FOIA Number: 2017-1093-F

FOIA MARKER

This is not a textual record. This is used as an administrative marker by the William J. Clinton Presidential Library Staff.

Collection/Record Group: Clinton Presidential Records

Subgroup/Office of Origin: Office of Environmental Initiatives

Series/Staff Member: General Files

Subseries:

OA/ID Number: 19506

FolderID:

Folder Title:
Climate Change Clips (12/98 to 4/99) [1]

Stack:	Row:	Section:	Shelf:	Position:
S	62	1	5	1

CLIMATE CHANGE CLIPS

As seen in the *Associated Press* (Washington, DC) on Tuesday, October 27, 1998

Associated Press

Cos. to Try to Reduce CO2 Emissions

WASHINGTON (AP) -- Several major corporations, including General Motors, pledged Tuesday to take voluntary actions to ``reduce the risk'' of global warming, although stopping short of endorsing the controversial Kyoto climate treaty.

Executives of General Motors, Monsanto and British Petroleum agreed to take steps to reduce emissions of carbon dioxide, the leading so-called ``greenhouse'' gas that many scientists say may lead to a serious warming of the earth.

British Petroleum previously has accepted global warming as a potentially serious environmental problem. But automakers, including General Motors, long have scoffed at concerns about climate change.

A growing number of leading corporations in recent months have publicly called for actions -- though usually voluntary -- to reduce carbon dioxide emissions in the coming decade:

--Last week Shell Oil, following British Petroleum's lead, announced plans to cut carbon emissions by 10 percent.

--United Technologies, a major builder of aircraft engines, air conditioners and heating systems, said recently it planned to cut energy use by 25 percent over the next decade in part because of climate concerns.

--Eighteen major corporations, including Boeing Co., Weyerhaeuser and American Electric Power Co., have joined with the Pew Center to develop programs addressing climate change.

In a meeting Tuesday at the White House of business and environmental leaders, Vice President Al Gore said these companies ``recognize the challenge that we face. ... They are forging common-sense plans to reduce their (greenhouse) emissions. ... These developments send a strong message.''

At a separate news conference, General Motors, British Petroleum and Monsanto joined with the World Resources Institute, an environmental think tank, in endorsing ``market-oriented'' efforts to reduce greenhouse emissions.

The group agreed that while climate science continues to evolve, ``there is growing consensus that action is merited'' and that businesses can benefit from addressing the challenge of potential climate change.

``These are companies that are willing to get on with it and demonstrate that we don't need to be immobilized by the political process,'' said Jonathan Lash, president of the World Resources Institute.

Meanwhile, Sen. Joseph Lieberman, D-Conn., said companies must be given assurance that whatever actions they take to reduce greenhouse gases will be recognized once a formal emission-reduction scheme is put in place under international treaty.

Lieberman said he planned to push for legislation assuring credit for early industry action on the climate issue when Congress reconvenes next year. ``This is a very gentle way of creating some incentive for companies,'' he said in a meeting with reporters Tuesday. ``It says you will be rewarded for taking early action.''

Dennis Minano, vice president and chief environmental officer at General Motors, said his company wants to ``constructively address the global climate issue'' through development of new technologies that will reduce carbon emissions.

But Minano said GM remains opposed to government requiring more fuel-efficient cars. Environmentalists have said higher fuel economy requirements for automobiles are essential to dealing with the climate issue.

``We don't support higher (fuel economy) standards. It doesn't represent where the market is,'' said Minano, alluding to growing demand in showrooms for sport utility vehicles and other larger and less fuel-efficient cars.

Minano also said GM remains opposed to Senate ratification of the climate treaty reached in negotiations last December in Kyoto, Japan. It calls for the United States to reduce greenhouse emissions to below 1990 levels by 2008-2012, a cut of more than a third from where emissions are expected to be by then.

The Global Climate Coalition, a group that includes General Motors as well as other automakers and oil companies, has led opposition to the Kyoto accord, arguing it would lead to soaring energy prices and economic losses.

While the White House has no plans to submit the Kyoto accord to the Senate anytime soon, the administration has been urging industry to take voluntary actions to reduce carbon emissions.

As seen in *The Washington Post* (Washington, DC) on Monday, November 2, 1998.

The Washington Post

Firms Warm Up to Climate Treaty

Efforts to Reduce Global Emissions Is Met With Less Resistance

By Martha M. Hamilton
Washington Post Staff Writer

Auto makers, utilities, oil companies and other businesses howled nearly a year ago when the United States and other industrialized nations agreed in Kyoto, Japan, to reduce emissions from fossil fuels that have been blamed for global warming. Since then, what once seemed like rock-solid business opposition to the Kyoto accord has fragmented.

Twenty major U.S. companies, including three electric power companies and two oil companies, have come together at the Pew Center for Global Climate Change in Washington to promote taking actions to address the problem of climate change. Two major international oil companies, British Petroleum PLC and Royal Dutch/Shell Group of Cos., recently announced they would reduce their own emissions greenhouse gases voluntarily.

United Technologies Corp., which builds Pratt & Whitney aircraft engines and Carrier air conditioners, has said it will reduce its energy use by 25 percent over the next 10 years to reduce emissions of greenhouse gases. And last week General Motors Corp. and Monsanto Co. joined British Petroleum and the World Resources Institute in calling now for action to address global warming.

"It's no longer a united front," said Robert N. Stavins, an environmental economist with the John F. Kennedy School of Government.

Paul Tebo, vice president in charge of environmental issues at DuPont Co., which joined the Pew Center on Global Climate Change last week, said he believes big business will be faster to match public sentiment on global warming than two decades ago, when many businesses were slow to respond to growing public concerns about the environment.

"They're a lot like us," Tebo said of other major corporations. "They say they don't think the science is conclusive, but it's cause for concern. The Kyoto Protocol is not perfect, but it is a signal that people around the world are concerned about this."

Tebo added, "The Kyoto Protocol needs work, but they're willing to get out front and work on it. They're willing to cooperate rather than to agitate."

Today, government officials, environmentalists and business leaders will begin gathering in Buenos Aires for a follow-up meeting on Kyoto. In contrast to the Kyoto meeting, which dealt with the big picture, the Buenos Aires meeting will begin the complicated, painstaking process of figuring out how to achieve the goals agreed to with much fanfare in Japan.

In fact, many participant are playing down expectations for the Buenos Aires meeting. "I think the best that comes out of Buenos Aires is a work plan and a schedule," said Eileen Claussen, executive director of the Pew Center group.

"I believe that there is a greater understanding of the difficulties of meeting the targets set last year," said William F. O'Keefe, executive vice president of the American Petroleum Institute and former chairman of the Global Climate Coalition, an organization of businesses that oppose ratification of the Kyoto treaty. "My understanding is that Buenos Aires will be to lay out an action plan to try to define the rules and process for going forward."

Although the Global Climate Coalition, from which British Petroleum and Royal Dutch/Shell resigned, continues to oppose the Kyoto Protocol, O'Keefe said the American Petroleum Institute is trying to create a uniform reporting system for emissions. U.S. oil companies generally have resisted calls for reducing emissions from fossil fuels, unlike companies based in Wetsren Europe, such as BP and Royal Dutch/Shell.

"Our challenge is whether we can have a reporting system that is uniform, so we get consistent data," O'Keefe said. "A lot of that has changed in the past year," he said of the API's decision to get involved in monitoring. "What hasn't changed is our continued opposition to the Kyoto Protocol and our continuing belief that it isn't workable."

The issues that will be critical for businesses as developed nations move forward to implement the goals set at Kyoto that include how to form a system that allows companies to trade credits for emissions. Such a trading regime would allow a company that could only reduce its emissions at great cost to pay another company that could achieve the same reduction more cheaply, ultimately helping reduce total emissions into the atmosphere.

Many companies also are lobbying to be granted credit for steps they have taken or take before the rules are written to reduce emissions. A bill was introduced in the Senate during the last days of the 105th Congress that would guarantee it, though it did not pass.

If businesses in developed nations begin taking steps to reduce emissions it will help encourage developing nations, which weren't required to set emissions reduction quotas under the Kyoto Protocol, to move forward, said Fred Krupp, president of the Environmental Defense Fund, which is working with BP on emissions reductions. "More businesses are figuring out that there are ways consistent with their business objectives that they can be constructive on the problem," he said.

As seen in *The Economist* (Washington, DC) on Saturday, November 7, 1998.

The Economist

Environmental policy

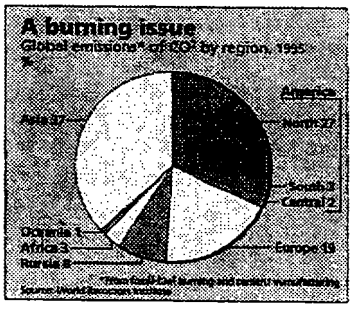
Hot market

Inefficiency for sale

THE days when, in the famous observation, "everybody talks about the weather but nobody does anything about it" are long gone. On November 2nd, policymakers and environmentalists descended on Buenos Aires for a two-week UN conference on global warming. A similar gathering in Kyoto last year resulted in a dramatic, but sketchy, agreement by rich countries to cut emissions of greenhouse gases to below their 1990 levels; this summit is meant to fill in the many blanks.

Do not hold your breath. Despite the progress at Kyoto, many countries still do not agree even on the premises of the argument. Yet the debate over reducing greenhouse emissions can really be distilled to three simple, sequential questions: why, who and how.

The answer to the first—why bother at all?—remains hotly debated. But the UN process has started a bandwagon rolling. In recent months, influential American firms, including such heavyweights as DuPont, United Technologies and Enron, have formed a coalition committed to a powerful premise: the scientific evidence, though incomplete, is alarming enough to warrant action now. They say that they will press the next Congress to guarantee financial benefits for firms that take "early action," treaty or no treaty.



Even with this help, the gathering in Buenos Aires is unlikely to achieve much. That is because negotiators in Kyoto, in their eagerness to frame an accord, failed to answer the second question—who should make the cuts?—to everyone's satisfaction. Only developed countries agreed to binding targets for emissions reductions; the others agreed to nothing. Poor countries insisted, with some justice, that today's problem is largely due to the excesses of the rich world: the United States alone spews out about a quarter of the world's carbon dioxide emissions (see chart). Besides, they say, cutting emissions would come at the price of economic growth, making the life of the poor even worse.

Yet it is the developing world that will be producing the lion's share of global greenhouse emissions within a few decades. The Americans therefore insist on "meaningful participation" by big developing countries. Argentina tried to break the impasse by offering to make "voluntary" cuts, and encouraging others to do the same. But the host's bold initiative, made on the opening day, was quickly quashed by countries such as China and India, which refused even to debate the matter.

So, without any agreement over the question of who, the summit is skipping to the third question: how to make the cuts? The three dozen or so rich countries that signed the Kyoto accord agreed to lower their emissions of greenhouse gases by at least 5% below 1990 levels by 2012—but did not specify how. Answering this is the thankless, and maybe impossible, task facing the delegates in Argentina.

Unsurprisingly, rival factions are promoting a bewildering array of solutions. The future of the accord hinges on one specific idea, however: an international market to trade the right to emit greenhouse gases. Such a market would allow countries that are above their quota to "buy" emissions reductions in other parts of the world where they are easier to achieve. The United States strongly favours such an approach, arguing that it is the most flexible, and least expensive, way of complying with Kyoto's targets. EU countries remain sceptical—some want to set limits on trading—and prefer policy changes such as carbon taxes.

Buenos Aires may fail. Yet the broader initiative will still have an effect. As Joseph Stanislaw of Cambridge Energy Research Associates, a consultancy, explains, "The point is no longer whether burning hydrocarbons leads to global warming... consumer perception and technological reality have created a requirement that companies embrace a proactive attitude on the environment."

Ironically, the best reason for expecting change now comes not from policymakers, but from oil companies. Royal Dutch Shell announced on October 16th a plan to reduce its greenhouse emissions by at least a tenth from its 1990 levels by 2002. BP has made a commitment to reach a similar target within a decade. With help from the Environmental Defence Fund, an American lobbying group, it has also launched an experiment in emissions trading within the firm to help it reach that target.

If oil companies forge ahead, the momentum for change created by the UN process may survive even as bureaucrats bicker. But sooner or later, good publicity alone will cease to be sufficient motivation for firms. This green revolution needs some deeds by governments if it is to continue.

As reported in *The Washington Post* (Washington, DC) on Sunday, November 8, 1998.

The Washington Post

Greening of the Board Rooms

A lot of Republicans in Congress have staked out a pretty clear position on global warming: It doesn't exist. Never mind the evidence. They don't want it to exist, and so it doesn't.

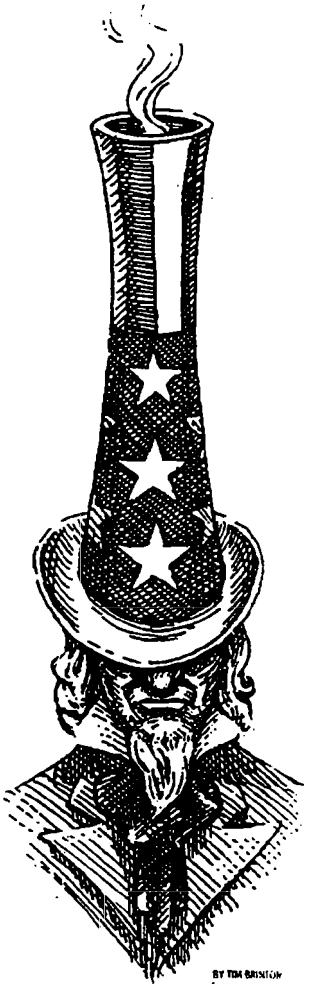
But a curious thing has happened during the past year. While Republicans rode off in spirited defense of this indefensible position, their ostensible allies in the business world—the supposed beneficiaries of the Republican hard line—have been riding the opposite way. Major multinationals such as Monsanto, United Technologies and General Motors have acknowledged that the danger of climate change is real and that some kind of early response is called for.

The corporate world has "made the turn," says Kevin Fay, who directs one business alliance on the subject. "That doesn't mean they're jumping up and down for joy," he says. "But it's: 'We took our shot at it, now let's get on with this.'"

This turn toward realism is worth keeping in mind as you scan headlines this week from Buenos Aires. Diplomats from around the world will be trying to flesh out a treaty they negotiated last year in Kyoto, and it won't be easy.

Europe will be trying to stick it to the United States, on the theory—shared by some U.S. environmentalists—that no solution to global warming is worthwhile if it doesn't make Americans suffer. The United States will be pressuring developing countries to assume some responsibility for the problem, while developing countries will insist that rich countries go first. The Clinton administration will claim it has gone first, which will be a hard sell since U.S. greenhouse gas emissions, already number one in the world, are still rising.

So 5,000 officials, lobbyists and hangers-on will argue and spin and point fingers. At best they'll come up with a work plan and schedule for further debate. But as long as they don't veer totally off track, that won't be so terrible. Controlling climate change is as complex an international problem as has ever been faced, combining the challenges of arms control verification, trade regulation, development aid and more. It won't be accomplished in a year, or two, or five.



BY TOM BRISTOW

All the more significant, then, that U.S. companies are beginning to agitate for action domestically, while the international rules are still taking shape. At the Pew Center on Global Climate Change, corporations ranging from Boeing to Dupont to Lockheed Martin have agreed that "the cost of delay is significant.... U.S. leadership is imperative ... leadership must start with Congress."

Kevin Fay's International Climate Change Partnership, which includes British Petroleum, United Technologies and General Electric, a few days ago issued a proposal to encourage "immediate action to reduce greenhouse gas emissions by rewarding companies that act early."

And BP, Monsanto and General Motors hooked up with the World Resources Institute to study what can be done right away. "Leadership and commitment to action now are necessary to address the climate challenge," they said, and endorsed the elimination of fossil fuel subsidies—no minor step for companies, such as BP and GM, for which fossil fuels (such as gasoline) are a lifeblood.

None of this means there's consensus on what to do. GM, while endorsing immediate action, maintains its membership in the most retrograde industry group, too. The Kyoto treaty, which President Clinton is likely to sign soon, will remain unratifiable, possibly for years.

But much of big business has come to accept, since Kyoto, that climate change is a real danger, with all that implies for rising sea levels, unpredictable changes in weather, new patterns of disease and the rest. Corporations see money to be made in new, energy-efficient technologies. These companies operate in Europe, where governments already are more serious about promoting energy efficiency, and they'd like to see some consistency. And they want an early role in shaping new policies that they understand are bound to come.

This gradual shift in the corporate world has big political implications. It means that Al Gore's close association with the Kyoto treaty, which looked perilous in the immediate weeks after Kyoto, may not prove to be a negative. And it means that the band of Just Say No resisters in Congress is likely to shrink.

Last month three senators—Democrat Joseph Lieberman and Republicans Connie Mack and John Chafee—took a first step, introducing legislation to reward companies that take early voluntary action to reduce their greenhouse gas emissions. By spring, no matter what happens in Argentina this week, those three pioneers will have plenty of company in Congress.

The writer is a member of the editorial page staff.

As seen in *Business Week* (New York, NY) on Monday, November 9, 1998.

BusinessWeek

LOOK WHO'S THAWING ON GLOBAL WARMING

A group of U.S. businesses–some seeing a chance for profits–is advocating action

SCORCHED EARTH: *This summer's heat took a toll on crops in Texas*

For years, U.S. energy and utility execs had a simple and direct response to the threat of global warming: Rubbish! There's no evidence, they said, that emissions from the burning of fossil fuels are raising the earth's temperature. And trying to cut those emissions—the goal of an international treaty hammered out last December in Kyoto—would cripple the American economy.

Not every exec came to the same conclusion, however. American Electric Power Co. CEO E. Linn Draper and his environment chief, Dale E. Heydlauff, pored over the evidence—including record temperatures in recent months—and decided that human-caused global warming was the most likely explanation. "It's no longer possible to say there is not a problem," says Heydlauff.

Earlier this year, Draper broke ranks with the hard-line industry position. In May, AEP joined Boeing, Enron, Lockheed Martin, 3M, United Technologies, and seven other companies as founding members of the Pew Center on Global Climate Change, formed to search for ways to prevent global warming. When AEP signed on, the reaction of fellow utility execs ranged "from shocked and confused to pretty vitriolic," recalls Heydlauff. But now they are "saying maybe we're on to something."

The willingness of AEP and other such companies to take a fresh look at the issues is an important change that offers hope for resolving the current impasse over the Kyoto climate treaty. Delegates from some 165 nations will gather in Buenos Aires on Nov. 2 to begin tackling the vast unresolved issues in the Kyoto Protocol (table, page 104).

> "We potentially have a very serious problem," says FMC CEO Robert Burt

Final decisions are not expected in Buenos Aires, but pressure to take action is growing. "Science has told us we potentially have a very serious problem," says Robert N. Burt, CEO of chemical and equipment giant FMC Corp. The evidence includes record-high global temperatures in recent years and computer models that forecast a warming of 2 to 5 degrees Fahrenheit by 2100.

LOGJAM. The central issue in the Buenos Aires talks will be whether developing countries should commit to emissions reductions—and when. The Kyoto treaty requires developed countries to cut their greenhouse gas emissions below 1990 levels by 2008-12. The U.S.'s target is a 7% cut. But the protocol puts no limits on the amounts of gases such nations as China, Korea, and Mexico can spew into the atmosphere. For that reason, Republicans in Congress say the Kyoto Protocol is grossly unfair. Last year, the Senate passed a resolution saying that

cont.

As seen in *Business Week* (New York, NY) on Monday, November 9, 1998.

BusinessWeek

THE HURDLES IN BUENOS AIRES

As delegates from around the world try to find a way to reduce the threat of global warming, here are some of the thorny issues they must resolve:

"MEANINGFUL PARTICIPATION" BY DEVELOPING COUNTRIES. The U.S. won't agree to cut its emissions unless developing nations like China and India also agree to limits. Not fair, developing countries retort. Industrial nations are mainly responsible for the problem, so they must act first.

"HOT AIR" TRADING. The Clinton Administration figures the U.S. could meet most of the negotiated emissions limits by buying emissions "credits" from Russia and Ukraine (whose economies and emissions have tanked since 1990) rather than actually cutting emissions at home. That's cheating, says the rest of the world. The European Union wants to require that at least 50% of reductions occur at home.

CREDITING CO_2 REMOVAL. In addition to reducing emissions of greenhouse gases, concentrations of CO_2 can be cut by removing the gas from the atmosphere by, for instance, growing more trees or crops. But figuring out how much credit countries will get from such measures is a delicate issue.

"CLEAN" DEVELOPMENT. The developing nations want the industrialized world to help them adopt energy-efficient, clean technologies. But they fear the U.S. will hold back until developing countries agree to measures such as emissions caps.

without developing country commitment, the treaty is dead.

Developing countries aren't ready to sign on. The current climate threat is the legacy of decades of emissions from the industrialized world, they argue. "Commitment is a dirty word in the developing world, and noncommitment is a dirty word in the developed world," says Atiq Rahman, director of the Bangladesh Center for Advanced Studies. "We have to break this logjam."

One way to do that would be to recognize steps countries are already taking. Cuts in subsidies for fossil-fuel energy in China, India, Mexico, and other nations have slowed the rise in emissions, says a new study from Washington's World Resources Institute. Meanwhile, Brazil has made a major push to use renewable fuels, Uruguay is reforesting 700,000 acres, and India is becoming a leader in wind power.

"CHANGE IS NOT FREE." Negotiators in Buenos Aires also are encouraged by recent developments in Europe. The European Union has reached an agreement with auto makers to reduce average fuel use per car by 25%. And in late October, the new coalition government of the Social Democrats and the Greens in Germany unveiled a plan to raise taxes on fossil fuels and boost support for renewable energy.

The U.S. has far less progress to report. The Clinton Administration's plan to foster new, more energy-efficient technologies, viewed as inadequate at best, was watered down even more by Congress. But some hope is coming from a surprising source—the U.S. business community. "Since Kyoto, the business community has taken a major step forward," says David Sandalow, the White House's point person for international climate policy. Eighteen major companies have joined the business council of the Pew Center on Global Climate Change, agreeing to take concrete steps to explore ways to cut emissions. United Technologies Corp., for instance, plans to reduce its energy use 25% by 2007. Given today's rock-bottom energy costs, "the pressure [to boost efficiency] has been off for some time," says Leslie Carothers, UT's environment chief. "But most of us, including our CEO, feel it is not unreasonable for the developed countries to take the first step."

AEP COAL PLANT IN WEST VIRGINIA: *We can't "say there is not a problem"*

The question is whether such efforts will save money. "Most of the economic studies on both sides are not believable," says Eileen Claussen, executive director of the Pew Center. "But serious change is not free." On the other hand, such change does offer enormous business opportunities. That was the message delivered at a news conference on Oct. 27 by execs from Monsanto, BP America, and General Motors. They called for a series of measures—from eliminating fossil-fuel subsidies to fostering new, more efficient technologies—that could reduce global warming and bolster their bottom lines. BP is making major investments in solar energy, for instance, while GM wants incentives for people to buy its advanced electric car.

MOMENTUM. Even companies that don't see potential new markets have a strong self-interest. Case in point: American Electric Power. CEO Draper is dead set against the Kyoto Protocol. "It's much too prescriptive in terms of timetables," he says. But he believes that, politically, the momentum for a global accord is too strong to stop. "The science doesn't matter anymore," says AEP's Heydlauff. "The world has become convinced that this is a matter of considerable urgency, and they want to take action. But if we don't arrive at the right policies, it could be a stake through the heart of AEP." And AEP execs think they have a better chance of avoiding disaster "if we acknowledge there is legitimacy to the issue and have a hand in writing the policies," says Heydlauff.

Add it up, and "there's an undercurrent of honest exploration," says one GOP Hill staffer. "Industry knows it can't say 'Hell, no' forever." Indeed, the shift has yielded results. On Oct. 10, Senators John Chafee (R-R. I.), Connie Mack (R-Fla.), and Joseph Lieberman (D-Conn.) introduced legislation to encourage and reward companies for taking early, voluntary action to cut greenhouse gases.

These are early days yet in complex and intricate global negotiations. Most countries believe that the 11 days of negotiations in Buenos Aires will, at best, produce a timetable for making decisions on the many thorny issues. But with businesses around the world starting to take seriously the scientific and political threats of global warming, the chances of finding a sensible and effective policy have begun to improve.

By John Carey in Washington

As seen in *The New York Times* (New York, NY) on Wednesday, November 11, 1998

The New York Times

Remember Global Warming?

Diplomats from more than 150 nations gathered in Buenos Aires this week to assess what they had done since the Kyoto agreement on global warming last December. The answer is, not much. They can be happy about one thing. Nobody has successfully challenged the urgency of their mission. Despite well-financed efforts by some industry groups to minimize the warming threat, the scientific consensus — that the unchecked burning of fossil fuels could someday cause great damage to the environment — remains intact. What is not intact is the spirit of common purpose that produced the Kyoto agreement.

The Kyoto Protocol committed the industrialized world to an average 5 percent reduction in greenhouse emissions *below* 1990 levels between 2008 and 2012 — a remarkably ambitious target, given the world's rising dependence on fossil fuels. The American target is 7 percent. But many important details were left unsettled. Even worse, the giant developing countries like India and China have yet to be brought on board. Until that happens, Senate ratification is out of the question. Meanwhile, greenhouse gases in the atmosphere continue to rise. Buenos Aires is a good place to re-energize the process. Two issues are of central importance.

Early Action. Although Kyoto's targets would not become legally binding until 2008, a quick start on the problem is essential — especially in the United States, which emits one-fourth of the world's greenhouse gases. Because America's emissions are projected to rise by 30 percent between now and 2008 under "business as usual" scenarios, it would be foolish to dawdle. Last-minute efforts to reverse the energy trajectory would be ruinously expensive.

A surprising number of American companies like the idea of early action. For the last year, two public-interest groups — the Pew Center on Global Climate Change and the Environmental Defense Fund — have been signing up companies like Boeing, United Technologies and British Petroleum that are prepared to reduce their own emissions even before a treaty is ratified. But the list would surely be longer if some way could be found to reward companies for taking action now, perhaps by giving them credits they could use to meet whatever obligations they incur when the agreement finally kicks in.

In the Senate, Joseph Lieberman, a Democrat, and John Chafee and Connie Mack, both Republicans, have introduced legislation establishing a mechanism to do just that. But they will have to persuade their colleagues in Congress, which grudgingly provided more money for clean-energy research in the new budget year but has otherwise been indifferent to the global warming issue.

Emissions Trading. The United States would have rejected the Kyoto Protocol if it had not included a provision that allows the sale or trade of emissions allowances among nations. In theory, industrialized nations that cannot quickly meet their targets without crippling energy taxes or costly investments would be able to "buy" pollution permits from poorer countries whose economies are so inefficient that even small adjustments can achieve big reductions in emissions. That transfer of capital, in turn, could help developing countries invest in cleaner technologies.

The British, among others, fear that the United States will exploit the trading plan to avoid making any real cuts in emissions, buying reductions from others instead. These fears are exaggerated. But the best way to put them to rest is to invite American companies to start cutting their emissions now. That would not only pacify the British but send a positive signal to the less-developed countries, which are unlikely to cut their energy use and prejudice their chances for further growth unless they are sure that America is serious.

The United States obviously cannot go it alone. Global warming demands a global response. But the rest of the world is not going to move without the leadership and example of the world's biggest producer of greenhouse gases.

As seen in the *Financial Times* (New York, NY) on Wednesday, November 11, 1998

FINANCIAL TIMES

CLIMATE: BUSINESS GRAPPLES WITH POTENTIAL CHANGES

By Vanessa Houlder in Buenos Aires

A year ago, many US businesses rejected the idea that there was a need for any action on climate change. Now, as diplomats gather in Buenos Aires for climate change negotiations, the emphasis of some prominent companies - including car, oil and chemical businesses - is on how to deal with it.

"The momentum has shifted to companies that accept the science. There is no question about it," says Eileen Claussen, executive director of the Pew Centre on Global Climate Change. This organisation, which is calling for US leadership on the issue of climate change, was established in May with members that include Air Products and Chemicals, Baxter International, Boeing, Enron and 3M.

The Buenos Aires meeting is an attempt at fleshing out the treaty agreed last December in Kyoto, Japan, at which developed countries made a legally binding agreement to cut back their emissions of greenhouse gases from 1990 levels by 2010.

"There is clearly a move. Companies are really thinking hard about what all this means," says Paul Faeth, programme director of the World Resources Institute, an environmental think-tank that has teamed up with General Motors, Monsanto and British Petroleum in a collaboration called Safe Climate, Sound Business (SCSB).

The SCSB argues that there is no inherent conflict between economic development and a healthy environment. "For proactive leaders there are major business opportunities in meeting the climate change, if the policy environment is right," it says.

The SCSB initiative states that "climate change is a cause for concern and precautionary action is justified now". But, among its members there are a wide range of views.

BP, for example, has set itself an internal target of cutting greenhouse gas emissions by 10 per cent by 2010, exceeding the Kyoto average. GM, however, is opposed to the Kyoto protocol and remains a member of the Global Climate Coalition (GCC), a vociferous opponent of taking action on stabilising greenhouse gas emissions on present scientific evidence.

GM argues: "We engage in dialogue with groups that have differing points of view in order to learn and to contribute to the discussions." Unless it participates in the debate on climate change, GM fears that "command-and-control" regulations would be imposed on it.

One of the main goals of groups such as Pew and SCSB is to influence policy. The Pew Group, for example, is pressing for congressional legislation on a domestic "early action" programme that will ensure that companies get credit for greenhouse gas reductions before an international framework is in place.

But companies are also mindful of the impact that membership of these organisations has on their public image. For multinational companies, this can present a difficult dilemma, since attitudes of customers differ across the world.

The GCC has dismissed the launch of groups such as Pew and SBSC as an exercise in public relations. "Pew and SCSB are viewed as progressive and constructive. But, with some exceptions, there is no difference between what we say and what they say," says William O'Keefe, former chairman of the GCC.

"A lot of people are trying to create a false momentum by saying that American business is now taking climate change seriously," he says.

For once, many environments would agree with Mr O'Keefe. The greening of American boardrooms will be demonstrated by deeds and not words. But as Mr Faeth of WRI argues, sooner or later there will be action on the climate because "companies have a responsibility to shareholders" to be ready for it.

As seen in *The Washington Post* (Washington, DC) on Saturday, November 14, 1998.

The Washington Post

Climate Talks Extended In Pursuit of an Accord

By Joby Warrick
Washington Post Staff Writer

BUENOS AIRES, Nov. 13—With a deal reportedly within reach, delegates to a United Nations climate conference hunkered down for a second all-night bargaining session tonight to try to decide how to implement last year's international accord to fight global warming.

The two-week conference slipped into overtime as rich and poor nations continued to clash over how to share the responsibility for cutting emissions of "greenhouse gases." U.N. officials had hoped to reach agreement today on a set of deadlines and rules that would lock nations onto a course for solving what many scientists see as the planet's most serious environmental problem.

Diplomats appeared to have achieved significant breakthroughs on several fronts, but officials acknowledged that the talks could collapse if the 160 nations gathered here fail to reach consensus on a wide range of contentious issues.

"We're going to go out of here with a signed-and-sealed deal or we go out with nothing," Peter Jorgensen, spokesman for the European Union's environmental mission, told reporters. "You're not going to get out of here while it's light—unless it's the morning light."

Last year's climate pact approved in Kyoto, Japan, would bind industrialized countries to sharp reductions in greenhouse gases over the next 13 years. But Kyoto left many issues unresolved, including when and how developing countries will take on obligations for curbing their emissions. The pact was formally signed on Thursday by the Clinton administration, but U.S. officials insist they will not submit the pact for the Senate ratification needed for it to become law until improvements are made.

Throughout the day, the mood at the cavernous municipal exposition center in Buenos Aires rose and fell with reports of deals that were on and then off again. U.S. and European governments at one point appeared to have scored a victory with an agreement on an early deadline—the year 2000—for setting rules to enforce the Kyoto accord and setting up market-based programs that would allow countries to work jointly on reducing emissions.

But late today a group of developing countries led by China and Saudi Arabia objected to the deadlines, a startling turn of events that appeared to put the entire conference in limbo. Other diplomats shrugged off the setback and insisted that talks would continue until a deal was reached.

"I don't think anyone wants to go home and say we can't take this process any further," said Jorgensen, the EU spokesman. "I don't think we could sell that result."

Still, the slow going in Buenos Aires was seen as a poor omen, since many of the most difficult decisions are not even scheduled to be addressed until next year at the earliest. Some observers at the conference were already labeling it a failure.

"A great deal of energy expended for not much of a result," said James Sheehan of Competitive Enterprise Institute, a free-market think tank that opposes the Kyoto treaty.

But others said Buenos Aires had already achieved significant breakthroughs, most notably the decisions by two developing countries—Argentina and Kazakhstan—to set voluntary limits on their emissions.

"The show of leadership to the rest of the world was critical," said Eileen Claussen of the Pew Center on Global Climate Change, a partnership of large corporations that broadly support action on climate change. "This meeting turned a critical corner, showing the first signs of a global response to this problem."

The diplomatic wrangling coincided with new scientific reports of unusual warming in the atmosphere and oceans. According to U.S. government scientists, surface temperatures last month just missed tying the record for the hottest October since reliable measurements began more than a century ago.

Last month's global average temperature reached 58.14 degrees Fahrenheit, just shy of the 58.15-degree record set in October 1997. The month was 1.04 degrees warmer than the 117-year average, the National Oceanic and Atmospheric Administration said, continuing a trend of unusually warm temperatures in a year in which each of the first nine months set new records.

While many scientists agree that pollution is causing a slow rise in global temperatures that could eventually become disastrous, it remains uncertain whether this year's unusual warming is part of such a trend.

As seen in *The Washington Post* (Washington, DC) on Sunday, November 15, 1998

The Washington Post

A Warming Trend

THE DOGMATIC divisions of the climate change debate are giving way to practical progress. The business community, united not so long ago against any measures to combat global warming, increasingly is playing a constructive role. Now developing countries, which also had maintained a defiant and unhelpful cohesion, are beginning to look for ways to cooperate and move forward, too. All of this makes it both more urgent, and more possible, for the United States to improve its record.

Human activity -- driving cars, burning coal, manufacturing -- produces carbon dioxide and other gases that increasingly are accumulating in the atmosphere. Most scientists now agree that this accumulation over time will alter the earth's climate, very likely with destructive if still unpredictable consequences. Rapid warming, coastal flooding and more severe droughts and storms are some of the unpleasant possibilities. The case for reducing greenhouse gas emissions, without taking radical or impoverishing steps, is strong. Fortunately, many of the technologies that will prove useful to combat climate change have other benefits as well, in energy efficiency and pollution prevention.

Last week the United States and other nations sent representatives to a conference in Buenos Aires where they debated how to implement the Kyoto treaty, which commits industrialized nations to reduce their emissions over the coming decade. The task of dividing up the atmosphere, or responsibility for it, is understandably complex, not to be concluded in one or two or five meetings. But the deliberations were gratifyingly businesslike and free of ideological posturing. Two courageous developing nations, Argentina and Kazakhstan, broke ranks to say that they, like the rich countries, will accept binding limits on gas emissions, though not in a way that will restrict their opportunities to prosper. Others, including Chile, Mexico and South Korea, are said to be considering comparable steps. Truculent oppositionists such as China, India and Saudi Arabia find themselves more isolated.

The Clinton administration last week signed the Kyoto treaty, a symbolic step intended to strengthen its international bargaining position. The Senate won't ratify the treaty, and the administration won't submit it until more developing countries sign on. Rightly, the United States also continues to lobby for rules that give each country maximum flexibility in deciding how to reach its target and that allow room for free-market mechanisms to work.

But American pleadings abroad will fail unless matched by progress at home; the United States after all remains the world's biggest source of greenhouse gases. One major advance would be legislation, such as that sponsored by Sens. Mack, Chafee and Lieberman, to encourage early, voluntary action by U.S. companies. Congress so far has been mostly an impediment to progress. But the Just Say No caucus can no longer rely on a like-minded industry alliance as a crutch, nor on a recalcitrant developing world bloc as an excuse.

As seen in the *San Jose Mercury News* (San Jose, CA) on Monday, November 16, 1998

San Jose Mercury News

Other nations will not sacrifice if the world's richest doesn't

U.S. must lead the global warming battle

NEGOTIATORS from around the world have just spent two weeks in Buenos Aires demonstrating how difficult it will be to implement a worldwide treaty on global warming.

The conference served principally to re-emphasize the obvious: Without a commitment by the United States, the treaty written last year in Kyoto means nothing.

The United States is the world's No. 1 producer of man-made carbon dioxide, the most significant of the greenhouse gases warming the atmosphere. In both the physical and political worlds, progress depends on America.

U.S. efforts remain half-hearted because too many representatives of heavy industry and coal-producing states (carbon dioxide comes from burning fossil fuels) are pretending that global warming is not a problem or that the United States is being asked to assume an unfair burden in slowing it down.

They've turned a blind eye to the scientific evidence that global warming is happening and that it will produce rising sea levels, more unpredictable weather and the spread of tropical diseases.

The have raised hysterical fears that the treaty is a first step toward the ``deindustrialization'' of the United States. And, they've noted, the treaty doesn't even cover developing countries, where most of the growth in energy use will occur.

The Kyoto treaty set a goal for the year 2012. The world's industrialized countries are to reduce the emission of greenhouses gases to 5 percent below 1990 levels. The purpose of the Buenos Aires meeting was to work out the mechanisms for measuring and accomplishing that.

As evidence of how difficult reaching the goal will be, annual emissions in the United States are now 10 percent *above* 1990 levels.

Although the United States signed the Kyoto treaty last week, it says it cannot ratify it until certain key provisions are met: a worldwide system for trading emission credits is established, and developing nations agree to some limits on their own greenhouse emissions.

Although the United States signed the Kyoto treaty last week, it says it cannot ratify it until certain key provisions are met: a worldwide system for trading emission credits is established, and developing nations agree to some limits on their own greenhouse emissions.

The U.S. demands are not unreasonable in principle, if they are carried out wisely in practice. But they will have no credibility unless the United States starts reducing its own emissions.

The Pew Center, a foundation, has an illuminating way of thinking about who should exert what sort of effort in combating global warming. It asks three questions: Who is causing the problem? Who has the standard of living that enables it to afford corrective action? Who can best profit from energy efficiency measures?

The United States contributes a quarter of the annual world emissions of carbon dioxide. Not only is it the largest emitter in total, it also leads all countries in emissions per person (except for a handful of the oil-producing nations in the Persian Gulf).

The United States is also the richest country, that is, the country that can most easily afford alternative sources of energy and more sophisticated energy-saving technology.

The Unites States is not the least energy-efficient nation; nations in the former Soviet bloc dominate that category. But with the exception of Canada, the United States uses more energy per dollar of gross domestic product than any of the rich industrial democracies.

Put it all together, and it's no surprise that countries around the world are not willing to sign up for sacrifices before the United States does.

Fortunately, there is evidence of division in the ranks of the opponents of the Kyoto treaty. Dupont, Monsanto and General Electric are among major corporations that have broken ranks and pushed for recognizing the threat of global warming and reducing emissions in the United States.

They're doing it in part because they see a business opportunity in developing new climate-friendly products, but there's nothing wrong with that. It's more evidence against the ``deindustrialization'' canard.

The Buenos Aires conference ended with only incremental accomplishments. The next gathering is two years away. The United States has a lot of work to do in the meantime.

As seen in the *Chicago Tribune* (Chicago, IL) on Monday, November 16, 1998.

Chicago Tribune

It's our move on global warming

After much haggling over whether the problem was real, the debate about global warming now has evolved into a frustrating ping-pong game between industrialized and developing nations over who should make the first move.

At the conclusion of the international conference on global warming in Buenos Aires this weekend, the United States signed on to the Kyoto Accords to reduce greenhouse gas emissions. But there's stiff opposition to ratification in the U.S. Senate, absent a comparable commitment by developing countries, which are themselves rapidly becoming world-class polluters.

Developing countries in turn argue that the U.S., which belches out an estimated 25 percent of all world's manmade carbon dioxide emissions and can best afford do something about the problem, ought to be the one take the first step.

Despite the apparent polarization, the contours of a compromise are beginning to take shape. And it is up to the U.S. to play the role of leader, not obstructionist, in moving the world closer to an agreement on this crucial issue.

In U.S. business circles, near-monolithic opposition to doing anything about global warming is quietly giving way to the realization that some action is unavoidable, and that it makes financial sense to get in front of the parade rather than be shoved along later. For example, corporate heavy-hitters like Boeing, United Technologies, Baxter, 3M and International Paper have joined the Pew Center on Global Climate Change to search for solutions.

In opinion polls, Americans say they believe global warming is real and needs to be dealt with.

The U.S. needs to shelve the notion that emissions reductions and economic growth are mutually exclusive. Each year, American productivity per worker—already the envy of the world — keeps rising, thanks to greater efficiencies and more advanced technologies. A similar push for more efficient and less polluting use of energy, particularly fossil fuels, is not only possible but in the national interest.

The U.S. cannot dodge a leadership role in this area. At the Buenos Aires conference, Argentina and Kazakhstan volunteered on their own to curb emissions. That's great, but it's not likely to break the current logjam, which only the U.S. Senate can do by ratifying the 1997 Kyoto Agreements and officially giving notice to the world that we're ready to move.

A lot of additional negotiating must precede ratification. The idea of "emissions trading" between nations is key, but needs to be spelled out to ensure that U.S. firms already moving to reduce emissions get credit for work done or in progress.

Another promising concept, floated by the Pew Center, is to assign responsibility for emissions reductions to developing countries according to their resources and emissions levels.

No effective action on global warming will materialize however, until the U.S. accepts its responsibility as a polluter—and a world leader.

As seen in the *Chicago Tribune* (Chicago, IL) on Wednesday, November 18, 1998

Chicago Tribune

ALLIES AGAINST GLOBAL WARMING

Firms pledge emissions cuts

By Laurie Goering
TRIBUNE CORRESPONDENT

BUENOS AIRES—Dale Heydlauff hates the idea of tough new pollution regulations as much as anybody in the coal-burning electricity business, one of the largest sources of suspected heat-trapping greenhouse gases.

The difference is he's now convinced global warming is a reality, industry changes are coming and his company, American Electric Power Inc., might just stand to benefit if it gets involved early.

Since the world's industrialized nations agreed last year in Kyoto, Japan, to cut their emissions of carbon dioxide and other gases, his company has invested in variable speed motors at its power plants and more efficient turbines at its hydroelectric plants.

It's also bought land in Bolivia to help preserve forests, banking on the creation of a worldwide system of trading in emissions allowances and pollution "sinks" such as carbon dioxide-absorbing forests.

"After Kyoto, it has become clear legally binding controls are inevitable," said Heydlauff, vice president for environmental affairs for the Columbus, Ohio-based electric company. "We think it'll be better if we're at the table and helping write the rules."

Not long ago, U.S. businesses uniformly scoffed at the notion of global warming. Science didn't support the theory, they insisted, and any effort to force emissions cuts was certain to derail the U.S. economy.

cont.

As seen in the *Chicago Tribune* (Chicago, IL) on Wednesday, November 18, 1998

Chicago Tribune

Allies

CONTINUED FROM PAGE 1

ideological decision (but) an act of good business sense," said Sen. Joseph Lieberman (D-Conn.), who has proposed a bill to give the companies credit in any eventual trading scheme for their early cutbacks.

The Kyoto agreement calls for 38 major countries, including the United States, to cut their emissions an average of 5 percent below 1990 levels by 2008-2012. For its part, the United States, as the world's largest polluter, would be obliged to cut greenhouse gas emissions 7 percent below 1990 levels by 2010.

The treaty is in trouble in the U.S. Senate, which must approve the pact for it to become binding. That's largely because the protocol exempts polluters in emerging nations. Nevertheless, several prominent American and European companies are already taking action.

Royal Dutch/Shell Group, the world's biggest oil producer, has announced that it is investing in new types of cars and renewable fuels, and will voluntarily cut emissions 10 percent below 1990 levels by 2002, a rate faster than that agreed to by industrialized countries at Kyoto and reaffirmed at a follow-up summit in Buenos Aires last week.

DuPont Co. says that it has already increased energy efficiency by 15 percent and hopes to reduce greenhouse gas emissions by half by 2000.

Semiconductor giant Intel Corp. is working on a deep-sleep mode for computers that will dramatically cut power usage.

United Technologies Corp., which produces jet engines, elevators and air conditioning equipment, has promised to cut energy use 25 percent by 2007, at a cost of about $200 million.

And British Petroleum PLC, which is in the process of acquiring Chicago-based Amoco Corp., is investing heavily in solar research and has promised to cut its emissions 10 percent below 1990 levels by 2010.

"We can beat this problem," said John Palmisano, director of environmental policy for Enron Corp., another energy firm that has switched sides in the debate. "We're trying to promote action today, not tomorrow."

Many of the firms promising voluntary emissions cuts signed on in May with the Pew Center on Global Climate Change, a new Virginia-based organization aimed at finding cooperative efforts to halt global warming.

The voluntary actions clearly have less to do with lofty ideals than with calculated business risks.

Pew Center-allied businesses, which include Boeing Co., International Paper Co., Maytag Corp. and Toyota Motor Corp., want to have a hand in writing any eventual regulations, and insist cutbacks should be made by market-based "flexible" mechanisms that allow them to earn reduction credits not just for cuts at home but for sharing clean technology with developing nations or protecting forests.

Many see huge new markets opening overseas if they can come up first with clean technology to create power or produce more efficient cars, appliances, and other products.

cont.

PEW CENTER on Global CLIMATE CHANGE

For more information, contact the Pew Center at (703)516-4146 or visit www.pewclimate.org

As seen in the *Chicago Tribune* (Chicago, IL) on Wednesday, November 18, 1998

Chicago Tribune

"If you're not part of the solution, your competition will fill the vacuum," predicted Judith Ann Bayer, director of environmental-government affairs at United Technologies, which is spending $1 billion a year on research and development.

Just how much effect the voluntary industry cuts now under way will have remains uncertain.

About 40 percent of U.S. emissions come from automobiles, and that industry sector has shown little interest in quick boosts in fuel economy, perhaps because car buyers have little concern about mileage these days. And only a handful of power companies, the largest U.S. emitters of greenhouse gases, have signed on to the early cutback effort.

Still, "there's been a sea change in the attitudes of industries," contended Fred Krupp, executive director of the Environmental Defense Fund, a so-called non-government organization that has worked closely with the government on developing U.S. climate change policy.

"If we wait until 2008 we'll have to stand the economy on its end to achieve reductions," agreed Leslie Carothers, vice president of environment, health and safety for United Technologies. "We should get going on this now."

BUENOS AIRES PRESS COVERAGE

Lead-Up

10/28	*Financial Times*	Eizenstat/Browner op-ed on emissions trading
10/30	*Wall Street Journal*	"Global-Warming Treaty's Opposition is Strained"
10/30	*Los Angeles Times*	"Countries Warm Up for Climate Talks"
11/2	*Washington Post*	"Talks on Warming Face Chill"
11/2	*New York Times*	"Talks on Global Warming Treaty Resuming Today"

1st Week

11/3	*Los Angeles Times*	"Developing Nations at Conference Urged to Help Battle Global Warming"
11/8	*Washington Post*	Hiatt column: "Greening of the Board Rooms"
11/9	*Business Week*	"Look Who's Thawing on Global Warming"
11/9	*Time*	"Look Who's Trying to Turn Green"
11/9	*Associated Press*	"Businesses Warming to Global Treaty"

2nd Week

11/10	*Christian Sci. Mon.*	Eizenstat op-ed on Buenos Aires meeting
11/11	*New York Times*	Editorial: "Remember Global Warming?"
11/11	*Los Angeles Times*	Editorial: "Gridlock on Global Warming"
11/11	*Washington Post*	"Stormy Disputes Mark International Climate Talks"
11/11	*New York Times*	"Washington Skirmishes Over Treaty on Warming"
11/11	*Wall Street Journal*	"U.S. is Cast in Role of Bad Guy at Conference To Work Out Details of Global-Warming Treaty"

Argentina's Pledge

11/12	*Washington Post*	"Argentina Fuels Talks With Pollution Pledge"
11/12	*New York Times*	"Argentina Takes a Lead in Setting Goals on Greenhouse Gases"
11/12	*Wall Street Journal*	"Two Developing Nations Agree to Reduce 'Greenhouse' Emissions in Breakthrough"
11/12	*USA Today*	"Argentina, Kazakhstan Bolster Global Warming Pact"

U.S. Signs

11/13	*Washington Post*	"Administration Signs Global Warming Pact"
11/13	*New York Times*	"U.S. Signs a Pact to Reduce Gases Tied to Warming"
11/13	*Wall Street Journal*	"Clinton Administration Signs Treaty Intended to Restrain Global Warming"
11/13	*Los Angeles Times*	"U.S. Endorses Treaty on Global Warming"
11/13	*USA Today*	"U.S. Signs International Global Warming Treaty"

Talks Extended

11/14	*Washington Post*	"Climate Talks Extended in Pursuit of an Accord"

Agreement Reached

11/15	*Washington Post*	Editorial "A Warming Trend"
11/15	*Washington Post*	"160 Nations Endorse Pact on Global Warming Compliance--Accord Speeds Up Timetable for 'Action Plan' on Environment"
11/15	*New York Times*	"Deadline Set to Form Rules for Reducing Gas Emissions"
11/15	*Los Angeles Times*	"Degrees of Progress at Environmental Summit"
11/16	*Wall Street Journal*	"Nations Agree to Finish Most Provisions of Global Warming Pact by 2000's End"
11/16	*Wall Street Journal*	"On Island, Global Warming is Clear Threat: Tiny Pacific Nation of Nauru Struggles to Be Heard at Conference"

Summary:

Washington Post	6 stories, 1 column & 1 editorial
New York Times	5 stories, 1 editorial
Wall Street Journal	6 stories
Los Angeles Times	4 stories, 1 editorial
USA Today	2 stories

Also:

- pieces in Business Week & Time
- Administration Op-eds in Financial Times & Christian Science Monitor
- Significant wire coverage

Cut-price emissions

Emissions trading is good for the world economy and the environment

On November 2 in Buenos Aires, the parties to the agreement on global climate change reached in Kyoto last December will gather to pursue the hard work of filling in the blanks to that historic accord. But a controversy over how to implement critical market-based provisions negotiated last year threatens to disrupt the steady progress that should be everyone's goal.

The Kyoto protocol sets ambitious targets for developed countries to reduce their greenhouse gas emissions, which most scientists believe are causing higher temperatures and disrupting the world's climate patterns. Preserving a stable and hospitable climate will require a sustained commitment to reduce emissions over time. That it why it is so important, right from the start, to focus on how countries can meet their targets at the lowest possible cost.

This link between ambitious environmental targets and low-cost implementation was central to the success of the Kyoto negotiations. In the protocol, parties agreed that countries may meet their targets through a combination of domestic and international actions, including "emissions trading". This is a market mechanism that promotes cost-effective reductions by allowing countries or companies to trade emissions allowances. Without this flexibility, it simply would not have been possible to take on targets as ambitious as we agreed to in Kyoto.

Unfortunately, many countries and organisations most passionately committed to solving the problem of climate change are, in our view, mistakenly opposed to emissions trading or determined to place counterproductive restrictions on it. If this view succeeds, it will dramatically increase the costs of protecting our environment and imperil many countries' ability to go forward with Kyoto.

Emissions trading is the key to strong targets because it makes possible the largest greenhouse gas reductions for each available dollar, mark, pound, franc, or yen. In America's acid rain emissions trading programme, every emitter must have an allowance for each ton of sulphur dioxide it emits. For some emitters, the cost of cutting a ton of emissions is many times greater than for others. Those who find the cheapest ways to cut emissions are tangibly rewarded, because they can sell any allowance they do not need to others that face higher costs.

Up for sale: companies will have to pay for the right to pollute

The results speak for themselves. US acid rain-causing emissions are being cut ahead of schedule at 50 per cent of the expected cost, bringing cleaner air to millions of Americans. Economists of every stripe agree that the costs of reducing greenhouse gas emissions for all countries – not just the US – will be dramatically lower with an efficient trading system. Within the European Union alone, measures to control greenhouse gases are as much as *six times* more expensive in some countries than in others, according to European private sector analysts. The cost differences are even greater when looking at all industrialised countries, and greater still between developed and developing countries. Trading gets the incentives right by encouraging cuts where they can be achieved at the lowest cost.

Of course, emissions trading is not a substitute for an aggressive national commitment to controlling greenhouse gases. Rather, it is just one tool for carrying out such a commitment. The US has been pursuing nearly 50 programmes to reduce emissions and improve energy efficiency since 1993, the year after it ratified the original climate change treaty. In October last year, President Bill Clinton proposed a significantly stepped-up effort, including $6.3bn over five years in tax incentives and R&D to cut carbon dioxide through increased energy efficiency and renewable energy, and to reduce the other greenhouse gases. In the recently completed budget negotiations, the president secured a 25 per cent increase in climate change investments over last year's total.

The US plan also includes restructuring the electricity industry to provide market incentives for renewables and increased efficiency; consultations with industry to develop sector-by-sector plans to reduce emissions; an aggressive plan to improve the federal government's own use and procurement of energy; and ultimately, after US ratification of the Kyoto protocol, a greenhouse gas emissions trading programme based on our acid rain experience.

We recognise that many people have questions about how emissions trading can be made to work internationally. Some are concerned about weaknesses in national and international institutions to measure emissions and ensure compliance. That is why the US is committed to building an international trading system of the highest integrity, with strong incentives for compliance. In fact, the US is already working with a number of developed and developing countries to help strengthen their capacity to measure emissions and participate in an emissions trading system with high standards.

Others have argued for limits on how much of a nation's Kyoto target can be met through international emissions trading. This is a deeply flawed idea. Limits on trading would greatly increase administrative costs, be exceedingly difficult to implement, and generally make it much more expensive to address climate change.

In fact, the adverse impact would be even greater in Europe than in the US: restrictions currently proposed by some governments could well double carbon allowance prices in the US and triple those allowance prices in the EU – without providing any reductions in worldwide greenhouse gas emissions beyond the targets established in Kyoto. Limiting trading will make any given amount of emissions reductions cost more. It makes little sense to waste resources at a time of uncertain growth prospects in the global economy, nor to limit the potential of emissions trading to spur investment and innovation and to expand job opportunities.

We owe it to future generations to protect them from the damaging effects of climate change. That is why it is vital that Buenos Aires build on the momentum generated at Kyoto. The best way to protect the environment is to provide the right economic incentives and, by so doing, get the fastest, deepest reductions at the lowest possible cost. Let us work together, do this right, and take good care of both the world's environment and its economy.

Carole Browner is the administrator of the US Environmental Protection Agency. Stuart Eizenstat is US undersecretary of state for economic, business and agricultural affairs

:om

10/30

to result in "lower employment than as higher inflation." Mr. Jasinowski laid out a worst-case scenario in which "business re- ... Federal Reserve governor Edward Kelley told reporters yesterday that "a concern we've had for a long time is this economy of ours was running at an unem-

WSJ **Journal Link:** For the text of the jobless claims report and the report on third-quarter employment costs, see The Wall Street Journal Interactive Edition at **http://wsj.com**

Global-Warming Treaty's Opposition Is Strained

By JOHN J. FIALKA
Staff Reporter of THE WALL STREET JOURNAL

WASHINGTON—The coalitions of oil, automobile, utility and other companies that opposed last year's global-warming treaty are showing some strain as talks to complete the pact are set to resume next week in Buenos Aires.

Some members are leaving the coalitions or repositioning themselves on the issue. One sign of the changed landscape is the American Automobile Manufacturers Association, whose members helped fund an anti-treaty television campaign on the eve of last fall's treaty deliberations in Kyoto, Japan. Now the AAMA is about to dissolve, and its largest member, **General Motors** Corp., has begun to work with environmental groups and joined a pro-treaty lobby association.

"Our main direction is to be constructive on this issue," explained John Williams, leader of GM's climate-issues team. "We need to be active in a wide variety of issues. It helps us influence the way things are going."

The giant auto maker's moves mean that this year it will be plotting strategies for lobbying on both sides of the issue. It is still a charter member of the Global Climate Coalition and the Business Roundtable, two large U.S. groups that oppose the treaty. But it has also joined the International Climate Change Partnership, a group of more than 40 companies and trade associations working with the Clinton administration in support of the treaty.

"You are seeing a fair amount of reassessment," said Kevin J. Fay, executive director of the Washington-based group, which, he said, has doubled its membership in a year. Joseph M. McGuire, chief regulatory analyst for **AlliedSignal** Inc., said belonging to the group allows his company to get inside the process.

Connie Holmes, head of the anti-treaty Global Climate Coalition, said it, too, hopes to follow the process more closely. If a treaty limiting emissions of such "greenhouse gases" as carbon dioxide is ratified, she noted, emissions trading will be very important to many GCC members. Such trades would allow companies that don't meet carbon-dioxide emissions quotas to buy excess-emission certificates from those that do. "The rules for that, oh Lordy, are really important," she said, referring to the main item looming on the agenda in Buenos Aires.

Two major oil companies, **British Petroleum** Co. and **Royal Dutch/Shell Group**, have recently dropped their GCC memberships because of its opposition to the treaty, and some other large members are said to be considering following suit. "You're beginning to see the logs breaking up and a return to forward motion domestically on this issue," said Fred Krupp, executive director of the Environmental Defense Fund, which is helping BP design its own emissions-trading system.

Still, U.S. negotiators, led by Undersecretary of State Stuart Eizenstat, will find plenty of logs in their way in Buenos Aires. They include a Republican-led congressional delegation, most of which is opposed to ratifying the treaty, and a European Union proposal to limit the amount of international trading that a nation can use to meet its emissions quota.

The U.S., which may have to cut its emissions by 30% below 1990 levels to meet its treaty obligations starting in 2008, wants unlimited trading to ease the cut's economic impact and provide incentives for more-efficient uses of fossil fuels. Mr. Eizenstat said in a news briefing yesterday that he hopes to avoid a fight over the issue in Buenos Aires. But the U.S. is prepared to wage one, he added, with the help of Japan, Canada, Russia and other allies.

WASHINGTON POST - Downloaded November 2, 1998

Talks On Warming Face Chill

By Joby Warrick, Washington Post Staff Writer

From observation posts high in the South American Andes, scientists this fall are pondering an extraordinary disappearing act: The great Quelccaya ice cap, home to some of the hemisphere's largest glaciers, is melting.

The losses were small when first detected 30 years ago, but in the 1990s Quelccaya's retreat turned into a rout. Scientists aren't sure why, but some suspect global warming. "Where it was shrinking at three meters a year, it's now up to 30 meters," said Ellen Mosley-Thompson, a glacier expert and professor at Ohio State University.

From the Andes to Montana's Lewis Range, dozens of ancient glaciers are turning to slush as global temperatures climb to the highest levels in recorded history. But despite increasingly strong signals of possible change in the climate, international efforts to slow global warming are at risk of sliding into a deep freeze.

A year after the world's nations approved the first binding agreement on climate change in Kyoto, Japan, 180 countries are gathering today in Argentina's capital to begin deciding how to cut emissions of greenhouse gases. But Kyoto's sunny optimism has given way to cold reality in Buenos Aires as diplomats awaken to formidable technical challenges and steep divisions among nations over how to apportion the costs.

Governments can point to only paltry progress on climate change over the last 11 months, and many are dampening expectations for significant achievements this year. Some observers worry that Kyoto's consensus will collapse in Buenos Aires, disintegrating like the great Quelccaya, in nearby Peru.

"For the first time, the glaciers are moving literally faster than the negotiations," said Christopher Flavin, vice president and senior climate researcher at the Worldwatch Institute, a Washington think tank. The fear, he said, is that "time could be running out for both."

The two-week United Nations-sponsored climate conference begins near the close of a year that will be remembered for its bizarre weather. For reasons that may or may not be related to global warming, Mother Nature cranked up the thermostat this year, pushing global temperatures to records in each of the first nine months. The year 1998 is on track for being the warmest in at least six centuries, or about as far back as scientists can reliably read the weather. Some blame goes to an unusually severe El Niño, yet the global heat pump has continued chugging long after El Niño fizzled out over the southern Pacific.

"We have never seen a sequence where we broke records every month in a row," said D. James Baker, administrator of the National Oceanic and Atmospheric Administration. "It doesn't prove that you have global warming, but it's absolutely consistent with what you'd expect."

While climate can shift abruptly without help from humans, most scientists believe people are contributing to the warming of the planet. Fossil fuel burning and the destruction of forests are causing a buildup of carbon dioxide in the atmosphere, which traps heat from the sun. Over the next century, scientists predict average temperatures will rise between 1.8 and 6.3 degrees Fahrenheit, enough to trigger a sea level rise that could swamp large chunks of coastal areas.

Last year's Kyoto accord was a historic attempt at putting the brakes on warming. For the first time, the United States and other industrialized nations agreed to binding limits on greenhouse gases. By 2012, these countries would be obliged not only to freeze their pollution output, but to reduce it to an average 5 percent below 1990 levels.

But while Kyoto set the targets and deadlines, the most difficult issues – how to achieve the cuts and how to spread the costs – were largely papered over, to be debated later. These are the questions that now lurk in ambush for government ministers attempting to put flesh on Kyoto's flimsy bones.

"This has all the makings of an old-time East-West free-for-all," said Sen. Chuck Hagel (R-Neb.), who will lead a delegation of U.S. Senate observers at the talks. "Buenos Aires could disintegrate into a name-calling process, with the West being blamed for all the evil, problems and difficulties in the world."

Aware of the risks, conference leaders are setting modest goals. Officially, the ministers are not required to answer all the questions in Buenos Aires but only to begin a process that will yield solutions in years to come. If Kyoto "created the architectural structure," then Buenos Aires will "create a process for installing the interior plumbing and circuitry," said Stuart Eizenstat, the undersecretary of state who will serve as chief U.S. negotiator.

But international fault lines that opened in Kyoto have only solidified in the past year. Complicating matters is the deepening economic turmoil in Asia, which Eizenstat acknowledges caused "setbacks" in the critical task of persuading developing countries to restrict the growth of their emissions.

To many observers, the peril in Buenos Aires is that nations will fail to agree even on the rules for settling their differences. With the clock ticking on deadlines set in Kyoto, a breakdown in Argentina could strip the process of its political momentum and delay action on climate for years – a prospect treaty opponents are already savoring.

The treaty is on shaky political ground in a number of world capitals. As of last month, only 55 countries have signed the accord and only one – Fiji – has ratified it. President Clinton, as leader of the world's biggest emitter of greenhouse gases, has said he will sign the treaty before the March 1, 1999, deadline, and aides say he may do so this month to give the Buenos Aires conference a symbolic boost.

The White House insists the accord will not be submitted for Senate ratification for at least another year, or until U.S. negotiators win assurances on flexible rules and solid commitments from key developing countries. Meanwhile, Republican leaders have pledged a bitter fight against the United Nations-brokered Kyoto agreement, which they believe would harm the nation economically. The congressional delegation to Buenos Aires is dominated by lawmakers who are skeptical not just of the treaty but of global warming itself. One member, Rep. Joe Knollenberg (R-Mich.), introduced legislation this year that would have imposed a de facto gag order on the Clinton administration, prohibiting even educational seminars on climate change.

"Opponents are hoping Buenos Aires will be Heartbreak Hill, that it will founder on the tensions they have worked so hard to foster," said Alden Meyer, director of government relations for the Union of Concerned Scientists, an environmental group. Supporters, he said, can only hope the conference will yield enough progress to avoid the appearance of standing still.

"Kyoto was a high-wire act," Meyer said. "Buenos Aires will be three yards and a cloud of dust."

There are many hidden mines that could blow the Buenos Aires talks off track. One of them could explode as early as the opening day, when Argentina will try to insert into the agenda a plan to allow

developing countries to voluntarily accept commitments to limit their own greenhouse gas emissions, setting their own goals and timetables.

Voluntary cuts – an idea strongly supported by the Clinton administration and a few developing countries with close ties to the United States – may seem innocuous enough. But other developing countries are opposed even to discussing Argentina's plan, U.N. officials said last week.

"Argentina stuck its neck out," said Michael Z[illegible]t Cutajar, the U.N. executive secretary who presides over the climate talks. "Other countries, such as Mexico and [South] Korea, may look at this positively. But after that it becomes quite speculative."

The role of developing countries had become a flash point in the climate debate. Because most of the world's greenhouse gases historically came from North America and Europe, poorer nations insist that the West goes first.

But wealthier countries say they can't solve the problem alone. Already, modernizing countries such as China and India are on their way toward eclipsing the developed world as the biggest polluters, and any climate strategy that excludes them would fail in the long run. Both the Clinton administration and congressional Republicans say they will not support U.S. ratification of the Kyoto accord without "meaningful participation" from key developing countries.

Another battle, pitting industrialized countries against each other, is looming over rules for emissions trading programs that would allow developed countries to cut their costs by buying and selling pollution credits. Europeans favor imposing "caps" or limits on such trading to force each country to make most of its emissions cuts at home. The Clinton administration strongly opposes caps, arguing that any restrictions would raise the cost of compliance. Eizenstat warned last week that the European Union's actions "threaten to undo the Kyoto agreement."

"We will adamantly oppose efforts to set limits on trading," the U.S. delegation leader said.

But while the U.S. position may sway moderates in the Senate, it leaves the White House open to criticism in Buenos Aires. Europeans, already suspicious that the United States intends to "buy" its way out of its treaty obligations by purchasing pollution credits, will likely point to the meager progress the Clinton administration has made on fighting climate change at home over the past year.

President Clinton's request for $6.3 billion in investments and tax credits for energy-efficient technology was largely ignored by Congress, as was his initiative to build 1 million solar roofs over the next century. A Department of Energy report next week is expected to show continued, if moderate, increases in U.S. carbon dioxide emissions over the past 12 months.

Still, the White House did secure $1 billion in funding for climate programs last month – a hard-won concession that White House officials say reflects climate's top rating on the administration's list of priorities.

To David Sandalow, White House associate director for the global environment, the money represents solid, if modest, progress. And U.S. negotiators can only hope to do as well in Argentina.

"We haven't filled all the blanks on the Kyoto protocol, but that's not a big surprise – this is the most complicated set of international negotiations ever," Sandalow said. "While recognizing the urgency of the problem, we must be realistic in understanding what it will take to move this ocean liner forward."

Talks On Global Warming Treaty Resuming Today

By JOHN H. CUSHMAN Jr.

WASHINGTON -- International negotiators will resume talks on Monday in Buenos Aires over details in the treaty to fight global warming, but with their expectations sharply lowered.

Last year in Kyoto, Japan, more than 150 nations hammered out a far-reaching agreement for steep reductions in emissions of heat-trapping greenhouse gases by industrialized countries during the next 10 to 15 years.

They also agreed, in principle, to establish a system that would allow the sale or trade of emissions permits between countries and to do more to bring developing countries into the effort, two key demands made by the United States. In theory, trading emissions credits would lessen the overall cost of reducing greenhouse gases in the atmosphere by letting one country pay another to reduce emissions to meet global targets.

But there has been little progress since the Kyoto Protocol was approved. And it now appears highly unlikely that an agreement on the details will be reached in time for the U.S. Senate to vote on ratification before the presidential elections in 2000. The Kyoto Protocol continues to face substantial opposition among major U.S. energy producers and consumers, who say it would be too costly.

Treaty supporters in this country, acknowledging the slow pace of negotiations, have begun to emphasize steps that can be taken before mandatory emissions restrictions go into effect. They want Congress to guarantee that companies voluntarily reducing emissions of waste industrial gases believed to be a factor in global warming will receive credit for these actions when a treaty finally takes shape.

Signaling the lowered expectations, Stuart Eizenstat, the senior U.S. negotiator, cautioned that the administration's first objective is to avoid what he called "backsliding" by other nations on the agreement that the United States brokered last year.

In Kyoto, the Clinton administration agreed to cut U.S. emissions over the next 10 to 15 years to a level 7 percent below 1990's emissions -- if international trading of emissions credits is allowed. That would let the United States meet a big part of its obligation by paying other countries to reduce their emissions more than the treaty requires.

European nations are calling for limits on how much a country could rely on emissions trading to meet its treaty obligations. But Eizenstat said: "I want to drive home as strongly as I can that we adamantly oppose efforts by the European Union or others to set arbitrary limits on trading. That is not consistent with either the letter or the spirit of Kyoto, and it would impose unsustainable costs on the U.S. economy."

After Kyoto, the parties to the treaty were also expected to work out what roles the developing nations would accept and what aid the industrial powers would provide them.

Big developing nations are expected to overtake the United States in emissions of greenhouse gases sometime in the next century. But many developing countries still are resisting commitments to reduce their emissions until they see action by the developed countries like the United States, which produces a quarter of the world's greenhouse gases.

Some developing nations -- even China, which at Kyoto was skeptical of measures to increase the role of developing nations -- are said to be intrigued by the "clean development mechanism" included in the protocol. It would funnel money and technology to energy efficiency projects in developing countries, letting industrialized nations take some of the credit for the resulting reductions in emissions. But the details of this, too, remain to be resolved.

Another source of delay is scientific uncertainty over how to count deforestation and reforestation in each country's contribution to the atmosphere's carbon dioxide. Growing trees absorb carbon dioxide, storing the carbon in wood and releasing oxygen. But the treaty partners will not decide how to score forestry until a science panel reports in about two years.

While climate can shift abruptly without help from humans, most scientists believe people are contributing to the warming of the planet. Fossil fuel burning and the destruction of forests are causing a buildup of carbon dioxide in the atmosphere, which traps heat from the sun. Over the next century, scientists predict average temperatures will rise between 1.8 and 6.3 degrees Fahrenheit, enough to trigger a sea level rise that could swamp large chunks of coastal areas.

Last year's Kyoto accord was a historic attempt at putting the brakes on warming. For the first time, the United States and other industrialized nations agreed to binding limits on greenhouse gases. By 2012, these countries would be obliged not only to freeze their pollution output, but to reduce it to an average 5 percent below 1990 levels.

But while Kyoto set the targets and deadlines, the most difficult issues – how to achieve the cuts and how to spread the costs – were largely papered over, to be debated later. These are the questions that now lurk in ambush for government ministers attempting to put flesh on Kyoto's flimsy bones.

"This has all the makings of an old-time East-West free-for-all," said Sen. Chuck Hagel (R-Neb.), who will lead a delegation of U.S. Senate observers at the talks. "Buenos Aires could disintegrate into a name-calling process, with the West being blamed for all the evil, problems and difficulties in the world."

Aware of the risks, conference leaders are setting modest goals. Officially, the ministers are not required to answer all the questions in Buenos Aires but only to begin a process that will yield solutions in years to come. If Kyoto "created the architectural structure," then Buenos Aires will "create a process for installing the interior plumbing and circuitry," said Stuart Eizenstat, the undersecretary of state who will serve as chief U.S. negotiator.

But international fault lines that opened in Kyoto have only solidified in the past year. Complicating matters is the deepening economic turmoil in Asia, which Eizenstat acknowledges caused "setbacks" in the critical task of persuading developing countries to restrict the growth of their emissions.

To many observers, the peril in Buenos Aires is that nations will fail to agree even on the rules for settling their differences. With the clock ticking on deadlines set in Kyoto, a breakdown in Argentina could strip the process of its political momentum and delay action on climate for years – a prospect treaty opponents are already savoring.

The treaty is on shaky political ground in a number of world capitals. As of last month, only 55 countries have signed the accord and only one – Fiji – has ratified it. President Clinton, as leader of the world's biggest emitter of greenhouse gases, has said he will sign the treaty before the March 1, 1999, deadline, and aides say he may do so this month to give the Buenos Aires conference a symbolic boost.

The White House insists the accord will not be submitted for Senate ratification for at least another year, or until U.S. negotiators win assurances on flexible rules and solid commitments from key developing countries. Meanwhile, Republican leaders have pledged a bitter fight against the United Nations-brokered Kyoto agreement, which they believe would harm the nation economically. The congressional delegation to Buenos Aires is dominated by lawmakers who are skeptical not just of the treaty but of global warming itself. One member, Rep. Joe Knollenberg (R-Mich.), introduced legislation this year that would have imposed a de facto gag order on the Clinton administration, prohibiting even educational seminars on climate change.

"Opponents are hoping Buenos Aires will be Heartbreak Hill, that it will founder on the tensions they have worked so hard to foster," said Alden Meyer, director of government relations for the Union of Concerned Scientists, an environmental group. Supporters, he said, can only hope the conference will yield enough progress to avoid the appearance of standing still.

"Kyoto was a high-wire act," Meyer said. "Buenos Aires will be three yards and a cloud of dust."

There are many hidden mines that could blow the Buenos Aires talks off track. One of them could explode as early as the opening day, when Argentina will try to insert into the agenda a plan to allow

Talks On Global Warming Treaty Resuming Today

In the next two weeks, negotiators are expected to do little more than to agree on a pace for further talks and studies.

"I think a success at Buenos Aires would be a work plan and timetable," Melinda Kimble, acting assistant secretary of state for international environmental issues, said at a recent briefing for foreign reporters.

Christopher Flavin, an energy expert at the Worldwatch Institute, an environmental research organization, said: "The Kyoto Protocol has been moving forward more slowly than most people had hoped for. The number of new, complicated issues added in the six months before the Kyoto Protocol was negotiated created a level of negotiating complexity that I fear has got us to the point that this protocol is in real danger."

But advocates are pressing industrial companies to reduce their emissions anyway. In Congress, a bipartisan group has introduced legislation that would guarantee that those who act soon will be given financial credits under any final agreement, whether it applies only in the United States or around the world.

Last week, members of the President's Council on Sustainable Development, which brings together industry, government and citizen groups, also endorsed steps to give credit for voluntary early actions to reduce emissions.

Several big companies, including British Petroleum, United Technologies and Du Pont, have already pledged to cut their emissions and have begun to urge Congress to approve credits for early actions.

Even industry groups like the Global Climate Coalition, which opposes the Kyoto Protocol, are supporting the administration's insistence on unfettered trading. "If emission caps are ever imposed, these market tools will be absolutely necessary to lessen high economic burdens placed on our citizens," said Connie Holmes, the organization's chairwoman.

Circ: 1,104,651

NOV 3 1998

Developing Nations at Conference Urged to Help Battle Global Warming

By SEBASTIAN ROTELLA
TIMES STAFF WRITER

A4

BUENOS AIRES—An international conference on climate change opened here Monday with a debate over a proposal by the host nation, Argentina, challenging fellow developing nations to adopt voluntary limits on emissions of the gases that cause global warming.

As a close U.S. ally and the first developing nation to host such a conference, Argentina wasted no time in framing one of the most divisive issues among about 170 countries gathered here for a massive task: building a framework for implementation of the climate accord adopted in Kyoto, Japan, last year. The Clinton administration wants developing nations to show meaningful progress on reducing emissions of greenhouse gases before the U.S. ratifies the agreement. The administration is under pressure from Republican legislators who say the burden on industrialized nations is too heavy.

China, India and many other developing nations, however, assert that industrialized nations are the biggest and wealthiest polluters and should meet the emissions reduction targets established in the Kyoto Protocol before making demands of poorer nations.

There were fears that mere mention of the issue here would cause a contentious uproar, as occurred last year in Kyoto. Instead, the Argentine proposal provoked a frank but civilized discussion that lasted for several hours.

Articulating the Argentine view in a statement before the conference began, the Argentine ambassador to the United States, Diego Guelar, criticized "the old conspiratorial argument that labels these new [environmental] policies a means to slow down the industrial and competitive development of the emerging economies."

"The idea that industrialization is not possible without pollution and degradation is false," he said.

Opposition by China and other nations blocked the proposal from being placed on the conference agenda. But the chairwoman, Argentine Environment Minister Maria Julia Alsogaray, will pursue informal conversations about standards with representatives of developing nations during the meeting.

In order for developed nations to reduce emissions by 5.2% of their 1990 levels by 2012, the 1,461 delegates gathered here must decide fundamental issues as how the complex international mechanisms for meeting the targets will be policed. The meeting promises to be grueling, with an emphasis on process and a shortage of breakthroughs.

15

The Washington Post
Fred Hiatt C7 Circ: 1,163,338 NOV 8 1998

Greening of the Board Rooms

A lot of Republicans in Congress have staked out a pretty clear position on global warming: It doesn't exist. Never mind the evidence. They don't want it to exist, and so it doesn't.

But a curious thing has happened during the past year. While Republicans rode off in spirited defense of this indefensible position, their ostensible allies in the business world—the supposed beneficiaries of the Republican hard line—have been riding the opposite way. Major multinationals such as Monsanto, United Technologies and General Motors have acknowledged that the danger of climate change is real and that some kind of early response is called for.

The corporate world has "made the turn," says Kevin Fay, who directs one business alliance on the subject. "That doesn't mean they're jumping up and down for joy," he says. "But it's: 'We took our shot at it, now let's get on with this.' "

This turn toward realism is worth keeping in mind as you scan headlines this week from Buenos Aires. Diplomats from around the world will be trying to flesh out a treaty they negotiated last year in Kyoto, and it won't be easy.

Europe will be trying to stick it to the United States, on the theory—shared by some U.S. environmentalists—that no solution to global warming is worthwhile if it doesn't make Americans suffer. The United States will be pressuring developing countries to assume some responsibility for the problem, while developing countries will insist that rich countries go first. The Clinton administration will claim it has gone first, which will be a hard sell since U.S. greenhouse gas emissions, already number one in the world, are still rising.

So 5,000 officials, lobbyists and hangers-on will argue and spin and point fingers. At best they'll come up with a work plan and schedule for further debate. But as long as they don't veer totally off track, that won't be so terrible. Controlling climate change is as complex an international problem as has ever been faced, combining the challenges of arms control verification, trade regulation, development aid and more. It won't be accomplished in a year, or two, or five.

All the more significant, then, that U.S. companies are beginning to agitate for action domestically, while the international rules are still taking shape. At the Pew Center on Global Climate Change, corporations ranging from Boeing to Dupont to Lockheed Martin have agreed that "the cost of delay is significant. . . . U.S. leadership is imperative . . . leadership must start with Congress."

Kevin Fay's International Climate Change Partnership, which includes British Petroleum, United Technologies and General Electric, a few days ago issued a proposal to encourage "immediate action to reduce greenhouse gas emissions by rewarding companies that act early."

And BP, Monsanto and General Motors hooked up with the World Resources Institute to study what can be done right away. "Leadership and commitment to action now are necessary to address the climate challenge," they said, and endorsed the elimination of fossil fuel subsidies—no minor step for companies, such as BP and GM, for which fossil fuels (such as gasoline) are a lifeblood.

None of this means there's consensus on what to do. GM, while endorsing immediate action, maintains its membership in the most retrograde industry group, too. The Kyoto treaty, which President Clinton is likely to sign soon, will remain unratifiable, possibly for years.

But much of big business has come to accept, since Kyoto, that climate change is a real danger, with all that implies for rising sea levels, unpredictable changes in weather, new patterns of disease and the rest. Corporations see money to be made in new, energy-efficient technologies. These companies operate in Europe, where governments already are more serious about promoting energy efficiency, and they'd like to see some consistency. And they want an early role in shaping new policies that they understand are bound to come.

This gradual shift in the corporate world has big political implications. It means that Al Gore's close association with the Kyoto treaty, which looked perilous in the immediate weeks after Kyoto, may not prove to be a negative. And it means that the band of Just Say No resisters in Congress is likely to shrink.

Last month three senators—Democrat Joseph Lieberman and Republicans Connie Mack and John Chafee—took a first step, introducing legislation to reward companies that take early voluntary action to reduce their greenhouse gas emissions. By spring, no matter what happens in Argentina this week, those three pioneers will have plenty of company in Congress.

The writer is a member of the editorial page staff.

CLIMATE

LOOK WHO'S THAWING ON GLOBAL WARMING

A group of U.S. businesses–some seeing a chance for profits–is advocating action

PAUL BUCK/AFP

SCORCHED EARTH: *This summer's heat took a toll on crops in Texas*

For years, U.S. energy and utility execs had a simple and direct response to the threat of global warming: Rubbish! There's no evidence, they said, that emissions from the burning of fossil fuels are raising the earth's temperature. And trying to cut those emissions—the goal of an international treaty hammered out last December in Kyoto—would cripple the American economy.

Not every exec came to the same conclusion, however. American Electric Power Co. CEO E. Linn Draper and his environment chief, Dale E. Heydlauff, pored over the evidence—including record temperatures in recent months—and decided that human-caused global warming was the most likely explanation. "It's no longer possible to say there is not a problem," says Heydlauff.

Earlier this year, Draper broke ranks with the hard-line industry position. In May, AEP joined Boeing, Enron, Lockheed Martin, 3M, United Technologies, and seven other companies as founding members of the Pew Center on Global Climate Change, formed to search for ways to prevent global warming. When AEP signed on, the reaction of fellow utility execs ranged "from shocked and confused to pretty vitriolic," recalls Heydlauff. But now they are "saying maybe we're on to something."

The willingness of AEP and other such companies to take a fresh look at the issues is an important change that offers hope for resolving the current impasse over the Kyoto climate treaty. Delegates from some 165 nations will gather in Buenos Aires on Nov. 2 to begin tackling the vast unresolved issues in the Kyoto Protocol (table, page 104).

> "We potentially have a very serious problem," says FMC CEO Robert Burt

Final decisions are not expected in Buenos Aires, but pressure to take action is growing. "Science has told us we potentially have a very serious problem," says Robert N. Burt, CEO of chemical and equipment giant FMC Corp. The evidence includes record-high global temperatures in recent years and computer models that forecast a warming of 2 to 5 degrees Fahrenheit by 2100.

LOGJAM. The central issue in the Buenos Aires talks will be whether developing countries should commit to emissions reductions—and when. The Kyoto treaty requires developed countries to cut their greenhouse gas emissions below 1990 levels by 2008-12. The U.S.'s target is a 7% cut. But the protocol puts no limits on the amounts of gases such nations as China, Korea, and Mexico can spew into the atmosphere. For that reason, Republicans in Congress say the Kyoto Protocol is grossly unfair. Last year, the Senate passed a resolution saying that

THE HURDLES IN BUENOS AIRES

As delegates from around the world try to find a way to reduce the threat of global warming, here are some of the thorny issues they must resolve:

"MEANINGFUL PARTICIPATION" BY DEVELOPING COUNTRIES The U.S. won't agree to cut its emissions unless developing nations like China and India also agree to limits. Not fair, developing countries retort: Industrial nations are mainly responsible for the problem, so they must act first.

"HOT AIR" TRADING The Clinton Administration figures the U.S. could meet most of the negotiated emissions limits by buying emissions "credits" from Russia and Ukraine (whose economies and emissions have tanked since 1990) rather than actually cutting emissions at home. That's cheating, says the rest of the world. The European Union wants to require that at least 50% of reductions occur at home.

CREDITING CO_2 REMOVAL In addition to reducing emissions of greenhouse gases,concentrations of CO_2 can be cut by removing the gas from the atmosphere by, for instance, growing more trees or crops. But figuring out how much credit countries will get from such measures is a delicate issue.

"CLEAN" DEVELOPMENT The developing nations want the industrialized world to help them adopt energy-efficient, clean technologies. But they fear the U.S. will hold back until developing countries agree to measures such as emissions caps.

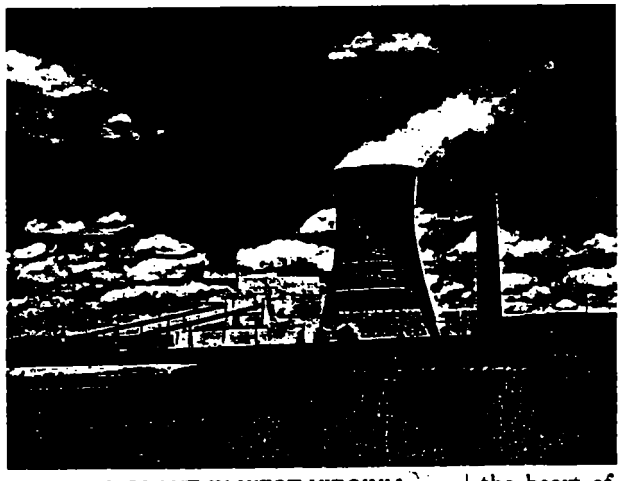
without developing country commitment, the treaty is dead.

Developing countries aren't ready to sign on. The current climate threat is the legacy of decades of emissions from the industrialized world, they argue. "Commitment is a dirty word in the developing world, and noncommitment is a dirty word in the developed world," says Atiq Rahman, director of the Bangladesh Center for Advanced Studies. "We have to break this logjam."

One way to do that would be to recognize steps countries are already taking. Cuts in subsidies for fossil-fuel energy in China, India, Mexico, and other nations have slowed the rise in emissions, says a new study from Washington's World Resources Institute. Meanwhile, Brazil has made a major push to use renewable fuels, Uruguay is reforesting 700,000 acres, and India is becoming a leader in wind power.

"CHANGE IS NOT FREE." Negotiators in Buenos Aires also are encouraged by recent developments in Europe. The European Union has reached an agreement with auto makers to reduce average fuel use per car by 25%. And in late October, the new coalition government of the Social Democrats and the Greens in Germany unveiled a plan to raise taxes on fossil fuels and boost support for renewable energy.

The U.S. has far less progress to report. The Clinton Administration's plan to foster new, more energy-efficient technologies, viewed as inadequate at best, was watered down even more by Congress. But some hope is coming from a surprising source—the U.S. business community. "Since Kyoto, the business community has taken a major step forward," says David Sandalow, the White House's point person for international climate policy. Eighteen major companies have joined the business council of the Pew Center on Global Climate Change, agreeing to take concrete steps to explore ways to cut emissions. United Technologies Corp., for instance, plans to reduce its energy use 25% by 2007. Given today's rock-bottom energy costs, "the pressure [to boost efficiency] has been off for some time," says Leslie Carothers, UT's environment chief. "But most of us, including our CEO, feel it is not unreasonable for the developed countries to take the first step."



AEP COAL PLANT IN WEST VIRGINIA: *We can't "say there is not a problem"*

The question is whether such efforts will save money. "Most of the economic studies on both sides are not believable," says Eileen Claussen, executive director of the Pew Center. "But serious change is not free." On the other hand, such change does offer enormous business opportunities. That was the message delivered at a news conference on Oct. 27 by execs from Monsanto, BP America, and General Motors. They called for a series of measures—from eliminating fossil-fuel subsidies to fostering new, more efficient technologies—that could reduce global warming and bolster their bottom lines. BP is making major investments in solar energy, for instance, while GM wants incentives for people to buy its advanced electric car.

MOMENTUM. Even companies that don't see potential new markets have a strong self-interest. Case in point: American Electric Power. CEO Draper is dead set against the Kyoto Protocol. "It's much too prescriptive in terms of timetables," he says. But he believes that, politically, the momentum for a global accord is too strong to stop. "The science doesn't matter anymore," says AEP's Heydlauff. "The world has become convinced that this is a matter of considerable urgency, and they want to take action. But if we don't arrive at the right policies, it could be a stake through the heart of AEP." And AEP execs think they have a better chance of avoiding disaster "if we acknowledge there is legitimacy to the issue and have a hand in writing the policies," says Heydlauff.

Add it up, and "there's an undercurrent of honest exploration," says one GOP Hill staffer. "Industry knows it can't say 'Hell, no' forever." Indeed, the shift has yielded results. On Oct. 10, Senators John Chafee (R-R.I.), Connie Mack (R-Fla.), and Joseph Lieberman (D-Conn.) introduced legislation to encourage and reward companies for taking early, voluntary action to cut greenhouse gases.

These are early days yet in complex and intricate global negotiations. Most countries believe that the 11 days of negotiations in Buenos Aires will, at best, produce a timetable for making decisions on the many thorny issues. But with businesses around the world starting to take seriously the scientific and political threats of global warming, the chances of finding a sensible and effective policy have begun to improve.

By John Carey in Washington

COURTESY AMERICAN ELECTRIC POWER

Look Who's Trying to Turn Green

FOR YEARS A POWERFUL INDUSTRY COALITION, LED BY AUTOMAKERS and coal and oil companies, tried to persuade everyone that global warming was nothing to get overly alarmed about. The barons of fossil fuel warned that curbs on emissions of greenhouse gases would destroy jobs without necessarily having a positive effect on our climate. But now, as officials from 180 nations meet in Buenos Aires this week to firm up the Kyoto Protocol, the treaty forged in Japan last year to combat climate change, the forces of opposition have suffered some major defections.

The American Automobile Manufacturers Association, representing General Motors, Ford and Chrysler, refused to help pay for the latest anti-Kyoto TV ads produced by the Global Climate Information Project, an alliance of industry, labor and farm groups. And last week Washington's World Resources Institute brought together executives from GM, British Petroleum and Monsanto to pledge that their companies would contribute less to the greenhouse effect. "There is a rising tide of environmental awareness," says incoming Ford chairman William Clay Ford Jr. "Smart companies will get ahead of the wave. Those that don't are headed for a wipeout."

ROBERT NEUBECKER FOR TIME

Unbearable Development

GRIZZLY-WAR ALERT: LATER THIS MONTH the U.S. government is expected to unveil a plan that could eventually lead to the removal of this Yellowstone-area resident from the "threatened" list under the Endangered Species Act. Federal officials say protection of the 400 or more grizzly bears in the region where Wyoming meets Idaho and Montana has been a success, and that under ESA rules, the animals are no longer threatened. A final decision won't come before next summer, but in preparation, the U.S. Fish and Wildlife Service is finishing a plan for turning bear management over to a consortium of the three states, two national parks, seven national forests and four federal agencies. Environmentalists fear this unwieldy arrangement could weaken grizzly-conservation efforts (the head of Wyoming's Game and Fish Department has talked of authorizing a trophy hunt of nuisance bears). As the grizzlies den up for the winter, stay tuned for the growling of experts fighting over the bears' fate.

VITAL SIGNS

47 years The average life expectancy in 29 African countries for people born between 1990 and 1995

54 years What the life expectancy for those people would be were it not for the AIDS epidemic engulfing Africa

Source: United Nations

DUMPING GROUNDS

ADDRESS UNKNOWN In 1986 the *Khian Sea* picked up a cargo of toxic incinerator ash from Philadelphia. The ship plied the seas for 18 months, and it was turned away by seven nations before dumping 4,000 tons of ash on a Haitian beach. Now, a decade later, Haiti will load the cinders onto another boat and stamp the poisonous pile Return to Sender. The cleanup was delayed by the cost—up to $1 million—and denials of responsibility. A waste hauler with links to the original dumper has offered $200,000, and Philadelphia will chip in only $50,000. That leaves Haiti to pay the rest. Many landfills can now handle the ash, but for the sake of environmental justice, says activist Ann Leonard of Essential Action, based in Washington, the nasty stuff should be stored safely in Philadelphia's backyard.

DUMAS LAFONTANT FOR TIME

Businesses Warming to Global Treaty

Filed at 2:51 a.m. EST

By The Associated Press

WASHINGTON (AP) -- The debate over global warming cuts both ways for United Technologies, one of America's largest corporations.

Reducing heat-trapping greenhouse gases may be a boon to its air conditioning and hydrogen fuel cell business, but its jet engine subsidiary could face new regulations and possibly suffer.

Even so, the company with nearly $25 billion in sales has become one of the growing number of Fortune 500 firms convinced it is better to address the thorny climate change issue, rather than ignore and scorn it.

``We hope that we can position ourselves to benefit, but we want to be ready either way so we aren't harmed,'' explains Leslie Carothers, United Technologies' vice president for environment.

As representatives from more than 160 nations meet in Buenos Aires, Argentina, to map out further global strategies on climate change, one thing is clear: U.S. business no longer is in lockstep opposition to taking action.

It represents a dramatic shift within the business community that many environmentalists and senior Clinton administration officials view as critical in getting the controversial climate agreement reached in Kyoto, Japan, a year ago, eventually accepted by Congress.

``While many in Congress still want to ignore the mounting evidence of global warming, many in the business community are paying heed. They recognize the challenge,'' Vice President Al Gore said at a recent White House meeting with business leaders.

Fossil-fuel industries and utilities have not eased their attack on the Kyoto protocol, which would require the United States to cut greenhouse emissions -- mostly carbon dioxide from burning fossil fuels -- by more than one-third beginning in 2008.

But a growing number of companies, including some automakers, utilities and oil and chemical producers, abandoned the strictly negative stand that had

marked these industries for years.

"There clearly is a splintering of the business community," says Alden Meyer of the Union of Concerned Scientists, who has followed the climate debate for environmentalists for more than a decade.

That is not to say these companies necessarily embrace the mandatory timetable for cutting heat-trapping emissions under the Kyoto pact.

"They consider it a work in progress," says Eileen Claussen, executive director of the Pew Center on Global Climate Change. "But they recognize the reality that more has to be done. ... They accept the science."

Twenty major corporations, including powers in the chemical, oil, utility and manufacturing industries, have joined with the Pew Center to promote actions to address climate change.

They include DuPont, the Boeing Co., Weyerhaeuser, Lockheed-Martin, American Electric Power, United Technologies, Enron and Sun Oil. Many, including British Petroleum, have committed to specific carbon emission reductions.

While not part of the group, General Motors Corp. said recently it also accepts the need for some action to cut greenhouse gases, although the automaker still strongly opposes the Kyoto agreement.

The globalization of U.S. companies also has forced many to take a fresh look at climate change. The U.S. Big Three automakers, for example, are seeing Europeans and Japanese manufacturers embracing the shift to more environmentally friendly vehicles.

"Outside the United States there are no industry opposition groups (on global warming)," says Kevin Fay, executive director of the Climate Change Partnership, a Washington-based business group.

The shift in business attitudes should not be underestimated, says Jonathan Lash, president of the World Resources Institute, which has worked with GM on the climate issue. "You're getting clear signals that we don't have to be politically immobilized when it comes to climate change."

The White House hopes business support at least for voluntary action will help it eventually sell the Kyoto accord to a critical Congress. Much of the climate debate next year is likely to focus on legislation to be proposed by Sen. Joseph Lieberman, D-Conn., that assures companies that take early actions on global warming will receive credit once a treaty is in place.

William O'Keefe, vice president of American Petroleum Institute, says most oil companies still "are convinced the Kyoto protocol is unworkable" and not justified based on current scientific knowledge and the potential economic impact.

United Technologies' Carothers, whose company has pledged to cut energy use by one-fourth by 2007, says fossil fuel companies face the most risk and "you can't expect them to be in the vanguard of this."

But she adds, "Getting the business community to say voluntarily there are things we can do and take the bull by the horn is critical. ... (Companies) are saying we have to be cautious and move forward. I don't think they're saying it's just a crock anymore."

TUESDAY, NOVEMBER 10, 1998

OPINION/ESSAYS

Combating Global Warming

Buenos Aires conference works to put Kyoto agreement into effect

Stuart E. Eizenstat

Last December in Kyoto, Japan, 160 countries reached an historical agreement to cut greenhouse gas emissions and put markets rather than regulation and heavy taxes to work to help fight global warming. These nations are now gathered in Buenos Aires to take the next steps in meeting the most profound environmental challenge of the 21st century.

One year after Kyoto, the scientific evidence of global warming - gathered from centuries-old trees, satellites, and Arctic ice - continues to mount. Every month so far this year has set a record high for global temperatures, right on the heels of 1997, the warmest year on the books. And a powerful El Niño gave us a taste of the extreme weather we can expect from global warming - droughts and floods in Texas, drought-driven fires in Indonesia, Florida, and Mexico, and devastating floods in China and Bangladesh.

As the evidence has grown stronger, so has our resolve. Some in Congress tried to block the administration's common-sense efforts to reduce greenhouse gases. Some even sought a gag order to keep us from educating the public about Kyoto. But President Clinton stood firm and, in the recent budget agreement, won more than $1 billion for clean energy research - a 25 percent increase. He will propose more in next year, including incentives for farmers and others to take steps to absorb carbon from the atmosphere.

The administration also is working intensively with business, launching creative efforts such as the Partnership for Advancing Technology in Housing that will help build new homes that are as much as 50 percent more energy efficient, and the Partnership for the Next Generation Vehicle that will triple the gas mileage of automobiles. We are working to help energy-intensive industries be more productive while using less power. And we have launched a government-wide effort to reduce the federal energy bill by $1 billion a year.

Even more striking is the growing number of leading corporations recognizing the urgency of addressing global warming. Companies like British Petroleum, Shell, United Technologies, and IBM have pledged publicly to reduce their emissions - in some cases, well below the Kyoto target. Senators Joseph Lieberman, John Chaffee, and Connie Mack recently introduced bipartisan legislation to reward companies that take early action by granting them credit that can be used against future emission reduction targets.

In Buenos Aires, we face two major diplomatic challenges. First, we must begin to design the flexible, market-based measures agreed to in Kyoto - such as emissions trading - that will dramatically lower the cost of reducing greenhouse gases. Emissions trading works. It has allowed the US to combat acid rain at

less than half the expected cost. To achieve both lower cost and real environmental gain, we need to develop firm rules that guarantee an efficient market with high integrity. We hope the Buenos Aires meeting will produce a work plan with clear timetables to establish such rules.

Well-meaning critics want to restrict the use of trading, viewing it as a loophole to avoid real action. They have it wrong. Strong rules can ensure that trading has integrity without sacrificing its capacity to bring down everyone's cost of reducing greenhouse gases. Moreover, those who argue for limits on trading fail to recognize the basic bargain struck in Kyoto: Our agreement to an ambitious emissions reduction target was premised on the availability of market measures to cut costs. That bargain must hold. It is critically important - especially at a time of global economic uncertainty - that everyone gets the greatest reduction possible for each dollar spent. Therefore, the United States and like-minded nations, from Japan to Russia, strongly oppose efforts to restrict use of market measures.

Our second challenge is to make progress with developing countries. As we have emphasized in our vigorous diplomatic efforts, we understand that developing countries face pressing needs and cannot take on commitments identical to those of industrialized nations. Nevertheless, developing nations will generate a majority of emissions in the next century; without them, we cannot meet the challenge of global warming no matter how much we do at home.

That is why Mr. Clinton has said he will not submit Kyoto for ratification without meaningful participation from key developing nations. While we do not expect to reach this goal at Buenos Aires, we are pressing ahead. We are emphasizing to developing countries that addressing climate change can help promote economic growth, and that many of the protocol's market-based mechanisms can speed the transfer of investment and clean-energy technologies to them.

The Kyoto Protocol represented a landmark advance, creating the structures to begin combating global warming. In Buenos Aires, the international community has begun the task of turning the protocol's broad concepts into working realities. Our success over time will ensure that we pass on to future generations a sustainable and livable world.

Stuart E. Eizenstat is undersecretary of State for economic business and agricultural affairs. He is head of the US delegation to the climate change talks in Buenos Aires this week.

The New York Times NOV 11 1998

Circ: 1,187,[illegible]

Washington Skirmishes Over Treaty On Warming

A13 By JOHN H. CUSHMAN Jr.

WASHINGTON, Nov. 10 — As negotiators from around the world worked on details of an international agreement to fight global warming, the Clinton Administration faced an intense debate among lawmakers today over whether to sign the pact during talks this week in Argentina.

There is no doubt that the Administration will sign the agreement eventually, even though it faces an uphill struggle for approval by the Senate.

But Congressional adversaries argued today whether signing it now, a step the White House favors as a sign of its commitment to the controversial accord, would strengthen or weaken the bargaining hand of the United States.

Some Administration officials said today that no decision had been reached on signing the agreement, but others said that the Administration's envoy to the talks, Stuart E. Eizenstat, would announce in Buenos Aires that it would be signed.

The agreement would commit the United States to reducing its emissions of carbon dioxide and other heat-trapping greenhouse gases, which scientists say threaten to warm the planet and disrupt its climate, by 7 percent below the 1990 levels over the next 10 to 15 years.

Opponents have said that this would require cuts in the use of fossil fuel that would devastate the economy. The Administration insists that new technologies would insure a painless transition to a cleaner economy.

For weeks, Administration officials have declined to say when the United States would sign the protocol, which was agreed to by more than 150 nations last year in Kyoto, Japan.

The current round of talks is aimed at establishing a system of international emissions trading and at defining what role developing countries should play in cutting emissions of the pollution that scientists say may cause major changes in the planet's climate.

As reports spread that the Administration would sign the agreement this week, Congressional opponents warned that this would be a political mistake, while those who favor the treaty said signing it now would increase the Administration's influence in the negotiations.

Sen. Robert Byrd, a Democrat from West Virginia, where cuts on emissions of carbon dioxide from burning coal would damage the state's mining industry, warned President Clinton to "resist making empty gestures that will only make the potential future approval of the protocol by the Senate more difficult."

Mr. Byrd is a leader of Congressional opponents of the treaty who contend that it must not be approved until developing nations, whose emissions of greenhouse gases are projected to surpass those of the United States in the next few decades, agree to join industrial nations in cutting emissions.

But Sen. Joseph Lieberman, a Democrat from Connecticut, urged the White House to sign the agreement.

"If we are not at the table, we cannot cajole or convince the developing nations to become part of the solution," he said.

Representative F. James Sensenbrenner Jr., a treaty opponent in the House and a leader of the Congressional observers' delegation to the talks in Buenos Aires, called on the Administration not to sign the treaty.

"Any global warming treaty devoid of developing country participation and credible evidence that America will maintain its economic health and vitality will be dead on arrival," said Mr. Sensenbrenner, a Republican from Wisconsin.

But Mr. Lieberman, as he left Washington to join the observers from Capitol Hill, called Mr. Sensenbrenner's plea "a mistake, and a serious abdication of American responsibility to lead in this effort, and also an obstacle to our being able to shape the global response to the problem."

Fred Krupp, the head of the Environmental Defense Fund, an advocacy organization that favors the treaty, said that "the people who oppose signing are the same people who have opposed the treaty from the beginning, and in fact they are really opposing protecting the planet. We feel very strongly that the time to sign has come."

But other environmentalists were not so enthusiastic.

"In my mind, this Administration has made expectations so low, that when they finally sign this weak agreement that they negotiated, people will mistake it for leadership," said John Passacantando, executive director of Ozone Action, an environmental group that follows climate issues.

City and State Times
Circ: 1,187,[illegible]
NOV 11 1998

Remember Global Warming? A30

Diplomats from more than 150 nations gathered in Buenos Aires this week to assess what they had done since the Kyoto agreement on global warming last December. The answer is, not much. They can be happy about one thing. Nobody has successfully challenged the urgency of their mission. Despite well-financed efforts by some industry groups to minimize the warming threat, the scientific consensus — that the unchecked burning of fossil fuels could someday cause great damage to the environment — remains intact. What is not intact is the spirit of common purpose that produced the Kyoto agreement.

The Kyoto Protocol committed the industrialized world to an average 5 percent reduction in greenhouse emissions *below* 1990 levels between 2008 and 2012 — a remarkably ambitious target, given the world's rising dependence on fossil fuels. The American target is 7 percent. But many important details were left unsettled. Even worse, the giant developing countries like India and China have yet to be brought on board. Until that happens, Senate ratification is out of the question. Meanwhile, greenhouse gases in the atmosphere continue to rise. Buenos Aires is a good place to re-energize the process. Two issues are of central importance.

Early Action. Although Kyoto's targets would not become legally binding until 2008, a quick start on the problem is essential — especially in the United States, which emits one-fourth of the world's greenhouse gases. Because America's emissions are projected to rise by 30 percent between now and 2008 under "business as usual" scenarios, it would be foolish to dawdle. Last-minute efforts to reverse the energy trajectory would be ruinously expensive.

A surprising number of American companies like the idea of early action. For the last year, two public-interest groups — the Pew Center on Global Climate Change and the Environmental Defense Fund — have been signing up companies like Boeing, United Technologies and British Petroleum that are prepared to reduce their own emissions even before a treaty is ratified. but the list would surely be longer if some way could be found to reward companies for taking action now, perhaps by giving them credits they could use to meet whatever obligations they incur when the agreement finally kicks in.

In the Senate, Joseph Lieberman, a Democrat, and John Chafee and Connie Mack, both Republicans, have introduced legislation establishing a mechanism to do just that. But they will have to persuade their colleagues in Congress, which grudgingly provided more money for clean-energy research in the new budget year but has otherwise been indifferent to the global warming issue.

Emissions Trading. The United States would have rejected the Kyoto Protocol if it had not included a provision that allows the sale or trade of emissions allowances among nations. In theory, industrialized nations that cannot quickly meet their targets without crippling energy taxes or costly investments would be able to "buy" pollution permits from poorer countries whose economies are so inefficient that even small adjustments can achieve big reductions in emissions. That transfer of capital, in turn, could help developing countries invest in cleaner technologies.

The British, among others, fear that the United States will exploit the trading plan to avoid making any real cuts in emissions, buying reductions from others instead. These fears are exaggerated. But the best way to put them to rest is to invite American companies to start cutting their emissions now. That would not only pacify the British but send a positive signal to the less-developed countries, which are unlikely to cut their energy use and prejudice their chances for further growth unless they are sure that America is serious.

The United States obviously cannot go it alone. Global warming demands a global response. But the rest of the world is not going to move without the leadership and example of the world's biggest producer of greenhouse gases.

Circ: 1,104,651

NOV 11 1998

Gridlock on Global Warming

Hurricane Mitch, which killed an estimated 10,000 people in Central America last month, is one of the many environmental upheavals that scientists relate to global warming, the issue being discussed at a summit of 400 nations in Buenos Aires. The summit is aimed at implementing a treaty, worked out last year in Kyoto, Japan, in which developed nations agreed to reduce the fossil fuel emissions that intensify global warming.

The United States had previously refused to sign the treaty, leading the other developed nations to ask why they should reduce emissions when the world's biggest polluter is not. It's a fair question, for while the United States has only 4% of the world's population, its power plants and cars create 25% of the world's fossil fuel pollution.

The Clinton administration, eager to sign the treaty, faces overwhelming opposition in Congress. Its critics say the treaty should be signed only after all developing nations also agree to emission reductions. That, however, is not going to happen. Impoverished developing nations like Bangladesh and Mali are plagued by floods and infectious disease outbreaks they believe are linked to global warming.

The Clinton administration will be lucky if it can even persuade lawmakers to embrace modest gains like marketing U.S.-made low-polluting energy plants in the developing world. Last month, Congress defeated administration efforts to eliminate tax subsidies to high-polluting coal-fired power plants.

However, even General Motors and British Petroleum have now issued a call to extend tax incentives to low-polluting industries instead. Renewable energies, healthier and in the long run cheaper than traditional fossil fuels, make sense. The time has come to harness them.

The Washington Post NOV 11 1998

Circ: 852,262

Stormy Disputes Mark International Climate Talks

180 Nations Try to Reach Deal on Meeting Emission Treaty Aims

By Joby Warrick
Washington Post Staff Writer A3

BUENOS AIRES, Nov. 10—To the island nation of Tuvalu, the threat from global warming was as clear as the blue Pacific lapping against its beaches: If sea levels rise, as some scientists predict, the entire nation could be swallowed up. "This is a matter of life and death," Prime Minister Bikenibeu Paeniu said.

Oil-rich Saudi Arabia saw the risk in starkly different terms. If a global climate treaty puts the world's gas-guzzling nations on a crash diet, Arab states could lose billions of dollars—losses that Saudi ministers say should be compensated by wealthy countries, including the United States.

Both views are part of the peculiar clash of science, politics and economic self-interest that has dominated a week of international climate talks underway in the Argentine capital. A year after adopting the world's first treaty to reduce greenhouse gas emissions, negotiators from 180 countries are struggling to find harmony on precisely how the cuts would be carried out and enforced.

Eight days of talks have yielded a sprinkling of progress, but buckets of discord over how to share the cost of reigning in pollution from fossil fuel combustion. The negotiations enter a crucial phase today as senior government ministers arrive from scores of capitals to try to nudge the talks along.

"This is a marathon, not a sprint," said U.S. delegation leader Stuart Eizenstat, the deputy secretary of state, sizing up negotiations a day after his arrival from Washington.

But Eizenstat, in a briefing for reporters tonight, also hailed what he called "encouraging signs," including "engagement, if not full agreement" by a number of developing countries on taking voluntary steps to curb pollution.

Diplomats are working against a Friday deadline to agree on a work plan for achieving the goals of a climate treaty approved last December in Kyoto, Japan. The accord requires industrialized countries to reduce emissions over the next 13 years to levels at least 5.2 percent below where they were in 1990. To take effect, the treaty must be signed by heads of state and ratified by legislatures in countries representing at least 55 percent of the world's greenhouse gas emissions.

President Clinton has not yet signed the accord, but speculation that he may do so this week continued to mount as negotiators looked for a symbolic boost from the White House in the talk's final days.

The president got conflicting advice yesterday from Congress, with some Democrats urging him to sign the treaty at once while Republicans and coal-state Democrats warned against doing anything to endorse what they termed a "fatally flawed treaty." Rep. Ron Klink (D-Pa.) joined Republican colleagues at a Buenos Aires news conference to denounce the treaty as a job killer that would drive U.S. manufacturers overseas.

"It would be the first major step toward the deindustrialization of this country," Klink said.

But congressional supporters of the treaty said Clinton's signature would give the United States more leverage in obtaining concessions from developing countries. Democratic Reps. Dennis J. Kucinich (Ohio) and Peter DeFazio (Ore.) accused the treaty's harshest Republican critics of being members of a "flat earth society" intent on denying global warming and crushing the treaty at all costs.

"My constituents want clean air and they also want jobs—and these two are not mutually exclusive," Kucinich said.

The role of poorer countries in fighting global warming remained one of the most divisive issues in the climate talks. While the Clinton administration has insisted on "meaningful participation" by key developing countries as a condition for submitting the treaty to the Senate for ratification, big polluters such as China and India have refused to consider even voluntary commitments to restraining emissions for at least another decade.

The good news for the White House has been a splintering of the once monolithic opposition to specific commitments. Argentina, Chile and a number of other nations have offered their own ideas in Buenos Aires for getting an early start on technology transfer programs that would allow rich and poor countries to share credit for pollution cuts in the developing world.

"A year ago, anyone who would have suggested such things would have been skewered," said Michael Oppenheimer, a senior scientist with the Environmental Defense Fund. "Now these proposals are being accepted with equanimity."

Still, other developing countries continued to throw up fresh obstacles. Western diplomats were particularly piqued at Saudi Arabia, which has pressed its demand for compensation at virtually every meeting.

CONTINUED

The Washington Post NOV 11 1998

Circ: 852,262

No small obstacle is the stupefying complexity of the topics and the nearly indecipherable diplomat-ese that has become the official language of the United Nations talks. Melinda Kimble, the acting assistant secretary of state who led the U.S. delegation during the first week, sent reporters scrambling for their dictionaries after she gave this summary of what she called a "very interesting agreement" reached on Monday: "We've agreed to make recommendations that the first COP after the IPCC's special report is issued to the COP/MOP on Article 3.3 definitions, rules, modalities and guidelines necessary to add additional activities under Article 3.4," Kimble said.

A Historic First Step

Last December representatives of 160 nations met in Kyoto, Japan, and developed the world's first legally binding plan for cutting emissions of greenhouse gases. Here are the highlights:

Pollution cuts: Industrialized countries of Europe, North America and Asia agreed to slash emissions collectively to levels 5.2 percent below where they were in 1990. Because emissions have been steadily increasing since 1990, the actual cuts will be much larger.

Deadlines: Countries must show "demonstrable progress" by 2005 and achieve their target between 2008 and 2012.

Poorer countries: Developing nations refused to accept binding limits for now, arguing that rich Western nations historically bear responsibility for global warming. The Climate Change Convention commits all countries to take voluntary action on climate change.

Flexibility: The Kyoto agreement gives countries flexibility in how they make and measure emissions reductions. For example, industrialized nations can set up "emissions trading" regimes that allow buying and selling of pollution credits on the open market. Wealthy countries can also receive credit for investing in clean-air projects overseas. Such programs could greatly reduce the cost of compliance.

International law: Nations have until next March to sign the agreement, but it doesn't become law until it is ratified by parliaments in 55 countries, including developed countries representing 55 percent of the world's emissions.

Unfinished Business

During the next two weeks, government ministers meeting in Buenos Aires will begin to decide how to achieve the goals set in Kyoto. Here are some of the tasks ahead:

Enforcement: Diplomats may decide how to monitor compliance with the Kyoto treaty and what to do about chronic violators. Options could range from a simple suspension of voting rights at future meetings to some form of economic sanctions.

Emissions trading: Countries will begin to decide ground rules for international trading programs that allow the buying and selling of pollution "credits." European countries favor strict limits on trading to force each country to achieve most of its cuts at home; the United States is pushing for maximum flexibility to reduce costs.

Investing abroad: Negotiators hope to begin drawing up guidelines for a "Clean Development Mechanism" that promotes investment in clean-air technology in poorer countries. The country making the investment would receive credit for cutting emissions while the host country would benefit from new technology and a cleaner environment.

Sinks: Work is just beginning on the question of whether countries should be able to claim credit for creating carbon "sinks." Sinks are natural systems, such as forests, that remove carbon dioxide from the air. If the idea is approved, countries could offset their pollution-cutting obligations by planting trees or carbon-absorbing crops.

—Joby Warrick

THE WALL STREET JOURNAL.
Circ: 1,852,863
NOV 11 1998

U.S. Is Cast in Role of Bad Guy at Conference To Work Out Details of Global-Warming Treaty

By JOHN J. FIALKA A24
Staff Reporter of THE WALL STREET JOURNAL

BUENOS AIRES—As delegates from 160 nations meet here to fill out the details in the United Nations treaty to curb global warming, one country stands out, somewhat like the proverbial skunk at the garden party.

It is the U.S., by far the world's largest producer of man-made carbon dioxide, which many scientists believe is artificially warming the Earth's atmosphere by trapping the sun's heat. While most other industrial nations have made political peace with the idea that cuts must be made in domestic "greenhouse gas" emissions, political consensus among the Americans can only be called a work in progress.

It is clearly in progress here as lobbying and wrangling go on among the representatives of major U.S. corporations, environmentalists and politicians prowling the hallways of this city's cavernous exhibition center. "We're all coming from different perspectives, different interests," says Sen. Michael Enzi, a Wyoming Republican who is part of the 15-member delegation sent by Congress to watch these talks.

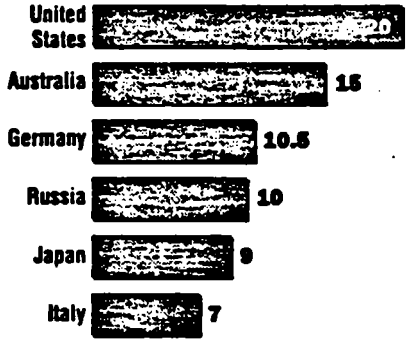
The two-week meeting here that ends Friday is a midstep in a diplomatic process that will probably take until late 2000 to complete. The Clinton administration is poised to sign the treaty, perhaps as early as today, joining about 60 other nations that have already signed, but the real test will come in winning Senate ratification. According to Clinton administration officials, the treaty won't be submitted to the Senate until around 2001, when President Clinton no longer will be in office.

Sen. Enzi, the first senator to arrive here, spent much of last week telling foreign delegates that the treaty is politically doomed in the U.S. Senate, unless major developing nations, such as China and India, agree now to cut their CO2 emissions—a move both countries have rejected. Sen. Enzi, who comes from a coal state, says Congress is deeply concerned about a loss of jobs if developing nations aren't covered by the treaty.

Hard on Sen. Enzi's heels, however, came Democratic Sen. Bob Kerrey of Nebraska, full of enthusiasm for eventual Senate ratification of the treaty, especially if it provides economic incentives for farmers. Sen. Kerrey says Congress hasn't focused on climate change yet, but when it does it will see the treaty as an "economic opportunity."

Gaseous States

The world's biggest per capita producers of carbon dioxide, a greenhouse gas thought to contribute to global warming. Figures are for amount produced in metric tons per capita annually.



Source: International Energy Agency

The dissonance between the two senators is amplified by representatives here from dozens of major U.S. corporations. Sen. Enzi is being trailed by a phalanx of executives from the anti-treaty Global Climate Coalition, whose members include the National Association of Manufacturers, the Chamber of Commerce and the American Petroleum Institute. But others, such as Monsanto Co., General Motors Corp. and DuPont Co., have teamed up with environmental groups to tout the treaty's economic opportunities, such as emissions trading.

Emissions trading would create a global market for certificates permitting emissions of a certain amount. The global scheme, developed by the Environmental Defense Fund, a New York-based environmental group, would allow companies to reduce the cost of complying with U.S. emissions-reduction quotas by allowing credit against the quotas for cheaper emissions-cutting activities carried out elsewhere.

"A ton of carbon taken out of the air anywhere in the world is a benefit," explains the head U.S. negotiator, Stuart Eizenstat, an undersecretary of state. Such trading, he says, promises "a more cost-effective way" to meet the treaty's limits. But it also raises a host of politically knotty issues, such as how to verify emissions reductions created by U.S. companies in places such as Russia, where authorities have been known to bend the rules.

And opponents such as the industry coalition question whether the plan could work in the U.S. "In order to have an emissions trading system, you have to put a limit on emissions," says one of the coalition's founders, William O'Keefe, executive vice president of the American Petroleum Institute. "I don't know who in [the U.S.] will say, 'Let's put a limit on our emissions.'."

While the Americans' wrangling echoed in the hallways, officials of the 15-member European Union were explaining in the convention's formal sessions how it has taken the first concrete steps to cut emissions. The EU has reached an agreement with European auto makers to require an average car's fuel efficiency to rise to 42 miles per gallon by the year 2008. The U.S. standard is 27.5 mpg.

In response, the U.S. delegation outlined a $1 billion package of Clinton administrative budget items to promote energy efficiency, but the Europeans seemed unimpressed. Under the U.N. treaty reached in Kyoto, Japan, a year ago, the U.S. has agreed to reduce its emissions by 7%, matched against 1990 levels, beginning in 2008, and the Europeans want to see specific moves to do it.

"The U.S. is the highest per capita producer [of CO2] in the world, and we would have expected the U.S. to have taken more measures," says Jos Delbeke, head of the European Common Market delegation.

But the Europeans are quick to concede that without U.S. involvement there will be no treaty. "From a technical point of view it is possible that the Kyoto protocol enters into force without the U.S., but from a political point of view, this is not very feasible," says Helmut Hojesky, acting head of the EU delegation.

One potential stumbling block here appears to be the group of developing nations led by Saudi Arabia that is pushing for a timetable that has no definite deadline.

CONTINUED

THE WALL STREET JOURNAL. NOV 11 1998
Circ: 1,852,863

CONTINUED

The Saudis and most other oil-producing nations have opposed the global-warming treaty from the start.

Another knotty issue relates to farmers. If farmers use a new type of planting, without the plowing that releases CO2 from the earth into the air, they could earn economic benefits from one of a number of emissions trading schemes that are under study. But scientists are still not sure how to measure the benefits.

Emissions trading has become a major selling point for the treaty as far as some U.S. corporations are concerned. Paul Tebo, DuPont's vice president for environmental matters, says his company isn't yet totally sold on the treaty. But he adds that trading will be "hugely helpful, especially if we can get credit for what we've already done." DuPont, he says, has spent $50 million around the world to reduce its emissions of CO2 and other greenhouse gasses by 15% since 1990.

If an emissions trading scheme permitted DuPont to receive credit for such reductions, he adds, it could sell the credits to other companies having difficulty meeting their quotas. "It would be a revolutionary way to approach this environmental issue, which is probably the biggest one that's facing us," he says.

Europeans suspect the U.S. will use international trading to try to avoid not only costs, but the political pain of having to cut emissions at home. They want a rule requiring that a large fraction of trades must be carried out in the home country, a move the U.S. rejects as being anti-free trade. The attempt to impose such a trading "cap" could result in a major collision here this week.

NOV 12 1998

Circ: 1,187,950

Argentina Takes a Lead in Setting Goals on Greenhouse Gases A7

By WILLIAM K. STEVENS

In an important breakthrough, Argentina signaled yesterday that it would become the first developing country to adopt binding targets for controlling emissions of industrial waste gases that are believed to cause global warming..

Until now, developing countries have presented a united front in resisting specific limits on their emissions of such gases, which are produced by the burning of coal, oil, wood and natural gas.

Rich countries agreed last December in Kyoto, Japan, to reduce emissions by an average of about 5 percent below 1990 levels in the period 2008 to 2012, but poorer nations have refused to follow suit until industrial countries actually show results.

Yesterday, at a follow-up conference in Buenos Aires, President Carlos Saúl Menem said Argentina would establish goals for carbon-dioxide emissions and in about a year would announce its commitment to those goals for 2008-10.

But María Julia Alsogaray, an Argentinian who is presiding over the Buenos Aires meeting, later described the goals as limitations on the growth of emissions, not as reductions.

While Mr. Menem's speech was somewhat general, Stuart Eizenstat, the head of the United States delegation, said he had been told by Mr. Menem that Argentina would spend the next year analyzing its emissions to produce a binding target. "This is a major, major move," Mr. Eizenstat said, "truly historic."

There were indications that other developing countries might follow now that Argentina has led the way, some participants in the Buenos Aires talks said. "No one wants to be the first one out of the box," said Connie Holmes, the chairwoman of the Global Climate Coalition, which represents fossil-fuel producers and users. She called Argentina's action "great," if it can follow through.

But she pointed out that it may be difficult for Argentina to be brought into the international process under the Kyoto Protocol because no developing countries are covered by it.

Argentina wants to pursue its emissions program by taking advantage of some of the protocol's cost-cutting mechanisms like trading of emissions rights, Mr. Eizenstat said he was told. This, President Menem said, implies the creation of a "new way" under the 1992 treaty to involve his country and others like it. How that will happen remains to be worked out over months or even years.

Moreover, said Ms. Holmes, Argentina's shift will not in itself satisfy the United States Senate, which has made participation by key developing countries a condition for ratifying the Kyoto Protocol.

Environmentalists hailed the development. "It is a major breakthrough," said Michael Oppenheimer of the Environmental Defense Fund. "I don't think there's any doubt about it." He called the Argentine move "a significant first step" in satisfying the Senate's requirements.

The move also represented "a clear break" from the developing countries' past insistence that binding limitations would put a cap on their economic growth, said Alden Meyer, a spokesman for the Climate Action Network, an environmental coalition.

President Menem said Argentina's economy had grown 6 percent a year in the last decade while greenhouse gases per capita had grown by only 1 percent, and he said his country's purpose was to erase "the false option between economic growth and environmental protection."

The Washington Post

NOV 12 1998

Circ: 852,262

Argentina Fuels Talks With Pollution Pledge

by Joby Warrick
Washington Post Staff Writer

BUENOS AIRES, Nov. 11—Argentine President Carlos Menem reinvigorated foundering climate negotiations today by committing his country to cutting "greenhouse gas" emissions in the first such pledge by a developing country since last year's global warming treaty.

Menem's announcement, delivered in a speech to ministers from 180 countries, electrified the 10-day-old talks while undercutting one of the biggest obstacles to an international strategy for fighting global warming—getting developing countries to take more responsibility.

The move was hailed as a breakthrough by the Clinton administration, which is pressing developing countries to share more of the burden for protecting the Earth's climate.

"The planet is our home, and to preserve it is our responsibility," Menem said in declaring Argentina's intention to voluntarily adopt specific targets for restricting emissions from factories and automobiles over the next 13 years. Menem's plan puts Argentina on the same time frame as the United States and 34 other industrialized countries that agreed to sharply reduce pollution last year in Kyoto, Japan.

The announcement appeared to expose a widening rift among developing countries that had previously presented a united opposition to the notion of specific commitments on curbing the growth of emissions. Within hours of Argentina's announcement, Kazakhstan told U.S. diplomats it intended to announce a similar move on Thursday.

"This is just the kind of commitment we needed to make the promise of Kyoto a reality," said Undersecretary of State Stuart Eizenstat, leader of the U.S. delegation to the climate talks. "This demonstrates that we have come a long way."

But the biggest polluters in the developing world, most notably China and India, remained opposed to any limits in the near future, opposition that continued to snarl the talks as they neared a scheduled conclusion on Friday. Negotiators are hoping by then to agree on a plan for deciding how to achieve and enforce the promises made in Kyoto.

The Kyoto accord commits industrial powers to reducing emissions by 2012 to levels at least 5 percent below where they were in 1990. But the agreement must be ratified by world parliaments to become law, and in the United States, congressional Republicans have vowed to defeat the treaty in its current form, in part because it would not require cuts by developing countries.

The Clinton administration says it will not submit the pact to the Senate until it wins commitments on "meaningful participation" by key developing countries.

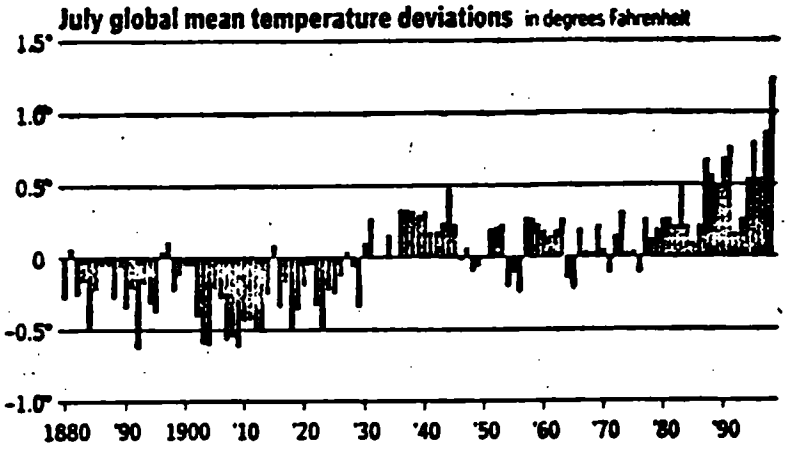
Menem's announcement was by far the biggest advance on that front, despite a year of steady prodding by President Clinton in meetings with U.S. allies and trading partners. Menem had signaled support for additional voluntary measures during Clinton's visit to Argentina earlier this year, but in today's speech he went much further, promising to adopt an emissions target before the next round of climate negotiations a year from now.

"We cannot ignore the warning signals that nature has given this year," Menem said, referring to record-high global temperatures in each of the past two years as well as this month's catastrophic flooding

CONTINUED

Getting Warmer

Global temperatures have been rising slowly over the past century and took a sharp jump this year. This chart shows how the global average temperature in July has deviated from the 100-year norm since 1880, when scientists began keeping records.



SOURCE: National Oceanic and Atmospheric Administration

The Washington Post

NOV 12 1998

Circ: 852,262

in Central America. "The planet, painfully, is issuing a warning call to us all."

Clinton administration officials had consulted with Menem about the decision in the days before the speech, and Clinton telephoned the Argentine president on the eve of the address to offer encouragement, administration sources said. White House officials said no specific promises were made to Menem in return for his commitment, although Argentina stands to reap significant benefits from future U.S.-Argentine collaboration on clean-energy projects, including U.S. investments in new power-generating plants.

Menem's speech drew applause from congressional supporters of the climate treaty and cautious praise from several major environmental groups. Some saw the move as the diplomatic equivalent of last year's pledge by British Petroleum to reduce its own greenhouse gas emissions—an announcement that fragmented industrial opposition to a climate treaty and led to declarations by more than a dozen other major corporations, from Royal Dutch Shell to Monsanto.

"Menem exploded the argument that you can't have both economic growth and environmental protection," said Sen. Joseph I. Lieberman (D-Conn.), a Senate observer to the talks and supporter of the treaty.

But Argentina's announcement drew angry reactions from elsewhere in the developing world and skepticism from some Europeans who feared the split within the developing world would merely add a new complication to the climate talks. And Sen. Chuck Hagel (R-Neb.), a leading Senate critic of the Kyoto treaty, said Menem's pledge was to little avail unless other countries followed suit.

"It's all interesting mechanics but it doesn't mean anything," he said.

But Menem also appeared to have created a political dilemma for some of the harshest U.S. critics of the climate treaty. Television ads in the United States have denounced the Kyoto accord for exempting developing countries. But at the same time, groups allied with the ads' sponsors have been lobbying poorer countries in Buenos Aires to try to keep them from making voluntary commitments to cut pollution.

USA TODAY

Circ: 1,557,171

NOV 12 1998

Argentina, Kazakhstan bolster global warming pact

By Traci Watson
USA TODAY

10A

In a victory for the White House, Argentina and Kazakhstan have agreed to limit their emissions of the pollutants that cause global warming.

As the first developing nations to adopt such limits, both countries had to resist major pressure from other developing countries.

The agreements came Wednesday in Buenos Aires, Argentina, where delegates from 160 countries are meeting to work out the details of a global warming treaty written in 1997 in Kyoto, Japan.

Agence France-Presse

Eizenstat: Lead U.S. negotiator

The treaty requires richer nations to limit their emissions of greenhouse gases, produced by using fossil fuels. Most scientists blame these gases for global warming.

But the treaty doesn't require developing countries to limit greenhouse gases, angering U.S. companies and lawmakers. The Senate has to approve the treaty before it takes effect in the USA.

The Buenos Aires talks have been hampered by disagreement between the United States and the "G-77," the negotiating bloc of developing countries. U.S. diplomats have been pushing developing nations to limit their greenhouse-gas emissions; developing nations have strongly resisted.

Argentina, as a loyal U.S. ally and host of the conference, came under especially intense U.S. pressure to limit its emissions. It also came under heavy G-77 pressure not to agree to limits.

Both Kazakhstan, formerly part of the Soviet Union, and Argentina may face consequences at the meeting and later for their action. Relations between Argentina and Brazil, which opposed its move, might be chilled by the news.

"It was a brave and farsighted move for these countries to ... move forward," said Annie Petsonk of the Environmental Defense Fund.

Stuart Eizenstat, the lead U.S. negotiator in Buenos Aires, applauded the decision. But others said Argentina's move does not go far enough. "It's a voluntary commitment, and we don't even know what it is," said Sen. Chuck Hagel, R-Neb., an outspoken opponent of the Kyoto treaty.

THE WALL STREET JOURNAL.
Circ: 1,852,863
NOV 12 1998

Two Developing Nations Agree to Reduce 'Greenhouse' Emissions in Breakthrough

By JOHN J. FIALKA A32
Staff Reporter of THE WALL STREET JOURNAL

BUENOS AIRES—Argentina and Kazakstan have become the first developing countries to join the world's industrial nations in agreeing to cut emissions of carbon dioxide and other "greenhouse gases" under the United Nations' treaty to curb global warming.

The action is the first crack in what had been a united front of 120 developing countries, the so-called G-77 led by China and oil-producing states, opposed to accepting cuts until after 2012. The treaty, agreed to in December in Kyoto, Japan, sets greenhouse-gas reduction targets for each industrial nation.

U.S. officials quickly applauded the breakthrough, which could help the ratification process in Washington. A 1997 Senate resolution declared the treaty won't be ratified without significant commitments from developing countries.

The moves came on a day the convention here on global warming appeared on the brink of bogging down over how the treaty will work. Ministers of industrial nations hope to reach agreement on a plan, with deadlines, to establish mechanisms for emissions trading and to complete other treaty elements within two years. But oil producers, led by Saudi Arabia, blocked several sessions aimed at working out details. The convention, involving about 1,500 diplomats, is scheduled to end tomorrow.

"This planet is our common home," said Argentine President Carlos Menem in a speech. "We can't ignore the warning signals sent out by nature this year," he said, referring to about 30,000 deaths caused by Hurricane Mitch in Central America.

By putting almost $2 billion into cleaner, more-efficient electricity systems, Mr. Menem said, Argentina is ready to cut its emissions below 1990 levels by 2008 to 2012, following the same terms the treaty set for 39 industrial nations.

Undersecretary of State Stuart E. Eizenstat, head of the U.S. delegation, called Mr. Menem's move "a bold step." He said it was a "clarion call" for other nations to join in strengthening the treaty, aimed at curbing manmade pollutants believed to be warming the globe by trapping heat from the sun. The U.S. target under the treaty is to reduce greenhouse-gas emissions by 7% from 1990 levels.

Bulat K. Esekin, deputy head of Kazakstan's delegation, said his country will announce a similar move here tomorrow. "Kazakstan wants to be able to manage this situation [global warming]," he said. "That's why we want to play a more active role in this treaty."

Mr. Esekin said leaders of his oil-rich country worry that within 20 years they may face desertification of large areas of grazing lands because average temperatures in his country appear to be rising.

Both he and Mr. Menem suggested their countries may also benefit by becoming more closely involved in emissions trading, which would give U.S. companies incentives for providing more energy-efficient technology to countries with pollution problems.

Mr. Esekin said Kazakstan has prepared a long list of projects, including one to trap methane leaking from coal mines. He said Kazakstan wants to promote more hydroelectric power, which, like nuclear energy, produces no greenhouse gases. Argentina and Kazakstan said they will set emission targets next year.

'22

Washington Post

Circ: 852,262

NOV 13 1998

Administration Signs Global Warming Pact

By Joby Warrick
Washington Post Staff Writer

BUENOS AIRES, Nov. 12—The Clinton administration formally signed a United Nations accord on global warming today in a largely symbolic act aimed at giving a boost to negotiators struggling to resolve key details of how to implement the 1997 pact.

Acting U.S. Ambassador to the United Nations A. Peter Burleigh signed the accord in New York, a move that provided a rare bit of good news for weary delegates to the U.N.-sponsored negotiating session.

"Our signing puts to rest any doubt about whether the United States will back out of the historic agreement reached in Kyoto," said Stuart E. Eizenstat, the undersecretary of state who heads the U.S. delegation to the talks. But he acknowledged that the endorsement "doesn't guarantee a positive outcome in Buenos Aires," where the 11-day-old talks are limping toward an uncertain conclusion.

The action was applauded by other nations but denounced by congressional critics who have vowed to defeat the treaty in the U.S. Senate.

Negotiators from 180 countries were expected to work through the night to try to craft a plan for attacking the unfinished business from Kyoto, including crucial questions of enforcement and cost-sharing among rich and poor nations. Despite progress on a few fronts, the talks have remained bogged down over whether developing countries should take on more responsibility for curbing emissions from factories, automobiles and power plants.

"We're definitely not there yet," Ritt Bjerregaard, environmental minister for the European Union, said last night.

The Kyoto agreement, which commits industrialized countries to sharp reductions in greenhouse gases over the next 13 years, was negotiated by the Clinton administration, and President Clinton had consistently promised to sign it before the March 15, 1999, deadline. Before today, nearly 60 countries had signed the pact, including nearly all "developed" countries except the United States and Iceland.

But Eizenstat, in a speech to delegates here, said the Clinton administration would not submit the treaty for Senate ratification until improvements are made, including new commitments by the biggest developing countries.

"Kyoto is a landmark achievement, but it is a work in progress, and many issues remain," he said. Eizenstat also pledged that Washington would seek more federal spending next year on climate research and investment and would launch initiatives to tighten energy efficiency standards for appliances and promote conservation in government office buildings and automotive fleets.

Eizenstat touted U.S. efforts to promote high-mileage automobiles and restructure utility regulations to encourage alternative fuels and higher efficiency. The U.S. signature was broadly welcomed by delegates happy for at least symbolic progress at a conference that has produced little of substance so far.

But some environmental groups were disappointed in the lack of new specific commitments for reducing emissions at home. "It is a useful step, but a giant leap is needed," said Howard Ris, executive director of the Union of Concerned Scientists.

Congressional opponents of the Kyoto treaty had been urging Clinton not to sign at all, a move that would effectively killed the accord. "This is not going to pass the Senate—it's not going to come close," said Sen. Chuck Hagel (R-Neb.), a congressional observer at the talks. "Obviously the president knows that. He's doing something very dishonest by signing the treaty and telling America it's good for them but not having the courage to debate it and try to get a vote on it."

Critics argue that the treaty would unfairly punish U.S. industries and would cripple the economy by raising energy prices. William O'Keefe of the American Petroleum Institute said Clinton's signing of the treaty over Senate objections would erode whatever support the accord may have had. "Wherever they were before, they've now lost ground," he said.

But other lawmakers said the signature increases U.S. leverage in the negotiations, allowing the administration to continue working toward securing developing-country commitments while solidifying international support for market-based mechanisms that will drive down the treaty's costs.

Opponents "wanted to kill the agreement in its cradle," said Rep. Peter A. DeFazio (D-Ore.). "They are working to influence developing countries and pressure them not to break from the pack."

U.S. SIGNS A PACT TO REDUCE GASES TIED TO WARMING

BUT NO SENATE VOTE IS SET

Steps to Ease Cost to Industry Are Sought as Condition of an Effort at Ratification

A1

By JOHN H. CUSHMAN Jr.

WASHINGTON, Nov. 12 — The Administration today signed the international agreement to fight global warming, affirming a crucial American role in a long environmental crusade but not raising any hope of Senate approval in the near future.

The signing, which the Administration has long promised, reinforces its commitment to the treaty, which calls for sharp cuts in emissions of industrial gases from burning coal, oil, wood and natural gas. But the accord is not legally binding unless the Senate approves it.

Vice President Al Gore said, "Our signing of the protocol underscores our determination to achieve a truly global solution to this global challenge." But he emphasized that much more bargaining lies ahead.

Treaty opponents in the United States immediately raised an outcry, but the step was widely applauded in Buenos Aires, where 150 nations are debating how the treaty can be put into effect.

Stuart E. Eizenstat, the chief American delegate to the talks there, announced this morning that the United States would sign the pact, which was negotiated last year in Kyoto, Japan. A. Peter Burleigh, the acting American representative to the United Nations, signed it in New York this afternoon.

But the Administration, as expected, will not yet submit the Kyoto Protocol for approval by the Senate, where it faces substantial opposition from critics who say the costs to industry would damage the economy.

The White House has said all along that the United States would sign it before the deadline next March, but would not ratify it unless key American provisos are accepted. Given the pace of the continuing talks, that probably means not before the elections in 2000.

The protocol strengthens a global treaty negotiated in Rio de Janiero in 1992 and ratified during the Bush Administration. Many scientists say rising concentrations of greenhouse gases, warming the earth's surface like an invisible quilt, are threatening grave environmental harm.

Without the participation of the United States, the leading source of waste industrial gases, the agreement would collapse. The United States was the 60th nation to sign.

"Kyoto is a landmark achievement but it is a work in progress and key issues remain outstanding," said Mr. Eizenstat, who is the Under Secretary of State for Economic Affairs.

In a telephone interview, he said the signing was intended to strengthen Washington's negotiating hand. But critics in Congress, echoing the views of their constituents in industries like coal and automobiles, said it would reduce American leverage.

Mr. Eizenstat called the announcement a high point in negotiations that otherwise have focused on small advances toward putting the complex agreement into force.

"I am not gilding the lily when I say there was near euphoria among delegates here," he said. "They just felt this was a real sign of U.S. leadership. I think there was really a doubt that we were really going to pursue this, with all the opposition in the Senate and in other quarters. The feeling was that perhaps the domestic opposition was so stiff that we were going to back off."

To fulfill the accord, the United States would have to cut its emissions by about 7 percent from the 1990 level over the next 10 to 15 years. Emissions have been steadily increasing since 1990, making that target very ambitious.

The conditions that the United States is demanding are meant to hold down the costs of compliance and to increase the chance that the Senate will eventually approve.

One condition is a system of trading "emissions credits," effectively allowing the United States to reduce its own emissions less by paying other countries to reduce theirs more. Another is persuading developing nations to take a larger role in cutting emissions, encouraging them with financial assistance from developed nations, which would get emissions credits in exchange.

Both ideas face strong resistance from some countries that say the first steps must be taken by industrial nations like the United States, which emits about a quarter of all greenhouse gases.

Opponents of the treaty are marshaling opposition in Congress, arguing that the targets cannot be met without damaging the economy.

Senator Joseph I. Lieberman, a Connecticut Democrat and a leading treaty proponent, said in Buenos Aires that signing the protocol "gives us the credibility to be at the table" in the continuing talks. "That means we can not only make sure it happens, but that it happens in the way that we prefer," he said.

But a Democrat who opposes the protocol, Representative John D. Dingell of Michigan, said, "The timing of this signing only encourages countries who refuse to be part of any effort to limit emissions."

On Wednesday Argentina pledged to curb its emissions, and today Kazakhstan also did so, but populous countries like China and India, whose emissions are growing fast, resist formal limits.

"The President has chosen a risky path both domestically and internationally," said Connie Holms, the chairwoman of the Global Climate Coalition, which represents major industry groups opposed to the treaty. "Clinton has sent the U.S. careening down an endless highway which appears on no maps, has no speed limits, no police patrols, and no exit or entrance ramps."

Senator Chuck Hagel, Republican of Nebraska, who sponsored a Senate resolution last year that opposed signing the treaty unless certain conditions were met, said the signing "blatantly contradicts the will of the United States Senate" and dared President Clinton to submit it to the Senate, where a two-thirds vote is required for approval.

"If this treaty is good enough to sign, it's good enough to be submitted to the Senate for an open, honest debate," he said.

Environmental groups praised the signing, but some complained that the United States is not doing enough yet to reduce greenhouse gas.

"Without a more vigorous commitment to domestic action, U.S. demands for more action by developing countries are like a chain-smoking parent telling his children that smoking is bad for them," said John Adams, president of the Natural Resources Defense Council. He urged the Administration to take unilateral steps to cut emissions of carbon dioxide from automobiles, power plants and other sources.

The New York Times
FRIDAY, NOVEMBER 13, 1998

THE WALL STREET JOURNAL.
Circ: 1,852,863
NOV 13 1998

Clinton Administration Signs Treaty Intended to Restrain Global Warming

By JOHN J. FIALKA
Staff Reporter of THE WALL STREET JOURNAL

BUENOS AIRES—Pledging to take new actions to cut greenhouse-gas emissions, the Clinton administration signed the United Nations treaty to curb global warming.

At a U.N. convention here to work out the pact's details, Stuart E. Eizenstat, an undersecretary of state, said the administration will launch initiatives for federal procurement of more energy-efficient equipment and to spur development of cleaner industrial technologies.

But critics said the move violated a July 1997 Senate resolution saying the U.S. shouldn't be a signatory until developing countries agree to greenhouse-gas reductions.

Its co-author, Sen. Chuck Hagel, (R., Neb.) has called the treaty dead on arrival. "Once the president signs this flawed treaty, he should have the courage of his convictions and immediately send it to the U.S. Senate," Sen. Hagel said.

But Mr. Eizenstat said the treaty wouldn't be submitted for ratification until it received commitments from more developing nations, which could take several years. The treaty, agreed to last December by over 160 nations in Kyoto, Japan, sets reduction targets only for industrial nations.

Mr. Eizenstat said that joining the 60 nations that have signed the pact "enables us to have a stronger and more credible seat at the table" while the rules and mechanisms are worked out. Only Fiji has ratified the pact, which binds industrial nations to reduce emissions by an average 5.6% from 1990 levels by 2008 to 2012.

How much Senate support the treaty has is a mystery. The Byrd-Hagel resolution posed a surprise test of strength that Democrats attempted to avoid by calling for its unanimous approval. After the resolution passed, Sen. Hagel claimed it represented the sense of every senator.

Democrats who back the treaty argue that support is much stronger than the resolution vote would indicate. Senate ratification, to bind the U.S. to the treaty, requires a two-thirds vote.

As diplomats headed into an all-night session to develop a timetable to complete the treaty, perhaps by 2000, there were signs that a longtime critic, a group of developing nations called the G-77, was breaking apart. Nations from Latin America, Africa and Pacific islands took issue with G-77 leaders China, India and oil-producing states, over emissions trading.

Emissions trading would allow a U.S. company to get credit against domestic targets by helping a developing nation reduce its emissions, which could be a more cost-effective way of cutting pollution. The European Economic Union wants to limit such credits, forcing the U.S. to make more domestic reductions. Mr. Eizenstat said a resolution isn't likely until next year.

Los Angeles Times
Circ: 1,104,651

NOV 13 1998

U.S. Endorses Treaty on Global Warming

■ **Environment:** Accord signed at U.N. must be ratified by Congress, where the pact faces intense opposition. A3

By SEBASTIAN ROTELLA
TIMES STAFF WRITER

BUENOS AIRES—In a move welcomed by environmentalists but condemned by congressional critics, the United States signed an international global-warming treaty Thursday at the United Nations, one of the modest achievements of a conference here that has focused on the role of developing nations in reducing greenhouse gases.

Before the signing, Undersecretary of State Stuart E. Eizenstat made the announcement here to representatives of 160 nations who have spent a sometimes contentious two weeks wrestling over implementation of the accord reached last year in Kyoto, Japan.

"In taking this action, the United States reaffirms our commitment to work with nations gathered here to address the challenge of climate change," Eizenstat said. "And we are guided by the firm belief that [illegible] will serve our environmental, economic and national security goals."

In taking another step toward a commitment to cutting emissions of carbon dioxide and five other heat-trapping gases, the United States joins about 60 nations that have signed the treaty.

The signing at the United Nations represents only a small, if necessary, advancement toward ratification of the treaty, which faces intense opposition in Congress. Republican opponents, some of whom question the very existence of a global-warming threat, demand that major developing nations make a stronger anti-pollution commitment before the U.S. even considers ratification.

So perhaps the closest development to a breakthrough here for the Clinton administration was a pledge by Argentine President Carlos Menem on Wednesday that his country will become the first developing nation to voluntarily set targets for itself to cut emissions of greenhouse gases. Kazakhstan also has promised to follow Argentina's lead.

Menem's announcement raised hopes among U.S. officials and environmental activists that attitudes are changing within a bloc of 77 developing and poor nations that had monolithically demanded that industrialized nations, the world's biggest polluters, shoulder the burden.

"The United States commends Argentina for the historic announcement by President Menem," Eizenstat said. "Without meaningful participation of key developing nations, the world cannot meet the challenge of global warming no matter how much is done by industrialized countries."

Richard Mott, vice president of the World Wildlife Fund, praised the signing.

"U.S. participation in the global-warming treaty is nothing short of essential," Mott said. "As the world's leading source of greenhouse gases, it is welcome news that the U.S. will join all other industrialized nations in curbing emissions."

A leading critic, however, said President Clinton's decision "contradicts the will of the United States Senate."

Sen. Charles Hagel (R-Neb.) cited a Senate resolution last year that called for the U.S. to refrain from signing any accord that did not include legally binding commitments for developing nations or that damaged the U.S. economy.

"The Kyoto Protocol fails both those tests," Hagel said in a statement Thursday. "Once the president signs this flawed treaty, he should have the courage of his convictions and immediately send it to the United States Senate."

At this point, ratification would have little chance of passing in the Senate.

However, U.S. officials and environmental activists say congressional opponents are out of touch with the U.S. public and, increasingly, with multinational corporations that have publicly acknowledged the menace of climate change.

Nearly eight of 10 U.S. voters support the Kyoto accord, and the majority of them, both Democrats and Republicans, want the U.S. to reduce emissions even if other nations do not, according to a poll released here by the World Wildlife Fund.

CONTINUED

Los Angeles Times
Circ: 1,104,651

"Most Americans want their elected representatives to act on this and act now," said Jennifer Morgan, the group's climate policy officer.

Delegates to the conference continued laborious negotiations Thursday on a framework for policing emissions reductions around the world.

CONTINUED

USA TODAY · FRIDAY, NOVEMBER 13, 1998

U.S. signs international global warming treaty

Senate, industrial opposition make move mostly ceremonial

By Traci Watson
USA TODAY

In a largely symbolic gesture, the United States signed an international treaty to slow global warming.

Thursday's signing does not commit the United States to abide by the treaty, written in 1997 at a historic meeting in Kyoto, Japan. Before its provisions can take effect in the United States, the treaty must be ratified by the Senate, an action seen as highly unlikely in the next few years.

"This was an important decision. Many countries doubted we would sign the (treaty)," Stuart Eizenstat, lead U.S. negotiator at a global warming summit in Buenos Aires, Argentina, told USA TODAY.

The announcement was greeted with relief and congratulations by other nations and many environmentalists. Between the Kyoto meeting and the current global-warming negotiations in Buenos Aires, the international effort to curb global warming has seemed to stall.

Opponents in the United States insist that humans are not responsible for global warming.

Most scientists agree that global warming is caused in part by greenhouse gases, created by burning fossil fuels. The gases trap heat in the atmosphere, and the resultant warming might lead to more droughts and floods.

To prevent such disasters, the Kyoto treaty calls for wealthy nations to cut greenhouse-gas emissions. It does not require poorer nations to limit their emissions.

The White House stance on the treaty has faced major opposition in Congress and from some businesses. Critics say the treaty would damage the U.S. economy, and they object to the lack of restrictions on developing nations.

By Diego Goldberg AP

Treaty support: From left, Rep. Dennis Kucinich, D-Ohio, Sen. Joseph Lieberman, D-Conn., and Rep. Peter DeFazio, D-Ore., back the decision

One opposition group has saturated the airwaves with TV ads blasting the treaty. In the 1999 budget bill, Congress forced through a provision forbidding the White House to take steps to implement the treaty before Senate ratification.

With a solid Republican majority in the Senate, there is little chance for ratification of the treaty, particularly because some Democrats, such as those from coal-producing states, are against it.

Over the past year, the USA has tried repeatedly to get developing countries to voluntarily limit their greenhouse gases as Congress and industry have demanded. But the developing nations that emit the most greenhouse gases — China and India — refuse to consider limits, saying rich nations should clean up first.

The United States has also angered its allies by insisting on unlimited use of emissions trading, a complex system that would allow a country to exceed its emission quota by paying a country that emits less than its quota. European and developing nations say there should be limits on such trading. But others say limits would make the Kyoto treaty too expensive and awkward to implement.

However, there has been some progress since Kyoto:

▶ Several dozen companies have agreed to try to lower their emissions of greenhouse gases. The group includes corporations such as Monsanto and Shell.

▶ Wednesday, Argentina and Kazakhstan agreed to limit their greenhouse-gas emissions, though the Kyoto treaty does not require them to do so.

▶ The developing nations have adopted a more conciliatory approach.

The diplomats in Buenos Aires are trying to set up work groups that will fill in the provisions that will help the Kyoto agreement reach its goals.

Until countries can agree on topics such as how to monitor progress and how to punish nations that don't comply, there can be no action against global warming.

Still, lurking in the background is the widespread acceptance that the treaty is too weak to keep the globe from warming. That is no excuse to abandon the Kyoto treaty, scientists say. But it does mean the Earth probably will warm several degrees — with the accompanying catastrophes — unless the world agrees to even stricter limits than those in the Kyoto treaty.

Climate Talks Extended in Pursuit of an Accord

By Joby Warrick
Washington Post Staff Writer
Saturday, November 14, 1998; Page A3

BUENOS AIRES, Nov. 13 – With a deal reportedly within reach, delegates to a United Nations climate conference hunkered down for a second all-night bargaining session tonight to try to decide how to implement last year's international accord to fight global warming.

The two-week conference slipped into overtime as rich and poor nations continued to clash over how to share the responsibility for cutting emissions of "greenhouse gases." U.N. officials had hoped to reach agreement today on a set of deadlines and rules that would lock nations onto a course for solving what many scientists see as the planet's most serious environmental problem.

Diplomats appeared to have achieved significant breakthroughs on several fronts, but officials acknowledged that the talks could collapse if the 160 nations gathered here fail to reach consensus on a wide range of contentious issues.

"We're going to go out of here with a signed-and-sealed deal or we go out with nothing," Peter Jorgensen, spokesman for the European Union's environmental mission, told reporters. "You're not going to get out of here while it's light – unless it's the morning light."

Last year's climate pact approved in Kyoto, Japan, would bind industrialized countries to sharp reductions in greenhouse gases over the next 13 years. But Kyoto left many issues unresolved, including when and how developing countries will take on obligations for curbing their emissions. The pact was formally signed on Thursday by the Clinton administration, but U.S. officials insist they will not submit the pact for the Senate ratification needed for it to become law until improvements are made.

Throughout the day, the mood at the cavernous municipal exposition center in Buenos Aires rose and fell with reports of deals that were on and then off again. U.S. and European governments at one point appeared to have scored a victory with an agreement on an early deadline – the year 2000 – for setting rules to enforce the Kyoto accord and setting up market-based programs that would allow countries to work jointly on reducing emissions.

But late today a group of developing countries led by China and Saudi Arabia objected to the deadlines, a startling turn of events that appeared to put the entire conference in limbo. Other diplomats shrugged off the setback and insisted that talks would continue until a deal was reached.

"I don't think anyone wants to go home and say we can't take this

process any further," said Jorgensen, the EU spokesman. "I don't think we could sell that result."

Still, the slow going in Buenos Aires was seen as a poor omen, since many of the most difficult decisions are not even scheduled to be addressed until next year at the earliest. Some observers at the conference were already labeling it a failure.

"A great deal of energy expended for not much of a result," said James Sheehan of Competitive Enterprise Institute, a free-market think tank that opposes the Kyoto treaty.

But others said Buenos Aires had already achieved significant breakthroughs, most notably the decisions by two developing countries – Argentina and Kazakhstan – to set voluntary limits on their emissions.

"The show of leadership to the rest of the world was critical," said Eileen Claussen of the Pew Center on Global Climate Change, a partnership of large corporations that broadly support action on climate change. "This meeting turned a critical corner, showing the first signs of a global response to this problem."

The diplomatic wrangling coincided with new scientific reports of unusual warming in the atmosphere and oceans. According to U.S. government scientists, surface temperatures last month just missed tying the record for the hottest October since reliable measurements began more than a century ago.

Last month's global average temperature reached 58.14 degrees Fahrenheit, just shy of the 58.15-degree record set in October 1997. The month was 1.04 degrees warmer than the 117-year average, the National Oceanic and Atmospheric Administration said, continuing a trend of unusually warm temperatures in a year in which each of the first nine months set new records.

While many scientists agree that pollution is causing a slow rise in global temperatures that could eventually become disastrous, it remains uncertain whether this year's unusual warming is part of such a trend.

Sunday, November 15, 1998

Degrees of Progress at Environmental Summit

■ **Global warming**: Delegates set compliance deadline. U.S. hails shift in developing nations' attitude.

By SEBASTIAN ROTELLA, Times Staff Writer

BUENOS AIRES--After an all-night session culminating two weeks of sometimes contentious and bureaucratic talks, negotiators from more than 170 nations attending a conference on **global warming** here wrapped up the event Saturday with the expected result: modest progress.

Following up on a treaty hammered out last year in Kyoto, Japan, the delegates set 2000 as a deadline for creating a global mechanism to police efforts to reduce emissions of six "greenhouse" gases that cause **global warming** and to hold accountable the nations that fail to comply.

The participants also made small steps on a fundamental and divisive issue: the use of U.S.-backed, market-based plans allowing industrialized nations to meet anti-pollution targets by trading emission "credits" or funding clean-air projects in poorer nations.

U.S. diplomats and environmentalists welcomed the notable change in the attitudes of developing nations, which in the past monolithically resisted pressure to increase their role in the fight against **global warming**.

Because U.S. ratification of the Kyoto treaty faces stiff opposition from Senate opponents who demand "meaningful progress" by key developing nations before considering the issue, last week's unprecedented promises by Argentina and three other countries to cut emissions voluntarily amounted to a domestic political victory for the Clinton administration.

"These pledges reflect a growing recognition that climate change is truly a global challenge that requires a global solution," said Undersecretary of State Stuart E. Eizenstat, the chief U.S. delegate. "They have changed the map of future negotiations."

Continued

Search the archives of the Los Angeles Times for similar stories about: UNITED NATIONS, TREATIES, GREENHOUSE EFFECT, ENVIRONMENT, POLLUTION CONTROL, SUMMIT CONFERENCES.

The Washington Post

A Warming Trend

THE DOGMATIC divisions of the climate change debate are giving way to practical progress. The business community, united not so long ago against any measures to combat global warming, increasingly is playing a constructive role. Now developing countries, which also had maintained a defiant and unhelpful cohesion, are beginning to look for ways to cooperate and move forward, too. All of this makes it both more urgent, and more possible, for the United States to improve its record.

Human activity—driving cars, burning coal, manufacturing—produces carbon dioxide and other gases that increasingly are accumulating in the atmosphere. Most scientists now agree that this accumulation over time will alter the earth's climate, very likely with destructive if still unpredictable consequences. Rapid warming, coastal flooding and more severe droughts and storms are some of the unpleasant possibilities. The case for reducing greenhouse gas emissions, without taking radical or impoverishing steps, is strong. Fortunately, many of the technologies that will prove useful to combat climate change have other benefits as well, in energy efficiency and pollution prevention.

Last week the United States and other nations sent representatives to a conference in Buenos Aires where they debated how to implement the Kyoto treaty, which commits industrialized nations to reduce their emissions over the coming decade. The task of dividing up the atmosphere, or responsibility for it, is understandably complex, not to be concluded in one or two or five meetings. But the deliberations were gratifyingly business-like and free of ideological posturing. Two courageous developing nations, Argentina and Kazakhstan, broke ranks to say that they, like the rich countries, will accept binding limits on gas emissions, though not in a way that will restrict their opportunities to prosper. Others, including Chile, Mexico and South Korea, are said to be considering comparable steps. Truculent oppositionists such as China, India and Saudi Arabia find themselves more isolated.

The Clinton administration last week signed the Kyoto treaty, a symbolic step intended to strengthen its international bargaining position. The Senate won't ratify the treaty, and the administration won't submit it until more developing countries sign on. Rightly, the United States also continues to lobby for rules that give each country maximum flexibility in deciding how to reach its target and that allow room for free-market mechanisms to work.

But American pleadings abroad will fail unless matched by progress at home; the United States after all remains the world's biggest source of greenhouse gases. One major advance would be legislation, such as that sponsored by Sens. Mack, Chafee and Lieberman, to encourage early, voluntary action by U.S. companies. Congress so far has been mostly an impediment to progress. But the Just Say No caucus can no longer rely on a like-minded industry alliance as a crutch, nor on a recalcitrant developing world bloc as an excuse.

Deadline Set To Form Rules For Reducing Gas Emissions

By WILLIAM K. STEVENS

After an all-night session in Buenos Aires, negotiators from more than 150 countries early yesterday set a deadline of two years for adopting operational rules for cutting emissions of waste industrial gases that are believed to cause global warming.

With that, proponents of the Kyoto Protocol, a treaty under which the reductions are to be made, declared victory in the two-week round of talks.

Expectations were low going in: United Nations officials, American diplomats and environmentalists said at the outset that they would consider the Buenos Aires meeting a success if it adopted a work program for fleshing out the Kyoto Protocol.

That was done. But beyond that, the treaty's backers said the conference revealed a shift in the worldwide debate on how to deal with the possibility of disruptive climate change brought about by emissions of heat-trapping greenhouse gases, mainly carbon dioxide, which is produced by the burning of oil, coal, wood and natural gas.

Buenos Aires made clear, they said, that both industry and developing countries were becoming more engaged in the effort to control emissions and in trying to make the Kyoto Protocol eventually work.

Under the protocol, negotiated last December in Japan, industrialized countries agreed to accept legally binding reductions in greenhouse gases averaging about 5 percent below 1990 levels from 2008 to 2012.

The protocol set up a number of mechanisms that was said to achieve the cuts most effectively and at least cost. Chief among them was a plan to allow countries to trade in emission rights, and another plan, called the clean development mechanism, to allow rich countries to invest in emissions-reducing enterprises in developing nations.

Last Wednesday, Argentina became the first developing country to announce that it would assume binding targets and timetables for controlling emissions. Kazakhstan followed. Honduras led a Latin American proposal to speed up introduction of the advent of the clean development mechanism. Some African nations expressed interest in becoming more involved.

All of this led Stuart Eizenstat, the chief American negotiator, to declare a "sea change in attitude" after the talks concluded.

At the same time, he said, many businesses have abandoned a posture of hard opposition to emissions reduction in favor of being actively constructive. A number of big companies, including General Motors, Monsanto, Shell and British Petroleum, have recently adopted such a stance, and Mr. Eizenstat said yesterday that their representatives seemed to outnumber fossil-fuel industry hard-liners in Buenos Aires.

But Mr. Eizenstat pointed out there was still considerable opposition to the Kyoto Protocol in the ranks of industry. The two biggest and most influential developing countries, China and India, continued to take a hard line against any sort of specific emissions reduction targets for poor nations until rich ones are actually reducing theirs.

And not everyone agreed with the Eizenstat assessment. "I don't think the business community is split," William F. O'Keefe, a spokesman for the American Petroleum Institute, said this week. While a number of companies are indeed taking a constructive course, he said, few support he Kyoto Protocol as the way to deal with the problem.

In general, the fossil-fuel industry and conservative American politicians continue to portray the protocol as a misbegotten instrument that will not work and will be too costly to the American economy.

Senator Chuck Hagel, Republican of Nebraska, said in Buenos Aires, as he has for the last year, that the protocol will never be ratified by the Senate. Under the rules of ratification adopted in Kyoto, the protocol cannot go into effect if the United States does not approve it. Senator Hagel also minimized the significance of the actions by Argentina and Kazakhstan, noting that there were 132 other developing countries.

Now that countries are coming to grips with what was decided in Kyoto, he said, "the cold stone wall of fact and reality has set in, and I think from here on it gets pretty tough."

Mr. Eizenstat agreed. "There are still very, very daunting challenges," he said.

Nevertheless, proponents hailed the modest achievements of Buenos Aires. The agreement on a deadline for fleshing out the protocol "insures that the nations of the world will continue moving forward against the threat of global warming," Vice President Al Gore said.

Fred Krupp, executive director of the Environmental Defense Fund, said the talks had resulted in "forward progress" and "major strides." He said the talks marked the start of "a whole new phase" in which people are beginning to understand the value of market mechanisms in reducing emissions.

160 Nations Endorse Pact on Global Warming Compliance

By JOBY WARRICK
Washington Post Staff Writer

BUENOS AIRES, Nov. 14—Diplomats, clinching a deal in the final hours of tumultuous, marathon climate talks here, agreed today to put their governments on a fast track for deciding how to meet ambitious goals for slashing emissions from fossil-fuel combustion.

The accord, gaveled through at sunrise after nearly two days of non-stop negotiations, represented the first concrete steps toward implementing the global warming treaty approved last December in Kyoto, Japan. In what diplomats described as a crucial first test for the pact, negotiators from more than 160 countries agreed on deadlines and an "action plan" that they say will guide efforts to fight global warming.

The deal was hailed by U.S. and European ministers as evidence of momentum in implementing the controversial climate treaty. But diplomats were more encouraged by apparent progress in resolving one of the thorniest issues blocking progress in climate talks—whether developing countries should take on more responsibility for reducing their emissions.

"This conference was marked by a clear shift in the terms of the debate," said Stuart Eizenstat, the deputy secretary of state who led the U.S. delegation to the United Nations talks here. "Our talks here were infused with a promising new spirit of engagement that is helping to bridge the divide between developed and developing nations."

Today's agreement was reached after intense bargaining and diplomacy-by-exhaustion that nearly mirrored the December conference, which produced the Kyoto accord. The deal teetered on collapse a number of times as a block of developing countries—led by Saudi Arabia and other oil-rich states—sought to block proposals for setting firm deadlines for resolving disputes about compliance with the treaty. The Saudis changed their stance after other developing countries broke ranks and sided with industrial countries.

Negotiators ultimately agreed to set rules for enforcing the Kyoto pact by late 2000, including tough measures to guard against cheating and penalties for countries that fail to comply. They also vowed to decide within two years guidelines for market-based programs to make it cheaper and easier for countries to cut pollution.

The Kyoto accord binds industrialized countries to sharp reductions in greenhouse gases over the next 13 years. But the pact leaves many issues unresolved, including when and how developing countries will take on obligations for curbing their emissions. The pact faces an uphill

See WARMING, A7, Col. 1

Accord Speeds Up Timetable for 'Action Plan' on Environment

WARMING, From A6

fight in the Senate, in part because of objections to the exemptions for large developing countries such as China, which will soon surpass the United States as the world's leading emitter of greenhouse gases.

The accord was formally signed on Thursday by the Clinton administration, but U.S. officials insist they will not submit the pact for the Senate ratification needed for it to become law until improvements are made.

The rift among developing countries emerged earlier in the week when Argentina and Kazakhstan announced they would voluntarily adopt restrictions on the growth of their emissions. Since then, more than a dozen other developing nations have expressed interest in taking on a variety of commitments for curbing pollution at home.

Some saw the movement as the diplomatic equivalent of last year's pledge by British Petroleum to reduce its own greenhouse gas emissions—an announcement that fragmented industrial opposition to a climate treaty and led to subsequent declarations by more than a dozen other major corporations.

"The decisions taken in Buenos Aires show that governments have begun to roll up their sleeves and get down to the serious business of reducing greenhouse gas emissions," said Fred Krupp, director of the the New York-based Environmental Defense Fund.

Europe and the United States put off until next year their biggest dispute, whether to set limits on the amount of trading in "emissions" credits and other market mechanisms that would allow rich countries to have higher emissions at home in return for investing in "clean" technology abroad.

Europeans want strict limits on trading to force countries to undertake most of their emissions cuts domestically.

The modest gains on substantive issues in Buenos Aires left partisans on both sides of the climate debate unimpressed. European "greens" complained that the ministers had done little to help the environment.

"This meeting has been a trade fair, wrangling over how to keep the fossil fuel industry alive and burning," said Patrick Green of Friends of the Earth International.

Widely known but little acknowledged at the conference, he said, is the fact that Kyoto's emissions cuts alone will barely put a dent in greenhouse gas levels over the next few decades.

On that point, global warming activists and skeptics were in full agreement.

"It's complete lunacy," said Fred Singer, a University of Virginia scientist and prominent skeptic on global warming. "Kyoto is not going to achieve anything."

On Island, Global Warming Is Clear Threat

Tiny Pacific Nation of Nauru Struggles to Be Heard at Conference

By JOHN J. FIALKA
Staff Reporter of THE WALL STREET JOURNAL

BUENOS AIRES—For many diplomats, last week's United Nations convention on global warming was another day at the office. For Ludwig Keke, the deputy speaker of the tiny Pacific island nation of Nauru, it was a chance to explain his nation's epic and peculiar struggle for survival.

"I want to see things moving," said Mr. Keke, as he started another 14-hour day at his assigned table in Buenos Aires' Exhibition Center. After two weeks of wrangling, some things moved slightly, but the job of completing a global-warming treaty was kicked forward for another couple of years.

Series of Calamities

Nauru is about to become the world's first poster child for global warming. Speaking in soft Australian-accented English over the sound of speech-making delegates, Mr. Keke, 63 years old, explained his country's plight.

Nauruans created one of the richest per-capita incomes in the world. The money came from a mining company that peeled the jungle off of the crown of their hat-shaped island and dug out the thick bed of phosphate underneath. Most of Nauru's population of 10,000 moved down to the island's narrow brim, within earshot of the waves that lap its pristine beaches.

But now a series of calamities topped off by climate change have knocked Nauru's elaborate plans into, well, a cocked hat.

First, the sea level is rising faster in the South Pacific than in many parts of the world. Storm waves now undermine Nauru's main road, which runs along the brim of the hat, and sometimes batter Nauruans' houses.

On normal islands, the houses could be moved, but on Nauru the high ground is taken up by the mine. The storm surges have also poisoned the island's supply of fresh water that once fed a pond where Mr. Keke raised fish.

"Now the pond's mostly dried up anyway, and the fish are dead," shrugged the diplomat, referring to Nauru's second crisis, an unprecedented drought now in its third year. Cisterns are dry. Even coconut trees are starting to wither.

Asian Financial Crisis

Grappling with the drought, Nauruan leaders were blind-sided by a third crisis. The island's $100 million investment fund, gleaned from the mine and from a settlement for environmental damages from the mine's former Australian and New Zealand owners, was put into the Asian real-estate market.

The waves from Asia's financial storm triggered cash-flow problems. Government officials didn't get paid for several months. Nauru's 18-man parliament gave its former prime minister a vote of no confidence and sent Mr. Keke, the deputy speaker, to the negotiations here.

On most days, Mr. Keke and a colleague left their hotel at 7:30 a.m. and didn't return until at least 10 p.m. Because Nauru is so tiny, they spent a great deal of time haggling with various coalitions.

At 9 a.m., there was the Alliance of Small Island States, a group of 40 low-lying Pacific islands, many of which have their own climate-change crises. At 11 a.m. came the larger "Group of 77," a fractious assembly including China, African nations and oil-producing nations, some of which seem determined to block the treaty.

Then there were so-called plenary sessions, where technical experts from industrial nations dueled over the meaning of "flexible mechanisms," "adaptation" and other jargon left undefined in last year's treaty. Finally came so-called contact groups, small meetings of activist delegates who huddled with corporate lobbyists and environmental groups, sometimes until 5 a.m.

Emergency-Aid Application

But by 10 p.m., Mr. Keke usually found his eyes glazing over. While other diplomats droned on, he went in search of a tango club or a good dinner. "This is ridiculous," he said of the punishing schedule.

Between meetings, he filled out an emergency-aid application form for Nauru's rehabilitation plan, the raw material for which consists of a loaf-shaped pile of dirt 100 feet tall and 500 feet long. It is the island's former topsoil, carefully scraped together over the years, which Nauruans hope to use to restore their former jungle.

But they can't move the dirt back now, Mr. Keke noted, because the financial crisis makes Nauru more dependent than ever on the income from three years' worth of phosphate left to be mined. Meanwhile, a water-desalinization plant, built several years ago to prevent a water crisis, is in trouble. Half of its six delivery trucks have broken down.

Mr. Keke and other island leaders look to the U.S. to save the day. When he was six years old, the Japanese hauled him and half the island's population to another island for use as slave laborers, part of a scheme to convert Nauru into an airport for bombers. "The Japanese ship was coming back for the rest of us when it got torpedoed by the U.S. Navy," he recalls with a smile.

But the U.S. is not coming to the rescue now, at least not soon. The negotiations here bogged down over how industrial nations that have sped up climate change with their "greenhouse gas" emissions such as carbon dioxide, might contribute to its most immediate victims.

The U.S. wants "flexible mechanisms," an elaborate emissions-trading scheme that would give U.S. companies credits for providing environmental assistance overseas. Oil-producing states want some of the credits to pay them for losses in oil revenues. African nations want aid. Small-island nations want it to go into a fund to help them survive, a process that's called "adaptation."

Each nation was allotted five minutes to speak about its problems. To get more time for the overall cause, Nauru had to strike a deal with four other island states, and the speaking job went to Bikenibeu Paenice, prime minister of Tuvalu. So Mr. Keke went home without a chance to tell Nauru's story to the assembled delegates.

Still, to emphasize Nauru's strong feelings, Mr. Keke registered his country as one of only four developing nations to volunteer to reduce greenhouse-gas emissions in the same way that industrial nations are required to under the treaty. The others were Argentina, Kazakstan and the Pacific island of Niue.

Wall Street Journal 11/16/95

Nations Agree to Finish Most Provisions Of Global-Warming Pact by 2000's End

By John J. Fialka
Staff Reporter of The Wall Street Journal

BUENOS AIRES—Delegates from 160 nations have settled on a deadline, the end of the year 2000, for completing most parts of the United Nations treaty to curb global warming. The agreement came after an all-night bargaining session that demonstrated growing support for the pact among developing nations.

"We are now beyond concepts. We are into the actual practical rules, regulations and procedures," said Stuart Eizenstat, leader of the U.S. negotiating team, who described an aborted 3 a.m. walkout by leaders of the so-called Group of 77 as part of a political "sea change" in the attitudes of many of the 120 developing nations that now compose the group.

After two days of high-level talks bogged down amid dozens of difficult issues that remain undefined in the 1997 Kyoto treaty, Maria Julia Alsogaray, chairwoman of the conference and Argentina's minister of environment, formed a group of 12 major players in the talks that hammered out the schedule for deadlines in a closed, night-long session.

According to several officials in the group, six G-77 delegates walked out at 3 a.m., led by China and Saudi Arabia. They said they could "no longer endure" the process. But they were met outside the door by delegates from Argentina, small island states and other members of the G-77 who began shouting at them to go back in.

As one diplomat explained: "We are telling them 'You can walk out if you want, but there are 100 other countries here that are willing to negotiate if you leave.' " After a brief, closed caucus with other G-77 members, the six delegates returned to Ms. Alsogaray's session.

Mr. Eizenstat said the move showed that developing nations, who were largely opposed to the treaty in Kyoto talks last year, have begun to develop individual stands for the treaty. "That will occur more frequently," he predicted, as talks over the details of emissions trading and other treaty mechanisms continue.

Many U.S. companies and Republican leaders in Congress remain skeptical about the treaty, intended to curb emissions of carbon dioxide and other global-warming gases by industrial nations, said Mr. Eizenstat, an undersecretary of state. "I'm not trying to gild the lily here. We've got substantial opposition in many quarters," he said.

At an 8 a.m. Saturday media briefing, Mr. Eizenstat said he was heartened by a shift coming from Southern Co., the largest private electric-power producer in the U.S. The Atlanta company has been a leader of two industry groups aggressively lobbying against the administration and the treaty. But Late Friday, Steve R. Spencer, senior executive vice president, issued a statement saying while Southern still has reservations about the pact, "We are committed to being a part of the solution and to working with the administration."

Southern belongs to the Climate Council, an alliance of a dozen major coal and oil-using companies that retains Donald H. Pearlman, a Washington lawyer. He was in attendance here, consulting with the Saudis and members of other oil-producing delegations.

The Saudis, who repeatedly tried to delete specific deadlines for further work on the treaty, are concerned that the effect of the treaty, which tends to promote more efficient use of energy, will lower oil prices. They want a clause giving them financial compensation, a move opposed by the U.S. and the European Union.

"I don't remember that we asked OPEC [the Organization of Petroleum Exporting Countries] for compensation when oil was at $32 a barrel," Mr. Eizenstat said.

Sentiment mustn't cool on Kyoto

By Crispin Tickell

Prospects are not promising for this month's Buenos Aires meeting of the parties to the Convention on Climate Change, yet there is no escaping the problem. Each month this year the world has set a new average high temperature, and now there is evidence that global warming is contributing to ozone depletion by causing cooling in the upper atmosphere. This is not Nature operating on her own. In the words of the last report of the Intergovernmental Panel on Climate Change, representing a broad consensus of the world's scientists: "the balance of evidence suggests a discernible human influence on global climate."

Unfortunately, some leaders in government and business still refuse to recognize what is clear to almost everyone else. It is ironic that just ten years ago it was a heroine of the conservative movement who chose to put the issue on the global agenda and draw attention to its widespread ramifications in a famous speech to the Royal Society in London. Prime Minister Margaret Thatcher later called an all-day meeting of her ministers with scientific and other experts for a briefing, and subsequently made a special visit to address the U.N. General Assembly on the subject. Since then her successors, John Major and Tony Blair, have taken the problem equally seriously, and it was the British deputy prime minister who led demands for action at the Kyoto meeting of the Conference of the Parties to the Climate Change Convention last year.

Although the United States is one of the biggest emitters of greenhouse gases, it is one of the last to join in work on global measures for their reduction. Indeed, the U.S. administration has not yet submitted the Kyoto Protocol to Congress, where special interest groups are preaching and practicing obstruction. Some extraneous measures were also opposed: for example, domestic energy conservation and efficiency initiatives, and the work of the Global Environment Facility (GEF) overseas on the same subject.

Since the Global Environment Facility was launched in 1991, it has emerged as the principal funder of global environmental projects. It has committed over $753 million for over 200 energy projects in 49 poor countries. These funds cover the added cost of making national energy development projects yield benefits for the world as a whole. For example, the GEF has worked with the private sector in Poland, Mexico and several other countries to promote energy efficient light bulbs. It has supported the world's largest solar home project in Indonesia, and it has helped private firms and government institutions to pioneer biomass technology in Brazil and solar thermal energy technology in India. These are the types of initiatives needed if we are to meet increasing energy demand without causing further damage in the earth's climate.

Much of this demand will be in countries least equipped to apply new technologies. They are unlikely even to try to take account of global climate problems if the industrial countries which created —and still create — most of the problem do not set an example. At present, the world seems likely to double its use of energy by 2030 and quadruple it by the end of the next century. While the natural mechanisms of climate change are far from fully understood, the uncertainty surrounding human influences is even greater. We are engaged in a global experiment in which we are unwitting participants and whose outcome, even if unclear in specific regions, is certainly hazardous and possibly dangerous for millions of people. Since the Rio conference of 1992, there are around 450 million new people on the earth. Human as well as environmental pressure could vastly increase the number of the world's refugees. Do we have to wait for drought, flood and sea level rise for the message to be understood?

Those attending the meeting will be seeking to give effect to the modest agreements reached at Kyoto, to promote measures that go beyond them, and to build on the progress made by many countries, not least by the GEF. It may be too late to prevent the problems associated with climate change, but we can mitigate their effects and adapt ourselves to them. Ultimately we are as subject to biological restraints as any other animal species. But unlike them, we can consciously shape at least some of our future. If we fail to do so, there will be no one to blame but ourselves.

Sir Crispin Tickell is convenor of the British Government Panel on Sustainable Development and has been an unofficial advisor on environment issues to successive British Prime Ministers. He was also the British Permanent Representative to the United Nations from 1987 to 1990.

Tod Lindberg

Editor's note: Because of the elections, Tod Lindberg's column for this week will appear tomorrow.

The Washington Times

WEDNESDAY, NOVEMBER 4, 1998

PATRICK MICHAELS

Buying treaty votes in Argentina

Now that the election is over, Clinton administration officials soon will journey to Buenos Aires to buy American votes for the Kyoto Protocol on climate change. This is the agreement negotiated last Dec. 1 that would effectively require us to reduce our energy use an astounding 30 percent to 40 percent below where we would use by the year 2010 if we just continued on our merry, prosperous way.

Sixteen months ago, the Senate voted 95-0 for a resolution declaring that it would not even consider a climate treaty that would cause economic damage or failed to include the world's developing nations. The Kyoto Protocol requires only the United States, Canada, the European Community and a few others to actually reduce their emissions. China, India, Mexico and just about every up-and-coming economic competitor don't have to do a thing except burn fossil fuel in manufacturing operations, while we export jobs to them. At least Kyoto kills the Asian contagion.

Everyone now knows the computer models that served as the basis for the original climate treaty grossly overestimated global warming.

But unless the administration can somehow demonstrate that what it calls "key developing nations" are playing ball, the Senate simply will reject the treaty if it's ever formally offered. Hence November's junket to Buenos Aires, for a gathering officially called the Fourth Meeting of the Conference of the Parties to the Framework Convention on Climate Change.

President Clinton and Argentine President Carlos Menem have already negotiated the deal. It's not very novel, and it works like this: First, we give them money. Then, we give them technology bought by U.S. taxpayers, like gas turbine electrical generators. In turn, they plant a few trees on Patagonian hillsides that have been so overgrazed as to be useless for raising cattle.

Next, Mr. Clinton claims a "joint" credit at the United Nations for reducing their emissions with our turbines and soaking up our globally distributed carbon dioxide with the trees they plant. The U.S. suppliers of the turbines and the gas that runs them ask for a subsidy because of their planetary responsibility, as they did in a letter to Mr. Clinton last month. Hardly novel.

Big old Brazil can't take the idea that its rival across the Platte gets all this dough, so the Brazilians go along, too. They agree to stop trying to raise cattle in what used to be the tropical rain forest. That's no sacrifice because the land there is too poor in nutrients ever to have been considered much of a pasture anyway. Beef and tropical rain forests just don't mix. Maybe someone should have noticed, before this whole silly enterprise started, that the Yanomanis, who have lived there for centuries, aren't cowboys and can barely feed enough children to replace their parents.

Brazil and Argentina are a lot of South America, and South America is a pretty respectable chunk of the developing world. So what do you think of that, senator? Now that we've cleared away your major objection to the Kyoto Protocol, what is to keep it from being ratified?

Forget the notion that scientific truth has anything to do with this. Everyone now knows the computer models that served as the basis for the original climate treaty grossly overestimated global warming. And more and more people are beginning to realize that the new, improved versions are making such fundamental errors as to make us wonder what scientists really do all day.

The problems are this bad: All of the computer models calculate that a rapid warming of the bottom 50,000 feet of the atmosphere should have been going on for the last 20 years. In fact, that zone's temperature hasn't changed a lick during that period. The warming that has occurred is mainly confined to the dead of winter in the coldest air masses. It hasn't spread into the atmosphere like the computer models indicate it should have. And all of the warming in the free atmosphere over the last 40 years occurred in one gulp 22 years ago. That hiccup was so slight that no one noticed it until two decades later.

When these facts were put before the senior staff of the Argentine Senate, they conceded that the science against global gloom and doom was pretty darned convincing. But, as the chief of staff of a key senator told me: "Look, the science doesn't matter. I don't care if it's cooling or warming. You have money, and we need it, and we'll do what you say."

All this from urbane Buenos Aires, capital of a not exactly poor, rapidly developing economy. Every other developing nation must be for sale at an even better price. How long before the administration buys up the support of just about everyone, so the United States Senate no longer can argue, as the ads say, that "it isn't global"?

Patrick J. Michaels is a senior fellow in environmental studies at the Cato Institute. He recently returned from Buenos Aires, where he spoke at an international seminar on global warming.

The Washington Times

WEDNESDAY, NOVEMBER 4, 1998

Global Warming Studies Are a Model of Confusion

By Bruce D. Berkowitz

Global warming is the policy issue that refutes Sen. Daniel Patrick Moynihan's axiom that "everyone is entitled to their own opinions, but everyone is not entitled to their own facts." When it comes to global warming, it seems that everyone is entitled—or rather, everyone feels entitled—to his own facts. Many of these conflicting facts are on display at the United Nations climate summit, which got under way this week in Buenos Aires.

Most predictions of global warming are based on "general circulation models." Such models divide the earth's surface and atmosphere into a grid of interconnected cells, and then estimate the rate at which energy and chemicals disperse through the environment. Extrapolate the results, and theoretically you can predict weather and climate over the world as a whole.

The devil is in the details. No one yet fully understands all the physics and chemistry these climate models require. For instance, at what rate do oceans and forests absorb carbon dioxide? On balance, do pollutants trap more heat in the atmosphere or reflect more solar energy into space? Even the best models currently available require some judgment calls.

Moreover, the more precise the model, the more computer capacity one needs to run it. Climate modeling is probably the single most demanding test of computer power. This is why a review article last year in Science, the journal of the National Association for the Advancement of Science, suggested that it may be a decade before computer climate models can link global warming to human activities.

If reliable results are not due for 10 years, what are we doing making global warming policy now? Serious climate scientists understand the limitations—which explains why most avoid making blanket predictions about global warming. The problem occurs when politicians and pundits go into Lewis Carroll mode ("Sentence first—trial afterwards!") and use the results of climate modeling as scientific justification for their preset agenda.

Just this summer, for example, President Clinton suggested man-made global warming was responsible for the drought and forest fires in Florida. Few climate specialists would agree. Probably none would attribute a specific weather event to global warming.

If any of this sounds familiar, it should, because it is a replay of the 1980s "nuclear winter" scare. Back then, politically motivated scientists and dovish policy wonks claimed climate models proved that even a few nuclear explosions would plunge the world into the cold and the dark. They rarely mentioned the limitations of the models, and the media rarely bothered checking. Misused, climate models provide the perfect political argument—an untestable proposition about a hypothetical event, cloaked in a veneer of science.

Using climate models to plan environmental policy today is as risky as, say, extrapolating econometric models to plan global trade. Such policies might prove worse than having no policy at all—and especially when the evidence is being spun to score political points.

All of this is worth keeping in mind as representatives from 166 nations meet this month in Buenos Aires at the Fourth Conference of Parties to implement the Kyoto Protocol on climate change. Current proposals would allot each nation a "quota" of greenhouse-gas emissions, the objective of which is to limit world energy consumption and supposedly culpable economic activities.

Yet it's not even clear that such restrictions would have any effect on global warming. The fact is, climate models only consider the amount of carbon dioxide, methane, and other greenhouse gases present in the atmosphere, not how they arrived there.

Observatories have collected data on atmospheric greenhouse gases for about 40 years. Most data suggest greenhouse-gas levels are rising, but they do not prove human activities are responsible. If you do not know the source of a greenhouse gas, you cannot control it. If you simply guess, which is essentially what we are doing now, the result could be both costly and futile.

The odd thing is that, while we wait for climate researchers to improve their models, we may be overlooking a more straightforward, and possibly more important, test. There are good data available measuring industrial output and global energy consumption since the early 19th century. If there is a link between energy consumption, industry and global temperatures, we should be able to see it.

Some colleagues and I recently ran a few tests using the data to see what patterns might appear. The results: Even allowing for lagging and cumulative effects, it is hard—really hard—to find any correlation between global temperature changes and fluctuations in energy consumption and industrial activity. The well-known relationships between solar cycles and temperature are easy to pick out, but once you control for them, any effect of energy consumption and industry disappears in the background noise.

This is important because restrictions on energy consumption and industry such as those being considered in Buenos Aires would, in effect, replicate the reductions that have occurred in economic downturns. Yet history suggests such reductions would have no effect on global temperatures.

These are preliminary results, and one ought not repeat the error of the climate mavens by overstating their significance. But here is a simple challenge: Before we cut energy consumption or limit industry to control global warming in the future, someone should prove that historic fluctuations have affected global temperatures in the past.

THE WALL STREET JOURNAL

WEDNESDAY, NOVEMBER 4, 1998

Greenhouse Gases' Increase Slows

Report Says '97 Growth in U.S. Emissions Fell From '96 Pace

By Martha M. Hamilton
Washington Post Staff Writer

The federal Energy Information Administration said yesterday that U.S. emissions of gases that have been blamed for global warming grew at a slower rate in 1997 than they had the year before. But the increase was large enough to push the total increase in U.S. emissions from 1990 through 1997 to 10 percent, the agency said.

"It really shows that the growth trend hasn't been reversed," said EIA Administrator Jay Hakes.

The growth rate in U.S. emissions of gases from fossil fuels in 1997 was 1.4 percent, or about average for the 1990s as a whole, the EIA noted. But it was down substantially from 1996, when an extraordinarily cold winter pushed fossil fuel consumption up. During that year, emissions grew by 2.8 percent.

The report comes as environmentalists, business leaders and government officials are gathering in Buenos Aires to begin to work out details of how to reduce emissions of greenhouse gases to meet the goals established last year in a treaty agreed to by major industrialized nations in Kyoto, Japan.

The Kyoto agreement required industrialized countries to lower emissions of greenhouse gases by an average of 5.2 percent below 1990 levels by 2012.

The EIA found that emissions of carbon dioxide increased by 1.5 percent, while the growth in U.S. emissions of other greenhouse gases was relatively flat in 1997. Although greenhouse gas emissions grew less rapidly than the U.S. economy, they grew at a rate slightly higher than population growth. For the first time in six years, hardly any of the growth was attributable to transportation, the EIA found.

The American Petroleum Institute's executive vice president, William F. O'Keefe, said the EIA report raises a number of questions about the science of global warming. He said the slower-than-expected growth in emissions of carbon dioxide and methane raises questions about whether North America and the oceans are absorbing more of the gases than was foreseen.

"It highlights the importance of understanding the climate system, because if there are some natural mechanisms at work, we need to take those into account to figure out what measures are required," said O'Keefe, who until recently headed the Global Climate Coalition. The coalition, which includes oil companies, utilities and automakers, has opposed ratification of the Kyoto treaty on several grounds, including what they say is its potential harm to the U.S. economy.

"It isn't possible to draw much in the way of policy conclusions from a single year's change," said David Hawkins, a senior lawyer with the Natural Resources Defense Council. "Even if it didn't grow at all from today's level, we have a significant job to meet the Kyoto commitments, but one that is feasible and affordable," he said.

If the growth is slowing, that is good news, Hawkins said. "But obviously, to the extent that we're increasing at all, we're still moving in the wrong direction," he said.

The Washington Post

Wednesday, November 4, 1998

THURSDAY, NOVEMBER 5, 1998
USA TODAY

Election results cheer environmentalists

By Traci Watson
USA TODAY

Environmentalists won key victories at the state polls Tuesday, especially on measures related to preserving the nation's wilderness and farmland from development. But industry and hunters' groups held their own in Oregon, Utah and Alaska.

Montana was where environmentalists scored especially big. In a state founded by prospectors, 53% of voters approved a measure to ban a controversial mining technique in new mines: using cyanide to leach gold or silver out of ores in open pits. Backers say cyanide from mining operations can contaminate groundwater.

Mining companies say that open-pit cyanide mining is a useful technique and that its ban will limit job growth in the state. Wednesday, mining groups asked a federal judge to strike down the initiative.

Business groups managed to fight off another assault on a time-honored industry, this one in Oregon. Measure 64 would have banned clear-cutting in forests. Its definition of a clear-cut was fairly broad, and timber groups mounted a multimillion-dollar campaign to defeat it. Voters decided against it in large numbers.

Measures to protect open space proved popular, nowhere more so than in New Jersey, a state not known for its open spaces. But New Jersey still has 2 million acres of forests and farms, much of it threatened by encroaching suburbs and shopping malls. Tuesday, 66% of those who went to the polls voted to spend $98 million a year in state tax and use fees to protect open space. Gov. Christie Whitman strongly backed the measure and spent weeks campaigning for it.

By David Zalubowski, AP

Environmental gains: In Colorado, 64% of voters approved strict rules to ensure that hog farming operations don't pollute waterways in the agriculture-rich state.

Measures that would help preserve wilderness and farmland also passed in Alabama, Arizona, Florida, Oregon and Rhode Island. But voters in Georgia and New Mexico turned down such provisions, though Georgia's was supported by many high-level politicians, and New Mexico's would have cost a relatively paltry $620,000. For many environmentalists, the passage of the Arizona provision was actually a defeat because it also forbids state laws controlling sprawl.

Animal rights activists had mixed luck. Building on previous success in the Western USA, they persuaded 57% of California voters to cast ballots to prohibit leg-hold traps, which clamp down tightly on an animal's limb.

But an Alaskan measure to ban the trapping of wolves with snares, thin wire loops designed to quickly strangle an entangled animal, garnered only one-third of the vote.

Ohioans rejected by a wide margin a measure to ban the hunting of mourning doves.

And Utah voters, reacting to animal-rights activists' headway in other states, voted strongly to require two-thirds of voters to approve any state ballot measures relating to wildlife.

Environmentalists made big gains on another animal: the hog.

Voters in Colorado and South Dakota signaled their disapproval of the influx into their states of large hog farms, which store the hogs' waste in open pits. Environmentalists say the pits can leak or break, contaminating groundwater.

In Colorado, 64% of voters approved of rigorous rules to ensure the farms do not pollute the state's waterways and aquifers. In keeping with that vote, an industry-sponsored measure to shield hog farmers from tighter restrictions was rejected.

In South Dakota, where large hog farms are springing up on the eastern plains, nearly 60% of voters favored a measure to ban any new corporate farms, which would effectively halt establishment of new hog farms. But the state attorney general said Wednesday that the amendment might not survive legal challenge.

Clinton Presidential Records
Digital Records Marker

This is not a presidential record. This is used as an administrative marker by the William J. Clinton Presidential Library Staff.

This marker identifies the place of a tabbed divider. Given our digitization capabilities, we are sometimes unable to adequately scan such dividers. The title from the original document is indicated below.

December 1998

Divider Title: _____

Unknown factors still surround global warming

By Traci Watson
USA TODAY

An international treaty has been written to take action against it. Nations are taking costly steps to prevent it. Politicians are staking their careers on it. But global warming, the subtle rise in the Earth's temperature that promises to unleash a posse of natural disasters, still is the subject of dispute and uncertainty.

And that is reflected in two recent scientific papers.

One of those papers is by climate scientist James Hansen, one of the earliest and most outspoken of those raising the alarm about global warming. His 1988 testimony to Congress that global warming was under way brought the subject to the public eye.

But in his new paper, he shows some uncertainty about how fast and how much of the Earth is warming.

Hansen, of the Goddard Institute of Space Studies, still thinks that the Earth is warming. He also still thinks that humans are part of the cause, because of the so-called greenhouse gases produced by fossil-fuel use. The gases trap heat that would normally radiate into space.

But in this article, published in the Oct. 27 issue of the *Proceedings of the National Academy of Sciences*, Hansen notes the scientific ignorance about many of the factors affecting the world's climate.

For example, cars and power plants spout tiny particles of soot and other pollutants into the atmosphere. These particles reflect sunlight and affect cloud formation, thereby helping to cool the planet. No one, he notes, knows how much effect this has.

Another puzzle he presents is the role of the sun. Greenhouse gases are definitely helping warm the planet, Hansen says. But fluctuations in the sun's energy also seem to be at work. Right now, the sun is adding to global warming.

But someday the sun might give off less heat than now, thereby canceling some of the effects of greenhouse gases. But whether that will happen, he notes, is unknown.

Even so, "you still have the concern that you'll have a very large climate change," Hansen says. But given the big changes in knowledge in the past 20 year, he says, "it's hard to predict over the next 100 years."

Other scientists agree, some pointing out even more uncertainties than Hansen does. "We do the best we can," says Simon Tett, a climatologist at Britain's Hadley Centre for Climate Prediction & Research.

However, Tett and many other climate scientists still say that human activity is warming the Earth into a fever.

That point was stressed in a paper in last week's *Science*. The author used a new technique to show that greenhouse gases already are influencing the Earth's climate.

The paper also concludes that the 20th-century temperature record can only be explained by taking into account both the sun and greenhouse gases, undercutting the argument that the sun alone has caused this century's warming.

Still, scientists don't want to oversimplify the state of knowledge, nor do they want politicians to do so.

Some scientists were uneasy about Vice President Gore's press briefing in July when he noted that the first six months of 1998 each set temperature records.

"Althought that's true, it gives the erroneous perception that it's going to continue that way," says Michael Schlesinger, a climate scientist at the University of Illinois-Urbana-Champaign.

Oregon to help pay assisted suicide bills

The Associated Press

SALEM, Ore. — Turning aside last-ditch arguments by opponents, state officials have decided to cover the costs of assisted suicide by low-income Oregonians.

The policy, which took effect Tuesday, is opposed by the Oregon Catholic Conference on grounds that taxpayers shouldn't be forced to subsidize a practice that some find immoral.

But Gov. John Kitzhaber and others have argued that voters twice have endorsed assisted suicide as a legitimate medical service for terminally ill people and that it should be covered by the state under the Oregon Health Plan.

In February, the state Health Services Commission decided that the 270,000 low-income people covered under the Oregon Health Plan should be able to choose death at taxpayer expense.

That policy was upheld Monday by state health plan officials after they reviewed testimony from a public hearing last week that focused on the proposed rule to implement the coverage.

State Medicaid Director Hersh Crawford said objections raised by the Catholic Conference at least week's hearing weren't sufficient to reverse the commission's earlier endorsement of state funding for assisted suicide.

Bob Castagna of the Catholic Conference said state health officials lacked the authority to move ahead with state-subsidized suicide because the Legislature did not specifically fund it.

"We intend to raise this issue in the next session of the Legislature," Castagna said. "There's also the overall policy argument that it is not appropriate to fund assisted suicide with taxpayer dollars."

In the first year since Oregon's assisted suicide took effect, the state has reported at least 10 cases of people receiving lethal prescriptions under the law. Eight of those people used the drugs to end their lives, and two died without using the prescriptions.

Crawford said state officials expect that only a small number of health plan recipients will choose assisted suicide.

The health plan would pay less than $45 for the prescription medicine, between $9 and $81 for each visit to a doctor's office and $30 to $118 for counseling sessions.

General accused in Bosnia massacre arrested

By Steven Komarow
USA TODAY

SARAJEVO, Bosnia-Herzegovina — U.S. troops arrested a commander of the Bosnian Serb military Wednesday to face charges of genocide in one of the most notorious events of the Bosnian war.

Gen. Radislav Krstic (pronounced KRIS-tich)is the highest-ranking person yet detained on Bosnian war crimes charges. He was seized at noon without incident near Bijeljina in northeast Bosnia. Details of the operation were not released, but officials said it was timed to minimize risk of resistance from Krstic or any of the 17,000 troops under his command.

Besides being the head of one of four active Bosnian Serb Army corps, Krstic reportedly remains a close associate of Radovan Karadzic and Gen. Ratko Mladic, the Serb political and military leaders during the 1992-95 war. They, too, face charges from the U.N. war crime tribunal in The Hague, Netherlands, but remain at large.

The charges against Krstic, which were kept secret in a sealed indictment until his arrest, are based on his role as commander of the so-called Drina Corps during the war. In July 1995, his troops pushed aside the lightly armed U.N. peacekeepers protecting the Muslim "safe haven" of Srebrenica in eastern Bosnia.

Krstic's troops separated male civilians of the town from the women and children, then slaughtered many of the inhabitants, according to tribunal investigators. Other civilians reportedly were murdered as they fled through the woods or were herded into storage sheds and gunned down.

More than 8,000 people were killed or are missing, according to Bosnian and U.N. authorities.

Louise Arbour, chief U.N. prosecutor for Bosnian war crimes, said in a statement that the arrest was "very significant for the continuing work of the tribunal."

The arrest was only the ninth by NATO troops in their three years in Bosnia. About five dozen more officials have been indicted publicly but not arrested. The U.N. tribunal will not say whether there are more sealed indictments.

"Persons indicted for war crimes who are still at large should realize that they, too, will be brought to justice," said Javier Solana, NATO's secretary-general. He called again for them to surrender peacefully.

Lt. Cmdr. Glenn Chamberlain, NATO's chief spokesman in Bosnia, said the alliance had been tracking Krstic's movements carefully since learning of the Oct. 30 indictment.

After his arrest, Krstic was taken to the U.S. base at Tuzla. A military transport was set to fly him to The Hague late Wednesday or early today.

If convicted of the charges, he could be sentenced to life in prison.

Some wish warm weather would cool it

By Christopher Lenney, Watertown Daily Times

In Potsdam, N.Y.: Oscar Sarmiento finds an alternate use for a snow sled: hauling leaves that have accumulated in his yard.

By Carrie Hedges
and Shannon Tangonan
USA TODAY

While most people are not complaining about the balmy weather that has embraced much of the nation, people who rely on cold temperatures to make a living are beginning to sweat.

About three-fourths of the nation is at least 20 degrees warmer than usual, meteorologists say. Springlike weather is expected to stick around at least through the weekend. "There really is no cold air in sight," Brian Waksmunski of Weather Services Corp. said.

Some resorts, such as Snowshoe Mountain in Charleston, W.Va., have reopened golf courses and mountain bike trails to keep customers coming.

Sam Ashelman, founder of Coolfont Resort near Berkeley Springs, W.Va., is praying for temperatures to drop at night so he can start his snow tubing business on schedule.

"We're waiting nervously for it to get colder," said Ashelman, who wants to open his second snow tubing season Dec. 15. The resort makes its own snow and needs five nights of temperatures in the 20s to make a good 2 feet.

In Minnesota, the temperatures are a brisk 20 degrees. But that's not cold enough for Jerry Hennum to get his ice-fishing business going. Hennum owns the Sportsman's Lodge in Baudette, near the Canadian border. "We're kind of waiting for Mother Nature to get rolling."

He said he needs temperatures to be near zero to maintain ice thickness.

Sellers of outdoor apparel also are feeling the pinch. "It's hard to get a consumer interested in buying a down parka when it's 70 degrees outside," said Pamela Rucker, spokeswoman for the National Retail Federation.

Rucker said when retailers develop their marketing plans, weather is always a factor. If coats and other outerwear aren't selling now, retailers might be forced to mark down items.

Georgia peach farmers are eyeing thermometers warily. Peach trees need hundreds of hours of "chill time" during the growing season in order to flower or produce fruit.

If temperatures don't start dropping below 45 degrees, what has been a bad year is going to get worse, said Wade Hutcheson, who represents growers in Spalding County, Ga.

Record highs were set Wednesday from the Dakotas to Providence, R.I. In Huron, S.D., the mercury hit a record 64 degrees. Atlanta nearly baked at 74, tying the record set in 1991. Providence had a record high of 63 degrees.

Storms in the West have formed a ridge of high pressure from the Rocky Mountains eastward, and it's causing the warm weather, James McCutcheon of Weather Services Corp. said. The warm weather has been a bane to gardeners, whose bulbs are starting to germinate, and is bamboozling the birds, too.

"People are saying they still see robins around," said Rich Patterson, director of the Indian Creek Nature Center in Cedar Rapids, Iowa. "As long as the weather is nice, they have no desire to go south."

Contributing: Wire services

▶ **Full weather, 26A**

AGENCY FOR INTERNATIONAL DEVELOPMENT
320 TWENTY FIRST STREET, N.W.
WASHINGTON, D.C. 20523

FILE

Jan 14

The Administrator

to Todd Stern

Todd,

I thought you might find my response & yet another attack on my reference to Hurricane Mitch as "a classic greenhouse effect" of interest. They have a well-oiled machine. We need to hit back.

all the best,

Brian

PHONE: (202) 647-9620 FAX: (202) 647-1770

Pls pass to Brian - op-ed ran in Wash Times on 12-28. Jess FILE

Defending a brief reference to Hurricane Mitch

Patrick Michaels charges in "Mitch's warming afterglow" (Commentary, Dec. 17) that my reference to Hurricane Mitch as a "classic greenhouse effect" is not substantiated by conclusive scientific evidence. The evidence may not be conclusive, but it is compelling. When Mr. Michaels implies that the increased intensity of recent hurricanes has nothing to do with climate change, he is not only on shaky scientific ground, he seems to be arguing for accepting major risk in the face of compelling evidence.

My very brief reference to a classic greenhouse effect has engendered separate rebuttals in three publications. I am impressed with the public relations machinery that has been put in place to track and knock down any administration reference to climate change or global warming. Perhaps the resources spent on public relations should be expanded on efforts to determine what the link is between climate change and extreme weather.

My reference was not intended to confirm a scientific linkage. Rather, it was meant to convey my notion that the excess heat and humidity of this hurricane season has contributed to more severe storms. Thomas R. Karl, a respected scientist with the National Oceanographic and Atmospheric Administration's National Climate Data Center, has written that the "earth's hydrologic cycle is intensifying" and includes "an increase in atmospheric water vapor which enables storms to generate more precipitation ... [which] leads to a significant increase in the energy available to drive storms and associated weather fronts, therefore affecting rainfall rates, precipitation amounts, storm intensity and related runoff."

If my brief reference to a greenhouse effect has launched us into an informed political debate, I suppose I welcome that. I would welcome more enthusiastically a serious effort to understand what is happening to the weather on our globe. So would the people of Central America, for whom the politics of climate change must seem a remote luxury.

J. BRIAN ATWOOD
Administrator
U.S. Agency for International Development
Washington

TWT 12-28-98

Venice's Plan To Stop Sea Sinks

Flooding, Disasters Looming as the Adriatic Keeps Rising

By Sarah Delaney
Special to The Washington Post

ROME, Dec. 10—A government commission today rejected a $2.6 billion proposal designed to save Venice from the vagaries of the Adriatic Sea with giant floating barriers, leaving the lagoon city without a working plan to protect itself from sinking in the decades ahead.

Italy's center-left government must make a final decision within two weeks, but Environment Minister Edo Ronchi—a member of the Greens party who will be responsible for the decision—has signaled his opposition to the plan, mainly for environmental reasons.

Venetians don their galoshes and walk wooden planks thrown over high water an average of 80 days a year. Besides the obvious difficulties flooding poses to the city's 140,000 residents, it hurts the tourist industry on which Venice thrives. And everyone fears a repeat of the 1966 flood that ruined buildings and works of art, and disrupted Venetians' lives for weeks.

Because the Adriatic is rising, some experts have warned that Venice could disappear altogether by the end of the next centuryunless something is done.

"We have to ask ourselves whether we want to save the lagoon or save Venice, and at this point we have to say Venice," said Roberto Frassetto, who leads a research committee on climate change, the Reuters news service reported. "The least harmful solution has to be the Moses project." At a news conference, commission president Maria Rosa Vittadini

> "We have to ask ourselves whether we want to save the lagoon or save Venice."
>
> **Roberto Frassetto,** research committee chair

said the revolutionary proposal to erect colossal flood barriers at three entrances to the lagoon "is not compatible with the critical conditions of the ecosystem that includes the lagoon, the city and the drainage basin" where inland rivers and streams come together.

She said the commission had not given sufficient consideration to such alternative proposals as raising the level of the land Venice is built on, or erecting higher first floors for homes and businesses.

The project—codenamed "Moses"—envisioned the construction of 79 giant cement barriers, weighing 300 tons a piece, that would be raised to keep out high tides during flood conditions. Vittadini said that if the barriers were to be called into use only seven or eight times a year, the system would be acceptable. But projections indicate the barriers would have to be raised some 30 or 40 times a year, Vittadini said, too much for the lagoon's delicate ecosystem.

"If the communication between the lagoon and sea is blocked too much, the lagoon will die," Vittadini said.

The Moses project has been approved by a five-member international commission as well as the Veneto Region and a commission from the ministry of public works.

Venice Mayor Massimo Cacciari has not pronounced himself officially on the Moses plan, but his fatalistic advice to Venetians to "put on their boots" when the water rises has become legendary. He questions the high cost when Venice has many other needs and less ambitious remedies haven't been fully applied.

The Washington Post

Friday, December 11, 1998

PATRICK MICHAELS

Mitch's warming afterglow

The Clinton administration has developed a nasty habit of using personal tragedy to further its global warming agenda. From the snowmelt-caused Red River flood last year, to Florida's fires this summer (which blazed because there was too much vegetation), to Hurricane Mitch, if there's any possible way to conflate human suffering with global warming, the administration will do so.

Administration antics on Mitch, a real son of a gun when it came to flooding rain, began during the recent Buenos Aires conference on global warming. There, the head of the U.S. Agency for International Development, J. Brian Atwood, told CBS News that Hurricane Mitch, which killed an estimated 10,000 Central Americans, was a "classic greenhouse effect." One hopes Mr. Atwood actually knows better and is merely engaging in White House huckstering.

In 1974 Hurricane Fifi killed the same proportion of the (then smaller) population of Honduras. In 1971, Hurricane Edith plowed into the northwestern tip of Honduras at Cabo Gracias a Dios as a Category 5 blaster. In 1955, Hurricane Janet, another Category 5 storm, had hit a couple of hundred miles to the south of where Edith landed. Only two storms of that magnitude have ever hit the United States. Flooding is another recurring phenomenon. In 1979 Tropical Storm Claudette produced five feet of rain in Texas — just like Mitch in Honduras — but killed about 10,000 fewer people.

Certainly Mr. Atwood's staffers could have apprised him of the refereed scientific literature on global warming and hurricanes. It contains two speculative papers saying hurricanes may get worse and an overwhelming number of others proving that notion wrong. In addition, hurricane observations in warm years and during planetary warming argue more for the opposite — weaker storms.

The first paper, published in 1987 in Nature by Kerry Emanuel, speculated that under unrealistic, physically impossible conditions, global warming would increase the strength of hurricanes. While that paper generated a lot of press, scientists knew it was merely an exercise in hurricane vortex mathematics. Mr. Emanuel threw more fuel on the fire when he published an article on "hypercanes" in the widely read American Scientist.

The larger community of hurricanologists had by then had enough. In 1994, James Lighthill published in the Bulletin of the American Meteorological Society an extensive review finding no basis for Mr. Emanuel's speculation.

In 1996, a storm surge of literature blew apart Mr. Emanuel's hypothesis. First, the aptly named Chris Landsea, a scientist at the National Hurricane Center, observed in Geophysical Research Letters that there had been a significant decline in the frequency of severe hurricanes in the Atlantic Basin over the last 50 years. The region warmed a few tenths of a degree during the period.

Later that year Johnny Chan published in the same Journal an article finding no net trend in Pacific typhoons. Even the computer modelers got into the act. Europe's Lennart Bengtsson published a paper in the journal Tellus showing that a computer climate simulation with an enhanced greenhouse effect predicted fewer hurricanes and lower average winds.

Also in 1996, J.B. Elsner found that the regions in which hurricanes form had shifted in the last 40 years and now favor development of weaker storms. And Chris Landsea, in yet another report published by the United Nations Intergovernmental Panel on Climate Change in 1996, showed there has been a statistically significant decline in the maximum windspeed measured in Atlantic hurricanes since World War II.

Australian climatologist Ann Henderson-Sellers and 10 others re-reviewed the hurricane/global warming situation in last January's Bulletin of the American Meteorological Society. They called their work a "Post IPCC Assessment," meaning they believed it stood for the consensus of scientists on the issue. They simply could not find any increase in hurricane frequency or severity, and they looked everywhere. They also took pains to note that the conditions assumed in Mr. Emanuel's initial work are just about impossible. That work and its ilk contain "known omissions [that] all act to reduce these increases" of hurricanes, Miss Henderson-Sellers wrote.

Who gains here? Rumors persist that Vice President Gore has been advised to make global warming a central theme of his presidential run in 2000.

It's rare to get such scientific consensus in climatology. But in one last attempt to bring the exaggerators and the alarmists to heel, Miss Henderson-Sellers recently published in the journal Climate Change a paper detailing the whole sorry history of the campaign to hype hurricanes. Ironically, Miss Henderson-Sellers herself is not shy about touting the dangers of global warming.

Who gains here? Rumors persist that Vice President Gore has been advised to make global warming a central theme of his presidential run in 2000. Threatening hundreds of thousands with imminent drowning unless they vote for him is a crude but probably effective trick.

Patrick J. Michaels is senior fellow in environmental studies at the Cato Institute and science advisor for the Greening Earth Society in Arlington, Va..

The Washington Times
THURSDAY, DECEMBER 17, 1998

1998 Is Warmest Year on Record

World Temperature Climbs 0.27 Degree, U.N. Agency Reports

By JOBY WARRICK
Washington Post Staff Writer

U.S. and international scientists officially declared 1998 to be the hottest year on record yesterday as worldwide temperatures continued an upward march that many experts partly attribute to man-made "greenhouse gases."

The worldwide average surface temperature, about 58 degrees Fahrenheit, was about 0.27 degree above the previous record set only a year ago and surpassed the 30-year norm by a full degree, the World Meteorological Organization (WMO) said in an annual report on climate.

The figures were based on the meteorological calendar, which ends Dec. 1, although the calendar year is also certain to go down in history as the warmest since at least 1860, said the WMO, a United Nations-sponsored agency made up of more than 180 meteorological organizations from around the globe.

It is the 20th consecutive year in which global surface temperatures were above normal, the WMO said, and the third record-breaking year since 1995. Seven of the hottest years on record have occurred in this decade, the agency said.

See WARMING, *A13, Col. 1*

WARMING, *From A12*

WMO Secretary-General G.O.P. Obasi, in a statement released with the report in Geneva, called on national governments to "heed the anomalies" and increase efforts to reduce emissions of heat-trapping gases from factories and automobiles.

Identical findings were announced by NASA Goddard Institute for Space Studies, which also reported that the United States experienced near-record warmth in 1998. Noting that year-to-year temperature variation is usually quite small—measured in hundredths of a degree, institute director James E. Hansen described this year's jump as "impressive."

"We broke the record by a substantial amount," Hansen said. "That's due in part to El Niño, but we've had El Niños every few years and haven't seen this."

Hansen described the trend as a continuation of a gradual global warming "presumably due to greenhouse gases, plus El Niño."

Scientists who are generally skeptical of global warming found the new data unconvincing. S. Fred Singer, an atmospheric scientist and former director of the U.S. Weather Satellite Service, said too little is known about climate to say if the recent warming is part of a trend or just a fluke. This year's unusual warmth is almost certainly due last year's unusually strong El Niño, he said.

"There are natural fluctuations in the climate," he said. "You can't tell if a particularly warm year is due to natural causes or human causes."

Unlike some previous years, 1998's unusually warm temperatures were confirmed not only by land and sea-based instruments but by satellites orbiting above Earth. Worldwide average temperatures set new monthly records in each of the first 10 months of the year, although by gradually smaller amounts since the start of autumn.

With the newest figures, the period since 1975 has emerged as a time of unusually rapid change, Goddard Institute's Hansen said.

"The rapid warming of the past 25 years undercuts the argument of greenhouse skeptics, who have maintained that most of the global warming occurred early this century while greenhouse gases were increasing more slowly," Hansen said. "In fact, the fastest warming is occurring just when it is expected."

The Washington Post
FRIDAY, DECEMBER 18, 1998

Earth Temperature in 1998 Is Reported at Record High

By WILLIAM K. STEVENS

The earth's average surface temperature in 1998 is the highest by far since people first began to measure it with thermometers in the mid-19th century, the World Meteorological Organization reported yesterday.

The organization, an agency of the United Nations, said 1998 would be the 20th year in a row that the globe's surface has been warmer than its recent long-term average, which is the average for 1961 through 1990. Seven of the 10 warmest years on record have occurred since 1990 and the other three occurred after 1983. Most recently, new monthly high-temperature records were set in each of the 18 consecutive months ending in October 1998.

The results, based on data through mid-December and reported in Geneva, will change slightly when final data are calculated. But experts say it is certain that 1998 will turn out to be the warmest year on record, and almost as certainly by an easy margin over the the previous warmest, 1997.

According to the new figures, the average global temperature this year will turn out to be about 58 degrees, a full degree warmer than the 1961-1990 average.

"This number's amazing," said Dr Philip D. Jones, a climatologist at the University of East Anglia in England, speaking of a field in which records are normally set in fractions. Dr. Jones provided much of the information on which yesterday's announcement was based.

While there are dissenters who believe the warmer climate can be explained by normal variation, the dominant view among climate scientists is that at least some of the warming trend is a result of emissions of heat-trapping waste industrial gases like carbon dioxide, which is produced by the burning of coal, oil, natural gas and wood.

Despite the 1998 record, a number of scientists said they believed the world was likely to be cooler in 1999 and possibly 2000 as well. The reason, they said, is that a fair measure of the warming in 1998 can be attributed to the effects earlier in the year of El Niño, the extensive pool of warm water that develops from time to time in the tropical Pacific. It both warms the global atmosphere and disrupts worldwide weather patterns.

But even though a dissipating El Niño may allow some cooling next year, several experts said they expected the underlying global warming trend to continue and temperatures to remain above average in the immediate future. The findings about 1998 were not a surprise, since highly publicized analyses by Federal scientists had made it clear since midyear that 1998 was shaping up as the warmest year on record.

Among other contributors to the United Nations agency's report were the NASA Goddard Institute for Space Studies in New York, the British Meteorological Office, the National Climatic Data Center in Asheville, N.C., the NASA Marshall Space Flight Center and University of Alabama in Huntsville, Ala., the International Research Institute in New York and the Climatic Prediction Center in Washington.

Based on studies of indirect evidence like the annual rings of trees, Dr. Jones has been saying for some time that he believes 1998 to be not only the warmest year in the thermometer record, but also the warmest year of this millennium.

As new global high-temperature records have been established in the 1990's, they have usually exceeded old ones by mere hundredths of a degree at a time. But if the new estimate holds up, 1998 will top the 1997 record by about a quarter of a degree. The difference may appear small, but the world is only 5 to 9 degrees warmer now than in the depths of the last ice age. According to the numbers announced yesterday, the globe is about 1.25 degrees warmer than at the beginning of this century.

7 of the 10 warmest years have occurred since 1990.

The actual average surface temperature of the earth this year will come in at about 58 degrees, according to the British data sets. Other data sets vary slightly.

Mainstream scientists project that the surface will warm by an additional 2 to 6 degrees over the next century if carbon dioxide emissions are not reduced, with the largest increases in temperate and sub-Arctic latitudes. Among other things, they say, this will make hot weather, droughts and floods more likely while reducing the number of extremely cold days, raise the level of the seas, cause climatic zones to shift and produce widespread environmental and economic dislocations.

Not all regions of the world have warmed in recent years, and each year there are some cool spots; in 1998, Eurasia was one of these. One place that has often lagged in the warming trend is the United States. But this year, according to an analysis by the Goddard center in New York, North America led the warming trend, experiencing its warmest year in the last four decades.

The New York Times

FRIDAY, DECEMBER 18, 1998

PATRICK MICHAELS

Logic evaporating with global readings

Even yellow journalists know it's a good idea to use the refereed scientific literature as the basis for science stories, so it was disconcerting to see a bona fide green journalist like The Washington Post's Joby Warrick give a great deal of ink to a nonrefereed speech — not even a paper — delivered in San Francisco by federal climatologist Jonathan Overpeck.

The reason for all the fuss soon became obvious. At the December meeting of the American Geophysical Union, Mr. Overpeck said the so-called Medieval Warm Period was local, not global. In other words, the warming that was so substantial it allowed the Vikings to colonize Greenland and North America was not created by a general planetary warming. That implies that the cooling that followed — known as the Little Ice Age —was similarly non-global; otherwise the Warm Period would have shown up, in comparison with temperatures in succeeding centuries as, well, global warming.

Mr. Overpeck's speech prompted handsprings of joy from our greener friends. Now, instead of saying the decade of the 1990s (and, in particular, 1998) is the warmest in 600 years (which goes back to the beginning of the putative Warm Period), they can say it's the warmest in 1,200 years. This story will be in print on or about Jan. 4, and allows them to declare that the warm terror is here and higher taxes are needed pronto to stop the burning of fossil fuels.

Others might say, "Big deal, sure am glad that I haven't spent a lick on heating oil and it's almost Christmas. Think I'll go and buy some stuff for the missus."

Still others may correctly deduce that Mr. Overpeck has created a big problem for those who warn of impending apocalypse. If he is right (a large *if*), then regional climate naturally varies tremendously, whether or not the globe warms. In other words, climate changes so dramatic that they promoted the Viking exploration are simply the way of things. And ditto for their flip side — large regional coolings like the Little Ice Age. That event sent the Rhone Glacier in the Alps some 5,000 feet further downslope than it is today and prompted winter carnivals on the frozen Thames.

Poignant testimony to the social consequences of this regional swing can be found in Kalaallit Nunaat (the politically correct term for Greenland these days), where masonry churches, once built in pastures, are now encased in ice. While Greenland's climate clearly changed in ways that were tremendously important to society at the time of the Vikings, that apparently had nothing to do with global warming or cooling.

Instead, Mr. Overpeck says, those changes occurred as purely internal oscillations of the climate system, with no external global change. If we accept that notion, what does it really mean?

It means that large, regional climate changes have occurred and will occur whether or not the planet warms. That is the kind of change people and plants care about, because no one can sense the global temperature. Like Tip O'Neill's politics, climate is local. So those who would seek to impose costs on society to prevent climate change had better demonstrate that warming the planet will make large regional excursions more, not less, likely.

Recently, I explored this notion in a paper in the refereed journal Climate Research. Relying upon historical data (and explicitly ignoring computer models of climate because of their patent unreality), I found that temperature variability between seasons and between years has significantly declined in the second half of this century. And there have been a few warm years in that period, too.

So when I looked at the variability as a function of the planet's annual temperature, I found that the cool years were more variable and the warmer ones less. Conclusion? Warming the planet decreases variability on a year-to-year scale. Cooling the planet makes things more variable.

That's pretty good evidence that what human beings are doing to the climate makes things more predictable and equable than before.

Want more? When the carbon dioxide concentration of the atmosphere was at its highest level since animals first appeared, the biggest animals in history roamed the Earth: dinosaurs. Those beasts required a tremendous amount of vegetation to reach their enormous size. Carnivores, like T. Rex, were supported by the massive herbivores. How many tons of vegetation were ultimately required to feed them, considering it had to pass through huge lunks like Apatosaurus (that's Brontosaurus to you intellectual dinosaurs)? The toasty Earth had to have been greener than casino felt.

What's more, when the dinos were around, the climate was so stable that they were coldblooded! They'd probably still be here today, except for the fact they went extinct when the Earth got clobbered by a small asteroid. The asteroid raised a huge cloud of dust and killed them with global cooling, which made the climate more variable, resulting in an undependable food supply.

Our greener friends might become extinct too, if they tout Mr. Overpeck's findings as good news for their side.

Patrick J. Michaels is senior fellow in environmental studies at the Catonstitute and science adviser to the Greening Earth Society in Arlington, Va.

The Washington Times
WEDNESDAY, DECEMBER 30, 1998

Clinton Presidential Records
Digital Records Marker

This is not a presidential record. This is used as an administrative marker by the William J. Clinton Presidential Library Staff.

This marker identifies the place of a tabbed divider. Given our digitization capabilities, we are sometimes unable to adequately scan such dividers. The title from the original document is indicated below.

January 1999

Divider Title: _____

INDUSTRIES PRESS PLAN FOR CREDITS IN EMISSIONS PACT

WARY OF GLOBAL CONTROL

New Legislation Would Offer Companies Incentives for Early Cuts in Pollution

By JOHN H. CUSHMAN Jr.

WASHINGTON, Jan. 2 — Even as a proposed treaty on global warming faces an uncertain future in the Senate, big companies are maneuvering to push through legislation giving them valuable credits for early actions to control the waste gases that the binding treaty would strictly limit.

The proposed treaty, negotiated in Kyoto, Japan, and signed by the Clinton Administration last year, requires steep reductions in the industrial nations' emissions of heat-trapping greenhouse gases. If the Senate eventually approves it despite widespread opposition from major industries, companies want to be sure they get credit for any reductions they achieve before the treaty takes force in 2008.

The legislation would mark a significant shift in the debate in the Senate over climate change, potentially moderating the opposition to the treaty among big industry groups and linking their financial interests to the goals of treaty supporters. And if it succeeded, it could revive the longstanding efforts of the Administration to persuade industries to cut their emissions voluntarily, which have met with mixed success.

"This is a potential winner," said Eileen Claussen, executive director of the Pew Center on Global Climate Change and a former treaty negotiator for the Administration. "It helps get the United States moving. It is voluntary. It is supported by industry. It seems to me there should be a way to get legislation like that through Congress."

For some companies, credits earned now could be applied against strict limits they would face later. Companies able to make even deeper cuts in emissions now could sell their surplus credits for billions of dollars under an emissions trading system that the Administration wants to set up.

With so much at stake, big companies, joined by influential environmental groups and policy analysts, are already lobbying hard for Congress to guarantee credits for early action.

Three Senators, led by John H. Chafee of Rhode Island, the leading Republican environmentalist in the Senate, introduced legislation late in the last session that would assure the companies that their early reductions would earn credit under any mechanism the Government eventually establishes to limit emissions of greenhouse gases. The bill is also supported by Senator Joseph I Lieberman of Connecticut, a Democrat, and by Senator Connie Mack of Florida, a Republican.

In a speech last month to the National Association of Manufacturers, Senator Chafee, who is chairman of the Senate Environment Committee, said he will make the bill a priority as soon as Congress reconvenes next week.

"While the climate debate will indeed continue over the next few years, we strongly believe that there is a voluntary, incentive-based approach which can be implemented now," he told the group, which has opposed the Kyoto treaty.

"The good guys who take action now will be rewarded by having these actions count," Mr. Chafee said. "This credit program may also make early greenhouse gas reductions financially valuable to the companies who make them."

That could mean a windfall for companies that have recorded reductions in greenhouse gas emissions since 1991, a period when the nation's overall annual emissions ballooned by more than 10 percent despite the Administration's voluntary plan to curtail them.

As drafted, the bill gives ton-for-ton credits to any of the more than 150 companies that can document reductions in their greenhouse gas emissions under various voluntary Federal programs.

The DuPont company is one example. The biggest chemical producer in the United States, DuPont has taken steps that will cut its own emissions of greenhouse gases far more and much faster than the treaty would require.

> Making deep cuts in emissions now could mean billions of dollars later.

Company officials said that DuPont will cut its annual greenhouse gas emissions to much less than half of 1991's levels by the year 2000. Under the treaty, the United States as a whole would have to cut emissions 7 percent below 1990's level between 2008 and 2012.

"If you did not recognize our voluntary work, you would punish us for stepping out in front," said Darwin G. Wika, director of safety, health and the environment for DuPont. "And the laggards who did not step up to the plate would be rewarded."

By DuPont's calculations, by the end of this year it will have reduced its annual emissions by the equivalent of 90 million tons of carbon dioxide. Economists' estimates of the value of carbon credits in an emissions trading scheme vary widely, but depending on the crediting rules, DuPont's savings alone could someday be worth billions of dollars.

Some big environmental groups, like the Environmental Defense Fund, which favors emissions trading and other market-based pollution controls, have published detailed proposals for granting credits to companies that move early, and have advised lawmakers on drafting legislation. There are at least five such proposals spelled out by various advocates, including one by Niagara Mohawk, the New York utility company.

But some environmentalists have criticized the bill offered by the three Senators.

John Stanton, legislative director for the National Environmental Trust, a pro-treaty advocacy group, said the bill "does not provide sufficient guarantees that emission reductions credited under it will actually result from reduced emissions, as opposed to phantom paper reductions."

With Senator Chafee planning hearings soon, the lobbying is sure to intensify.

"You are creating a new currency called carbon-dioxide tons," said Alden Meyer of the Union of Concerned Scientists, another treaty advocacy group. "There is a lot of money involved, and there is going to be a lot of ferocious jockeying to control who gets the money. It is going to be pretty intense."

For now, the most active proponents of credit for early action are a closely knit coterie of former Government officials, policy analysts, environmental advocates, lobbyists, lawyers and corporate officials who have been working for months to build support for the credit idea.

Along with the Environmental Defense Fund and the Pew Center for Global Climate Change, they include law firms and lobbyists like Van Ness Feldman and Alcalde & Fay, both of which represent several electric utilities, and a number of individual companies, several of them aligned with the Pew Center.

Hundreds of companies, big and small, could benefit from the proposal.

The New York Times
Sunday, January 3, 1999

In 1997, the latest year for which data is available, companies participating in voluntary reductions of greenhouse gases reported to the Energy Department that they had reduced greenhouse gas emissions by the equivalent of 137 million tons of carbon dioxide. Under the bill, all of them would qualify for credits.

The companies, which filed detailed reports about more than 1,200 emission control projects, included 156 participants in more than a dozen different industries. Most of them are electric utilities, but other types of companies are increasingly participating.

Even one individual filed a report in 1995. Carter H. Lewis 3d, who at the time was a consultant for the Energy Department, claimed to have cut his personal emissions of carbon dioxide by between three and four tons by never having more than one light at a time turned on in his house, and by commuting to work outside of rush hours to save gasoline.

"I just wanted to demonstrate what the ordinary citizen could do," he said. "You don't have to be a gigantic power plant to reduce carbon dioxide emissions." (The reductions he claimed, however, would have only a trivial market value.)

Although the number of participants has increased steadily, for the past few years the amount of reductions in emissions that they claimed has been falling. In 1996 it was the equivalent of 154 million tons of carbon dioxide, and in 1995 it was 183 million tons.

There is considerable debate whether actions taken years ago should be granted credits.

"To the extent the credit is regarded as an incentive to spur industry to make greenhouse gas reductions that would not otherwise occur, there is little basis for rewarding reductions already achieved," said the report, written for the Pew Center by Robert Nordhaus and Stephen Fotis of Van Ness Feldman.

On the other hand, they noted, companies that signed onto the Administration's voluntary programs may have relied on the Government's representations that they would be granted appropriate credits.

The General Accounting Office, which investigated the Energy Department's reporting system, found some flaws that suggest that the claims may be exaggerated.

The agency noted that the Energy Department does not verify that claimed reductions are actually achieved.

Companies have used many different strategies for reducing their emissions.

DuPont, officials said, not only has cut its energy consumption, but invested millions of dollars changing its processes for making adipic acid powder, a chemical feedstock. The new approach eliminates most emissions of nitrous oxides, like carbon dioxide a potent greenhouse gas that would be controlled by the treaty.

American Forests, a conservation group, has filed annual reports with the Energy Department describing hundreds of tree-planting projects that could offset carbon dioxide emissions because growing trees remove carbon dioxide from the atmosphere and store the carbon as wood.

So far, the organization has planted more than 8 million trees, which it calculates will offset 2.3 million tons of carbon dioxide or lock up 634,000 tons of carbon. Credits for those tons could easily become worth millions of dollars to the organization in the future.

Many electric utilities have argued that they have achieved reductions in carbon dioxide emissions by operating their nuclear power plants more efficiently, reducing the need to burn coal in other power plants. Some utilities have filed reports with the Energy Department claiming millions of tons of reductions of this kind, even as their total emissions of carbon dioxide have continued to increase.

Duke Power Company, for example, reported that its total annual emissions of carbon dioxide increased from about 24 million tons in 1990 to about 36 million tons in 1996, an increase of 50 percent.

It said, however, that its more efficient use of nuclear power between 1993 and 1996 prevented an additional 35 million tons of carbon dioxide from being added to the atmosphere. Credit for those tons could be very important to Duke if it is told to sharply limit its emissions between 2008 and 2012 to help comply with the global warming treaty.

The New York Times
Sunday, January 3, 1999

2
2

his own Bush-Quayle re-election campaign four years earlier.

"We did not discuss foreign policy in the 1992 presidential campaign, and it was a mistake," Mr. Quayle said. "We did not discuss foreign policy in the 1996 presidential campaign and that, too, was a mistake. We should not make that mistake in the presidential campaign in the year 2000."

He said that even though polls show little public interest in foreign and defense issues, he would make them central because the United States needs — but does not

that calls itself the "Republic of China."

Mr. Clinton ang[illegible]any Americans and — got a [illegible]olution of reprimand from the U.S. Senate — for saying the U.S. government in effect supports the PRC's opposition to independence for Taiwan and its admittance to the United Nations and similar world bodies.

Questioned after his speech, Mr. Quayle said, "I reiterate, it's one China, two [political] systems." The Republic of China does "not have sovereignty as you and I interpret it," he added.

Other GOP presidential contenders have emphasized conservative positions on domestic issues, including Social Security, taxes and "family values."

Mr. Quayle is setting out to distinguish himself from that field in an area in which he feels comfortable and competent, according to aides.

"Most Republican candidates for president are going to agree on most issues, and in a large field of candidates you have to have something to distinguish yourself," said Quayle aide Kyle McSlarrow.

Clinton seeks big lands-fund increase

ASSOCIATED PRESS

President Clinton introduced a plan yesterday to triple spending in an effort to preserve vulnerable lands ranging from the California desert to the Florida Everglades and Civil War battlefield tracts.

"Our population is growing, our cities are growing, our commitment to conservation must grow as well," Mr. Clinton said in announcing the $1 billion spending proposal during a ceremony at the National Arboretum.

The "land-legacy initiative" will be included in the fiscal 2000 budget that Mr. Clinton will send to Congress next week, and it was the administration's second major environmental initiative in two days.

It calls for adding thousands of acres to the system of federally protected lands and providing states with nearly $600 million for land preservation. Touting the federal budget surplus and the steady economy, Mr. Clinton said: "We'll never have a better time to act."

Among the protected areas that would be expanded under the plan are the Joshua Tree National Park in California and the Florida Everglades, Mr. Clinton said.

Priority land purchases under the program would include large tracts of forest in New England, private parcels within and near the Mojave and Joshua Tree national parks in the Southern California desert, land in the Florida Everglades, and land along the 3,700-mile Lewis and Clark Trail, as well as land near and within several Civil War battlefields, including Antietam and Gettysburg.

The announcement comes a day after Vice President Al Gore introduced a separate program that proposes to use $700 million in tax credits to finance a $10 billion bond program aimed at creating suburban parks, greenways and other open space.

That proposal deals with suburban sprawl, while the new initiative is directed at restoring and protecting undeveloped, but vulnerable, forests, grasslands, beaches and marine sanctuaries, officials said.

More than three decades ago, Congress created a land-and-water conservation fund that authorized spending as much as $900 million a year to buy land for conservation.

This year, Congress provided about $320 million for federal land purchases.

The Clinton proposal calls for full funding of the program. It would funnel millions of dollars more — for a total of just over $1 billion a year — into land preservation.

The Washington Times
WEDNESDAY, JANUARY 13, 1999

THE WHITE HOUSE

Office of Press Secretary

For Immediate Release January 14, 1999

PRESIDENT CLINTON NAMES GARY S. GUZY AS GENERAL COUNSEL AT THE ENVIRONMENTAL PROTECTION AGENCY

The President today announced his intent to nominate Gary S. Guzy to serve as General Counsel at the U.S. Environmental Protection Agency.

Mr. Gary S. Guzy, of Washington, DC, has been Counselor to the Administrator of the Environmental Protection Agency since 1995, where his duties include advising the Administrator on policy and strategic matters, working with the senior management team to establish legislative, regulatory, policy and public relations goals and working with White House policy offices on Administration priority issues. From 1994 to 1995, he served as the Deputy General Counsel at the U.S. Environmental Protection Agency, where he helped manage the agency's legal services, litigation docket and 150 lawyer legal staff. From 1987 to 1993, Mr. Guzy was a Senior Trial Attorney for the Environment & Natural Resources Division in the Environmental Defense Section of the U.S. Department of Justice. Mr. Guzy represented the federal government in major trial and appellate litigation.

Mr. Guzy received his A.B., *Magna Cum Laude*, from Cornell University and a J.D. from Cornell Law School.

The General Counsel serves as the primary legal advisor to the Administrator of the U.S. Environmental Protection Agency and provides legal service to all of the organizational elements of the Agency with respect to all programs and activities of the Agency. In addition, the General Counsel provides legal opinions, legal counsel, litigation support, and assists in the formulation and administration of the Agency's policies and programs.

30-30-30

Garden Auction Is Slap at Civility

To the Editor:

The social and educational benefits of New York's community gardens far override the one-shot revenue to be gained from auctioning them off (editorial, Jan. 14). Many of them sponsor children's activities and act as informal summer camps.

In fact, the community gardens are illustrative of Mayor Rudolph W. Giuliani's often-expressed wish to restore civility to our social fabric. He should be working to increase the number of gardens, not trying to destroy them under the cover of snow.

JOAN EWING
AUDREY TUMBARELLO
Brooklyn, Jan. 14, 1999

•

A Bargain

To the Editor:

It is time for New York to stop being penny-wise and pound foolish about community gardens (news article, Jan. 11). Its 20,000 volunteer gardeners, working an average of 10 hours a week, provide more than $53 million in volunteer labor. Other benefits include decreased crime, cleaner air and increased property values. The gardens should be preserved for future generations with a gardener-run land trust.

TERRI DRACH
New York, Jan. 11, 1999

The writer is president, New York City Community Garden Coalition.

•

Neighborhood Pride

To the Editor:

Re "Auction Plan for Gardens Stirs Tensions" (news article, Jan. 11): New York City's neighborhoods have character, but often lack greenery and a sense of community. Local gardeners are working to better their surroundings in a tangible esthetic sense, but also by encouraging participation in a community project. The city should consider putting gardens in its budget, as it would a community center. Perhaps the community could raise money to buy the sites at a discounted price. A compromise would recognize the people who pour energy into the public life of their neighborhoods and provide incentive for others to do the same.

MEGAN E. MULLIGAN
New York, Jan. 11, 1999

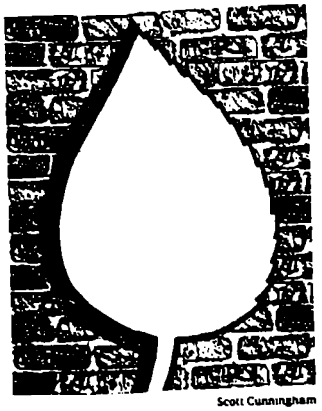
•

A Failed Policy Returns

To the Editor:

Mayor Rudolph W. Giuliani claims he will save us from the failed policy of past administrations by selling the city's community gardens at an unrestricted auction (news article, Jan. 11) and returning them to the tax rolls. In fact, he is restoring the very policy that caused so many sites in low-income neighborhoods to languish.

For decades the city sold tax-foreclosed sites without restriction to speculators. When the market did not



Scott Cunningham

meet expectations, the sites were abandoned. Many of the gardens appeared on these blighted lots.

Pressure from the community led the city to impose a schedule for buyers at auctions to clean, fence and develop land or forfeit it. Mr. Giuliani now plans to destory gardens that have increased property values and provided much-needed open space, in order to give speculators free rein.

LESLIE H. LOWE
New York, Jan. 12, 1999

The writer is executive director of the New York City Environmental Justice Alliance.

Global Warming: Not a Fantasy

To the Editor:

Jack Kemp and Fred L. Smith Jr. (Op-Ed, Jan. 13) use familiar bugaboos — "unelected global authorities" and "immense harm" to the American economy — to make their argument against the Kyoto Protocol on global warming.

There's no need for concern about "unelected global authorities." The emission-credit plan is a United States initiative, separate from, although similar to a provision of, the Kyoto treaty. Because it is an American law, there would be no role for "unelected global authorities." Moreover, while the Kyoto plan may hurt certain sectors of the American economy in the short term, the plan opens up new opportunities for green industry. While jobs are lost in one area, like petrochemicals, won't others open up in alternative-energy production and anti-emission technology?

There are many industries that have fallen prey to the march of time, but there are always new ones to take their place.

ANTHONY G. WAHL
Philadelphia, Jan. 13, 1999

•

To the Editor:

Jack Kemp and Fred L. Smith Jr. (Op-Ed, Jan. 13) argue that the Kyoto treaty would mean "ceding power to unelected global authorities." In fact, the Kyoto treaty is an attempt to bring the political process to bear on a group of powerful, unelected global authorities: the fossil fuel and automotive industries.

Mr. Kemp and Mr. Smith breezily dismiss the abundant evidence that indicates a human impact on global climate. However, if the growing scientific consensus is correct, then a small group of unaccountable industries will, through their production of greenhouse gases, exercise a profound negative impact on the economic prospects, health and quality of life globally.

PETER F. CANNAVO
Cambridge, Mass., Jan. 14, 1999

•

To the Editor:

One of the biggest problems discussed at Kyoto was the rapid industrialization currently under way across Asia, especially in China and India. As the living standards rise in these countries, pollution will rapidly escalate, with global consequences (Op-Ed, Jan. 13).

The developed world has no moral authority to ask developing countries to tackle these environmental problems if it has not already put its own house in order. Without a lead from the United States, this simply will not happen.

DOMINIC SYMONS
London, Jan. 13, 1999

•

As Oceans Warm, Problems From Viruses and Bacteria Mount

ANAHEIM, Calif., Jan. 23 (AP) — Previously unknown bacteria and viruses blooming in the Earth's warming oceans are killing some marine life and threatening human health, researchers say.

There are increasing reports of dying coral, diseased shellfish and waters infected with human viruses as the seas' temperature rises and pollution from the land intensifies, researchers said on Friday in studies presented at the national meeting of the American Association for the Advancement of Science.

"These are the cries and whispers beginning to confront us about the ecological dangers ahead," said James W. Porter, an ocean studies specialist at the University of Georgia. "We are finding disturbing new kinds of things."

About 10 percent of the coral worldwide has died, Mr. Porter said, and if current trends and conditions continue, an additional 20 percent to 30 percent of the coral could be lost.

In many cases, he said, the pathogens — viruses, bacteria and fungi — killing the coral had not been previously identified by researchers.

"Corals are like the canary in the mine," Mr. Porter said. "They are telling us that the water where they live is becoming suboptimal for their existence."

There has been a 446 percent increase in disease at 160 coral sites being monitored along the Florida coast since 1996. One reef had a death rate of 62 percent, Mr. Porter said, and nearly all of the killing pathogens "are new to science."

"We don't know if what we are seeing is a natural cycle or it is being caused by what human beings are doing to the planet," he said.

Mr. Porter said the loss of coral was significant because the reef-building animal "is the basis for the health of the tropical seas."

New studies show that vast colonies of human viruses migrate regularly into coastal waters of Florida from the 1.6 million septic tanks in the state, said Joan B. Rose, a University of South Florida researcher.

Many people are becoming infected with viruses picked up while swimming, windsurfing or boating in infected waters.

One study found that almost a quarter of the people using marine beaches developed ear infections, sore throats and eyes, respiratory or gastrointestinal disease.

Some of the viruses detected in coastal waters are linked to heart disease, diabetes, meningitis and hepatitis.

"Most people who come in contact with these viruses do not get ill," Ms. Rose said. But of the 20 percent to 24 percent who do, about 1 percent become chronically infected, she said.

Ms. Rose's research team has traced the migration of viruses from septic tanks and found that the pathogens infect coastal waters within 24 hours of being flushed down toilets. Storms that churn the waters can speed the process.

Viruses have been detected in oysters and other shellfish in many coastal areas outside Florida. For instance, some sampling in New York waters has found 40 percent of the shellfish infected.

Many of the viruses that infect humans directly or through eating contaminated shellfish cannot be detected by the routine monitoring of water pollution, Ms. Rose said.

Mr. Porter said the increase in pathogens in the world's oceans might be linked to a 1.8 degree rise in sea surface temperature detected in many areas. He blamed the warming oceans, for instance, for a "global pattern of coral bleaching." The warmer water kills algae on the coral, weakening the coral and making it more susceptible to infection.

The New York Times

Sunday, January 24, 1999

THE WHITE HOUSE

Office of the Vice President

For Immediate Release
Monday, January 25, 1999

Contact:
(202) 456-7035

STATEMENT BY VICE PRESIDENT GORE ON GLOBAL WARMING

President Clinton and I are proposing significant new investments in fiscal year 2000 to accelerate our aggressive, common-sense efforts to meet the challenge of global warming.

Two weeks ago, scientists confirmed that 1998 was the warmest year on record, providing yet more evidence that global warming is real. Thankfully, last year also produced genuine progress in addressing this grave threat. Developing countries showed new willingness to join us in meeting this challenge, while leading corporations voluntarily pledged to significantly reduce their greenhouse gas pollution.

We will continue to work on the diplomatic front to achieve a truly global response to this global challenge. And we are firmly committed to stepping up our efforts at home as well. That is why President Clinton and I are proposing a record $4 billion for expanded research and other programs to better understand and protect our climate, and for tax incentives for consumers and businesses to purchase energy-efficient cars, homes, and appliances.

Efforts to address global warming can at the same time help to protect public health. To maximize these twin benefits, our budget includes $200 million for a new Clean Air Partnership Fund that will allow state and local governments to finance projects achieving early reductions in both greenhouse gases and lung-damaging pollutants like smog and soot. This innovative Fund will leverage significant private investment for coordinated, cost-effective pollution reduction.

Our climate change proposals will save consumers money and create new business opportunities while ensuring a safer planet for our children and grandchildren. Just today, BP Amoco expanded its historic commitment to reducing greenhouse pollution, again demonstrating that a strong economy and a healthy environment go hand in hand. I urge Congress to join us in that spirit and approve these sound investments in our future.

###

Scientists Warn Against Ignoring Climate Change

By WILLIAM K. STEVENS

The American Geophysical Union, the nation's most broadly based professional organization in earth and space science, said in an official policy statement yesterday that there was a "compelling basis for legitimate public concern" about human-induced climatic change.

Scientific uncertainty about the problem, the statement said, "does not justify inaction" in coping with it.

The statement dealt with the burning of fossil fuels like coal, oil and natural gas. The burning produces carbon dioxide, a gas that traps heat in Earth's atmosphere like in a greenhouse.

The geophysical union said "there is no known geologic precedent" for the conversion of carbon from Earth's crust into atmospheric carbon dioxide, in the amounts being burned as fossil fuels, without changing the climate.

The statement is the eighth the union has issued on some aspect of science-related public policy, and the latest in a long list of statements on global warming over the last two decades by prestigious scientific groups that have reached similar conclusions.

"The answer always comes back: 'Global warming is a serious problem, and policy makers have got to figure out what to do about it,' " said Dr. Michael Oppenheimer, a senior scientist at the Environmental Defense Fund, an environmental research and advocacy group.

But the Competitive Enterprise Institute, a public policy group that promotes free enterprise and limited government, said the geophysical union, by making a judgment favorable to the Clinton Administration's policy of action on global warming, had "crossed the line separating science from advocacy."

The average surface temperature of Earth has risen by about 1 degree over the last century, compared with a difference of 5 to 9 degrees from the present to the depths of the last ice age, some 20,000 years ago.

An international panel of scientists convened by the United Nations has projected that if emissions of the heat-trapping gases are not reduced, the surface temperature will rise by an additional 2 to 6 degrees by the end of the 21st century, producing widespread climatic disruptions. The world's industrialized countries in late 1997 bound themselves to reduce their emissions of these gases by about 5 percent over the next decade.

Opponents of mandatory action to reduce such emissions have cited the uncertainties surrounding predictions about climate change, and yesterday's statement dealt prominently with those uncertainties. It noted, for instance, that while the observed global temperature rise "appears to be unusual in the context of the last few centuries," it is "not clearly outside the range of climate variability of the last few thousand years."

Moreover, it said, the complexity of the climate system insures that uncertainty "will never be completely eliminated."

Still, it said, present understanding of the system "provides a compelling basis for legitimate public concern over future global- and regional-scale changes resulting from increased concentrations of greenhouse gases."

While the statement recommended the development of strategies for dealing with global warming, it did not propose any specific solutions.

The New York Times

FRIDAY, JANUARY 29, 1999

Caesarean Plus Dru
To Reduce Transfe

BOSTON, Jan. 28 (AP) — The risk of an H.I.V.-infected woman passing the AIDS virus to her baby during birth is nearly eliminated if the woman takes a standard AIDS drug during pregnancy and has a Caesarean.

The benefits of the drug, AZT, have been known for five years. The added advantage of a Caesarean was suspected but had not been proved until a large study released today.

The new data show that a Caesarean alone reduces by half the risk of AIDS transmission during birth. An infected woman who has both a Caesarean and treatment with AZT has only about a 2 percent chance of infecting her child.

"All infected women need to be told about this information," said Dr. Lynne Mofenson, a co-author of the study at the National Institute of Child Health and Human Development in Bethesda, Md.

The study is scheduled to be published in the March 31 issue of The Ne
Medicine
article o
its impor
Much
been rel
meeting.
tricians
schedulir
tant mot
If a p
with H I
has a n
feeds, th
chance s
her baby
This risk
ly reduc
world by
during pr
aging bre
leads to t
AIDS
for nearl
of Africa
demic is
of the ba
are infec

Both sides hit report on global warming

Scientists' treatise takes middle ground

By Joyce Howard Price
THE WASHINGTON TIMES

A call by a prominent group of scientists to develop strategies to reduce greenhouse-gas emissions is being slammed by both sides in the global-warming debate.

Critics of the global-warming hypothesis say the American Geophysical Union's new "position statement on climate change and greenhouse gases" is alarmist and politically motivated. People who accept the theory, meanwhile, say it doesn't go far enough, because it doesn't recommend implementation of policies to cut carbon dioxide emissions.

The position paper, adopted unanimously by the 26 members of the AGU council, or board of directors, and released yesterday at an overflow news conference in Washington, states that "present understanding of the earth climate system provides a compelling basis for legitimate public concern over future global- and regional-scale changes resulting from increased concentrations of greenhouse gases."

But the report acknowledges "significant scientific uncertainties" about the magnitude of expected climate changes. And it concedes factors other than greenhouse-gas emissions, such as "extreme weather events," aerosols, changes in clouds, precipitation patterns and ocean circulation also may affect climate change.

"AGU recommends the development and evaluation of strategies, such as emissions reduction, carbon sequestration, and adaptation to the impacts of climate change. AGU believes that the present level of scientific uncertainty does not justify inaction," the paper concluded.

Asked if this means AGU is saying action to curb greenhouse-gas emissions can be justified, Eric Sundquist, a senior scientist with the U.S. Geological Survey who helped prepare the statement, replied, "We hesitate to justify action because we don't think we're in a position to recommend specific policies."

S. Fred Singer, president of the Science & Environmental Policy Project and a well-known critic of the global-warming theory, said the AGU council's position paper is "alarmist."

"I quibble with the politics, procedures and science [involved]. I say the science is faulty, misleading, and incomplete," Mr. Singer said in an interview before the AGU news conference.

The Competitive Enterprise Institute agreed. "It's a shame that this distinguished science organization has succumbed to political correctness at the expense of scientific integrity," said Paul Georgia, managing editor of Cooler Heads, CEI's newsletter dealing with global-warming issues.

But physicist Sinyan Shen, director of the Global Warming International Center in Naperville, Ill., dismissed the AGU's position as old news.

"An organization such as AGU certainly needs to enlighten the general public and policymakers a lot more" than this, Mr. Shen said in a telephone interview yesterday following the news conference. "I'm very disappointed."

The 35,000-member AGU is an international organization that's the major professional society dealing with earth sciences.

Reed Irvine, chairman of Accuracy in Media, questioned the timing of the report's release.

In an interview afterward, Mr. Irvine complained that the AGU position sheet did not include "any economic input." It said only, "Science cannot be the sole source of guidance on how society should respond to climate issues."

The Washington Times
FRIDAY, JANUARY 29, 1999

Clinton Pushes Environmental Power-Sharing

Fewer Federal Strings On Aid to the States

A1

By JOHN H. CUSHMAN Jr.

WASHINGTON, Jan. 30 — The environmental proposals that the Clinton Administration is sending to Congress in its budget request for the year 2000 include new ways for delivering money to state and local governments to spend as they see fit, a sign that environmental power-sharing is taking a firmer hold than ever before.

The Administration is seeking to spend $34 billion on environmental programs in the fiscal year that begins on Oct. 1, a 5 percent increase over the amount Congress approved for the current fiscal year.

Among other things, the White House is seeking expanded grants of conservation funds to states for purchasing ecologically sensitive lands; Federal payments to cities for controlling the air pollutants that cause global warming; tax credits to make it cheaper for local authorities to issue bonds for environmental purposes, and bigger Federal contributions to state revolving funds that pay for municipal water treatment.

Some of the money is aimed at specific states for particular purposes, like a program announced this week that would help California, Oregon and Washington protect the habitat of endangered salmon.

But if Congress agrees with these plans, the states and the cities would compete for most of the money and would largely control how it is spent.

Administration officials said that the pattern showed a heightened commitment to shifting more power over environmental programs away from Washington, meeting a goal long cherished by local officials and a policy frequently urged by Republicans in Congress. This approach also carries significant political advantages for the White House.

Buried in the budget are ideas that include a new financing tool called "better America bonds," which would use $700 million in Federal tax incentives to help generate $9.5 billion in bond authority over the next five years.

States that borrowed this money at subsidized interest rates could choose to spend it to create parks, protect water quality and clean up the abandoned industrial sites known as "brownfields."

"This is a big turning point," said Carol M. Browner, the administrator of the Environmental Protection Agency. She said it grew from the agency's past efforts to encourage local governments to clean up brownfields.

"In the brownfields program, E.P.A. never wrote a single rule or regulation," Ms. Browner said. "E.P.A. never said, it is this property and that property that qualify. And in the better America bonds program, E.P.A. will allot the tax incentives, but E.P.A. will never make the decisions that it is this green space or that green space that qualifies."

The state role in environmental programs is not completely new.

Over the years, as one Federal law after another set national environmental standards, the states have assumed much of the responsibility for carrying out the mandates under Federal supervision.

That trend has been accelerating. By 1998, the E.P.A. had delegated responsibility to individual states for managing 757 environmental programs, an increase of 323, or nearly 75 percent, from five years earlier.

The Federal Government provides only 20 percent of the money that the states spend on the environment, according to the Environmental Council of the States, which comprises the heads of the states' environmental agencies.

But for a number of reasons, some pragmatic and some political, the Administration seems to be emphasizing the states' role in the new budget.

First, it might help ease the strains between states and Federal authorities over environmental priorities, chiefly how strictly to enforce national environmental laws. This has been a source of friction.

Second, it might help persuade Congress to increase overall environmental spending, an area of the budget in which the White House has fought bitterly year after year with appropriations committees controlled by Republicans.

Third, it might make some specific Administration initiatives more palatable to opponents in Congress. An example is the program to fight global warming by controlling the waste gases that scientists say threaten to disrupt the planet's climate.

Finally, expanding Federal spending in states, cities and counties from coast to coast is an obvious tool for Vice President Al Gore, the Administration's point man on matters environmental, to highlight his accomplishments in campaign stops as he runs for President.

Several state officials said they were very pleased by the trend, especially the emphasis on the state and local role in a $1 billion land conservation initiative that is the centerpiece of the Administration's environmental budget.

The initiative includes $150 million from the Federal land and water conservation fund for matching grants to states for land purchases; $50 million for planning to control urban sprawl; $80 million for acquiring land to protect endangered species; $50 million for conservation easements on privately owned forest land; $40 million for wooded urban areas; $50 million to help protect farmland from urban encroachment, and a few smaller initiatives.

David Struhs, who left his job this week as Massachusetts's environmental commissioner to take a similar post in the new administration of Florida's Governor, Jeb Bush, said that he believed the Administration was "on the right track" for both substantive and political reasons.

"The one thing that the Clinton Administration does better than most is they make sure they have truth-tested these things in the public opinion polls before they roll them out," Mr. Struhs said.

And he said the governors are hearing the same messages, especially on conservation of lands.

"If you actually listen to and read the rhetoric of Al Gore on these issues and compare it to Gov. Paul Cellucci in Massachusetts and Gov. Jeb Bush in Florida, there are remarkable parallels in where they see environmental policy going," Mr. Struhs said.

Other political figures, though, were more skeptical.

"I am a little ambivalent when the Government creates what are sometimes irrational requirements for cities, then gives them a little money to help deal with them," said the Republican Mayor of Indianapolis, Stephen Goldsmith.

Senator Christopher S. Bond of Missouri, the Republican chairman of a subcommittee of the Senate Appropriations Committee that deals with environmental programs, said that he had always supported generous financing for the state's revolving funds, which pay for many clean air and water programs, but that he did not yet know enough about the Administration's new programs to endorse them.

"This Administration, like the other administrations before it, has had a habit of creating a whole bunch of boutique programs each year, and taking a few dollars for this and a few dollars for that," Mr. Bond said. "I have generally opposed creating more boutique programs until we can fund the ones that already exist."

Among the new programs is a "clean air partnership fund" that will provide $200 million to states and localities to reduce both so-called greenhouse gas emissions and other pollutants that come from automobiles and coal-powered electric plants.

The money can be used to provide low-interest loans or matching grants, potentially increasing the amount of investment flowing from the relatively small Federal contribution.

Similarly, $100 million sought for 2000 in new assistance to state, local and tribal governments would be matched dollar for dollar by local governments willing to spend the money to protect salmon habitat by buying conservation easements, planting trees along river banks and taking similar steps.

"A year from now, a substantial part of the Northwest, including large urban areas near the Puget Sound, are going to be endangered salmon habitat," said George Frampton, the acting director of the White House Council on Environmental Quality. "Regulation alone, listing the salmon as endangered, isn't going to get the salmon restored to health. It is going to take a partnership of the counties, the mayors, companies like Boeing and Microsoft, and the Federal Government to address this problem."

The New York Times
Sunday, January 31, 1999

Clinton Presidential Records
Digital Records Marker

This is not a presidential record. This is used as an administrative marker by the William J. Clinton Presidential Library Staff.

This marker identifies the place of a tabbed divider. Given our digitization capabilities, we are sometimes unable to adequately scan such dividers. The title from the original document is indicated below.

February 1999

Divider Title: _____

Polluting runoff that has been closing beaches could be slowed by a major EPA agreement.

A new day at the beach

A landmark deal may finally force a cleanup of Southern California's dirty waterways

BY BETSY STREISAND

For years, the popular image of Southern California beaches has been glistening surf, white sand, and hard bodies, but the reality was often raw sewage, viruses, and trash. Now, after years of disputes, a cleanup may finally be coming. In a sweeping settlement announced last week that could serve as a nationwide model for urban areas, the U.S. Environmental Protection Agency agreed to set pollution limits for ocean waters and more than 130 other waterways in Los Angeles and Ventura counties. The new limits could affect everything from how subdivisions are built to the way Angelenos fertilize their lawns and wash their beloved cars. "This agreement will redefine how water quality is regulated," says David Beckman, an attorney for the Natural Resources Defense Council. The NRDC represented two Santa Monica environmental groups that sued the EPA because such limits should been set by 1979, under the Clean r Act.

The deal is significant because it will set overall pollution limits—called total maximum daily loads—for a huge urban area, defining precisely how much of each pollutant a creek or segment of beach, for instance, can withstand daily. Then individual pollution sources like sewage treatment plants would be regulated, allowing them to generate a specific portion of that total maximum daily load. The limits will be phased in over 13 years.

The new limits will be aimed primarily at controlling urban and agricultural runoff, the never-ending stream of everything from animal feces to oil and gas that collect on streets and yards and then flow into oceans and waterways in pipes or storm drains. Beaches in Los Angeles County routinely bar swimming because of fecal waste from runoff.

It's an enormous job in an area of millions of people, zillions of cars, and a storm-drain system that was designed to prevent floods but has become a dangerously efficient delivery system for the dreck of daily life. In addition, many of the worst offenders, like bacteria and viruses, are the most difficult to locate. And that's not counting the politics of a forced cleanup of this size. Environmentalists say there are easy starting points like storm-drain inserts and street cleaners that suck up dirt instead of hosing it off. But last week, affected sanitation districts went to court to fight the new limits. ■

Last call for gold diggers

A mine closing and the end of an era

BY GARY COHEN

Some of the greatest American fortunes were made in the tiny town of Leadville, Colo. Meyer Guggenheim struck it rich working in the gold, silver, lead, and zinc mines there. Charles Dow was a journalist in Leadville before launching the Dow Jones news service. And Marshall Field and David May sold pants to the Leadville miners before building their department store empires.

At the turn of the century, the then bustling town rivaled Denver in population. It was so culturally rich, it once boasted the largest opera house west of the Mississippi and drew artists and writers from around the country. Even

Opera house in Leadville, built in the 1880s

Oscar Wilde came to visit.

But this week, Leadville's last operating mine will close, leaving 100 miners jobless. The shutdown of the Black Cloud Mine is the latest in a string of crushing blows to this community, whose population—60,000 in its heyday—now hovers around 3,400. Just months ago, the Environmental Protection Agency declared the place a hazard because of decades of mine pollution.

But residents say their town—an unorthodox mix of Victorian architecture and trailer parks near ritzy ski resorts Vail and Copper Mountain—will survive. "The only time Leadville will be a ghost town," insists Esther Mellott, head of the town's National Mining Hall of Fame, "is on Halloween." ■

Auto Makers and Oil Firms Are Fighting Again As EPA Prepares New Rules to Clean Up the Air

By Anna Wilde Mathews
Staff Reporter of The Wall Street Journal

WASHINGTON—When environmental regulators are looking for ways to clean up the air, oil and autos don't mix.

Auto makers and oil companies are fighting again as the Environmental Protection Agency prepares to propose sweeping new rules that will determine how cleanly autos run, and what kind of gasoline goes in them, for the next decade or more. Lobbyists on both sides have swamped the EPA, the White House and Capitol Hill, and crisscrossed the country to lobby state regulators to try to make the other bear the bigger brunt of the new rules.

Car makers have sought the aid of some traditional foes in the environmental lobby, winning some help from Rep. Henry Waxman, a California Democrat who has long fought for tougher clean-air rules. Oil companies, already beset with an oil glut that has kept prices low, have raised the specter of too-tough rules hurting small refineries. "We've witnessed this fight before," but these are "much higher stakes," says William Becker, executive director of a national association of state and local air pollution officials.

The EPA is leaning toward proposing rules that would require cleaner, low-sulfur gasoline close to the level that auto makers are looking for. But that could change before the proposals, expected as soon as this month, are final. The proposed rules also are expected to include provisions designed to provide flexibility for small refineries.

Worries Over Tailpipe Rules

Auto makers—especially **General Motors** Corp., **Ford Motor** Co. and **Daimler-Chrysler** AG—fear the EPA will toughen tailpipe rules on their best-selling pickup trucks and sport-utility vehicles. Those vehicles produce the bulk of the companies' profits and represent about half of the U.S. auto market.

Last year, environmental bellwether California came down hard on the big vehicles, demanding that they meet the same new pollution standards as cars. "Today, we don't know how to do what California has asked for," says Samuel Leonard, director of mobile emissions and fuel efficiency at GM.

The auto industry would prefer that big clean-air concessions come out of the pockets of the oil companies, via cleaner gasoline. High-sulfur gas fouls up the catalytic converters that auto makers use to clean emissions. To meet new, super-tight standards, "there's no other path than fuel," says Reg Modlin, a DaimlerChrysler senior manager who oversees emissions issues.

The auto makers have made that argument to environmentalists, with some success. "They've suddenly started showing up at clean-air conferences, sounding like the Sierra Club," says Frank O'Donnell, executive director of the Clean Air Trust, which, like the Sierra Club, is an environmental group.

Unusual Allies

When auto officials briefed staffers of Eastern and Midwestern congressional members over sandwiches recently, they shared a dais with some unusual allies: a spokesman for state and local environmental regulators and a speaker from the American Lung Association, all calling for strong fuel provisions.

And Mr. Waxman, who had a big hand in putting together the 1990 Clean Air Act, joined Democratic Rep. John Dingell of Michigan, a longtime friend of the auto industry, in signing a letter to the EPA calling for stringent fuel rules.

The auto makers also have sought to make points with President Clinton. DaimlerChrysler Co-Chairmen Juergen Schrempp and Robert Eaton raised the fuels issue with him last month, as Mr. Clinton looked over their new, high-tech fuel-efficient cars at the Detroit auto show. Car makers have argued that if the emissions standard is too strict, it could essentially ban diesel engines, which promise higher fuel efficiency—another environmental goal.

Supply of Gasoline

Oil companies say that cleaning up gasoline further could boost pump prices and hurt small oil refineries if they aren't given enough time to modernize. Industry lobbyists have told Energy Department staffers that could even affect the supply of gasoline, if small refineries are forced to close their doors. They have gotten backing from several senators, who argued in a December letter that the EPA shouldn't set fuel standards that are "excessive or beyond the reach" of refineries that supply rural areas.

The oil companies also argue that a new, tough national gasoline standard would weigh unfairly on regions that already have relatively clean air and shouldn't have to spend more at the pump. "The main question is, do you need to have the same gasoline in Wyoming as New York or Baltimore?" says Edward Murphy, a general manager at the American Petroleum Institute.

The two industries have a long history of clashing over government efforts to crack down on pollution from cars and trucks. Several years ago, they fought about whether fumes from gasoline should be controlled by canisters built into cars or nozzles attached to gas pumps. Regulators eventually required that new cars have the canisters, while gas stations were forced to install the nozzles to curtail the spread of fumes from older vehicles.

States' Regulations

In the current battle, state environmental officials are likely to have an unusually strong voice with the EPA. If they don't think the agency goes far enough in its rules, the states could try to create their own patchwork of fuel and emissions regulations. Some already are considering setting their own low-sulfur fuel standard if the EPA doesn't create a federal one.

Both industries have been meeting with state environmental officials. David Gore, a Kentucky state environmental official, last year got a visit from five auto lobbyists armed with a neat pile of printouts. One was a ready-made letter for Mr. Gore's agency to send to Washington, helpfully laid out with a blank at the top for the name of the state and a space at the bottom for a signature, above the title "Governor." "We take it all with a grain of salt," says Mr. Gore.

State officials are pushing policies tied largely to their own local air-quality and economic needs. Several Western governors have protested the idea of higher gasoline costs that would help mostly Eastern cities. Northeastern states have sent a flood of their own letters, backing tight controls and extra-clean gasoline for the entire country; the New England Governors' Conference, for one, came out for a national version of the new California rules, including the state's extra-low-sulfur fuel.

Darryl Tyler, program administrator for air-quality management in Delaware, sat through long slide shows and mounds of research by oil and auto representatives. But his biggest concern is what it will take for his state to meet the national air-quality standards that are already in place. "It doesn't take a rocket scientist to see that states, particularly those in the Northeast, will be leaning hard on the EPA to do the most it can," he says.

In Wisconsin, the state environmental agency has had visits from both oil and auto interests. Larry Bruss, chief of the ozone section, says what concerns him most is the air quality in Milwaukee. He wants a national standard on fuel so his state doesn't end up on an odd new clean-fuel borderline, with a different gasoline from nearby Minnesota.

WSJ Tues, Feb 2, 1999

Martha L. Wofford 02/05/99 01:33:17 PM

Record Type: Record

To: See the distribution list at the bottom of this message

cc: Meagan M. Earley/WHO/EOP
Subject: L.A. Times editorial

If you didn't see it already:

Friday, February 5, 1999

Depoliticize Emissions Issue

Last fall the Clinton administration and Republicans in Congress were irreconcilably divided over what steps Washington might take to encourage development of energy-efficient cars and power plants and other means to reduce fossil fuel emissions. The conflict flared in November, when the administration signed a global warming treaty, the Kyoto Protocol, which Republicans vowed never to discuss, much less vote to ratify.

Next week, John H. Chafee (R-R.I.), chairman of the Senate Environment and Public Works Committee, hopes to introduce compromise legislation that could lift the fossil fuel debate above partisan mudslinging. His bill would reward U.S. companies that voluntarily agree to reduce fossil fuel emissions and would allocate credits to companies reducing them now.

Unfortunately, some environmental groups, taking a stand as irrationally hard-line as the one the Republicans took with the Kyoto Protocol, seek to defeat Chafee's bill. The measure, they say, is "all carrot, no stick." But their proposal to stiffly penalize fossil fuel emissions won't fly in Washington.

Chafee's bill is a first step toward encouraging companies--from coal plants to auto manufacturers--to reduce their fossil fuel emissions. Environmentalists ought to support it as a good start and lobby elsewhere for additional fossil fuel reductions. Congress should use the budget to reward forward-looking, low-polluting technologies. But prospects are dim. The Clinton administration itself has asked Congress to deliver big subsidies to wealthy fossil fuel companies.

Like many conflicts in Washington, this one has less to do with the purported policy objective--encouraging smart energy use--than with politics. Vice President Al Gore, for instance, has identified fossil fuel reduction as one of his top priorities as a presidential candidate, which makes it a hard issue for Republicans to support.

Wise legislators like Chafee know there is no national interest in turning emissions reductions into a partisan issue. All Americans will lose if the United States fails to emulate its competitors, from Britain to Japan, who are using tax dollars to encourage spending on energy-efficient technologies.

Environment

■ By Margaret Kriz

The Clinton Administration's environmental budget for fiscal 2000 is an attempt to create several big, splashy programs without locking horns with the Republican Congress. The White House hopes to win GOP support by funneling billions of dollars to state and local governments, and by creating financial incentives to encourage companies to voluntarily protect the environment. "We're trying to figure out where the federal government, in a strategic way, can encourage local government action," said George T. Frampton Jr., the acting director of the White House's Council on Environmental Quality, during a budget briefing on Tuesday.

Frampton says the Administration anticipates broad bipartisan support for most of its environmental agenda. But conservatives in Congress are certain to oppose several controversial programs, particularly proposals to curb the pollution that many environmental scientists say causes global warming. Fiscal conservatives might also make waves. Already, Sen. Christopher S. "Kit" Bond, R-Mo., the chairman of the Senate Appropriations subcommittee that oversees the Environmental Protection Agency, has accused the Administration of proposing to spend too much money on specialized "boutique programs."

Clinton is asking for a record-high $33.9 billion for environmental programs within the EPA, the Interior Department, the Energy Department, and other agencies. Topping his environmental wish list is a new $1 billion "Lands Legacy Initiative." More than half of the money would go to help local communities protect farmlands, forests, and parks. The rest would be earmarked for expanding national parks and wildlife regions. The White House also proposed a $1 billion "livability" agenda to control suburban sprawl by helping communities underwrite new mass transportation, urban planning, and school rehabilitation. *(See related story on the sprawl program, p. 332.)*

AP/LESHIE KOSSOFF

Defense Secretary Cohen:
"$112 billion in additional funds over six years . . . goes a long way toward addressing the military's most pressing needs."

Republican Hill staffers warned that passing the "Lands Legacy" and "livability" programs would be complicated because the Administration proposes pulling funding for them from several different departments, some of which are not permitted to use the money in the ways that the White House has outlined.

Clinton's global-warming initiative is another expensive and politically problematic proposal. The President has called for spending more than $4 billion to reduce pollutants. That package includes a $3.6 billion, five-year tax incentive program to encourage investment in renewable energy and energy-efficient homes and products. It also includes $1.4 billion for researching and deploying clean-energy technologies, and a $200 million grant program with which states and communities could help local businesses install new pollution-control equipment. None of this is going to glide through a Republican Congress.

In addition, the White House is seeking $300 million for programs to encourage farmers to limit the polluted runoff from their land. It has also asked for nearly a half-billion dollars for three regional environmental programs that are likely to win support in Congress: $312 million to continue restoration of Florida's Everglades, $100 million for a new salmon restoration program in Alaska and the Pacific Northwest, and $75 million to continue ecosystem restoration in the California Bay Delta region.

Missing from the EPA budget proposal was the Administration's perennial request for an additional $650 million for the Superfund program, which pays for cleaning up hazardous waste sites. During each of the past four years, the White House has sought the additional money, contingent upon Congress' rewriting the 1980 law. For more than a decade, however, a rewrite has proven politically impossible, and no Superfund legislation is expected to pass during this Congress, either.

Education

■ By Siobhan Gorman

Everyone agrees that schools should be better. But deciding how to ensure better performance will be the crux of the budget battles over education this year. Clinton—in unveiling his $34.7 billion education budget, 3.7 percent larger than last year's—has made it clear he wants to tie the national government's aid programs to some basic performance standards to make sure that local schools are more accountable.

Republicans and advocates of greater local control won't necessarily turn down the extra money the President wants to spend, but they don't want it controlled from Washington. And therein lies the contradiction for conservatives. How can you make sure schools measure up, when every state and local school district is left to decide what standard they must measure up to?

"There will be some real fights over whether accountability is going to be real or not," said Rep. George Miller, D-Calif. "[Republicans] decry the education system, but then their answer is to give [local schools] a block grant and let them do whatever they want."

But Rep. Michael N. Castle, R-Del., who chairs the House Education and the Workforce Subcommittee on Early Childhood, Youth, and Families, said accountability incentives can be "designed in" to a block grant program without making it too burdensome for states and local schools. Castle said he would like to see block grants for school technology and teacher training, with states deciding priorities.

But Clinton has had the ear of the public on this issue since his State of the Union speech, and it was education he

Suburban 'Sprawl' Takes Its Place on the Political Landscape

A1

By TODD S. PURDUM

LOS ANGELES, Feb. 3 — The word "sprawl" does not even appear in the index of "Earth in the Balance," Vice President Al Gore's earnest 1992 treatise on the environment. But these days that word, and the set of creeping suburban problems it embraces, from traffic congestion to loss of open space, has emerged as one of the reigning buzzwords in the political lexicon.

Politicians as diverse as Mr. Gore and Gov. Christine Todd Whitman of New Jersey have made the issue a priority, and voters around the nation have shown their concern in the most tangible way that taxpayers can, by passing billions of dollars in bond measures to buy and preserve undeveloped land and approving ballot measures intended to slow growth.

Sprawl, in sum, is the new language of environmentalism, seen by political strategists as perhaps the best way to engage voters in a debate that had become more abstract over the last two decades as regulation curbed many of the most egregious environmental abuses, from pesticides to pollution, that had animated suburbanites in the 1970's.

The new debate is being driven by some of the same concerns that inspired the original movement, but now the length of a commuter's daily drive is increasingly seen as an environmental issue like chlorofluorocarbons or global warming. And political strategists say that the voters most concerned about these issues — suburban women — are the voting group that helps decide elections.

"In a period of prosperity, it's not about how much we have, it's about how we hold our lives together," said Alex Castellanos, a Republican political consultant who has worked for candidates in Texas and Florida and helped spread the concept of the soccer mom. "So all these quality-of-life issues, from health care to the environment, come to the fore. A lot of it is the feminization of politics. The warrior of the suburban jungle is the mom out there in her suburban assault vehicle, and there's no oasis for her, no place for her to rest."

"Where Joe Six-Pack is not concerned about green space, he is not the dominant force on the spectrum anymore."

With its Teddy Roosevelt-style emphasis on conservation in the classic sense, the fight against untrammeled sprawl finds an equally comfortable place in Mr. Gore's emerging Presidential campaign theme of "practical idealism" and in the "compassionate conservative" mantra of Gov. George W. Bush of Texas. And although it has not emerged as a top-tier issue like education or crime in public opinion surveys, it is steadily gaining.

In Ventura County, just west of here, voters in November overwhelmingly approved a ballot initiative called SOAR — for Save Open Space and Agricultural Resources — which will force every proposed development that requires a zoning change to be approved by a public referendum. Similar measures were passed in four individual cities within the county, just one beachhead among some 200 measures worth $7 billion that passed nationwide.

In New Jersey, Governor Whitman successfully pressed for $1 billion in borrowing to set aside half the state's remaining 2 million acres of open space over the next 10 years. Voters overwhelmingly approved the measure in November.

A statewide survey last year by the Public Policy Institute of California found that more than a quarter of Californians saw population growth and development as a big problem in their region — hardly a surprise in a state that is expected to add 18 million more people, an entire New York State, to its current population of more than 32 million people by the year 2025. In the San Francisco Bay Area, where Silicon Valley has fueled a boom, nearly 40 percent of respondents saw growth as a major problem, while statewide a third of residents saw transportation and traffic congestion as a big problem.

"It's an issue which, on the surface, seems like a very policy-wonk kind of thing," said Mark Baldassare, survey director for the nonpartisan institute. "But there's a lot of public sentiment and concern about the everyday annoyance of sprawl and growth, and the long-range problems associated with air pollution and environmental degradation. And, after all, most Californians do live in suburban regions."

Depending on how suburban is defined, so do about half of all Americans, and the sprawl issue is increasingly seen as a way for politicians like Mr. Gore to take the lingering elitist tinge off environmentalism, and capitalize on a longstanding personal concern by casting it in terms readily apparent to average voters. In its budget proposal, the Clinton Administration is seeking more than $1 billion in new spending to help local governments preserve open space, ease traffic congestion and promote environmentally sensitive economic development. The Administration calls it a "livability agenda," and in addition seeks another $1 billion for a "lands legacy initiative" to preserve parklands.

"It's an upscale issue in the sense that if you're worried about your basic material well-being, you don't have so much time to be worried about your quality of life," said Mark Mellman, a Democratic pollster in Washington who said he saw increasing interest in the issue among political clients. "But once you pass that threshold, even in rural areas, where family farms are threatened by development, this is really an issue that cuts across the board for folks."

Predicting just how much steam a given issue may have in an election, much less a Presidential contest still more than a year off, is notoriously difficult, and an economic downturn could quickly relegate sprawl to the back burner. But Mr. Mellman notes that many of the Congressional seats in swing districts are centered in suburban areas, so the issue could well loom large in local contests.

Precisely because most land-use decisions are the province of cities, counties and states, it is not entirely clear what role the Federal Government may play. In announcing the Administration's initiative last month, Mr. Gore took pains to say that the Government should not act as "beauty commissar" but should instead provide financial incentives — like transportation aid — for localities to work together.

Richard Moe, who was chief of staff to Vice President Walter F. Mondale and is now president of the National Trust for Historic Preservation in Washington, said that although sprawl was often portrayed as the natural free-market consequence of normal and desirable growth, the reality was that government action at all levels had effectively subsidized it for years, by actions as simple as building Federal office buildings on the outer edges of cities instead of downtown.

"State policy is the single most important factor in trying to deal with this issue, and there's not a one-size-fits-all solution," said Mr. Moe, an author of the book "Changing Places: Rebuilding Community in the Age of Sprawl" (Henry Holt, 1998). "Sprawl is affecting people much more directly, in terms of air quality, visual blight, all these manifestations," he said in an interview. "It's hitting people right in the face, and they see it and know it and don't like it. They're not quite clear what needs to be done, but they know that the way we're doing it is not right."

In a recent speech to the National Press Club in Washington, Mr. Moe ticked off a litany of sprawl's reach: Since 1950, Pennsylvania has lost more than 4 million acres of farmland, an area larger than Connecticut and Rhode Island combined; metropolitan Phoenix now covers some 600 square miles, an area larger than Delaware; and by at least some estimates, over the next half-century sprawl is expected to consume more than 3.5 million acres of California's Great Central Valley, the nation's greengrocer.

If sprawl is often couched as a motherhood issue, not every group approves of efforts to limit it. The National Association of Home Builders has warned that it will fight any efforts to limit new Federal money for infrastructure like roads. In some cases, developers have successfully co-opted anti-sprawl efforts. In Arizona last fall, a measure narrowly passed that would set aside $20 million a year for 11 years to buy open space, in exchange for a ban on development fees and restrictions on urban growth.

And Mr. Castellanos, the Republican consultant, said Mr. Gore could be hurt by any sign that he still subscribed to a "fairly 60's-style environmental agenda," and he insisted that the Republicans' most important issue was the high taxes that forced families to work longer hours to keep up.

"When it comes to quality of life, you can either give someone a park to go to, or you can give her more time to go to the park," he said.

Similarly, Mr. Mellman, the Democratic pollster, said it would be possible for Democrats to attack Republican candidates who seemed too willing to allow unbridled development.

But he added: "I think it's really an issue that unites more than it divides. It goes to the question, can you understand and articulate the kinds of concerns that people have in their lives. This is an opportunity to do that."

The New York Times
SATURDAY, FEBRUARY 6, 1999

"The Folding Cliffs."

Big Problem, Big Problems: Getting to Work on Global Warming

By JOHN H. CUSHMAN JR.

WASHINGTON

A YEAR ago, representatives of more than 150 nations faced a midnight deadline in Kyoto, Japan, for talks on an agreement to cut emissions of the gases that scientists warn may be warming the planet. After delegates caucused, argued, slumped and snored through the night — and toward lunchtime, a pact was reached when the session's chairman decreed that an important conflict would be dealt with later.

In November of this year, delegates from the same nations gathered in Buenos Aires to set a timetable to carry out the pact. Afterward, delegates were heartened by the progress they had made; they broke up in time for breakfast, with a firm agreement to work a few more years on the pact's biggest obstacles.

Such is the current status of the international effort to limit global warming: the work that has been done has produced a consensus that *something* will come of the Kyoto gathering. But the conflicts that clouded the accord have not grown easier to resolve, and time is racing by.

The United States, long the leading emitter of greenhouses gases, is caught up in this delay. To be sure, the highlight of the Buenos Aires conference was the Clinton Administration's signing of the Kyoto accord. But the American representatives made it clear that they would not submit the agreement to the Senate for approval until many of the Administration's demands are met. Negotiators at the conference settled on an ambitious two-year timetable for resolving those and other sticking points. But that means approval cannot come until after the 2000 elections, if it occurs at all.

"Kyoto is not dead," said Eileen Claussen, a former State Department negotiator who is the executive director of the Pew Center on Global Climate Change, a public-interest group. "But I don't know if this can be done in two years."

Michael Oppenheimer, a climate expert for the Environmental Defense Fund, an advocacy group that favors the treaty, said: "If significant progress is not made by the year 2000, we will never make the 2008 deadlines of the treaty. We have to get the rules in place, or the time will slip away."

Groups representing fossil-fuel producers and users are even more skeptical. "I don't think the protocol is ever going to be ratified," said Connie Holmes, the chairwoman of the Global Climate Coalition, which opposes the agreement. "In about 2001 or 2002, people are going to say, 'My God, we can't do this, let's stretch this thing out.' You need more time if you are going to change as radically as this."

Without the United States on board, the world will not meet the targets of the Kyoto Protocol, which calls for industrial countries to drastically cut their greenhouse gas emissions between 2008 and 2012. The United States is supposed to cut its emissions by more than a third, to a level 7 percent lower than 1990. But the Americans are insisting on commitments from the developing world, and on a complex scheme for trading emissions permits and credits. "On all these issues, the biggest obstacles are political, not technical," Ms. Claussen said. "Technical people could sit down and work out the details. But it all boils down to politics and sovereignty."

Here are the main issues that need to be resolved in the Kyoto Protocol:

The Third World's Role

PROBLEM: The United States and other developed nations account for about 60 percent of industrial greenhouse gases given off each year. But developing nations, led by China and India, are expected to catch up in about 15 years. By mid-century, they will account for most of the long-term buildup of gases that threaten the climate.

SOLUTION: The United States says that the least expensive way to head off global warming may be to cut future emissions in other countries overseas. To entice third-world nations to pursue such a path, America favors a "clean development mechanism," which would give donor nations credit for foreign aid or investments that cut emissions in developing countries.

OBSTACLE: China and India are still resisting calls for big developing countries to promise emissions cuts. African and Latin American countries are more interested, but they want guarantees that they will get their share of the aid.

OUTLOOK: "The monolithic phalanx that we saw in Kyoto in opposition to any and all participation has completely broken down," said Stuart E. Eizenstat, the chief American negotiator. In Buenos Aires, Kazakhstan and Argentina agreed to commit themselves to reductions.

International Trading

PROBLEM: It will cost a lot of money to control greenhouse gases — especially on the rapid timetable that the United States is being asked to meet. If these costs are too high, the Senate will not support the treaty.

SOLUTION: Many economists say the way to keep costs down is to let countries buy and sell emissions quotas, making the deepest cuts where it is cheapest to do so. The United States would be able to buy its way into compliance with the treaty by paying other industrial countries, like Russia, to cut emissions more than the treaty required.

OBSTACLE: European nations are the biggest opponents of unfettered trading in emission credits. They are demanding that the United States achieve at least a majority of its emissions reductions within its own borders. Many third-world nations, too, have objected that it is unfair for rich countries to buy their way out of treaty obligations.

OUTLOOK: Mr. Oppenheimer at the Environmental Defense Fund, which favors emissions trading and other market-based pollution controls, says that other nations, realizing how important trading is to the United States, are "holding it hostage" as a bargaining chip. But schisms among developing nations are weakening their resistance, and Europeans are recognizing that they need to make concessions to the Americans if the treaty is to work.

Credit for Early Action

PROBLEM: Every year that goes by without controls on greenhouse gas emissions makes it harder for the United States and other industrial nations to comply with their targets. Emissions in the United States are currently 10 percent higher than they were in 1990; they rose 1.[redacted] in 1997, and the Energy Departme[redacted] this trend to continue for another[redacted]rs.

SOLUTION: Many companies have already invested in energy saving and other approaches to cut their emissions, or are planning to do so soon. To encourage early reductions, legislation has been introduced to give these companies credits for their reductions, which could be used or sold if binding limits on emissions were imposed.

OBSTACLE: Many treaty opponents in Congress have fought policy measures, like tax cuts. They have even fought voluntary steps that suggest back-door implementation of an unratified treaty.

OUTLOOK: Big companies, even some that would prefer no binding limits on emissions, are lobbying hard to get credits for early action, just in case. "This is really the one area involving the whole issue of greenhouse gases where I think everybody ought to be able to agree," said Todd Stern, the White House official who coordinates the Administration's climate policy.

Finally, participants are wondering how the American Presidential elections will affect the negotiating timetable — especially the aspirations of Vice President Al Gore, the world leader most closely associated with the fight against global warming.

"How does the process of moving toward the year 2000 play with the Presidential election campaign, and with President Clinton's known desire to make progress before he leaves office?" Mr. Oppenheimer asked. "Those questions are not imponderable, but they are very big factors, and they make it very hard to figure out where the process will be two years from now."

FACES

Turning Her Passion Into a Park

FEDERAL WAY, Wash.

ABOUT 25 miles south of Seattle, under the flight path into the Seattle-Tacoma International Airport, in a sprawling city named after a highway lined with strip malls, Ilene Marckx and her neighbors have turned one of the last unspoiled bogs in the region into a state park.

On a tour of the 58.4 acres that she helped preserve, Mrs. Marckx, who will be 88 on Dec. 18 and is the park's unofficial guardian angel, shakes her fist in frustration that more people have not learned the intimate secrets of the 39 mosses, 41 lichens and 6 liverworts that grow in West Hylebos State Park. Mrs. Marckx, a former biology teacher, carries a list of plants — laminated and tied around her walking stick — mostly the ones she has trouble recalling.

She says she hopes visitors will remember some of the secrets she willingly shares: that Indian legend says that every fireweed plant is a soul of a tree burned in a forest fire; that honey from the salal plant has a caramel-like flavor, and that the unfolding leaf buds of cottonwood emit a fragrant resin. Some of these tidbits appear on the interpretive trail signs that Mrs. Marckx has written, one of the tasks she has undertaken during her walks through the bogs.

Mrs. Marckx and her late husband, Francis, bought the land in 1955 because they wanted property with a pond. "Right away, people wanted to start building," she said, referring to when she and her husband moved onto their land. "But we wanted to leave it the way it was. When we saw all this, we had to do it, that's all. It was beautiful."

To keep away developers, the couple donated their 23.5 acres in 1981 as a park. (Mrs. Marckx can stay on the land as long as she wants.) The park's other acreage was donated or bought through state money.

"She has dedicated her adult life since the early 1970's to educating both children and adults about the importance of wetlands," said Tom Geiger, the outreach director of the Washington Environmental Council, which recently honored Mrs. Marckx as an environmental hero. "Given the importance of water in everyone's life, that's a really crucial educational role to play."

TINA KELLEY

Therese Frare for The New York Times

Ilene Marckx in West Hylebos State Park, created in part from land she donated.

ELECTRIC VEHICLES

ENVIRO-CARS: THE RACE IS ON

Toyota's green machine will soon have lots of rivals

For more than a year, Toyota Motor Corp. has been cranking out the world's first mass-produced hybrid car. Under its hood are two power plants—a gasoline engine and an electric motor. In congested urban areas the motor is the full-time workhorse, while the engine keeps the batteries charged and kicks in extra oomph when passing.

Toyota's Prius goes a long way toward achieving the low-pollution benefits of electric vehicles. Yet it doesn't saddle drivers with a car that can only wander 100 miles or so before it must stop to recharge its batteries. In fact, because of the dual-energy approach, the Prius wrings 870 miles out of a tank of gas. "It represents a new value for the 21st century," boasted Toyota President Hiroshi Okuda when the car was launched.

Now, Toyota's backyard rivals are revving up their own hybrids. Honda, Nissan, and Fuji are gearing up to challenge Toyota's lead in "green" cars. The contest kicks off in the fall, when Honda Motor Co. aims to steal the spotlight with the first gasoline-electric hybrid car in the U.S., along with Europe and Japan. Toyota's Prius won't leave Japan until 2000, after an overhaul to give it more zip for foreign roads and to comply with various national regulations.

Honda's green contender will be a two-seat subcompact with an aluminum body. Code-named VV, it reverses the Prius recipe: The electric motor plays second fiddle to the gas engine, which runs constantly. Still, thanks largely to the VV's light weight—roughly 1,000 pounds less than the Prius—Honda promises the VV will one-up Toyota in fuel economy, cleanliness, and price. "We wanted to create a car so fuel-efficient it would shock everyone," says Hiroshi Kuroda, the VV's head engineer. Its engine will comply with California's tough Ultra-Low Emission Vehicle (ULEV) standard, the stage beyond the Low Emission Vehicle standard that the Prius meets.

Back in Japan, a third contender will enter the ring this fall: Nissan Motor Co. Its hybrid probably will be an offshoot of the new Tino station wagon. Come 2001, Fuji Heavy Industries hopes to mesmerize minicar fans with a hybrid Subaru minivan.

DISTANT PROFITS. The race is on because Japanese drivers are snapping up 1,765 Prius compacts a month. That's shy of Toyota's production capacity of 2,000 a month, but way over the initial target of 1,000. But it's still too few to be profitable. Analysts estimate that building a Prius costs many thousands more than its $19,000 price. Honda expects to lose money, too. "It depends on the volume," says Honda President Hiroyuki Yoshino. "We don't know how many we will sell."

To trim their hybrid losses, Japan's carmakers hope to crank up volume by going global. It will be a tough battle. Consumers haven't been eager to "buy" cleaner air—especially in the U.S., where gasoline costs less than bottled water. That's why General Motors Corp. is betting on hybrid buses and trucks. Fleet owners are willing to pay more up front if the outlay can be recovered

TWO TAKES ON HYBRID CARS

ON THE TRACK . . .

Toyota's Prius is selling well in Japan at roughly $19,000.

SPECIFICATIONS

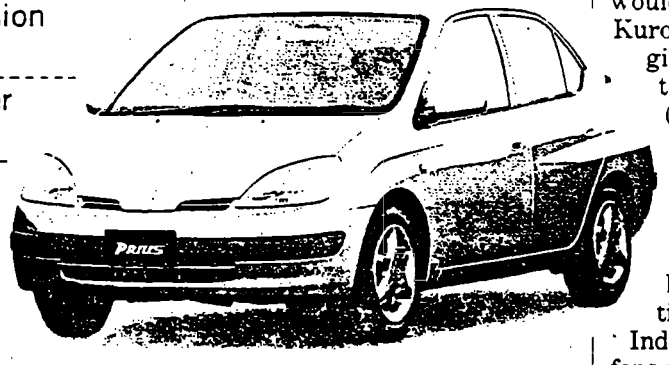
Emissions rating Low Emission Vehicle

Fuel efficiency 66 miles per gallon

Gasoline engine 1.5 liters, four cylinders, 58 hp

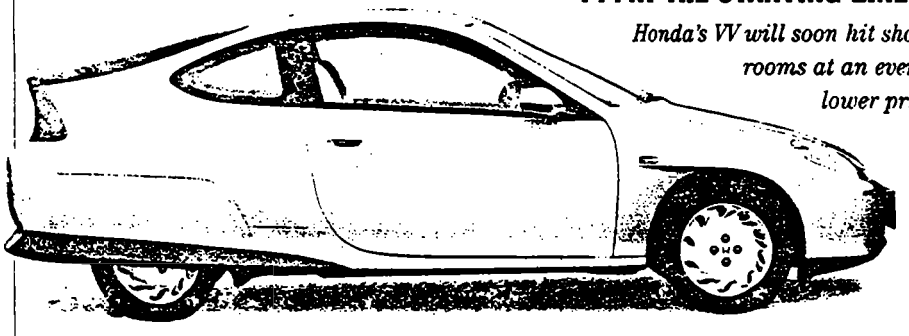
Electric motor 30 kilowatts, 40 hp

Range 870 miles per tank of gas



. . . AT THE STARTING LINE

Honda's VV will soon hit showrooms at an even lower price.



SPECIFICATIONS

Emissions rating Ultra-Low Emission vehicle

Fuel efficiency 70 miles per gallon

Gasoline engine 1.0 liter, three cylinders

Electric motor Not disclosed yet

Range 700 miles per tank of gas

from lower operating costs. GM plans to test a diesel-electric hybrid bus on New York City streets later this year. A hybrid car should be ready for production by 2001, GM says, but there's no timetable for actually building it. Ford Motor Co. and DaimlerChrysler don't expect to roll out hybrid cars before 2003, if then. Skepticism abounds in Europe as well. Although Volkswagen's Audi division has been road-testing hybrid cars since 1989, it hasn't found one that measures up to the Audi image.

BYE, BYE GAS? Japan's carmakers remain undeterred. They see hybrid technology as a bridge between the squeaky-clean, but unpopular, all-electric vehicles of today and tomorrow's ultimate green car—which probably will be powered by a fuel cell that chemically converts gasoline or hydrogen into electricity without combustion. With increasingly stringent pollution curbs spreading from country to country, gasoline engines seem doomed—but not for a decade or two. In the interim, better fuel efficiency could pay off in big market-share gains, just as it did after oil prices skyrocketed in 1973.

So Japan's carmakers are barreling ahead. Soon, the hefty subsidies for every hybrid may begin easing. Analysts expect Honda to buy its VV batteries from Panasonic EV Energy Co., the Toyota-Matsushita group joint venture that supplies nickel metal-hydride batteries for the Prius. If so, rising volumes could drive down battery costs—and batteries account for 20% of total hybrid costs. At 10,000 batteries a month, Panasonic EV Energy says it could slash its prices in half—reducing total hybrid production costs by 10%.

Nissan plans to use lighter lithium-ion batteries to offset the weight of its hybrid, which will be larger than the Prius. Nissan also is fine-tuning a new transmission to provide better handling, says Hiromasa Maeda, a senior engineering manager. The investments in new technologies mean "no one can make money for the time being," says analyst Koji Endo of Schroders Japan Ltd., a Tokyo securities firm. But he predicts some players will start earning returns "in three to five years."

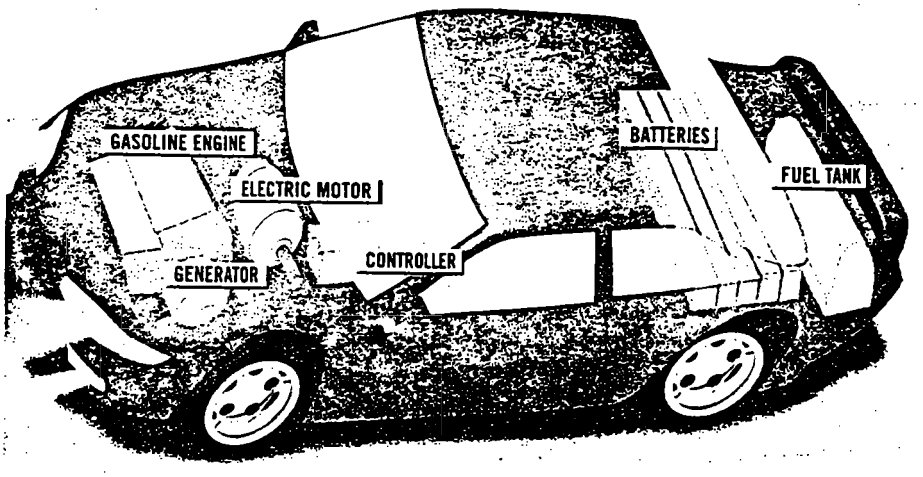
This fall, look for Toyota to react strongly to Honda's challenge. Akihiro Wada, Toyota's executive vice-president for development, doesn't like being upstaged by Honda, so Toyota is working on a few performance-boosting schemes to trump the VV. For its U.S. debut, Wada wants the Prius to leap over California's ULEV standard and qualify as a super-ultra-low emission vehicle—which may make it slightly costlier in the U.S.

Pioneering green cars isn't easy or cheap. But the intense rivalry triggered by the Prius might end up helping to make the rush hour commute a healthier time to breathe.

By Emily Thornton in Tokyo, with bureau reports

WHAT'S INSIDE

Hybrid cars have dual energy sources—both gasoline and electricity



HITTING THE ROAD IN TOYOTA'S PRIUS

There's just one hybrid car in production, Toyota Motor Corp.'s Prius, and it's sold only in Japan. But Toyota brought a handful to the U.S. recently, so I borrowed one for five days to see if this new breed of "green" car is easier to live with than all-electric vehicles.

I am pleasantly impressed. This is a no-compromise vehicle that behaves like a conventional small car. Thanks to its fuel tank, there's no need to remember to hook it up to the charger every night. No jitters over whether the battery has enough juice to get you home.

Still, the Prius is an electric car at heart. Get in, turn the key, and the "ready" light comes on. If the batteries are fully charged, the gasoline engine won't kick in until you approach 10 mph. At red lights, it shuts down.

Out on the road, though, it feels like an ordinary gasoline car. What reminds you otherwise is a 5-inch liquid-crystal display in the console. It shows whether the car is being propelled by the engine, the motor, or both. When you brake, the LCD lets you know that the excess energy is being converted into electricity. It's all a bit distracting, but I was soon just letting the Prius do its thing.

The Prius is three inches shorter than a Corolla, yet bigger inside—with generous headroom and legroom. Don't look for the speedometer through the steering wheel. Instead, it sits in a little pod on the dash, below the rear-view mirror. Looks weird, but I quickly discovered the location makes for quicker reading.

To see if the Prius could handle American freeways as well as Tokyo's traffic jams, I took it to San Diego—a 130-mile trek that's beyond the range of every electric vehicle now on the market. Acceleration was good enough, passing power was fine, and while the engine strained a bit, it kept up with traffic in the fast lane. And when I topped off the tank back home, I calculated the Prius got 47 miles per gallon, maybe half again as much as most 1.5-liter buggies.

By Larry Armstrong in Los Angeles

U.S. Will Increase Oil Reserve For the First Time Since 1994

By MATTHEW L. WALD

WASHINGTON, Feb. 10 — To shore up the nation's shrinking protection against oil emergencies, the Clinton Administration will announce on Thursday that it plans to add oil to the Strategic Petroleum Reserve for the first time since 1994.

To add to the reserve, the Government will take royalty payments for wells on Federal land in oil rather than money.

The decision represents the first time since 1990 that the Government has dedicated new resources to buying oil; then, Congress voted money for purchases.

The move is a sharp policy turnaround and a hedge against a threat that looms ever smaller in the popular imagination. The strategic reserve was conceived as a billion-barrel shield against gasoline lines like the ones during the Arab oil embargo of 1973-74 and again during the Iranian revolution of 1979.

But the reserve reached only a little more than half its expected level, and it has shrunk precipitously in the last few years as millions of barrels have been sold — at a loss of $10 a barrel or so — to help balance the Federal budget. And imports have grown by 60 percent since the Arab oil embargo as the country has switched to sport utility vehicles and domestic wells have run dry.

The oil remaining in the reserve, 561 million barrels, represents about 60 days of imports. When Iraq invaded Kuwait in 1990 and import levels were lower, the reserve had nearly 90 days' supply.

Many oil experts, though doubtful that another war in the Mideast would produce shortages, given the free-flowing world oil market, say that crude oil would soar in price.

Energy Secretary Bill Richardson plans on Thursday to announce that the Government will replace the 28 million barrels sold over the last few years at a rate of about 150,000 barrels a day, drawing on the Government's 200,000-barrel-a-day royalties from offshore wells in the Gulf of Mexico. The Energy Department and the Interior Department, which collects the royalties, already have authority to transfer the oil and no Congressional action is needed, officials said. "The time to take this step is now, when prices are low and when we can save for a rainy day," Mr. Richardson said in a telephone interview. Oil for March delivery settled in New York today at $11.75 a barrel; by contrast, the average purchase price of oil in the reserve is around $27 a barrel.

At the Petroleum Industry Research Foundation in New York, John H. Lichtblau said that increasing the reserve was sensible. "With the uncertainty in the Middle East, it's a lot cheaper than having military operations," he said, adding that more of the world's oil would come from the Mideast as the years go by.

The New York Times

THURSDAY, FEBRUARY 11, 1999

THE WALL STREET JOURNAL
THURSDAY, FEBRUARY 11, 1999

U.S. Selects Firms For Energy Project At Military Bases

By JOHN J. FIALKA
Staff Reporter of THE WALL STREET JOURNAL

WASHINGTON – The Energy Department selected five companies to finance and manage contracts valued at as much as $500 million to install energy-saving devices at military bases and other federal installations.

The projects will use geothermal heat pumps to heat and cool buildings, saving as much as 40% at each site, said Energy Secretary Bill Richardson.

The program is aimed at trimming the federal government's $8 billion annual energy bill and reducing pollutants. The selected companies will finance and manage energy-saving retrofits and will be paid with part of the savings in a given agency's energy bills.

"For every $1 these contractors receive, the government will receive $2 over the term of the contracts," said Mr. Richardson. He predicted that by 2005 the annual savings could total $700 million.

The heat pumps can heat or cool, based on the difference between underground and surface temperatures. They would often replace outmoded steam boilers used at many federal installations. The first ones are scheduled to be installed this year at two U.S. Navy sites at Little Creek, near Virginia Beach, Va.

The program, part of a larger energy-savings program involving several new technologies and outside contractors, doesn't require federal budget authority because it is supposed to pay for itself with resulting savings. It can be used at any of 500,000 federal buildings in the U.S. or its territories.

The companies selected for the geothermal projects are:

Constellation Energy Source, a unit of Baltimore Gas & Electric Co., Baltimore.

Duke Solutions, a subsidiary of Duke Energy Corp., Charlotte, N.C.

Exelon Energy Services, King of Prussia, Pa., a unit of Peco Energy Co., Philadelphia.

Enron Energy Services, San Ramone, Calif., a subsidiary of Enron Corp., Houston.

Trane Co. Asset Management Services, St. Paul, Minn., a unit of American Standard Cos., Piscataway, N.J.

Federal Regulators Weigh Change In Food-Testing Rules to Boost Saf

By ROCHELLE SHARPE
Staff Reporter of THE WALL STREET JOURNAL

ARLINGTON, Va.–Prompted by a recent string of food poisonings, federal regulators said they would consider requiring the food industry to increase microbial testing of ready-to-eat foods and add health warnings to foods such as hot dogs.

At a meeting yesterday, Agriculture Department officials said they would weigh several changes to improve food safety because of recent contaminations with the deadly bacterium *Listeria monocytogenes* in the past several months. In one major outbreak, 16 people died and 73 were sickened after eating products made at Sara Lee Corp.'s Bil Mar Foods plant in Zeeland, Mich. The company has since recalled millions of pounds of fully cooked hot dogs and deli meats.

The contaminations "bring into question the adequacy of control procedures we currently rely on," said Thomas Billy, administrator of the Agriculture Department's Food Safety and Inspection Service. He said he would seriously consider a proposal requiring food-processing plants to test their products for Listeria and other deadly bacteria. The government would also consider adding warning labels suggesting that consumers reheat hot dogs before eating and warn of the dangers Listeria poses to those with weakened immune systems.

Listeria sickens relatively few people in the U.S., about 1,300 a year. those are people suffering fr eases, the elderly, pregnant newborns, the Centers for Di and Prevention said. But those who contract the lister die from it.

Few industry officials s meeting, and they were spli control the hazard. Gary Trer quality assurance at Pilgrim' in Pittsburg, Texas, endorse ing, saying his poultry-pro pany already tests its produc hourly. He also said he supp ing label urging consumers dogs. But the National Food P sociation opposed warning tioning whether consumers tention to them.

Unlike slaughterhouses, ing plants aren't required to crobial tests. The Agriculture tests processing plants for sa conducts random sampling but most of the government' requirements have focused houses.

The Agriculture Departm mendations for controlling Li pected to be sent to the food ir end of the month. It also said propose a rule allowing rad beef, which could kill deadly

White House Seeks to Ease Retirement-Fund Transfers

By a WALL STREET JOURNAL *Staff Reporter*

WASHINGTON–The Clinton administration plans to propose tax-law changes to help workers who change jobs transfer retirement-savings accounts to new employers.

Currently, many workers employed by state and local governments or nonprofit institutions are barred from making such transfers to retirement plans of private-sector employers. As part of a pension-reform initiative that Vice President Al Gore is scheduled to announce today, the administration will propose eliminating the barriers. While the number of potential beneficiaries isn't expected to be great, the administration is pressing the plan to promote the principle of pension portability.

The administration also will propose that all workers be allowed to transfer holdings in individual retirement accounts to most employer-run 401(k)-style plans. That would help individuals track

New rules for those fun trucks

Cleaner gas and less pollution for SUVs

BY MARIANNE LAVELLE

Sport utility vehicles seem well on the way to becoming the ultimate icon of yuppiedom. Late last year, for the first time, SUV sales outpaced those of passenger cars. The reason: families and urban commuters who cotton to high-riding chic. But there's a snag. Because SUVs can legally cough up twice the pollution of cars, they present conservation-minded parents, lovers of the outdoors, and young professionals with a hard choice: riding in style versus smog.

Now that's about to change. The Environmental Protection Agency is poised to propose that SUVs be held to the same emissions-control standards as sedans. Surprisingly, auto makers are not balking at the proposal, which would add less than $200 to an SUV's sticker price.

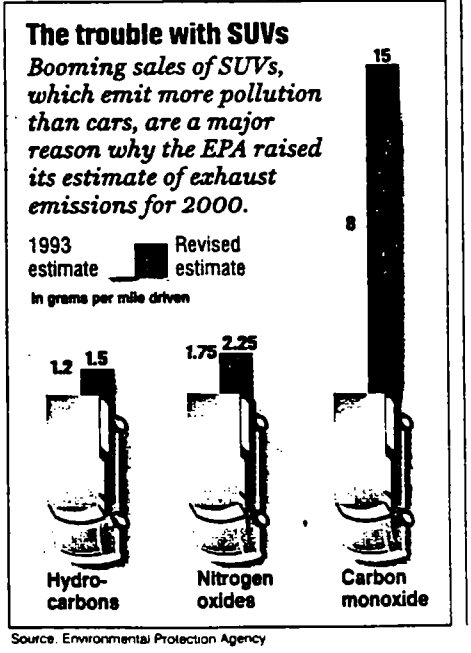
The EPA is likely to achieve its new pollution goals not so much on the backs of the auto industry as on oil producers and refiners. Within the next few weeks, the EPA is expected to announce new standards for gasoline. If they are enacted, by 2004, oil companies and refiners will have to reduce sulfur levels in gasoline sold in the United States by 90 percent. The EPA says cleaner fuel would cost as little as 2 cents more per gallon at the pump; the petroleum industry estimates the cost at up to 8 cents more.

Suffering sulfur. Either way, auto makers are not unhappy. "The auto industry has come to the conclusion that this is better, and better means cheaper for them," says Urvan Sternfels, president of the National Petrochemical & Refiners Association. The oil industry has been pushing for a more modest proposal under which sulfur content would be sliced in half only in the eastern United States. But a new national standard seems inevitable, because California has already switched to low-sulfur gasoline, and Japan, the European Union, and Canada have decided to follow suit.

A woman hangs out in trendy South Beach Miami in front of her hot SUV.

There's good reason to target sulfur emissions. Sulfur damages vehicles' air-pollution-control systems—known as catalytic converters—diminishing their ability to reduce carbon monoxide, hydrocarbons, and nitrogen oxides released into the air. Ironically, the most sophisticated and powerful catalysts seem to be the most sensitive to sulfur. Because low-emission SUVs and cars require highly sensitive catalysts, car makers argue that short of improving gasoline quality, any new regulation intended to improve air quality would be for naught. "It's very similar to the impact of lead in the past," says General Motors Mobile Emissions Director Al Weverstad, noting that lead, which the EPA phased out of gasoline in the 1980s, damaged the earliest catalytic converters. "Now we are at the next threshold," he says, "and sulfur control is the enabler we need to make a similar improvement" in pollution control.

ROD LITTLE—USN&WR



Source: Environmental Protection Agency

The EPA has been considering clamping down on SUV pollution for some time. Last year alone, sport utility sales increased by 14 percent to 2.8 million, according to *Automotive News*. Over the past few years, skyrocketing SUV sales caused the EPA to revise pollution estimates based on figures from the 1980s, when the vehicles represented less than 30 percent of the market—compared with 50 percent today. But the more EPA officials studied sport utility vehicles, the more convinced they became that cleaner gasoline was the only way to go.

California regulators say their move to low-sulfur gasoline three years ago was the most important step toward improving air quality since the catalytic converter was introduced in 1975. It paved the

BURK UZZLE FOR USN&WR

.s lots of pieces of ammunition, than one big shell. You want a variety so you can fight back no r how anyone attacks you. Al Gore ng this very well."

.d the administration is arranging for to announce more and more key initia ives in important states to bolster his standing outside Washington. In California earlier this month, for example, he unveiled a $1.3 billion plan to restore welfare benefits for legal immigrants, a $366 million initiative for research on information technology, and a $43 million proposal to help crime victims pay medical bills.

Charm wars. Yet there are some trouble signs. A *Los Angeles Times* survey last week found that while 52 percent of Democrats favor Gore for their party's nomination (with Jackson at 17 percent and Bradley at 7 percent), Gore would lose general-election matchups with Texas Gov. George W. Bush and former GOP cabinet member Elizabeth Dole. Gore's aides argue that support for Bush and Dole will evaporate as the vice president becomes firmly identified with the strong economy and the Republicans' views become clear. "People don't know very much about them yet," says a senior Gore strategist. "But once they start taking criticism from within the Republican Party for their positions on gun control, taxes, defense, and other issues, their popularity will sink."

Still, one of Gore's challenges is to compete with Bush and Dole in the charm department, where they have a clear edge. Gore friends insist he can be funny and warm in private and just has to learn how to convey those qualities on television. They have a point. During an interview about mass culture and TV, Gore chatted with a reporter about how his father tried to keep him from watching Western "shoot-'em-ups" as a child because they were too violent but admitted tuning in whenever he got the chance. At one point in the interview, the vice president and the journalist began singing theme songs from the old-time Westerns, including *Have Gun, Will Travel* and *Wyatt Earp.* Gore concluded by warbling a solo—the tune from *Johnny Yuma*—in a strong baritone that was slightly off key but delivered with gusto. Afterward, he smiled in delight at his performance.

Yet Gore realizes that few people outside his immediate circle can appreciate this lighter side of his personality. When a friend complained recently that the public hasn't seen the real Gore, the vice president said happily, "You know, I like to benefit from low expectations." But with his campaign on an upswing now, low expectations will be the least of his problems. ■

EYE IN THE SKY

Al Gore's inspired space jam

BY CHARLES W. PETIT

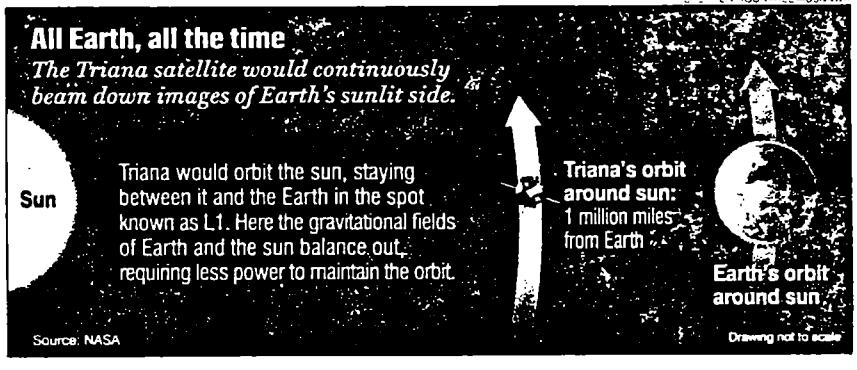
Tucked into NASA's FY 2000 budget request for $13.58 billion, the sixth straight year of shrinking funds, is a little $35.1 million item designed to satisfy one of Al Gore's fondest wishes: a satellite that the vice president dreamed up all by himself. Using an oddball orbit, it will be the first space platform to keep the fully sunlit side of Earth constantly in view.

The idea, Gore says, is to provide an all-Earth, all-the-time view of the world, suitable for posting live on the Internet, a notion that came to him in the wee hours of the morning early last year. It got a few giggles when he announced it during a speech at MIT last March. But he had checked the relatively low-cost project out with the right guy—space agency boss Daniel Goldin, who has worked relentlessly to favor little, cheap space projects over big, expensive ones. "It blew me away," Goldin says. "It was like, Eureka!"

NASA immediately sought bids and last fall picked the Scripps Institute of Oceanography to lead the $75 million project. It hopes to launch late next year. Gore wants the images posted on the Internet under the rubric EarthSPAN, for Earth Satellite Picture Access Network. He hopes the images will have as much impact on the public's appreciation for the fragile world as did the portraits of the cloud-streaked orb snapped by astronauts orbiting the moon.

A stunt? As Gore suggested, the satellite's name will be Triana, after Rodrigo de Triana, the Spanish sailor who was the first to glimpse the New World from Christopher Columbus's flotilla. The project is more than a politically driven stunt, according to one of the team leaders, Francisco Valero, who says Triana will provide data previously unavailable from a single source. Most important is a "bulk thermodynamic" gauge of the planet, which would tally Earth's energy budget—how much energy comes in from the sun, how much immediately reflects, and how much is absorbed to be reradiated at longer infrared wavelengths. So far, those data, which can help calculate global warming, have been patched together from measurements by scores of satellites in lower orbits, each viewing Earth only briefly.

STEPHEN ROUNTREE—USN&WR



Any project with Gore's fingerprints all over it is sure to get tough scrutiny from GOP lawmakers. David Weldon, a space subcommittee member whose district includes the Kennedy Space Center, says he regards it as a special favor to Gore irrelevant to NASA's primary mission. "This is unprecedented for a vice president to dream something up for NASA and bingo, he gets it," Weldon said. "It is strange to have the administration cutting the NASA budget, canceling some research, while doing something like this that has politics written all over it."

Realistically, however, if the White House wants the satellite, Congress won't scuttle it. NASA has Triana on the schedule for deployment from the bay of a space shuttle in December 2000. By then, Gore hopes his even fonder wish for next year will have materialized, and that he will be packing his desktop computer to watch EarthSPAN from the Oval Office.

FILE - CLIPS

CBS EVENING NEWS with Dan Rather

Seeing The Future In Antarctica

• *Scientists Study Ice For Climate Change Clues*

ANTARCTICA
Monday, February 15,1999 - 10:59 PM ET

VIDEO
CBS News Correspondent Jerry Bowen reports.

CBS

Scientist Joan Fitzpatrick examines an ice core.

"We're trying to pull a record out of the past in order to enable us to predict the future of climate change."
Joan Fitzpatrick
Scientist

(CBS) At the edge of the ice at the bottom of the world, the whales are putting on a show. They are cruising the newly-cut shipping channel -- spy hopping, as it's called -- to see who has come visiting, reports **CBS News Correspondent Jerry Bowen.**

It's a common sight for the crew of the Coast Guard cutter *Polar Sea*, breaking the summer ice to the American Base at McMurdo. What's unusual this year, says Capt. Gerald Davis, is the weather.

"This year was an unusual year," Davis says. **"We had an awful lot of ice to break through -- about 31 feet -- to create this channel into McMurdo. . .Previous years seem to be a little milder than they were. There's definitely a cycle."**

Scientists' say it was last year's El Nino that disrupted Antarctic weather. One researcher says El Nino may have very close ties to the continent. He noticed that when air pressure suddenly drops at the South Pole, an El Nino soon pops up elsewhere. The pressure drop may be the signal El Nino is coming.

781 394 0492

"It could be the trigger," says Charles Stearns of the University of Wisconsin.

National Science Foundation researchers working at remote field camps are looking into Antarctica's role in global climate change. There is special interest in the

stability of the Brazil-sized West Antarctic Ice Sheet. Its melting or collapse could cause catastrophic coastal flooding worldwide.

Scientist Joan Fitzpatrick says such an event would raise sea levels by five meters, putting U.S. cities like New Orleans or Malibu underwater. However extreme that may sound, Fitzpatrick is not among the doomsayers.

A new NASA computer model shows that over the past 20,000 years, the ice sheet has already lost two-thirds of its size. It's widely believed any new melting would occur over several centuries. However, what has surprised researchers is how quickly a new meltdown could start -- within just four years.

"Major climate change can be accomplished in a short period of time -- over the period of time it takes you to get through college in some cases," Fitzpatrick says.

Researchers know this from what the ice records tell them.

Within the ice walls of a carved-out storeroom, 20 feet beneath the surface of the researcher's base, lies the climate history of the West Antarctic Ice Sheet. Hundreds of ice cores are housed there, each one tens of thousands of years old. Scientists hope they reveal as much about the future of global weather patterns as they do about the past.

"We can get a good sequential, chronological record every year preserved in the ice, much like tree rings," says researcher Gregg Lamorey.

At the Siple Dome drill site, researchers have been retrieving ice cores from a hole 3,000 feet deep. Each core contains trapped air bubbles from ancient atmospheres.

"At the bottom, we calculate the ice is 80,000 years old," Lamorey says.

Sometimes the brittle samples shatter at the surface, but each piece is like a page from the past, revealing temperatures, snow fall amounts, even wind direction. It is Fitzpatrick's job to search for parallels to what we see now.

"We're trying to pull a record out of the past in order to enable us to predict the future of climate change," she says.

Five hundred miles away in Antarctica's Dry Valleys, researchers are taking a close look at some actual changes occurring right now: melting glaciers. This year the water runoff is six times higher than normal, and part of a trend.

"That's not going out on a limb to say the past thirty years have been warmer," says hydrologist Diane McKnight.

McKnight says the finding is one small piece of the climate change puzzle. It's a puzzle that includes retreating glaciers and thinning sea ice in the Northern Hemisphere, and that other weather wildcard, El Nino.

"There isn't really ever a smoking gun, but many pieces of evidence coming together" she explains.

If the climate is getting warmer, say the scientists, this is where we will likely see the evidence first -- at the bottom of the world, at the edge of the ice -- the edge of change.

Reported By Jerry Bowen.

RELATED STORIES
• 3 Weeks in Antarctica

▲ back to TOP

[Home | News | Weather | Sports | Life | Local Guide | Affiliates]
[Feedback | Help]

EPA Wants Cleaner Gas, Light Trucks

Air Quality, Costs Could Be Affected

By Martha M. Hamilton *and* Warren Brown
Washington Post Staff Writers A1

The Environmental Protection Agency has decided to propose a set of tough new environmental rules that would require light trucks and sport-utility vehicles for the first time to meet the same stringent emission standards as cars, according to sources who have been briefed on the plan.

The proposed rules would also require oil companies to produce cleaner gasoline.

Both changes would take effect starting in 2004.

The new rules are designed to create huge improvements in air quality, according to environmentalists. Cleaner gasoline alone should be the equivalent of taking 54 million cars off the road, said William Becker, executive director of a national association of state and local air pollution officials. The EPA proposals, if adopted, could also reduce acid rain, diminish the amounts of harmful toxins and particulates in the air and help dispel the haze that sometimes clouds the views from the Blue Ridge Mountains, environmentalists said.

The rules also are expected to increase gasoline and vehicle costs. That, in turn, could have a profound effect on the mix of vehicles on the nation's roads, which in recent years have become crowded with smog-producing, fuel-thirsty trucks.

Light trucks—pickups, vans, minivans and sport-utility models—now account for 47.5 percent of all new vehicles sold in the United States. As a group, their average fuel consumption is 20.7 miles per gallon, compared with an average 27.5 for passenger cars. More fuel consumption generally leads to more tailpipe pollution, and the light trucks have been exempt from stricter standards that apply to passenger cars.

The proposed requirements have been the source of fierce battles between the automobile and oil industries. The final draft of the document is supposed to be sent to the Office of Management and Budget for review on Friday, but the EPA has begun briefing people on its general contents.

An auto industry executive said yesterday that in some respects the proposal goes too far. But, "the industry would like very much to be positive in this thing," he said. "We're going to work hard to put the best light on a bad situation." He said the industry would try to push back some of the target dates for reducing tailpipe emissions and that it would also argue that some targets are too strict.

Oil companies and car manufacturers have been arguing with each other and the EPA for almost two years over who should bear the biggest responsibility for cleaning up vehicular pollution. That battle is expected to continue as the White House, Congress and the public review the EPA proposals.

William F. O'Keefe, executive vice president of the American Petroleum Institute, which represents the oil companies, said the EPA proposals to reduce the sulfur content in gasoline could increase the cost of gasoline by as much as 5 to 6 cents a gallon and would require hard-pressed refiners to spend $5 billion to $6 billion to retool. Some refiners may be forced to shut down and others may choose not to make the investment, producing gasoline only for export, he said.

The EPA proposal would require a nationwide average for sulfur in gasoline of 30 parts per million, phased in from 2004 through 2006. The nationwide average is now more than 10 times that level, or about 330 parts per million. The carmakers had sought lower levels of sulfur in gasoline because sulfur clogs up the honeycombs in catalytic converters and limits their ability to reduce pollution.

The proposed rules also aim to reduce emissions of nitrogen oxides, which contribute to smog. The current standard for emissions of nitrogen oxides from passenger cars limits them to 0.4 grams per mile, but in the Northeast beginning this year the standard becomes 0.2 grams. That standard will apply nationally by the year 2001.

Beginning in 2004 cars will begin moving to a standard of 0.07 grams per mile. At the same time light trucks (those weighing up to 8,500 pounds) would be required to meet the current 0.2 grams-per-mile standard. They would be required to move to the 0.07 standard in 2009. The current emissions standard for light trucks is 0.4 grams of nitrogen oxides per mile.

The EPA proposals would also require the manufacturers of diesel vehicles to produce a cleaner fleet with average emissions of 0.07 grams per mile. The idea behind the EPA's thinking, according to one source who had been briefed, is that meeting that average would require diesel manufacturers to produce some super-clean vehicles, which would be a spur for developing new technology.

State and local air quality officials have fought hard for stricter gasoline and tailpipe standards. Becker said yesterday that the proposal "is probably the single most important action that Administrator [Carol] Browner will be taking over the next couple of years in addressing air pollution and environmental quality."

Some environmental groups said yesterday that the EPA should have gone still further, making the rules that govern diesel engines even tighter. Diesel engines have become an issue because they generally are more fuel-efficient than gasoline engines. Because federal fuel economy laws apply to a company's fleet of cars and not each individual model, automakers produce a number of fuel-efficient diesel cars, which allows them to sell more trucks that guzzle gas, without increasing the risk of violating the fuel economy laws.

Jason Mark, an analyst with the Union of Concerned Scientists, said the proposed EPA rules still provide "a loophole" for diesel engines by allowing automakers to meet higher standards in some diesel vehicles and lower standards in others.

Staff writer Cindy Skrzycki contributed to this report.

The Washington Post
Thursday, February 18, 1999

EPA's stricter emissions standards target trucks

By James R. Healey
and Jayne O'Donnell
USA TODAY

Although federal clean-air officials are about to propose stricter emissions standards for popular sport-utility vehicles, pickups and minivans, only tiny amounts of pollution are still coming from their tailpipes.

The federal Environmental Protection Agency hasn't disclosed details of its so-called Tier 2 standards being sent for review to the White House, perhaps as soon as today. But in what is standard procedure for Washington, some bits have been leaked to test for outcry.

The details suggest that trucks — defined as vans, pickups and SUVs — would have to meet tougher car pollution standards by 2007. A phase-in period would begin in '04.

A separate provision would require oil refiners to dramatically reduce the amount of sulfur in gasoline. They already do so for gas sold in California. Lowering sulfur cleans exhaust. Automakers say they also can use more-effective pollution-control catalytic converters with low-sulfur gas.

Despite the EPA effort, the American Automobile Association said in 1997 that its latest study showed cars and light trucks cause less than 30% of smog-related pollution in 24 high-traffic urban areas. "Substantially reducing car and light-truck emissions isn't going to substantially change the pollution picture," says James Kolstad, a AAA vice president and former member of the National Transportation Safety Board.

Automakers say they might need longer than the EPA would allow to squeeze out much of the remaining pollutants in light trucks. "We don't know how to get these (proposed) levels today with the bigger trucks," says Sam Leonard, director of auto emissions work at General Motors. "It's not like we've not done anything to (improve emissions from) trucks over the years."

Indeed, the lightest trucks — such as Chevrolet Tracker SUV and 4-cylinder compact pickups — have had to meet car pollution standards since the 1994 models. And heavier-duty models — Chevy Blazer and Tahoe, for example — already meet standards close to cars.

Since clean-air rules began applying to trucks in 1974, tailpipe pollution from pickups, vans and SUVs has been nearly eliminated. Hydrocarbon (HC) emissions have gone down about 96%. Oxides of nitrogen (NOx) have fallen about 80%. The amount of carbon monoxide (CO) has been cut about 96%.

HC and NOx combine with sunshine to form urban smog or ozone. CO is a poison.

Car emissions first were regulated in 1968. Their HC pollutants have fallen 97.6%; NOx is down 90%; CO is off 96%.

EPA's acting general counsel, Gary Guzzy, applauded automakers for "enormous strides." But, he added, "there's significant future need to address emissions from all types of vehicles. One of our concerns is the growth of vehicle miles (driven) and the levels of smog that would result if there are no new controls."

For the auto industry, the issue is technical and political. The technical side is this: Trucks, to carry the loads people expect and workers demand, must be heavier and use bigger engines. That means they always will burn more fuel and put out more pollution. But it's barely noticeable in contrast to pre-'94 models.

The industry sees the political issue thus: People like big SUVs and trucks in general. SUVs are the fastest-growing segment, and trucks of all types account for nearly half of U.S. sales. We're in business to sell what people want.

Hard-core environmentalists see it differently: Lax pollution standards for trucks mean those cost less to build and so earn higher profits. Automakers, therefore, heavily advertise those high-profit models, making them more popular. Because they use more gas and pollute more, the government should do something. They also think automakers are not working hard enough on alternatives. If past is prologue, Tier 2 rules could make cars and trucks less powerful and less smooth the first year or two, until automakers fine-tune engines, computers and anti-pollution gear to work together.

Thus, wary shoppers might want to lease or buy '03 models, the last designed to meet current EPA standards, and keep them until '06 or '07, when bugs are worked out.

Emission regulations pay off

Pollutant emissions have dropped considerably since the federal government started regulating trucks in 1974 and cars in 1968.

Trucks

Pollutants	Grams per mile			
	1974	1984	1994	1997-2003
Hydrocarbons (HC)	8.0	0.8	0.32[1]	0.39[1]
Carbon monoxide (CO)	102	10	4.4[1]	5.0[1]
Oxides of nitrogen (NOx)	3.6	2.3	0.7[1]	1.1[1]

Cars

	1968	1978	1988	1997-2003
Hydrocarbons (HC)	4.1	1.5	0.41	0.25
Carbon monoxide (CO)	34	15	3.4	3.4
Oxides of nitrogen (NOx)	4.1	2.0	1.0	0.4

1 - Maximum emissions. Number varies based on engine size and truck weight.
Source: Coalition for Vehicle Choice

U.S. to step up trade pressure

By Rich Miller
USA TODAY

The United States, fed up with a mushrooming trade deficit, is expected to press Europe and Japan Saturday to do more to pump up their economies and buy more imports.

"We will be discussing how Japan and Europe plan to move forward on growth in their economies," Treasury Secretary Robert Rubin told reporters ahead of Saturday's meeting in Bonn, Germany. "This is critical."

Rubin and Federal Reserve Chairman Alan Greenspan will attend the talks, which bring together economic policymakers from the Group of Seven — Britain, Canada, France, Germany, Italy, Japan and the USA.

shows no sign of picking up. That leaves the USA as the sole locomotive for the world economy, sucking in imports from everywhere else.

Partly in response to U.S. pressure, Japan last week cut a key short-term interest rate to 0.15% from 0.25% and promised to pump money into its economy to get it growing again.

"I'm sure they (U.S. policymakers) are not completely satisfied," says David Gilmore of consultants Foreign Exchange Analytics. "But they can't extract much more from Japan now."

Tokyo's moves have sent the yen skidding vs. the dollar because the lower interest rates make Japan's currency less lucrative to hold. The dollar briefly passed the 120-yen barrier Thursday, before closing in New York at 119.81, vs.

The weaker yen will boost Japanese exports by making them less expensive on world markets. But the U.S. now says it's more important to avoid a total economic collapse in Japan than it is to keep the yen from weakening.

In contrast to Japan, the European Central Bank (ECB) left interest rates unchanged ahead of Saturday's meeting, despite pressure from Germany and France for a rate cut. However, faced with minimal inflation and slowing growth, most experts expect the ECB to cut rates eventually.

In the USA, investors worry the Fed may raise rates to keep the economy from overheating and inflation from rising. The government said Thursday that wholesale prices rose 0.5% in January, the biggest increase in over two years.

GEOFFREY BALLARD

In a Hurry to Prove the "Pistonheads" Wrong

A CENTURY HENCE, WHEN HISTORIANS TRY TO PINPOINT THE birth of the hydrogen age, will they focus on two weary tennis players vegging out in a Vancouver hot tub? It is as good a peg as any. For on that summer day in 1989 at the Hollyburn Country Club, a peripatetic Canadian geophysicist persuaded a British Columbia official to help fund a farfetched idea: a municipal bus that would run not on gasoline or diesel fuel but on hydrogen, and spew from its tailpipe only a thin stream of pure water. "Can you get me a green photo op?" Geoffrey Ballard, the geophysicist, remembers his companion asking.

Four years and $4.2 million later, the magic bus was built. Scientists from Vancouver's Ballard Power Systems, a then fledgling company, joined Canadian officials in drinking from a fluted glass the clean emissions of the world's first fuel-cell vehicle, celebrating an event they hoped would herald a transportation revolution. Since then, auto companies and other investors have poured more than $1 billion into Ballard's outlandish notion, betting that the fuel cell—an electrochemical device that combines oxygen with hydrogen to generate electricity—can all but eliminate auto pollution. With bravado Ballard predicts that fuel-cell cars will become economical by 2010 and "the internal-combustion engine will go the way of the horse. It will be a curiosity to my grandchildren."

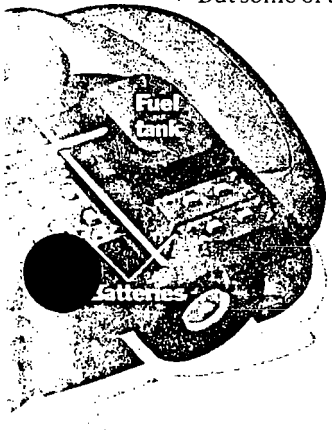
If Ballard, a trim 66-year-old with an unflinching gaze, sounds cocky, it may be because he has finally won respect at the end of a long and winding career. The son of an electrochemist from Niagara Falls, Ont., he crossed the border to earn a Ph.D. in geophysics from Washington University in St. Louis, Mo., and worked for the U.S. Army in specialties ranging from microwave communications to ice physics (he studied how to hide bomber refueling tanks in Greenland). After the 1974 energy crisis hit, he became head of the new Federal Energy Conservation Research office in Washington but was frustrated when Congress refused to get serious about weaning the U.S. from imported oil. "So I quit," he says. "I've never followed the herd." His first business venture, a seven-year quest to build a lithium-based "superbattery" that would replace the internal-combustion engine, never panned out, landing him at one point in bankruptcy.

In 1983 Ballard and two younger partners, engineer Paul Howard and electrochemist Keith Prater, changed course, winning a contract from the Canadian military to research a more exotic form of power. Fuel cells had been around for 150 years and were used in the Gemini space program but were thought to be too expensive for any practical use. As Ballard's team began to make the cells lighter, smaller and thus cheaper, it realized that the technology could eventually be used in vehicles.

Skeptics—"pistonheads," Ballard calls them—say the company is decades away from making fuel-cell cars affordable, if it ever can. But some of the largest automakers are betting on a hydrogen future. DaimlerChrysler and Ford have paid $750 million for 35% of Ballard Power Systems, vowing to market fuel-cell cars within five years. Since hydrogen is difficult to store, current research focuses on fueling the cars with methanol, from which hydrogen would be extracted on board. That process would produce pollution, but not nearly as much as conventional engines give off.

PURE EXHAUST **The peripatetic geophysicist built a bus that runs on hydrogen and puts out only a thin stream of water you can drink**

In late 1997 Ballard, now a multimillionaire, retired as chairman of his company, but he's confident that his successors can fulfill his vision. He has already turned many doubters into believers. Science colleagues who were once "embarrassed to be seen with me at professional symposia," he says, now call upon him to give speeches. "Be impatient," he counseled students at British Columbia's University of Victoria as he accepted an honorary degree last year. "Challenge the normal. Dare to be in a hurry to change things for the better." ■

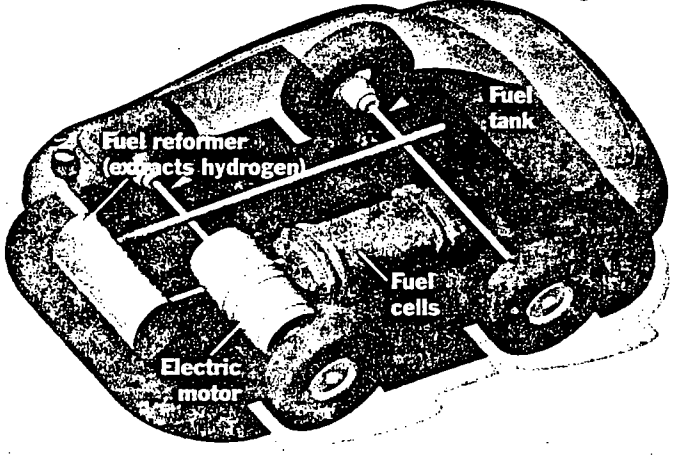


◁ HYBRID

HOW Alternates automatically between gasoline engine and electric motor. Battery is recharged by the engine and the energy from braking action

PROS Better gasoline mileage and thus less pollution than with conventional autos

CONS Only partway to an emissions-free car



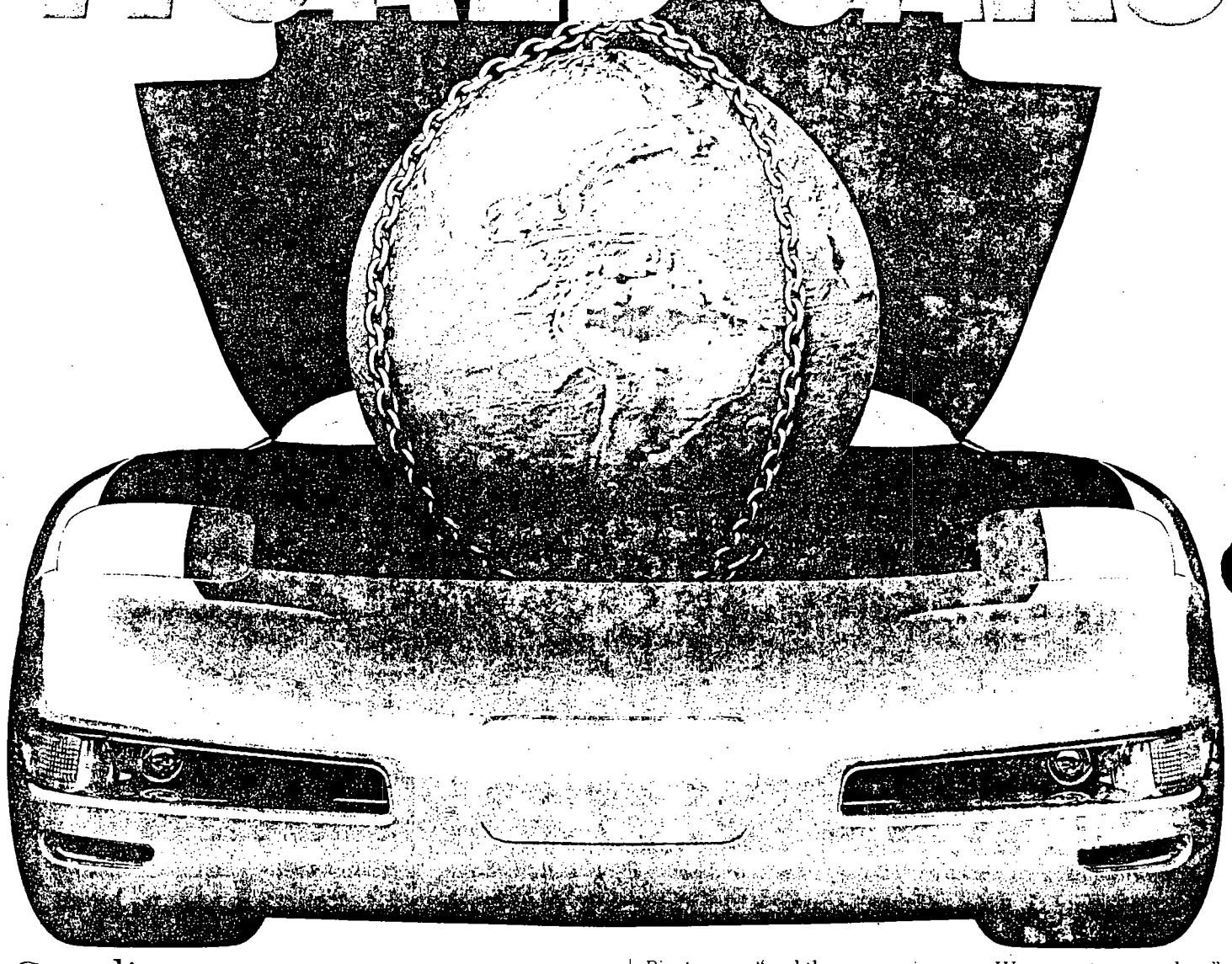
◁ FUEL CELL

HOW Hydrogen is removed from methanol. The fuel cell combines hydrogen with oxygen to produce water and electrical power

PROS Using methanol produces less pollution than burning gasoline

CONS What's needed is a convenient distribution system so drivers can fill tanks with hydrogen

WORLD CARS



Canadian auto-parts company Magna shows the way toward the modular car industry of the future

By **STEVE ZWICK** DÜSSELDORF

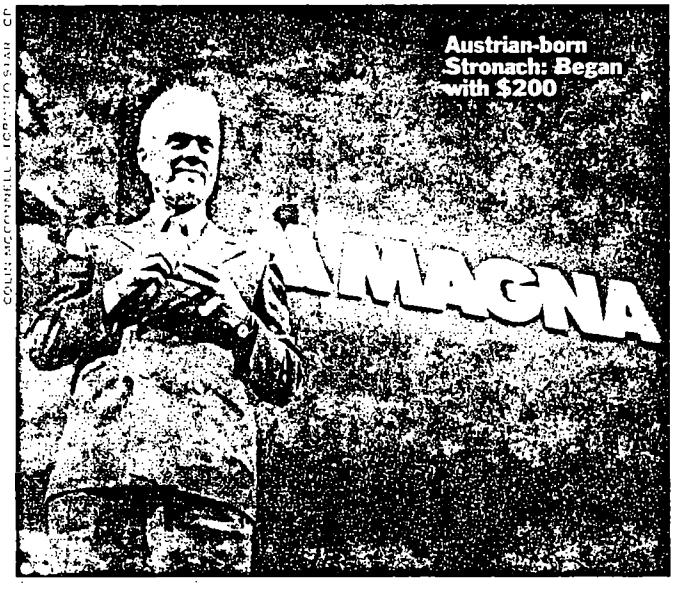
WHEN IT WAS UNVEILED AT AUTO SHOWS IN 1988, the Magna Torrero's hybrid design turned heads in auto-company boardrooms from Detroit to Tokyo. But it never got a chance to tear up pavement like a Lotus Elise. Instead, parts of the Canadian company's prototype car are quietly helping Ford Contours, Volkswagen Golfs and Audi A8s roll comfortably down driveways around the world. "People keep asking us when Magna is going to manufacture our own car," company spokesman Paul Pivato says, "and the answer is never. We are not a carmaker."

Instead, Magna is something called a systems supplier. With more than 40,000 employees scattered across Europe, the U.S., Canada, Mexico, China and Brazil, it is one of a growing number of companies making ever larger and more complex parts of cars—like the metal-body exterior of BMW Z3 roadsters manufactured in the U.S., the instrument panel on the Jaguar XK8 and the passenger cell for the cute little Smart Car that German consumer Cerstin Stadeler was eyeing disapprovingly in Bonn. "It looks like one of those kid's toys that come in chocolate eggs," she says. "You know, the ones you snap together."

That playful look—dreamed up by DaimlerChrysler and the folks who brought you the Swatch watch—is part of a "visible technology" motif that tries to make a fashion statement out of one of the biggest changes to hit the auto industry since Henry Ford started making flywheel magnetos on a moving assembly line in 1913. The car industry, like the computer and consumer-

Photo-Illustrations for TIME by John Blackford

electronics industries before it, is going modular, and the percentage of a car that is actually manufactured by traditional car companies is getting smaller and smaller as a result. More and more of the cars of the well-known brands are composed of whole sections that instead come from specialized upstarts like Magna and from established engineering giants like Bosch in Germany and TRW in the U.S. These systems-manufacturing firms provide large chunks of car across the entire range of established auto companies and are taking on their own global role alongside the global auto assemblers. The advantages for the major carmakers include faster delivery times, more flexibility and more manageable inventories, as well as redefined labor arrangements. Another effect, as Magna's case illustrates, is a blurring of the distinction between parts supplier and automaker.



Austrian-born Stronach: Began with $200

COLIN MCCONNELL—TORONTO STAR—CP

EVOLUTION IN LANGUAGE

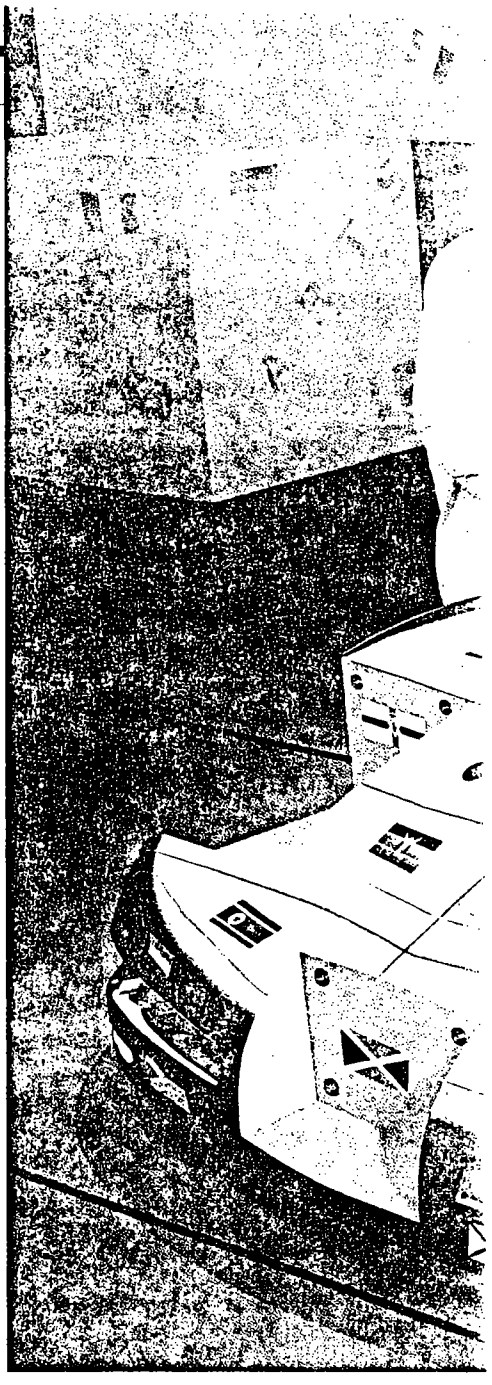
Indeed, within the car industry, executives have taken to using the words car assembler and car developer in place of the old term carmaker. The evolution in language mirrors the development of Magna, whose success Frank Stronach couldn't even have begun to dream about in 1954, when, at age 22, he left his native Austria for Canada with $200 in his pocket and about the same number of English words in his vocabulary. Three years later he managed to start up a tool-and-die shop in a rented garage in downtown Toronto, and in 1960 he signed a contract with General Motors to produce sun-visor brackets for Chevrolets and Pontiacs. Over the following decade, Stronach pulled together a team of mostly German and Austrian tool-and-die workers to make more parts for more cars, and in 1970 he and some partners took over an aerospace-parts company called Magna Electronics Corp.

The new company was focused on the ground: it gradually began offering more and more components to the auto industry, from visor brackets to complete roof systems. As the order books bulged, so did Stronach's paycheck—by 1987 he had become Canada's highest-paid executive. Around that time, Magna's engineers developed the Torrero from the company's components inventory to drive home a point: it's not the parts that matter; it's how they fit together that counts. Dennis Blommers, a plant manager for Magna's Decoma division, which specializes in exterior systems, has been along for much of the company's ride to success; he now oversees 300 employees who engineer and make high-tech plastic bumper covers and grilles for Chrysler, GM and Honda at a plant near the company's headquarters in Aurora, Ont., about 20 miles north of Toronto. "Each year we get more and more into what the customers are asking for," he yells over the roar and hiss of 15 molding machines. "In the old days, a customer would have one supplier that shipped grilles from Idaho, and the fog lamps came from somewhere else. Now the whole piece is made here."

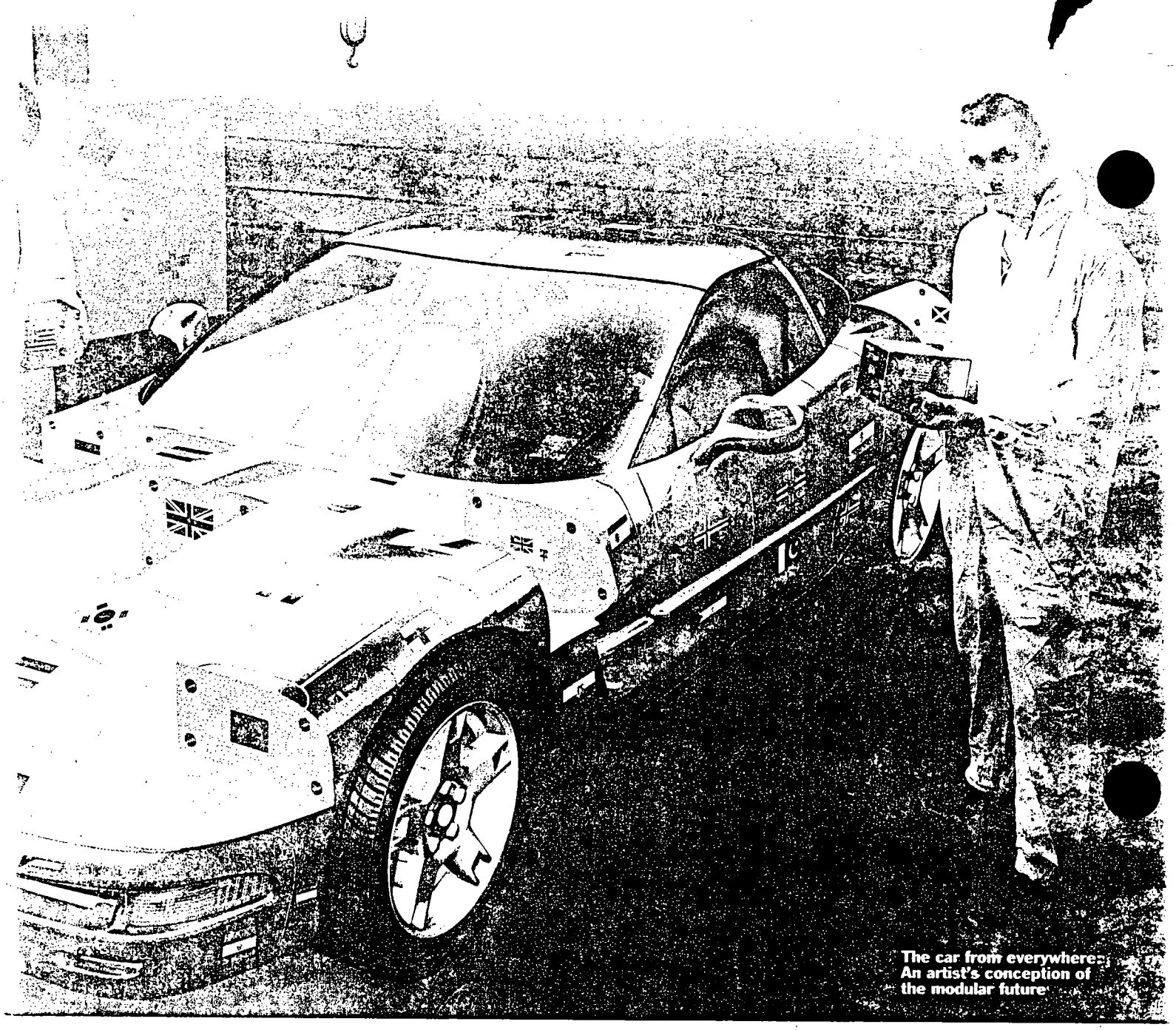
The trend toward comprehensive component systems had been gathering steam for decades, but it was the recession of the early 1990s that got things boiling, especially in Europe. With profit margins pushed beyond the agony point, companies began letting their suppliers do more of the engineering and preassembly of integrated systems in increasingly complex cars. Air-bag makers like Sweden's Autoliv, for example, started buying up or forging partnerships with companies that make sensors, steering wheels and other related products and offering car companies complete, preassembled safety systems.

That was only the start. Suppliers began making complete prefabricated front ends, back ends and middles of vehicles, and automakers began outsourcing the entire design, development and manufacture of certain car models like the Lincoln Navigator. The results of this shift can be seen in Magna's order book. Although European and American auto production inched up only slightly during fiscal 1998, the company's sales topped $6 billion—a 19% jump over 1997. "Systems suppliers are getting a bigger piece of the pie," says Anders Franzen, vice president for strategic sourcing at Sweden's Volvo, which is now in the process of being purchased by Ford.

In fact, one of the reasons Volvo, which makes only 400,000 cars a year, was able to survive as an independent car assembler until this year was its innovative and extensive use of systems suppliers in previous years. A few years back, Volvo's engineers



In Saarlouis, Germany, Ford representatives show off an elaborate 3,000-foot-long ski-lift c



The car from everywhere: An artist's conception of the modular future

teamed up with Autoliv to develop safety systems that incorporated side air bags, and safety-minded Volvo got a one-year exclusive deal to use the systems. Going modular helped Volvo offer more flexibility on a limited range of basic models. "With the traditional assembly process, you can usually manufacture just one car per assembly line," Franzen says. "In our case, being one of the smaller players, we don't have the volume to justify setting up multiple assembly lines, so we have to use one line for all the varieties of a model."

OUTSOURCED ASSEMBLY LINES

Micro Compact Car (MCC), the Daimler-Chrysler subsidiary that assembles the Smart Car, has taken that idea further than any other company. Its plant in Hambach, France, is really seven separate factories, each occupied by a different systems partner. The chassis is shuffled off to a subfactory run by the German firm of Krupp Hoesch Automotive, where the power module is installed. Bosch plunks down the front end, which includes the cooler, headlights and crash box. German plastics, chemical and industrial-ceramics company Dynamit Nobel snaps on plastic body panels and the whole vehicle is done in four hours—down from the 20 or so it takes a traditional car manufacturer. "It's an admirable experiment," says Volvo's Franzen. "They've gone and outsourced the assembly line itself. The entire industry is looking at it with interest and, I must admit, skepticism because assembly is also a core competency."

With outside providers supplying more and more of the finished product, auto assemblers talk a lot about core competencies these days, which essentially means defining what a company does best and then focusing energy on that activity. For the Smart Car, Mercedes made sure it kept the engine design to itself, while the chassis is that of a Mercedes A-class sedan. The car's styling comes largely from SMH Automotive, the Swiss company that uses modular design to make Longines and Swatch watches (Smart, in fact, stands for Swatch-Mercedes ART). SMH owned 19% of MCC until Daimler-Benz bought its stake in MCC before merging with Chrysler in October. "Basically, you could say the Smart's

...tion that feeds 58,000 sequenced components daily into the company's assembly flow

design, engine and chassis platform were all done by the assembler, because Swatch was an owner at the time." Franzen says. "These three things will always be done by assemblers themselves, but it's up to each developer to define its own core competencies and then outsource the competencies it feels can better be handled by a more specialized provider."

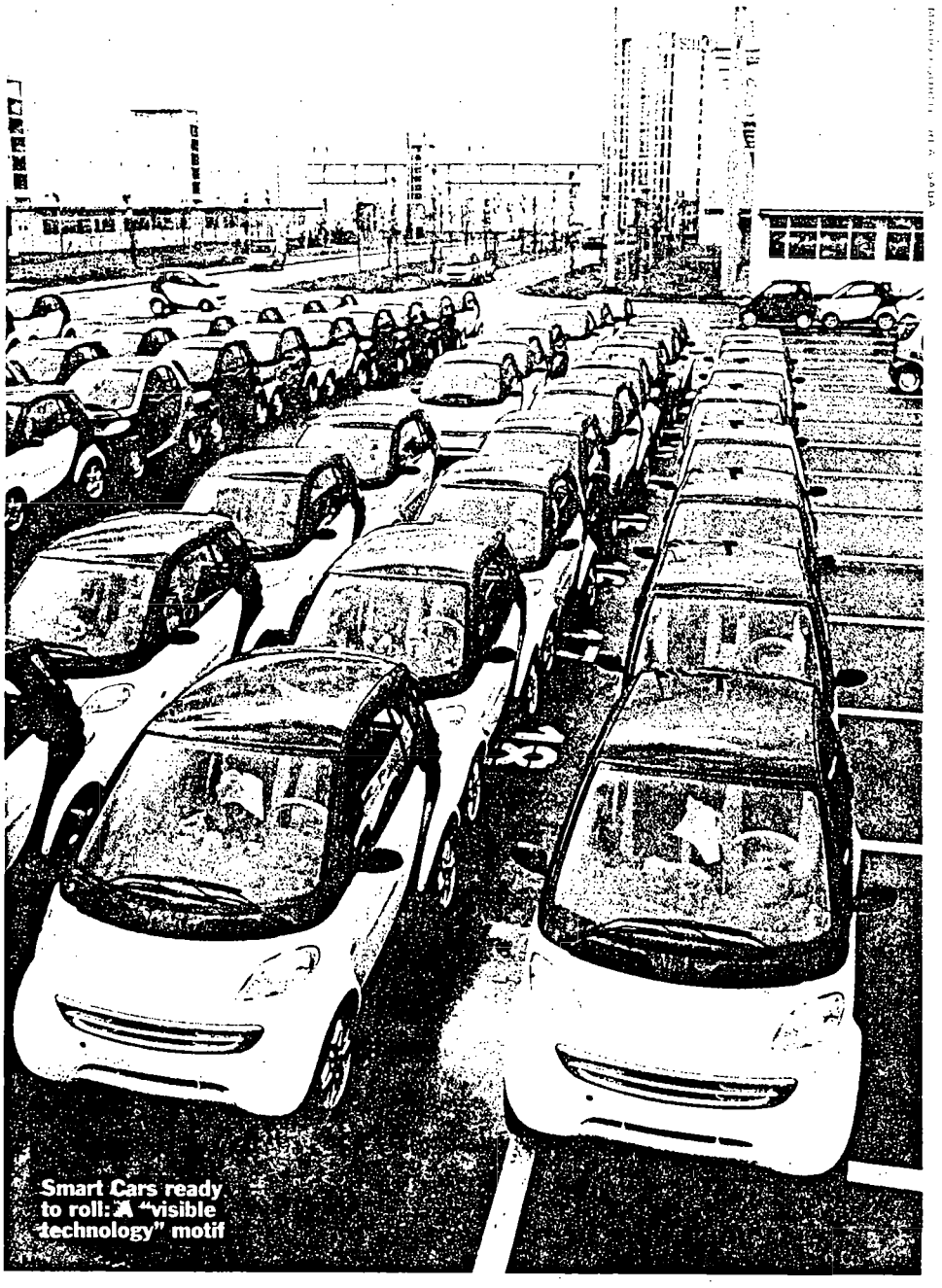
Even such proprietary items as engines and overall design may be up for grabs. Volvo and Renault supply each other with engines for some models, and the high-performance British motorcar company Lotus says 10% of new cars made in Europe will carry engines of Lotus design next year. Lotus spokesman Alastair Florance says the company's new modular V-8 motor can be dismantled, reconfigured, expanded or contracted to fit virtually any car. Lotus, which is owned by Malaysian carmaker Proton, earned more money advising other carmakers last year than it did selling its own legendary road burners.

SHARED PLATFORMS

So what do car assemblers actually make these days? "Car assemblers have cornered the market on chassis platforms, and no modular provider wants to start making those, at least not in Europe," says Jürgen Kruschwitz, head of SMH Automotive. "Outside engineering consultants like Lotus may play a larger part in certain functional situations, but the car companies know how to protect their own design and competence."

Udo Liesenfeld, Magna's European spokesman, agrees. "The manufacturers are using shared platforms to bring more and more niche vehicles to the market. Those platforms are what everything else is based on. We design a module to fit an existing platform, but it's the carmakers who define the platform." Assemblers usually settle on one or two preferred suppliers for each model, but there is always another supplier ready to jump in if one or more of the chosen stumble. "If Magna doesn't provide the best price, GM can go down the street to somebody else," Magna's Blommers explains.

Outsourcing of entire systems does more than save money. It gives customers unprecedented freedom of choice. "The new S80 is built 100% to customer order, and virtually every car is different," says Volvo's Franzen, who credits systems suppliers, and their willingness to provide finished modules in sequence, with making that practicable. "Just think of something as simple as door panels," says Franzen. "There are four to five basic colors per car line, plus various internal surfaces such as textile, leather or wood trim, and then there are electric and mechanical mirrors. For just one car model, 3,000 variants of door panels exist." That's far too many for an assembler to handle. Explains Franzen: "The systems partners chop the elephant into more manageable chunks."



Smart Cars ready to roll: A "visible technology" motif

One key is that the chopping happens close to home, which reduces outsourcing costs and keeps jobs nearby. Volvo, based in Göteborg, Sweden, has turned an old shipyard in the nearby town of Arendal into a supplier village, where nine supplier partners construct components and subsystems and line them up in the proper order before shipping them to the assembly plant. It all happens in double-quick time. "We give them eight days' notice to get the quantities together, and then we give them four hours' notice to do the sequencing," Franzen says.

"Think of those 3,000 varieties of door panel," he continues. "If you assembled those in southern Germany, you can imagine what kind of pipeline you'd need to deliver them in sequence. The number of manufacturing jobs associated with Volvo has gone up 300 in the past year, but our own head count has gone down."

During fiscal 1998, Magna's sales topped $6 billion—a 19% jump over 1997 results

Bumper crop: An assembly line moves along front ends for a Chrysler model at a Magna plant located in southern Ontario

The company that is buying Volvo's carmaking division is no slouch at sequencing either. In Saarlouis, Germany, Ford representatives show off a 3,000-foot-long ski-lift contraption that feeds 58,000 sequenced components daily into the company's assembly flow, replacing 3 million miles' worth of truck travel over the course of the year. The modular scheme will enable the company to offer the same diversity of car models on just 16 different chassis by next year, down from 32 platforms in 1998, as part of an overall plan to trim yearly costs $1 billion worldwide.

NEW DESIGNS

Systems providers also change the way cars are designed. "First, the existence of these suppliers speeds up the development of the components themselves," Franzen says. "If you are a car manufacturer and design your own seats, you will probably have a new generation of seats every 10 or 15 years. But if you go to a megasupplier, it will probably have eight seat generations in parallel development at any given time. This leads to the second big advantage: it frees up engineers to concentrate on the things that make the designs unique because they don't have to do a lot of detailed engineering work."

Ford purchasing boss Hans-Peter Kunze says his company intends to work even more closely with suppliers in the future. That will mean assigning more and more work to a smaller number of systems partners, who will in turn contract the work with more outsiders. As a result, the number of suppliers dealing directly with Ford is expected to continue dropping. "For the Escort, we worked with about 700 suppliers directly, and for the new Focus it's only 210," he says, talking about Ford's European models. "For the car we're planning as a replacement for the Fiesta, it will be 100 maximum."

As a result, competition among suppliers is kicking into overdrive. In Europe, the myriad small companies that have traditionally fed the industry are clumping together in consortiums or getting bought by bigger companies. Dynamit Nobel is part of Germany's Metallgesellschaft. Budd Automotive, which introduced the all-steel body in 1914, is now part of Thyssen Budd Automotive, which will soon be folded into emerging industrial conglomerate Thyssen Krupp AG. Carmakers themselves are also creating new players. Both Ford and GM have turned their component divisions into distinct profit centers with fancy names like Visteon and Delphi, and Renault and Fiat recently announced they were blending their foundry activities into a $2 billion-a-year systems supplier.

German auto-industry analyst Michael Schickling predicts that soon "there will be 10 to 15 assemblers worldwide, with a corresponding number of major systems suppliers, and the systems suppliers will keep buying and selling divisions as they define and redefine themselves." In the welter of change, the so-called systems partners are finally emerging from the shadows to become significant names in their own right. Perhaps one day they will start pitching their product directly to the public. Who knows, maybe "Auto by Magna" will replace old rubrics like "Body by Fisher."

—With reporting by Moira Daly/Toronto

Lotus says 10% of new cars made in Europe will carry engines of Lotus design next year

The Washington Times
MONDAY, FEBRUARY 22, 1999

EPA can't win this country's sprawl brawl

By Jonathan H. Adler

Last month, the Clinton-Gore Administration unveiled a new multibillion-dollar environmental agenda, including the so-called Livability Agenda and Lands Legacy Initiative, as well as efforts to begin implementation of the United Nations global warming treaty. Seeking to capitalize on public concern about suburban development, aka urban sprawl, the Clinton-Gore administration is proposing a $700 million subsidy for Environmental Protection Agency-approved bonds for local environmental projects. In the name of helping build livable communities, the Clinton-Gore administration will inject the EPA into local land-use decisions as never before.

The Clinton-Gore environmental agenda is part and parcel of the failed, government-knows-best approach to environmental protection. Protecting America's environment does not call for the creation of new federal programs, but returning power to local communities, reigning in ineffective and outmoded bureaucracies, and restoring accountability. Government command and control is no friendlier to the ecology than it is to the economy.

Rather than challenge the Clinton-Gore agenda to environmental protection, many Republicans seem intent to jump on the government-knows-best bandwagon. The Clinton-Gore administration is proposing approximately $1 billion in government land acquisitions.

Nearly half of this money will be used to purchase more land for the federal government, and yet federal agencies can scarcely manage the lands they own now. Federal forests and grazing lands are in a state of disrepair due to political control. Uncle Sam already owns 25 percent of America's land — one out of every four acres — he doesn't need to own any more.

The loss of open space is a legitimate, if overstated, concern. The amount of farmland in America has remained relatively constant since the 1940s. If the vice president is concerned about preserving farmland in those areas open space is dwindling, the answer is not more government regulation, but less. The greatest threats to agricultural communities are over-regulation and overtaxation, not suburban development.

In many instances, the best thing the federal government can do to enhance environmental protection is get out of the way — and eliminate those policies and programs which subsidize or encourage environmental harm. For instance, if the administration is truly concerned about preserving open space, it would join the call to eliminate the death tax.

If you inherit land in this country, you can be walloped with a one-time tax of up to 55 percent. For many farmers and rural landowners, the only way to pay this tax is to subdivide or sell inherited land for development. The result is less open space, and less habitat for threatened species.

Many Americans are concerned about urban sprawl, but that does not mean that they want the federal government involved. Indeed, recent polling by Kellyanne Fitzpatrick of the Polling Company found that only 8 percent of Americans want the federal government to take the lead in dealing with this issue. Most Americans believe that local land-use should remain a local concern; insofar as it's a problem, it is something that state and local governments can handle. There is no need to turn to the EPA.

A similar preference for state and local environmental solutions is found on other environmental issues. By nearly two to one, registered voters believe that state and local governments do a better job of dealing with environmental concerns than the federal government. Similar majorities want to see state and local governments take the lead in working on issues such as water quality. Given the federal government's record of enacting ill-conceived, overburdensome, and ineffective environmental regulations, it is no wonder.

Returning control over environmental policy to state and local governments is not only good politics, it's good policy as well. Few environmental problems are truly national in scope. Most are regional or local, leaving state and local officials in a better position to diagnose the problem and develop practical solutions. It is no wonder that all the useful innovation in environmental policy today is percolating up from the state and local level. Federal reform efforts have run aground, yet states are experimenting with audit privilege laws, flexible permitting schemes, property rights protections, and regulatory reform.

Republicans need not cower at the prospect of dealing with environmental concerns for here, as elsewhere, good policy makes for good politics. The very same polls that show strong public support for greater environmental protection show strong support for regulatory reform, protecting private property and decentralization of environmental decision-making. Americans, it seems, recognize that not every environmental problem requires sending more control over their lives and livelihoods to Washington, D.C. If Republicans learn this lesson, they could turn the environment into a winning political issue.

Jonathan H. Adler is senior director of environmental policy at the Competitive Enterprise Institute and the author of "Environmentalism at the Crossroads."

MICHAEL AND JUDY CORBETT

Back to the Garden: A Suburban Dream

By **DAVID S. JACKSON** DAVIS

AS DEVELOPER MICHAEL CORBETT STROLLS AROUND THE GARdens of Village Homes, his pioneering experiment in ecological living in Davis, Calif., life looks pretty good. Solar panels help keep the houses warm, shared backyards bring neighbors together, and natural drainage irrigates fruit trees. Corbett reaches up to a branch, plucks off a persimmon, and bites into it. "Just right," he proclaims with a smile. Village Homes is one of the world's best examples of sustainable development—it doesn't degrade the environment that future generations will inherit. But only a quarter-century ago, the ideas behind the project were considered so radical that it almost didn't happen.

WILLIAM MERETH MCLEOD FOR TIME

MISSIONARIES
To go ahead, all they had to do was get past the fire department, the police and legions of city officials, all of them skeptical

Corbett, now 58, was a young homebuilder in the early '70s, when he and his wife Judy began thinking of ways to combine environmental ecology with social ecology, which uses building design to make neighbors more neighborly. The couple bought 60 acres of tomato fields west of downtown Davis and drew up plans for a housing development that would combine residential, commercial and agricultural elements in an unprecedented mix. The houses, which would use the latest in solar-heating technology, would be built in clusters and oriented toward the backyards, which would open onto large common areas. Fruits and vegetables would grow there, using water collected by natural drainage (the land would be contoured to capture most rainwater, with excess flowing into ditches and ponds rather than concrete storm sewers). The streets would be narrow and end in cul-de-sacs. Winding walkways would connect the homes to a small courtyard of offices, reinforcing the theme of a community built for people, not cars.

The Corbetts submitted their plans to city officials—and got doused in cold water. "Everybody had a problem," recalls Judy. "The police department didn't like the dead-end cul-de-sacs. The fire department didn't like the narrow streets. The public-works department didn't like agriculture mixing with residential. And the planning department picked it apart endlessly."

Financing was another roadblock. "We went to 20 banks that wouldn't make a loan because the plan was too unconventional," says Corbett. "Everything was untried and unproven." But he and his wife were dauntless. "We never considered giving up," Judy says. "We weren't developers, we were missionaries."

They set up traffic cones on an empty parking lot to show the fire department that emergency equipment could easily navigate the narrow streets, even past parked cars. Village Homes' streets—with an average width of 23 ft., compared with up to 36 ft. on normal streets—would not only cost the city less to build and maintain but would give off less heat in the summer. They convinced the police department that putting sidewalks behind the homes rather than in front and eliminating throughways would make residents safer, and Village Homes' low crime rate has proved the point.

They promised city officials that agricultural runoff wouldn't be a problem because they would use environmentally safe growing methods. And to those who objected to natural drainage, Corbett argued that cities had been built around that concept for centuries before modern techniques came in. As for financing, Corbett finally got help from a small local bank by not telling it about all the ecology business. The only major idea that had to be dropped was a plan to recycle sewage through underground pipes to nourish the orchards. The public health department refused to bend.

After three years of delays, the Corbetts got the go-ahead, and the first of 240 homes began going up. In the heart of the development, a day-care center and a small suite of offices were built. Nearby, a solar-heated pool and playground looked out on a vineyard. (A restaurant would come later.) The homes came in all types and sizes: traditional, modern, even four with sod roofs. There was virtually no restriction on style, but all had to use solar heating. And there was one iron commandment: Thou shalt not block thy neighbor's sun.

Gardens soon sprouted, and so did kids. Families flocked to the development, drawn by the community spirit, open spaces and the bike paths that connected them to downtown Davis. "It really is a village," says Kit Bruner, 51, who moved in 15 years ago with her husband and two children. "There were eight 8-year-old boys in a two-block radius. You knew the parents of the child your child was playing with."

The residents became as diverse as the bounty of their vegetable patches. A bond salesman who had never gardened before started raising onions, broccoli, cauliflower, parsley, snow peas, chard and kale. Near him is a physics professor who once specialized in nuclear energy and now prefers the solar kind. There are schoolteachers and state-government employees (Sacramento is 15 miles away), young couples and retirees. Although the houses grew as large as 3,000 sq. ft., Corbett built several 1,000-sq.-ft. units for low-income residents.

Village Homes' success has attracted admirers from near and far. Architects and landscape-architecture students still troop

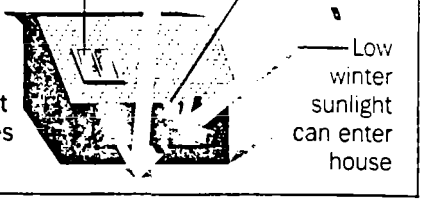
HAPPY

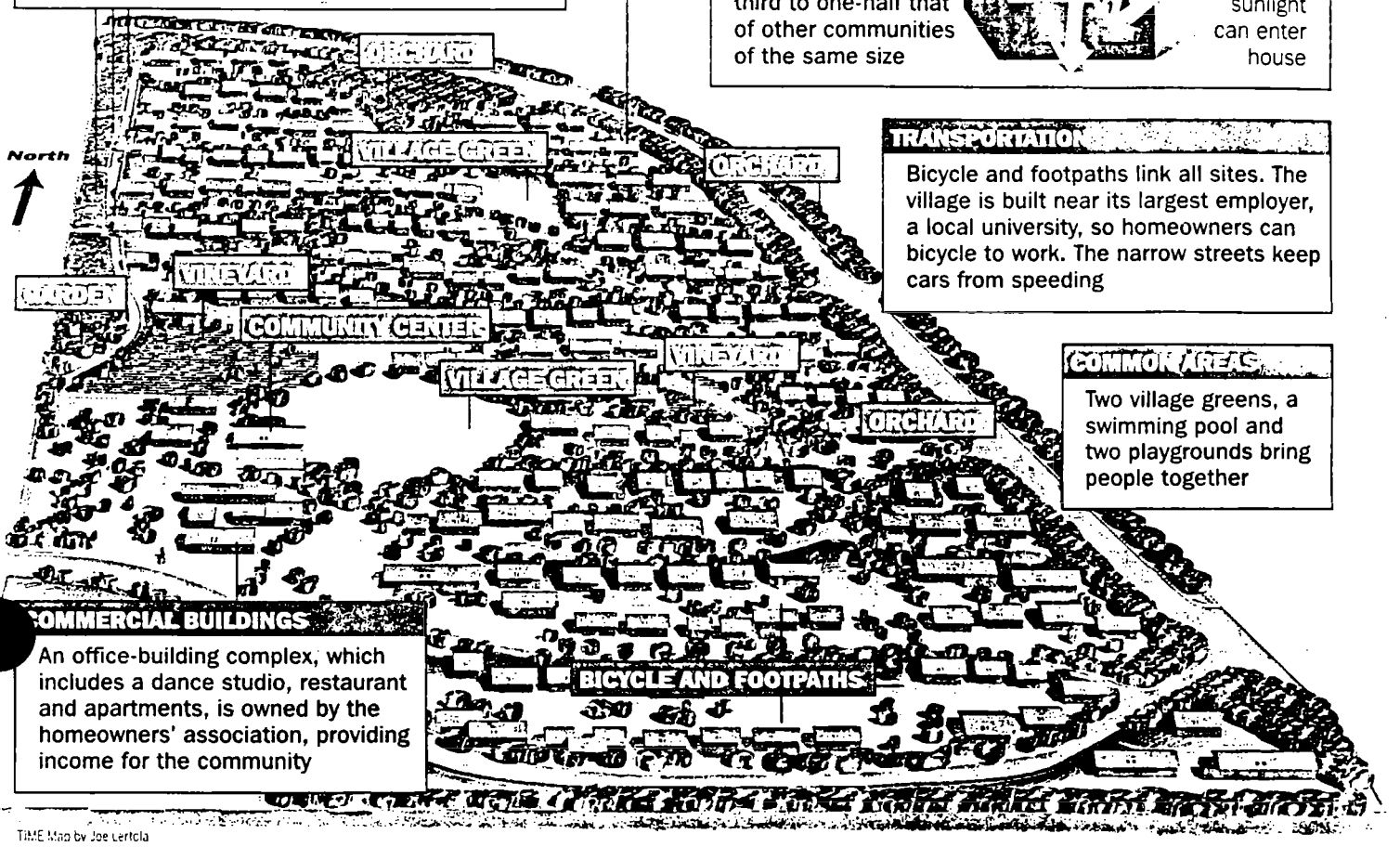
Village Homes, Davis, Calif.

Orchards, vineyards and gardens are maintained by the residents, who also have spaces next to their homes to grow fruits and vegetables

ENERGY-EFFICIENT HOMES

Houses in the development are positioned to get maximum sunlight for solar water and space heating. Energy use is one-third to one-half that of other communities of the same size





TRANSPORTATION

Bicycle and footpaths link all sites. The village is built near its largest employer, a local university, so homeowners can bicycle to work. The narrow streets keep cars from speeding

COMMON AREAS

Two village greens, a swimming pool and two playgrounds bring people together

COMMERCIAL BUILDINGS

An office-building complex, which includes a dance studio, restaurant and apartments, is owned by the homeowners' association, providing income for the community

TIME Map by Joe Lertola

through regularly, and Japanese tourists are frequent visitors. "They're always trying to find what the latest thing in the world is, so they can capitalize on it," says Corbett with a laugh. The late French President François Mitterrand and former First Lady Rosalyn Carter have taken tours.

But enthusiasm for solar energy ebbed in the '80s after President Reagan ended tax credits for alternative power sources. Judy Corbett, who had been appointed to California's Solar Cal Council by Governor Jerry Brown, suddenly found herself without a job when his successor, George Deukmejian, pulled the plug on the agency. So she set up a nonprofit organization called the Local Government Commission to help educate officials on ways to deal with social and environmental problems. "It was clear to me that without mayors and city council managers and supervisors undertaking the lead in making things change, Village Homes could never be duplicated," she says.

Village Homes was one of the inspirations for the Coffee Creek community that green architect William McDonough is designing in Indiana, but other developers have been slow to pick up on the Corbetts' ideas. "The problem isn't that the public doesn't want it," Corbett says. "They come here and see what we've done and say, 'Why isn't everybody doing this?' But developers are so closed-minded. They continue to build thousands of places where you can't get around without a car."

"Developers are so closed-minded. They continue to build thousands of places where you can't get around without a car."

Village Homes isn't perfect. The Corbetts say that if they could do it over again, they'd build garages rather than open carports, which have filled up over the years with unsightly junk. Corbett would also put solariums—solar-heated rooms—in every house, and his wife would like to use photovoltaic roofing shingles to generate electricity from sunlight.

But what Corbett would most like to do is put his ideas into practice on a larger scale, especially since the fight against suburban sprawl has moved to the top of the nation's environmental agenda. His next goal is to create a combined residential, retail and office development south of Davis that would feature natural drainage and on-site food production. More than two decades after breaking ground for Village Homes, he's back in front of those persnickety city officials, seeking the green light to build. "At this point in my life," he says, "I don't want to do anything if it's not on the cutting edge." It may be lonely out there, but he doesn't mind. ■

Clips 2/26

Forbes Magazine
February 22, 1999
Law & Issues

The vice president is a powerful man because he controls environmental regulation, and environmental regulation pervades our lives.

Gore's crusaders

By Pranay Gupte and Bonner R. Cohen

THE VICE PRESIDENCY, someone once said, is a spare tire on the automobile of government. (It was John Nance Garner—FDR's veep for the first two terms.) But in today's technologically complicated and heavily regulated society, a vice president can be very powerful indeed. He can have a large and lasting impact on the way you lead your life and the way you run your business.

Al Gore is obsessed with protecting the environment, and he has the means to put his beliefs into law. He has seeded such bodies as the Environmental Protection Agency, the Council on Environmental Quality and the Department of Energy with his friends, acolytes and ex-staffers; from those positions the Gore-ites hold sway over a large part of the federal regulatory apparatus. And in the environmental arena the regulatory apparatus cuts a wide swath. The EPA alone expects to issue 462 of the 4,560 planned rules that will eventually find their way to the Code of Federal Regulations.

In the environmental sector Congress has, in effect, ceded lawmaking power to the executive branch. It had to. There is simply no way that legislators could themselves run the experiments and make the scientific judgments that determine the details of pollution control or energy conservation. And how is Vice President Gore

on science—the science of global warming or resource scarcity or hazardous chemicals?

"The things Gore believes aren't supported by facts," says William Happer, a Princeton University physics professor who worked at the department of energy from 1991 to 1993. "He is surrounded by like-minded people, and they all want to save the world. That's a recipe for disaster."

Gore gave America an alarmingly revealing peek at his environmental extremism in his 1992 bestseller, Earth in the Balance, a bleak tome on our "dysfunctional" society that was devoid of any recognition of the potential of science and technology to improve lives.

Reared on national politics and the son of a U.S. senator, Gore has pursued his agenda as the most powerful vice president in modern history. Clinton delegated to him much of the turf that will define our future: the environment, energy, technology, information systems, housing. He is Clinton's main conduit to the social and economic development programs of the United Nations, covering such issues as climate change and population control.

The regulatory efforts of the vice president's loyalists are taking hold. One irksome example: The Department of Energy, a backwater brimming with Gore lieutenants, is seriously considering dictating that all domestic washing machines be front loading rather than top loading. Front loaders use less hot water—never mind that they also require smaller loads, or that America's white goods aren't exactly draining the national power supply.

New standards for ovens, water heaters, fluorescent lamps and air conditioners are in the works at DOE. Who's energy secretary? It is William Richardson, previously U.S. ambassador to the U.N. and, before that, a congressman from

New Mexico.

Gore's kitchen cabinet on environmental issues also includes Carol M. Browner, whom he persuaded President Clinton to name head of the EPA, and Gore's former Senate staffer Kathleen McGinty, who recently resigned as director of the White House Council on Environmental Quality, but is likely to play a major role in Gore's run for president.

Another ally, Jonathan Lash, former attorney general of Vermont, is now president of the World Resources Institute, the Administration's favorite eco think tank. Maurice F. Strong, a millionaire Canadian businessman and former secretary-general of the 1992 United Nations Earth Summit, is Gore's link to nongovernmental organizations. Also close to Gore are Time Warner honcho Ted Turner and former Senator Timothy E. Wirth (D–Colo.), who now heads a Washington-based foundation that Turner set up to fund U.N. projects.

Do these eco-advisers have an antibusiness bias? Seems that way. Last June a renegade group of more than a dozen EPA employees, most of them scientists, published a letter in the Washington Times harshly criticizing their own shop. They alleged that EPA employees "are harassed, even fired, for protesting illegal or irresponsible behavior by managers."

They argued that agency moves are based on "poor science" and that staffers who said as much were harassed. The letter-writers were responding to revelations contained in a report by the National Wilderness Institute showing the EPA ignored whistle-blower warnings about fabrication of agency documents in a Wisconsin wetlands case, and that it had used public funds to bankroll a puppet foundation to win control of Chesapeake Bay restoration.

The EPA pursues drastic policy even when sibling

agencies vehemently disagree. In July 1997 the EPA put out tougher standards on air pollution. The rules on particulate matter and ground-level ozone ignored the findings of the EPA's Clean Air Scientific Advisory Committee, which found no proof that the new standards would measurably improve public health. But the standards will be costly—a burden of perhaps $100 billion a year over and above previous standards, a burden that will be paid in some way by consumers, businesses or taxpayers.

What's going on? You have to understand pollution control in the context of the battle over global warming. The new rules force some counties to further reduce levels of ozone and particulate matter or lose federal transportation funds. The man-made sources of these pollutants—cars, trucks, manufacturing plants and electric utilities—are in large part the same sources of manmade "greenhouse gases."

And that's the point. Those gases are the target of the Kyoto Protocol, which puts most of the burden for reducing gas emissions on the U.S. It effectively requires a 30% reduction in emissions over the next decade—while imposing no restrictions on China, India, Mexico and other developing nations. The Kyoto treaty is one that the U.S. Senate would probably reject, but that problem is not stopping Gore & Co. from moving full speed ahead. "The goal of all this," says Malcolm Wallop, chairman of advocacy group Frontiers of Freedom, "is to phase out coal and reduce use of fossil fuels, thereby significantly altering U.S. energy policy."

With his influence over federal purse strings, the Vice President has made sure that environmental lobbying groups receive plenty of taxpayer funds. James Sheehan, a research associate at Washington's Competitive Enterprise Institute, says organizations backing the Kyoto treaty tend to win federal research grants, while dissenters don't.

Last year the Global Environment Facility, a World Bank-related program that supports the global-warming treaty, began passing out $193 million in U.S. funding to eager recipients; to date, $43 million of it has been committed to implementing the treaty. Among the environmental groups that have already received such funds are Greenpeace, the World Wildlife Fund and Jonathan Lash's World Resources Institute—all fervent Gore supporters.

You might think that the ideas in Earth in the Balance are kooky. Read the book anyway. You may have to live with its philosophy.

Pranay Gupte is editor and publisher of The Earth Times. Bonner R. Cohen is a senior fellow at the Arlington, Va.-based Lexington Institute and editor of EPA Watch.

Global Warming Could Grow

Tundra Releases Carbon Dioxide When Temperature Rises

Reuters

W A S H I N G T O N, Feb. 25 — Global warming could multiply its effect by heating up the Arctic tundra.

A team at Ohio State University tested plots of Arctic tundra and found that raising temperatures by about 3.6 degrees Fahrenheit caused the tundra to release extra carbon dioxide.

Carbon dioxide is a key greenhouse gas, and releasing more of it would raise temperatures even more.

Significant Loss

"We found significant losses of carbon dioxide from the soil of the tundra," Michael Jones, who is researching evolution, ecology and organismal biology at Ohio State University, said in a statement.

"Anticipated global warming may increase this carbon loss."

Writing in the journal Arctic and Alpine Research, Jones said his team worked on tundra at Toolik Lake in Alaska. They manipulated how much snow fell on each

plot by setting up a large snow fence.

They used mini-fiberglass greenhouses to affect the temperature on each plot.

Jones said a slight increase of temperature on the tundra patch increased the carbon dioxide emissions by 26 to 38 percent under normal snowfall.

Reapidly Changing Climate

But when they caused more snow to artificially fall on some plots — something that could happen with global warming — the carbon dioxide emissions increased 112 to 326 percent.

The arctic, which covers about one-fifth of the globe, contains nearly one-third of the earth's stored soil carbon. This carbon is released when tiny plants and microorganisms in the soil breathe.

"The arctic has the most rapidly changing climate of any region on earth," Jones said.

"We know there will be more snow accumulation with increasing winter temperatures," he added.

Shortening the Growing Season

"If the snow takes longer to melt, that shortens the growing season, and that may influence how much carbon dioxide is released."

Last month, scientists reported that global warming could disrupt the balance of ocean-borne plankton. Diatoms could prevail over algae that absorb carbon—adding to a vicious cycle of global warming.

The U.S. National Oceanic and Atmospheric Administration (NOAA) says the global average temperature in the first five months of this year was 1.76 degrees above an average of 61.7 F (16.5 C) for the period from 1961-1990.

Santa Monica Council Votes to Exclusively Power City Facilities With Green Electricity

(Last updated 5:24 PM ET February 24)

SANTA MONICA, Calif. (BUSINESS WIRE) - In a landmark vote yesterday, the Santa Monica City Council elected to switch all city facilities to 100% green power.

In the 5-0 vote, the Council gave the go ahead to city staff to sign a one year contract with Commonwealth Energy Corporation. The

Council decision will make Santa Monica the first city in the nation to be exclusively powered by renewably generated electricity.

Taking advantage of California's competitive electricity market, Santa Monica Council's decision moves the city away from system power, which relies on coal, nuclear, and natural gas. Instead, the city will now be powered by electricity generated exclusively from geothermal sources.

"Buying green power fits into Santa Monica's 'Sustainable City Program'," said Craig Perkins Director of the Department of Environmental and Public Works. "Switching to green power allows Santa Monica to play our role in reducing climate change gases and eliminating other emissions which cause severe health problems."

By choosing Commonwealth, Santa Monica's electricity payments will exclusively support 5 megawatts of annual generation by geothermal sources and thus directly lower their emissions of air polluting and global warming carbon by thousands of tons annually. The city will pay an estimated 5% above current costs for this green power purchase and other environmentally friendly energy services.

"The new structure of the electric industry creates an opportunity for all civic institutions in California to play a role in developing a forward looking energy policy," said Susan Munves, City Conservation Coordinator. "It is incumbent on the city to play a leadership role in implementing a sustainable and environmentally friendly energy policy."

Santa Monica has for years played a valuable leadership role in energy and other environmental policies. The switch to renewable electricity generation is a consistent move for a city which has already implemented an extensive energy efficiency program, electric vehicle program, and Photovoltaic installations.

As a next step, the city will initiate a public education campaign to encourage residents and businesses to become more aware of their energy use, its impact on the environment, to encourage people to switch to a green power provider, and to become more energy efficient.

By Kenneth Chang
ABCNEWS.com

The wave of deadly avalanches in Europe has a simple cause: Snow. Lots of it.

Winter storms that usually blanket Scandinavia have diverted farther south into central Europe, dumping the heaviest snows there in decades.

More Snow, Bigger Avalanches

That sets the stage for avalanches, which have killed more than 60 people so far this year across Europe. That's the deadliest winter on record.

"It's the magnitude of the avalanches that's unusual, not the number," says Don Bachman, executive director of the American Association of Avalanche Professionals, a Montana-based organization. "If you release a big pile of snow, it's going to go farther than a small pile of snow."

What's pushing the storms into central Europe isn't clear. Weather conditions in the North Atlantic have been following a pattern that typically spawns heavy snowstorms across Scandinavia.

"The weather tends to flow into Europe out of the North Atlantic," says Kevin Trenberth, head of the climate analysis section at the National Center for Atmospheric Research in Boulder, Colo.

Blame La Niña?

Indirect effects from La Niña — the antithesis of last year's El Niño — in the tropical Pacific Ocean could conceivably have nudged the high-altitude jet-stream winds farther south.

"I can't give you a definitive answer," Trenberth says. "I think there's likely an influence, but most of what's going on is probably weather."

Avalanche control experts have also been busy in the Pacific Northwest of the United States, where La Niña's weather-disrupting fingerprints are obvious. The cooler-than-normal water in the eastern tropical Pacific Ocean has disrupted winds, guiding more winter storms into British Columbia, Washington and Oregon.

"We're having greater-than-usual avalanches this season," says Garth Ferber, an avalanche meteorologist for the National Oceanic and Atmospheric Administration. "The main reason is greater-than-usual snowfall."

The depth of snow on Northwest mountains is 50 percent to 100 percent deeper than normal. Some ski resorts have even closed temporarily because of too much snow.

Toll Not High in North America

The death toll from avalanches is not, however, unusually high on this side of the Atlantic.

Last winter, 46 people died in avalanches in North America. So far this winter, 32 have perished. Nine of those died in a single incident Jan. 1 when a avalanche slammed into a school gymnasium in northern Quebec where 500 people had gathered for a New Year's celebration.

Efforts to prevent avalanches at ski resorts and on roads over mountains — largely by triggering them with explosives — are generally very successful. According to Bachman, no one has died in an avalanche at a lift-served ski resort in the United States since 1986. (Skiiers who have been killed in avalanches were outside the patrolled and groomed slopes.)

As for trying to protect buildings along an avalanche path, Bachman calls it "poor policy, because if you do that, you're liable to create the avalanche yourself that creates the damage. The best way is not build the houses."

It's not clear yet whether European builders did not take avalanche threats seriously enough or whether this year's storms were so much bigger than normal that they could not have been anticipated. "I think a combination," Bachman says.

Present Predicts Future?

The heavy snowstorms could also be part of a larger trend: more extreme weather everywhere fueled by global warming.

With warmer temperatures, more water evaporates, "and that moisture is then available to all these weather systems coming through," Trenberth says. "I think there's probably some aspect of that. This helps account for a lot of what's going on."

That's not just a passing observation.

Statistical analysis of rainfall in the United States has shown "when it rains, it rains harder now than it used to," Trenberth says. "There is some evidence that is happening in other places as well."

Those waiting for the return of "normal" weather may have a long time to wait.

Kansas City Star
Forum/Opinion
Letters, Faxes and E-Mails
February 26, 1999

Global warming

Kay O'Connor's article on global warming (As I see it, 2/20) was typical of the Republican Party's disastrous stance on environmental issues and typifies its preference for commerce over preserving the delicate balance of nature. If I ever change my political affiliation from Republican to Democrat, it will be due to the likes of Rep. O'Connor.

Her statement that "the small amount of warming that occurred ... would mean longer growing seasons and less stress on most plants and wildlife, a

substantial benefit for the global ecosystem," is nonsense.

A very small elevation in the global temperature may significantly reduce the size of the polar ice caps, resulting in less reflection of the sun's heat and causing a rise in the level of the oceans.

The shrinking of the polar ice would result in an acceleration of the temperature escalation, and the results would be catastrophic for many heavily populated areas just above sea level.

Millions of years were required for Earth to achieve a homeostasis between

plants and animals, and humans are altering the balance much too quickly for

Earth to properly adjust. Earth's plants and animals don't need a longer growing season -- they are doing fine without our help.

Again quoting O'Connor: "reducing greenhouse gas would be costly and

would not stop global warming ... to reduce only one gas -- carbon dioxide would eliminate up to 3.1 million jobs ... $318 billion would be lost from the gross national product."

What price does she place on the preservation of Earth for our children, grandchildren and subsequent generations? How can any reasonable person not be more concerned about the long-term effects that a potential ecological disaster might have on the welfare of the entire human race versus its effects on "jobs and the gross national product?"

As all of us Republicans get older and contemplate the future for our

children's grandchildren, can we really be proud of the environmental position

our party has taken as exemplified by Rep. O'Connor?

Al Gore is looking better all the time!

Martin Kanne

Kansas City

Akron Beacon Journal
February 26, 1999
Sierra Club claims truck is menace to environment

Imagine a Ford truck that would make Saddam Hussein smile.

According to the nature-loving Sierra Club, that's the new Ford Excursion, a 3.5-ton "super duty" sport utility vehicle.

The 19-feet-long vehicle -- dubbed by the club as the "Ford Valdez" -- has six doors, nine seats, 10 cylinders and gets a paltry 12 miles to the gallon.

"At a time of mounting concern over global warming, air pollution and oil exploration in fragile wilderness areas, the gas-guzzling SUV is a rolling monument to environmental destruction," the Sierra Club said in a release.

The Sierra Club's broadside against the vehicle is designed in part to catch the attention of the Clinton administration, which is considering emissions standards for sport utility vehicles.

When the Excursion hits showrooms this summer, it is expected to sell for $45,000 to $50,000, with a per-vehicle profit of between $12,000 and $20,000. That will make it one of the most profitable vehicles on the road.

-- DAVID ADAMS

Clinton Presidential Records
Digital Records Marker

This is not a presidential record. This is used as an administrative marker by the William J. Clinton Presidential Library Staff.

This marker identifies the place of a tabbed divider. Given our digitization capabilities, we are sometimes unable to adequately scan such dividers. The title from the original document is indicated below.

March 1999

Divider Title: _____

A global push for 'biosafety'

Labor for Democrats, repetitive motion, testing for racial bias, hepatitis

After almost three years of haggling, some 170 nations may be nearing agreement in Cartagena, Colombia, on a pact to regulate trade in products containing genetically altered organisms. The "biosafety protocol" may require special labels on exports of genetically engineered items and preapproval by importing nations. Big exporters like the United States fear tough rules that could curb billions of dollars of trade in goods ranging from grains to drinks with sweetener made from genetically modified corn.

■ *Even if the protocol stalls this week, U.S. farmers—who last year planted more than 50 million acres of crops with modified genes—face an uphill struggle. A fresh protest in London reflects mistrust of genetically engineered foods in European and many other countries worldwide, where consumers may boycott them.*

AFP

Greenpeace dumped 4 tons of altered soybeans at London's Downing Street.

Unions fund a drive for House Democrats

With the backlash against impeachment in full swing, Democrats are drooling over their chances of winning congressional majorities in 2000. The AFL-CIO will spend $46 million backing House Democratic contenders. While Democrats are justifiably bullish about gaining six seats to retake the House, Tom Daschle's prospects of becoming Senate majority leader dimmed after colleagues Richard Bryan of Nevada and Frank Lautenberg of New Jersey said they would quit. Analysts give Republicans an early edge in these races, with possible heavyweight entries like New Jersey's popular Gov. Christine Todd Whitman.

■ *All is not lost for Senate Democrats. The GOP's John Chafee (Rhode Island) and William Roth (Delaware) may bow out of the 2000 race this month.*

The feds take action on repetitive motion

Washington may force a retooling of domestic assembly lines to reduce workers' repetitive motion injuries. Industry wanted the Occupational Safety and Health Administration to wait for a National Academy of Sciences study. But OSHA says 600 studies have documented the problem and workstation improvements can help. Work-related disorders like carpal tunnel syndrome account for more than a third of lost workdays and more than $15 billion in workers' compensation costs annually.

■ *OSHA needs several months to decide details, including how to manage the costs to small firms. The agency will review its decision not to cover white-collar workers at computer terminals, who account for nearly half of lost days. And congressional Republicans may try to block the plan.*

A court challenge to bias testers

A defendant in a racial-bias case is crying foul over the long-standing use of testers to gather evidence. In 1995, black Northwestern University students Lolita Pierce and Kyra Kyles, working at a legal aid unit, sought a receptionist job at Guardian Security Services in Chicago. They got no offers, but two white testers did. A judge dismissed a lawsuit by the blacks, saying they weren't genuinely interested in jobs. Now the company that manages Guardian has charged the women with fraud, saying it was "induced to waste time and resources interviewing, screening and processing" their applications.

■ *The Legal Assistance Foundation of Chicago will argue at a hearing in April that testing is legitimate to ferret out illegal bias.*

DATEBOOK

✓ **TUES., FEB. 23** National Governors' Association concludes its winter meeting in Washington, D.C.

✓ **WED., FEB. 24** The State Department begins a three-day conference on corruption problems in criminal justice systems worldwide.

✓ **SUN., FEB. 28** Secretary of State Madeleine Albright starts a weeklong trip to China, Thailand, and Indonesia.

More hepatitis shots loom for many kids

Hepatitis A may join the ever growing list of required childhood vaccines. The U.S. Centers for Disease Control and Prevention, eager to reduce the 180,000 hepatitis A cases every year, is calling for routine immunization in 11 Western states with high rates. Unlike hepatitis B, which is transmitted sexually or through blood, type A spreads by fecal-oral contact. "Kids don't do as well with some of that hygiene" and may transmit the liver-damaging disease to adults, says the CDC's Harold Margolis.

■ *The CDC and the American Liver Foundation hope to stem a disease that each year costs the economy nearly $500 million. To limit children's shots, experts want to combine hepatitis A with other vaccines.*

By Laura Tangley, Franklin Foer, Marianne Lavelle, Angie Cannon, and Jennifer Couzin

Clips 3/3

The New York Post
Commentary
March 2, 1999

HILLARY'S NUMBERS HEAD SOUTH

By DICK MORRIS

HILLARY for Senate? It's a lot less likely after a Feb. 26 Fox News/Opinion Dynamics poll showing that her national favorability has dropped from 63 percent to 53 percent since speculation about her candidacy began. The cruel irony is that while America loves Hillary as First Lady, standing unflappably by her man, the closer she gets to an actual candidacy, the more her popularity fades.

Her sudden rise in voter approval and equally sudden drop is chronicled in the Fox News polling since the November election (see table).

As impeachment gathered momentum, awe at Hillary's grace under pressure moved her popularity to heights it had not seen since she first burst on our national consciousness. Just as Jackie Kennedy's dignity and poise after her husband's assassination moved the nation, Hillary's calm, self-possessed bearing during what must have been weeks of excruciating embarrassment impressed us all. Her favorability rating moved from 54 percent on Nov. 13 to a high of 63 percent on Jan. 29.

But as talk of her Senate candidacy has increased, she has come across as just another politician. The very discussion about her using her popularity to get elected has taken the sheen off her image and sent her ratings back down to earth. In the past four weeks, she has skidded 10 points back to her more typical favorability rating of 53 percent.

While the talk of her running for the Senate has acclimated people to the idea of her separate political career, it has diminished the very popularity which made the concept of Senator Clinton attractive in the first

place. This shows the volatility of her image while her husband is president. When you get your face on the cover of Time and Newsweek and your ratings drop, something is wrong.

Hillary would make a wonderful senator. She is a lifelong advocate for women and children and is happiest in that role. But she should launch her candidacy only after she has put some distance between herself and her husband's administration. Her best bet is to run in Illinois, where she grew up, in 2004 against the highly vulnerable, newly elected, right-wing Sen. Peter Fitzgerald.

The Fox News Poll shows the growing popularity of another political wife - Elizabeth Dole. She not only runs ahead of Vice President Al Gore by 51-36, she's closing in on Texas Gov. George W. Bush.

It would be a serious blunder to count out Liddy Dole. In a general election, her candidacy would appeal to women and close the gender gap on which Democrats depend. In the GOP primary, she would run to the right of Bush - always a good place to be in the Republican field. With her sterling record at the Red Cross, she could win. Elizabeth Dole could well be the first woman president.

On the Democratic side, Gore is clearly hurting. The lack of enthusiasm for him even among Democrats is palpable. While he still runs in first place, he doesn't even muster a majority of the vote against a very weak field.

Gore needs to come out from Clinton's shadow. In that shade no candidacy can grow. While the president's job-approval is flourishing, his personal popularity continues to fall (this week it dropped to a new low of 40 percent).

Of course Gore can't dump on Clinton, but he should distinguish himself by returning to his original theme of the environment and global climate changes. Recent weird weather throughout the world makes his gloomy predictions seem more appropriate than they have ever

been. By talking about his old passion, he will develop a welcome animation and remind voters of his life before Clinton.

In 1968, Nixon harnessed each day's crime headlines to make law and order the basis of his national agenda. In 2000, Gore must use the fires in Florida, the mudslides in California, the floods in Texas, and the droughts in the Mid-west to show Americans the pressing necessity of action in the face of global warming. Global climate is changing. If the consequences of this shift are as dire as predicted, the environment will become the issue of the next decade. With the millennium, voters are in a mood to think in planetary terms and Gore could be just the man to make the issue work.

Is it not a sad commentary on our politics that the three main contenders are only able to run because they rode their father's or husband's reputation into power? Gore's father was a senator as, of course, was Liddy's husband. Bush's dad was president and his grandfather was a senator. Can't we have a president who made it on his own like Clinton, Reagan and Carter did? We need a candidate who vindicates fully Winston Churchill's characterization - "a self-made man who worships his Creator."

Christian Science Monitor
WEDNESDAY, MARCH 3, 1999

OPINION

Whatever happened to global warming?

Michael Northrup

A funny thing happened to the national debate over global warming: Since the international treaty on global warming was signed 14 months ago in Kyoto, Japan, the issue has virtually disappeared from the political radar. The vanishing act is taking place just when real climate solutions are, for the first time, within reach.

Lack of effort is not to blame. Environmentalists and academics have thrown themselves at the problem as never before, while financial resources from the federal government and major foundations have increased dramatically.

Instead, we've simply lost sight of what it is we're asking for. The sharp focus that helped produce the Kyoto deal has dissolved into a sea of complex legal and accounting questions.

This is particularly ironic in light of the dramatic retreat by the treaty opposition. Blustery speeches still occasionally emanate from Capitol Hill, but the corporate adversaries who once denied the very existence of global warming have largely ceded the debate in favor of more conciliatory postures.

The problem for US environmentalists isn't too few solutions; it's too many, all at once. As the issue unfolds, it spawns one subsidiary concern after another. In dealing with each new detail, our concentration on an overarching goal has lapsed. For all the small solutions, there is no single, clear national plan for meeting the Kyoto targets.

Under the pact, the US has until 2012 to cut greenhouse emissions to 7 percent below 1990 levels, eliminating about 500 million metric tons of carbon pollution each year.

Whether the Senate ratifies the treaty soon or not, that target marks at best the bare minimum of what scientists say is necessary to avert the most severe climate change. In fact, it's not hard to sketch a clear-cut, cost-effective path to that goal.

For starters, even the more modest

proposals for federal deregulation of the electric utilities could reduce carbon emissions by almost 70 million metric tons while saving $38 billion. Doubling cogeneration - reclaiming energy now thrown away as waste heat - saves 43 million metric tons, and $50 billion.

Modernizing just a third of obsolete coal-fired power plants currently exempted from clean-air laws would cut 200 million metric tons of carbon pollution. The one-time cost would boost the national electric bill by just 2 percent for a decade or so, but even this would be offset by health and economic benefits from the corresponding elimination of nitrogen oxides, hydrocarbons, and other pollution.

Raising fuel economy of sport-utility vehicles, minivans, and pickups from 20 to 38 miles per gallon saves 58 million metric tons by 2010, plus $40 billion in consumer spending. Boosting automobile efficiency to 45 miles per gallon brings another 50 million tons, and $30 billion in savings. At home, pending appliance efficiency standards will cut 25 million tons of carbon by 2010, saving consumers $15 billion.

Together these measures would eliminate 546 million metric tons of carbon by 2010 - more than enough to meet the goal - and free up billions of dollars. And this is just one scenario. Many others exist. Presented as an action plan, it suddenly becomes clear the Kyoto targets are achievable, both politically and technologically.

Slimming down the agenda creates a much needed political focal point for the debate, and undercuts the alarmists who say it's too expensive to act. The environmental community would do well to refocus on such a plan quickly, before the window in

which we can comfortably reach our Kyoto treaty obligation closes.

Michael Northrop is a program officer with the Rockefeller Brothers Fund, a New York-based foundation providing support for global environmental issues.

The Washington Post
Planet in Peril
By Bill Gifford
Sunday, February 28, 1999; Page X03

EARTH ODYSSEY: Around the World in Search of Our Environmental Future
By Mark Hertsgaard
Broadway. 372 pp. $26

Reviewed by Bill Gifford

Does the world really need another ponderous eco-tome? Is there anything we haven't already heard about global warming, famine, and the evils of the automobile? When I cracked this book, my answer was a swift, resonating Noooooooo. But by the third chapter, I'd changed my mind.

When Mark Hertsgaard embarked on his environmental investigative trip around the world in 1991, the environment was the It Topic of American journalism. News magazines ran cover stories on global warming, and Alaska's shores were still dark with Exxon's oil. When he finished, seven years later, it was yesterday's news, as far as the mainstream media and the public were concerned. A Newsweek poll in 1991 found that 35 percent of Americans considered global warming a serious problem. By 1996, only 22 percent thought so, even though scientists had since reached a consensus that global warming was indeed a threat.

The second poll reflects a certain amount of green fatigue: So the world is ending -- next! The first few chapters of this book present a daunting roster of ills: war and starvation! soil erosion! traffic jams! nukes! We've heard this litany before, but just as our eyes glaze over, Hertsgaard's sharp reporting jolts us awake. He has an acute eye for detail, an endless appetite for chitchat with locals, and a knack for tying his observations to his hefty background research.

His central question is an easy one: "Will the human species survive the many pressures crowding in on it at the end of the twentieth century?" The answer is, "Of course." We've been through famine, plague and worse --

even drastic climate change, in the form of the Ice Ages. It wasn't much fun, but our hardy species survived. The real question is, will the survivors inherit a world worth living in? Rather than looking for traces of taint in the wilderness, Hertsgaard deliberately seeks his answers in the nastiest spots on earth, from radioactive Russian cities to famine-wracked African wastelands. In one memorable scene, he and his interpreter are engulfed in an explosion of chlorine gas (they emerge scared but unscathed).

Hertsgaard's message really takes hold in his long and (mostly) fascinating section on China -- one of two countries that hold effective "veto power" over the world's environmental progress (the other is the United States). China's power resides in its vast population, clamoring for what Americans consider basic necessities of life. It's chilling to contemplate what it will be like to live in a world with 10 billion people, in the year 2050.

And it's shocking to realize how much of the world, including vast parts of Russia and China and Africa, is already unlivable by any civilized standard. Few Americans would tolerate air like that in the Chinese industrial city of Chongqing, where the pollution was so thick that Hertsgaard could stare directly at the sun for 10 full seconds.

He grasps the problem in all of its complex dimensions. Yes, the Chinese burn way too much coal -- but it's a freezing-cold country where many people still don't have electricity or heat or even enough food to eat. Cleaner coal-burning technology exists, but it's more expensive. So should the government build four dirty power plants or three clean ones that leave more people without power? For most environmentalists, the quick answer is three clean power plants, but Hertsgaard -- prodded by his likable young Chinese interpreter, Zhenbing -- sees the human case for building the four dirty ones.

Although he relies heavily on sources like Lester Brown of the Worldwatch Institute, with whom he clearly sympathizes, Hertsgaard takes their pronouncements with a grain of skepticism. He skillfully charts a course between the Polyanna-ish mainstream and the doom-and-gloom crowd, who seem to almost want an "environmental Pearl Harbor," in Brown's phrase. The result is a surprisingly fair-minded, and therefore important, book.

Hertsgaard even expresses a certain heretical faith in technology: Technologies exist that could drastically ameliorate many of the world's worst environmental problems. What's lacking is the political will to deploy them. In many cases, he realizes, solving environmental problems requires people to go against their own nature. When slum-dwellers in Rio or peasants in China need basic comforts immediately, it's impossible (and

unfair) to ask them to "sacrifice" in order to solve long-term problems. What's more, if history is any guide, those Chinese and South Americans who want cars so badly will eventually get them.

Hertsgaard is savvy enough to realize that the automobile is not going to go away, but optimistic enough to think it can be controlled -- even after a visit to car-choked Bangkok. Technological progress and economic growth are inevitable; our only hope is that they will lead to a better life, and not a worse one, for the majority of humanity. He finds signs of hope in the unlikeliest places. The book opens with his visit to the Dinka tribe, in war-blighted southern Sudan. On the brink of mass starvation, uprooted from their homes, and living on international handouts, the Dinka have been reduced to selling even their clothing for food.

One in six people on the planet live like the Dinka, Hertsgaard reports. But then he makes an even more telling point: For much of human history, that proportion has been more like nine out of 10. This sounds an awful lot like progress.

Bill Gifford is a senior editor of Philadelphia magazine.

Los Angeles Times
Monday, March 1, 1999

Science Watch
Tiny Firm Sees Process as Big Answer to Waste
By LEE DYE

Scientists have long dreamed of converting the mountains of waste we produce in our cities and factories and on our farms into something useful. Now they may be on the edge of success.

A tiny Massachusetts company, working with the Energy Department, the state of New York and several other firms, has developed the technology to convert cellulose into an acid that can be used to produce a wide range of products, from alternative fuels to fertilizer. Cellulose is the sugar that makes up the cell walls of plants, and it is the raw material for many manufactured goods, such as paper. It is also the most common waste product of many manufacturing processes.

Our landfills are literally overflowing with the stuff.

For 150 years, scientists have known that if cellulose is mixed with acid and heated, it produces levulinic acid, known as a "platform chemical" because it can be used for so many different purposes. But the yield from cellulose conversion processors has been low--only about 25% levulinic acid to 75% tar. That has driven the cost of the acid up to $5 to $10 per pound, thus thwarting its potential.

So for the last 10 years, Stephen Fitzpatrick, a chemical engineer who heads a three-person company, Biofine Inc., of Waltham, Mass., has been developing the technology to produce levulinic acid much more cheaply. A demonstration plant, funded by a $3-million grant from the Energy Department and $1 million from the state of New York, has converted cellulose to levulinic acid at much higher yields. The demonstration plant produces the acid at a cost of 4 cents to 32 cents per pound, according to the New York State Energy Research and Development Authority.

"It's an exciting technology," said Jeff Peterson, program manager for the state agency.

The demonstration plant at South Glens Falls, N.Y., converts waste sludge from a paper-processing plant into levulinic acid at the rate of about a ton per day. That's enough to prove the viability of the technology, but much larger plants capable of converting up to 1,000 tons of cellulose a day are needed for the promising acid to support the many applications that could grow out of cheaper availability.

According to New York studies, that could drive the demand for levulinic acid up from its current worldwide level of 1 million pounds per year to as much as 1 trillion pounds.

At the same time, it would convert one of the most common waste products in the world into a wide range of useful products.

The beauty of the process lies in its simplicity. There is already an abundance of concentrated waste deposits around the world to provide the "feed stock" for a conversion plant.

"We could plunk it down next to a paper mill, or near a number of paper mills, and take that stuff away," Fitzpatrick said. The "stuff," consisting mostly of cellulose fibers, would otherwise go to a landfill where it would decay and release carbon dioxide, a "greenhouse" gas blamed for global warming.

Fitzpatrick's process, for which he holds two patents, reduces the time the cellulose remains in a processing vessel, called a reactor, and causes levulinic acid to form "preferentially" to tar. Only 25% emerges as tar, Fitzpatrick said, and it comes out almost like coal.

The coal-like substance, he said, is a perfect fuel to run the plant. "We can burn that and make steam and electricity for the

process," he said. "We're almost a net zero user of power to do all this."

Douglas C. Elliott, a chemist at the Energy Department's Pacific Northwest National Laboratory in Richland, Wash., believes the technology could lead to a new generation of alternative fuels, especially for fleet vehicles under federal mandate to use cleaner fuel.

Elliott and his co-workers have created what the lab calls "the first-ever multi-step catalytic process that converts levulinic acid into an alternative fuel component called methyltetrahydrofuran," more commonly known as MTHF.

MTHF can be combined with natural-gas liquids to produce a clean-burning fuel for vehicles, thus converting what was once a waste product into a gasoline substitute.

"Biofine has been able to refine levulinic acid production to the point that they can get a high enough yield to make it interesting economically," Elliott said. "And in the process, they remove all of the other contaminants that would hurt our catalyst and give us a clean product to work with. That makes it a lot easier on our end to come up with a final product of value."

The reactor at the Northwest lab would have to be scaled up considerably to make the conversion of levulinic acid to MTHF economically rewarding, but Elliott said that's no problem.

"A reactor like this is pretty easy to scale up," he said. "We don't have any fancy tricks wrapped up inside the reactor. We just need a bigger pipe."

But making things bigger also means spending more money, possibly a lot of it.

"The biggest step is to go from a demonstration plant to a really big commercial plant," Fitzpatrick said. "It's not a technical risk, it's a financial one. That's the biggest downside, the fact that you are putting $50 million into a new technology."

Fitzpatrick said two of the country's largest chemical companies, which he declined to name, are studying the economic feasibility of the process, and he sees a potentially global market. "Lots of countries have no mineral resources, but they've got lots of vegetation and lots of cellulose," he said. "One could imagine that this could be even more broadly used worldwide."

* * *

Lee Dye can be reached via e-mail at leedye@compuserve.com.

The New York Times
March 2, 1999

Early Signs of Spring and Global Warming

By WILLIAM K. STEVENS

Separate studies using different methods in the last three years have found that as the earth's atmosphere warms, spring warmth is arriving earlier and autumn coolness is coming later in the Northern Hemisphere.

But much of the evidence has been indirect, and now a direct examination of the actual behavior of plants across Europe appears to confirm the earlier findings.

The new evidence comes from a network of 77 research sites called the International Phenological Gardens.

Spread across Europe from northern Scandinavia to Greece and from Spain and Ireland to Poland and Bulgaria, the gardens contain genetically identical clones of various species of trees and shrubs.

Each spring from 1959 to 1993, observers at the sites recorded the dates when buds first appeared, leaves unfolded and plants flowered. Likewise, the observers noted the dates when leaves turned color and fell from trees.

Analyzing the resulting mass of data, two researchers at the University of Munich in Germany have found that over the three decades, the advent of botanical spring advanced an average of six days, while autumn was delayed an average of about five days.

This 11-day lengthening of the growing season was caused by warmer temperatures, concluded the researchers, Dr. Annette Menzel, a specialist in the study of forests, and Dr. Peter Fabian, who specializes in climate, meteorology and forests.

Their report appears in the current issue of Nature.

Since the late 19th century, the average surface temperature of the earth has risen by about 1 degree Fahrenheit or a little more, with northern latitudes warming more than the global average.

The dominant view among experts is that emissions of heat-trapping waste industrial gases like carbon dioxide, a product of the burning of fossil fuels like coal and oil, are responsible for at least some of this warming.

The dominant view also holds that if emissions of the heat-trapping gases continue at the present rate, the average global temperature will rise by another 2 to 6 degrees, with a best estimate of 3.5 degrees, over the next century.

This compares with a warming of 5 to 9 degrees since the depths of the last ice age some 20,000 years ago.

The predicted warming, the experts say, would disrupt the earth's climate, make both droughts and floods worse, cause the oceans to rise and push temperate-zone climatic zones farther north.

It would also be expected to have some positive effects, not least the lengthening of growing seasons in northern latitudes.

According to the Menzel-Fabian study, the longer growing seasons have already arrived.

The area of the study spanned almost the entire width of the northern temperate zone, from the sub-Arctic to the Mediterranean region.

The two scientists' analysis of the plants' spring awakening and autumn decline found that in some research stations, in the Balkans, spring was coming later.

They attributed this to regional patterns of climate change that were exceptions to the larger European pattern.

That pattern, they found, was clear: Over the last three decades, the onset of spring gradually moved earlier in the year, while the advent of autumn became later and later. Further, they discovered, this pattern matched what would be expected to happen on the basis of computer models of the effect of rising temperatures on plant behavior in spring and fall.

Plants' response to seasonal change is driven mainly by changes in the average daily temperature, said Dr. Menzel, and Europe's temperature has been rising over the last three decades.

Modeling studies, she said, indicate that 70 percent of the lengthened growing season can be explained by rises in daily temperature. Changes in light, soil conditions and water supply also influence the awakening and dormancy of deciduous plants.

The researchers attributed the rise in daily temperatures to a general warming of the climate rather than any locally induced warming produced by what is called the urban heat-island effect.

Cities are warmer than the surrounding countryside, but only a few of the research sites in the International Phenological Gardens are in urban areas.

Other recent studies have shown that buds are bursting open earlier in the spring in Canada, and studies in Britain have found that birds are laying their eggs earlier in the year.

In 1996, Dr. Charles D. Keeling of the Scripps Institution of Oceanography in San Diego reported that an earlier spring in the Northern Hemisphere was reflected in the seasonal rise and fall of atmospheric carbon dioxide levels.

Plants "breathe" carbon dioxide.

When they drop their leaves in the fall and go dormant, atmospheric levels of the gas increase.

When they regain the leaves in the spring, levels drop.

Analysis of these fluctuations revealed that spring was arriving across the hemisphere about a week earlier in the 1990's than in the 1970's.

In 1997, this finding was bolstered by a study by Dr. Ranga B. Myneni of Boston University and four other researchers, including Dr. Keeling.

Using a different method, they found that spring was arriving about a week earlier in the early 1990's than in the early 1980's.

This study was confined to regions north of the 45th parallel, which runs through or near Yellowstone National Park, Minneapolis, Ottawa, Boston, Bordeaux, Belgrade and Vladivostok.

North of that line, warming in recent decades has been substantially greater than the global average.

The Myneni study also found that fall was arriving later, with the result that

the growing season in the northern climes had increased by 12 days, give or take 4 days.

The researchers reached this conclusion by analyzing changes in solar radiation absorbed by plants as they performed photosynthesis. From this, the scientists were able to infer the arrival of the seasons.

Taken together, Dr. Myneni said, all the recent studies indicate that a warming and greening of the planet is indeed under way, and that the growing season should lengthen further if temperatures continue to rise.

One result, a number of scientists say, is an increase in vegetation..

Dr. Menzel and Dr. Fabian, writing in Nature, said the lengthened growing season they found was "likely to contribute to increased biomass formation." Biomass is the dry weight of living things, in this case plants.

Studies in Europe and Asia have indicated that forests have indeed increased in biomass.

And Dr. Myneni and his colleagues were able to determine that because of more vigorous plant growth associated both with warmer temperatures and higher levels of atmospheric carbon dioxide, the amount of vegetation in the northern regions had increased by 10 percent.

Quite apart from the effect of warming, carbon dioxide spurs plant growth.

What this carbon dioxide effect might mean for agriculture and forestry is not entirely clear.

Some experts say that while more carbon dioxide makes plants bigger, it does so by reducing the relative amount of nutrients in a plant.

This makes it less nutritious as food -- a person or animal would have to eat more to get the same benefit.

On the other hand, a greener north could increase agricultural and timber production and expand the Northern Hemisphere's wheat-growing regions.

International Study on Water in Mideast Leads to a Warning

By WILLIAM A. ORME Jr.

RAMALLAH, West Bank, March 2 — The drought this winter could be a portent of an even drier future unless Israel, Jordan and the Palestinians work together to conserve shared water resources, an international panel of scientists warned today.

With a population of 12 million in a region with as much rainfall as Phoenix, Ariz., water supplies "are barely sufficient to maintain a quality standard of living," said Gilbert F. White, a geographer from the University of Colorado who was chairman of a research group from the United States National Academy of Sciences and counterpart institutions from Israel, Jordan and the Palestinian Authority.

In what was described as the first major study of the long-term outlook for water supplies between the eastern border of Jordan and the Mediterranean Coast of Israel, the report said even with strict management "the area's inhabitants will almost assuredly live under conditions of significant water stress in the near future."

Ancient underground aquifers are being drained dry, while scarce rains flow unused into desert gulches and rivers are diverted for water-intensive tropical agriculture, the researchers said. Watersheds cross political boundaries and can only be managed jointly, they said.

It is hardly news here that water is getting ever scarcer and the population steadily larger. Yet by drawing on data from disparate sources within and outside the region, the study provides what its authors believe is the first comprehensive analysis of regional patterns of water demands and supplies, while at the same time detailing feasible methods of conserving water and reducing consumption.

At least as significant as the content, participants said, was the political fact that this was the first serious study involving Jordanian, Israeli and Palestinian experts, all of whom urged their Governments to work together on recycling waste water, developing more efficient irrigation and using brackish water for industry and agriculture.

The unusual regional collaboration and the prestige of the Academy of Sciences should help assure that the study will guide the World Bank and other Western aid donors whose support is crucial to all three Governments, the authors said.

Left carefully unmentioned were the consequences of an regional battle over dwindling water resources. But the concern was implicit.

"This is a very dry region and a very tiny region, with an importance out of all proportion to its size," said David Policansky, staff director of the project.

The 225-page study, which took more than two years, is itself rather arid, scrupulously avoiding any hint of national bias or ideological advocacy, and concentrating on regional research rather than policy prescriptions.

"While we were aware of many proposals for managing water supplies in the study area and neighboring areas, we explicitly refrained from making recommendations about these specific programs and political policies," Mr. White said.

The scientists acknowledged that their hope was to galvanize policymakers into action and to remove the excuse that there is insufficient scientific information on which to base broad new water policies.

Members of the group met on Monday with the Palestinian leader, Yasir Arafat. The Israel Academy of Sciences and Humanities will be presenting its findings to the Israeli Government, and the Royal Scientific Society of Jordan is advising the Government in Amman about the research.

The principal scientific contribution of the panel, some suggested, was to collate and verify existing research from varied sources on regional industry, irrigation, meteorology and geology.

"There was a serious lack of regional information," Mr. Policansky said, pointing to a map of regional rainfall patterns that was drawn from different official sources and research institutes. "This is quite basic. But until we did it there was nothing like it."

The report stresses the limits of a landscape ranging from "sparse forest" to desert and "semidesert," cleaved by the "temperate steppe" of the Jordan Valley, itself increasingly dried out by upstream irrigation. In 40 years, all fresh water in the region should be reserved for household use, with treated waste water and saline water used to supply agriculture and industry, the researchers said.

As the largest and by far the most prosperous of the three, Israel accounts for most of the consumption, the study confirmed. At 344 cubic meters, its per capita water use in 1994 was almost four times that of the West Bank and the Gaza Strip, at 93 cubic meters a person.

Palestinian officials and Israeli environmentalists often point critically to this disparity and to California-style watered lawns and capacious bathtubs that they consider irresponsibly profligate. Yet the study showed that Israel's use is only marginally greater than Jordan's. Jordan is poorer than the West Bank, yet consumed 244 cubic meters a person.

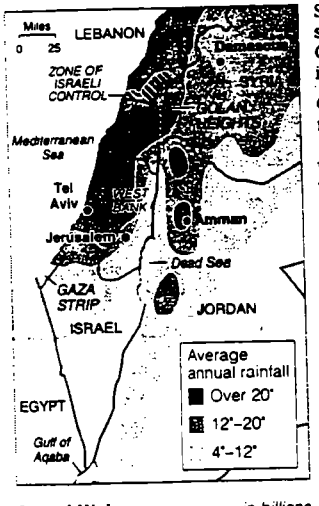
In Jordan and Israel, the thirstiest consumers are not households, but farms, out of all proportion to their share of the economy and workforce. In Israel, agriculture accounts for 3 percent of the gross domestic product and 57 percent of water consumption. The Jordanian agricultural sector contributes 6 percent of the G.D.P., but uses 72 percent of the water. In the less developed West Bank and Gaza Strip, agriculture absorbs about the same share of water, 64 percent, yet accounts for fully a third of the local economy.

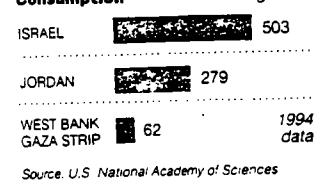
The Israeli Foreign Minister, Ariel Sharon, has been promoting plans for Mediterranean desalting plants that could supply Gaza and Israeli coastal communities. But the study noted that desalting sea water was extremely expensive — $1 or more for a cubic meter of potable water — and would not usually be considered feasible in a region without cheap and abundant fuel supplies.

SNAPSHOT

Crossing Bridges

The first major study of water resources in the Mideast was released yesterday. Scientists hope that their findings may be of use in creating new water policies.





Source: U.S. National Academy of Sciences

The New York Time

The New York Times
WEDNESDAY, MARCH 3, 1999

Kyoto lobby kills small businesses

By Marlo Lewis Jr.

Credit for early action — a policy proposal developed by the Environmental Defense Fund, warmly embraced by the Clinton-Gore administration, and championed by Rhode Island Republican Senator John Chafee, — is the latest ploy in the Kyoto lobby's strategy to divide and conquer the American business community. Early action crediting would jump start implementation of the non-ratified United Nations global warming treaty while increasing the number of companies amenable to ratification. Opponents rightly call the scheme Kyoto Lite.

Although the mechanics of an early action program are complicated, the basic idea is quite simple. Companies that reduce their energy-related emissions before 2008 — the year when a ratified Kyoto Protocol would go into effect — would earn credits they could later use during the first (2008-2012) Kyoto compliance period.

Any such program would fuel an upsurge in pro-Kyoto business lobbying. Credits earned under the program, although potentially worth millions or billions of dollars, would actually be worthless unless Kyoto, or a comparable regulatory program, were ratified or adopted. Consequently, participating companies would acquire financial incentives to support ratification.

Early action crediting is not an attempt to implement Kyoto through the backdoor of sneaky regulation. Rather, it is an in-your-face plan to implement Kyoto through the legislative front door. Early action crediting openly rewards compliance with Kyoto and is openly tied to ratification. As Mr. Chafee explained last October when he first introduced an early action bill: The credits would be usable beginning in the first five-year budget period (2008-2012) under the Kyoto Protocol, if the Kyoto Protocol is ratified.

Supporters describe early action crediting as a voluntary program, but the plan contains sticks — perhaps even fangs — as well as carrots. In the first place, the Environmental Protection Agency would likely be the administering agency. If EPA officials broach the topic of early action with a company over which they have inspection, permitting, or enforcement authority, how could the discussion not involve an element of coercion? Even if EPA scrupulously refrained from behind-the-scenes intimidation, companies might volunteer just to stay on the good side of their regulatory overlord.

Furthermore, even if not run by EPA, an early reduction program would put the squeeze on many companies to volunteer, because early reducers would profit at the expense of non-participants. The latter would not merely forgo benefits — they would be penalized.

Here's why. The Kyoto Protocol assigns to every industrial nation an emissions budget — a fixed quantity of emission allowances or credits it may lawfully use during 2008-2012. Under Kyoto, an industrial nation can earn emission credits, and thus increase its budget, by implementing early reduction projects in developing countries. However, early reductions achieved at home do not generate bankable credits that can later be added to a nation's budget. Thus, credits for domestic early action can come from only one place —the future U.S. Kyoto budget. The inescapable result is a zero-sum game. For every company that gains a credit for early action, there must be another that loses a credit in the compliance period.

In a Kyoto world, all small businesses will have to pay higher energy costs.

Since early reducers are rewarded at the expense of non-participants, many businesses that otherwise would never dream of volunteering may do so just to avoid getting stuck in the shallow end of the credit pool, come 2008. This dynamic is, of course, exactly what Kyoto partisans desire, as it would build up the mass of companies holding costly paper assets that are completely valueless unless Kyoto is ratified.

Who would be hurt the most? The answer is really quite obvious. Only the big boys — utilities and major manufacturing firms — have the legal and technical expertise and the discretionary capital to invest in voluntary emission reduction projects. Most small businesses will not be players in the early credit game. Yet in a Kyoto world, all small businesses will have to pay higher energy costs and many will have to reduce their use of fossil fuel. Credit for early reduction would not only make Kyoto more likely to be ratified, it would also make the treaty more costly for small business.

The strongest rationale for an early action program is Florida Republican Senator Connie Mack's 'precautionary' argument. Mr. Mack, an original cosponsor of the Chafee legislation, warns that a future Congress might ratify Kyoto or mandate energy-use controls. An early reduction program would allow participating companies to stretch out their compliance costs and thus, Mr. Mack contends, buy a kind of insurance against possible future regulatory excess.

This argument does not survive inspection. Enacting an early action program would send a strong message to the business community: Congress believes Kyoto ratification is inevitable, and American companies had better get prepared for it. That message —the Kyoto Express cannot be stopped — could easily become a self-fulfilling prophecy. Many businesses would conclude, if you can't lick 'em, join 'em. By strengthening the Kyoto lobby, early action crediting would feed the very regulatory ambitions Mr. Mack professes to oppose.

Early action crediting may seem like a voluntary, market-oriented, win-win environmental program. It is actually a political strategy to implement a non-ratified treaty and grow the Kyoto lobby. And it would produce a zero-sum game in which small business can only lose. Policy makers cannot consistently claim to oppose Kyoto and support early action crediting.

Marlo Lewis is Vice President for Policy & Coalitions at the Competitive Enterprise Institute.

Suzanne Fields

Suzanne Fields is on vacation. Her column won't appear this week.

Ford's New Monster

The oversize Excursion, the biggest SUV ever, is making the company defend its green reputation

By NICHOLE CHRISTIAN DETROIT

EVERYONE LOVED THE JEEP, AN INSTANT icon with its short frame and oh-so-rugged ways. Eventually, our hearts and wallets—and behinds—warmed to beefed-up successors, like the Ford Explorer and GMC Yukon. But is the whole SUV craze getting a little out of control with the new Ford Excursion, the King Kong of SUVs at 19 ft. and 8,500 lbs.? Park it in the garage—won't happen. And this six-door nine-seater swallows gas fast enough (about 12 miles per gal.) to warm any oil sheik's heart.

The new monster seems to be biting the reputation of Ford's new chairman, William Clay Ford Jr., great-grandson of the founder, who has promised to lead the auto industry into a pollution-free future. But Ford executives know that big, gas-thirsty vehicles are where the consumers and the cash meet. For years, General Motors has raked in oversize profits with the Chevrolet Suburban, long the standard-bearer among land yachts. Analysts say the spacious Suburban holds $10,000 to $15,000 in profit per vehicle. When the Excursion roars into showrooms this fall with a projected sticker price of $45,000 to $50,000, Ford could take in up to $20,000 per vehicle.

Not to be outwheeled, GM will unveil its new Chevrolet Suburban next month. Considering that the Excursion is nearly a foot longer than the current Suburban (18 ft., 3 in.) don't be surprised if GM has enlisted the Pentagon for design cues. "We set the benchmark for this type of vehicle," boasts Chevrolet/GMC spokesman Dee Allen. "We don't intend to simply hand it over."

SUV and truck sales are hotter than ever and show little signs of cooling off soon. In the past seven years, sales of giant SUVs have rocketed from 50,000 to nearly 160,000. Trucks and SUVs represent 50% of all the vehicles sold in the U.S. In 1997, Ford alone tallied $60 billion in revenues from sales of popular SUVs such as the Explorer, Expedition, Lincoln Navigator and other kinds of trucks.

Environmentalists call the Excursion a betrayal by a company that pledged to become cleaner and greener than its rivals. The Sierra Club is calling the Excursion "the Ford Valdez," after the infamous oil tanker. As Sierra president Dan Becker puts it, "People aren't marching in the streets demanding a vehicle that can carry a whole apartment in it." What's more, environmentalists argue, the Excursion will dump double the pollution of a small car, while at the same time raising the temperature of the earth's atmosphere. "It's nice that Ford is talking about the environment," says Becker. "But Ford needs to put its vehicles where its mouth is."

Safety advocates also fret that corporate responsibility has stalled. SUV critics have long contended that vehicles like the Excursion and Suburban contribute to more deadly accidents because they are so much larger than, say, a Dodge Neon.

Ford maintains that it hasn't spurned its commitment to building cleaner, safer SUVs. At last week's Excursion unveiling, teams of Ford executives pleaded with reporters to "look beyond" the vehicle's hulking exterior to its more unsung attributes. The Excursion will qualify as a low-emission vehicle in all 50 states and is expected to emit 43% less smog than is permitted by law. Ford also says it is planning to roll out a small SUV that could get up to 30 miles per gal. On the safety side, a new steel-beam technology should help reduce the chances of a Neon's rolling underneath an Excursion or being crushed. The beam is designed to absorb the impact of a collision and lift the Excursion's front end before it makes contact with another car's passenger compartment.

Ford is unlikely, however, to abandon the big metal if that's what customers want. Even William Clay Ford Jr. is learning to think about Ford's future in more pragmatic terms. "What we do to help the environment must succeed as a business proposition," he likes to tell reporters. "A zero-emissions vehicle that sits unsold on a dealer's lot is not reducing pollution." For now, Ford seems willing to take its lumps as it struggles to balance its plan to build greener cars with going for the green. ■

Conspicuous Consumption: Then and Now

CADILLAC AUTOMOBILE QUARTERLY

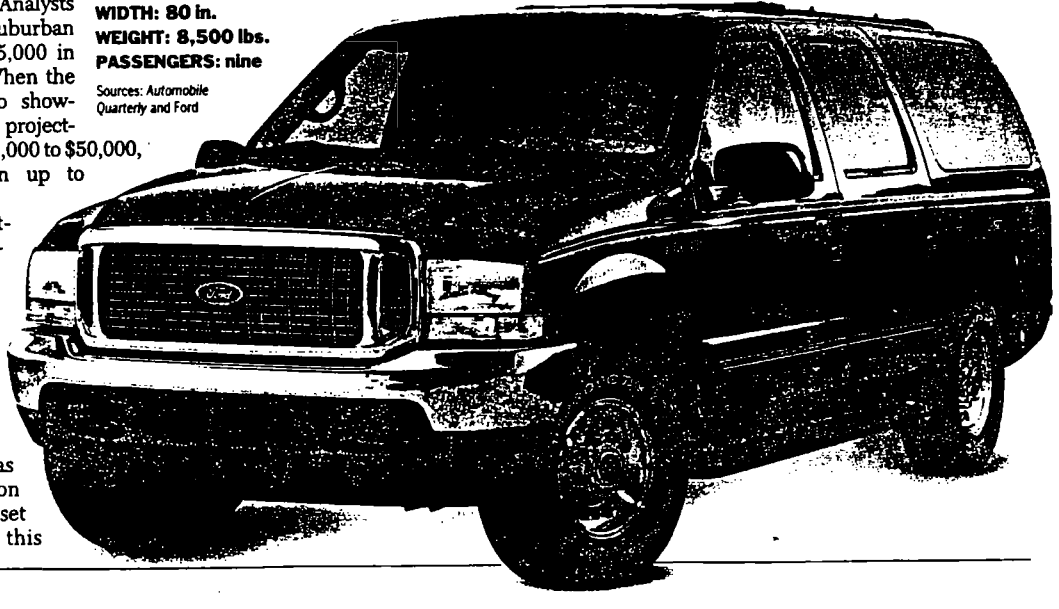
1959 Cadillac Eldorado Seville

MILEAGE: 12.1 m.p.g.
LENGTH: 225 in.
WIDTH: 80.3 in.
WEIGHT: 4,855 lbs.
PASSENGERS: six

2000 Ford Excursion

MILEAGE: 12 m.p.g.
LENGTH: 226.7 in.
WIDTH: 80 in.
WEIGHT: 8,500 lbs.
PASSENGERS: nine

Sources: *Automobile Quarterly* and Ford



Clips 3/5

The Washington Post
Hot Year Was Killer For Coral
Loss in Some Areas Exceeds 70 Percent

By Joby Warrick
Washington Post Staff Writer
Friday, March 5, 1999; Page A03

Record sea temperatures triggered the largest mass die-off of tropical corals in modern times last year, destroying in some areas more than 70 percent of the reef-building creatures whose elaborate homes form the backbone of ocean ecosystems, according to a government study to be released today.

The warm weather of 1998--the hottest year in at least six centuries--left a broad swath of dead or damaged tropical corals from the Caribbean to the eastern Pacific, concludes the report by State Department officials and scientists. It suggests a combination of El Nino and global warming is to blame.

"In 1998, coral reefs around the world appear to have suffered the most extensive and severe bleaching and subsequent mortality in the modern record," says the report, to be presented in Hawaii to a federal task force. "These events cannot be accounted for by localized stressors or natural variability alone."

Corals "bleach" or lose pigment when stressed by disease or environmental changes--such as a spike in ocean surface temperatures--and can die if the conditions persist. Scientists have documented a string of "mass bleachings" since the mid-1980s, but last year's outbreak was unprecedented both in severity and geographic scale, the study says.

Although conditions in 1998 were worsened by a severe El Nino, recent trends suggest that the threat to coral reefs will only increase with time, it says. Further losses, the report adds, could have profound consequences for biodiversity, fisheries and tourism.

"At this time, it appears that only . . . global warming could have induced such extensive bleaching simultaneously throughout the disparate reef regions of the world," the report concludes. "Thus the geographic extent, increasing frequency and regional severity of mass bleaching events are likely a consequence of a steadily rising baseline of marine temperatures."

The scale of coral disease and death in 1998 has been noted in several recent reports by international scientific groups, but the State Department study is the most complete documentation of the problem. It is also the most forceful pronouncement by federal officials linking the phenomenon to climate change.

Other scientists, however, say they aren't convinced of a link to global warming, especially because the ocean warming pattern doesn't match climate forecasting models.

Coral reefs are the foundation of one of Earth's most productive and diverse ecosystems, providing food and shelter for at least 1 million species of animals, plants and microbes. Reefs yield a host of benefits for humans, including food, medicines and tourism income.

In recent decades, scientists have documented a worldwide decline in the health of reefs because of coastal pollution and destructive fishing practices. The gradual degradation may have left corals more vulnerable, experts say.

Corals are tiny animals whose immense colonies form the small layer of living tissue on tropical reefs. They secrete a limestone skeleton, which over generations forms the framework of reefs.

Bleaching results from a disruption in the balance between the coral and tiny algae plants that live inside the coral tissue. The algae supply nutrients for the corals while giving the reefs their vibrant colors. But if the water becomes unusually warm--even by a single degree Celsius above the seasonal norm--the corals expel the algae and take on a ghost-like hue.

Bleached corals generally recover with time, but last year's unremitting heat resulted in "devastating mortality," the State Department report says. According to preliminary data, more than 70 percent of corals died off across a wide region of the Indian Ocean, from the coast of Kenya to the Lakshadweep Islands off southern India. The mortality rate topped 75 percent near the Seychelles and more than 80 percent in the Mafia Marine Park off Tanzania.

Bleaching itself was even more widespread, with many areas reporting 100 percent of corals bleached. The phenomenon was observed in at least 60 countries and island nations in the Indian Ocean, Pacific, Red Sea, Persian Gulf and Caribbean, the study says. Only the central Pacific region appears to have been spared.

"Nothing like this has ever been observed before," said Rafe Pomerance,

deputy assistant secretary of state for the environment and development, who will present the findings to a meeting of the U.S. Coral Reef Task Force. "Something is going on, and we have to figure out what it is."

Global Reef Damage

Record-high ocean temperatures last year devastated coral reefs, causing widespread "bleaching" and death. Gray areas below show where surface temperatures reached or exceeded the maximum summertime levels for the first six months of 1998.

SOURCE: National Oceanic and Atmospheric Administration

The Washington Post

Shrinkage Detected In Greenland's Ice
Other Studies Find Different Results

By Curt Suplee
Washington Post Staff Writer
Friday, March 5, 1999; Page A03

Greenland's ice sheet has thinned dramatically at the southern and eastern edges, many parts of which have lost three to six feet in thickness per year since 1993, a new study has found.

The rapid pace of the decline "was surprising even to us," said project scientist William B. Krabill of NASA's Goddard Space Flight Center facility at Wallops Island, Va. "There was very consistent thinning along the east coast and southern tip of Greenland."

The giant island's ice mass is presumed to be much more likely to respond to a global warming trend than the far colder Antarctic ice, and Greenland's prognosis has been debated hotly among scientists. Last year, different teams of researchers analyzed the same satellite elevation data. One concluded that the ice was growing a bit; another found no significant change.

But many experts believe that satellite observations are unreliable at elevations below 5,500 feet, according to Curt H. Davis of the University of Missouri. And those areas make up about two-fifths of the ice cover in southern Greenland.

Krabill and colleagues used a different method, surveying the thickness of the ice mass in southern Greenland during 1993 using an airplane flying

1,300 feet above the surface. A laser device on the plane recorded the height of the terrain below. The group repeated those measurements last year.

Nearly all of the shrinkage they found was at elevations below 4,900 feet, in the "peripheral regions which . . . are likely to be most susceptible to climate change," the team reports in today's issue of the journal Science.

The decline of the fringe glaciers occurred at the same time as a reported increase in air temperature of about one-half a degree Fahrenheit along Greenland's east coast.

But Krabill and others cautioned that the new findings cannot be construed as evidence of the effects of global warming. Nor do they pose a threat to world sea levels. The thinning portions of the ice comprise only a fraction of 1 percent of the total. Greenland is about one-fourth the size of the United States, and 84 percent of it is covered with ice that is 2 miles thick in places.

Moreover, thinning was observed only at low elevations. According to the new survey, the ice mass above 6,500 feet is largely unchanged, and three areas--all in high snowfall regions--had thickened by more than four inches per year since the last survey.

"What this shows is that these ice sheets are very dynamic," said geophysicist Kendrick C. Taylor of Nevada's Desert Research Institute. "But we don't really know on what time scales they change or what they're responding to. [The NASA team] could be seeing a response to something that has happened over the last 1,000 years, and maybe not something we're doing right now."

Davis noted that the new data are "the first that show such large thinning rates over such a large area of any ice sheet" in Greenland or Antarctica. But "this could be the natural state of the ice sheet," he said.

The NASA researchers attribute the thinning to an increase in the speed with which coastal glaciers are creeping toward the sea. Any other cause, such as excessive melting or reduced snowfall, is "extremely unlikely," they conclude.

"The edges of these fringe glaciers have a lot of crevasses and cracks in the ice," Krabill said. "If water runs down into the ice and onto the rock underneath, it could lubricate [the boundary between the two]. All of a sudden, the thing could start to creep a lot faster than it had been."

In 1994, Krabill's researchers surveyed the northern half of Greenland. Starting in May, they plan to retrace their earlier flight paths. "If [the thinning] trend continues up the east coast, it could be very interesting," Krabill said.

Greenland ice sheet thinning rapidly

March 4, 1999
Web posted at: 10:24 p.m. EST (0324 GMT)

WASHINGTON (CNN) -- Glaciers along the southeastern coast of Greenland are thinning by more than 3 feet a year -- possibly because of global warming, according to a new study by NASA scientists.

Researchers compared aerial surveys of the Greenland ice sheet taken in 1993 and 1994 with a similar survey taken last year. Their data, reported in this week's edition of the journal Science, indicated that parts of the ice sheet near the ocean thinned at a rate of more than 3 feet (1 meter) per year.

While ice layers thickened by up to 10 inches (25 centimeters) in interior areas of Greenland during the same period, the net effect was a loss of ice mass for the whole area surveyed. The glaciers were also moving into the ocean at a higher rate, though that has so far had a negligible effect on global sea levels.

"Why (glaciers) are behaving like this is a mystery," said Bill Krabill, a researcher at NASA's Goddard Space Flight Center. "But it may indicate that the coastal margins of ice sheets are capable of responding quite rapidly to external changes, such as a warming climate."

Krabill said if the higher rate of ice flowing into the ocean from Greenland "accelerates or becomes more widespread, it would begin to have a detectable impact on sea level."

The glaciers may be speeding their flow to the ocean because melted ice on the surface is seeping to the bedrock, and the massive ice mountains are sliding on it, Krabill said.

Researchers believe the thinning is too dramatic to result from just

increased surface ice melting or decreased snowfall.

Much of the Earth's water is contained in ice frozen around the North and South poles. Earlier studies have suggested that melting of this ice could cause massive coastal flooding as the sea level rises.

The Associated Press contributed to this report.

Reuters
Warmest Decade so Far
Cooling Trend of 900 Years Dramatically Reversed this Century

W A S H I N G T O N, March 3 — The 1990s were the warmest decade of the millennium, with 1998 the warmest year so far, researchers said today.

The study adds to a growing body of evidence that the global climate has been getting steadily warmer—especially the last half of the 20th century.

"Temperatures in the latter half of the 20th century were unprecedented," Raymond Bradley of the University of Massachusetts said in a statement.

Their report, published in Geophysical Research Letters, shows that temperatures dropped an average of 0.04 degree F per century for the 900 years before the 20th century.

Human Climate Records

Because human climate records only go back a few hundred years, and do not cover the whole globe, the team at the University of Massachusetts and the University of Arizona looked at measurements other scientists have made of tree rings, ice cores and other "proxy indicators" that record climate variations.

They heavily relied on three sets of 1,000-year-long tree-ring records from North America, as well as tree rings from northern Scandinavia, northern Russia, Tasmania, Argentina, Morocco, and France.

The ice cores they studied came from Greenland and the Andes mountains in South America.

"As you go back farther in time, the data become sketchier," Michael Mann of the University of Massachusetts said.

Startling Revelations

"One can't quite pin things down as well, but our results do reveal that significant changes have occurred, and temperatures in the latter 20th century have been exceptionally warm compared to the preceding 900 years."

He said the records were not perfect, but complete enough to show "startling revelations."

"If temperatures change slowly, society and the environment have time to adjust," he said. "The slow, moderate, long-term cooling trend that we found makes the abrupt warming of the late 20th-century even more dramatic.

"The cooling trend of over 900 years was dramatically reversed in less than a century. The abruptness of the recent warming is key, and it is a potential cause for concern."

Warmest Year on Record

In January the National Aeronautics and Space Administration (NASA) and the National Oceanic and Atmospheric Administration (NOAA) said they had established that 1998 was the warmest year on record.

But their finding was based on records only going back 120 years.

In January the American Geophysical Union, which publishes Geophysical Research Letters, called for continued efforts to curb human-made carbon emissions to stop global warming.

In December the World Meteorological Organization (WMO) said the earth's mean surface temperature in 1998 was 0.58 degrees C above the average for the benchmark period 1961–90. For the century, global temperatures were almost 0.7 degrees C above those at the end of the 19th century.

A warmer global climate melts the ice caps, raising sea levels, and disturbs weather patterns, causing droughts, severe storms, tornadoes, hurricanes and blizzards.

Reuters

Glacier Signals Warming

Greenland's Ice Sheet Helps Cool Earth, but it's Shrinking

W A S H I N G T O N, March 4 — Large tracts of the Greenland ice sheet—a giant "ice cube" that helps cool the Earth's atmosphere—are

disappearing faster than scientists expected in a sign that global warming is having dramatic effects, researchers said today.

"It's probably slipping faster into the ocean than it has in the past. This isn't something we will have to worry about in our lifetime, but it will be a question for our children if this phenomena is accelerating," said William Krabill, project scientist on the NASA Goddard Space Flight Center study.

The world's glaciers are important because they help cool the Earth when temperatures rise. The Greenland glacier acts like a 2-mile thick ice cube in chilling the atmosphere, Krabill explained.

"An ice cube that big kind of buffers global climate nicely," Krabill said. But when warming periods continue too long, glaciers start spitting ice into the ocean at faster rates.

Sufficient Techniques

"If it continues there will be a sea level rise," he said.

Krabill said for the first time scientists had "sufficient techniques" to chart possible effects of global warming on the Greenland ice sheet over a five-year period.

Using an aircraft equipped with laser altimeters and a global positioning system to help pilot the plane 1,300 feet above the surface, scientists estimated how much the ice sheet had thinned since a 1993 study.

These remote sensing techniques showed the 1,000-mile long, 500-mile wide glacier had shrunk along the edges by up to 3 feet since 1993.

Glacier Is Shrinking

Writing in the journal Science Friday, Krabill's team said even though parts of the glacier actually increased there was still an overall loss of ice.

"These observations of extensive, near-coastal thinning of the Greenland ice sheet illustrate the importance of detailed monitoring of these regions," they wrote.

No one knows why the glacier is shrinking, but less snowfall or increased summer melting are probably not the culprits.

A more likely explanation is an accelerated process in which water from the ice surface seeps through crevices down to the bottom of the glacier. This lubricates the bottom layer of bedrock, making the glacier slide more

easily and speeding the flow of ice into the ocean.

Surface Temperature Rose

"This process is always taking place," Krabill said. "But it is on the increase now."

A study published Wednesday in Geophysical Research Letters said the 1990s were the warmest decade of the millennium, with 1998 the warmest year since 1860.

And the World Meteorological Organization said the Earth's mean surface temperature has risen by 1.3 degrees Fahrenheit , from the end of the last century.

The Greenland glacier is much smaller than the Antarctic ice sheet, where scientists have predicted even a partial collapse could cause global sea levels to rise up to 20 feet.

But further study of the Greenland ice sheet is important to understand whether the surprisingly quick thinning represents an indicator of global climate change.

"It is the signal where you can sense something is taking place," Krabill said.

Seventh Bay Area Episcopal Church Votes to Go Green

(Last updated 6:54 PM ET March 2)

BERKELEY, Calif. (BUSINESS WIRE) - In a showing of how people of faith are awakening to the need to take action on environmental issues such as global climate change, All Souls Episcopal Church of Berkeley voted unanimously last month to purchase power for its church facility from Green Mountain Energy Resources (GMER).

The church becomes the seventh Episcopal church to vote to switch to green power. Last October, California's Episcopal Diocesan Convention adopted a resolution entitled Episcopal Power and Light put forward by Sally Bingham, chair of the Diocese's Commission for the Environment. It instructs each of California's 87 Episcopal churches to buy clean, renewable power.

Bingham negotiated an arrangement with GMER whereby each church that signs up for GMER receives a $250 donation; for each parishioner, the church gets another $20.

"God's purpose for us is to love and to live in harmony with all that

God has made. We invite people of all faith to join with us in cutting greenhouse gas emissions by investing in energy efficiency and by buying renewable energy resources generated from God's gifts, the wind and sun," said Bingham.

Nancy Snow, chair of the All Souls environmental committee, said all 12 members of the committee voted for going green, and was delighted the decision was so easy. The church will not choose a specific product until an energy audit is completed.

"There is a strong expectation that we would want the highest level of renewable energy -- which would be the 'Wind For The Future' product," said Snow. "Wind For The Future" is comprised of power from new wind and existing geothermal, biomass and small hydro power sources.

Snow also noted that the church is encouraging its parishioners to perform energy audits and GMER has provided a CD-ROM that will be available at services whereby they can calculate how much money they can save through energy efficiency and then how much renewable energy they could buy with the savings.

"We're pleased to see Bay Area churches taking advantage of California's growing renewable energy market," said Lori Jablonski with the Center for Energy Efficiency and Renewable Technologies (CEERT). "We hope that churches, businesses and individuals statewide will follow their lead."

To date the following Bay Area Episcopal churches have also voted to switch to GMER: St. Aidain's of Diamond Heights; St. Holy Innocence, St. Luke's and Christ Church of San Francisco; St. John's of Montclair; and St. Christopher's of San Lorenzo. Another goal of Bay Area Episcopal Churches is to sign-up 3,800 parishioners. When that goal is reached, GMER will erect a new wind turbine that will have exclusively been supported by members of the Episcopal faith.

Excerpts from Clinton Remarks at DOI 150th Anniversary Event
U.S. Newswire
Transcript of Clinton Remarks at DOI 150th Anniversary Event
Department of Interior
Washington. D.C.

2:50 P.M. EST

THE PRESIDENT:

...Fourth, we must do more to meet our most profound, common global environmental challenge, the challenge of global warming. I have proposed a clean air partnership fund to help communities reduce both greenhouse pollution and smog, as well as tax and research incentives to spur clean energy technologies. I want to work with members of Congress in both parties to reward companies that take early, voluntary action to reduce greenhouse gases.

Let me say just one thing here that's not in the script. A lot of you clapped and a lot of you were smiling when I said I'd been to Utah, and people came up to me and said, this Grand Staircase idea wasn't such a bad idea, after all. And you nodded your head because you knew it all along. One of the biggest impediments to human progress in any free society is the persistence buried deep in the brains of the people at large or people in decision-making positions, of old ideas that aren't right any longer. The biggest impediment we have to dealing with the challenge of climate change is not cheap oil. It is the old idea that we simply cannot have economic growth without Industrial Age patterns of energy use.

And I see it all over the world. I see it here in the United States. I see it in the United States Congress, where one subcommittee forced us to spend hundreds of thousands of dollars last year trying to defend our climate change plan, which had no new taxes, no big new regulations, was solely devoted to tax incentives, and new research and development for new technologies.

Now, the fact is that things we do today to reduce greenhouse gas pollution -- with available technologies, not to mention those that are just ahead and almost within our reach -- will lower greenhouse gas emissions, will reduce the threat of global warming, and will create more jobs at higher incomes. The old idea is wrong. I ask the employees of the Interior Department to help the American people get rid of an old, wrong idea, so that we can do this. (Applause.)

These are the things that we have to do: setting aside more lands; making more livable communities; cleaning up our waterways; dealing with the challenge of climate change. We can do it. I say to the members of Congress in both parties, please join this crusade. I say to the majority party, the preservation of our natural resources, the stewardship of this great land, should not be a partisan issue. (Applause.) ...

Doubts About Electricity Deregulation

By Margaret Kriz

Electricity deregulation, much ballyhooed as the way to slash energy costs for all Americans, could raise power rates for homeowners in 19 states, according to an internal Administration study by the Agriculture Department's chief economist's office.

The draft study, a copy of which was obtained by *National Journal*, concluded that the greatest rate cuts would be enjoyed by consumers in the highly populated states of California, Florida, Illinois, New York, and Texas, where electricity rates have been higher than the national average.

However, deregulation would actually cause the power costs to rise—triggering a tumble in the gross domestic product—in rural regions of the country, particularly in areas that now have lower-than-average electric rates or are served by rural electric cooperatives. Cooperatives are consumer-owned businesses, and they serve 31 million customers, primarily in sparsely populated regions of the country.

The USDA analysis predicted that deregulation would cause energy price hikes in Alabama, Colorado, Idaho, Indiana, Kentucky, Mississippi, Montana, Nebraska, North Carolina, North Dakota, Oregon, South Carolina, South Dakota, Tennessee, Utah, Washington, West Virginia, Wisconsin, and Wyoming.

The findings are certain to complicate congressional attempts to pass a federal electricity deregulation bill—particularly in the Senate Energy and Natural Resources Committee, which is dominated by members from rural regions. Members of Congress who have seen the study are calling for immediate congressional hearings to examine the new data.

"It's shocking," Sen. Craig Thomas, R-Wyo., said of the report. "What's critical in this analysis of deregulation is whether or not there is a benefit to all consumers. And the answer pretty clearly is, there is not." Thomas, a member of the Senate Energy and Natural Resources Committee, said rural members fear that their constituents will lose services under electricity deregulation, much as many lost access to airline service when that industry was deregulated.

Sen. Kent Conrad, D-N.D., described the USDA study as a "warning light for anybody who has a proposal on deregulation that what they're doing is putting a noose around the neck of rural Americans and tightening that noose in the midst of what is already a financial calamity. We're in an agriculture recession bordering on depression," he said. "And absolutely the last thing we need is to have a rate increase on electric utilities."

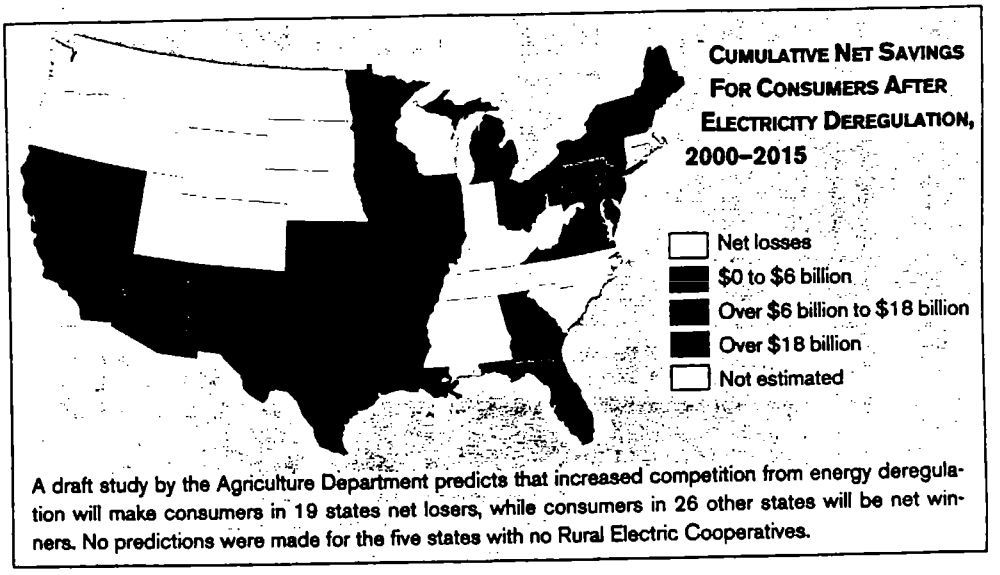
Rep. John D. Dingell, D-Mich., ranking member of the House Commerce Committee, said the study underscores the need for "great caution in this area. We hear a lot of win-win happy talk on the subject of utility deregulation," he said. "But people need to understand that there will be winners and losers in a deregulated world."

Many pro-competition members and industry lobbyists have been promoting legislation that would require every state to allow competition in its electricity industries by a firm deadline. But lawmakers from the rural West and South have long opposed federal efforts to force all states to deregulate. Thomas, for example, has introduced a bill that would give the states broad discretion on electricity deregulation.

But Conrad said that none of the bills introduced so far would eliminate the negative impacts of deregulation on rural regions. "The kind of proposals evaluated in this study clearly would be a stab in the back to those parts of the country that are already suffering badly," he said.

RICHARD A. BLOOM

Craig Thomas: "The answer pretty clearly is" that deregulation doesn't benefit everyone.



A draft study by the Agriculture Department predicts that increased competition from energy deregulation will make consumers in 19 states net losers, while consumers in 26 other states will be net winners. No predictions were made for the five states with no Rural Electric Cooperatives.

Glenn English, president of the National Rural Electric Cooperative Association, agreed. "There are going to be a lot of members of Congress who are going to be thinking carefully about how they can protect their districts, or whether deregulation is really and truly in the interest of their districts," said English, a former Democratic congressman from Oklahoma.

The Clinton Administration's electricity legislation, which is currently being revised, would allow states to opt out of electricity deregulation. A modified version of the Administration's 1998 bill is expected to be released sometime this spring.

The White House has repeatedly argued that electricity deregulation will cut national energy costs by $20 billion a year. That estimate, used to support the Administration's 1998 deregulation bill, was based on economic models developed by the Energy Department.

The Agriculture study, which is dated January 1999, did not take issue with White House claims that deregulation will have a broad national benefit. However, the USDA economists used the Energy Department's economic models and "took the market outcomes one step further than DOE by looking at individual states," according to a briefing paper prepared for Agriculture Secretary Dan Glickman.

Based on that analysis, the study concluded that "restructuring will bring savings to retail consumers; however, savings are concentrated in some states, while substantial costs are borne by consumers in other states."

USDA Chief Economist Keith Collins said that the findings of the study are still preliminary and are being reviewed by other federal agencies. Collins added that his office was asked to conduct the study of deregulation's effects on rural areas by Jill Long Thompson, USDA undersecretary for rural development. White House officials said they have not seen the analysis and would not comment on it.

The Agriculture Department has a vested interest in the future of the rural electric cooperatives—also known as RECs. The USDA's Rural Utilities Service currently has $31 billion in loans outstanding to the cooperatives. "Financial stress among the nation's RECs would carry risk to the U.S. taxpayers, should the RECs not be able to repay loans on schedule," the analysis warned.

The USDA report focused on 45 contiguous states that are served by rural electric cooperatives. According to that assessment, "RECs may be less financially resilient to the effects of a shift to competitive pricing than the [investor-owned utilities] will be." The study concluded that deregulation will be expensive for homeowners who get their energy from rural electric cooperatives because RECs tend to be located in rural regions, with few customers and high construction costs.

"It wasn't by chance that electric cooperatives sprung up in these areas," English said. "The big power companies didn't want to serve these areas because it cost a lot of money to build and maintain the infrastructure."

In a competitive electricity market, the cooperatives' most lucrative industrial customers are likely to be offered cheaper electricity from newly competitive energy companies. To keep their biggest customers, the cooperatives are likely to offer discounted electricity rates of up to 30 percent, the report said.

The bargain prices, however, would have to be offset by hikes in residential rates, which the report estimated could rise by 5 cents per kilowatt hour. If half of the cooperatives' industrial customers decided to buy power from other companies, the RECs' remaining customers would face price hikes of up to 2.5 cents per kilowatt hour, the report said.

Cooperative companies would face even higher rate hikes if the federally owned Power Marketing Administrations are required by Congress to sell electricity at market prices. Cooperatives now pay a discounted rate for electricity from the PMAs. The report said that without that subsidy, cooperatives would face electricity price hikes of 11.4 percent in South Dakota; 9 percent or more in Montana and Utah; 4.1 percent to 4.4 percent in Colorado, Nebraska, and Nevada; and 3 percent to 3.8 percent in Iowa, New Mexico, and Wyoming.

But many utility industry officials have protested that RECs and some quasi-governmental energy companies are receiving government-subsidized electricity, which has unfairly lowered their power rates. "Subsidies distort competition in electric markets," said M. William Brier, vice president for communications and statistics at the Edison Electric Institute. "Congress must address subsidies to make sure the playing field will be level for all suppliers in competitive markets."

To prevent deregulation from hurting the rural economies, the USDA analysis recommends creating a "safety net" for adversely affected electricity consumers—a fund of about $1 billion in 2000, increasing to about $2.4 billion in 2015.

The study was conducted after an Agriculture Department staff member raised concerns, during a series of 1997 White House meetings, about deregulation's impact on rural communities. Those gatherings of the White House Interagency Working Group on Electric Restructuring ultimately resulted in the Administration's 1998 deregulation proposal.

According to the briefing paper for Glickman, a staff member of the department's Rural Utilities Service, who represented the USDA on the White House panel, "continually called attention to the need for a 'rural safety net' to protect rural electric consumers from adverse effects as a result of retail competition." ■

Fiddling While Antarctica Burns

By David Helvarg

WASHINGTON

I am glad to count myself among the handful of Washington reporters who missed the impeachment trial of the President. I was off covering a far more important story in Antarctica.

My trip convinced me that a hundred years from now Americans will look back at late-20th-century scientific research done in places like Antarctica and wonder how society could have been distracted by the sexual misadventures of a politician.

For the past 30 years climatologists have predicted that global warming would occur most rapidly

Next century's scandals have begun — near the South Pole.

at the poles, a fact now confirmed by scientists in Alaska, Canada and Greenland, at the North Pole and on the Antarctic Peninsula. The peninsula is a 700-mile-long rocky kite tail curving out from the coldest, driest, highest continent on earth. The peninsula is also, as I discovered, a wildlife-rich habitat undergoing a frighteningly rapid change.

At Palmer Station, one of three Antarctic bases administered by the National Science Foundation, I spoke with the chief scientist, Bill Frasier, who has been studying the Antarctic climate since 1974.

"When I was a graduate student, we were told that climate change occurs but we'd never see the effects in our lifetime," Dr. Frasier told me. "But in the last 20 years I've seen tremendous changes. I've seen islands pop out from under glaciers; I've seen species changing places and landscape ecology altered."

While global temperatures have, on average, warmed by 1 degree Fahrenheit over the last century — paralleling increased industrial output of carbon dioxide and other greenhouse gases — the Antarctic Peninsula has seen a jump of more than 5 degrees in just 50 years, including an incredible 10-degree average warming during its winter months. As a result, huge pieces of the ice shelf — some sections are as large as the state of Delaware — have begun calving off its eastern shore.

And scientists are now discussing the possibility that the adjacent Western Antarctic Ice Sheet could experience a sudden meltdown, raising global sea levels by more than 15 feet over the next century (instead of one to three feet, as currently predicted).

That event could, among other things, turn the Trump Tower mezzanine into waterfront property. While most experts believe this melting will occur sometime after the 21st century, by the time they know for sure it will probably be too late to do anything about it.

Today's warming poses a more immediate threat to Antarctica's abundant wildlife. And here, too, there are implications that extend to the rest of the world, researchers told me.

Tiny shrimplike creatures called krill — the most abundant animal on earth in terms of their total biomass — are the broad base of Antarctica's food chain, consumed in vast quantities by penguins, seals and whales. (A single blue whale eats four tons a day.) Without access to sea ice, krill shrink, lose weight and are vulnerable to early death.

A decline of krill due to melting of the ice shelf could wreck much of the Antarctic ecosystem that depends on them.

Rising temperatures also increase precipitation — which, in Antarctica, takes the form of snow. Excessive spring snow has disrupted the nesting and breeding of Adelie penguins, leading to the extinction of many of their colonies. At the same time, more adaptable species like chinstrap penguins, elephant seals and fur seals are increasing their numbers, threatening to displace sea ice-dependent animals like Weddell seals, crabeater seals and leopard seals.

What these changes in the Antarctic Peninsula suggest is that rapid warming could speed up a global chain reaction of extinctions that — thanks to the impact of humans — is already under way.

"Weedlike" species that are highly adaptable to disrupted habitat (pigeons, rats, deer and elephant seals) will displace more specialized creatures (tigers, monarch butterflies, river dolphins and Adelie penguins) that depend on unique ecosystems like tropical rain forests, coral reefs and the Antarctic ice shelf.

Rising temperatures may kill off certain plant species as well. At Palmer Station, I met Tad Day, a plant biologist who studies Antarctica's only two flowering plants: hairgrass and pearlwort. He has found that warming improves growth of pearlwort but appears to have a negative impact on hairgrass. Hairgrass, which was the dominant species in Antarctica, is now being displaced by pearlwort, a mosslike plant.

"Global warming," Dr. Day told me, "has the capacity to shift the competitive balance of species in ways that, until we get out there and do the research, we don't understand yet, and that could have important consequences on our ability to produce food and fiber."

Increasingly reliable climate models now predict a 2-to-6-degree planetary warming in the next century, with regional shifts in agriculture that will favor the industrial north at the expense of the poorer nations of Africa and Latin America. There will also be increases in extreme weather events, coastal storms and the spread of tropical diseases.

In that light, the work of Antarctic scientists like the ones I met suggests that — for better or worse — environmental change will define much of the politics of the 21st century, whether in Washington or at the South Pole. □

David Helvarg is a television documentary producer and the author of "The War Against the Greens."

The New York Times

Sunday, March 7, 1999

Reactors: Healthy but Dying

By MATTHEW L. WALD

WASHINGTON

TWENTY years after the meltdown at Three Mile Island, the nuclear industry has succeeded in ways that were hard to imagine in March of 1979 as Pennsylvania cowered in fear, plants around the country lost their luster and scores of half-built reactors were abandoned. The industry is doing better now, but ironically extinction is in sight.

Today, reactors are quietly producing about one-quarter more electricity each, and the level of radiation exposure to workers is down along with the number of automatic shut-downs. Uranium fuel is cheap and plentiful, and, with low interest rates, so is nuclear power's biggest ingredient, capital. The industry has also happily achieved a lowered public profile.

"And everything seems to be falling apart," Michael L. Corradini, a professor of nuclear engineering at the University of Wisconsin, said sadly.

The nuclear industry will be around for years to come, but seems to have peaked in terms of the number of working reactors and their share of power generated nationally. No reactors are being built; the last ordered were Palo Verde 1, 2 and 3 in Arizona in October, 1973, the month the Arab oil embargo began.

Since then there has been an energy revolution, but it wasn't nuclear. A barrel of oil, which has roughly enough energy to run a small house for a month, sold for $12 then; by 1979 it was $40. Today it is back down around $12. These gyrations upward lured utility companies into nuclear decisions that now look ridiculous.

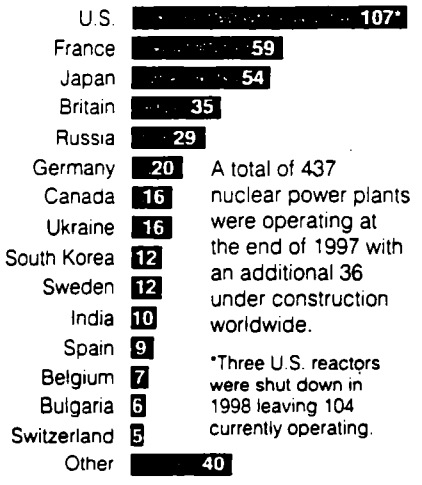
For example, Millstone 3 reactor in Waterford, Conn., was far over budget during construction in the late 1970's. Even after the incident at Three Mile Island, consultants said it was still worthwhile to finish Millstone if oil averaged $96 a barrel over the reactor's lifetime. The Energy Information Administration, part of the Energy Department, predicted that the price would be $100 by the turn of the century. But oil is now about a 10th of that.

Reactors are a bit like the Concordes, the supersonic transport planes that first flew a few days before the Three Mile Island accident, or the Apollo moon rockets, which made the last of their flights to the moon a few years before. They are technological artifacts of an era slipping into history.

Cloning the best practices from one utility to another, policing each other, getting more output from the reactors, the industry essentially adopted the Greenpeace motto: a nuclear accident anywhere is a nuclear accident everywhere. It vowed to have no more meltdowns. Not counting the 1986 catastrophe at Chernobyl, where the nuclear reactors are of a different design, the industry has so far succeeded.

Global Nuclear Energy

The United States has the most reactors

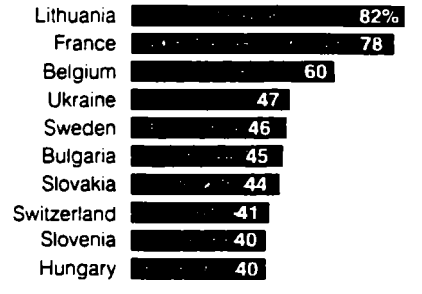


A total of 437 nuclear power plants were operating at the end of 1997 with an additional 36 under construction worldwide.

*Three U.S. reactors were shut down in 1998 leaving 104 currently operating.

... but other nations rely on theirs more.

Percentage of energy produced by nuclear power plants for the 10 nations with the highest reliance on nuclear energy. The United States produced 20 percent of its electricity from nuclear power in 1997.



Source International Atomic Energy Agency

The New York Times

BUT not everyone agrees that the industry's performance is greatly improved. James P. Riccio, a nuclear expert at Critical Mass, a Washington-based nonprofit organization affiliated with Ralph Nader, said that the plants operated more now because the Nuclear Regulatory Commission had shortened the list of equipment that had to be in perfect working order for them to run, and the number of automatic shut-downs has declined because the number of manual shut-downs is up. "They've gotten more intelligent about what they're doing," he said, "but then again, they've had to."

There have been other changes in the last 20 years. If two decades ago nuclear power seemed forbidding and secret, today anyone can log on to Nuclear Regulatory Commission Web site, which offers detailed specifications for each reactor (http://www.nrc.gov/AEOD/pib/pib.html). For Three Mile Island unit 1, the undamaged twin of the reactor that had the meltdown, the data includes the identification numbers stamped on the water pumps. Another table for Three Mile Island shows the temperatures and pressures at which the emergency systems will automatically start, with different numbers depending on how many coolant pumps are running.

But elsewhere technology is accelerating, too. Natural gas has become cheaper to find and recover, and the system for turning it into electricity has improved steadily. The newest plants produce twice as many kilowatt-hours from a thousand cubic feet as the ones that nuclear power was competing with in 1979.

The real reactor killer, according to Professor Corradini and others, is something that was not thought of in 1979 — deregulation in the the utility industry. Nationwide, power companies are fissioning into companies that will distribute electricity and sell it to consumers (like local phone companies) and other companies that will generate power and compete to sell it (like long distance carriers).

THE companies that built the 104 reactors still operating ordered them in the 1960's and early 1970's. Asked then which source of power would be the cheapest in the next few decades, they had guessed nuclear, knowing that if they were off by a few tenths of a cent per kilowatt-hour, the consumer would pay or reap the difference. Now, if they are asked the question at all, they say natural gas. Today they are building nothing and buying power from independent producers, none of whom seems inclined to place a multi-billion-dollar bet on a reactor where the output might be uncompetitive in 2010, or 2020 or 2030, for that matter.

"The investment risk changed," said James K. Joosten, a nuclear engineer and consultant and former official of the Organization for Economic Cooperation and Development, a group of industrialized nations. "In old days, people used to talk about nuclear power in religious terms, and say, 'It's good and we need to do it and if the public doesn't buy into it, we'll make them buy into it.' Realistically, today it's a business decision."

By Mr. Joosten's estimate, if electricity is completely deregulated, the market price will be about 2 cents per kilowatt-hour at the wholesale level, a price that about 28 nuclear plants cannot achieve. And if some states offer a one-time payment to their utilities because they have to close such plants in the transition to deregulation, then some reactor owners with marginal plants will jump at that offer while they can get it.

The New York Times

Sunday, March 7, 1999

Mock Invasion Takes a Detour Above Sea Life

By BILL STAGGS

SAN FRANCISCO, March 12 — Giving in to the concerns for the safety of whales and other marine life, the Marine Corps has called off a mock assault by hovercraft on Monterey Bay.

Six days of war games, scheduled to begin on Saturday in Northern California, hit a snag when the California Coastal Commission objected on Thursday to the shore landing by the hovercraft in the bay, much of which is a marine sanctuary, about 90 miles south of San Francisco.

The Monterey component of the games — part of a $4.5 million training exercise called Urban Warrior — will go on as planned at two military sites, the Naval Postgraduate School and the Defense Language Institute, both in Monterey. But the 700 troops and "actors" will now skip the beach and will be taken from ships by helicopter to the staging sites. There, they will play out scenarios meant to test warfare equipment and techniques used to fight enemies in urban, seaside environments in foreign countries.

Mark Delaplaine, a San Francisco analyst for the commission, said the coastal watchdog group was particularly concerned about the effect of the hovercraft, amphibious craft that ride at high speed on a cushion of air, on migrating gray whales, now making their annual trip north. The endangered southern sea otter and a coastal bird, the snowy plover, were also thought be at risk.

From 15,000 to 20,000 gray whales make the trip from Baja California to Alaska every spring, Mr. Delaplaine said, and March 10 to March 15 is the busiest week, with 20 whales an hour cruising by. And while the male whales tend to take a straight northerly course across the broad mouth of Monterey Bay, female whales and their weeks-old offspring venture closer to shore.

"The mother and calf pairs tend to hug the coast where there are canyons and food," Mr. Delaplaine said. "They would see the hovercraft and hear them and they would freak, with the potential for the mothers and calves to become separated."

Environmentalists complain that war games are serious business for whales.

Lieut. Col. Jenny Holbert, a Marine Corps spokeswoman for the Urban Warrior program, said she was disappointed that the Coastal Commission objected to the water approach.

"The hovercraft were a means to get the marines to land," Colonel Holbert said, "and the fact that we are changing our mode of transportation does not affect the exercise."

Once ashore in Monterey, 400 uniformed marines and 300 trained actors will simulate incidents involving the release of chemical and biological weapons, as well as practice humanitarian, peacekeeping and disaster relief missions. Following the mock skirmishes, the teams will instruct local police, fire and emergency personnel on incidents involving those weapons.

The Monterey sites were chosen for the exercises after the National Park Service last year denied the Marine Corps permission to use the Presidio, a former Army post in San Francisco, with shoreline both on San Francisco Bay and along the Pacific Ocean.

Operations were quickly reorganized using Monterey, and a recently closed Naval air station and former Naval hospital in nearby Oakland.

On Monday, hovercraft, Harrier jets and Cobra helicopters will land at the closed Alameda Naval Air Station. As many as 1,200 marines will then conduct four days of daytime exercises at the abandoned hospital complex, with marines simulating exercises to deal with terrorists and other enemies.

Some residents of the San Francisco Bay area plan to protest the mock invasion, saying that the hardware and troops will cause environmental damage, with the hovercraft stirring up toxic sediments in the bay.

An Oakland City Councilwoman, Nancy Nadel, said today that she objected to the exercises themselves, and to the fact that the City Council did not get to vote on them.

"My concern is that this is really nothing but a blatant recruitment exercise for the military," she said, adding that the Marine Corps could have used one of its coastal bases and a constructed "set" to practice warfare techniques.

"It is a public relations event that has nothing to do with humanitarian exercises as has been claimed," she said. Ms. Nadel said she also objected to the planned exhibits of military hardware in Oakland and Alameda on Sunday.

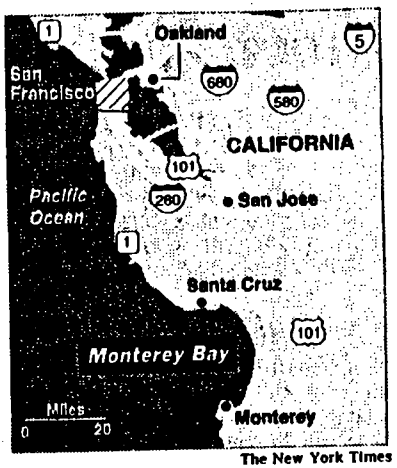
"This is a needless glorification of the toys of war at a time when we are working hard to minimize violence in our city," Ms. Nadel said.

Protests are planned to coincide with the hovercraft landings on Monday morning and Monday afternoon at the office of Oakland's new Mayor, Jerry Brown.

Tim Jones, a spokesman for the Marine Corps Warfighting Laboratory in Quantico, Va., — where Urban Warrior was conceived and planned — described the games as real-world tests of warfare models that the Marines expect to employ in future military encounters around the world.

"When the President sends the Marines in," Mr. Jones said, "we'll be feeding people, keeping the peace, and — when necessary, like it or not — we'll be fighting people," he said.

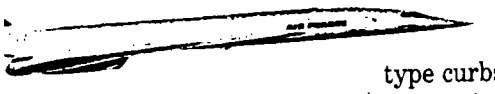
Previous Urban Warrior exercises have been conducted in Chicago, New York City, Charleston, S.C., and Jacksonville, Fla.



The New York Times

Troops, minus hovercraft, will skip the beach at Monterey.

The New York Times
SATURDAY, MARCH 13, 1999



RACKET BALL: *The Concorde vs. U.S. jet engines*

ALL COZY OVER GLOBAL WARMING

AS RECENTLY AS LAST YEAR, worldwide efforts to curb global warming faced gridlock. The U.S. and other nations couldn't agree on the 1997 Kyoto Protocol, which calls on industrialized nations to sharply cut greenhouse gas emissions. But there's now a proposal that would spur action on emissions. On Mar. 4, Senators John Chafee (R-R.I.), Joseph Lieberman (D-Conn.), and Connie Mack (R-Fla.) introduced a bill to give companies credit for their voluntary efforts to cut emissions of greenhouse gases. Will it pass? Chances are good because industry groups, expecting Kyoto-type curbs, have joined environmentalists in backing the idea.

Environmental Cancer: Science, Not Politics

In his Feb. 24 Leisure & Arts review of S. Robert Lichter and Stanley Rothman's book "Environmental Cancer—A Political Disease?" Michael Fumento writes:

"As Messrs. Lichter and Rothman demonstrate, this skewing of scientific reality is accomplished not just through a reporter's choice of stories and the flow of his narrative but also through his selection of "experts" to quote. Two such 'experts' are Sidney Wolfe, of the Naderite group Public Citizen, and Samuel Epstein, of the University of Chicago. They can be counted on to sound the alarm, claiming that a given man-made chemical, pollutant or device causes cancer or other health problems. That's probably why their names pop up regularly on the news. Yet 'each received a high confidence rating from fewer than one in four cancer researchers,' the authors write."

The majority of these "cancer researchers," who trivialize the cancer epidemic and the role of industrial carcinogens, are oncologists fixated on damage control (diagnosis and treatment) and basic molecular biologists, with minimal interest or expertise in the causes and prevention of cancer. Nevertheless, up to one in four of these researchers accorded to me and Dr. Wolfe, "a high confidence rating," in contrast to Mr. Fumento's accusation of our "exaggeration and scaremongering."

Also, a group of 65 authorities in public health and preventive medicine, together with past directors of three federal agencies—OSHA, the National Institute of Environmental Health Sciences, and the National Institute of Occupational Safety and Health—endorsed my February 1992 statement warning that "Age-standardized incidence rates have escalated to epidemic proportions over recent decades while the ability to treat and cure most cancers has not materially improved. Much cancer is avoidable and due to past exposure to chemical and physical carcinogens in the air, water and food and the workplace."

SAMUEL S. EPSTEIN, M.D.
Professor
Environmental and Occupational Medicine
University of Illinois at Chicago
Chicago

THE WALL STREET JOURNAL
MONDAY, MARCH 15, 1999

Needed: a G.O.P. Environmental Identity

By Tom Ridge

HARRISBURG, Pa.

At the turn of the century, President Theodore Roosevelt derided political leaders who talked a good game on the environment but did little else as "nature fakers." Roosevelt would probably apply that same label to many of today's politicians — including some members of his own Republican Party.

Tom Ridge is Governor of Pennsylvania.

Too many Republicans have allowed the party's bedrock principle of limited government to excuse the absence of an aggressive, creative environmental strategy — resulting in a widely held belief that Republicans are more interested in protecting big business than in preserving our parks, air, rivers and forests.

As a result, environmental policy is monopolized by Democratic ideas. The public faces a choice between Democratic clean air and Republican economic growth.

The truth is that we need both. And Republicans need to present alternatives to Democratic policies — alternatives that effectively address environmental crises without betraying the party's core values.

Fighting sprawl — and Al Gore's agenda.

The Republicans' latest missed opportunity came when Vice President Al Gore recently announced his proposal to curb suburban sprawl. Certainly, politicians of both parties can agree that the strip-malling of America's rural landscape is a serious environmental problem — and one that should make us rethink the way that cities and businesses grow.

The Vice President has responded to the sprawl problem with a traditional environmentalist plan: for the Federal Government to buy and conserve large tracts of open space. But instead of simply opposing this as another costly, interventionist Federal program, Republicans should seize the chance to promote a solution that would counter sprawl while supporting responsible growth.

Among the biggest factors contributing to suburban sprawl are the substantial Federal impediments to the redevelopment of urban land. Often, businesses invade the countryside because they can't afford to clean up and reuse polluted industrial sites in the cities. There are about 250,000 such sites nationwide, with an average size of about 20 acres — so there may be millions of acres of urban land lying needlessly fallow.

Many companies will not develop urban sites because they fear being penalized for the sins of past polluters — the result of a Federal environmental protection bureaucracy that measures success by the number of businesses prosecuted and the amount of the fines levied.

In Pennsylvania, we've discovered that a strategy of cooperation with businesses, not confrontation, works best to revitalize cities and contain sprawl in the suburbs.

The Federal Superfund program has, in 18 years, cleaned up only 13 of its original 111 sites in Pennsylvania — incurring unconscionable costs with little to show for it. By comparison, in just four years, a state land-recycling program has cleaned up and put to use more than 350 polluted industrial sites in Pennsylvania. The program gives developers immunity from liability once they have met certain clearly defined standards insuring that future occupants of their property will not be exposed to harmful pollutants.

For too long, too many Republicans have opposed almost any government involvement in environmental management. At the same time, too many Democrats have believed that government is the only player that matters. This either/or approach has held businesses hostage, rendered government ineffectual and left the environment to degrade.

Pennsylvania's experience shows that Republicans have to offer their own model of environmental stewardship. That way, people can judge who are the nature fakers — and who, like Theodore Roosevelt, are the true conservationists. □

The New York Times

MONDAY, MARCH 15, 1999

Clips 3/15

Washington Post
Studies May Alter Insights Into Global Warming

By Curt Suplee
Washington Post Staff Writer
Monday, March 15, 1999; Page A07

Two new studies of the Earth's ancient atmosphere may alter the way scientists understand the relationship between airborne carbon dioxide and climate change--and hence the dynamics of future "greenhouse" global warming.

In one paper, published in the March 11 issue of the journal Nature, researchers said they found that during the past 11,000 years--the period known as the Holocene epoch that began around the end of the last ice age and extends to the present--levels of carbon dioxide, a potent greenhouse gas, did not remain constant until the onset of the industrial revolution, as many had long supposed.

Instead, although average global temperatures stayed relatively stable, carbon dioxide levels fluctuated considerably during the Holocene, according to a team from the Scripps Institution of Oceanography and the University of Bern, Switzerland. "The system was never in equilibrium because the carbon dioxide levels never stabilized," said Martin Wahlen of Scripps, part of the University of California at San Diego.

Presumably this occurred because of still-unexplained changes in the amount of carbon dioxide taken up by oceans and vegetation, especially short-term variations of 10 percent or more in the quantity absorbed by plants. "This suggests that the terrestrial biosphere may also exhibit changes in the future," said Thomas F. Stocker of the University of Bern. What they might be, however, is uncertain.

In the other study, reported in the March 12 issue of the journal Science, Scripps investigators addressed one of the most vexing "chicken-and-egg" questions in climate research. Namely, when the Earth shifts from glacial to warm periods (as it does every 100,000 years or so), which comes first: an increase in atmospheric carbon dioxide levels, or an increase in global temperature? Contrary to what many believe, the team concluded that the temperature rise comes first, followed by a carbon dioxide boost 400 to 1,000 years later.

That's what the researchers found at glacial-interglacial transitions from 240,000, 140,000 and 13,000 years ago. That sequence of events appears to contradict the fundamental logic of simple greenhouse warming theories, which argue that increases in heat-trapping gases will be followed by higher surface temperatures.

The analysis also points to vegetation as a major source of the carbon spike. "Previously it was thought to have originated primarily in the ocean biosphere," said Julie Palais of the National Science Foundation, which supported both studies. "But this work suggests that the terrestrial biosphere played a significant role. . . . There are clearly implications for the future, considering the rate at which the rain forests in South America are currently being destroyed."

Both research projects used evidence from hundreds of ice specimens, or "cores," taken far below the surface of Antarctica. Each layer contains tiny bubbles of air snared in the ice when it formed from snow. Investigators placed the samples in vacuum chambers, released the traces of air, and analyzed them for carbon dioxide content and an isotope of carbon that indicates where the gas was last.

Carbon, a ubiquitous element in the Earth's surface and atmosphere, exists in three isotopes. Photosynthesis, the process whereby plants use sunlight to turn carbon dioxide into organic matter, favors the uptake of the lightest, carbon-12 atom, leaving the atmosphere with a relative plenitude of carbon-13, the next heaviest isotope. When plants die and rot, they release that carbon-12 back into the atmosphere. So the ratio between the two isotopes at any time indicates how much carbon dioxide is being absorbed by plants.

That quantity may be critical to future climate changes. In general, civilization releases about 6 billion tons of carbon (in the form of carbon dioxide) into the atmosphere every year. But only 3 billion tons stay there; the rest is absorbed into what are called carbon "sinks." Half dissolves into the ocean; the remainder ostensibly is taken up by vegetation. Consequently, the performance of these sinks is an important variable in how much carbon dioxide is left in the air to trap heat and possibly raise global temperatures.

The Scripps-Bern authors writing in Nature found that at the beginning of the Holocene, the atmosphere contained about 268 parts per million by volume of carbon dioxide, up from 180 to 200 ppmv in the depths of the last ice age about 18,000 years ago. By the late 1700s, it had risen to 285 ppmv. (Since then, the concentration has climbed to 364 ppmv and is still growing. That is, it rose by the same amount--80 ppmv--in the past 200

years that it had from the coldest part of the previous ice age to the late 1700s.)

In accordance with orthodox notions, "one commonly referred to the 'preindustrial CO2 concentration of 280 ppmv,' " as if it were constant, Stocker said. But now "this has to be revised," he noted.

As the world warmed its way out of the last ice age, carbon dioxide levels first dipped to 260 ppmv about 8,200 years ago, probably because receding glaciers made way for the increasing vegetation that took up a lot of gas. But then the carbon dioxide content began to creep back up as ocean temperatures rose (decreasing the amount of dissolved gas oceans could hold) and land masses cooled and dried out (decreasing the carbon-trapping activity of photosynthesis).

"The direct relevance of this finding," said Jean Lynch-Stieglitz of Lamont-Doherty Earth Observatory at Columbia University, "is that we can expect that as climate warms, the terrestrial biosphere will probably be capable of holding more carbon than it can today."

But uncertainty is high. Over the past few thousand years, there have been dramatically abnormal climate events. But "none of those involved a rate of CO2 change like that occurring now," said Lamont-Doherty's Gerard Bond, and that "is a measure of how serious the problem might be."

As for the carbon dioxide lag-time findings, "the crux of the issue" for nonscientists is that "if the observation that increases in temperature lead increases in CO2 in the natural system, then industrialization is forcing the natural system backwards, and our natural analogs deduced from past behavior might not be good models for predicting what's going to happen in the future," said Joan J. Fitzpatrick, technical director of the U.S. Geological Survey's National Ice Core Laboratory in Denver. "That's a sobering thought."

Indeed, despite the sizable margin of possible error in the analysis, "greenhouse skeptics will probably jump on this paper as 'proof' " that there is no necessary causal relation between carbon dioxide levels and temperatures, said Anthony J. Broccoli of the National Oceanic and Atmospheric Administration's Geophysical Fluid Dynamics Laboratory in Princeton, N.J. But in fact, he said, the new findings are completely consistent with a "positive CO2-temperature feedback" system in which changes in one prompt changes in the other.

Monday, March 15, 1999 Published at 14:22 GMT
BBC News Sci/Tech

Coral crusade

Beneath the beauty of the reef most of the coral is dead

By Roger Harrabin of BBC Radio 4's Today programme

It is far cry from Westminster, but Deputy Prime Minister John Prescott's visit to the idyllic Maldives islands carries a serious purpose.

> Scientific reports have confirmed the bad news first mooted last year about massive destruction to coral reefs caused by a sudden increase in sea temperatures in 1998.

Mr Prescott, on his way back from an official visit to India, stopped off in the Maldives to see the damage to the coral in the Indian Ocean for himself.

El Nino effect

Like most of the tourists who come to the islands, Mr Prescott has been snorkelling in the clear waters.

> But what most do not realise as they gaze at the fish around the reefs is that the corals on which the reef system depends have been decimated by last year's surge in sea temperature.
>
> The ocean current known as El Nino is thought to be mainly responsible. The US State Department says that climate change, probably fuelled by pollution, is also

almost certainly implicated.

In some areas more than 95% of shallow water hard corals have died. The coral has been killed by warm bodies of water being pushed through the oceans by the El Nino current.

"This coral bleaching event has been the worst ever recorded," says Jason Rubens of the Global Reef Monitoring Network.

"The damage to coral particularly in the Indian Ocean has been spectacular and that damage has spread to the Great Barrier Reef, most parts of South-East Asia, some parts of the Pacific and recently parts of the Caribbean."

Obligation to help

In the Indian Ocean, El Nino coincidentally struck at the hottest time of the year, and in a year when background temperatures of air and water globally were the highest recorded.

> The effect was to destroy the tiny invertebrates called polyps whose skeletons build the structure of the reefs and could not withstand a dramatic change in temperature.
>
> As Mr Prescott descended on his fact-finding dive, he immediately found himself surrounded by shoals of multi-coloured fish.

The coral reef looked wonderful. But in fact the scientists estimate coral death at around 80%. Mr Prescott gave his reaction to what he had seen.

"It is tragic that something as beautiful as a coral reef can be lost in such a manner. But we can prevent it if we

do more and I feel we have an obligation to do something about it," he said.

The results of the mass coral death are also potentially devastating economically.

> "They provide fisheries for the local population and for exports, an excellent form of sea defence against strong wave energy, storms and sea level increase. Also they are important for generating tourism revenue," explains Dr Susan Clark of Newcastle University, who has been researching in the Maldives.
>
> It is impossible to tell yet how the fisheries will react in the medium term to the huge death of coral.

But it is likely that the reef building capacity of the coral will be desperately needed for protection from the waves by coastal communities under threat from sea level rise caused by a global rise in temperature.

Mr Prescott said his visit would provide ammunition for future discussions on the need to protect the oceans and to cut the gases pollution which may fuel global warming.

Martha L. Wofford 03/16/99 09:28:00 AM

Record Type: Record

To: See the distribution list at the bottom of this message

cc: Meagan M. Earley/WHO/EOP
Subject: State & Local climate clip

Anti-global warming treaty measure a victim of timing

By Dave Williams
Savannah Morning News

ATLANTA -- A powerful state Senate committee chairman has quashed a resolution opposing an international global warming treaty for fear of sending a message that Georgia is not concerned about clean air.

But the resolution's chief House sponsor is vowing to continue pushing the measure, backed by the oil and farming industries, if only to make a statement of a different sort.

The non-binding resolution urges the U.S. Senate to reject a 1997 treaty requiring industrialized nations to reduce emissions of greenhouse gases linked to global warming. It charges that meeting the targets set in the treaty could cost the average Georgia household $1,708 per year in higher prices for fuel, utilities, consumer goods and services.

But Sen. David Scott, D-Atlanta, chairman of the Senate Rules Committee, is concerned that the resolution is pending even as lawmakers are considering Gov. Roy Barnes' plan to create an authority to oversee transportation projects in areas that don't meet federal air-quality standards. The authority would design improvements aimed at bringing those areas back into compliance.

"It's not good timing," said Scott, who is holding up the resolution in his committee. "When you have something in place that's moving in the right direction, the kind of message we should be communicating should not be contrary to meeting clean-air standards."

President Clinton signed the treaty earlier this year. But it has run into stiff opposition in the U.S. Senate because of provisions that would exempt developing countries.

"I don't have a problem with doing something about global warming," said state Rep. Tom McCall, D-Elberton, the resolution's chief House sponsor and a farmer. "What I have a problem with is the United States and Japan being the ones that have to do everything, while all of these developing nations ... are under no restrictions."

"Our major (agricultural) competitors in China, Mexico and Argentina would be exempt," added Adam Sharpe, director of governmental relations for the American Farm Bureau Federation.

But Jennifer Lyons, director of the Atlanta-based Georgia AirKeepers Campaign, said the treaty cracks down on industrialized nations because they are responsible for a disproportionate amount of pollution.

"Georgia alone has more greenhouse emissions than Argentina or Venezuela," she said.

Senate Agriculture Committee Chairman Harold Ragan, D-Cairo, the resolution's chief Senate sponsor, said he won't fight to get it out of the Rules Committee. He said the measure's supporters at least have raised awareness of the issue.

"A lot of states have passed resolutions to signal to the U.S. Senate to go slow on this," he said. "Don't put the U.S. at a severe disadvantage."

State governmental reporter Dave Williams can be reached at (404) 589-8424.

Web posted Monday, March 15, 1999

Message Sent To:

Studies May Alter Insights Into Global Warming

By Curt Suplee
Washington Post Staff Writer

Two new studies of the Earth's ancient atmosphere may alter the way scientists understand the relationship between airborne carbon dioxide and climate change—and hence the dynamics of future "greenhouse" global warming.

In one paper, published in the March 11 issue of the journal Nature, researchers said they found that during the past 11,000 years—the period known as the Holocene epoch that began around the end of the last ice age and extends to the present—levels of carbon dioxide, a potent greenhouse gas, did not remain constant until the onset of the industrial revolution, as many had long supposed.

Instead, although average global temperatures stayed relatively stable, carbon dioxide levels fluctuated considerably during the Holocene, according to a team from the Scripps Institution of Oceanography and the University of Bern, Switzerland. "The system was never in equilibrium because the carbon dioxide levels never stabilized," said Martin Wahlen of Scripps, part of the University of California at San Diego.

Presumably this occurred because of still-unexplained changes in the amount of carbon dioxide taken up by oceans and vegetation, especially short-term variations of 10 percent or more in the quantity absorbed by plants. "This suggests that the terrestrial biosphere may also exhibit changes in the future," said Thomas F. Stocker of the University of Bern. What they might be, however, is uncertain.

In the other study, reported in the March 12 issue of the journal Science, Scripps investigators addressed one of the most vexing "chicken-and-egg" questions in climate research. Namely, when the Earth shifts from glacial to warm periods (as it does every 100,000 years or so), which comes first: an increase in atmospheric carbon dioxide levels, or an increase in global temperature? Contrary to what many believe, the team concluded that the temperature rise comes first, followed by a carbon dioxide boost 400 to 1,000 years later.

That's what the researchers found at glacial-interglacial transitions from 240,000, 140,000 and 13,000 years ago. That sequence of events appears to contradict the fundamental logic of simple greenhouse warming theories, which argue that increases in heat-trapping gases will be followed by higher surface temperatures.

The analysis also points to vegetation as a major source of the carbon spike. "Previously it was thought to have originated primarily in the ocean biosphere," said Julie Palais of the National Science Foundation, which supported both studies. "But this work suggests that the terrestrial biosphere played a significant role. . . . There are clearly implications for the future, considering the rate at which the rain forests in South America are currently being destroyed."

Both research projects used evidence from hundreds of ice specimens, or "cores," taken far below the surface of Antarctica. Each layer contains tiny bubbles of air snared in the ice when it formed from snow. Investigators placed the samples in vacuum chambers, released the traces of air, and analyzed them for carbon dioxide content and an isotope of carbon that indicates where the gas was last.

Carbon, a ubiquitous element in the Earth's surface and atmosphere, exists in three isotopes. Photosynthesis, the process whereby plants use sunlight to turn carbon dioxide into organic matter, favors the uptake of the lightest, carbon-12 atom, leaving the atmosphere with a relative plenitude of carbon-13, the next heaviest isotope. When plants die and rot, they release that carbon-12 back into the atmosphere. So the ratio between the two isotopes at any time indicates how much carbon dioxide is being absorbed by plants.

That quantity may be critical to future climate changes. In general, civilization releases about 6 billion tons of carbon (in the form of carbon dioxide) into the atmosphere every year. But only 3 billion tons stay there; the rest is absorbed into what are called carbon "sinks." Half dissolves into the ocean; the remainder ostensibly is taken up by vegetation. Consequently, the performance of these sinks is an important variable in how much carbon dioxide is left in the air to trap heat and possibly raise global temperatures.

The Scripps-Bern authors writing in Nature found that at the beginning of the Holocene, the atmosphere contained about 268 parts per million by volume of carbon dioxide, up from 180 to 200 ppmv in the depths of the last ice age about 18,000 years ago. By the late 1700s, it had risen to 285 ppmv. (Since then, the concentration has climbed to 364 ppmv and is still growing. That is, it rose by the same amount—80 ppmv—in the past 200 years that it had from the coldest part of the previous ice age to the late 1700s.)

In accordance with orthodox notions, "one commonly referred to the 'preindustrial CO_2 concentration of 280 ppmv,'" as if it were constant, Stocker said. But now "this has to be revised," he noted.

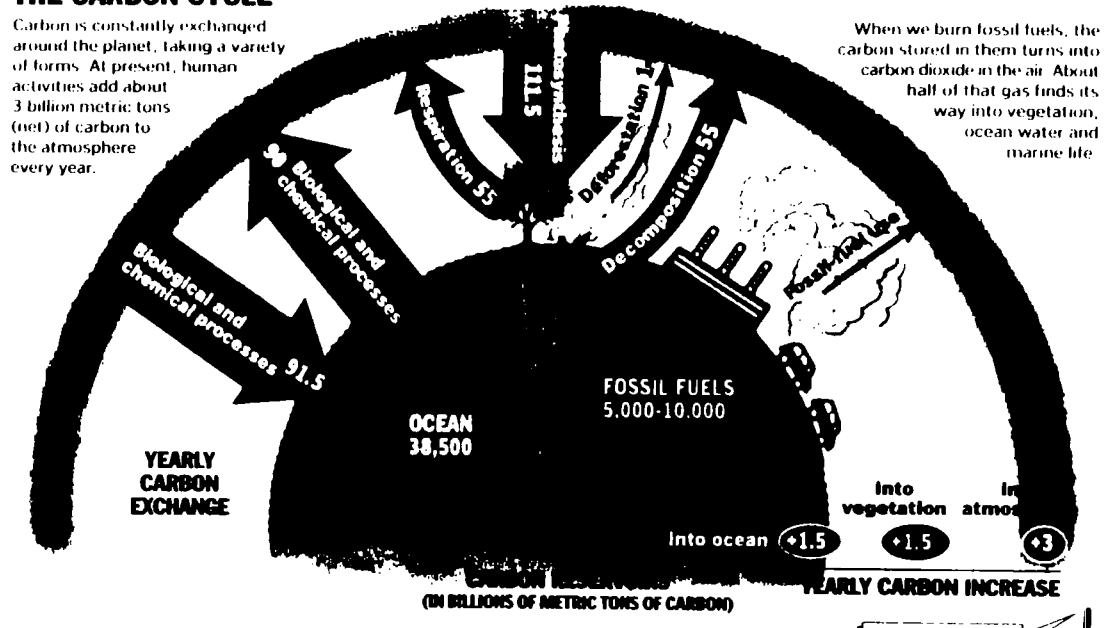
As the world warmed its way out of the last ice age, carbon dioxide levels first dipped to 260 ppmv about 8,200 years ago, probably because receding glaciers made way for the increasing vegetation that took up a lot of gas. But then the carbon dioxide content began to creep back up as ocean temperatures rose (decreasing the amount of dissolved gas oceans could hold) and land masses cooled and dried out (decreasing the carbon-trapping activity of photosynthesis).

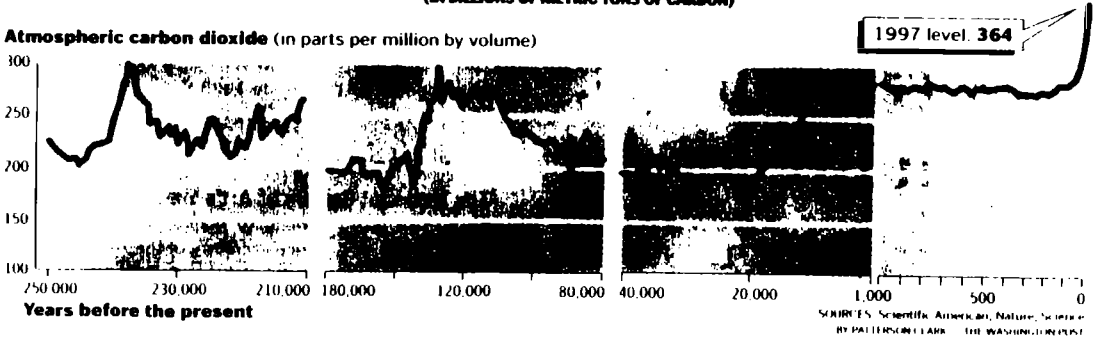
"The direct relevance of this finding," said Jean Lynch-Stieglitz of Lamont-Doherty Earth Observatory at Columbia University, "is that we can expect that as climate warms, the terrestrial biosphere will probably be capable of holding more carbon than it can today."

But uncertainty is high. Over the past few thousand years, there have been dramatically abnormal climate events. But "none of those involved a rate of CO_2 change like that occurring now," said Lamont-Doherty's Gerard Bond, and that "is a measure of how serious the problem might be."

As for the carbon dioxide lag-time findings, "the crux of the issue" for nonscientists is that "if the observation that increases in temperature lead increases in CO_2 in the natural system, then industrialization is forcing the natural system backwards, and our natural analogs deduced from past behavior might not be good models for predicting what's going to happen in the future," said Joan J. Fitzpatrick, technical director of the U.S. Geological Survey's National Ice Core Laboratory in Denver. "That's a sobering thought."

Indeed, despite the sizable margin of possible error in the analysis, "greenhouse skeptics will probably jump on this paper as 'proof'" that there is no necessary causal relation between carbon dioxide levels and temperatures, said Anthony J. Broccoli of the National Oceanic and Atmospheric Administration's Geophysical Fluid Dynamics Laboratory in Princeton, N.J. But in fact, he said, the new findings are completely consistent with a "positive CO_2-temperature feedback" system in which changes in one prompt changes in the other.





Martha L. Wofford 03/18/99 12:01:02 PM

Record Type: Record

To: Todd Stern/WHO/EOP

cc: Meagan M. Earley/WHO/EOP
Subject: clips

You probably already saw this in the WashPost or on the evening news -- but in case you didn't here are a couple of the stories on Daimler Chrysler's fuel cell car. And a release on the PNGV award.

By Catherine Strong
The Associated Press
W A S H I N G T O N, March 17 — DaimlerChrysler has built a compact car powered by fuel cells that seats five people, goes 280 miles before refueling and travels as fast as 90 mph.

The concept car, called Necar 4, is the latest demonstration of progress on fuel cell cars as the world's automakers continue their race to bring such cars to market by 2004. Fuel cells convert hydrogen and oxygen into electricity to power a vehicle.

The car was formally unveiled today by DaimlerChrysler chairmen Robert Eaton and Juergen Schrempp at a press conference attended by Environmental Protection Agency officials at the Ronald Reagan International Trade Center.

"This is the next step in a very long journey," Eaton said after driving the car. "Our challenge is to provide more earth-friendly vehicles without penalty of cost of convenience" to customers.

The Necar 4, based on the Mercedes-Benz A-class compact car sold in Europe, accelerates easily from 0 to 30 and beyond. It can go as fast as 90 mph and travels 280 miles without refueling, Chrysler said. It also is a zero-emissions vehicle.

"This is a real step forward," said EPA Administrator Carol Browner. "This car leaves a trail of water vapor, not clouds of carbon dioxide, nitrous oxide and other pollutants."

Impractical, for Now

Other fuel cell cars have zero or near zero emissions, depending on their fuel source. That makes fuel cells a favorite among automakers trying to comply with California's standard of zero emissions by 2003 for 10 percent of the cars sold in the state.

But the demise of gas-powered cars is not imminent. NECAR 4 is powered by liquid hydrogen, an impractical fuel for mass marketing since it must be kept at extremely cold temperatures. It also is 1,100 pounds heavier than an equivalent gas-powered car.

DaimlerChrysler officials said the concept car would be replaced with NECAR X, which would run on methanol. Methanol contains hydrogen and is the auto industry's favored fuel to power fuel cells.

Nationwide use of methanol-powered fuel cells would require a network of methanol pumping stations.

DaimlerChrysler's Ferdinand Panik said NECAR 4 was a major breakthrough because the fuel cell technology was small enough to fit in a compact car. The fuel cells were stacked underneath the car's floorboard and the liquid hydrogen tank took up some space in its small trunk.

By David Phinney
National Correspondent
ABCNEWS.com

W A S H I N G T O N, March 17 — DaimlerChrysler AG declared victory today in the race to develop a pollution-free, long-range car.

At a press conference here, executives from the U.S.-German auto giant boasted that their five-year campaign to develop fuel cell technology has finally paid off with NECAR 4. The five-seat compact can reach 90 miles per hour and travel 280 miles without refueling.

"The race has ended," DaimlerChrysler co-chairman Juergen Schrempp told reporters and government officials. "Now, we begin the race to make the vehicles affordable to our customers."

Chrysler hopes to bring the first models onto the market in 2004.

A Trail of Vapor
By using fuel cells to convert hydrogen and oxygen into electricity to power, the new engine produces nothing

but a trail of water
vapor.
Environmentalists hail it
as a major step forward
in reducing air pollution
and global warming.

"If we can put a
man on the moon, why can't we have clean burning vehicles and why can't we have clean cars?" asked Environmental Protection Agency Administrator Carol Browner, who joined DaimlerChrysler officials in the announcement. "Well, today we see that we can and by applying the very same technology that powered us to the moon and powers the space shuttles today. Fuel cells."

About 200 million gasoline-powered vehicles are on the road today in the United States. That number will reach 270 million by 2010, according to Browner, whose agency is expected to soon release stricter fuel emission requirements.

Fuel cell-driven cars may prove particularly popular in California, which has adopted a standard of zero emissions by 2003 for 10 percent of the cars sold there.

Energy Independence?

Bob Rose, executive director of Fuel Cells 2000, a nonprofit organization focusing on the study and promotion of fuel cell technology, pointed out that the development of fuel cells offers benefits beyond the roadways: "They mean people may soon be energy independent. Every one of these cars is an electrical generator that could be plugged into your home."

In an unusual partnership with rival Ford Motor Co. and the Canadian firm Ballard Power Systems, DaimlerChrysler AG has invested about $750 million to develop fuel cell technology. The company estimates that it will spend another $1.2 billion to bring the car to market.

Ford officials expect to have their own version of their five-seat fuel-cell car, the P2000, later this spring. General Motors and Honda Motor are also in hot pursuit.

Ferdinand Panik, head of DaimlerChrysler's fuel cell program, said NECAR 4 represents a major breakthrough because the fuel cell technology has been reduced in size and now fits into a Mercedes Benz A-class compact car. The fuel cells are stacked underneath the car's floorboard, while the liquid hydrogen tank takes up part of the small trunk.

That leaves enough room to seat five passengers.

Not Cheap

DaimlerChrysler engineers still have a few bugs to iron out before the NECAR 4 reaches the showroom.

At 1,100 pounds, the car weighs more than a typical compact gasoline-powered car because of the fuel cell technology. The company plans to develop much lighter versions.

What's more, NECAR 4 is powered by liquid hydrogen — an impractical fuel for mass marketing since it must be kept at extremely cold temperatures.

Then there's the cost: The fuel cell hardware alone costs about $30,000. Conventional gasoline-powered engines cost around $3,000.

DaimlerChrysler engineers are also working on NECAR X, which will run on methanol. Methanol contains hydrogen and is the auto industry's favored fuel to power fuel cells. But methanol-fueled cars would require a national network of methanol pumping stations that do not now exist.

Epyx Corporation Receives 1998 PNGV Medal Award

17 March 1999

Epyx Corporation Receives 1998 PNGV Medal Award

Demonstration of Gasoline / Ethanol Powered Fuel Cell Engine Hailed as Key to Enhancing American Competitiveness, Increasing Energy Independence, and Offering Cleaner Environment

WASHINGTON, March 17 /PRNewswire/ -- In a White House ceremony, U.S. Assistant Secretary of Energy Dan Reicher awarded the prestigious 1998 Partnership for a New Generation of Vehicles (PNGV) Medal to team members from Epyx Corporation. Epyx' staff were honored today along with 11 scientists from the Federal government, the automotive industry, and automotive suppliers for their work advancing clean, highly efficient automotive technologies for the future.

Epyx, in conjunction with the U.S. Department of Energy, teamed with industry researchers to successfully demonstrate the first-ever multi-fuel processing technology, which is capable of converting conventional hydrocarbon fuels (gasoline), renewable fuels (ethanol), and alternative fuels (natural

gas and methanol) into hydrogen to power fuel cells and generate electricity. Fuel cells, originally developed as part of the nation's space program, have the potential to become a highly efficient and clean source of power for future automobiles.

"I have counted on our PNGV technical team to achieve breakthroughs in fuel cell technology," said Vice President Al Gore who has championed the effort for cleaner, more fuel-efficient automobiles. "It's demonstrations like the one we are recognizing today that will catalyze the ability to put fuel-cell-powered vehicles on the road and, ultimately, bring enormous benefits for all Americans: a stronger economy, a cleaner environment, and greater energy independence."

PNGV is a joint government-industry program aimed at strengthening America's competitiveness by developing technologies for a new generation of vehicles. Automakers are scheduled to unveil PNGV concept cars as early as 2000 and pre-production prototype vehicles in 2004. The goal is to produce vehicles that achieve up to triple the fuel economy of today's vehicles, meet all safety and environmental requirements, and provide the comfort, utility, and performance of today's vehicles.

"This historic program has enabled us to tap the enormous creative and technical resources in our nation's research community in pursuit of an important national goal -- a cleaner environment and a stronger economy, said William M. Daley, Secretary of the U.S. Department of Commerce.

In partnership with the PNGV and industry, Epyx aims to translate this exciting technology into commercial reality. "The Epyx multi-fuel processor is commercially significant because it enables fuel cell-powered vehicles and stationary power applications to use nearly any fuel accessible in the world today," stated Jeffrey Bentley, Chief Operating Officer at Epyx. "For consumers, this means convenience, which will ultimately drive early market success. And for the automotive industry, it hastens the day fuel cell vehicles can operate on practical, available fuels."

According to the White House, "The technology would permit the nation's gasoline refining and distribution infrastructure to be used to supply fuel for fuel cell-powered vehicles. By developing and demonstrating a fuel-flexible system, the scientists removed a major barrier to the application of fuel cell technology in automobiles."

Among the award winners are Epyx' Jeffrey Bentley, Chief Operating Officer; William Mitchell, Vice President of Engineering & Operations; Lawrence Clawson, Senior Scientist; and Bo-Xiong He, Senior Scientist. Researchers from Los Alamos National Laboratory, Argonne National Laboratory, Plug Power LLC, and General Motors were also honored.

The Medal winners were selected by a panel of five judges for research involving government-industry teamwork and resulting in a significant technical accomplishment in PNGV-related automotive technology. The research was sponsored by the U.S. Department of Energy, a government partner in PNGV, and by the industry participants. The Illinois Corn Growers Association also contributed to the projects.

Epyx Corporation, established in February 1998, is a recognized global leader in fuel processing technology. Its mission is to rapidly develop and commercialize the Epyx multi-fuel processor for fuel cell applications in the transportation and small-scale stationary power markets. To date, the Epyx multi-fuel processor has powered fuel cells from Ballard, Plug Power, Energy Partners, DeNora, Dais, and other world-class organizations, generating clean, efficient, power in a range from 300 watts to 250 kW. With the commercialization of its revolutionary Next Millennium Fuel Processor(TM) technology, Epyx is reshaping the power paradigm for the 21st century -- bringing The Future of Energy(TM) to the world today!

TIME, MARCH 22, 1999

Forecasting Solar Storms

NASA sees trouble on the sun before it gets to Earth

IT WAS AN EERIE MOMENT FOR OWNERS OF electronic pagers last May, when 45 million of the units across North America suddenly flickered and died. The blackout was caused not by some routine equipment failure but by a massive storm on the surface of the sun that shorted out an Earth-orbiting communications satellite. Such solar typhoons are not uncommon, and the damage they do can be considerable. Last week NASA announced that it may now be possible to predict the storms and take action to limit their impact.

The most violent type of solar eruption is known as a coronal mass ejection, a vast bubble of gas that bursts from the sun and releases a wave of charged particles into space. Slamming into Earth's atmosphere, CME discharges have been known to fry satellites, bathe airplanes with radiation and black out entire cities.

DANGER SIGN: An S-shaped gas formation called a sigmoid suggests trouble brewing

INSTITUTE OF SPACE AND ASTRONAUTICAL SCIENCE, JAPAN

Recently, researchers studying satellite images of the sun have paid special attention to great, S-shaped twists of plasma called sigmoids that they now believe are an early stage of CME formation. Find a sigmoid, and within a few days you'll probably see an explosion. Since it takes an additional four days for the solar tsunami to reach Earth, you can double today's early-warning time.

That time can be well used. Satellite operators who know a CME storm front is coming can briefly shut their systems off to prevent short-circuiting. Earth-based power grids can be temporarily—if expensively—reconfigured to provide extra grounding. Astronauts planning a space walk can stay indoors until the danger passes. "Each sigmoid is like a loaded gun," says solar researcher Alphonse Sterling, who helped make the discovery. Now, it seems, humanity may have a better chance of dodging the bullet. —*By Jeffrey Kluger.*

Reported by Dick Thompson/Washington

JOSEPH PERKINS

Who's at fault for warming?

In a paper published two springs ago in the scientific journal Oceanography, John Knauss offered his perspective on "the politics of global warming."

What might be seen as a "portent of the future" of the debate on this environmental issue, he lamented, was a commentary piece authored by yours truly. My column concerned the presidential prospects of Al Gore, who had just been sworn in to a second term as vice president. Among Mr. Gore's liabilities, I wrote, was his extremism on environmental issues — such as global warming.

Of all the putative threats to the ecosystem, I wrote (and Mr. Knauss quoted), the vice president perceives global warming to be the most dangerous of all, notwithstanding the fact that the overwhelming majority of climatologists disagree with him.

Mr. Gore's proposal to attack this non-problem, I continued, is to punish Americans using fossil fuels by forcing them to pay a "carbon tax," which would drive up the costs of both gasoline and electricity.

"You will note that a scientific minority has been translated by Perkins to be 'the overwhelming majority of climatologists,' " wrote Mr. Knauss. But then, he added dismissively, "precision of speech has never been a hallmark of a presidential campaign."

Mr. Knauss is among the legion of scientists who have much invested — in research grants, lectures, published papers (in scholarly journals such as Oceanography) — in global warming. Thus, anyone who challenges the global warming orthodoxy — that human consumption of fossil fuels has increased atmospheric carbon dioxide levels, which, in turn, has precipitated a dangerous planetary warming trend — is dealt with by global-warming apostles like Mr. Knauss with extreme prejudice.

But what are Mr. Knauss and his fellow global-warming adherents to do when hard scientific evidence comes to the fore that contradicts their basic hypothesis — that all those gas-burning cars and SUVs and electricity-guzzling office buildings and homes are causing global warming?

Based on the findings of the Scripps scientists, it is quite conceivable that recent rises in planetary temperature and carbon dioxide levels (if they have in fact occurred) are attributable almost entirely to forces of nature that control the planet's climate and almost not at all to human activity.

For that is precisely the dilemma they face now in the wake of an article published in the March 12 issue of Science. The article was co-authored by Hubertus Fischer, Martin Wahlen, Jesse Smith, Derek Mastroianni and Bruce Deck, scientists at the Scripps Institution of Oceanography in California.

The research team studied Antarctic ice cores to ascertain the relation between greenhouse gasses and climate in the past. These ice cores, excavated from far below Antarctica's surface, are like time capsules. Each layer contains tiny bubbles of air trapped in the ice when it first formed, tens or even hundreds of thousands of years ago.

Based on the conventional scientific wisdom on global warming — advanced by Mr. Knauss, Mr. Gore, et al. — periods of rising carbon dioxide levels should have been followed by increasing planetary temperatures.

But the Scripps team's examination of ice samples from three epochs — 13,000, 140,000 and 240,000 years ago (periods of transition between ice age and planetary warming) found that the complete opposite occurred.

First the Earth warmed up. Then carbon dioxide levels rose.

It so happens the Earth has been in a warming period since the last Ice Age ended roughly 10,000 years ago.

And based on the findings of the Scripps scientists, it is quite conceivable that recent rises in planetary temperature and carbon dioxide levels (if they have in fact occurred) are attributable almost entirely to forces of nature that control the planet's climate and almost not at all to human activity.

Yes, this possibility must be profoundly disappointing to politicians, like our vice president, who believe consumption of fossil fuels is a public evil unmatched by any other (save for maybe "urban sprawl").

And it must be a real bummer for Mr. Knauss and other scientists who have so many lectures, so many papers and so many research grants riding on global warming's authenticity.

But it should be a comfort to the vast majority of Americans, who would bear the brunt of public policy — mandated by government, driven by questionable science — aimed at mitigating the supposed role that human activity has in heating up the planet.

The only way to achieve such a public policy goal, as I previously wrote, is for the government to use its power to tax, to regulate, to artificially dampen demand for fossil fuels (by doubling, tripling or even quadrupling the cost of gasoline and electricity).

But it is hard for global-warming alarmists to advocate such government policy in light of the recent scientific research contradicting their basic premise.

No, Mr. Gore, no Mr. Knauss, the sky is not falling.

Joseph Perkins is a nationally syndicated columnist.

The Washington Times
FRIDAY, MARCH 26, 1999

National News Briefs

Nuclear Waste Arrives At Desert Burial Site

CARLSBAD, N.M., March 26 (AP) — A truck carrying radioactive waste arrived here early today at the world's first deep underground nuclear waste dump.

The truck left Los Alamos National Laboratory, in north-central New Mexico, and traveled 270 miles to the dump, the Waste Isolation Pilot Plant, near Carlsbad in the southeastern corner of the state. The nuclear waste, which arrived at the plant at 3:36 A.M. after a trip of seven and a half hours, is expected to be buried early next week.

The plant is to gather contaminated material from 23 sites spread across 16 states to fill a single depository carved out of ancient salt caverns nearly half a mile below ground. Eventually, about 37,000 shipments will fill the plant's storage rooms and become entombed by salt over the next 30 years.

The New York Times
SATURDAY, MARCH 27, 1999

First Nuclear Dump Opens in N.M.

Associated Press

CARLSBAD, N.M., March 26—After 25 years of lawsuits, studies and protests, the nation's first nuclear dump—a network of chambers carved out of the salt beds deep beneath the New Mexico desert—today received its first truckload of radioactive waste.

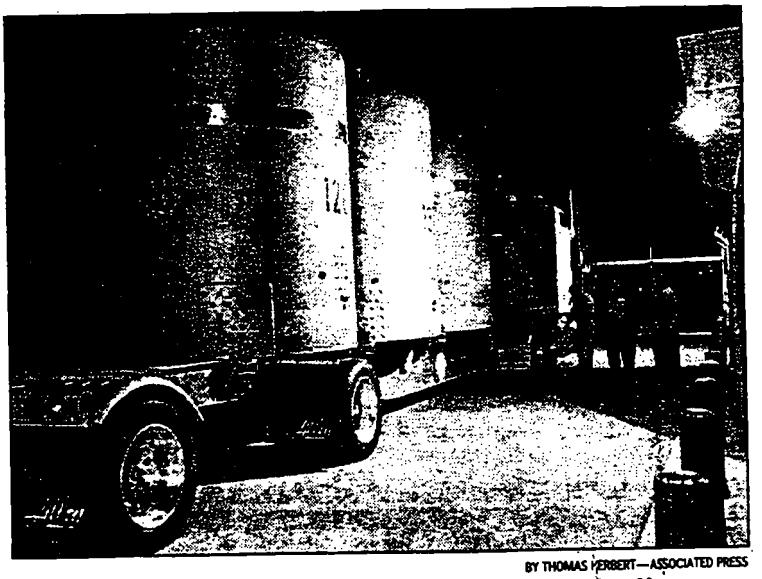
A crowd of about 100 people who live in Carlsbad, 25 miles from the Waste Isolation Pilot Plant, cheered the truck and held up cardboard signs reading, "Welcome finally" and "It's about time!" as the rig rolled through before daybreak.

Earlier in the 270-mile, 7½-hour trip, the truck faced a scattering of protesters yelling "Poison! Poison!" along with two young women who sat down in the road and a driver who tried to block the highway.

The first load of waste came from Los Alamos National Laboratory in the New Mexico city that was the birthplace of the atomic bomb.

Ultimately, up to 6.2 million cubic feet of waste generated since the dawn of the atomic age will be entombed over the next 30 years in the salt beds nearly a half-mile below ground. The waste consists of such items as clothing, tools and rags contaminated with plutonium.

Until now, the United States has had no permanent site for weapons-related plutonium waste. Waste has been piling up at 23 weapons installations around the country such as Rocky Flats near Denver and the Idaho National Engineering Laboratory, where it is kept mostly in 55-gallon drums on above-ground concrete pads, underneath bubble structures or in earthen mounds.



BY THOMAS HERBERT—ASSOCIATED PRESS

First truckload rolls into the Waste Isolation Pilot Plant from Los Alamos.

These corroding drums must be periodically repackaged, and some fear the waste is vulnerable to hazards such as tornadoes or earthquakes.

The arrival of the first shipment of waste at WIPP marked more than two decades of effort to open the $1.8 billion repository, first proposed in 1974. The first truckload will be placed underground by Monday.

"I'm ecstatic—this is just the culmination of everything I've worked for for 25 years," said Wendell Weart, a Sandia National Laboratories scientist who was instrumental in creating the repository.

WIPP is not designed for the thousands of tons of high-level waste stored at nuclear power plants across the country. Yucca Mountain in Nevada is being studied as a long-term burial place for that waste.

The Washington Post
SATURDAY, MARCH 27, 1999

U.S. and Russia Sign Uranium Sales Deal

By JUDITH MILLER

UNITED NATIONS, March 26 — Russia and the United States have quietly signed an agreement that salvages a $12 billion deal aimed at helping Russia convert uranium from its nuclear weapons into fuel for American nuclear reactors, Administration officials said today.

The program to convert highly enriched uranium into low-enrichment fuel is the key component of a three-part package and part of the Administration's effort to stop the spread of nuclear weapons, Administration officials said. The United States and Russia have already taken steps to safeguard Russia's nuclear-weapons material and contain damage from a nuclear accident should one occur.

The latest agreement was signed without publicity at a ceremony at the Department of Energy on Wednesday night, just hours after cruise missiles began hitting targets in Yugoslavia. Energy Secretary Bill Richardson and Yevgeny Adamov, Russia's Minister of Atomic Energy, toasted each other with champagne.

The accord was supposed to have been announced at the end of the planned visit by Prime Minister Yevgeny M. Primakov, but he aborted his visit en route to Washington on Tuesday after NATO authorized the attacks on Yugoslavia.

Fanfare is called off, but a plan to handle Russian nuclear waste survives.

Secretary Richardson said today that the new agreement put the uranium-conversion deal, which was originally signed in 1993 but quickly ran into trouble, "on solid ground for years to come."

"Russia benefits and America benefits," he added, "and that, more than anything, symbolizes our new relationship. We seek mutual security, not separate advantage."

Deeply in debt and in desperate need of billions of dollars in Western loans, Russia will now be able to sell 500 metric tons of uranium from its nuclear warheads, worth an estimated $12 billion, to the United States Government and energy companies over the next 20 years.

An Administration official said that under the 1993 agreement, Russia diluted about 30 tons of weapons-grade uranium that was supposed to be sold to the West. But the deal snagged over disputes about the terms of the sale after uranium prices plunged, and Russia stopped diluting the uranium last year.

Last fall Congress and the Administration agreed to spend $325 million to buy the natural uranium that had accumulated at market prices. The Administration then helped Russia conclude deals with three energy companies — Cameco of Canada, Cogema of France, and Nukem of Germany. The contacts were signed two days ago, the Administration official said.

The second part of the new agreement sets up two centers for enhancing nuclear safety in Russia and the United States. The centers, which will cost Washington about $1 million to open and up to $2 million a year when fully operatings, are supposed to enable Russian and American nuclear experts to cooperate in resolving environmental issues associated with managing radioactive waste and decontaminating plants that are taken out of commission.

The American center will be located at the Idaho National Engineering and Environmental Laboratory in Idaho Falls, the historical home of research reactors and advanced test reactors. A site for the Russian center has not been determined, but it will be in Moscow.

The third part provides American assistance to help the Russian Atomic Energy Ministry establish a nuclear crisis center similar to the Department of Energy's Emergency Operations Center in Washington. The goal is to assemble experts and resources quickly to help protect people in the event of an accident at a nuclear plant.

Discussing the decision by Mr. Adamov, the Russian minister, to stay in Washington despite disagreements over the bombing of Yugoslavia, the senior Administration who described the new accord said: "We've had a lot of ups and downs, politically and economically in our relationship. But we've both kept our eyes on the importance of the shared goal of helping Russia control its nuclear material and know-how."

The New York Times
SATURDAY, MARCH 27, 1999

E SEATTLE TIMES
RCH 29, 1999

Forest Service shifting to environmental goals

By Paul Rogers
Knight Ridder Newspapers

Shifting priorities for millions of acres of forests and rangelands, the Clinton administration was announcing today that environmental health of public lands - rather than logging targets or cattle-grazing totals - will become the primary way to reward employees who manage America's national forest system.

The new focus reverses 50 years of practice in which "getting the cut out" has been a dominant incentive across 191 million acres of national forests in the United States.

U.S. Forest Service Chief Mike Dombeck was scheduled to announce the changes today in a speech to the North American Wildlife and Natural Resources Conference in Burlingame, Calif.

In a copy of the speech, Dombeck noted that "Americans want and expect clean water and healthy lands."

Beginning this year, instead of traditional board-feet targets or cattle counts, U.S. Forest Service employees will be evaluated chiefly by how well they improve soil erosion, stream purity, wildlife and fish abundance, watershed health and other ecological factors.

Dombeck was calling for "an invigorated national land ethic." In it, restoring clear-cut lands, bringing back endangered species and providing camping, fishing, hunting and other activities supplant logging and grazing as top priorities in the nation's 155 national forests.

"We will still track traditional outputs of goods and services, but they will be accomplished within the ecological sideboards imposed by land health," Dombeck's address said.

The Forest Service is one of America's largest land managers, with more than double the acreage of the national parks. Any management changes will have dramatic impacts across the West and in New England.

Dombeck also was calling for the Forest Service to rely less on timber receipts to fund its future budgets, to increase by 50 percent the miles of old logging roads decommissioned and to expand new wilderness areas.

Environmentalists cheered the news yesterday.

"It sounds like it is going to be a welcome change," said Louis Blumberg, assistant regional director for the California-Nevada office of the Wilderness Society.

"For years there have been perverse incentives that rewarded people cutting down the forests," Blumberg added. "We'll still have to see the details, but Chief Dombeck is charting a new direction for the Forest Service and we support it."

Timber-industry officials expressed concern.

"There has to be goals that they're accountable for," said Dave Bischel, president of the California Forestry Association. "Biological sustainability is an important goal, but timber should always be one of those goals as well."

Because of major drops in logging levels on federal lands, Bischel said: "As it is now, timber is already almost nonexistent."

The Forest Service has long been villainized by environmentalists as the "U.S. Timber Service," where logging companies and cattle ranchers heavily influenced regional officials across the West.

END