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CLIMATE CHANGE
DOCUMENT REQUESTS

ECONOMISTS' STATEMENT ON CLIMATE CHANGE

LIST OF ECONOMISTS WHO HAVE ENDORSED TO DATE

MARCH 24, 1997

NAME	AFFILIATION	NAME	AFFILIATION
A. W. Coats		Daniel G. Swanson	
Abbass Bozory		Danny A. Bring	
Abdul Qayum		David Ashmore	
Ahmad Afraslabi		David Buland	
Ajal Chopra		David Burress	
Alan R. Winger		David C. Campbell	
Almudena Arcelus		David C. Roberts	
Amos Khasigian		David Calvin Gogerty	
Andrea Dean		David D. Hanig	
Andrew Chritton		David I. Siskind	
Andrew Horowitz		David M. Eaves	
Andrew W. Weler		David R. Burnett	
Angela E. Chang		David Reiffen	
Ann A. Dean		David Sandler	
Ann M. Watkins		David Schenker	
Anonymous		Debojyoti Sarkar	
Anthony Apostolides		Deborah A. Senior	
Anthony Barkume		Deenie Neff	
Arthur G. Ashbrook, Jr.		Delle Nadler	
Arturo R. Torres Jr.		Desiderius Viktor	
Arun Kumar Ghosh		Dhez Woodworth	
Austin Curwood Hoggatt		Divid W. Riggs	
Barbara Weinstein		Donald E. Agthe	
Barbara Y. Peters		Donald J. O'Hara	
Benjamin Bridges		Donald W. O'Connell	
Bernard Gordon		Donald Wooten	
Bernard Kemp		Douglass B. Lee	
Brian C. Jack		Dr. Raynal Hammelton	
Bruce Fallick		Drue Barker	
Caren Grown		Dubravko Mihaljek	
Carlos Padilla		Edgar J. Gordon	
Carlos Uliberri		Edward K. Smith	
Carmine Gorga		Elias R. Ason	
Charles D. Coleman		Elliot A. Ponchick	
Charles Ronald Ross		Elmer P. Lotshaw	
Charles S. Maurice		Eloy Mestre	
Chetan Sanghavi		Eric Nauenborg	
Chris Beacham		Ernest C. Olson	
Christian Ergen-Zucchi		Eugene D. Straub	
Chyongchiou Lin		Evamaria Uribe	
Clara Chu		Evert Van Der Heide	
Clyde Tappwig		F. Brian Simmons, III	
Cornelia Strawser		Fereidoon P. Siohansi	
Craig Gallet		Francois Melese	
D. Ward Mardfin		Frank Canter	
Damon Wheelchel		Frank Leiber	

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MARCH 24, 1997

NAME	AFFILIATION	NAME	AFFILIATION
Thesia I. Garner		Donald Rosenthal	American Management Systems
Thomas Foster		Tom Everding	American Medical Association
Thomas M. Stanback, Jr.		Alan G. Isaa	American University
Thomson Whittin		Bruce H. Lubich	American University
Tim Lefever		Donald Bowles	American University
Timothy D. Baker		Howard M. Wachtel	American University
Timothy E. Mc Clive		James H. Weaver	American University
Timothy E. Sullivan		Robin Hahnel	American University
Va Nee V. Van Vleck		Sue Headlee	American University
Valeo Schultz		Karen Hallows	American University, Avreitt College
Van Lam		Ralph E. Beals	Amherst College
Volher Wieland		Richard C. Hoyt	Analytics
W. C. Brainard		Samuel Gubins	Annual Reviews Inc.
W. N. Turpin		Elbert V. Bowden	Appalachian State University
Willem J. Jansen		James Cavallo	Argonne National Laboratory
William A. Masters		Lutz Hendricks	Arizona State University
William Crowell		Michael Lemmon	Arizona State University
William Dellal		Gary A. Latanich	Arkansas State University
William J. Weiskopf		Brian J. Cody	Arthur Andersen
William Kahley		Kevin J. O'Connor	Assistant Attorney General
William R. Belmont		Thomas White	Assumption College
William S. Stine		Christopher J. Monroe	AT&T
Yves Maroni		Douglas G. Hobbs	AT&T
Clark C. Abt	ABT Associates, Inc.	Jian Cao	AT&T
Gregory B Mills	ABT Associates, Inc.	Kumiko Powell	AT&T
Gunars Hauff Platals	ABT Associates, Inc.	Gregory Napiorkowski	AT&T Laboratories
Jacob Benus	ABT Associates, Inc.	Louis T. Brewer	AT&T, Rtd.
Larry L. Orr	ABT Associates, Inc.	Henry Thompson	Auburn University
Leland Deck	ABT Associates, Inc.	John P. Sophocleus	Auburn University
Marty Makinen	ABT Associates, Inc.	Robert F. Hebert	Auburn University
Robert Kornfeld	ABT Associates, Inc.	Jurgen Brauer	Augusta State University, School of Business
Ulrich F.W. Ernst	ABT Associates, Inc.	Hiro Fukao	Aurthur D. Little
Allen B. Ferguson	AFE, Inc.	Patrick J. Kennon	Aviation Economics
Amy K. Taylor	Agency for Health Care Policy and Research	Mark Tomass	Babson College
Chiou-nan Yeh	Alabama State University	Stephen Silver	BADM, The Citadel
Earl W. Adams	Allegheny College	Judith A. Smrha	Baker University
Kenneth G. Ainsworth	Allegheny College	Barbara Sherman Rolleston	Baldwin-Wallace College
Stephen D. Casler	Allegheny College	Terence E. Byrne	Baltimore-Washington Financial Advisors
Pamela Mobilia	Alpine PCS	Leland S. Prussia	Bank of America Corporation
Michael Stavv	Alternative Energy and EV's	R. McFall Lamm, Jr.	Bankers Trust Co.
Paul Thompson	AMBAC Indemnity	Maxwell Rhee	Banque Nationale de Paris
Riad Tabbarah	Ambassador of Lebanon to the U.S.	Mary Lashley Barcella	Barcella Associates
Daniel Bell	American Academy of Arts & Science	Dimitri Papadimitriou	Bard College
M. Abdul Shibli	American Economic Association	Shannon Mudd	Barente Group
Paul Kahane	American Economic Association	Gopal Iyer	Baruch College
Jay G. Chambers	American Institutes for Research	Theodore Joyce	Baruch College

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MARCH 24, 1997

NAME	AFFILIATION	NAME	AFFILIATION
Ted Walther	Bates College	David Weil	Boston University
Steve Shanlley	Battelle	Debraj Ray	Boston University
Kathrine F. Wellman	Battelle Memorial Institute	Eli Berman	Boston University
Dave Anderson	Battelle-Northwest	Ingo Vogelsang	Boston University
David B. Belzer	Battelle-Northwest	Jonathan Eaton	Boston University
Joseph A. McKinney	Baylor University	Laurence J. Kotlikoff	Boston University
John Katharopoulos	BCBS of Michigan	Shane J. Hunt	Boston University
Ernie Nadel	BCI	Thomas McGuire	Boston University
Wayne A. Morra	Beaver College	Wei Yu	Boston University
James Lacey	Bell Labs	William M. Capron	Boston University
Steven G. Lanning	Bell Labs - Lucent Technologies	Zvi Bodie	Boston University
Roger Story	Bellcore	Zvika Neeman	Boston University
Kristina Weir	Bellevue Community College	William F. Samuelson	Boston University, School of Management
Gary L. Hodgkin	Belmont University	John Fitzgerald	Bowdoin College
Mary M. Thompson	Belmont University	Alan Day Haight	Bowling Green State University
Warren Palmer	Beloit College	Charles R. Chittle	Bowling Green State University
Marc Bendick, Jr.	Bendick & Egan Economic Consultants, Inc.	Harold I. Lunde	Bowling Green State University
Bertrand LaNoue, O.S.B.	Benedictine College	Kyoo Kim	Bowling Green State University
Janet M. Thomas	Bentley College	Mark Kasoff	Bowling Green State University
Lucy Ackert	Berry College	Paul F. Haas	Bowling Green State University
Bassem Abou-Zeid	Bethel College	Stephen Ziliak	Bowling Green State University
Phyllis Campbell	Bethel College	Felicia Yesari	BPBA-New York
Miles O. Bidwell	Bidwell Associates Inc.	Kalman Goldberg	Bradley University
Edward A. Manfield	Binary Traders	Kevin M. O'Brien	Bradley University
Charles W. Bischoff	Binghamton University	Anne P. Carter	Brandeis University
Clifford D. Clark	Binghamton University	Arthur Lewbel	Brandeis University
Dr. N.J. Wulwick	Binghamton University	Gary H. Jefferson	Brandeis University
Stanley H. Masters	Binghamton University	Rachel McCulloch	Brandeis University
L. Aubrey Drewry, Jr.	Birmingham-Southern College	Brian Kelly	Brian Kelly Inc.
M. Iqbal Akhtar	Blackburn College	Edward R. Fried	Brookings Institution
Bennett W. Golub	Blackrouk Financial Management	Margaret M. Blair	Brookings Institution
Edward Bloom	Bloom Research	Nora Lustig	Brookings Institution
Woo-Bong Lee	Bloomsburg University	Robert Axtell	Brookings Institution
Ronald L. Friesen	Bluffton College	Robert E. Litan	Brookings Institution
Chong-en Bai	Boston College	Robert Solomon	Brookings Institution
Christopher Baum	Boston College	William Dickens	Brookings Institution
Donald J. White	Boston College	Leo J. Raskind	Brooklyn Law School
Frank M. Gollop	Boston College	Akio Yasuhara	Brown University
Harold Petersen	Boston College	Louis Putterman	Brown University
Joseph F. Quinn	Boston College	Mark B. Schupack	Brown University
Kathleen Lang	Boston College	Michael Spagat	Brown University
Marvin Kraus	Boston College	David R. Ross	Bryn Mawr College
Paul Streeten	Boston College	Thomas Loo	Budget Comp.
Robert G. Murphy	Boston College	Joel D. Fischer	Burnham Securities Inc.
Andrew Weiss	Boston University	Hasan MacNeil	Butte College
Carla Y. Willis	Boston University	Bruce W. Kinzey	BYU-Hawaii, School of Business

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MARCH 24, 1997

NAME	AFFILIATION	NAME	AFFILIATION
Daniel M. Bernhofen	Clark University	Chaitram J. Talele	Columbia State College
John C. Brown	Clark University	Elliot Zupnik	Columbia University
Joseph Golec	Clark University	Giulio Pontecorvo	Columbia University
Rudy Yaksick	Clark University	Harold W. Watts	Columbia University
Wayne B. Gray	Clark University	Hugh Patrick	Columbia University
Fredric Menz	Clarkson University	James W. Kuhn	Columbia University
J.K. Mullen	Clarkson University	Jay Pill Choi	Columbia University
Holley Ulbrich	Clemson University	Maurice Wilkinson	Columbia University
Donald G. Freeman	Cleveland State University	Richard R. Nelson	Columbia University
John F. Burke Jr.	Cleveland State University	Roberto Perotti	Columbia University
Jon D. Harford	Cleveland State University	Roger F. Murray	Columbia University
Michael Bond	Cleveland State University	Ronald M. Schramm	Columbia University
Myong-Hun Chang	Cleveland State University	Stefan H. Robock	Columbia University
Vijay K. Mathur	Cleveland State University	Susan S. Wieler	Columbia University
Nancy C. Willson	Climate Institute	Duncan K. Foley	Columbia University, Barnard College
Peter J. Francis	CNA Corporation	Perry Mehrling	Columbia University, Barnard College
H. A. Gemery	Colby College	Rajiv Sethi	Columbia University, Barnard College
Randy Nelson	Colby College	Andrew Haggard	Committee for Economic Development
Tom Tietenberg	Colby College	Ronald S. Boster	Committee for Economic Development
David M. Sturges	Colgate University	Van Doorn Ooms	Committee for Economic Development
Michael R. Haines	Colgate University	William J. Beeman	Committee for Economic Development
Oz Honkalehto	Colgate University	Robert Atallo	Comp. Resource Solutions
Robert W. Turner	Colgate University	Jeffrey G. Woods	Concord College
Wayne A. Grove	Colgate University	Dick Nanto	Congressional Research Service
Lawrence J. Frateschi	College of Du Page	William A. Cox	Congressional Research Service
Mary Goldschmid	College of Mount Saint Vincent	Spencer J. Pack	Connecticut College
Lee H. Endress	College of Security Studies, Asia-Pacific Center	Daniel W. Kennedy	Connecticut Labor Dept
Marcia J. Frost	College of St. Benedict	Stuart Harshbarger	Coopers and Lybrand
James R. Ashley	College of St. Catherine	Ziad Ayash	Coopers & Lybrand
Miles B. Cahill	College of the Holy Cross	Habtu Braha	Coppin State College
David H. Feldman	College of William and Mary	Donald C. Cell	Cornell College
Eric R. Jensen	College of William and Mary	Gordon Urquhart	Cornell College
John S. Strong	College of William and Mary	Imran Farooqi	Cornell College
Robert B. Archibald	College of William and Mary	Bill Rosen	Cornell University
Carol A. Dahl	Colorado School of Mines	Duane Chapman	Cornell University
Graham Davis	Colorado School of Mines	Erik Thorbecke	Cornell University
Wade E. Martin	Colorado School of Mines	Gary S. Fields	Cornell University
Charles Revier	Colorado State University	John H. Bishop	Cornell University
John B. Loomis	Colorado State University	M. Gardner Clark	Cornell University
John R. McKean	Colorado State University	Robert C. Lind	Cornell University
Kenneth C. Nobe	Colorado State University	Robert Gibbons	Cornell University
Robert R. Keller	Colorado State University	Robert H. Frank	Cornell University
Stephen Weller	Colorado State University	Shankar Subramanian	Cornell University
Chris Mayer	Columbia Business School	Seymour Smidt	Cornell University, Johnson Graduate School
Kenneth N. Kuttner	Columbia Business School	Hirsch S. Ruchlin	Cornell University Medical College
Orba T aylor	Columbia College	Michael D. Topper	Cornerstone Research

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NAME	AFFILIATION	NAME	AFFILIATION
C. K. Woo	Energy and Environmental Economics, Inc.	Daniel A. Mizak	Frostburg State University
Bruce Stram	Enron Corporation	William J. Serow	FSU, Center for the Study of Population
Kenneth Acks	Env. Damage Valuation & Cost-Benefit News	Young J. Park	Fu Associates, Ltd.
Paul Holden	ERI	Raul Moreno	Fundacion Nacional Para El Desarrollo
Robert Neal Peterson	ERS	Kim M. Gardey	Gardey Investment Management
Dennis Erickson	Erskine College	Anthony Negbenebor	Gardner Webb University
Kenneth P. Selden	Essential Economics, Inc.	Frances Hammond	General Motors Corporation
Richard Castellana	Fairleigh Dickinson University	Carrie A. Meyer	George Mason University
Steven A. Seelig	FDIC	Chris G. Rodrigo	George Mason University
Kevin Lansing	Federal Reserve Bank of Cleveland	Steven C. Michael	George Mason University
Joseph Haimowitz	Federal Reserve Bank of Kansas City	Anita M. Benvignati	George Washington University
Edward Lotterman	Federal Reserve Bank of Minneapolis	David C. Ribber	George Washington University
Richard M. Todd	Federal Reserve Bank of Minneapolis	Elinor H. Solomon	George Washington University
Patricia Pollard	Federal Reserve Bank of St. Louis	Eric Kodjo Ralph	George Washington University
Alexander David	Federal Reserve Board	Julian Silk	George Washington University
Charles Siegmán	Federal Reserve Board	Mary Ann Bailly	George Washington University
Chunsheng Zhou	Federal Reserve Board	Stephen C. Smith	George Washington University
Dale W. Henderson	Federal Reserve Board	Vincy Fon	George Washington University
Dean F. Amiel	Federal Reserve Board	Warren Greenberg	George Washington University
Guy V.G. Stevens	Federal Reserve Board	Charles K. Ebinger	Georgetown University
Laura S. Rubin	Federal Reserve Board	Dale Murphey	Georgetown University
Murat F. Iyigun	Federal Reserve Board	Daniel Kahn	Georgetown University
Randall Mariger	Federal Reserve Board	George J. Viksnins	Georgetown University
Steve Rhoades	Federal Reserve Board	Ibrahim M. Oweiss	Georgetown University
Gerald D. Lomen	Federal Reserve Board of New York	James Tybout	Georgetown University
George Budzelka	Federal Reserve Board of New York, Rtd.	Jens Ludwig	Georgetown University
Richard E. Ludwick, Jr.	Federal Trade Commission	John Cuddington	Georgetown University
Ohannes Hagopian	Felician College	Mitch Kaneda	Georgetown University
Abdollah Ferdowsi	Ferris State University	Robert E. Moore	Georgia College & State University
Daniel Teferra	Ferris State University	Usha Nair	Georgia Institute of Technology
Herbert E. Nell	Financial and Economic Strategies	David L. Sjoquist	Georgia State University
Gabriel Torres	Fitch Investor Services	Jorge Martinez-Vazquez	Georgia State University
Benjamin Chinitz	Florida Atlantic University	Julie Hotchkiss	Georgia State University
Alison Butler	Florida International University	Ronald G. Cummings	Georgia State University
Maria Willumsen	Florida International University	Rubin Saposnik	Georgia State University
Charles E. Rockwood	Florida State University	Peter G. Sassone	Georgia Tech
James Cobbe	Florida State University	Richard J. Cebula	Georgia Tech
Michael Slotkin	Florida Tech	Brendan Cushing-Daniels	Gettysburg College
Peter M. Ewen	Forcasts Department, APS	Katsuyuki Niino	Gettysburg College
Dominick Salvatore	Fordham University	Ralph Chances	Gettysburg College
Jacqueline G. Coolidge	Foreign Investment Advisory Service	Janamitra Devan	Global Strategies Group
Betty F. Slade	Formerly Harvard Inst. for Intl. Development	Randal G. Gunden	Goshen College
Glenn G. Stevenson	Formerly Oak Ridge National Laboratory	Katherine Henneberger	Goucher College
Ronald G. Ridker	Formerly of The World Bank	Mark Montgomery	Grinnell College
Richard W. Stewart	Frontier Cooperative Herbs	Claude Gruen	Gruen Gruen & Associates
Yury F. Ruban	Frontier Vision Technologies, Inc.	Robert T. Tanimura	GTE Telephone Operations

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MARCH 24, 1997

NAME	AFFILIATION	NAME	AFFILIATION
Lawrence Y. Fu	Illinois College	Stephen A. Vosti	International Food Policy Research Institute
J. Lon Carlson	Illinois State University	Nazrul Islam	International Inst. for Advanced Studies
L. Dean Hiebert	Illinois State University	Adolfo Barajas	International Monetary Fund
Michael A. Nelson	Illinois State University	Adrienne Cheasty	International Monetary Fund
Michael C. Seeborg	Illinois Wesleyan University	Alphecca Muttardy	International Monetary Fund
Thomas E. McGinnis	Indiana State Government	Caroline Van Ryckeghem	International Monetary Fund
Craig W. Holden	Indiana University	David T. Coe	International Monetary Fund
David Waterman	Indiana University	Dev Kumar Kar	International Monetary Fund
Eckhard Janeba	Indiana University	Elaine Buckberg	International Monetary Fund
Fwu-Rang Chang	Indiana University	Romero Hernandez-Cala	International Monetary Fund
Herbert Kiesling	Indiana University	Geert J. Almekinders	International Monetary Fund
Janardhanan A. Alse	Indiana University	George Iden	International Monetary Fund
Joyce Man	Indiana University	Gian Maria Milesi-Ferretti	International Monetary Fund
Lloyd Orr	Indiana University	Gregory C. Dahl	International Monetary Fund
Marianne V. Felton	Indiana University	Gustavo Canonero	International Monetary Fund
Martin C. Spechler	Indiana University	James E. Blalock	International Monetary Fund
Philip T. Powell	Indiana University	Jeremiah Zettelmeyer	International Monetary Fund
Phillip Saunders	Indiana University	John E. Leimone	International Monetary Fund
Roy Gardner	Indiana University	Kevin L. Ross	International Monetary Fund
Scott Smart	Indiana University	Lorenzo L. Perez	International Monetary Fund
Clarence C. Morrison	Indiana University, Bloomington	Malcom D. Knight	International Monetary Fund
Ashton I. Veramallay	Indiana University East	Mark R. Stone	International Monetary Fund
Shyam I. Bhatia	Indiana University Northwest	Michael G. Papaloannou	International Monetary Fund
Arthur Martel	Indiana University of Pennsylvania	Michael P. Leidy	International Monetary Fund
Robert J. Stonebraker	Indiana University of Pennsylvania	Nicholas Tsavvas	International Monetary Fund
Roger W. Schumacher	Indiana University School of Business	Patricia A. Reynolds	International Monetary Fund
Lawrence J. Haber	Indiana-Purdue at Fort Wayne	Peter B. Clark	International Monetary Fund
Thomas L. Guthrie	Indiana-Purdue at Fort Wayne	Rakia Moalla-Felini	International Monetary Fund
Robert Weiss	Industrial Electrotechnology Laboratory	Richard Stillson	International Monetary Fund
Roy B. Helfgott	Industrial Relations Counselors Inc.	Sunil Sharma	International Monetary Fund
Charles Marston	Infinity Inc.	Thomas Rumbaugh	International Monetary Fund
Thomas P. Rothrock	Info Tech Inc.	Toshiro Nishizawa	International Monetary Fund
Bruce McKinlay	Information Systems Group	Vikram Haksar	International Monetary Fund
Jon Christianson	Inst. for Health Services Research	Wayne E. Lewis	International Monetary Fund
Geoffrey Carlner	Institute for International Economics	William L. Hemphill	International Monetary Fund
Robert J. Muscat	Institute for Policy Reform	Zeljko Bogetic	International Monetary Fund
Richard Webb	Instituto Cuanto	Jonathan Levin	International Monetary Fund Ltd.
Charles Richter	Inter-American Development Bank	Robert F. Lundy	Interstate Commerce Commission, Rtd.
Michael A. Gomez	Inter-American Development Bank	Roger Williams	INVEST
Michael Gavin	Inter-American Development bank	David Hennessy	Iowa State University
Orlando A. Reos	Inter-American Development Bank	J. Peter Mattila	Iowa State University
Alan McInnes	Internal Revenue Service	John A. Miranowski	Iowa State University
Joseph M. Grows	Internal Revenue Service	Peter Orazem	Iowa State University
Peter G. Balash	Internal Revenue Service	Stanley R. Johnson	Iowa State University
Agnes R. Quisumbing	International Food Policy Research Institute	William Merrill	Iowa State University
Dean Jolliffe	International Food Policy Research Institute	Cynthia Hacımun	Iowa Wesleyan College

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ECONOMISTS' STATEMENT ON CLIMATE CHANGE

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MARCH 24, 1997

NAME	AFFILIATION	NAME	AFFILIATION
Theodore Palivos	Louisiana State University	John P. Hoehn	Michigan State University
Howard Baetser, Jr.	Loyola College	Kenneth D. Boyer	Michigan State University
James Konow	Loyola Marymount University	Mordechai Kreinin	Michigan State University
Bruce Vanderporten	Loyola University, Chicago	Norman P. Obst	Michigan State University
George Kaufman	Loyola University, Chicago	Paul L. Menchik	Michigan State University
Marc Douglas Hayford	Loyola University, Chicago	Paul Segerstrom	Michigan State University
Robert Carow	Loyola University, Chicago	Richard T. Baillie	Michigan State University
Dan C. Messerschmidt	Lynchburg College	Robert J. La Londe	Michigan State University
D. Sykes Willford	M.D. Bankers Trust	Scott M. Swinton	Michigan State University
Marshall Pomer	Macroeconomic Institute	Stephen A. Woodbury	Michigan State University
Emily Sun	Manhattan College	W. Paul Strassmann	Michigan State University
John F. Tomer	Manhattan College	Paul A. Nelson	Michigan Technological University
Bruce Carpenter	Mansfield University	Atanu Saha	Micronomics Inc.
Joan E. Gadsby	Market Media International Corporation	Dichaka Fayissa	Middle Tennessee State University
James Tober	Marlboro College	Reuben Kyle	Middle Tennessee State University
David E. Clark	Marquette University	John Craven	Middlebury College
David L. Marshall	Marshall & Associates	Yoshi Fukasawa	Midwestern State University
Harlan M. Smith, II	Marshall University	Alec R. Levenson	Milken Institute
Mark A. Thompson	Marshall University	Kurt R. Schaefer	Miller Freeman Inc.
Amy M. Diduch	Mary Baldwin College	Ross Miller	Miller Risk Advisors
Amata	Marygrove College	Marion Ross	Mills College
Calvin Timmerman	Maryland Public Service Commission	Patrick A. Taylor	Millsaps College
Steven Payson	Marymont University	Kevin Richardson	Minute Maid Company
Lyle Nelson	Mathematica Policy Research	Paul W. Grimes	Mississippi State University
Merrile Sing	Mathematica Policy Research	Robert O. Weagley	Missouri University
Walter Corson	Mathematica Policy Research	Alberto Bisin	MIT
Karen Akerhielm	Mathtech Inc.	Carl Kaysen	MIT
Ramsey Nguon Lay	McDonnell Douglas Aerospace West	Donald Lessard	MIT
David Wyss	McGraw Hill	E. Cary Brown	MIT
Anthony Pennington-Cross	McGraw-Hill	Eli Shapiro	MIT
Susan M. Lund	McKinsey & Company	Evsey D. Domar	MIT
B. David Collier	Medical College of Wisconsin	✓ Franklin M. Fisher	MIT
Charles H. Andrews	Mercer University	George W. Rathjens	MIT
C.W. Blowens	Metro-Dade County Planning Department	Jorn Steffen Pischke	MIT
David J. O'Hara	Metropolitan State University	M. A. Adelman	MIT
O. Homer Erikson	Miami University	* Paul Krugman	MIT
Raymond Gorman	Miami University	Paul Smoke	MIT
Robert L. Conn	Miami University	*, ** Robert Solow	MIT
William K. Hutchinson	Miami University	Robin Wells	MIT
William R. Hart	Miami University	Scott Stern	MIT
Peter Eckstein	Michigan AFL-CIO	Susan Athey	MIT
H. William Rockwell, Jr.	Michigan Dept. of Natural Resources	Tim Riddiough	MIT
Corinne M. Krupp	Michigan State University	William C. Wheaton	MIT
Daniel R. Talhelm	Michigan State University	Alan M. Strout	MIT, Rtd.
Harry J. Holzer	Michigan State University	B. Wernerfelt	MIT, Sloan School of Management
James L. ...	Michigan State University	Erik Brynjolfsson	MIT, Sloan School of Management

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MARCH 24, 1997

NAME	AFFILIATION	NAME	AFFILIATION
Lori Leachman	Northern Arizona University	Mario J. Miranda	Ohio State University
Richard J. Dowen	Northern Illinois University	Nancy Ettlinger	Ohio State University
Todd Knoop	Northern Illinois University	Nelson C. Mark	Ohio State University
Virginia Wilcox-Gok	Northern Illinois University	Peter Howitt	Ohio State University
Young C. Kim	Northern Illinois University	Richard A. Tybout	Ohio State University
Gary E. Clayton	Northern Kentucky University	Robert J. Caswell	Ohio State University
Martin G. Giesbrecht	Northern Kentucky University	Stephen G. Cecchetti	Ohio State University
Tom Cate	Northern Kentucky University	Chulho Jung	Ohio University
Hillar D. Neumann, Jr.	Northern State University, South Dakota	Kurt A. Schwabe	Ohio University
R. Stephen Elliott	Northwestern State University	James V. Koch	Old Dominion University
Alan M. Taylor	Northwestern University	Paul R. Koch	Olivet Nazarene University
Boaz Moselle	Northwestern University	Vartkes L. Broussalian	OMB, Washington, Dtd.
Burton A. Weisbrod	Northwestern University	Rohit Sah	Oppenheimer Funds, Inc.
Deborah Lucas	Northwestern University	Carol Horton Tremblay	Oregon State University
Mark A. Satterthwaite	Northwestern University	Emery N. Castle	Oregon State University
Michael Wallerstein	Northwestern University	Joe Kerkvliet	Oregon State University
Todd Pulvino	Northwestern University	Laura S. Connolly	Oregon State University
Donald P. Jacobs	Northwestern University, J.C. Kellogg School	Ronald A. Oliveira	Oregon State University
Sr. Beth Anne Tercek	Notre Dame College	Bronwyn H. Hall	Oxford University, UK
Liang-rong Shiau	NSU	Jacques J. Polak	P. Jacobson Foundation
John Pepper Marlin	NYC Comptroller's Office	Richard Ottinger	Pace Law School
Eileen R. Kaufman	NYC Dept of Design & Construction	Michael Szenberg	Pace University
Larry M. Blair	Oak Ridge Associated Universities	Bruce McWilliams	Pacific Institute
C. J. Austermliller	Oakland Community College	Marlen Miller	Pacific Lutheran University
Kevin J. Murphy	Oakland University	Norris A. Peterson	Pacific Lutheran University
A. T. Aburachis	Oannon University	Rachel Nugent	Pacific Lutheran University
David L. Cleeton	Oberlin College	John A. Jaksch	Pacific Northwest National Laboratory
Hirschel Kasper	Oberlin College	Joseph M. Roop	Pacific Northwest National Laboratory
James Whitney	Occidental College	Michael J. Scott	Pacific Northwest National Laboratory
Michael K. Tamada	Occidental College	H. Joe Story	Pacific University
Robert L. Moore	Occidental College	Phillip J. Ruder	Pacific University
Edward H. Clarke	Office of Management & Budget	Loren A. Lee	Palomar College
Joseph R. Mason	Office of the Comptroller of the Currency	Teresa L. C. Laughlin	Palomar College
Robert DeYoung	Office of the Comptroller of the Currency	Craig Paxton	Paxton Analysts
William O. Shropshire	Oglethorpe University	Brandt Witte	Peace Corps
Frederick Church	Ohio Legislature Budget Office	Daniel A. Underwood	Peninsula College
Alan Randall	Ohio State University	Colin Polsky	Penn. State Univ., Earth System Science Center
Amy Jocelyn Glass	Ohio State University	Mark D. Agee	Pennsylvania State University
Belton M. Fleisher	Ohio State University	Ali Abderrezak	Pennsylvania State University
Brent Sohngen	Ohio State University	Ann Fisher	Pennsylvania State University
Elian Khalil	Ohio State University	Barry N.	Pennsylvania State University
Eric Fisher	Ohio State University	Chidem Kuras	Pennsylvania State University
Hassan Y. Aly	Ohio State University	Donald J. Epp	Pennsylvania State University
Herbert Farnes	Ohio State University	Gary Bolton	Pennsylvania State University
Jay L. Zagorsky	Ohio State University	Jacob DeRooy	Pennsylvania State University
Jingang Zhao	Ohio State University	James D. Rodgers	Pennsylvania State University

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LIST OF ECONOMISTS WHO HAVE ENDORSED TO DATE

MARCH 24, 1997

NAME	AFFILIATION	NAME	AFFILIATION
Bernard Rose	Rocky Mountain College	Patricia Dillon	Scripps College
Kenna Taylor	Rollins University	Jere W. Clark	SCSC
Ron Balman	Roosevelt University	M. Louise Curley	Scudder, Stevens & Clark
Dale Bremner	Rose - Hulman Institute of Technology	Allen S. Bellas	Seattle University
Stephen Smith	Rose State College	Vinay Datar	Seattle University
Manijeh Sabl	Russell Sage College	William L. Weber	SEMO State University
A. Myrick Freeman III	Rutgers University	Jerry Jenkins	Sequoia Institute
Bruce Mizrach	Rutgers University	Henry C. F. Arnold	Seton Hall University
Carlos Seiglie	Rutgers University	Tony Lovisek	Seton Hall University
Edmund M. Tavemler	Rutgers University	Alan G. Myers	SFWS
Horace J. De Podwin	Rutgers University	Michael J. Chapman	Shearman & Sterling
Leslie E. Small	Rutgers University	Thomas H. Sheenan, Jr.	Sheenan International
Marlene Kim	Rutgers University	Daneil A. Pavsek	Shenandoah University
Michael A. Crew	Rutgers University	Signe L. Sherman	Sherman Holdings
Michael K. Taussig	Rutgers University	Kirk E. Vandezande	Simon Fraser University
Richard W. Johnson	Rutgers University	Sharon Pang	Skadden, Arps, Slate, Meaher & Flonn
Robert H. Patrick	Rutgers University	Deborah Haas-Wilson	Smith College
Marjorie W. Munson	Rutgers University, Douglass College	Roger T. Kaufman	Smith College
William H. Wrean	Sacajawea & Company	L. Scott Muller	Social Security Administration
Lucjan Orłowski	Sacred Heart University	Michael V. Leonesio	Social Security Administration
Alannah Orrison	Saddleback College	Carlos A. Benito	Sonoma State University
Kenneth G. Woodward	Saddleback College	Stephen D. Lewis	Sonoma State University
Hong Y. Park	Saginaw Valley State University	Robert C. McGilivray	Sound Economics
Charles Henning	SAIC	Thomas Mitchell	South Illinois University
Gilbert Becker	Saint Anselm College	Elizabeth Granitz	Southampton College
Reza Ramazani	Saint Michael's College	Christopher R. Mann	Southeast Michigan Council of Govts.
Thamby Mammen	Saint Norbert College	Kenneth Chinn	Southeastern Oklahoma State University
Dorothy Ryan Siden	Salem State College	Scott Bellamy	Southern Arkansas University
Chee Y. Thum	Salomon Brothers Inc.	Paul Shrier	Southern California College
Adam Gifford, Sr.	San Diego State University	David Lui	Southern California Edison
Douglas B. Stewart	San Diego State University	Donald Elliott	Southern Illinois University
James Gerber	San Diego State University	Jim Musumeci	Southern Illinois University
S. Crossbay-Shechtman	San Diego State University	Julius Horvath	Southern Illinois University
Dluchi O. Nnachi	San Francisco Juvenile Court	Paul Trescott	Southern Illinois University
Betty J. Blecha	San Francisco State University	S. Grosskopf	Southern Illinois University
Joanna Moss	San Francisco State University	Stanford L. Levin	Southern Illinois University
R. Newby Schweitzer	San Francisco State University	R.W. Hafer	Southern Indiana University
Yea-Mow Chen	San Francisco State University	J. Carter Murphy	Southern Methodist University
Douglas F. Greer	San Jose State University	Thomas Osang	Southern Missouri University
Thomas Drennen	Sandia National Laboratories	Thomas Dalton	Southern University at New Orleans
Helen Popper	Santa Clara University	C. E. Chang	Southwest Missouri State University
Michael Kevane	Santa Clara University	E. Dale Wasson	Southwest Missouri State University
R. D. Norton	Sarkisian	Anne R. Hornsby	Spelman College
Edward Alban	Savannah State University	Bernice de Gaines Scott	Spelman College
John Watters	SBC Communications	Kenneth N. Hamilton	Spring Hill College
Frank D. Weiss	School of Advanced International Studies	Brian K. Stalhr	Sprint

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MARCH 24, 1997

NAME	AFFILIATION	NAME	AFFILIATION
Stephen Golub	Swarthmore College	Ronald H. Miller	The Hudson Group
Roger C. Dower	Sycom Enterprises	Thomas E. O'Hare	The Intertich Group
A. Dale Tussing	Syracuse University	Gina Livermore	The Levin Group
Bernard Jump	Syracuse University	David C. Stapleton	The Lewin Group
Donald H. Dutkowsky	Syracuse University	Linz Audain	The Mandate Corporation
Michael Wasylenko	Syracuse University	William G Rhoads	The Nature Conservancy
David I. Goldeberg	Systematic Forecasting, Inc.	Martin Duffy	The Perseus Group
Faith Breen	Systems Resource Management	Hiroshi Kawamura	The United Nations
Dana Stevens	Takashl Corporation	Larry Willmore	The United Nations
Cindy Houser	TAMU	Fernando Losada	The Weston Group
William L. Beaty	Tarleton College	Peter C. Moll	The World Bank
Thomas D. Legg	TD Legg Financial Economics	A. Mead Over, Jr.	The World Bank
Robert E. Lucore	Teamsters Union	Andrew Steer	The World Bank
Michael J. Ileo	Technical Associates, Inc.	Carter Brandon	The World Bank
Charles P. Hall	Temple University	Charles C. Griffin	The World Bank
Charlotte Phelps	Temple University	David Dollar	The World Bank
J. Jay Choi	Temple University	Delbert Fitchett	The World Bank
Thomas E. Getzen	Temple University	Estelle James	The World Bank
Seisel Jonakin	Tennessee Tech. University	Gianni Zanini	The World Bank
Whewon Cho	Tennessee Tech. University	Gunnar S. Eskeland	The World Bank
Lonnie L. Jones	Texas A & M University	Herman Cesar	The World Bank
Wade L. Griffin	Texas A&M University	Hideo Akabayashi	The World Bank
Amy P. Thurow	Texas A&M University	Humayun Tal	The World Bank
C. Richard Shumway	Texas A&M University	Inderjit Singh	The World Bank
Farshid Vahid	Texas A&M University	J. Michael Finger	The World Bank
James H. Ullmer	Texas A&M University	Jacques Van der Gaag	The World Bank
Javier Gimeno	Texas A&M University	John Kellenberg	The World Bank
John R. Moroney	Texas A&M University	John Williamson	The World Bank
Julian E. Gaspar	Texas A&M University	Keith E. Hansen	The World Bank
Manzoor E. Chowdhury	Texas A&M University	Loerene Yap	The World Bank
Noh-Sun Kwark	Texas A&M University	Manuela Ferro	The World Bank
Rajiv Sarin	Texas A&M University	Marla Freire	The World Bank
Ronald C. Griffin	Texas A&M University	Mark W. Leiserson	The World Bank
Thomas D. Jeltschko	Texas A&M University	Martha De Melo	The World Bank
Frank Giesber	Texas Lutheran University	Martin Ravallion	The World Bank
Richard E. Quandt	The Andrew W. Mellon Foundation	Maurice Schiff	The World Bank
Kenneth T. Wise	The Brattle Group	Moshe Syrquin	The World Bank
Paul R. Carpenter	The Brattle Group	Nobuhiko Fuwa	The World Bank
Peter Fox-Penner	The Brattle Group	Pedro Belli	The World Bank
Peter Fox-Penner	The Brattle Group	Robert Armstrong	The World Bank
G.R. Guralnik	The Business Group, Inc.	Robert Hunt	The World Bank
Donald E. Campbell	The College of William & Mary	Saji Thomas	The World Bank
A. Doris Capistrano	The Ford Foundation	Stefan G. Koeberle	The World Bank
Bernard Wasow	The Ford Foundation	Timothy King	The World Bank
Henry E. Cole	The Future Group International	Yi Chen	The World Bank
Gerald Kraft	The CSK Group, Ltd.	Yin-kann Wen	The World Bank

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LIST OF ECONOMISTS WHO HAVE ENDORSED TO DATE

MARCH 24, 1997

NAME	AFFILIATION	NAME	AFFILIATION
Robert M. Williams	UCLA	Mark Zupan	University of Arizona
Stuart O. Schweitzer	UCLA	Richard Newcomb	University of Arizona
Tom K. Lleser	UCLA	Roger W. Fox	University of Arizona
Trudy Ann Cameron	UCLA	Ronald J. Vogel	University of Arizona
Wei-Yin Hu	UCLA	Willard T. Carleton	University of Arizona
Werner Z. Hirsch	UCLA	Gary Fenier	University of Arkansas
Brad Cornell	UCLA, Anderson School of Business	William P. Curington	University of Arkansas
Bhagwan Chowdhry	UCLA, Anderson School of Management	Michael Sher	University of Auckland
David R. Bell	UCLA, Anderson School of Management	David W. Stevens	University of Baltimore
M. J. Brennan	UCLA, Anderson School of Management	Esra Bennathan	University of Bristol, UK
Marvin Lieberman	UCLA, Anderson School of Management	Aaron S. Edlin	University of California, Berkeley
Jose' De La Torre	UCLA, Anderson School of Mgmt.	Anne M. Libby	University of California, Berkeley
Richard H. Sander	UCLA, School of Law	Anthony Fisher	University of California, Berkeley
Georgios Karras	UIC	Ben F. Vaughan, IV	University of California, Berkeley
Bill Lord	UMBC	Clair Brown	University of California, Berkeley
Nathaniel Wollman	University of New Mexico	Clark Kerr	University of California, Berkeley
Ella K. Hensley	Union College	David Romer	University of California, Berkeley
J. Douglas Klein	Union College	Frank E. Triukl	University of California, Berkeley
Therese McCarthy	Union College	Garland L. Brinkley	University of California, Berkeley
Todd A. Burgman	Union College	Gary Charness	University of California, Berkeley
Dr. Faruk G. Sabet	United Nations	** Gerard Debreu	University of California, Berkeley
Gary W. Grizzle	United Parcel Service	Glenn A. Woroch	University of California, Berkeley
Herbert Traxler	United States PHS	Gordon Rausser	University of California, Berkeley
John Mark Lindrall	Univ. of Phoenix, Southern CA campus	Gregory Grossman	University of California, Berkeley
Stanley Long	Univ. of Pittsburgh, Penn. State Univ.	Hal R. Varian	University of California, Berkeley
James J. Heckman	University of Chicago	Jeffrey S. Petersen	University of California, Berkeley
Richard Bryant	University of Missouri-Rolla	Jerome Siebert	University of California, Berkeley
Gautam Vora	University of New Mexico	John M. Letiche	University of California, Berkeley
Richard W. Stratton	University of Akron	Larry S. Kaip	University of California, Berkeley
Harris Schlesinger	University of Alabama	Lee S. Friedman	University of California, Berkeley
Nancy S. Barrett	University of Alabama	Mark Rubinstein	University of California, Berkeley
Walter S. Misiulek	University of Alabama	Maurice Obstfeld	University of California, Berkeley
Robert A. McLean	University of Alabama, Birmingham	Miguel Cantillo	University of California, Berkeley
Seung-Dong Lee	University of Alabama, Birmingham	Oliver E. Williamson	University of California, Berkeley
John F. Schnell	University of Alabama, Huntsville	Peter Berck	University of California, Berkeley
William S. Brown	University of Alaska - SE	Richard B. Norgaard	University of California, Berkeley
Todd R. Smith	University of Alberta, Canada	Robert M. Anderson	University of California, Berkeley
Alberta H. Charney	University of Arizona	Sylvia Lane	University of California, Berkeley
David A. King	University of Arizona	Theodore E. Keeler	University of California, Berkeley
Edward E. Zajac	University of Arizona	David J. Teece	University of California, Berkeley, Haas School
Eric Monke	University of Arizona	** John C. Harsanyi	University of California, Berkeley, Haas School
Gordon Tullock	University of Arizona	Pablo T. Spiller	University of California, Berkeley, Haas School
James C. Cox	University of Arizona	Stephen Penman	University of California, Berkeley, Haas School
John L. Wilson	University of Arizona	Richard H. Holton	University of California, Berkeley, Haas School
Leslie S. Stratton	University of Arizona	Richard Meese	University of California, Berkeley, Haas School
Lester D. Taylor	University of Arizona	Daniel Rubinfeld	University of California, Berkeley Law School

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ECONOMISTS' STATEMENT ON CLIMATE CHANGE

LIST OF ECONOMISTS WHO HAVE ENDORSED TO DATE

MARCH 24, 1997

NAME	AFFILIATION	NAME	AFFILIATION
Francis Tannian	University of Delaware	John B. Braden	University of Illinois
Lawrence P. Donnelley	University of Delaware	Robert Resek	University of Illinois
Pamela C. Brown	University of Delaware	Robert W. Gillespie	University of Illinois
Pamela J. Smith	University of Delaware	Thomas S. Ulen	University of Illinois
Donald Pemberton	University of Detroit, Mercy	Walter W. McMahon	University of Illinois
Maurice Tsai	University of Evansville	George Rosen	University of Illinois, Chicago
David Denalow	University of Florida	Houston H. Stokes	University of Illinois, Chicago
Elias Dinopoulos	University of Florida	Richard F. Kosobud	University of Illinois, Chicago
Eugene Brigham	University of Florida	William F. Maloney	University of Illinois, Urbana
Ira Horowitz	University of Florida	William F. Malowey	University of Illinois, Urbana
Jay R. Ritter	University of Florida	David J. Balan	University of Illinois, Urbana-Champaign
John F. Scoggins	University of Florida	Koji Taira	University of Indiana
Max R. Langham	University of Florida	Benjamin Wilner	University of Iowa
Richard E. Suttor	University of Florida	Calvin D. Siebert	University of Iowa
Sanford V. Berg	University of Florida	Gerald Nordquist	University of Iowa
Tracy R. Lewis	University of Florida	Joel Horowitz	University of Iowa
Andy Keeler	University of Georgia	John M. Brooks	University of Iowa
P. Mather Lindsay	University of Georgia	S. Y. Wu	University of Iowa
Steve Turner	University of Georgia	Thomas F. Pogue	University of Iowa
W. J. Florkowski	University of Georgia, Griffin	De-Min Wu	University of Kansas
Paul Callaghan	University of Guam	Joseph Sicilian	University of Kansas
Bharat Kolluri	University of Hartford	Neal Becker	University of Kansas
Demetrios Giannaros	University of Hartford	Donald J. Mullineaux	University of Kentucky
Farhad Rassekh	University of Hartford	James Stoker	University of Kentucky
Rao Singamsetti	University of Hartford	Yoonbai Kim	University of Kentucky
Chung H. Lee	University of Hawaii	Gonyung Park	University of La Verne
David McClain	University of Hawaii	John Vahaly	University of Louisville
James Moncur	University of Hawaii	Anthony Lanyi	University of Maryland
Louis A. Rose	University of Hawaii	Arvind Panagariya	University of Maryland
Richard E. Peterson	University of Hawaii	Christopher K. Clague	University of Maryland
Sumner La Croix	University of Hawaii	Douglas Meade	University of Maryland
David L. Hammes	University of Hawaii, Hilo	Erik Lichtenberg	University of Maryland
Denise Eby Konan	University of Hawaii, Manoa	John H. Cumberland	University of Maryland
A. Reza Hoshmand	University of Hawaii, West Oahu	John W. Dorsey	University of Maryland
A. Marvasti	University of Houston	Karla Hoff	University of Maryland
D. Andrew Austin	University of Houston	Lee E. Preston	University of Maryland
Janet Kohlhasse	University of Houston	Maureen Cropper	University of Maryland
Steven G. Craig	University of Houston	Paul A. Weinstein	University of Maryland
Roger H. Coupal	University of Idaho	Peter Cramton	University of Maryland
Stephen Devadoss	University of Idaho	R. Betancourt	University of Maryland
Anil K. Bera	University of Illinois	Robert Costanza	University of Maryland
Donald W. Paden	University of Illinois	Suzi C. Kerr	University of Maryland
Eliezer B. Ayal	University of Illinois	Theodore C. Karlolis	University of Maryland
George G. Pennacchi	University of Illinois	Phillip Weitzman	University of Maryland UNW College
Gerrit Knaap	University of Illinois	Branch Ben	University of Massachusetts
Hans J. Brems	University of Illinois	Donald W. Katzner	University of Massachusetts

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ECONOMISTS' STATEMENT ON CLIMATE CHANGE

LIST OF ECONOMISTS WHO HAVE ENDORSED TO DATE

MARCH 24, 1997

NAME	AFFILIATION	NAME	AFFILIATION
Barry M. Popkin	University of North Carolina, Chapel Hill	John Kagel	University of Pittsburgh
David J. Ravenscraft	University of North Carolina, Chapel Hill	Josephine E. Olson	University of Pittsburgh
Michael Luger	University of North Carolina, Chapel Hill	Kevin Sontheimer	University of Pittsburgh
Robert Callman	University of North Carolina, Chapel Hill	Michael H. Spiro	University of Pittsburgh
Teresa L. Kauf	University of North Carolina, Chapel Hill	Steve Husted	University of Pittsburgh
Richard A. Zuber	University of North Carolina, Charlotte	Steven F. Rushen	University of Pittsburgh
Andrew C. Brod	University of North Carolina, Greensboro	Evaldo A. Cabarroury	University of Puerto Rico
Donald R. Escarraz	University of North Dakota	Kate Stirling	University of Puget Sound
Fikret Ceyhan	University of North Dakota	Lorenzo Garbo	University of Redlands
Michael Nieswiadomy	University of North Texas	John P. Burkett	University of Rhode Island
Micheal A. McPhasa	University of North Texas	S. Ghon Rhee	University of Rhode Island
Steven G. Thorpe	University of Northern Iowa	Stephen Swallow	University of Rhode Island
Charles K. Wilber	University of Notre Dame	Jonathan Wight	University of Richmond
Jeffrey H. Bergstrand	University of Notre Dame	Peter W. Schuhmann	University of Richmond
Ralph Chami	University of Notre Dame	Robert Dolan	University of Richmond
Richard G. Sheehan	University of Notre Dame	Florian Zettelmeyer	University of Rochester
Robert E. Florence	University of Notre Dame	James A. Kahn	University of Rochester
James C. Hartigan	University of Oklahoma	Jeffrey S. Banks	University of Rochester
Zhen Zhu	University of Oklahoma	Lionel W. McKenzie	University of Rochester
Shuanglin Lin	University of Omaha	Per Krusell	University of Rochester
Bruce A. Blomgen	University of Oregon	Eric Hanushek	University of Rochester, Walworth Institute
James P. Ziliak	University of Oregon	Yhi-Min Ho	University of Saint Thomas
Paul B. Simpson	University of Oregon	Rosalie Liccardo Pacula	University of San Diego
Raymond Mikesell	University of Oregon	Man-Lui Lau	University of San Francisco
Robert E. Smith	University of Oregon	Mike Lehmann	University of San Francisco
Stephen Haynes	University of Oregon	Ed Scallill	University of Scranton
Alan Heston	University of Pennsylvania	John H. McDermott	University of South Carolina
Andrew Postlewaite	University of Pennsylvania	Oliver G. Wood, Jr.	University of South Carolina
Arthur I. Bloomfield	University of Pennsylvania	Randolph C. Martin	University of South Carolina
Herbert S. Levine	University of Pennsylvania	Samuel L. Baker	University of South Carolina
** Lawrence R. Klein	University of Pennsylvania	William S. Rawson	University of South Carolina
Morris Hamburg	University of Pennsylvania	William T. Moore	University of South Carolina
Patricia M. Danzon	University of Pennsylvania	Dennis A. Johnson	University of South Dakota
Paul E. Fischer	University of Pennsylvania	Eila Hanni	University of South Florida
Petra E. Todd	University of Pennsylvania	John C. Briggs	University of South Florida
Daniel Levinthal	University of Pennsylvania, Wharton School	John W. Rowe, Jr.	University of South Florida
David Cummins	University of Pennsylvania, Wharton School	K. Gyimah-Brempong	University of South Florida
Elizabeth E. Bailey	University of Pennsylvania, Wharton School	R. Mark Wilson	University of South Florida
Franklin Allen	University of Pennsylvania, Wharton School	Thomas N. Chirikos	University of South Florida
Richard C. Marston	University of Pennsylvania, Wharton School	Catherine S. Elliott	University of South Florida, New College
William G. Whitney	University of Pennsylvania, Wharton School	Frederick R. Strobel	University of South Florida, New College
Alvin E. Roth	University of Pittsburgh	Semoon Chang	University of Southern Alabama
Daniel Berkowitz	University of Pittsburgh	Baizhu Chen	University of Southern California
Edward Sussna	University of Pittsburgh	Jeff Chapman	University of Southern California
Gene W. Gruver	University of Pittsburgh	Jeff Nugent	University of Southern California
Jerome C. Wells	University of Pittsburgh	Kevin Chang	University of Southern California

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MARCH 24, 1997

NAME	AFFILIATION	NAME	AFFILIATION
Norman R. Cloutier	University of Wisconsin, Parkside	Bruce Petersen	Washington University
Richard H. Keehu	University of Wisconsin, Parkside	Marcus Berliant	Washington University
Ahdol Sooti	University of Wisconsin, Platteville	Wilhelm Neufeind	Washington University
Lawrence Welser	University of Wisconsin, Stevens Point	Dennis L. Lambert	Washington University, School of Medicine
Thomas D. Crocker	University of Wyoming	R. W. La Hote	Washtenaw Community College
Mark D. Soskin	University of Central Florida	Kenneth G. McCain	Waterford International
John D. Bitzan	Upper Great Plains Transportation Institute	Yong U. Glasure	Wayland Baptist University
Gerhard N. Rostvold	Urbanomics Research Associates	Doris Geide-Stevenson	Weber State University
Christine Williams	USG	John Mukum Mbaku	Weber State University
Amit Batabyal	Utah State University	Sarah Tinkler	Weber State University
Carl Lundgren	Valmarpro Forecasting	James Burtle	WEFA Group
Andrea Maneschi	Vanderbilt University	Jeffrey F. Werling	WEFA Group
C. Elton Hinshaw	Vanderbilt University	Virendra Singh	WEFA Group
Fred M. Westfield	Vanderbilt University	Marshall Goldman	Wellesley College
Gian S. Sahota	Vanderbilt University	Gary Yohe	Wesleyan University
Malcolm Getz	Vanderbilt University	John P. Bonin	Wesleyan University
Rudolph C. Blitz	Vanderbilt University	Joyce Jacobsen	Wesleyan University
Stephen Buckles	Vanderbilt University	Lori Bollinger	Wesleyan University
Geoffrey A. Jehle	Vassar College	Marnie W. Mueller	Wesleyan University
Phyllis W. Isley	Vermont Law School	Clifford B. Hawley	West Virginia University
N. Laopodis	Villa Julie College	Douglas W. Mitchell	West Virginia University
Kishor Thanawala	Villanova University	Jerald J. Fletcher	West Virginia University
Wen Mao	Villanova University	Kern O. Kymn	West Virginia University
Amy H. Dalton	Virginia Commonwealth University	Peter V. Schaeffer	West Virginia University
Eleanor C. Snellings	Virginia Commonwealth University	Stratford M. Douglas	West Virginia University
John H. Bowman	Virginia Commonwealth University	Walter C. Labys	West Virginia University
Thomas J. Meeks	Virginia State University	Susan K. Kask	Western Carolina University
Allan Mandelstamm	Virginia Tech	James A. Yunker	Western Illinois University
Catherine Eckel	Virginia Tech	Vaman Rao	Western Illinois University
Djavad Salehi-Isfahani	Virginia Tech	Annette N. Brown	Western Michigan University
George W. Norton	Virginia Tech	Bassam E. Harik	Western Michigan University
Glen H. Mitchell	Virginia Tech	Donald L. Alexander	Western Michigan University
Mark Stegeman	Virginia Tech	Emily P. Hoffman	Western Michigan University
Nicholas Tideman	Virginia Tech	Usree Bandyopadhyay	Western Michigan University
Vijay Singal	Virginia Tech	Werner Sichel	Western Michigan University
Vernon O. Roningen	VORSDM	Dennis R. Murphy	Western Washington University
Christopher J. O'Leary	W. E. Upjohn Institute	John R. Wagner	Westfield State College
Jonathan Peters	Wagner College	Maria K. Wrotniak	Westminster College
Donald W. Walls	Walls & Associates	Gordon Well	Wheaton College
Lisa Daniels	Washington College	James Halteman	Wheaton College
Art Goldsmith	Washington & Lee University	John A. Walgreen	Wheaton College
Bruce Herrick	Washington & Lee University	James F. Shepherd	Whitman College
John C. Winfrey	Washington & Lee University	Samuel Webb	Wichita State University
Ernst W. Stromsdorfer	Washington State University	Charles Waldauer	Widener University
Gareth P. Green	Washington State University	Beth A. Wilson	Willamette University
Robert Rosenman	Washington State University	Don Negri	Willamette University

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NAME	AFFILIATION	NAME	AFFILIATION
Peter B. Rosendorff	University of Southern California	Gail Blattenberger	University of Utah
Peter Gordon	University of Southern California	Kenneth P. Jameson	University of Utah
Richard H. Day	University of Southern California	Lance Gorton	University of Utah
Timothy N. Cason	University of Southern California	Mark Glick	University of Utah
Howard F. Chang	University of Southern California Law School	R. Thayne Robson	University of Utah
Lewis R. Gale, IV	University of Southwest Louisiana	Thomas N. Maloney	University of Utah
Charles M. Gray	University of St. Thomas	Abbas Alnasrawi	University of Vermont
Demos P. Hadjiyanis	University of St. Thomas	Alfred L. Thimun	University of Vermont
Marsha Blumenthal	University of St. Thomas	Michael Sesnowitz	University of Vermont
Paul R. Casperson	University of St. Thomas	Charles A. Holt	University of Virginia
Amy Farmer	University of Tennessee	Jane Burig	University of Virginia
Charles B. Garrison	University of Tennessee	John Elder	University of Virginia
Jean Cauger	University of Tennessee	John K. Whitaker	University of Virginia
John W. Mayo	University of Tennessee	Mark R. Eaker	University of Virginia
Jonathan D. Rubin	University of Tennessee	Michael G. Rukstad	University of Virginia
Matthew N. Murray	University of Tennessee	John Treble	University of Wales
Peter M. Bearse	University of Tennessee	Dan Jacoby	University of Washington
Sidney L. Carroll	University of Tennessee	Gardner Brown	University of Washington
Thomas R. Sadler	University of Tennessee	Haideh Salehi-Esfahani	University of Washington
E. Bruce Hutchinson	University of Tennessee, Chattanooga	J. Lawarree	University of Washington
William J. Crowder	University of Texas	Kathryn Dewenter	University of Washington
Brian M. Trinkle	University of Texas, Austin	Robert Varadi	University of Washington
Charles C. Holt	University of Texas, Austin	William Beyers	University of Washington
Chrys Dougherty	University of Texas, Austin	Abbas A. Taheri	University of Wisconsin Center Fox Valley
David Kendrick	University of Texas, Austin	Darwin Wassink	University of Wisconsin, Eau Claire
David Scoones	University of Texas, Austin	Maria DaCosta	University of Wisconsin, Eau Claire
Don Fullerton	University of Texas, Austin	Wayne Carroll	University of Wisconsin, Eau Claire
Dwight Steward	University of Texas, Austin	Sayeed Payesteh	University of Wisconsin, Fond du Lac
Geoffrey T. Andron	University of Texas, Austin	Thomas S. Nesselin	University of Wisconsin, Green Bay
Paul W. Wilson	University of Texas, Austin	Glenn Knowles	University of Wisconsin, LaCrosse
Ray Marshall	University of Texas, Austin	Donald A. Nichols	University of Wisconsin, Madison
Stephen L. McDonald	University of Texas, Austin	James Andreoni	University of Wisconsin, Madison
Tracy Hofer	University of Texas, Austin	James D. Schilling	University of Wisconsin, Madison
Charles Lackey, Jr.	University of Texas, Brownsville	Kenneth D. West	University of Wisconsin, Madison
Wim P.M. Vijverberg	University of Texas, Dallas	Patricia Hallinan	University of Wisconsin, Madison
Jose A. Pagan	University of Texas, Pan American	Arik Levinson	University of Wisconsin, Madison
John Merrifield	University of Texas, San Antonio	James D. Shilling	University of Wisconsin, Madison
David E. Keefe	University of the Pacific	Martin David	University of Wisconsin, Madison
Michael Ballot	University of the Pacific	Raghar Oygar	University of Wisconsin, Madison
Walter C. Wagner	University of the Pacific	W. A. Brock	University of Wisconsin, Madison
Johannes Overbeek	University of the Virgin Islands	David J. Bernstein	University of Wisconsin, Milwaukee
Alan H. Gleason	University of Toledo	Markos J. Mamalakis	University of Wisconsin, Milwaukee
C. R. Winegarden	University of Toledo	Sol Shalit	University of Wisconsin, Milwaukee
John Murray	University of Toledo	M. Kevin McGee	University of Wisconsin, Oshkosh
Bobbie L. Horn	University of Tulsa	Nancy J. Burnett	University of Wisconsin, Oshkosh
John Karikari	University of Tulsa	Dennis A. Kaufman	University of Wisconsin, Parkside

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ECONOMISTS' STATEMENT ON CLIMATE CHANGE

LIST OF ECONOMISTS WHO HAVE ENDORSED TO DATE

MARCH 24, 1997

NAME	AFFILIATION	NAME	AFFILIATION
Herbert Glwtes	University of Massachusetts	G. Edward Schuh	University of Minnesota
Irving Gershenberg	University of Massachusetts	Grant Haner	University of Minnesota
James K. Kindahl	University of Massachusetts	Jared Creason	University of Minnesota
James T. Campen	University of Massachusetts	Jay S. Coggins	University of Minnesota
Nancy Folbre	University of Massachusetts	Jerrold M. Peterson	University of Minnesota
Norman D. Altken	University of Massachusetts	John A. Nyman	University of Minnesota
Paul M. Brown	University of Massachusetts	Leonid Hurwicz	University of Minnesota
Andres Torres	University of Massachusetts, Boston	Mahmood A. Zaldi	University of Minnesota
David Terkla	University of Massachusetts, Boston	Margaret Peteraf	University of Minnesota
Joann Stewart	University of Massachusetts, Boston	Pareena Lawrence	University of Minnesota
David M. Kemme	University of Memphis	Philip M. Raup	University of Minnesota
K. K. Fung	University of Memphis	Robert T. Kudrle	University of Minnesota
Anphonse C. Holtmann	University of Miami	Roger Feldman	University of Minnesota
Bryan W. Roberts	University of Miami	Timothy J. Kehoe	University of Minnesota
David C. Mauer	University of Miami	Vernon W. Ruttan	University of Minnesota
David Letson	University of Miami	Arne Kildergaard	University of Mississippi
Kerry Anne McGeary	University of Miami	Norman K. Womer	University of Mississippi
Alan V. Deardorff	University of Michigan	Chyi-Ing Lin	University of Missouri
Albert Park	University of Michigan	Donald J. Schilling	University of Missouri
Christine Papajohn	University of Michigan	Floyd K. Hamston	University of Missouri
Edward Gramlich	University of Michigan	Nicholas Kalaitzandonakes	University of Missouri
F. Thomas Juster	University of Michigan	Robert J. Bevins	University of Missouri
Frank Thompson	University of Michigan	Shawn Ni	University of Missouri
J. Kmenta	University of Michigan	W. Whitney Hicks	University of Missouri
James N. Morgan	University of Michigan	Phillip B. Thompson	University of Missouri, Rolla
Jeffrey K. Mackie-Mason	University of Michigan	Douglas Dalenberg	University of Montana
Jonathan A. Parker	University of Michigan	John Duffield	University of Montana
Merritt B. Fox	University of Michigan	Michael Kupilik	University of Montana
Michael R. Moore	University of Michigan	Craig R. MacPhee	University of Nebraska
Michael Wellman	University of Michigan	E. Wesley F. Peterson	University of Nebraska
Paul N. Courant	University of Michigan	Gordon Karels	University of Nebraska
Richard A. Hirth	University of Michigan	Lilyan E. Fulginiti	University of Nebraska
Robert Stern	University of Michigan	Roger F. Riefler	University of Nebraska
Steven T. Vass	University of Michigan	Richard K. Perrin	University of Nebraska, Lincoln
Terry L. Roe	University of Michigan	Ronald M. Cronovich	University of Nevada
Warren C. Whalley	University of Michigan	Ricardo Gazel	University of Nevada, Las Vegas
Wolfgang F. Stolper	University of Michigan	Dwayne Wrightsman	University of New Hampshire
Yan Chen	University of Michigan	W. David Bradford	University of New Hampshire
David Weinstein	University of Michigan Business School	Edward A. Downe	University of New Haven
Sugato Bhattacharyya	University of Michigan Business School	Robert Rainish	University of New Haven
Mark J. Perry	University of Michigan, Flint	Christine Sauer	University of New Mexico
N. N. Reddy	University of Michigan, Flint	Geoffrey J. Bannister	University of New Mexico
Bryan Dowd	University of Minnesota	K. Gawande	University of New Mexico
C. Ford Runge	University of Minnesota	Max D. Bennett	University of New Mexico
Edward Coen	University of Minnesota	Arija Turunen-Red	University of New Orleans
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LIST OF ECONOMISTS WHO HAVE ENDORSED TO DATE

MARCH 24, 1997

NAME	AFFILIATION	NAME	AFFILIATION
Peter S. Menell	University of California, Berkeley, Law School	Michael M. Hutchison	University of California, Santa Cruz
Robert D. Cooter	University of California, Berkeley, Law School	Richard B. Howarth	University of California, Santa Cruz
Robert D. Cooter	University of California, Berkeley Law School	Catherine Y. Co	University of Central Florida
David F. Layton	University of California, Davis	Andres Rodriguez	University of Chicago
John E Roemer	University of California, Davis	David Hummels	University of Chicago
Klaus Nehring	University of California, Davis	Gale D. Johnson	University of Chicago
Lovell S. Jarvis	University of California, Davis	James D. Fearon	University of Chicago
Peter H. Lindert	University of California, Davis	Lars Peter Hansen	University of Chicago
Robert Smiley	University of California, Davis	Mary Jean Bowman	University of Chicago
Thomas Mayer	University of California, Davis	Milton Harris	University of Chicago
Barrie R. Nault	University of California, Irvine	Stefan Krieger	University of Chicago
David Brownstone	University of California, Irvine	Thomas Sargent	University of Chicago
Dennis J. Aigner	University of California, Irvine	Uzma Qureshi	University of Chicago
Kenneth A. Small	University of California, Irvine	Claire Friedland	University of Chicago, George J. Stigler Center
Michelle R. Garfinkel	University of California, Irvine	Cass D. Sunstein	University of Chicago, Law School
Peter Navarro	University of California, Irvine	Austan Goolsbee	University of Chicago, School of Business
Aziz Khan	University of California, Riverside	Lars A. Stole	University of Chicago, School of Business
Jang-Ting Guo	University of California, Riverside	Timur Kuran	University of Chicago, School of Business
Keith C. Knapp	University of California, Riverside	Dennis Hanseman	University of Cincinnati
Keith Griffin	University of California, Riverside	Wolfgang Mayer	University of Cincinnati
R. Robert Russell	University of California, Riverside	Naci Mocan	University of Colorado
Steven Helfand	University of California, Riverside	Bernard Udis	University of Colorado, Boulder
Victor D. Lippit	University of California, Riverside	Charles De Bartolome	University of Colorado, Boulder
Takeo Hoshi	University of California, San Diego	Charles W. Howe	University of Colorado, Boulder
Alex Kane	University of California, San Diego	Keith E. Maskus	University of Colorado, Boulder
Allan Timmermann	University of California, San Diego	Kenneth R. Beauchemin	University of Colorado, Boulder
Christopher Woodruff	University of California, San Diego	Mark Cronshaw	University of Colorado, Boulder
Joel Watson	University of California, San Diego	Paul Stutsman	University of Colorado, Boulder
John Conlisk	University of California, San Diego	Robert K. Davis	University of Colorado, Boulder
Joseph Grunwald	University of California, San Diego	Robert McNown	University of Colorado, Boulder
Lawrence B. Krause	University of California, San Diego	Russell R. Wermers	University of Colorado, Boulder
Michael Willoughby	University of California, San Diego	Daphne Greenwood	University of Colorado, Colorado Springs
Richard T. Carson	University of California, San Diego	Michael J. Mueller	University of Colorado, Colorado Springs
Richard W. Ruppert	University of California, San Diego	Arthur W. Wright	University of Connecticut
Elliot Marseille	University of California, San Francisco	C. P. Hallwood	University of Connecticut
Harold S. Luft	University of California, San Francisco	Lanse Minkler	University of Connecticut
Charles D. Kolstad	University of California, Santa Barbara	Peter Barth	University of Connecticut
Doug Steigerwald	University of California, Santa Barbara	Susan Randolph	University of Connecticut
Lloyd J. Mercer	University of California, Santa Barbara	Walter Dolde	University of Connecticut
Robert T. Deacon	University of California, Santa Barbara	John Rapp	University of Dayton
Stephen J. DeCanio	University of California, Santa Barbara	George R. Parsons	University of Delaware
William S. Comanor	University of California, Santa Barbara	Kenneth A. Lewis	University of Delaware
Alan Richards	University of California, Santa Cruz	Laurence Seidman	University of Delaware
Daniel Friedman	University of California, Santa Cruz	Russell F. Settle	University of Delaware
Lori Kletzer	University of California, Santa Cruz	Stacie E. Beck	University of Delaware
Menzie D. Chinn	University of California, Santa Cruz	David E. Black	University of Delaware

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NAME	AFFILIATION	NAME	AFFILIATION
Edward K. Hawkins	The World Bank, Rtd.	Marshall Reinsdorf	U. S. Bureau of Labor Statistics
Enrique Lerda	The World Bank, Rtd.	Adam A. Sokoloski	U. S. Bureau of Land Management
George C. Maniatis	The World Bank, Rtd.	Marc Rubin	U. S. Bureau of the Census
Philip J. Glaessner	The World Bank, Rtd.	Anthony C. Homan	U. S. Consumer Product Safety Commission
Ralph H. Hofmeister	The World Bank, Rtd.	Elliot Levy	U. S. Department of Commerce
Theodore Lang	Thomas Lane & Associates	H. Kemble Stokes, Jr.	U. S. Department of Commerce
Michael H. Thomson	Thomson Econometrics	John E. Jelacic	U. S. Department of Commerce
James W. Thomson	Thomson Investing	Inja K. Falk	U. S. Department of Energy
Richard Skolnik	Tiffin University	Robert Copaken	U. S. Department of Energy
Nayyer Hussain	Tougaloo College	Joseph M. Burns	U. S. Department of Justice
B. Michael Gilbar	Town of Hanover, New Hampshire	Robert Blicksilver	U. S. Department of Labor
Chang Min Kong	Towson State University	C. Anne Pence	U. S. Department of State
George C. Georgiou	Towson State University	Jon H. Goldstein	U. S. Department of the Interior
William Ingram	Tradewinds Realty	Stewart E. Butler	U. S. Department of Transportation
Bruce Vermeulen	Training & Development Corp.	Deborah Shields	U. S. Dept. of Agriculture
Andrew J. Gold	Trinity College	Robbin Shoenaler	U. S. Dept of Agriculture
Ward S. Curran	Trinity College	James M. MacDonald	U. S. Dept of Agriculture, Economic Research
William Breit	Trinity University	Kenneth Hanson	U. S. Dept of Agriculture, Economic Research
David Gillette	Truman State University	David Schimmelpfennig	U. S. Dept of Agriculture ERS
Jane Sung	Truman State University	Tanya Roberts	U. S. Dept of Agriculture, ERS
Seymour Patterson	Truman State University	Ken Borghese	U. S. Dept of Commerce
Werner Sublette	Truman State University	Christian Ehemann	U. S. Dept. of Commerce, Bureau of Economic
Carsten Kowalczyk	Tufts University	Paul D. Gayer	U. S. Dept of Health and Human Services Rtd.
David M. Garman	Tufts University	Monroe Burk	U. S. Foreign Service
Gilbert Metcalf	Tufts University	Michael E. C. Ely	U. S. Foreign Service, Rtd.
Jonathan Harris	Tufts University	William B. Shear	U. S. General Accounting Office
Joseph A. DiMasi	Tufts University	William McNaught	U. S. General Accounting Office
Neva Goodwin	Tufts University	Charles Collier	U. S. Government
Thomas A. Downes	Tufts University	Edgar A. Peden	U. S. Government
Dahlia Remler	Tulane University	Thomas F. Jennings	U. S. International Trade Commission
David Hotchkiss	Tulane University	Oscar A. Echevarria	U. S. Investment Group
David Malueg	Tulane University	John Heinberg	U. S. Labor Department
Eamon M. Kelly	Tulane University	Adrian Kendry	U. S. Naval Academy
Irving H. LaValle	Tulane University	Brian J. Richter	U. S. Nuclear Regulatory Commission
Jonathan B. Pritchett	Tulane University	Donald Rousslang	U. S. Treasury Department
William H. Oakland	Tulane University	James M. Russell	U. S. Treasury Department
John H.Y. Edwards	Tulane University, The World Bank	William B. Trautman	U. S. Treasury Department
Ganpat Ramesh	U.N. Development Program	Lawrence D. Krohn	UBS Securities
David A. Heesen	U.S.A.I.D.	Donald Shoup	UCLA
Donald A. Sillers	U.S.A.I.D.	Hilary Sigman	UCLA
James L. Mudge	U.S.A.I.D.	Jack Hirshleifer	UCLA
Jerre A. Manarolla	U.S.A.I.D.	John G. Riley	UCLA
Michael Crosswell	U.S.A.I.D.	John J. McCall	UCLA
Liliana E. Pezzin	U. S. Agency for Health Care Policy & Research	Mohan Penubarti	UCLA
Arden K. Sansom	U. S. Army Corps of Engineers	Paul M. Ong	UCLA
Frank D. Campbell	U. S. Army Trade Analysis	Rebecca Menes	UCLA

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MARCH 24, 1997

NAME	AFFILIATION	NAME	AFFILIATION
Theodore S. Woodruff	St. Ambrose University	Charles E. McLure, Jr.	Stanford University, Hoover Institute
Mark Partridge	St. Cloud State University	Gerald M. Meier	Stanford University, School of Business
Patricia Hughes	St. Cloud State University	Thomas Hellman	Stanford University, School of Business
Michael St. John	St. John & Associates	Andrea Shepard	Stanford University, School of Business
Daniel Finn	St. John's University	Jeremy Bulow	Stanford University, School of Business
Sara Gordon	St. John's University	Patricia Bowles	State Education
Ralph A. Terregrossa	St. Johns University	Gregory Vitale	State of Iowa
Linda R. Rudolph	St. Lawrence University	Khosrow Khojasteh	State of Iowa
Robert A. Blewett	St. Lawrence University	Bernard Brown	State of New Jersey
Sarah A. Stevens	St. Lawrence University	Richard Fryman	State University of West Georgia
Kathleen N. Gillespie	St. Louis University, School of Public Health	Siegfried G. Karsten	State University of West Georgia
Andrea T. Williams	St. Mary's College of California	William C. Schaniel	State University of West Georgia
Joan Underhill Hannon	St. Mary's College of California	James E. Mallett	Stetson University
Theodore Tsukahara, Jr.	St. Mary's College of California	Ranjini Thaver	Stetson University
Gary Scott	St. Mary's University	Richard H. Wood, Jr.	Stetson University
Roy E. Robbins	St. Mary's University	Richard M. O'Connor	Stockholm School of Economics
Herbert Kessel	St. Michael's College	Hossein S. Kazemi	Stonehill College
David Emery	St. Olaf College	Raymond A. Pepin	Stonehill College
David W. Schodf	St. Olaf College	Jeffrey H. Rohlf	Strategic Policy Research
Paul Wojcik	St. Olaf College	Karen Nelson	Streamline Training & Documentation
Rebecca Judge	St. Olaf College	Shahruz Mohtadi	Suffolk University
Xum Z. Pomponio	St. Olaf College	Jonathan Sunshine	Sunshine and Associates
John J. Donohue	Stanford Law School	Betty C. Daniel	SUNY, Albany
William F. Baxter	Stanford Law School	Jim H. Wyckoff	SUNY, Albany
A. Michael Spence	Stanford University	Kajal Lahiri	SUNY, Albany
Anne O. Krueger	Stanford University	Terrence Kinal	SUNY, Albany
Auner Greif	Stanford University	John S. Nader	SUNY at Delhi
B. Douglas Bernheim	Stanford University	Edward C. Kukkelenberg	SUNY, Binghamton
Bert G. Hickman	Stanford University	Manas Chatterji	SUNY, Binghamton
Bruce F. Johnston	Stanford University	Robert L. Basmann	SUNY, Binghamton
Ciaran S. Phibbs	Stanford University	Richard M. Romano	SUNY, Broome
Ezra Solomon	Stanford University	Frederick G. Floss	SUNY, Buffalo
Henry M. Levin	Stanford University	Murray Brown	SUNY, Buffalo
Hung-po Chao	Stanford University	Thomas Romans	SUNY, Buffalo
John Earle	Stanford University	David Ring	SUNY, College at Oneonta
Karine Nyborg	Stanford University	Edward I. Beck	SUNY, College at Oneonta
*** Kenneth J. Arrow	Stanford University	Amar K. Paral	SUNY, Fredonia
Lawrence J. Lau	Stanford University	William H. Foeller	SUNY, Fredonia
Martin Carnoy	Stanford University	David A. Martin	SUNY, Geneseo
Mordecai Kurz	Stanford University	Roman A. Ohrenstein	SUNY, Nassau College
Myra H. Strober	Stanford University	Peter Vukasin	SUNY, New Paltz
Rosamond Naylor	Stanford University	Wade L. Thomas	SUNY, Oneonta
Scott Rozelle	Stanford University	William P. O'Dea	SUNY, Oneonta
Victor R. Fuchs	Stanford University	Michael A. Stoller	SUNY, Plattsburgh
Jeffrey Williams	Stanford University, Food Research Institute	Warren L. Fisher	Susquehanna University
Pan A. Yotopoulos	Stanford University, Food Research Institute	Larry E. Westphal	Swarthmore College

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NAME	AFFILIATION	NAME	AFFILIATION
James F. Kasting	Pennsylvania State University	Antonio L. Rosado	Puerto Rico Economist Association
Jeffrey K. Lazo	Pennsylvania State University	Dan Kovenock	Purdue University
Lawrence L. Blacchi	Pennsylvania State University	George R. Averitt	Purdue University
Norman R. Swanson	Pennsylvania State University	Gerald E. Shively	Purdue University
Philip A. Klein	Pennsylvania State University	Hedayeh Samavati	Purdue University
Thomas A. Gresik	Pennsylvania State University	James C. Moore	Purdue University
Tim Considine	Pennsylvania State University	Janet S. Netz	Purdue University
William J. Wheeler	Pennsylvania State University	John M. Connor	Purdue University
Elizabeth T. Hill	Pennsylvania State University, Mont Alto	Larry De Boer	Purdue University
M.M. Shahjahan	PEPCO	Patrick McCarthy	Purdue University
Morton Zeman	Perimeter Adult Learning & Services	Paul L. Farris	Purdue University
Peter L. Bernstein	Peter L. Bernstein, Inc.	George R. Hall	Putnam, Hayes & Barlett, Inc.
Yoon Kim	Phoenix, Inc.	Trish Kelly	Quinnipiac College
James Lehman	Pitzer College	Rex J. Bates	R. J. Bates
Sailaja Raparla	Point Systems Solutions, Inc.	Robert L. Randall	RainForest ReGeneration
Hans Lofgren	Policy Research Institute	Dana Goldman	RAND
Jane Venohr	Policy Studies, Inc.	Julia Lowell	RAND Corp.
Eleanor Brown	Pomona College	Sheila Nataraj Kirby	RAND Corp.
Frank C. Wykoff	Pomona College	William Dow	RAND Corp.
James D. Likens	Pomona College	C. Barry Pfiltzner	Randolph Macone College
Michael Kuehlwein	Pomona College	Antoinette J. Criss	Randolph-Macon Woman's College
Stephen V. Marks	Pomona College	Eugenio Diaz-Bonilla	RDP Consulting Group
Giles H. Burgess Jr.	Portland State University	Richard B. Parker	Red Oak Research
Harold C. Vatter	Portland State University	Carl M. Stevens	Reed College
Helen Youngelson-Neal	Portland State University	Heidi Brown	Reed Consulting Group
John F. Walker	Portland State University	Benjamin H. Stevens	Regional Science Research Corp.
Myron B. Katz	Portland State University	H. Michael Coiner	Regis College
Thomas P. Potiowsky	Portland State University	Mary J. Oates	Regis College
Robert Kirchner	Potomac Electric Power Company	Robert L. Lessne	Rehabilitation Services, Inc.
Peter Merrill	Price Waterhouse	Donald F. Vitallano	Rensselaer Polytechnic Institute
Burton Malkiel	Princeton University	Gary Zarkin	Research Triangle Institute
Elizabeth C. Bogen	Princeton University	Katherine B. Heller	Research Triangle Institute
Gregory Chow	Princeton University	Sheila A. Martin	Research Triangle Institute
Maria Hanratty	Princeton University	Marvin Feldman	Resource Decisions
Timothy Van Zandt	Princeton University	Dallas Burtraw	Resources for the Future
Albert O. Hirschman	Princeton University, Inst. for Adv. Studies	Alema Karim	Rhode Island College
John P. Lewis	Princeton University, Woodrow Wilson School	Dagobert L. Brito	Rice University
Kenneth Rogoff	Princeton University, Woodrow Wilson School	Gordon W. Smith	Rice University
Mark Watson	Princeton University, Woodrow Wilson School	Kei-Mu Yi	Rice University
Michael Rothschild	Princeton University, Woodrow Wilson School	Melaku Lakew	Richard Stockton College of New Jersey
R. Thomas Burge	Proctor & Gamble Pharmaceuticals	Kirk D. Gifford	Ricks College
Curt Mueller	Project Hope	Henry J. Frank	Rider University
David Zalewski	Providence College	Paul J. Schoofs	Ripon College
Mary Jane Lenon	Providence College	Clare W. Zempel	Robert W. Baird & Co. Incorporated
YJ Yoon	Public Choice Center	Michael J. Vemarelli	Rochester Institute of Technology
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MARCH 24, 1997

NAME	AFFILIATION	NAME	AFFILIATION
Ernst R. Berndt	MIT, Sloan School of Management	Carol L. Osler	New York Federal
** Franco Modigliani	MIT, Sloan School of Management	William J. Lawrence	New York Institute of Technology
Dale W. Larson	Mitsubishi Research Institute	Sonya Komreich	New York State Dept. of Labor, Ind.
Michael H. Lee	Montana Public Service Commission	Janusz A. Ordover	New York University
Phillip LeBel	Montclair State University	Adam Przeworski	New York University
William Gissy	Morehouse College	Amy Ellen Schwartz	New York University
Michael Rollins	Mount Holyoke College	Dick Netzer	New York University
Frank Zarnowski	Mount St. Mary's College	Edward Wolff	New York University
Arthur J. Raymond	Muhlenberg College	Holger C. Wolf	New York University
George Heitmann	Muhlenberg College	Jacob A. Toby	New York University
Rohini P. Sinha	Muhlenberg College	Jess Benhabib	New York University
Martin Milkman	Murray State University	Joshua Ronen	New York University
Seid Y. Hassan	Murray State University	Lawrence White	New York University
Brian Thomas	MWD	Lewis A. Kornhauser	New York University
Brian Crumb	NACT	Paul Wachtel	New York University
C. Stuart Callison	Nathan Associates, Inc.	Rita Maldonado-Bear	New York University
Gary L. French	Nathan Associates, Inc.	Roy Radner	New York University
John Varley	Nathan Associates, Inc.	W. Van Der Klaauw	New York University
Abraham J. Fallick	National Association of Business Economists	Walter W. Haines	New York University
Brian J. Ostrom	National Center for State Courts	** Wassily Leontief	New York University
Gerald C. Berg	National Defense University	William J. Baumol	New York University
Robert W. Beckstead	National Defense University	Robert A. Kavesh	New York University, Stern School
Alan J. Daskin	National Economic Research Associates Inc.	Thomas A. Pugel	New York University, Stern School
David Tabak	National Economic Research Associates Inc.	Mark J. Lawless	NFPA International
Leonardo Giacchino	National Economic Research Associates Inc.	Thomas A. Foulkes	NHTI
Li-Lan Cheng	National Economic Research Associates Inc.	Stanton A. Warren	Niagara University
Marc Kramer Mayer	National Economic Research Associates Inc.	Yuzo Kumasaka	NLI Research Institute
Robert Petersen	National Economic Research Associates Inc.	Blair T. Bower	NOAA Consultant
Stephen E. Usher	National Economic Research Associates Inc.	Carol A. Jones	NOAA Damage Assessment Center
Carolyn Dewa	National Opinion Research Center	Gregory N. Price	North Carolina A&T University
Ted R. Miller	National Public Services Research Institute	Lawrence B. Morse	North Carolina A&T University
Chris Wise-Mahr	National Science Foundation	Ryoichi Sakano	North Carolina A&T University
Robert Schmidt	National University	Darren L. Frechette	North Carolina State University
Bill Gates	Naval Postgraduate School	Duncan M. Holthausen	North Carolina State University
David Whipple	Naval Postgraduate School	Fanis Tsoulouhas	North Carolina State University
Joseph DaBoll-Lavoie	Nazareth College	Michael B. McElroy	North Carolina State University
Edward A. Schroeder, IV	Nazareth College of Nazareth	Samim Cilem	North Carolina State University
Joyce Gleason	Nebraska Wesleyan University	J. Carl Poindexter	North Carolina State University
Richard McGahey	Neece, Cator & McGahey	Allen Vander Muelen	North Central College
Richard L. Kaluzny	New Jersey Division of Taxation	Thomas M. Love	North Central College
David T. Geithman	New Jersey Institute of Technology	Lynn Schneider	North Georgia College & State University
Eliot Orton	New Mexico State University	Watson Collins	Northeast Utilities
Robert Heilbroner	New School for Social Research	Barbara M. Fraumeni	Northeastern University
Willi Semmler	New School for Social Research	Gustav Schachter	Northeastern University
Alex L. Yufa	New York City Economic Dev. Corp.	John Adams	Northeastern University
Sidney Friend, Jr.	New York City Police Department	Kamran M. Dadkhah	Northeastern University

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NAME	AFFILIATION	NAME	AFFILIATION
Shawky El Toukhy	ITA of New Jersey	John P. Brown	KPMG Economic Consulting Services
Elia Kacapyr	Ithaca College	Richard A. Boykin	KPMG Economic Consulting Services
M. Raquibuz Zaman	Ithaca College	Steven D. Felgran	KPMG Economic Consulting Services
Marc Bilodeau	IUPUI	Stephen E. Baldwin	KRA Corporation
Jannette M. Barth	J.M. Barth & Associates, Inc.	Jon Haveman	Krannert School of Management
Andrew Kohen	James Madison University	David H. Robinson	La Salle University
Joanne M. Doyle	James Madison University	Dr. Mark J. Ratkus	La Salle University
Ehsan Ahmed	James Madison University	James C. Haefner	Labelon Corporation
J. Barkley Rosser, Jr.	James Madison University	Dwayne S. Breger	Lafayette College
William C. Wood	James Madison University	Howard Bodenhorn	Lafayette College
Kevin Stokes	Jefferson Community College	James DeVault	Lafayette University
Ronald Swanstrom	Jefferson High School	Jeffrey O. Sundberg	Lake Forest College
Edward J. Jorgenson	Jet Propulsion Laboratory	Richard F. Dye	Lake Forest College
Lawrence R. Cima	John Carroll University	Robert A. Baade	Lake Forest College
Thomas A. Sears	John F. Kennedy University	William Maskoff	Lake Forest College
Carl F. Christ	Johns Hopkins University	Rolando A. Santos	Lakeland College
Christopher D. Carroll	Johns Hopkins University	Judith Markland	Landmark Strategies
Cristino R. Arroyo	Johns Hopkins University	Thomas W. Langford	Langford & Associates
David G. Fernandez	Johns Hopkins University	Christopher J. Pleatsikas	Law & Economics Consulting Group
Isaiah Frank	Johns Hopkins University	Steven Stoft	LBNL
Louis J. Maccini	Johns Hopkins University	Hui-Liang Tsai	Lebanon Valley College
W. Max Corden	Johns Hopkins University	J. Richard Aronson	Lehigh University
Douglas W. Copeland	Johnson County Community College	Thomas Hydlak	Lehigh University
Nan L. Willson	Johnson County Community College	Todd A. Watkins	Lehigh University
Zohreh M. Niknia	Johnson County Community College	Eban Goodstein	Lewis & Clark College
Milton Russell	Joint Institute for Energy and Environment	James H. Grant	Lewis & Clark College
Joseph A. Swanson	Joseph Swanson & Co.	Shaomin Huang	Lewis Clark State College
Kenneth A. Reinert	Kalamazoo College	Hal Sider	Lexecon Inc.
Amir Tavakkol	Kansas State University	Jeffery T. Collins	Lincoln Memorial University
Andrew Barkley	Kansas State University	Vishwanath Tirupattur	Lincoln National
Patrick Gormely	Kansas State University	Randy R. Grant	Linfield College
Richard L. D. Morse	Kansas State University	Stephen M. Lewarne	LMCL Corp
Robert B. Borges	Kansas State University	Douglas A. Wion	Lock Haven University
Roger Trenary	Kansas State University	Michael Edesess	Lockwood Financial Group
Steve Hamilton	Kansas State University	Gang Feng	Lockwood Trade Journal Co. Inc.
Pierre Carasso	Kayne Anderson	John T. Evans	Long Island University
Carol M. Condon	Kean College of New Jersey	P. M. Rao	Long Island University
Youn-Suk Kim	Kean College of New Jersey	Ranbir Varma	Long Island University
Alexander S. Kelso, Jr.	Kelso International	Brian R. Horrigan	Loomis, Sayles & Co.
Penelope B. Prime	Kennesaw State University	Steven Booth	Los Alamos National Laboratory
Richard J. Kemt	Kent State University	Verne W. Loose	Los Alamos National Laboratory
Arthur D. Chesler	Kentucky Wesleyan College	Robby C. Winters	Los Angeles City College
Kottayam V. Natarajan	King Co. Dept. of Natural Resources	Nancy L. Sidener	Louisiana Council for Economic Education
Hamid Hosseini	King's College	Steven J. Prince	Louisiana Scholars' College
Zachary Rolnik	Kluwer Publishers	John M. Church	Louisiana State University Law Center
Wan Ho Cho	Korean Consulate	Marc C. Chopin	Louisiana Tech

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MARCH 24, 1997

NAME	AFFILIATION	NAME	AFFILIATION
Peter C. Mayer	Guam Power Authority	David T. Ellwood	Harvard University, Kennedy School of Govt.
Louis D. Johnston	Gustavus Adolphus College	Edward A. Parson	Harvard University, Kennedy School of Govt.
Herbert W. Fraser	H. W. Fraser Associates	F. M. Scherrer	Harvard University, Kennedy School of Govt.
Ahmad Faruqi	Hagler Bailly	Jose Antonio Gomez-Ibanez	Harvard University, Kennedy School of Govt.
Harold A. Cohen	Hal Cohen, Inc.	Mun S. Ho	Harvard University, Kennedy School of Govt.
Robert E. Dansby	Halcyon Inc.	P. Timothy Bushnell	Harvard University, Kennedy School of Govt.
John Haldi	Haldi Associates, Inc.	Richard F. Garbaccio	Harvard University, Kennedy School of Govt.
Elizabeth J. Jensen	Hamilton College	Robert Stavins	Harvard University, Kennedy School of Govt.
Hilke Kayser	Hamilton College	William Spitz	Harvard University, Kennedy School of Govt.
Burke Burright	Hamon Systems Center	Robert H. Mnouin	Harvard University, Law School
Robert Charles Graham	Hanover College	W. Klip Viscusi	Harvard University, Law School
Samuel S. Chun	Harvard Business School	Abram Bergson	Harvard University, Littauer Center
Thomas K. McCraw	Harvard Business School	Rashi Fein	Harvard University, Medical School
Randall Bluffstone	Harvard Inst. for International Development	David Hemenway	Harvard University, School of Public Health
Bruce R. Bolnick	Harvard Inst. for International Development	Maurine A. Haver	Haver Analytics
Clifford Zinnes	Harvard Inst. for International Development	Shelley M. Mark	Hawaii, Dept of Bus. Econ. Dev. & Tourism
Clive S. Gray	Harvard Inst. for International Development	Vincent A. Fulmer	Hawthorn College
David C. Cole	Harvard Inst. for International Development	Hilda Kahne	Heller School, Brandeis University
Glenn P. Jenkins	Harvard Inst. for International Development	David E. Ervin	Henry A. Wallace Institute
Jeffrey D. Sachs	Harvard Inst. for International Development	Michael MacCully	High Point University
Jeffrey Vincent	Harvard Inst. for International Development	Michael McCully	High Point University
John Luke Gallup	Harvard Inst. for International Development	Stephen L. Zabor	Hiram College
Amartya Sen	Harvard University	Ugur Aker	Hiram College
Andrew Metrick	Harvard University	James E. Metzger	Histecon Associates Inc.
Brian Hall	Harvard University	Takatoshi Ito	Hitotsubashi University, International
Cheol Soo Park	Harvard University	Matthew K. Loke	HMSA
Claudia Goldin	Harvard University	Jacob Weissman	Hofstra University
* Dale Jorgenson	Harvard University	Walter E. Hoadley	Hoover Institution
David Laibson	Harvard University	Robin Klay	Hope College
Dwight H. Perkins	Harvard University	Linda Marie Dynan	Hospital Research and Education Trust
James K. Hammitt	Harvard University	Chuck Nwaka	Howard University
Jerry R. Green	Harvard University	Cleveland A. Chandler	Howard University
John R. Meyer	Harvard University	Sung Kwack	Howard University
John Y. Campbell	Harvard University	C. Elisabeth Pittman	HPA, Inc.
Lawrence Katz	Harvard University	L. Douglas Lee	HSBC Washington Analysis
Lester E. Gordon	Harvard University	Mark Shroder	HUD (for identification only)
Martin L. Weitzman	Harvard University	David T. Hulett	Hulett & Associates
Michael Whinston	Harvard University	Daniel M. Ihara	Humboldt State University
Nathan Keyfitz	Harvard University	Saeed Mortazavi	Humboldt State University
Oliver Hart	Harvard University	Steven Hackett	Humboldt State University
Raymond Vernon	Harvard University	Tim Yeager	Humboldt State University
Robert Dorfman	Harvard University	Tatsuji Hayakawa	IADB
Roswell G. Townsend	Harvard University	Michael C. Barth	ICF Kaiser
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MARCH 24, 1997

NAME	AFFILIATION	NAME	AFFILIATION
Anne Bunton	Cotley College	Gordon S. Bergsten	Dickinson College
Alice Tepper Marlin	Council on Economic Priorities	Leo Brand	Director, Standard & Poor's
Lenore H. Burckel	Cowers TM	Cono Casella	Dowling College
Naomi Chesler	CPE	William M. Boal	Drake University
Joseph M. Phillips	Creighton University	Andrew Verzilli	Drexel University
Roberto Riley	Critical Decisions Group	Bijou Y. Lester	Drexel University
P. Hartland-Thunberg	CSIS	Shawkat Hammoudeh	Drexel University
Albert I. A. Bookbinder	CUNY	Vibhas Madan	Drexel University
Ashok Vora	CUNY	Carol Mansfield	Duke University
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Irving Stone	CUNY	Ed Tower	Duke University
Joseph Berechman	CUNY	Mark Y. An	Duke University
Ki-Ho Kim	CUNY	Martin Bronfenbrenner	Duke University
Lawrence Jay Kaplan	CUNY	Philip J. Cook	Duke University
Robert Kaestner	CUNY, Baruch College	Pietro Peretto	Duke University
Yehuda L. Klein	CUNY, Brooklyn College	Wesley A. Magat	Duke University
V. Petratos	CUNY, C. S. I.	Richard Henning	E. Elgar Publishers
Howard Chernick	CUNY, Hunter College	C. A. Christofides	East Stroudsburg University
Harvey Gram	CUNY, Queens College	P. Neelakantan	East Stroudsburg University
Peter Ellbott	CUNY, Queens College	Seewoonundun Bunjun	East Stroudsburg University
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M. O. Clement	Dartmouth College	Adrian J. Lottle	Eastern Michigan University
Michael M. Knetter	Dartmouth College	Michael G. Vogt	Eastern Michigan University
Sang-Seung Yi	Dartmouth College	Thomas W. Bonsor	Eastern Washington University
Sheri L. Aggarwal	Dartmouth College	Hugh Richards	ECON
C. Louise Nelson	Davidson College	Frederic B. Jennings, Jr.	Econologistics
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Gary D. Lemon	De Pauw University	Geoffrey H. Moore	Economic Cycle Research Institute
Peter Meenan	Deloitte & Touche LLP	Jared Bernstein	Economic Policy Institute
Richard Sciacca	Deloitte & Touche LLP	Kenneth R. Dunmore	Economic & Policy Studies
Calvin A. Hoerneman	Delta College	John A. Laitner	Economic Research Associates
Craig Walker	Delta State University	Paul F. White	Economic Research Services, Inc.
Pete Morton	Denver University	Steve Holland	Economics Institute
Adolph E. Mark	DePaul University	An-Sik Min	Edinboro University of Pennsylvania
Animesh Ghoshal	DePaul University	Rudi W. Schadt	Edwin L. Cox School of Business, SMU
Bala Batavia	DePaul University	Robert J. Eggert	Eggert Economic Enterprises
Michael Marschoun	DePaul University	Ell Ginzberg	Eisenhower Center, Columbia University
Woods Bowman	DePaul University	E. Somanathan	Emory University
Eric R. Nelson	Development Alternatives, Inc.	Jeffrey A. Rosenweig	Emory University
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MARCH 24, 1997

NAME	AFFILIATION	NAME	AFFILIATION
Robert Wassmer	Cal State Sacramento	Lester B. Lave	Carnegie Mellon University
James M. Payne	Calhoun Community College	Mark S. Kamlet	Carnegie Mellon University
Tsong-Yue Lai	California State University	Russell Sheldon	Carnegie Mellon University
Malcom Dole, Jr.	California Air Resources Board	Shyam Sunder	Carnegie Mellon University
Seymour Goldstone	California Energy Commission	Amresh Hanchate	Case Western Reserve University
Lionel J. Lerner	California Energy Commission, Rtd.	Bo Carlsson	Case Western Reserve University
Charles R. Plott	California Institute of Technology	Robert E. Schill	Castleton State College
Lance E. Davis	California Institute of Technology	Robert K. Arnold	CCSCE
Phillip Fanchon	California Polytechnic State University	Robert Deuson	Center for Disease Control
James Ahern	California Polytechnic University	Stephen T. Parente	Center for Health Affairs
Franklin Y. Ho	California State Polytechnic University	Zbigniew Bochniarz	Center for Nations in Transition, Univ. of
A. R. Gutowsky	California State University	Carol Moore	Center for Naval Analysis
Anil K. Puri	California State University	Jan Ondrich	Center for Policy Research, Syracuse University
Daniel R. Blake	California State University	Sidney Weintraub	Center for Strategic and Intl. Studies
Don R. Leet	California State University	James Reschovsky	Center for Studying Health System Change
Eduardo M. Ochoa	California State University	Paul B. Ginsburg	Center for Studying Health System Change
Eric J. Solberg	California State University	Brian Peterson	Central College
Madhu S. Mohanty	California State University	Richard Glendenning	Central College
Michael Perelman	California State University	N. Wayne Jordan	Central Florida Community College
Neil Garston	California State University	Paul Natke	Central Michigan University
Tom C. Geurts	California State University	Baird Allen Brock	Central Missouri State University
Donald J. Oswald	California State University, Bakersfield	Bruce K. Johnson	Centre College
Robert G. James	California State University, Chico	David A. Anderson	Centre College
Suleman A. Moosa	California State University, Chico	Robert E. Martin	Centre College
Scott Houser	California State University, Fresno	Michael J. Walsh	Centre Financial Products Ltd.
Paul D. Staudohar	California State University, Hayward	Raymond Sfeir	Chapman University
Robert S. Ozaki	California State University, Hayward	Deloris R. Wright	Charles River Associates
Marion S. Beaumont	California State University, Long Beach	Philip K. Vealecer Sr.	Charles River Associates
Micheal J. Farrell	California State University, Long Beach	Robert J. Lerner	Charles River Associates
John A. Tomasko	California State University, Los Angeles	Gladys A. Dejesus	Chowan College
H. Dieter Renning	California State University, Stanislaus	Koenraad M. Driessens	Christensen Associates
Mary Fair Berglund	California Transportation Commission	Laurence D. Kirsch	Christensen Associates
Young J. Park	California University of Pennsylvania	Laurits R. Christensen	Christensen Associates
Julie Elston	Caltech	Samuel Cutting	Christensen Associates
John P. Tiemstra	Calvin College	Philip Schoech	Christiansen Associates
Scott V. Parris	Cambridge University Press	Rita C. Sweeney	Christiansen Associates
Pierre Canac	Cameron School of Business	Kookshin Ahn	Chung-Ang University, Seoul
John M. Courington	Cameron University	Jarl R. Hellemalm-Ashfield	Church of God
Yu-Mong Hsiao	Campbell University	Frederick Schroeder	Cigna Financial Advisors, Inc.
Andrew C. Givens	Cardinal Energy Service, Inc.	Alfred Eisenpreis	City Innovation
Dickson K. Smith	Cardinal Strich College	Alfred Keisenpress	City Innovation
George H. Lamson	Carleton College	Gordon Alexander	City of Austin, Texas
Stephen H. Strand	Carleton College	Greg Hill	City of Seattle
Allan H. Meltzer	Carnegie Mellon University	Paul A. Zak	Claremont Graduate School
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NAME	AFFILIATION	NAME	AFFILIATION
Lorraine M. Connell		Richard B. Goode	
M. G. Zephirin		Richard Gomez	
M. S. Noorzoy		Richard Hooley	
Marianne Ferber		Richard J. Claycombe	
Mark D. Henson		Richard L. Ruth	
Mark W. Rider		Richard Nichols	
Marnie Shaul		Richard Raymond	
Martin J. Wyand		Richard Sabatino	
Martin Muhleisen		Richard Weckstein	
Martine Duchatelet		Richard Young	
Mary McNally		Rick Mines	
Maud Naroll		Robert A. Rennie	
Michael Adler		Robert C. Young	
Michael Rabbitt		Robert D. Stevens	
Mike Denning		Robert Dennis	
Milton A. Wolf		Robert Hawkins	
Milton Garnet James		Robert L. Steiner	
Milton Moss		Robert L. Wood, Jr.	
Mingliang Zhang		Robert Myers	
Nancy H. Wilson		Robert T. Mott	
Nicholas Komninos		Robert V. Bishop	
Nizar Jetha		Robert V. Bishop	
Nora Piore		Roberto Chang	
Norman Nierenberg		Rod E. Jensen	
Omar Azfar		Rogene A. Buchholz	
P. Michael Laub		Roger D. Little	
Pat Markovich		Roger Mann	
Patricia Godoy-Kahn		Rose Jochowitz	
Patrick Karani		Rudolph W. Hardy	
Paul Boyce		S. Scanlon Romer	
Peter F. Freund		Saul L. Smith	
Peter M. Emerson		Scott Goldsmith	
Peter Siegelman		Sergio Pereira Leite	
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Philip A. Dillaber		Shannon R. Brown	
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R.R. Rhomberg		Stella Swetnick	
Rafael Montalvo		Stephen Altheim	
Ralph N. Calkins		Stephen H. Zeller	
Ralph W. Pfouts		Stephen Parkoff	
Raymond A. Miller		Steven Yamarik	
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NAME	AFFILIATION	NAME	AFFILIATION
Frank Lerman		John Hayes	
Frank W. Gery		John J. Hisnanick	
Fred Morser		John J. Soladay	
Gary Anders		John M. Hackett	
Gary Watts		John Maher	
George A. Jougantos		John McFarland	
George E. Michel		John Navratil	
George Fox		John P. Shelton	
George L. Perry		John R. Moore	
George R. Feiwel		John R. Norrworthy	
Gerald A. Pollack		John R. Stewart, Jr.	
Gerald T. O'Mara		John S. Coleman	
Gertrude Schroeder		John Stein	
Gilbert R. Coleman		John Van Dewater	
Gordon Irlam		Jon Manger	
Gordon K. Douglass		Jonathan Willner	
Gregory L. Rosston		Joseph E. Bowring	
Cretchen McClain		Joseph F. Shaw	
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Henry B. McFarland		Joseph V. Cartwright	
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Howard Gensler		Jules N. LaRocque	
Hugh Franks		Julie-Anne M. Cronin	
Irma T. de Alonso		Jurg Niehans	
Irving W. Cheskin		Karen Van Nuys	
J. Herbert Burkman		Karl De Schweinitz	
J. L. Bascunana		Karl Driessen	
Jack Beebe		Karl E. Sagner	
Jacob C. Hurwitz		Katherine K. Yunker	
Jacques J. Kozub		Kathleen Short	
James A. Lew		Kathleen V. McNally	
James Duprey		Keith Waehrer	
James E. Clark		Ken Beler	
James E. Glassman		Kenan Ogelman	
James L. Hamilton		Kent R. Nilsson	
James Trask		Kent Sims	
Jan Parker		Kevin J. Klyan	
Jay V. Groves		Kishure Kulkarni	
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MARCH 24, 1997

NAME	AFFILIATION	NAME	AFFILIATION
James S. Hanson	Willamette University		
Elizabeth Brainerd	Williams College		
Matthew Hyle	Winona State University		
David Peterson	Wisconsin Department of Revenue		
Marcus Boggs	Wishview Press		
E. B. Gendel	Woodbury University		
Michael J. Radzicki	Worcester Polytechnic Institute		
Paul Faeth	World Resources Institute		
Robert Repetto	World Resources Institute		
Norman S. Anon	Wright State University		
Rishi Kumar	Wright State University		
Thomas Traynor	Wright State University		
Steven C. Agee	XAE Corporation		
Robert O. Zimmerman	Xavier University		
Henry Hansmann	Yale Law School		
Katherine O'Regan	Yale School of Management		
Paul W. MacAvoy	Yale School of Management		
Barry Nalebuff	Yale University		
Dirk Berleemann	Yale University		
** James Tobin	Yale University		
Jody Sindelar	Yale University		
Joel Waldfogel	Yale University		
L. G. Reynolds	Yale University		
Lynne Bennett	Yale University		
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Robert Evenson	Yale University		
T. Paul Schultz	Yale University		
* William Nordhaus	Yale University		
Gustav Ranis	Yale University, Economic Growth Center		

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OCTOBER 1997

THE ECONOMICS OF CLIMATE CHANGE

BY STEPHEN J. DECANIO

BACKGROUND PAPER

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TTY: (202) 226-4410

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→ Called Committee 11/30/98

~~Joe Sullivan~~

Harlan Watson
225-9662

October 20, 1998

|| => left message saying
that CEA would
provide response
by 12/14

The Honorable Janet L. Yellen
Chair, Council of Economic Advisers
Executive Office of the President
Old Executive Building, Room 314
17th and Pennsylvania Avenue, NW
Washington, DC 20500

Dear Dr. Yellen:

Paragraph 4 of Decision 1/CP.1 (the Berlin Mandate), adopted in March 1995 by the first Conference of Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC), called for an analysis and assessment of the economic impacts of any future protocol. However, none was made by the Parties to the UNFCCC, including the European Union (EU). In the United States, the Administration started an analysis prior to Kyoto, but it was never finished. Although there have been several analyses by the private sector, yours of last March and July, to my knowledge, was really the first by a Government. However, it was not comprehensive and it is still preliminary. It was designed to show that the economic impacts of complying with the Kyoto Protocol "are likely to be relatively modest". Clearly, it was not the broader, independent analysis of the type promised in 1995 but never delivered.

For these and other reasons, this Committee made a bipartisan request to the Administrator of the Energy Information Agency (EIA), for the enclosed report entitled "Impact of the Kyoto Protocol on U.S. Energy Markets and Economic Activity." The report's Preface explains that EIA arranged for nine experts, including William Nordhaus of Yale University and three prominent persons from Resources for the Future, to review and comment on versions of the report.

Nevertheless, I understand that some in the Administration, reportedly including the Secretary of Energy, are critical of the EIA report. In fact, Ms. Kathleen McGinty, Chair of the Council on Environmental Quality, is reported by the October 13, 1998 edition of *The Energy Daily* as disputing the EIA conclusions. She reportedly believes that "several key factors were conspicuously missing from EIA's analysis", including cost savings from international trading of greenhouse gas emissions which she says "has already begun" and is likely to exist on a

The Honorable Janet L. Yellen
October 20, 1998
Page two

"broad scale within a decade." The article quotes her as saying: "Some people try to make the point that this is an expensive endeavor and it isn't. Those who want to mislead will use this account."

That is rather harsh criticism of another Administration Agency that long ago was required by section 205(c) of the Department of Energy Organization Act and a 1974 law to provide independent analysis of this kind to Congress and its Committees. Nevertheless, I take this criticism seriously and I request your views and comments on the EIA report, taking into consideration your latest version of your March analysis, which, apparently, was not available to the EIA in preparing this report and those made by the private sector, particularly the analysis made by DRI for the United Mine Workers, and the enclosed article.

I understand from your analysis and your October 6, 1998 testimony before the House Commerce Committee, that your optimism, and that of Ms. McGinty, about the economic impact of the Protocol is largely based on expectations about the availability of so-called "flexible mechanisms" under Articles 6, 12, and 17 of the Kyoto Protocol which, of course, has not entered into force. Additionally, it has not been submitted to the Senate for advice and consent to ratification, nor has it been signed by the Administration on behalf of the Executive Branch.

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"Because the exact rules that would govern the final implementation of the Protocol are not known with certainty, the specific reductions in energy-related emissions cannot be established."

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The Honorable Janet L. Yellen
October 20, 1998
Page three

“The Group of 77 and China maintains that the mechanisms of the Kyoto Protocol have to proceed on a step-by-step basis, as the protocol has yet to enter into force, and that a common understanding has to be reached on the nature of these mechanisms. The study of methodological issues is a first step to be taken. All the mechanisms have to be examined on the basis of the principles of equity, sustainable development, the other principles, and the objective of the Convention. The issues relating to the Clean Development Mechanism (CDM) should be addressed first. The Group further maintains that domestic actions by the developed countries should be their primary means of greenhouse gas limitation and reduction, and that the overseas mechanisms should be supplemental to such domestic actions by developed countries for the purpose of meeting their quantified emissions limitation and reduction commitments.”

It appears therefore that the aim of the developing countries is not only to avoid new commitments to reduce and limit their greenhouse gas emissions, but also to restrict the very flexibility mechanisms that you and Ms. McGinty are counting on to keep the Protocol costs “modest.”

I understand that the UNFCCC Secretariat has prepared a new work plan proposal (FCCC/CP/1998/3, Sept. 9, 1998) for the fourth Conference of Parties (COP-4) in Buenos Aires. However, there is little to suggest that this document or something similar to it will be well received at COP-4. In fact, another group, the European Union Environment Ministers, who were reported to be mellowing in their views on some significant issues in regards to the Mechanisms, met earlier this month and issued on October 6th their “Community Strategy on Climate Change - Council Conclusions.” It appears that, in reality, the EU Ministers who also want a work plan and schedule adopted at COP-4, have not changed their views, but have attempted to “re-package” them. They continue to press for “coordinated” policies and measures “amongst Annex I Parties”, including taxes, “to achieve the targets of the Kyoto Protocol.” As to the mechanisms, they concluded in paragraph 6:

“The Council reaffirms that the flexible mechanisms defined in the Kyoto Protocol are supplemental to domestic action, which should provide the main means for meeting the commitments under Article 3 of the Protocol. The principles, modalities, rules and guidelines for the operation of the mechanisms have to ensure that they do not undermine domestic action or weaken these commitments. In this context, the Council also recalls that a concrete ceiling on the use of flexible mechanisms has to be defined to achieve these aims. It should be defined in quantitative and qualitative terms based on equitable criteria. The Council believes that the discussion between all Parties on the practical elaboration of the supplementarity principle has effectively to start at COP-4. This elaboration needs

The Honorable Janet L. Yellen

October 20, 1998

Page four

to constitute an essential element of the work plan to be adopted at Buenos Aires. The Council urges all Parties to co-operate with a view to reaching final agreement on this issue at COP-5."

It does not appear that the views and positions of the G-77/China and the EU coincide with those of New Zealand, in reply for the so-called "Umbrella Group" (which includes the U.S.) to questions by the G-77/China on the mechanisms. As the views and positions of these two large groups persist, it becomes more and more difficult to accept your rather rosy economic analysis of the Protocol's impacts on consumers, business, and jobs. There appears to be broader support among the UNFCCC Parties for the limitations sought by the EU than for the more flexible view urged by the U.S. through the Umbrella Group. It would seem therefore that the EIA's broader analysis which recognizes these uncertainties about future negotiations, and does not assume their availability without the limits urged by these groups, is more realistic, at least for now, than your analysis. Therefore, in commenting on the EIA report, please explain the basis for your optimism about these negotiations and indicate what your views will be if the EU and G77/China continue to press those views and positions over the next two years of the Administration's term.

Let me stress that I and many of my colleagues in Congress fully agree that the Administration must continue at all costs to continue to stand firm at COP-4 and thereafter against coordinated policies and measures and the interpretation of "supplemental" urged by these groups if the Administration intends to conform with S. Res. 98 which is your basic "bible".

In addition, I note that the incomplete version of the Administration's analysis that was started prior to Kyoto seemed to recognize that the Protocol is not self-executing in the U.S. (even with COP guidelines, rules, etc.) and that, if and when, it is ratified, implementing legislation would be needed. That document also contemplated an emission permit program and the recycling of rather large sums of money. The EIA report also mentions the likelihood of such legislation and recycling. However, your July analysis appears to omit any mention of the need for implementing legislation or discuss the possibility of a domestic emission trading proposal that would generate large sums of money which might be recycled, subject to the provision of 31 U.S.C. 3302 and other applicable provisions of law regarding the disposal of revenues. In your reply, I request that you address the issue of the need for implementing legislation, if and when, the Protocol is ratified and whether the pre-Kyoto analyses about domestic programs and revenue recycling are still under consideration. I recognize, of course, that such matters may only be in the early stages of consideration and, may never be developed if the Protocol is not submitted to the Senate for advice and consent to ratification during the remaining term of this Administration.

The Honorable Janet L. Yellen

October 20, 1998

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Finally, your response should identify any "key factors" that are missing in the EIA report. This should include a discussion of the international trade that Ms. McGinty says "has already begun," and an explanation as to how that trade relates to a Protocol that is not in force and is not yet complete in many important details. Specifically, what is that trade, what entities are involved, what are they trading, and for what purpose?

In responding to these matters, please consult, as necessary, with Ms. McGinty and others in the Executive Branch to ensure a full and complete response. Also, so that you may have the benefit of the results of the COP-4 session, I do not expect your comments about the EIA report and these related matters until November 30, 1998. However, if you cannot meet that deadline, please advise in writing and indicate when you will reply before the end of 1998.

Sincerely,



F. JAMES SENSENBRENNER, JR.
Chairman

Enclosure

FJS/hlw

cc: Secretary of State
Secretary of Energy Bill Richardson
The Honorable Kathleen A. McGinty, Chair, Council on Environmental Quality

SHERWOOD L. BOEHLERT, New York
HARRIS W. FAWELL, Illinois
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DAVE WELDON, Florida
MATT SALMON, Arizona
THOMAS M. DAVIS, Virginia
GIL GUTKNECHT, Minnesota
MARK FOLEY, Florida
THOMAS W. EWING, Illinois
CHARLES W. "CHIP" PICKERING, Mississippi
CHRIS CANNON, Utah
KEVIN BRADY, Texas
MERRILL COOK, Utah
PHIL ENGLISH, Pennsylvania
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SUITE 2320 RAYBURN HOUSE OFFICE BUILDING

WASHINGTON, DC 20515-6301

(202) 225-6371

TTY: (202) 226-4410

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DARLENE HOOLEY, Oregon
LOIS CAPPS, California
BARBARA LEE, California
Vacancy
Vacancy

→ Called Committee 11/30/98

~~Joe Sullivan~~
Harlan Watson
225-9662

October 20, 1998

⇒ left message saying
that CEA would
provide response
by 12/14

The Honorable Janet L. Yellen
Chair, Council of Economic Advisers
Executive Office of the President
Old Executive Building, Room 314
17th and Pennsylvania Avenue, NW
Washington, DC 20500

Dear Dr. Yellen:

Paragraph 4 of Decision 1/CP.1 (the Berlin Mandate), adopted in March 1995 by the first Conference of Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC), called for an analysis and assessment of the economic impacts of any future protocol. However, none was made by the Parties to the UNFCCC, including the European Union (EU). In the United States, the Administration started an analysis prior to Kyoto, but it was never finished. Although there have been several analyses by the private sector, yours of last March and July, to my knowledge, was really the first by a Government. However, it was not comprehensive and it is still preliminary. It was designed to show that the economic impacts of complying with the Kyoto Protocol "are likely to be relatively modest". Clearly, it was not the broader, independent analysis of the type promised in 1995 but never delivered.

For these and other reasons, this Committee made a bipartisan request to the Administrator of the Energy Information Agency (EIA), for the enclosed report entitled "Impact of the Kyoto Protocol on U.S. Energy Markets and Economic Activity." The report's Preface explains that EIA arranged for nine experts, including William Nordhaus of Yale University and three prominent persons from Resources for the Future, to review and comment on versions of the report.

Nevertheless, I understand that some in the Administration, reportedly including the Secretary of Energy, are critical of the EIA report. In fact, Ms. Kathleen McGinty, Chair of the Council on Environmental Quality, is reported by the October 13, 1998 edition of *The Energy Daily* as disputing the EIA conclusions. She reportedly believes that "several key factors were conspicuously missing from EIA's analysis", including cost savings from international trading of greenhouse gas emissions which she says "has already begun" and is likely to exist on a

The Honorable Janet L. Yellen
October 20, 1998
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"broad scale within a decade." The article quotes her as saying: "Some people try to make the point that this is an expensive endeavor and it isn't. Those who want to mislead will use this account."

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The Honorable Janet L. Yellen
October 20, 1998
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“The Group of 77 and China maintains that the mechanisms of the Kyoto Protocol have to proceed on a step-by-step basis, as the protocol has yet to enter into force, and that a common understanding has to be reached on the nature of these mechanisms. The study of methodological issues is a first step to be taken. All the mechanisms have to be examined on the basis of the principles of equity, sustainable development, the other principles, and the objective of the Convention. The issues relating to the Clean Development Mechanism (CDM) should be addressed first. The Group further maintains that domestic actions by the developed countries should be their primary means of greenhouse gas limitation and reduction, and that the overseas mechanisms should be supplemental to such domestic actions by developed countries for the purpose of meeting their quantified emissions limitation and reduction commitments.”

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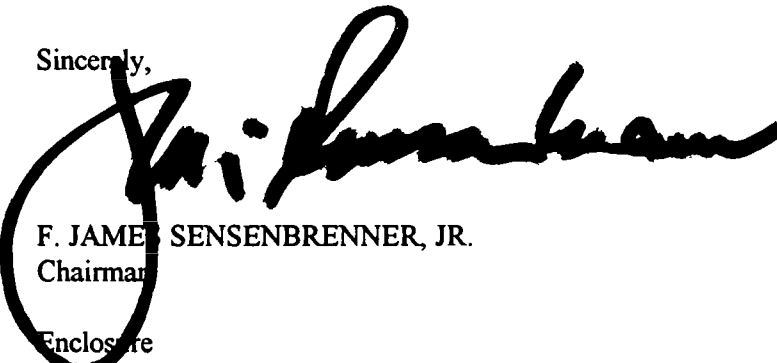
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Sincerely,



F. JAMES SENSENBRENNER, JR.
Chairman

Enclosure

FJS/hlw

cc: Secretary of State
Secretary of Energy Bill Richardson
The Honorable Kathleen A. McGinty, Chair, Council on Environmental Quality

Dear Chairman Sensenbrenner:

I appreciate the opportunity to provide you with a response to your October 20, 1998 letter regarding economic analysis of the Kyoto Protocol. Your letter made requests for comments on two issues. First, I will address your interest in the Council of Economic Advisers' (CEA) views on the Energy Information Administration (EIA) report "Impact of the Kyoto Protocol on U.S. Energy Markets and Economic Activity." Second, I will respond to your question regarding implementing legislation.

CEA Views on EIA Report

In evaluating the results from any economic modeling effort, it is important to first identify and understand what questions are being asked by using that particular model. The most significant cause for divergence in modeling results is that different modelers ask and answer different questions.

In the Administration's assessment of the economic implications of the Kyoto Protocol, a set of questions that reflect the Administration's position on the Protocol are addressed. For instance, the Administration unambiguously supports the efficient implementation of the "flexibility mechanisms" secured in the Kyoto Protocol -- international emissions trading, joint implementation, and the Clean Development Mechanism -- and we will continue to work over the coming years in multilateral fora to develop rules that ensure such implementation. In the Administration's illustrative modeling analysis, these flexibility mechanisms are critical to reducing the costs of meeting emissions targets, not just for the United States, but also for the European Union, Japan, and all other Annex I countries.

Economic modeling efforts outside of the U.S. government have also found that these flexibility mechanisms can significantly reduce the cost to the United States of reaching its Kyoto target. For example, the Energy Modeling Forum (EMF) based at Stanford University, which has a long-running model comparison exercise involving many of the leading climate and energy models, has coordinated full scale analyses of the Kyoto Protocol. This comparison exercise of the Kyoto Protocol included ten modeling teams from the United States, Europe, and Asia. The Kyoto Protocol enables all countries with emissions targets to trade emissions allowances among other countries with targets. In evaluating the Kyoto Protocol, all of the participating teams used economic models that incorporate the potential for international trading in greenhouse gas permits. These models are well-suited to assess the economic implications of the international trading component of the agreement. On average, the EMF models found that Annex I trading would cut the U.S. permit price by 53% relative to a no trading scenario. Of these models, one estimated a 72% reduction in the permit price under Annex I trading. In full global trading, the permit price would be, on average, 80% lower than the no trading

price. Several models estimated permit price reductions of about 90%.

In addition, the Organization for Economic Cooperation and Development (OECD) recently convened modelers from around the world for a climate change modeling workshop. While many of the modeling teams at OECD also participate in the EMF exercise, the workshop included four non-EMF teams. The results from non-EMF models reinforce the importance of international emissions trading in lowering permit prices. These models also found that Annex I trading can significantly reduce costs, and global trading can result in even more substantial cost-savings.

The modeling results from these two large efforts coordinated by EMF and by the OECD clearly indicate the potential for cost-savings through an efficiently-designed international trading system. It is important to recognize that these two efforts relied exclusively on models with the capacity to model explicitly international trade in emissions allowances. We believe that it is appropriate to evaluate the Kyoto Protocol with models that can assess the opportunities for international emissions trading, since trading is embedded in Article 17 of the Protocol. Models that cannot evaluate international trading are constrained in the kinds of questions they can effectively address.

The Energy Information Administration's model, NEMS, is not capable of addressing the question of international emissions trading: it is focused only on the U.S. energy sector and has no international component. Thus, EIA did not conduct any analysis of cost-effective international trading opportunities. A traditional economic analysis of international trading would assess the demand and supply of emissions allowances and, by modeling a market where costs are minimized, identify a single international permit price. This is the approach taken by the Administration as well as by the EMF and OECD modeling teams. However, the EIA analysis assesses only the demand side of the issue for the United States, and then incorporates what appear to be arbitrary assumptions about alternative possibilities for the international permit price and subsequent international transfers. The scenarios that attempt to include international trading overstate the cost of permits because they fail to take into account the way that an international market, bidding to a single international permit price, lowers cost.

In addition to the question of international trading, there are other important questions that models should consider in evaluating the Kyoto Protocol. For example, the Protocol covers all six major kinds of greenhouse gases. While most of the models involved in the EMF and the OECD exercises did not consider these other gases in their analyses, the Administration's illustrative modeling effort did address this issue. The EIA analysis does not address this question. EIA assumed that the United States would achieve its target only through carbon dioxide reductions. The flexibility across gases allows countries and companies to make

reductions in the most cost-effective manner possible, reducing the cost of compliance. Based on Annex I national communications, emissions growth in non-carbon dioxide greenhouse gases is expected to be much slower (and in some cases negative) than carbon dioxide between 1990 and 2010. This indicates that the U.S. six-gas target is less stringent than implied by just an assessment of carbon dioxide alone, and that there could be greater cost-savings through international trading of all greenhouse gases than implied by assessments of carbon dioxide trading alone.

Another crucial aspect concerns the time frame of emissions abatement. As the Administration Economic Analysis on climate change noted, the Administration advocated and secured in the Kyoto Protocol a later and more realistic time frame for the initial emissions target than what had been proposed by other countries. By adopting a gradual and credible path of reductions in the early years, adjustment costs can be reduced. How one addresses the question of timing of reductions affects the modeling results. In EIA's study, most businesses do not take action to address climate change until 2005, and therefore only have a short time until the 2008-2012 budget window to reduce emissions. This essentially assumes that even though the Administration secured this more realistic commitment period to reduce the burden on firms by allowing them to more gradually undertake emissions reductions, very few firms would actually take advantage of such an opportunity. Studies have demonstrated that the amount of lead time a company takes has dramatic economic implications. For example with EIA's model in the Interagency Analytic Team draft report, a 5-year "ramp-up" (starting in 2005) would result in economic costs 65% greater than that associated with a 10-year "ramp-up" (starting in 2000). Thus, the assumption that many businesses would fail to plan for the future results in higher projected costs.

While some may claim that very little action is likely to occur prior to 2005, there is reason to believe that some firms will act well before 2005. Already businesses are taking action to address climate change. For example, on September 18, British Petroleum announced its plan to reduce emissions of greenhouse gases worldwide by 10% below 1990 levels by the year 2010. In July, United Technologies announced their plan to reduce its worldwide energy consumption by 25% by the year 2007.

Finally, how an analysis addresses other policy issues that can affect the costs of abating emissions can also impact the conclusion regarding costs. In the Administration's analysis, additional elements of policy were recognized as having the potential to significantly decrease the costs of compliance and increase the amount of reductions that might be accomplished at home. These policies were not factored into the illustrative model the Administration cited, but were qualitatively taken into account in reaching the conclusion that the United States could meet its Kyoto target for a relatively modest cost. The EIA analysis,

however, ignores elements such as forestry activities (covered under the Kyoto Protocol) and the Administration's electricity restructuring proposal, which could significantly lower compliance costs.

Implementing Legislation

Based on conversations with State Department staff, it is my understanding that when the Administration submits the Protocol for ratification it will also submit implementing legislation. While the Administration advocates the use of a domestic trading program during the 2008-2012 commitment period, no policy decisions have yet been made about the nature of this program. Thus, all aspects of the trading program, including the option to auction some or all permits and recycle the revenue back to the economy through cutting other taxes, are still under consideration.

The Administration continues to believe that the costs of achieving our Kyoto target will be modest if we are successful in securing rules for efficient international trading, joint implementation, and the Clean Development Mechanism, and key developing countries meaningfully participate in the international effort to address climate change. Again, I appreciate this opportunity to share with you some of the latest insights from the economic modeling community and our perspective on the recent EIA analysis. If you have any questions, please feel free to follow-up with Joe Aldy on my staff at 202-395-1455.

Sincerely,

Janet Yellen
Chair



THE CHAIRMAN

EXECUTIVE OFFICE OF THE PRESIDENT
COUNCIL OF ECONOMIC ADVISERS
WASHINGTON, D.C. 20502

December 14, 1998

Joe Almy

Dear Chairman Sensenbrenner:

This letter responds to your October 20, 1998 letter regarding economic analysis of the Kyoto Protocol. Your letter requested comments on two issues. First, I will address your interest in the Council of Economic Advisers' (CEA) views on the Energy Information Administration (EIA) report "Impact of the Kyoto Protocol on U.S. Energy Markets and Economic Activity." Second, I will respond to your question regarding implementing legislation.

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In addition, the Organization for Economic Cooperation and Development (OECD) recently convened modelers from around the world for a climate change modeling workshop. While many of the modeling teams at OECD also participate in the EMF exercise, the workshop included four non-EMF teams. The results from non-EMF models reinforce the importance of international emissions trading in lowering permit prices. These models also found that Annex I trading can significantly reduce costs, and global trading can result in even more substantial cost-savings.

The modeling results from these two large efforts coordinated by EMF and by the OECD clearly indicate the potential for cost-savings through an efficiently-designed international trading system. It is important to recognize that these two efforts relied exclusively on models with the capacity to model explicitly international trade in emissions allowances. We believe that it is appropriate to evaluate the Kyoto Protocol with models that can assess the opportunities for international emissions trading, since trading is embedded in Article 17 of the Protocol. Models that cannot evaluate international trading are constrained in the kinds of questions they can effectively address.

The Energy Information Administration's model is not capable of addressing the question of international emissions trading: it is focused only on the U.S. energy sector and has no international emissions trading component. Thus, EIA did not conduct any analysis of cost-effective international trading opportunities. A traditional economic analysis of international trading would assess the demand and supply of emissions allowances and, by modeling a market where costs are minimized, identify a single international permit price. This is the approach taken by the Administration as well as by the EMF and OECD modeling teams. However, the EIA analysis assesses only the demand side of the issue for the United States, and then incorporates what appear to be arbitrary assumptions about alternative possibilities for the international permit price and subsequent international transfers. The scenarios that attempt to include international trading overstate the cost of permits because they fail to take into account the way that an international market, equilibrating to a single international permit price, lowers cost.

Even if one were to ignore international trading completely, the EIA analysis generates higher U.S. permit prices than nine of the ten models participating in the EMF exercise. This implies that EIA may be making more pessimistic assumptions about the responsiveness of the economy to reducing emissions than the broad climate change modeling community.

In addition to the question of international trading, there are other important questions that models should consider in evaluating the Kyoto Protocol. For example, the Protocol covers all six major kinds of greenhouse gases. While most of the models involved in the EMF and the OECD exercises did not consider these other gases in their analyses, the Administration's illustrative modeling effort did address this issue. The EIA analysis does not address this question. The model used by EIA cannot assess the opportunities for abating non-carbon dioxide greenhouse gas emissions. EIA makes an assumption that moving from 1990 -7% to 1990 -3% reflects the opportunities for emissions abatement in non-carbon dioxide gases and carbon sinks based on a misinterpretation of a State Department paper describing how the 1990 -7% target agreed to in Kyoto is roughly equivalent to 1990 -3% under the accounting system used in the

President's October 1997 proposed target of returning to 1990. Under EIA's interpretation, sinks and other greenhouse gases would provide only 57 MMTCE annually, irrespective of the price of greenhouse gas permits. This implies that the United States would achieve its target almost exclusively through carbon dioxide reductions and international trading. However, it is reasonable to expect that as permit prices increase, as they do across the various scenarios in the EIA report, higher levels of abatement of these other greenhouse gases would become cost-effective and would occur.

The flexibility across gases allows countries and companies to make reductions in the most cost-effective manner possible, reducing the cost of compliance. Based on Annex I national communications, emissions growth in non-carbon dioxide greenhouse gases is expected to be much slower (and in some cases negative) than carbon dioxide emissions growth between 1990 and 2010. This indicates that the U.S. six-gas target is less stringent than implied by just an assessment of carbon dioxide alone, and that there could be greater cost-savings through international trading of all greenhouse gases than implied by assessments of carbon dioxide trading alone.

Another crucial aspect concerns the time frame of emissions abatement. As the Administration Economic Analysis on climate change noted, the Administration advocated and secured in the Kyoto Protocol a later and more realistic time frame for the initial emissions target than what had been proposed by other countries. By adopting a gradual and credible path of reductions in the early years, adjustment costs can be reduced. How one addresses the question of timing of reductions affects the modeling results. In EIA's study, most businesses do not take action to address climate change until 2005, and therefore only have a short time until the 2008-2012 budget window to reduce emissions. This essentially assumes that even though the Administration secured this more realistic commitment period to reduce the burden on firms by allowing them to more gradually undertake emissions reductions, very few firms would actually take advantage of such an opportunity. Studies have demonstrated that the amount of lead time a company takes has dramatic economic implications. For example with EIA's model in the Interagency Analytic Team draft report, a 5-year "ramp-up" (starting in 2005) would result in economic costs 65% greater than that associated with a 10-year "ramp-up" (starting in 2000). Thus, the assumption that many businesses would fail to plan for the future results in higher projected costs.

While some may claim that very little action is likely to occur prior to 2005, there is reason to believe that some firms will act voluntarily well before 2005. Already businesses are taking action to address climate change. For example, on September 18, British Petroleum announced its plan to reduce emissions of greenhouse gases worldwide by 10% below 1990 levels by the year 2010. In July, United Technologies announced their plan to reduce its worldwide energy consumption by 25% by the year 2007. Moreover, once the Protocol is ratified with the advice and consent of the Senate, we would expect more firms to respond and undertake more actions to abate emissions.

Finally, how an analysis addresses other policy issues that can affect the costs of abating emissions can also impact the conclusion regarding costs. In the Administration's analysis, additional elements of policy were recognized as having the potential to significantly decrease

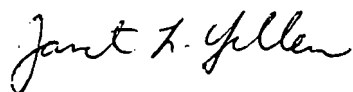
the costs of compliance and increase the amount of reductions that might be accomplished at home. These policies were not factored into the illustrative model the Administration cited, but were qualitatively taken into account in reaching the conclusion that the United States could meet its Kyoto target for a relatively modest cost. The EIA analysis, however, ignores elements such as afforestation and reforestation (covered under the Kyoto Protocol) and the Administration's electricity restructuring proposal, all of which could significantly lower compliance costs.

Implementing Legislation

The Administration will seek any necessary new implementing legislation at the appropriate time. While the Administration advocates the use of a domestic trading program during the 2008-2012 commitment period, no policy decisions have yet been made about the nature of this program. Thus, all aspects of the trading program, including the options to allocate permits based on historical emissions or to auction some or all permits and recycle the revenue back to the economy through cutting other taxes, are still under consideration.

The Administration continues to believe that the costs of achieving our Kyoto target will be modest if we are successful in securing rules for efficient international trading, joint implementation, and the Clean Development Mechanism, and if key developing countries meaningfully participate in the international effort to address climate change. Again, I appreciate this opportunity to share with you some of the latest insights from the economic modeling community and our perspective on the recent EIA analysis. If you have any questions, please feel free to contact me or have your staff follow-up with Joe Aldy on my staff at 202-395-1455.

Sincerely,

A handwritten signature in cursive script, reading "Janet L. Yellen".

Janet L. Yellen

The Honorable Jim Sensenbrenner, Jr.
Chairman
Committee on Science
U.S. House of Representatives
Room 2320 Rayburn House Office Building
Washington, D.C. 20515

Economic Impact of the Kyoto Protocol

June 9, 1998

- 1. The WEFA study was funded by the Global Climate Coalition, a corporate group of fossil fuel and other interests that is leading the opposition to taking responsible action on global climate change.***
 - 2. The model used to derive the WEFA numbers is flawed. It omits all the flexibility mechanisms included in the Kyoto Protocol and the Administration's policies.***
- The WEFA analysis omits international emissions trading.** This study assumes that no countries undertake emissions trading, even though the right to trade is explicitly stated in the Kyoto agreement. International trading among industrialized countries could reduce costs of emissions by half.
 - The WEFA study does not include developing country participation in emissions reduction.** This study assumes developing countries do nothing to reduce greenhouse gas emissions. However, the Kyoto Protocol establishes the Clean Development Mechanism, and even if developing nations only participate in this mechanism the costs to the United States could be 20 to 25% lower. If key developing countries participate more fully, for example by taking on emissions targets and undertake emissions trading, the costs to the United States could be reduced even more.
 - The WEFA study does not account for six categories of greenhouse gases.** This study assumes that emissions reductions would occur only through carbon dioxide reductions, even though all six major greenhouse gases are covered by the Protocol. Since the Kyoto agreement requires countries to reduce emissions to specific targets, on average across all kinds of greenhouse gases, the flexibility is available to reduce emissions of some gases more than others if it is cost-effective. Allowing for trading across gases could lower costs by about 10%.
 - The WEFA analysis omits carbon sinks.** This study assumes that no carbon sink opportunities for absorbing greenhouse gas emissions are available, even though the Kyoto agreement explicitly includes forestry activities. Low-cost carbon sink options provide another opportunity to achieve emissions targets at a modest cost.

By ignoring these flexibility mechanisms, this analysis fails to assess accurately the Kyoto Protocol as well as the Administration's efforts to reduce greenhouse gas emissions. The Administration has always said that reducing emissions can be done smart or dumb. By failing to account for these flexibility mechanisms, the WEFA analysis illustrates the costs of doing it dumb. The Administration believes that by including market mechanisms it can be done smart.

The costs of meeting the challenge of climate change will be modest. The Administration is working to ensure that greenhouse gas emissions that contribute to global warming are reduced in common sense, cost-effective ways. The Administration believes that with effective market mechanisms -- international emissions permit trading, the Clean Development Mechanism joint implementation, timing flexibility during the commitment period, opportunities to trade across greenhouse gases, and carbon sinks -- as well as with meaningful developing country participation and flexible timetables, the economic cost to the United States of meeting the Kyoto targets will be modest.

3. ***The potential costs of waiting too long to address the threat of climate change exceed the costs of acting now.*** The threats climate change presents are widespread and range from potential increases in asthma and infectious diseases to increasingly frequent and severe storms. Despite the challenge of putting a price tag on the risks of inaction, economists have nonetheless developed troubling cost estimates of the risks of global climate change -- ranging in the tens of billions of dollars per year for the United States.
- ***Human health.*** Warmer temperatures are projected to increase fatalities attributable to heat waves in the U.S. of the kind that killed 400 in Chicago in 1995. The incidence of asthma and other respiratory illnesses, particularly among children and the elderly, is expected to increase from the additional smog caused by warmer temperatures. In a warmer, wetter world, the geographic ranges for infectious diseases could significantly expand. The incidence of malaria, for example, could increase by 50 million or more cases a year by 2100.
 - ***Extreme weather.*** Warmer, wetter weather is projected to increase the frequency and intensity of extreme events such as floods and drought. The 1993 Mississippi River flood alone caused damages of \$10-20 billion, while the Pacific Northwest floods in 1996-97, and the 1997 Ohio River and Red River floods resulted in substantial costs to business and homeowners. Global warming may also mean increased drought in the U.S., particularly in the Great Plains and other arid areas.
 - ***Sea level rise.*** Scientists project that sea level will rise by an additional 6-38 inches by 2100. A 20 inch-rise could inundate 7,000 square miles of the U.S. coastline, with Florida and the Gulf Coast at greatest risk. Changes in rain and snowfall could affect water supplies and water quality, posing threats to irrigation, fisheries, and drinking supplies
 - ***Agricultural impacts.*** Changes in growing seasons, water availability, soil moisture and precipitation could cause significant regional shifts in food productivity, with decreases in food production.
4. ***The President's plan protects the environment and grows the economy.*** In October 1997, President Clinton put forward a responsible, balanced approach to begin meeting the challenge of global warming, while protecting our economy and maintaining our international competitiveness. This plan emphasizes win-win initiatives designed to cut emissions by increasing energy efficiency; developing new, cleaner energy technologies; working with industry and others to promote sensible solutions; and relying on market-based mechanisms to ensure cost-effective reductions.
- The plan includes a \$6.3 billion package of tax incentives and R&D aimed at cutting greenhouse gas emissions and building partnerships with industry to remove barriers to the development and widespread use of energy efficient technologies and practices.
5. ***Enabling environmental protection and economic growth to go hand-in-hand.*** For the past 25 years, efforts to protect the environment, whether by cleaning our air and water, eliminating acid rain or closing the ozone hole, have been repeatedly assailed as a threat to our economy. Yet today we have the cleanest environment in a generation and the strongest economy in a generation. President Clinton's balanced approach to the challenge of climate change will allow us to grow the economy and protect the environment at the same time.



PRESS OFFICE: (202) 628-3622

NEWS RELEASE

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FOR IMMEDIATE RELEASE
June 9, 1998

Contact: Frank Maisano
(202) 628-3622

FIRST COMPREHENSIVE POST-KYOTO STUDY SHOWS TREATY WILL COST FAMILIES \$2,700 A YEAR

WASHINGTON, D.C. – The climate treaty negotiated in Kyoto, Japan, last December will cost the typical American family of four \$2,700 a year in higher costs for such things as energy, manufactured goods, and food, according to a study released today by the Global Climate Coalition.

The study, conducted by the independent economic forecasting firm WEFA, Inc., projects that the treaty jeopardizes 2.4 million jobs in the mining, energy, manufacturing, agriculture, and service industries.

WEFA is the first independent organization to calculate, both nationally and on a state-by-state basis, the full economic consequences of the treaty negotiated in Kyoto. In addition, it looks at impacts in 20 representative cities, counties, and metropolitan areas across the nation.

“While scientists debate the extent of human impact on the global climate, there is no question that the Kyoto treaty will have a dramatic effect on what American families pay for gasoline, electricity, and food,” said Mary Novak, WEFA Senior Vice President and lead author of the study.

The WEFA study’s cost projections are based on several key assumptions: that the U.S. will cut greenhouse gas emissions to a point seven percent below 1990 levels by the years 2008 to 2012, as required by the treaty; that there will be no international system for emissions trading with developing nations; and that there will be no Clean Development Mechanism enabling U.S. companies to build efficient new facilities in developing nations and take credit for emissions reductions.

- More -



"These assumptions reflect the way things are today," Novak said. "None of the devices included in the treaty to ease the economic burden of cutting U.S. energy consumption by 35 percent or more exists. And there is no reason to believe they will be available in time to make a difference. The sad truth is, we need to be looking at this kind of worst case scenario because that's the reality Americans face."

GCC President Gail McDonald said the WEFA study confirms the worst fears the U.S. Senate expressed last year when it voted 95-0 to oppose any treaty that would harm the American economy. "This treaty is a threat to our new prosperity," she said. "The WEFA study proves conclusively that the Kyoto Protocol is impractical and it won't work."

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The Global Climate Coalition is an organization of trade associations and private companies established in 1989 to coordinate participation in the scientific and policy debate on global climate change.

Economic Impacts of the Kyoto Protocol On Selected Cities and Counties

(WEFA, Inc., June 1998)

City, County	Jobs Lost
Boston, Massachusetts	42,000
Billings, Montana	26,000
Chicago, Illinois	94,000
Charlotte, North Carolina	25,000
Clark County, Nevada	14,000
Cleveland, Ohio	25,000
Fairfax, Virginia	9,500
Fort Wayne, Indiana	8,000
Fulton County, Georgia	26,000
Harris County, Texas	45,000
Hennepin County, Minnesota	14,000
Howard County, Maryland	1,500
Jefferson County, Kentucky	11,000
Madison County, Alabama	3,600
New Orleans, Louisiana	20,000
Oklahoma City, Oklahoma	9,400
Philadelphia, Pennsylvania	43,000
Phoenix, Arizona	68,000
San Jose, California	27,000
Seattle, Washington	24,000

Economic Impacts of the Kyoto Protocol On States

(WEFA, Inc., June 1998)

State	Jobs Lost	Cost per family of four (\$)
Alabama	67,500	948
Alaska	4,300	1,603
Arizona	102,300	1,572
Arkansas	20,600	932
California	278,800	1,312
Colorado	47,400	1,144
Connecticut	28,100	1,264
Delaware	4,500	1,240
Florida	142,000	1,816
Georgia	80,000	1,708
Hawaii	9,700	1,020
Idaho	11,600	764
Illinois	190,700	1,516
Indiana	99,700	1,228
Iowa	21,600	772
Kansas	18,400	968
Kentucky	56,500	1,436
Louisiana	64,500	1,232
Maine	7,000	1,772
Maryland	33,300	1,012
Massachusetts	45,600	1,736
Michigan	96,500	1,156
Minnesota	46,900	1,376
Mississippi	28,600	924
Missouri	48,700	1,084
Montana	41,500	2,740
Nebraska	19,000	1,136
Nevada	27,300	1,356
New Hampshire	12,400	1,628
New Jersey	120,500	800
New Mexico	13,500	724
New York	140,000	976
North Carolina	107,200	1,272
North Dakota	3,600	992
Ohio	119,800	1,188
Oklahoma	26,600	732
Oregon	22,900	820
Pennsylvania	108,000	748
Rhode Island	3,400	1,592
South Carolina	32,500	976
South Dakota	7,200	1,168
Tennessee	39,500	892
Texas	124,600	828
Utah	12,700	976
Vermont	2,300	1,512
Virginia	34,600	756
Washington	47,700	1,120
West Virginia	19,400	948
Wisconsin	69,800	1,348
Wyoming	7,600	928

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Global Warming: The High Cost of the Kyoto Protocol

National and State Impacts – Executive Summary

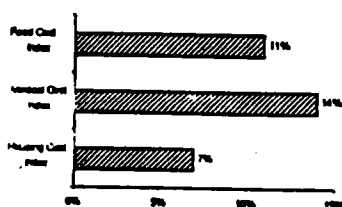
Implementing the Kyoto Protocol Would Reduce Economic Prosperity and Cost US Jobs

- Loss of 2.4 Million Jobs
- Loss of \$300 billion in US GDP annually, an average loss of \$2700 per household
- Loss of competitiveness to developing countries which refuse to commit to emission targets

Energy Prices Would Double for Businesses (Percent Increase from Baseline)

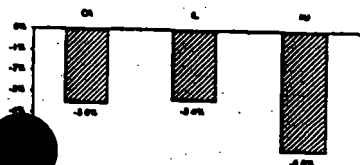


The Cost of Basic Necessities Would Rise (Percent Increase from Baseline)



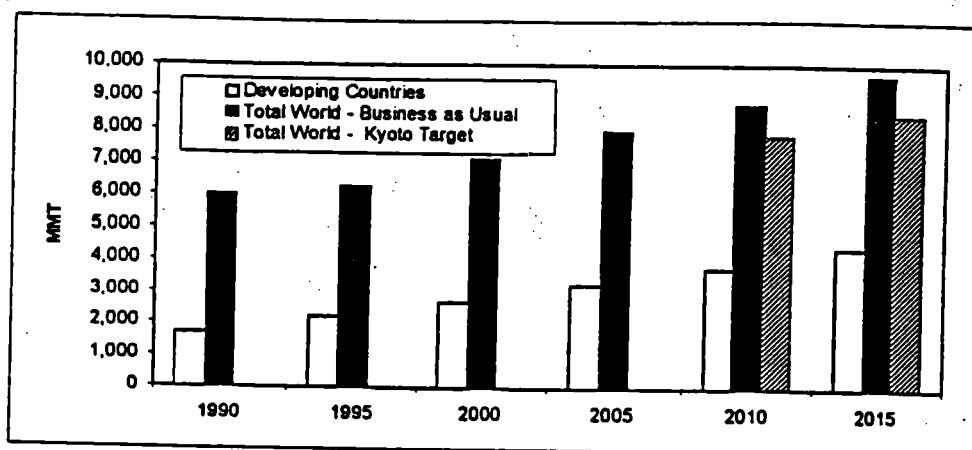
Every State Would Suffer Large Manufacturing Job Losses, Even Non-Energy-Intensive States

(Percent Decrease from Baseline)



The Kyoto Protocol is an international treaty that would commit the U.S. and other industrialized countries to reduce greenhouse gas emissions by late next decade. Developing countries would not commit to reduce their greenhouse gas emissions. Without the participation of the developing countries, the impact on global greenhouse gas emissions from implementing the Kyoto Protocol would be small.

The Kyoto Protocol Would Have Little Impact on Global Carbon Emissions from Man-Made Sources



Source: Energy Information Administration, *International Energy Outlook 1997*

The US faces a daunting task: reducing greenhouse gas emissions to 93% of the 1990 level. Today, carbon emissions exceed the target by 16%; by 2010 – 37% or more.

The Kyoto Protocol's Call for Near-Term Action Costs US Jobs

Economists at academic institutions and independent firms, including WEFA, have helped define climate policy options and their likely costs for more than a decade. All of their studies estimated high costs at both the national and individual state levels – without carbon limits, the economy and energy-use are expected to grow steadily. Reducing energy-use to achieve carbon emission reductions to or below 1990 levels within 10-12 years requires sending very powerful price signals through the economy. However, these powerful price signals, implemented by adding permit fees or taxes to energy prices, result in: premature retirement of capital stock, a decline in GDP, a rise in unemployment, less capital for business investments, and less disposable household income. The result is a picture of a less prosperous America.

A Better Strategy:

Promote Technological Progress and Global Participation

WEFA believes the better climate strategy would be to match policy actions to an evolving understanding of climate science, as global warming is likely to be gradual and limited to only a small change in average global temperature. Measures consistent with this approach would be:

- increase investments in technology and gradually replace existing capital stock
- encourage voluntary actions to reduce greenhouse gas emissions
- insist that developing countries meaningfully participate

Overview

Unemployment Rate in 2010:

State	Base	Kyoto
Alaska	7.20	8.51
Alabama	3.63	6.33
Arkansas	4.72	6.13
Arizona	3.03	6.73
California	6.10	7.73
Colorado	3.75	5.32
Connecticut	5.48	6.97
Delaware	4.71	5.64
Florida	4.97	6.56
Georgia	3.92	5.48
Hawaii	6.55	8.15
Iowa	6.07	6.29
Idaho	3.92	5.28
Illinois	3.38	6.06
Indiana	3.65	6.15
Kansas	4.21	6.39
Kentucky	4.60	7.10
Louisiana	6.35	8.85
Massachusetts	4.32	6.50
Maryland	4.71	5.92
Maine	5.31	6.37
Michigan	3.80	5.54
Minnesota	3.45	4.93
Missouri	4.04	6.55
Mississippi	5.86	7.94
Montana	6.04	9.94
North Carolina	3.95	6.14
North Dakota	2.78	3.66
Nebraska	3.09	4.82
New Hampshire	4.39	6.12
New Jersey	6.15	7.84
New Mexico	7.26	8.68
Nevada	4.64	6.48
New York	6.24	7.76
Ohio	3.92	6.74
Oklahoma	3.83	5.41
Oregon	5.47	6.63
Pennsylvania	4.65	6.37
Rhode Island	4.57	5.27
South Carolina	5.48	6.99
South Dakota	3.23	4.81
Tennessee	5.41	6.61
Texas	5.21	6.32
Utah	3.09	3.89
Virginia	4.23	5.06
Vermont	4.12	4.79
Washington	5.35	6.76
Wisconsin	2.59	4.71
West Virginia	4.87	7.09
Wyoming	5.45	8.29
U.S.	5.43	6.95

In Washington, DC and throughout the nation, elected officials and key leaders are debating whether the Kyoto Protocol, an international treaty negotiated by the Clinton Administration that would legally bind developed countries to reduce their greenhouse gas emissions, should be signed and ultimately ratified by the US Senate. By the terms of the Protocol, the US would have to reduce its emissions 7% below 1990 levels by late next decade. And, unless developing countries agree to binding emissions targets, a competitive imbalance would be created between industrial and developing nations.

Meeting the goal of the Kyoto Protocol would be a daunting task. In 1997, carbon emissions from the energy sector, the majority of greenhouse gas emissions, exceed the goal established at Kyoto by 16%. By late next decade, WEFA projects that carbon emissions would exceed the goal by at least 37%. Due to population increases, on a per capita basis, the required reduction would exceed 50%.

WEFA has analyzed the economic consequences to the U.S. of achieving the Kyoto target through domestic actions. These consequences would be severe, a result that others analyzing even less onerous targets also have reported. These include the U.S. Department of Energy, leading academic institutions, and other independent consulting firms. Meeting the Kyoto target would:

- Nearly double energy and electricity prices, and raise gasoline prices an additional 65 cents per gallon.
- Cost 2.4 million US jobs and reduce US total output \$300 billion (1992\$) annually, 3.2% below baseline GDP projections, an amount greater than the total expenditure on primary and secondary education.
- Harm U.S. competitiveness, as developing countries will not need to raise energy prices (or product prices) to meet mandatory greenhouse gas targets.
- Reduce the average annual household income nearly \$2700, at a time when the cost of all goods, particularly food and basic necessities, would rise sharply.
- State tax revenues would be reduced by \$93.1 billion due to job and output losses attributable to lost US competitiveness in the global market and higher energy costs.

The sharp rise in energy prices would reduce economic growth opportunities. Compounding this effect is the loss of competitiveness the industrialized countries would suffer, as developing countries would not raise energy prices to meet greenhouse gas reduction targets. Although developing countries argue that full responsibility for mitigating the risk of global warming rests with industrialized countries, developing countries exempted themselves from emission limits because they recognize the role energy plays in their economic development.

The Administration has argued that new technology can drastically reduce the costs of implementing the Kyoto Protocol, and that international permit trading, sinks and other market-based mechanisms mentioned in the Protocol also will lower costs. WEFA has carefully assessed the ability of technology to reduce costs over the time period in question. Without very powerful price incentives, such rapid technology improvement is extremely unlikely. Hence, technology implementation does not invalidate the estimates determined through this analysis. As for permit-trading and other

international market mechanisms, the Kyoto Protocol leaves all such instruments undefined, to be worked out in the future among the parties. Further, according to the Protocol, they are to be supplemental to indigenous efforts, not primary mechanisms to reach country targets. And finally, there is great hostility on the part of many countries to their use. For these reasons, WEFA does not ascribe significant savings to them.

The high cost estimates reported would only be justified if catastrophic climate change were imminent.

As global warming may be gradual and largely due to natural causes, measures that more closely link economic cost to the still-potential threat of very long-term global warming may be more appropriate.

The high cost estimates reported would only be justified if catastrophic climate change were imminent. As global warming may be gradual and largely due to natural causes, measures that more closely link economic cost to the still-potential threat of very long-term global warming may be more appropriate. Such measures include encouraging voluntary actions, supporting academic research and educational programs on climate, and investing in the development and deployment new energy technologies.

Key results of this study of meeting the Kyoto target through intra-country tradable permits are:

Energy prices would double

The estimated costs of achieving the Kyoto target are high at both the national and state level because, without carbon limits, the economy, population and energy use are expected to grow steadily. Reducing energy use to 1990 levels within 10 years or more requires sending very powerful price signals through the economy. WEFA's analysis has determined that a \$265 per metric ton of carbon (1992\$) would be required. When added to energy prices, consumers would see an increase of 65 cents per gallon of gasoline and nearly a doubling of natural gas and electricity prices for businesses.

Energy Price Impact of Limiting Carbon Emissions to 93% of 1990 Levels by 2008-2012 (Percent Difference from Baseline)

	2010	2015	2020
Carbon Permit Fee (\$96/metric ton)	\$265	\$310	\$360
Consumer Impacts			
Home Heating Oil	73.2	83.7	95.4
Natural Gas	65.7	78.3	94.3
Electricity	55.7	65.7	72.9
Motor Gasoline	47.5	53.6	60.2
Difference, Cents Per Gallon (96\$)	59.1	68.1	78.2
Business Impacts			
Commercial Establishments			
Distillate Fuel Oil	98.3	112.0	127.3
Natural Gas	76.3	89.9	107.5
Electricity	60.2	71.3	79.4
Industrial Facilities			
Residual Fuel Oil	184.5	210.9	240.1
Natural Gas	118.6	135.5	156.4
Electricity	87.7	98.3	105.1
Trucking and Rail			
Diesel	56.2	64.4	73.6
Difference, Cents Per Gallon (96\$)	68.3	78.8	90.7

Consumers would see price increases in excess of 55% for electricity and 70% for home heating oil by 2010.

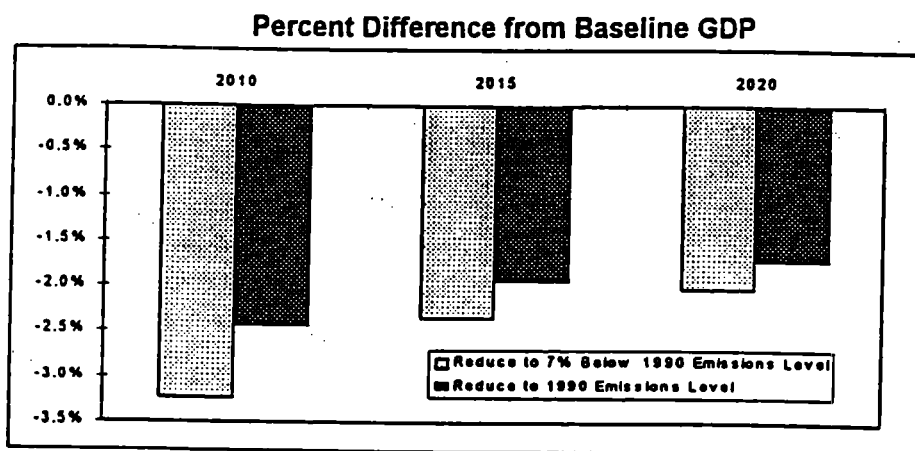
Commercial establishments, including hospitals and schools, as well as industrial facilities, would see electricity price increases of 60% by 2010.

Truckers and railroads would see their fuel costs rise by nearly 70 cents per gallon by 2010.

Economic consequences would be severe: The U.S. would lose \$300 billion in real GDP

The results paint a picture of a less prosperous 21st century America.

These powerful price signals result in premature retirement of capital stock, less capital for business investments, and less disposable household income as prices climb for electricity, gasoline, heating oil and air conditioning. As a result, the growth in GDP would be substantially slower, there would be a sharp rise in unemployment, salaries and wages would be lower, and prices for basic necessities such as food, medical care and housing would be significantly higher.



Some workers would lose their jobs through a weaker economic environment.

All workers would face a slowing in their real wage growth as more workers compete for fewer jobs.

Job losses would exceed 2.4 million; wages would be lower

Implementing the Kyoto Protocol would have a devastating impact on workers. Some workers lose their jobs through a weaker economic environment while other workers lose relatively high paying manufacturing jobs and find only lower wage service jobs. All workers face a slowing in their real wage growth as more workers compete for fewer jobs. Hence, though the government compensates workers — through a refund of the fees collected to consume carbon-based energy resources — for their increased energy expenditures, total real disposable income falls due to reduced employment.

Families would suffer as the loss in aggregate income per household exceeds \$2700

On a per household basis, the cost of signing the Kyoto Protocol results in an average real GDP loss in 2010 of \$2,728 per household.

Real GDP Loss per Household

2010	\$2,728
2015	\$2,083
2020	\$1,876

Low and moderate income families would be hardest hit.

Low and moderate income families would be squeezed: higher costs, lower wages, fewer jobs.

Commodities such as food, medical care, and housing would be nearly 10% more expensive by 2020.

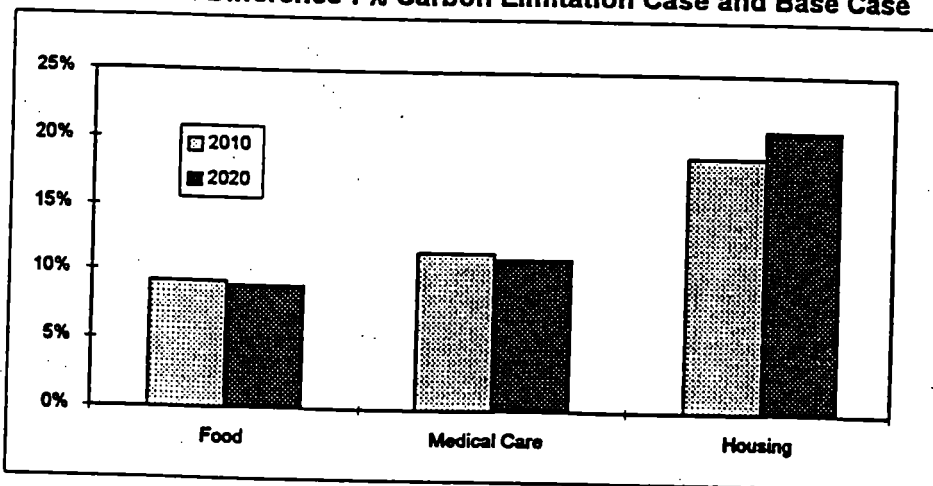
Low and moderate income families would be hurt

Low and moderate income families would be the ultimate losers under a carbon limits regime. Energy use is pervasive: all commercial activities require the use of energy, and energy is a necessity for households. Low and moderate income families spend a significant share of their income on basic necessities including energy. Raising energy prices would present an enormous hardship to these families. In combination with a weaker economy where workers are competing for less-well-paying jobs, families are projected to see a large rise in costs and a reduction in income.

The cost of all necessities would rise substantially

Throughout the forecast period, food, medical care, and housing continue to become more expensive under the carbon stabilization case. By 2020, food is nearly 9% more expensive, medical care is roughly 11% higher, and housing is nearly 21% higher than the base case.

**Inflation in the Prices of Food, Medical Care, and Housing:
Percent Difference 7% Carbon Limitation Case and Base Case**



The most severely impacted industries would be energy producing industries, industries that produce energy-intensive products, and industries that depend on export sales or face strong import competition.

As the imposition of carbon limits is not borne equally by all countries, U.S. exports would be relatively more expensive on world markets.

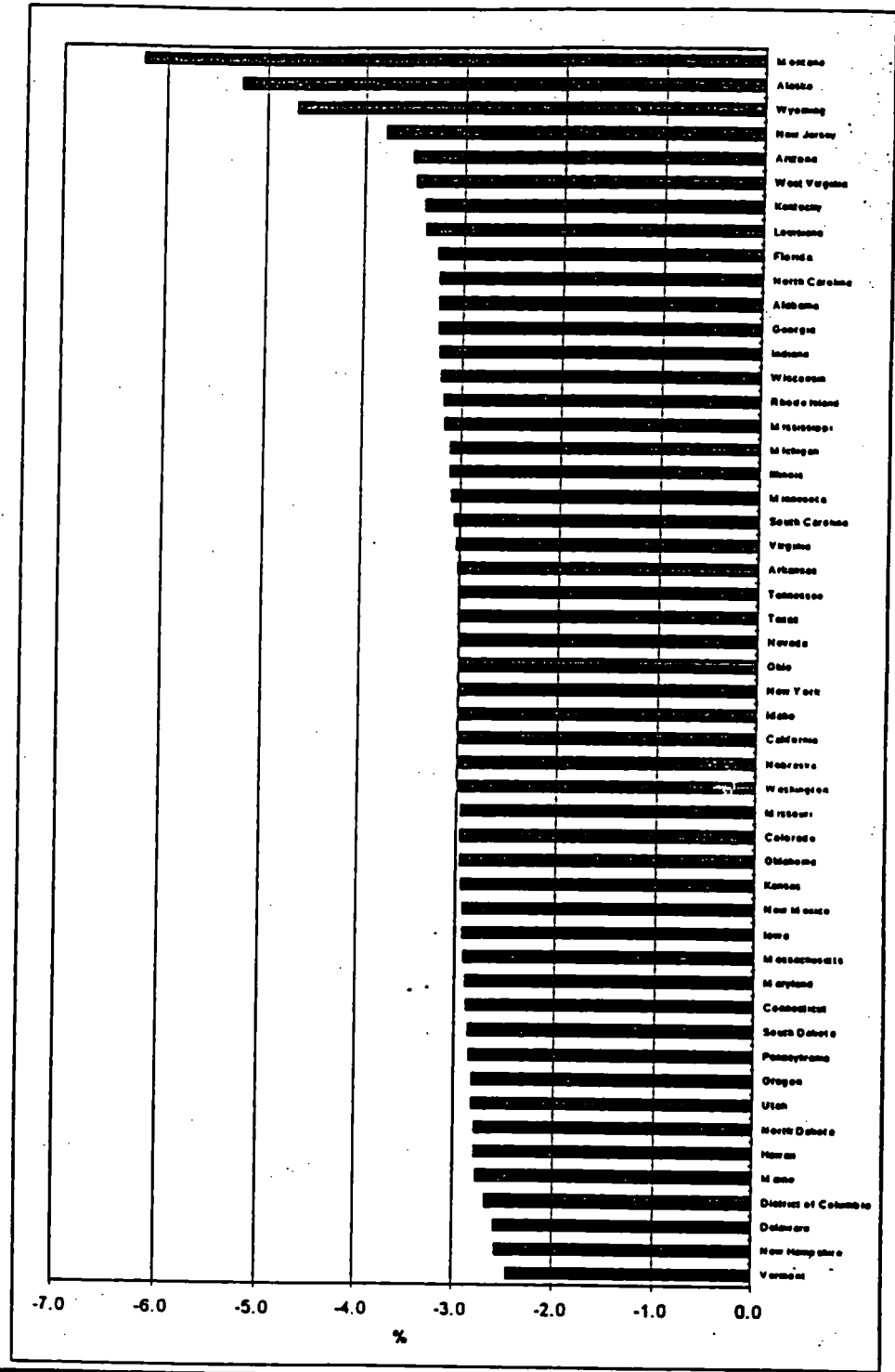
Every state would suffer output and job losses

The most severely affected industries would be energy producing industries, industries that produce energy-intensive products, and industries that depend on export sales or face strong import competition. Because the imposition of the carbon target and permit system is not borne equally by all countries (the developed economies of the OECD face comparable energy price increases, but the developing countries do not) U.S. exports are relatively more expensive on the world market. As a consequence, real exports are lowered dramatically, while imports are increased substantially, affecting:

- the chemicals and paper industries, which are both energy-intensive and already subject to stiff price competition from new producers in developing countries,
- the textile and apparel industries, which have difficulty competing on price due to higher U.S. labor rates, and
- the computer and electronic products industries, particularly from imports. (It is worth noting that the trade deficit in this area would escalate dramatically under the carbon emission limitation case.)

As a result, all states would suffer output and job losses that would persist as long as developing nations exempt themselves from the similar constraints on carbon emissions.

**Real Gross State Product:
Percent Difference from Baseline in 2010**



Proponents of ratifying the Kyoto Protocol offer a rejoinder to WEFA's analysis: 1) technology can greatly reduce the cost to the US economy; and 2) several conceptual mechanisms in the Protocol – such as sinks and international emission trading – can reduce the economic impact on the US. In response:

The Kyoto Protocol's Call for Early Action Reduces the Role Technology Could Play in Mitigating the Risk of Global Warming

Implementing the Protocol would require significant reductions in energy use.

The Administration has argued that the economic cost estimates from WEFA, the Energy Information Administration, and other independent firms and academics are overstated. Relying on its own technology assessments, the Administration concludes that substantial technological progress is available with little or no price incentives.

WEFA, through its on-going assessments of energy technology and analysis of the aggregate performance of the economy in improving energy use, comes to a different conclusion. Substantial improvements in energy-efficiency, particularly in newly restructured electric power markets, are included in WEFA's baseline. Further efficiency gains would be increasingly expensive. The extraordinary efficiency gains required for achieving the Kyoto target would only occur in response to extraordinary price incentives.

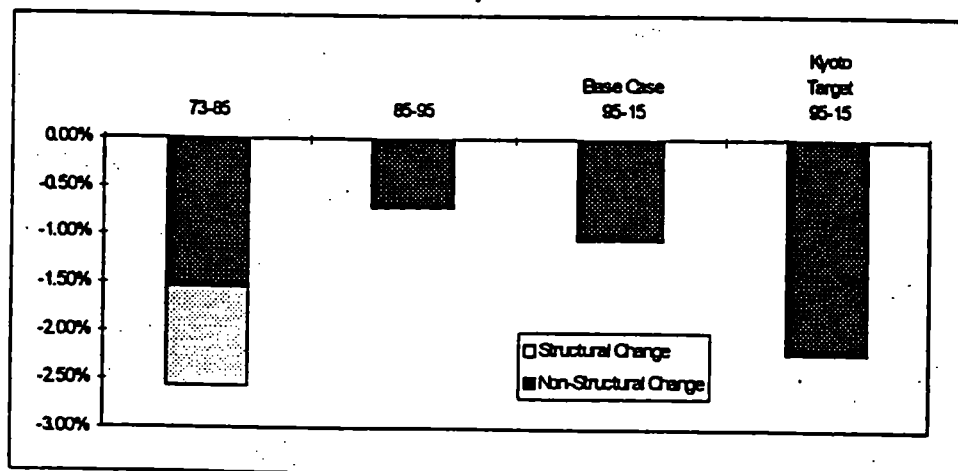
Any carbon permit fee must be high in order to provide the economic incentive for dramatic improvements over a base case, which already includes many technology advances and lower carbon emission estimates.

The carbon fee has to bring about a large reduction in the demand for energy services, major improvements in energy efficiency, as well as improve the opportunity for substitution of low carbon and non-carbon emitting fuels. The required change in energy efficiency to meet the goal is unprecedented. As shown in the chart, energy use per dollar of real GDP would need to improve at a rate in excess of 2.0% per year. Historically, the only period that experienced a similar rate of energy improvement was the late 1970s and early 1980s – and nearly half of that improvement is attributable to structural changes in the economy (the loss of energy intensive well-paying manufacturing jobs overseas.) Without price incentives, the goal would not be reached.

Historically, the only period that experienced a rate of energy improvement similar to the one needed to meet the Kyoto target was the late 1970s and early 1980s.

Nearly half of that improvement is attributable to structural changes in the economy (the loss of energy intensive well-paying manufacturing jobs to overseas competitors.)

Compound Annual Growth Rates in the Energy to GDP Ratio
(Quadrillion BTU/Billion 1992\$)



Trading, Sinks And Other Mechanisms

Measures not included in WEFA's analysis are international emission trading, sinks, the inclusion of an additional three gases, and mechanisms for promoting technology transfer.

While the Kyoto Protocol includes provisions that have been touted by its proponents as a means for alleviating the cost of complying with the Protocol's goals, these measures have not been tested and have been heavily discounted in WEFA's analysis. These provisions are currently only conceptual or have very uncertain implications for meeting the target. Measures not included in WEFA's analysis are international emission trading, sinks, the inclusion of an additional three gases, and mechanisms for promoting technology transfer (Joint Implementation and the Clean Development Fund).

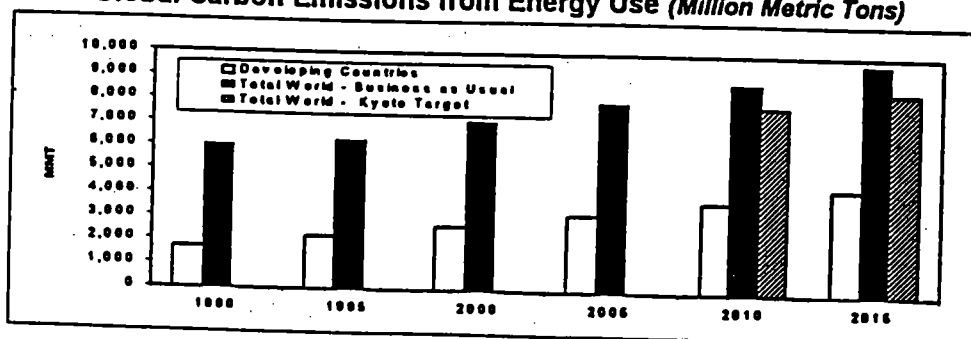
However, these "market based" mechanisms are undefined in the Protocol and hence have to be negotiated by a large number of UN nations, many of whom have expressed open hostility toward such ideas. Further, the Protocol itself indicates these may only be supplemental to a country's internal programs. And finally, most are limited in scope--emissions trading, for example, won't involve the developing nations-- , have no history in international relations, will be costly and difficult to administer, and may conflict with existing GATT or other agreements. For these reasons, it is premature at best to assume costs can be significantly reduced by these measures.

The Kyoto Protocol Is Not the Only Option

As the present study and the work of others make clear, the Kyoto Protocol forces policymakers to decide whether they are willing to risk the economic well being of their nation. From both economic and risk-assessment viewpoints, WEFA believes that there is a better climate strategy; namely to match policy actions to an evolving understanding of climate science; to increase investments in technology (should it prove necessary to substantially reduce fossil fuel use); and to gradually retire existing capital stock.

Further support for investing in a technologically based solution is evident from the chart below. It is the developing countries that are the principal contributors to annual global emission increases. Driven by their expanding economies and their rising populations, the less developed economies of the world will emit more emissions than the industrialized economies by 2015. The reduction in carbon emissions that would result from the developed economies fully meeting their targets under the Kyoto Protocol would not significantly affect the annual global emissions. The developing economies of the world will not meaningfully participate in a greenhouse gas emission reduction or limitation program until there are technological alternatives that provide equal or better opportunities for economic growth than is offered by fossil fuels today.

Global Carbon Emissions from Energy Use (Million Metric Tons)



Source: Energy Information Administration, *International Energy Outlook 1997*

WEFA believes that a better climate strategy would be to match policy actions to an evolving understanding of climate science.

The developing economies of the world will not meaningfully participate in a greenhouse gas emission reduction or limitation program until technological alternatives exist that provide an equal or better opportunity for economic growth than is offered by fossil fuels.

The principal contributors to GHG emission growth are the emerging economies.

Reducing carbon emissions from participating industrialized countries by 5% would not substantially impact global emissions.

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Congress of the United States

House of Representatives

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INDEPENDENT

April 9, 1998

BY FACSIMILE

The Honorable Janet L. Yellen
Chair
Council of Economic Advisers
Old Executive Office Building
Washington, D.C. 20500

Dear Chair Yellen:

On Thursday, April 23, 1998, at 11:30 a.m., the House Subcommittee on National Economic Growth, Natural Resources, and Regulatory Affairs will hold a hearing on the White House Initiative on Global Climate Change.

On behalf of the Subcommittee, I want to invite you to testify at the hearing for the Council of Economic Advisers. Specifically, we would like you to present the Administration's detailed economic analysis of the effects of the Kyoto Protocol.

Pursuant to committee procedures, please provide 25 copies of your written testimony by 5:00 p.m. on Tuesday, April 21, 1998. Please provide 75 more copies of the testimony at the time of the hearing for distribution to the public and the press. If you have any questions, please contact Senior Counsel Larisa Dobriansky at 225-4407.

Thank you for your courtesy and attention to this matter.

Sincerely,



David M. McIntosh
Chairman
Subcommittee on National Economic Growth,
Natural Resources, and Regulatory Affairs

cc: The Honorable Dan Burton
The Honorable John Tierney

DAN BURTON, INDIANA
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MINORITY (203) 775-8051
TTY (203) 775-8852

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Subcommittee on National Economic Growth,
Natural Resources, and Regulatory Affairs
B-377 Rayburn House Office Building
Washington, DC 20515
Phone: (202)225-4407
Fax: (202)225-2441

Facsimile Cover Letter

To: *CHAIR JANEY ELLEN*

Total Number of Pages (including cover sheet) 2

Fax #: *395-6958*

Date: *4/8/98*

From: ☒ Chairman David M. McIntosh

____ Mildred J. Webber - Staff Director
(Mildred.Webber@mail.house.gov)

____ J. Keith Ausbrook - Senior Counsel
(Keith.Ausbrook@mail.house.gov)

____ Larisa Dobriansky - Senior Counsel
(Larisa.Dobriansky@mail.house.gov)

____ Jay Apperson - Special Counsel
(Jay.Apperson@mail.house.gov)

____ Andrew Wilder - Clerk
(Andrew.Wilder@mail.house.gov)

____ Steve Silbiger - Counsel
(Steve.Silbiger@mail.house.gov)

____ Sean Cunningham - Counsel
(Sean.Cunningham@mail.house.gov)

____ Karen Barnes - Professional Staff
(Karen.Barnes@mail.house.gov)

____ Barbara Kahlow - Professional Staff
(Barbara.Kahlow@mail.house.gov)

JAMES M. TALENT, MISSOURI
CHAIRMAN

NYDIA M. VELÁZQUEZ, NEW YORK

JLY, JAF
CC: RL, JA,
HJ

Congress of the United States

House of Representatives

105th Congress

Committee on Small Business

2361 Rayburn House Office Building

Washington, DC 20515-6515

Rec'd 7-6-98

Need Responses

by

Mid - August

June 30, 1998

Honorable Janet L. Yellen
Chair
Council of Economic Advisors
OEOB
17th & Pennsylvania Ave., N.W.
Washington, DC 20500

Dear Dr. Yellen:

Thank you for testifying at the Committee's hearing on the Kyoto Protocol. The hearing was held to give you and others the opportunity to provide Members of the Committee with a report on the potential economic impact of the Protocol on small businesses.

As mentioned at the hearing, the hearing record has been kept open for Members of the Committee for follow-up questions. In light of this, please provide the Committee with answers to the enclosed follow-up questions for the hearing record. Please send your response to the Committee office at 2361 Rayburn House Office Building by July 24, 1998. If you have any questions concerning this request, please direct them to Peter Brechtel of the Committee staff at 225-5821.

Sincerely,

Jim Talent

James M. Talent
Chairman

Enclosure

8/31/98
June 30 letter
on follow-up
questions from
Committee on
Small Business

Questions for the record by Chairman James M. Talent for Dr. Janet L. Yellen, Chair, Council of Economic Advisors

- 1) In your written testimony, you referenced the increase in an average household's energy bill. What is your estimate of the impact of the Kyoto Protocol for the following cases:
 - a) Energy costs for an average household assuming that emissions trading is not allowed (approximately \$200/metric ton based on the SGM model). This data should include the components from oil (heating oil and gasoline), natural gas, and electricity. This data should include a typical household in the following regions: Northeast, Southeast, South, Mid-West, Northwest, and Southwest.
 - b) Direct energy costs for an average small business of 50 employees under the same conditions as listed in Item a above.
- 2) In addition to the direct energy costs, what is your estimate of the indirect costs of the policy for the cases described above?

On page 10 of your written testimony, you said "the emission cuts agreed upon in Kyoto are only a first step in a long journey." Since the implications of these further reductions contemplated by President Clinton are substantial in terms of the impact on the U.S. economy and the availability of emissions credits, please provide the following:

- 1) At the time of the President's policy statement in October the reduction target for carbon stabilization at 1990 levels was approximately 375 million metric tons (Mmt). Since this announcement the EIA outlook has added another 80 Mmt to the target and the Kyoto reduction of 7% has added another 95 Mmt. The total reduction for energy alone is now 550 Mmt. If you add the other gases the Kyoto target for reduction is 650 Mmt. Since the total amount of emissions is critical to any economic analysis, please provide the assumptions used in your analysis for the amount of emissions to be traded. Also, confirm which of the analyses you used were performed after Kyoto.
- 2) What are the Clinton Administration's assumed further emission reduction targets for the period of 2013-2020?

- 3) What analysis of the total impact on the economy (both direct and indirect costs) of the U.S. has been performed using these assumptions? How are total costs reflected in your analysis since the SGM analysis you referenced in your testimony only treats direct costs, which is recognized to underestimate total costs by a factor of 2-4?
- 4) Estimates of the U.S. demand for emissions credits by year for the period 2008-2020 and the potential supply from Russia and the Ukraine based on:
- a) Projected demand relative to the Kyoto target.
 - b) Projected demand relative to the assumed additional reduction targets.

Dr. Yellen, your testimony before the Committee on June 4 was that the Kyoto Protocol would have a modest economic impact on the United States and that the cost per ton of greenhouse gas reductions would be in the range of \$14 to \$23 per ton. You also testified that this cost estimate was predicated on achieving developing country participation and other flexibility mechanisms in future international negotiations. However, during the recent UN FCCC Subsidiary Bodies meeting in Bonn, Germany, the Group of 77 (G-77) and China voiced strong opposition to even placing voluntary responses for developing nations on the agenda for the fourth Conference of Parties (COP-4). On June 12, the closing statement by the Ambassador of Indonesia on behalf of G-77 and China stated:

“The Group reiterates that there must be no new commitments, voluntary or otherwise, introduced for all developing countries, under any guise, in such reviews.”

Given this strong opposition by developing nations to even consider voluntary commitments and given the lack of progress on fleshing out the skeletal flexibility provisions (such as trading) in the protocol, isn't it unrealistic to expect savings from these areas and isn't the Kyoto Protocol likely to cost America substantially more. Please elaborate in your answer and supply details of your calculations.

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United States Senate

COMMITTEE ON FOREIGN RELATIONS

WASHINGTON, DC 20510-6225

September 9, 1998

The Honorable Stuart E. Eizenstat
Under Secretary for Economic, Business
and Agricultural Affairs
Department of State
Washington, D.C. 20520

Dear Secretary Eizenstat:

Since February of this year, the Congress has been attempting to gain a clear understanding of the ramifications of your negotiation last December of the Kyoto Protocol on Climate Change. Specifically, I have submitted to you a number of questions, all focused on answering the two requirements of S.Res. 98, the Byrd-Hagel Resolution: economic impact and developing country participation.

After seven months, the Senate is still left unable to determine the impact of the Kyoto Protocol on the United States economy and how you would propose to place on developing nations real and legally binding commitments under this treaty. It leaves me at a loss how the Administration could have agreed to this Protocol without answering these basic questions. I can only surmise that either you agreed to the Protocol without knowing the answers to these basic questions or that you fear that answering these questions frankly and for the public record would undermine any support for the treaty.

In order for the Senate Committee on Foreign Relations to move forward on the nomination of Frank Loy to be Under Secretary for Global Affairs, two fundamental questions still remain that must be answered fully and in writing. Without a full understanding of the Administration's own cost analysis at the time the Kyoto Protocol was being negotiated, and without a definition of precisely what constitutes "meaningful participation" and exactly what countries the Administration considers "key developing countries" it will be impossible to conduct a knowledgeable and serious review of the Clinton Administration's climate change policy. I have continually pressed for answers to these two questions. The Committee needs to understand the Administration's policy, how it was formulated and how it is to be implemented based on the above-mentioned requested information. Without an understanding of the Administration's policy, how can the Committee conduct a hearing to evaluate Mr. Loy's ability to carry out that policy? Again, the requests are as follows:

1. Provide a clear and precise definition of the President's requirement that there be "meaningful participation by key developing countries" (the President's words from his October 1997 speech). The Senate clearly and unanimously stated its own criteria for developing country compliance with the treaty (text of S.Res. 98 enclosed). The Administration developed a different standard. This is not a matter of sensitive diplomacy. This is a matter of being able to measure the Administration's adherence to its own stated policy.

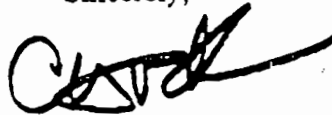
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The Honorable Stuart E. Eizenstat
September 9, 1998
Page 2

2. During your February 11 testimony, you stated, "we had with us a representative, John Gruber, from the Treasury Department, who had his handy computer who at every turn, every time we made any significant proposal or we received one, factored the costs in. ...we did not sneeze without getting an economic analysis of it." The only possible interpretation of this statement is that you were using some economic model or analysis in Kyoto to assess the economic impact of every significant aspect of the Protocol. In previous questions I have asked for a full, public copy of the model or analysis used during the negotiations in Kyoto. Before you took on this issue, former Under Secretary Wirth testified before the Senate Foreign Relations Committee on June 19, 1997 that he would provide such a model or analysis. I am now asking you whether you wish to amend your February 11 testimony, in case such a model or analysis did not, in fact, exist. If it does exist, I again ask that you provide it to the Committee so that we and the American people can gain a better understanding of the economic assumptions the Administration was using at the time you were negotiating the Kyoto Protocol.

As you know, I respect your immense abilities and appreciate your years of exemplary and selfless service to our nation in a variety of positions. You took on leadership responsibilities for the climate change negotiations late in the process. Nonetheless, this Administration has been less than forthcoming in providing timely, honest, clear, concise and accurate information and answers to questions regarding the climate change issue. I hope that we can close this issue with complete responses to the above critically important questions.

Thank you.

Sincerely,



Chuck Hagel
Chairman
Subcommittee on International Economic
Policy, Export and Trade Promotion

CTH/kp

Enclosure

cc: The Honorable Jesse Helms
The Honorable Joseph R. Biden, Jr.

FAX COVER

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AND OVERSIGHT

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HON. HENRY A. WAXMAN
RANKING MINORITY MEMBER
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FAX (202) 226-3348

DATE: 3.30.78

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FROM: Hy

SUBJECT: Approps H.

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Hy

IF THERE IS A PROBLEM WITH THIS
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Congress of the United States

Washington, DC 20515

March 27, 1998

Dear Chairman Livingston and Ranking Member Obey:

The Administration's FY99 proposed budget request includes \$1.292 billion to promote the research and development of energy efficient, renewable energy and clean energy technologies. We respectfully ask that you consider supporting this request with full funding.

The request seeks \$1.06 billion for the Department of Energy, \$205 million for the Environmental Protection Agency, \$10 million for the Department of Housing and Urban Development, \$7 million for the Department of Commerce, and \$10 million for the Department of Agriculture. We believe that funding these programs is a wise investment in America's energy future that will benefit our economy, public health, the environment, and national security.

Funding the development and expanded use of energy efficient and renewable energy technologies is a proven investment that will pay immediate dividends for all Americans. Since 1973, energy savings have reduced the national energy bill by nearly \$200 billion each year. Despite these savings, the U.S. continues to waste over \$300 billion in energy every year, an amount that exceeds the entire military budget. Analysis indicates that further efficiency gains could save U.S. industry as much as \$183 billion per year by 2010.

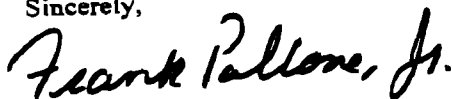
Funding for renewable energy sources also is critical to America's energy independence. Nearly half of U.S. oil was imported in 1996. Continued development of efficient and renewable energy sources will protect against future oil price shocks and free up capital for increased domestic investment that will spur economic growth.

Moreover, our nation needs continued funding for innovative research to maintain our leadership role in the expanding global market for clean, cost-effective, efficient technologies. Two recent studies estimate job growth related to energy efficiency and technology innovation will exceed 800,000 jobs in the next 15 years. Funding also is included for technologies to make our current primary sources of energy as safe and competitive as possible, through the development of cleaner coal combustion technologies.

Significantly, many of these programs epitomize the kinds of public-private partnerships that have been praised as the model for environmental protection and economic development. Such voluntary initiatives bring together innovative thinkers from our universities, corporations, and national laboratories to tackle tough technological challenges.

Attached is a list of the sectors that the programs would support, and their major goals and achievements. We hope the Committee will give these requests the utmost consideration. We thank you for your continued assistance and look forward to working with you as this process moves forward.

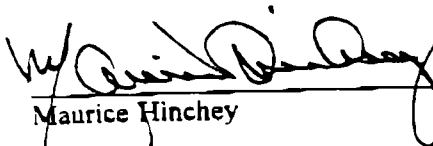
Sincerely,



Frank Pallone, Jr.

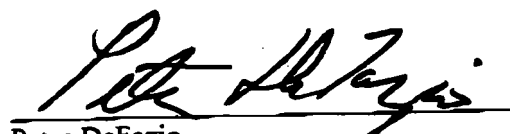

Henry Waxman

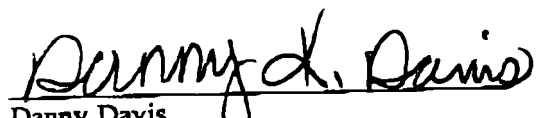
Page Two
March 27, 1998


Maurice Hinchey

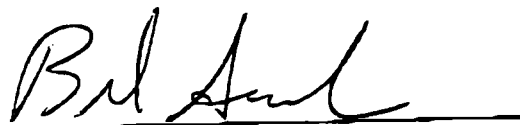

George Miller

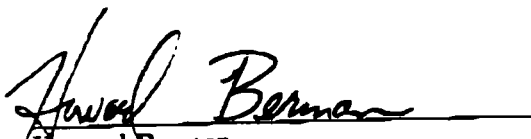

Dale Kildee


Peter DeFazio

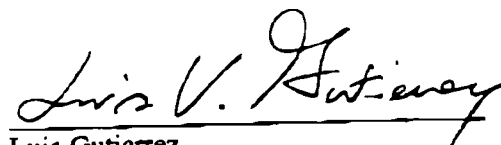

Danny Davis

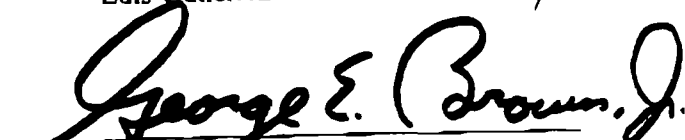

Earl Blumenauer

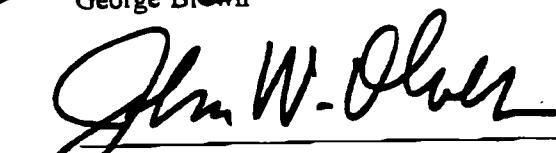

Bernard Sanders

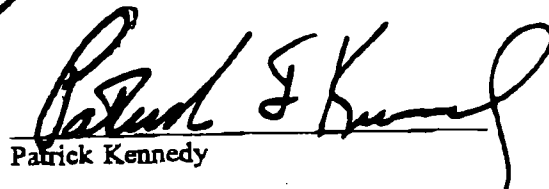

Howard Berman

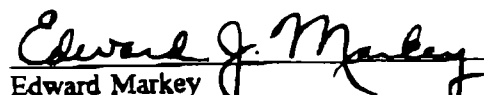

Greg Ganske

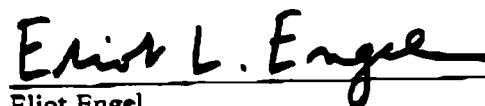

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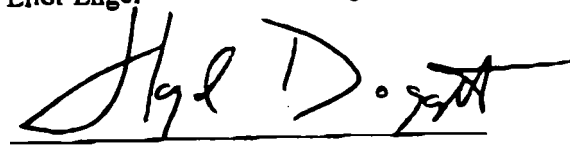

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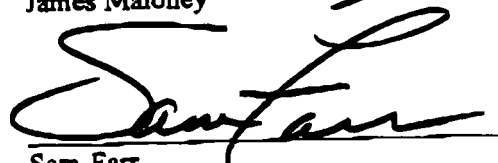

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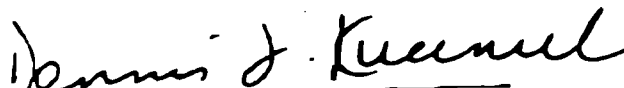

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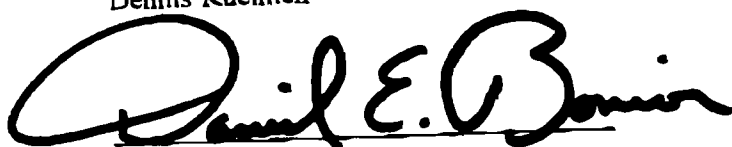

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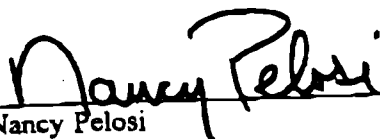
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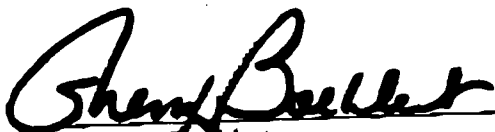
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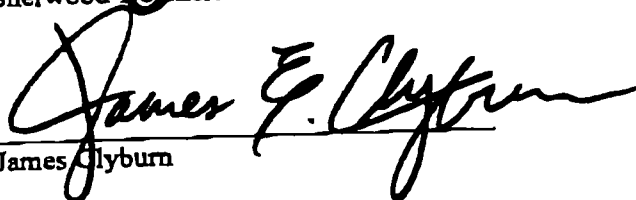
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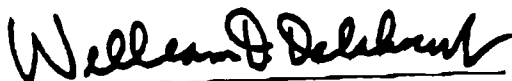
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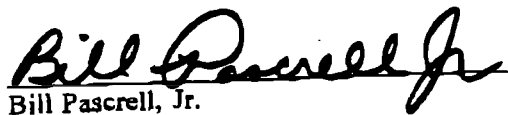
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James Clyburn



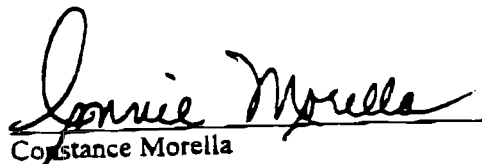
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Bill Pascrell, Jr.



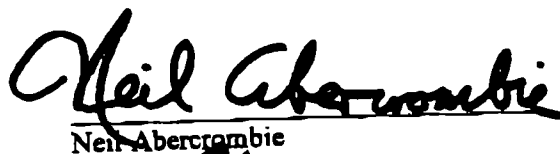
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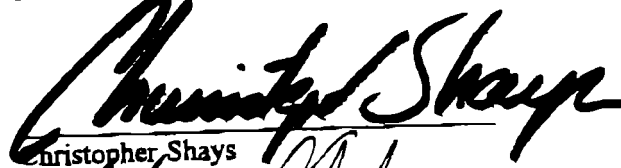
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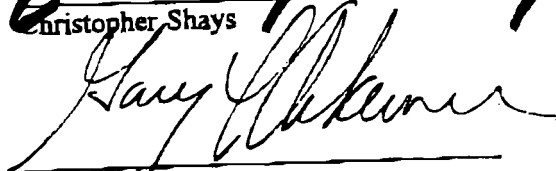
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Neil Abercrombie



Christopher Shays



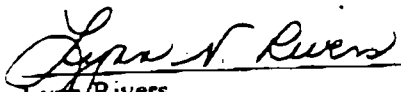
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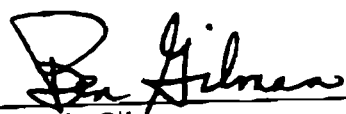


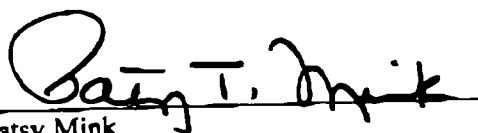
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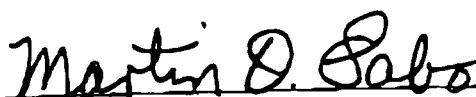


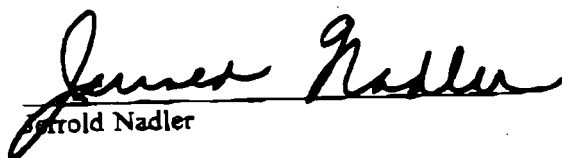
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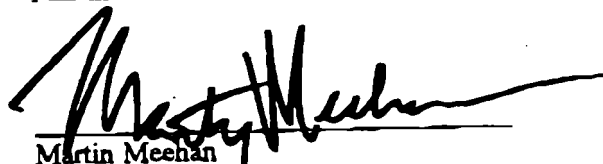

Lynn Rivers

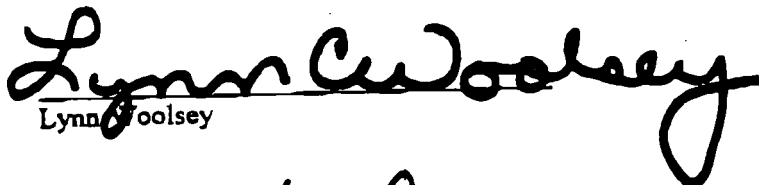

Benjamin Gilman


Patsy Mink

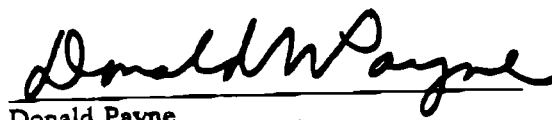

Martin Sabo


Carroll Nadler


Martin Meehan


Lynn Woolsey


Diana DeGette


Donald Payne

cc: Chairman Rogers, Commerce, Justice, State and Judiciary Subcommittee;
Ranking Member Mollohan, Commerce, Justice, State and Judiciary Subcommittee;
Chairman Skeen, Agriculture, Rural Development, Food and Drug Administration, and Related
Agencies Subcommittee;
Ranking Member Kaptur, Agriculture, Rural Development, Food and Drug Administration, and
Related Agencies Subcommittee;
Chairman Lewis, VA, HUD, and Independent Agencies Subcommittee;
Ranking Member Stokes, VA, HUD, and Independent Agencies Subcommittee

ATTACHMENT

Buildings

Because approximately two-thirds of electricity is consumed in buildings, the Administration requests a \$264 million appropriation to improve building design efficiencies as well as to improve equipment (e.g., lighting, heating, ventilation, and air conditioning) and appliance (e.g., refrigerators, computers) efficiencies. This request includes incentives that would accelerate replacement and early retirement of older, less efficient appliances, and would be complemented by voluntary, public-private partnership programs that support the development and purchase of the most highly efficient appliances. For example, new refrigerator prototypes could be 80 percent more efficient than 1980 units.

This portion of the DOE budget request also supports the initiative to have one million solar roofs installed domestically within the coming decade.

Industry

The appropriations request for this sector is \$216 million. Manufacturing, materials, and process industries produce over 80 percent of hazardous wastes and 95 percent of toxic wastes. Technological R&D efforts in the industrial sector would lead to sharp reductions in these wastes, reduce the demand for raw materials, and generate significant cost savings through both improved production processes and reduced treatment and disposal costs.

Transportation

The Administration is requesting \$356 million dollars for efficient transportation research. Funding will assist the Partnership for a New Generation of Vehicles, a partnership program with industry to produce a prototype of an affordable vehicle that achieves up to three times the efficiency of cars on the road today.

Electricity

Generation of electricity in the U.S. is responsible for emissions that pollute the environment, deplete natural resources, and threaten human health. The FY99 request proposes \$312 million for research partnerships in wind, photovoltaics, biomass, solar thermal, geothermal, and other renewable energy sources. These efforts could lead to competitively priced sources of electricity that produce virtually no pollutants.

Agriculture

Important programs that support agriculture also are included in the budget request. The Administration requests \$39.1 million for research on conversion of wood and crop wastes and energy crops to fuels and electricity. Ethanol and biomass fuels have great potential for both baseload power production and as alternative, non-polluting, competitive transportation fuels. Ethanol and biomass also offer new sources of income for farm communities and produce rural jobs.

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BERNARD SANDERS, VERMONT
INDEPENDENT

April 2, 1998

BY FACSIMILE

The Honorable Charles F.C. Ruff
Counsel to the President
The White House
Washington, D.C. 20500

Dear Mr. Ruff:

This letter responds to your March 31, 1998 letter regarding my March 11, 1998 letter to Gene Sperling, Director of the National Economic Council (NEC), relating to the White House Initiative on Global Climate Change. In that letter, you refuse to allow the NEC to provide responses to my inquiry, claiming that such responses implicate the confidentiality of Presidential decision making.

This letter renews my request. My letter requested no information that implicates the confidentiality of Presidential decision making; rather, I requested information about the interagency process, including review of and comments on documents from sister agencies within the Executive Office of the President (EOP), e.g., the Council of Economic Advisers, and from Executive Branch agencies.

In addition, the NEC is an agency subject to Congressional oversight and not part of the White House Office.¹ The President's Budget shows that the Office of Policy Development (OPD), which includes the NEC staff, is an agency within the EOP and not part of the White House Office, i.e., OPD has its own budget account separate from the White House budget accounts. Also, the EOP Telephone Directory treats the OPD identically as the Office of Administration, a sister EOP agency.

My requests do not implicate the confidentiality of Presidential decision making. Specifically, questions 8 through 14 ask for information and documentation relating to climate change proposals, e.g., information and documentation relating to the NEC's participation in interagency efforts on climate change, the NEC's comments on analyses prepared by sister EOP

¹Even if the NEC were part of the White House Office, the White House Office is still subject to Congressional oversight.

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AND OVERSIGHTDEMOCRATIC STAFF OFFICEBob Davis 395-7285
David Benish 396-9891

HON. HENRY A. WAXMAN

RANKING MINORITY MEMBER

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Ellen Athas 395-3744 PHONE (202) 225-5051

Rob Weiner 456-1647 FAX (202) 225-4784 or 8185

DATE: Sally Brandel 647-6217

Bob Dreher 260-8046

TO: Michelle John 395 6958 FAX # _____

Core Peterson

FROM: Ellen Athas

SUBJECT: Global Warming Document ProductionNO. OF PAGES _____
(EXCLUDING COVER SHEET)

COMMENT:

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BERNARD SANDERS, VERMONT
INDEPENDENT

August 24, 1998

The Honorable Dan Burton
Chairman, Committee on Government Reform and Oversight
U.S. House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

It is my understanding that at a meeting last week between the White House, the Council on Environmental Quality, and the staff of the Subcommittee on National Economic Growth, Natural Resources, and Regulatory Affairs concerns were raised about how the Committee would handle certain documents related to global warming that you have subpoenaed.

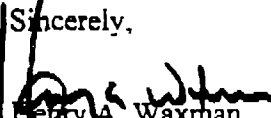
We faced a similar issue during the early months of the campaign finance investigation. As you will recall, the minority members of the Committee wrote to you on March 10, 1997, about the need to establish a protocol to handle the documents subpoenaed by the Committee as part of the campaign finance investigation. As we pointed out in that letter, the House rules provide that subpoenaed documents are the property of the Committee. They cannot be unilaterally released by any member, including the chairman, without Committee approval.

The same considerations apply to the documents relating to global warming that the Committee has obtained by subpoena. These documents belong to the Committee and must be handled under procedures adopted by the Committee.

The Committee responded to the concerns expressed in the March 10, 1997, letter by adopting a document protocol for the campaign finance investigation. Although I have concerns with aspects of the document protocol adopted by the Committee, a similar approach would seem to be required for the global warming investigation, especially given its heavy reliance on Committee subpoenas.

For your convenience, I have attached copies of the March 10, 1997, letter, as well as the current version of the document protocol for the campaign finance investigation.

Sincerely,


Henry A. Waxman

Ranking Minority Member

Enclosures

cc: The Honorable David M. McIntosh

DAN BURTON, INDIANA
CHAIRMANHENRY A. WAXMAN, CALIFORNIA
RANKING MINORITY MEMBER

ONE HUNDRED FIFTH CONGRESS

Congress of the United States
House of Representatives**COMMITTEE ON GOVERNMENT REFORM AND OVERSIGHT**
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March 10, 1997

The Honorable Dan Burton
Chairman
Committee on Government Reform and Oversight
U.S. House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

Pursuant to House rule XI clause 2(c)(2), we are writing to request that you convene a special meeting of the Committee to establish fair procedures and approve an appropriate scope and budget for the Committee's investigation into alleged campaign finance abuses.

As the minority members of the Committee, we wish to work with you and the other majority members in investigating alleged campaign finance abuses. As a prerequisite to bipartisan cooperation, however, the Committee must adopt impartial procedures for the conduct of the investigation: the investigation must avoid pursuing a strictly partisan agenda; and the minority must be provided adequate resources to participate actively in the investigation. Unfortunately, without seeking the approval of the Committee, you have implemented procedures that are unfair to the minority and have established a partisan scope and budget for the investigation.

The ranking minority member has written you on January 24, February 3, February 18, February 20, February 26, and March 7 of this year to raise these issues and make suggestions for more appropriate ways to proceed. The ranking minority member has also met privately with you on February 4 and February 27 to raise our concerns directly with you. These efforts have been to no avail. Despite the minority's many requests, you have determined to proceed in a manner that vests unprecedented power in the chair and that unfairly prejudices the minority.

At this point, we have no alternative but to appeal your decisions to the full Committee. For this reason, we request that you call a special meeting of the Committee under House rule XI clause 2(c)(2) at which we will ask the Committee to vote on whether the procedures, scope, and budget that you have set for the investigation are appropriate. The traditions of the House -- as well as principles of fundamental fairness -- dictate that we should be afforded the opportunity to bring our concerns before the Committee for decision by Committee vote.

The Honorable Dan Burton
March 10, 1997
Page 2

At the special meeting, we would raise the following three matters: (1) whether the "Protocol for Documents" that you have announced, which gives you the unilateral authority to release Committee documents, is a fair protocol; (2) whether you should have the authority to issue subpoenas unilaterally, without seeking either the concurrence of the ranking minority member or a Committee vote; and (3) whether the scope of the investigation and the budget requests that you have submitted to the Committee on House Oversight are appropriate.

Our concerns regarding each of these three fundamental issues are described in more detail below.

The Protocol for Documents

Late last month, you announced a "Protocol for Documents" that "sets forth the procedures to be followed by the House Committee on Government Reform and Oversight for the obtaining, handling and releasing of documents and other materials during investigations conducted by the Committee." Under this protocol, you "retain the discretion" to release Committee documents "to the media ... or to any other person" without the prior consent of the Committee. Indeed, you assert that you may even release to the media -- without the approval of the Committee -- confidential and privileged documents obtained by the Committee through subpoena.

The unilateral authority that you assert to release Committee documents, including privileged and confidential documents, is an extraordinary and unprecedented power. It far exceeds the power of the chair in other similar investigations, such as the Iran-Contra investigation, House ethics investigations, and the Senate Whitewater investigation.

The unilateral implementation of the "Protocol for Documents" is also inconsistent with the House rules. We have consulted extensively with the House Parliamentarian about this matter. After careful consideration, the Parliamentarian has advised us that the unilateral implementation of the Protocol -- without the approval of the Committee -- is not consistent with the House rules.

House rule XI clause 2(e)(2) provides that "[a]ll committee hearings, records, data, charts, and files shall be kept separate and distinct from the congressional office records of the Member serving as chairman of the committee; and such records shall be the property of the House." According to the Parliamentarian, the documents submitted to the Committee pursuant to Committee requests or subpoenas become part of the Committee records and files. As such, they must be handled under procedures adopted by the Committee -- not under procedures announced unilaterally by the chair.

The Honorable Dan Burton
March 10, 1997
Page 3

House rule XI clause 2(m)(2)(A), which provides committees with their subpoena authority, is also relevant. This rule provides that the power to issue subpoenas resides in the Committee. Under this rule, the chair can issue a subpoena only when the authority to do so has been expressly "delegated" by the Committee to the chair. Under this rule, according to the Parliamentarian, all documents received under a subpoena belong to the Committee. Even when a chair has been delegated authority to issue subpoenas, the chair's delegated authority under the rule is limited to the issuance of the subpoena. The documents that are received pursuant to the subpoena belong to the Committee and must be handled under procedures adopted by the Committee.

The Parliamentarian's advice makes it clear that it is the Committee -- not the chair acting on its own -- that must decide how the documents received during the investigation will be handled. It is necessary, therefore, that a Committee meeting be called at which this issue can be resolved by Committee vote. At such a meeting, we intend to propose that privileged and confidential documents received by the Committee must be kept confidential until their release is authorized by the Committee.

The Unilateral Issuance of Subpoenas

We also object to the issuance of subpoenas by the chair without a Committee vote or the concurrence of the ranking minority member. We believe that our Committee rules should be modified to provide that the chair may issue a subpoena without a Committee vote or the concurrence of the ranking minority member only in emergency situations, such as when relevant documents may be destroyed before a Committee vote can be held.

We recognize that the chair of the Government Reform and Oversight Committee has for many years had the authority under Committee rules to issue subpoenas unilaterally. Under Democratic chairmen, however, this power was never exercised. Instead, as a matter of prudence, your Democratic predecessors always asked for a Committee vote or the concurrence of the ranking minority member before issuing subpoenas. This practice provided a procedural safeguard designed to insure that the subpoena power was not abused for partisan political purposes.

Unfortunately, you have decided not to follow the traditional practice of the Committee. Since the Committee organized on February 12, you have issued 46 subpoenas -- without once seeking either Committee approval or the concurrence of the ranking minority member. The result has been an abuse of the Committee's subpoena power. As the ranking minority member described in his letter of March 7, the unilateral subpoenas you have issued compel the production of extraordinarily sensitive national security and foreign policy documents that have no apparent connection to any alleged fundraising abuse. The subpoenas would also require the production of purely personal information about the Clintons, such as a record of doctor visits to the White

The Honorable Dan Burton
March 10, 1997
Page 4

House, as well as copies of confidential Democratic political strategies developed as a legitimate part of the last Presidential campaign.

The issuance of a subpoena is an exceptionally serious step that compels the person subpoenaed to provide documents to the Committee against his or her will, often at great personal sacrifice and expense. It is clear to us that except in emergency circumstances, it should be the Committee -- not the chair acting unilaterally -- that determines when a subpoena should be issued and what its scope should be.

The Investigation's Scope and Budget

Finally, we have three fundamental objections to the Committee budgets that you have submitted to the Committee on House Oversight. We believe that the Committee should also meet to resolve these issues.

First, the supplemental \$3.8 million budget that you submitted to the Committee on House Oversight last week proposes that the scope of the investigation be limited to alleged Democratic fundraising abuses. Specifically, it provides that the supplemental budget would be used to investigate:

The DNC and allegations of illegal or unethical fundraising activities, misuse of the White House and White House personnel, the questionable political activities of John Huang and other Commerce Dept. personnel, questionable political activities of Clinton appointees in connection with DNC fundraising at numerous Government Agencies and Departments including, but not limited to: Department of Commerce, Department of State, Export-Import Bank, Office of Trade Representative, Department of Interior, Office of Comptroller General.

This scope is partisan. It focuses the investigation on the White House and the DNC and ignores fundraising abuses in congressional campaigns. It is also inconsistent with your pledge at our organizational meeting that "[w]e would apply equally the investigative procedures of this committee to whomever, Republican or Democrat." We believe that the Committee investigation should focus on all illegal or improper fundraising activity, including illegal or improper fundraising activity by the Presidential campaigns, Democratic and Republican fundraising organizations, and individual House and Senate campaigns.

Second, the budgets you have proposed would provide the minority with no more than -- and likely substantially less than -- 25% of the staff available to the Committee. As the ranking minority member has explained in correspondence with you and at the House Oversight hearing on March 6, this allocation is not sufficient to allow the minority to participate effectively in the campaign finance investigation. It is also in violation of House policy, which provides that the

The Honorable Dan Burton
 March 10, 1997
 Page 5

minority should receive at least 33% of the Committee's resources.

Finally, the Committee budgets were developed in violation of Committee rules. On February 12, the Committee adopted a rule that requires the chair to develop a Committee budget only "after consultation with ... the minority." Two days later, however, you submitted a budget to the House Oversight Committee with no consultation with the minority. On March 5, you submitted a "supplemental" budget to the House Oversight Committee seeking an additional \$3.8 million for the campaign finance investigation — again with no consultation with the minority. These are serious violations of our Committee rules. They should be rectified by bringing the Committee budgets before the Committee for vote.

Conclusion

For the reasons set forth above, we respectfully request that you schedule a special meeting of the Committee within seven calendar days at which the matters discussed above may be resolved by Committee vote.

Sincerely,

Henry A. Waxman Carol B. Malley Tom
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ELEANOR HOLMES NORTON
DISTRICT OF COLUMBIA
CHAKA FATTAH PENNSYLVANIA
ELMAN E. CLARKSON MARYLAND
DEAN RUCHELMAN OHIO
ROB B. BLANKENHORN ILLINOIS
JERRY A. DAVIS ILLINOIS
JOHN F. TERRY MASSACHUSETTS
JIM TURNER TEXAS
THOMAS H. ALLEN MARYLAND
CAROL E. FORD TENNESSEE

BERNARD SANDERS VERMONT
INDEPENDENT

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PROTOCOL FOR DOCUMENTS

This Protocol sets forth the procedures to be followed by the House Committee on Government Reform and Oversight ("the Committee"), and its Subcommittees, for obtaining, storing and releasing of documents and other materials.

Applicability and Interpretation of Protocol

This Protocol shall apply only to Committee and Subcommittee investigation of political fund-raising improprieties and possible violations of law by persons or entities within the Committee's oversight jurisdiction ("the Investigation") and to documents and materials ("documents") obtained during the Investigation by Committee subpoena or letter request. The Protocol shall not apply to any other oversight conducted by the Committee or any Subcommittee unless specifically adopted by decision of the Chairman or by vote of the Committee.

All employees and representatives of any government office, department or agency shall address to the Chairman of the Committee or his designated representative any inquiries, concerns or other communications relating to this Protocol and the matters addressed herein. No representation, commitment or practice by persons other than the Chairman or his designee concerning document-related matters are applicable to or binding on the Chairman.

A. Obtaining Documents

1. **Requests for Documents.** Document requests shall be made under the auspices of the Committee only as authorized by the Chairman on behalf of the Committee, or by the appropriate Subcommittee Chairman on behalf of any Subcommittee. Authorized requests may include the production of documents by agencies, entities, and/or individuals, by letter, facsimile, or other means.

a) **Procedure for Document Requests** -- The Chairman of the full Committee or the Chairman of any Subcommittee, as the case may be, shall notify the appropriate Ranking Minority Member of the intention to request, on behalf of the Committee or Subcommittee, the production of documents, and shall provide the Ranking Minority member an opportunity to suggest how the scope or substance of the proposed requests might be modified or improved. The Ranking Minority Member shall advise the Chairman whether the Minority will join in the request. Any agreed joint request will be issued by the Chairman and the Ranking Minority Member on behalf of the Committee, or Subcommittee, as appropriate. The request for documents may issue following the provision of notice to the Ranking Minority Member as provided herein. The Chairman retains the discretion to cause letter requests to be issued without the Minority's review or concurrence. Following issuance, copies of letter requests shall be provided to the Ranking Minority Member.

2. Subpoenas for Documents or Witnesses. A subpoena, whether from the full Committee or any Subcommittee, may be issued only with the express authorization of the Chairman, Committee or Subcommittee.

(a) **Procedure for Issuance of Subpoenas** -- The Chairman of the full Committee shall advise the appropriate Ranking Minority Member of his intention to issue subpoenas for documents or witnesses, and shall provide the Ranking Minority Member an opportunity to suggest how the scope or substance of the proposed subpoenas might be modified or improved. The Chairman shall notify the Ranking Minority Member of the proposed subpoenas at least twenty-four (24) hours before the Chairman issues the subpoenas, excluding Saturdays, Sundays and federal holidays, unless the provisions of Section A.2(b) apply. The Ranking Minority Member shall advise the Chairman whether the Minority agrees with the proposed subpoenas. For the purpose of deciding whether or not to issue document subpoenas, a Working Group consisting of the Chairman, the Ranking Minority Member, the Vice Chairman, a majority member chosen by the Chairman, and a minority member chosen by the Ranking Minority Member, shall be created. In the event that the Ranking Minority Member objects to the proposed subpoenas, the Chairman shall present the subpoenas to the Working Group for decision regarding the advisability of issuing the proposed subpoenas. The Working Group shall endeavor in good faith to reach consensus and shall render its opinion to the Chairman within twenty-four (24) hours of presentation of the subpoenas by the Chairman. The Working Group shall meet in person, or if a face-to-face meeting is not practicable, by telephone or conference call. If the Working Group is unable to reach timely consensus concerning the proposed subpoenas, the Working Group shall, upon motion of the Chairman, render an opinion by majority vote. The Chairman shall abide by the opinion rendered by the Working Group when deciding whether to issue a subpoena.

1. The term "notify" as used in this Protocol means all communications, including those made by telephone, letter and telefax, between the Chairman and the Ranking Minority Member, the Subcommittee Chairmen and the appropriate Ranking Subcommittee Members, as well as contacts on their behalf by respective staff.

b) Issuance of Subpoenas Without Prior Notice -- In accordance with long-standing rules of the Committee, the Chairman may cause a subpoena to be issued without prior notice to members of the Committee including the Ranking Minority Member if, in the Chairman's judgment, delay in issuance could hinder or compromise the Committee's ability to obtain documents or testimony in furtherance of the Committee's investigation. In such event, as soon after issuance as is practicable, the Chairman shall notify the Ranking Minority Member of the existence of subpoena.

B. Handling and Storage of Documents

All documents obtained by the Committee shall be handled and stored by Majority and Minority Investigative Staff in a manner consistent with the level of sensitivity of the documents. Documents shall be stored in a locked area ("the Secure Area") within the Majority and Minority Investigative Staff offices which, in the judgment of the Chairman, provide a secure environment for the storage, handling and review of such documents. The Committee may maintain documents at locations other than the Secure Areas provided that they are stored in secure facilities under the respective control of the Majority or Minority Investigative Staff. Subcommittees involved in the investigation shall maintain a locked area within Subcommittee offices for the secure storage of documents. In recognition of office space limitations, this Protocol does not envision that Subcommittees will create and maintain separate areas similar to the Committee's Secure Area. Subcommittees will maintain and store documents in such other manner required to prevent unintended disclosure.

1. **Public Documents** -- "Public Documents" include all documents obtained by the Committee and any Subcommittee which are publicly available prior to the time they come into the possession of the Committee or Subcommittee, or which thereafter become publicly available as a result of disclosure by sources other than the Committee or Subcommittee. Since Public Documents are by definition already in the public domain, this Protocol shall not apply to such documents and materials.

2. **Non-Classified Documents** -- "Non-Classified Documents" include all documents obtained by the Committee, except "Public Documents" and "Classified Materials" as defined below. This category of documents includes non-sensitive documents, as well as those for which the possessing party asserts a claim that the documents contain proprietary, privileged, confidential or other sensitive information. All Non-Classified Documents will be maintained within the Secure Area, or such other secure facility as is necessary to prevent unintended disclosure. Non-Classified Documents will not be removed from such area(s) except as required in furtherance of the Committee's oversight and investigative responsibilities. In the event that an individual or entity in possession of documents asserts that some or all of the documents contain proprietary, privileged, confidential or other sensitive information, the Chairman will

2/ "Documents" includes originals and all copies made therefrom.

determine whether or not the claim is properly made and will so advise the individual or entity, and the Ranking Minority Member, in writing. Documents determined to contain proprietary, privileged, confidential or other sensitive information will be maintained by the Committee in *locked file cabinets* located within the Secure Area, or in such other secure facility as is required by the circumstances. Copies of all documents in the Committee's possession will be limited to the number required for the Committee's oversight and investigation functions. Subcommittees involved in the Investigation shall make such arrangements for the secure storage of Non-Classified Documents and materials in Subcommittee offices, or in such other secure facility as is necessary to prevent unintended disclosure.

3. Classified Documents -- "Classified Documents" are documents and materials containing "classified information" as defined by Title 50, United States Code, Section 438(2). Classified Documents shall be maintained by the Committee in a *locked safe* within the Secure Area, or at such other secure facility required by the level of classification of the documents. Access to Classified Documents shall be restricted as required by law. These procedures shall also apply to Subcommittees involved in the Investigation.

Access to Secure Areas and Documents. Access to the documents and materials maintained in the Majority and Minority Secure Areas shall be restricted to Members of the House, as provided by Rule XI, clause 2(e)(2), respective Investigative Staff, to other Committee staff engaged in the Committee's oversight and investigative functions, and to law enforcement officials. A list of all staff with access to the Secure Areas will be maintained by the Majority and Minority and will be updated from time to time as necessary. Subcommittees participating in the Investigation shall limit access to documents and materials to Members of the House, Majority Investigative Staff, to other Committee and Subcommittee staff engaged in the Subcommittee's oversight and investigative functions, and to law enforcement officials.

C. Release of Documents

The Committee, and its members, shall not publicly or privately release documents obtained by the Committee in accordance with the provisions of Paragraph A, except as provided herein. The provisions of this paragraph do not apply to Public Documents or Classified Documents. Non-Classified Documents, the third category of documents defined in Paragraph B, shall not be publicly or privately released except as follows:

1. Release During Committee Meetings -- In accordance with House Rules, Non-Classified Documents shall, unless otherwise directed by the Committee, be available for use by members of the Committee in open session, in Committee Reports, and as attachments to official correspondence:

2. Executive Session -- Pursuant to House Rule XI, clause 2(k)(7), no evidence or testimony taken in executive session shall be released or used in public sessions without the consent of the Committee; and

3. Other Public Release -- In the event that circumstances, including the necessity of correcting the public record after a partial release of documents by another party, require the public release of Non-Classified Documents through channels other than as set forth above, the Committee shall proceed as set forth below:

(a) **Agreed Release --** The Chairman shall notify the Ranking Minority Member of his desire to release documents. The Chairman and the Ranking Minority Member shall share their views about the proposal and shall endeavor to reach consensus about the issue. The Ranking Minority Member shall notify the Chairman within twenty-four (24) hours whether he agrees or objects to the proposed release. If the Ranking Minority Member agrees with the proposed release, the Chairman may release the documents.

(b) **Contested Release --** If the Ranking Minority Member objects to the proposed release, the Committee shall vote upon the proposed release of documents.

D. Minority Document Procedures

Unless otherwise indicated by Committee Rules or this Protocol, the procedures set forth herein shall apply to both the Majority and the Minority. This Protocol anticipates that the Minority Investigative Staff will receive separate copies of the documents obtained by Committee subpoena and letter requests during the investigation. The Minority Investigative Staff shall handle and store all documents consistent with the security requirements and procedures specified in Paragraph B herein, including the creation and maintenance of a Secure Area. The Chairman shall request in Committee letter requests and direct in subpoenas that government agencies, private corporations and persons producing documents provide the Minority Investigative Staff with a duplicate set of documents contemporaneous with production to the Committee and its Majority Investigative Staff. In the event that the party producing documents does not make a duplicate set of documents, the Majority Investigative Staff will assist the Minority Investigative Staff in duplicating a set of the documents.

E. Internal Policy Guidance

These procedures are solely for the internal policy guidance of the Committee in handling investigative documents. Nothing in these procedures affects or waives the privileges of the Committee Members or others referred to; subjects them to any forum, authority, or questioning outside the House itself; creates rights or duties enforceable or cognizable in court; or invokes or expands the jurisdiction of any House entity, including the Committee on Standards of Official Conduct, other than the Committee.