
CRUDE ACCOUNTABILITY

Turkmenistan's Crude Awakening Oil, Gas and Environment in the South Caspian

A Report by

Crude Accountability

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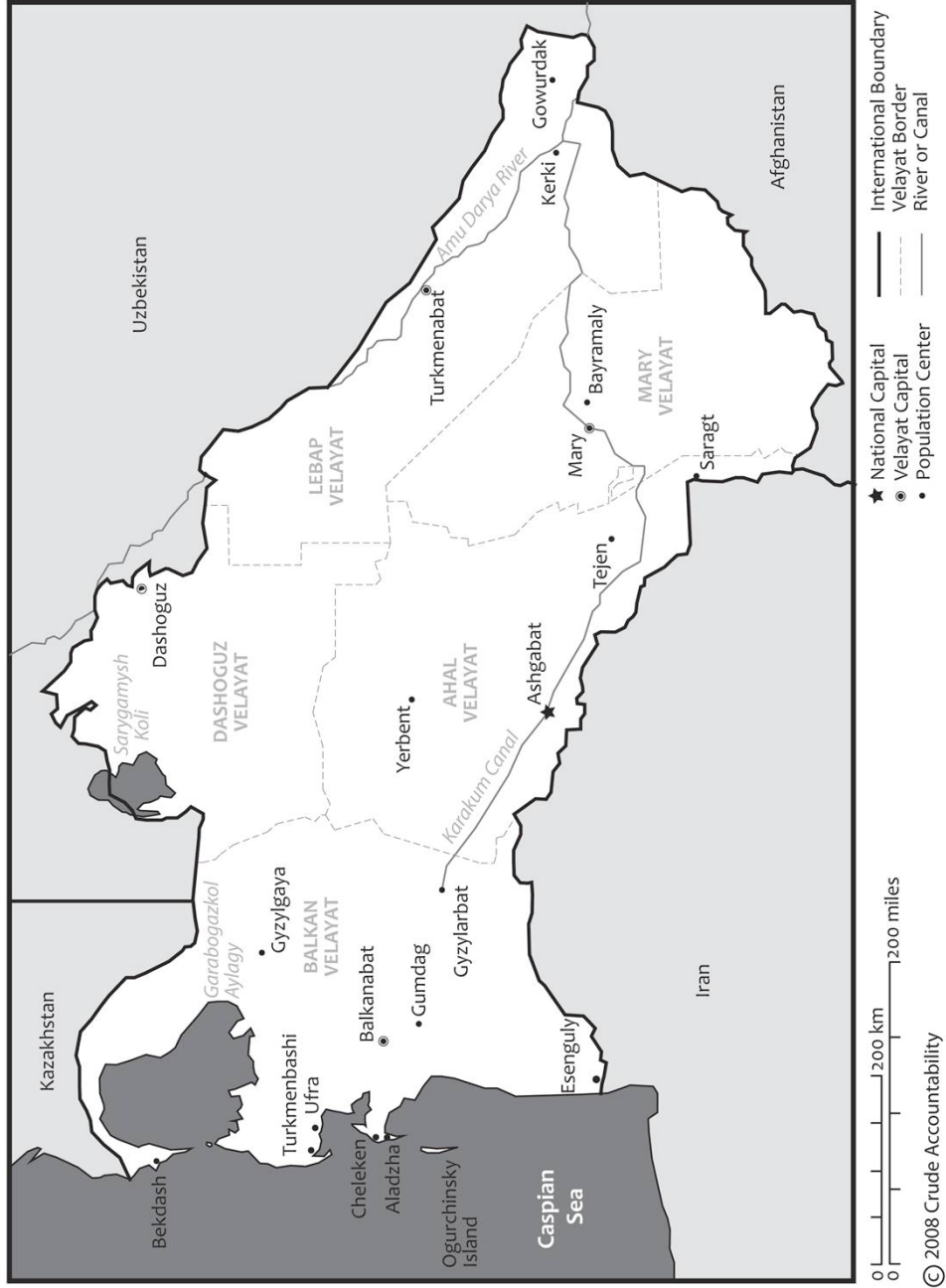
Crude Accountability thanks the individuals and organizations who have contributed valuable information to this report, many of them anonymously, out of necessity. We could not have compiled this information without their support and assistance. Crude Accountability assumes full responsibility for the contents of this report. While we have made every effort to ensure the accuracy of the information presented in this report, we cannot be held liable for any errors, omissions or inconsistencies.

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Turkmenistan



Introduction

Crude Accountability has undertaken this study of the environmental impact of hydrocarbon development in Turkmenistan in an effort to provide information about how the development of this sector is affecting the last country in the Caspian Sea region to be inundated by international oil and gas companies pursuing wealth from hydrocarbons. Since the beginning of Berdymukhammedov's presidency, international oil companies have expressed unprecedented interest in partnering with his government to extract and export hydrocarbons from Turkmenistan. International finance institutions are also reiterating their interest in investment in Turkmenistan, and western governmental officials are visiting Turkmenistan in waves. Russia's Prime Minister Putin has renewed efforts to create an energy alliance with Turkmenistan and other Central Asian countries, creating nervousness within European and American policymaking circles.

Following a decade of intensive investments in Azerbaijan, Kazakhstan and Russia, Turkmenistan represents the last frontier of hydrocarbon investments in this region and, therefore, maintains an important geopolitical position. As petroleum exploration, extraction and transport prospects turn into projects, it is important to provide decision-makers with a comprehensive resource that will encourage hydrocarbon companies, financial institutions and policymakers to base critical decisions regarding Turkmenistan's environmental future on the lessons learned throughout the wider Caspian region. Crude Accountability's goal in writing this report is to provide information that will help decision-makers protect the environment and ensure long-term, sustainable development. We also hope to provide activists and environmentalists in the region and elsewhere with new tools to protect the Caspian Sea and to encourage the development of a strong and viable civil society.

We have utilized written materials on Turkmenistan from the press, academia and other sources; interviews with environmental experts in- and outside of Turkmenistan; and our own experience working in Central Asia and the Caspian region for the past fifteen years.

Rather than providing a comprehensive study of all of Turkmenistan's environmental problems, we instead focus on the environmental concerns most relevant to, and likely to be exacerbated by, oil and gas development, particularly in the Caspian coastal region of Turkmenistan.

The report is broken into several sections. We begin with an overview of Turkmenistan, describing the physical and demographic landscape of the country, as well as its history as part of, and following the dissolution of, the Soviet Union.

The second section of the report focuses on the hydrocarbon sector, describing Turkmenistan's oil and natural gas reserves, naming the international corporations that are involved in Turkmenistan, and discussing their prospects for the future.

The third section looks at civil society in Turkmenistan, providing a historical perspective, a view of the situation today, and specific information about Turkmenistan's failure to comply with the Aarhus Convention, which governs access to environmentally relevant information.

The fourth section looks at the environmental and social challenges of oil and gas development in Turkmenistan. As oil and gas companies engage increasingly in Turkmenistan, understanding the risks involved is critical to assessments of the pros and cons of their involvement.

The fifth section of the report considers relevant international conventions, Turkmen legislation, and voluntary codes of conduct. It provides a comprehensive list of environmentally significant international conventions to which Turkmenistan has signed on, and focuses specifically on the importance of the Aarhus Convention and the Framework Convention for the Protection of the Marine Environment of the Caspian Sea.

The sixth section examines the role of international finance institutions and private banks in Turkmenistan, looking at the history of IFI involvement and raising questions about transparency and accountability in the closed environment of Turkmen finance.

Finally, the report offers policy recommendations for international finance institutions, governments, corporations, and civil society.

Following the report itself are two appendices, which offer information about the main oil and gas corporations operating, or planning to operate, in Turkmenistan. These dossiers provide as much information about each company as we were able to assemble as of this printing. These profiles are accessible on our website and will be updated as new information becomes available.

The situation on the ground in Turkmenistan is constantly changing, as is the landscape in which the hydrocarbon sector operates. The companies involved, the relevant legislation and the geopolitical scene are volatile elements in a fluid operating environment. As the current economic crisis demonstrates, the world can change quickly, with far-reaching ramifications. In November 2008, the IMF stated that Turkmenistan appeared to be insulated from the international financial crisis with little impact on its economy.¹ Will this be true in the long-term, and how will the crisis impact potential investors? The crisis may, for example, mean that oil companies—with their massive profits and revenues—are in a stronger position to bargain for concessions in Turkmenistan. On the other hand, it may mean that investments will slow, at least temporarily putting on hold the rush to develop Turkmenistan's hydrocarbons. This remains to be seen. Taking into consideration these elements, this study captures the current moment in time, with the intention that it will be relevant over time. With regard to our policy recommendations, we have drawn on experience from other parts of the Caspian region, which share more with Turkmenistan than is

different, particularly in the hydrocarbon sector. We trust the recommendations will be considered with this in mind.

Finally, Crude Accountability would like to thank our brave and generous colleagues who made critical contributions to this study, many of whom must remain anonymous for reasons of personal safety.

Overview of Turkmenistan

Turkmenistan is one of the five Central Asian states of the former Soviet Union (FSU), which achieved independence in October 1991. It borders the Caspian Sea to the west, Iran and Afghanistan to the south, Uzbekistan to the east and Kazakhstan to the north. With a population of around five million, Turkmenistan is approximately the size of California, and over eighty percent of the country is desert.² Turkmenistan is divided into five administrative districts, or velayats: Ahal, Balkan, Dashoguz, Lebap and Mary.

Turkmenistan's economy is based largely on natural resource extraction. Although the hydrocarbon sector performs well, according to the US Fund for Peace, fifty-eight percent of the population lives below the poverty level.³ According to the US State Department, in 2006, GDP per capita was \$8,500.⁴ Life expectancy for men is approximately sixty-five years; for women, seventy-one. The infant mortality rate is 51.8 per thousand live births⁵

Fifty-four percent of Turkmenistan's population lives in rural areas,⁶ where health concerns are abundant, with only twenty-four percent of the rural population having access to potable water. (The statistic for the country overall is fifty-five percent.)⁷ Poverty in rural areas also contributes to lower living standards. In the Caspian Sea region of Turkmenistan, particularly in the Cheleken region where much of the oil development is centered, many people are employed in the oil and gas sector. Others are employed in agriculture, fishing and in the marine transport sector.⁸ Lack and poor quality of water contributes to health problems in this region as in other regions of the country. According to the Hakim (Mayor) of Cheleken, a town of approximately 14,000 inhabitants, the reported average life expectancy is forty-six years.⁹

As has been well documented elsewhere, the USSR's oil wealth came primarily from Azerbaijan, Kazakhstan, and Russia itself.¹⁰ Turkmenistan was also a significant contributor of natural resources to other Soviet republics, including oil and natural gas, which the Soviets began exploiting heavily in the 1970s. Other resources included cotton and fruits and vegetables.¹¹ This created an economy focused on resource exploitation rather than development. Therefore, following the dissolution of the Soviet Union, Turkmenistan, as many republics, went through a period of economic hardship, from which it is still recovering.

During the Soviet period, Turkmenistan was one of the poorest republics, and since the dissolution of the Soviet Union, it has continued to fall behind its Central Asian neighbors in most areas of development. Infant and maternal mortality rates are among the highest in the former Soviet Union (FSU), gross domestic production is lower than in the other Central Asian states and economic development is slow in comparison to its neighbors.¹²

After the breakup of the Soviet Union, former Communist Party boss Saparmurat Niyazov became the country's first President, and he ruled Turkmenistan with an iron fist until

December 2006, when he died suddenly of cardiac arrest.¹³ His legacy is a regime of totalitarian control, paranoid dictatorship and an absence of basic freedoms and human rights for the citizens of Turkmenistan. During his rule, his government gutted the country's educational system, destroyed the medical system, built elaborate statues and enormous government buildings at the expense of ordinary citizens, most of whom lived in extreme poverty, and systematically isolated Turkmenistan by outlawing foreign publications, maintaining full control over the Internet, and censoring all media. Freedom of association was extremely limited and he maintained full control over the political system, outlawing opposition and squelching all forms of expression. He created an unrivalled cult of personality, even renaming the months of the year after members of his family and decreeing that the Rukhnama, a spiritual guide he allegedly wrote, be taught in schools throughout the country and, often, be recited from memory as a precondition to obtaining jobs.

Following Niyazov's death in December 2006, Gurbanguly Berdymukhammedov, a dentist who had been serving as the Minister of Health and Deputy Prime Minister under Niyazov, was appointed acting President until he was elected in February 2007.¹⁴ He promised to continue in the footsteps of Niyazov, and he has kept his word. Although minor reforms have been made to the educational system and a loosening of Internet restrictions has been implemented, there is no indication that Berdymukhammedov will institute sweeping reforms to bring democracy—or even a less repressive regime—to Turkmenistan anytime in the near future.¹⁵ In fact, recent changes to the Constitution increase the powers of the executive branch of government by giving the president the authority to name regional governors and mayors as well as to appoint the electoral commission.¹⁶ In October 2008, exercising his executive authority, President Berdymukhammedov instituted a new commission on censorship in order to ensure the “quality” of artistic work, including film, painting, photography and other forms of personal expression.¹⁷

The Hydrocarbon Sector

Turkmenistan has significant hydrocarbon reserves in both oil and natural gas. On and offshore fields have been or are being developed, and the major fields include: Barsa-Gelmes, Burun, Cheleken, Gograndag, Kamyshldzha, Korturtepe, Kum Dag, Kuydzhik, and the Okarem deposits.

Turkmenistan has two state-owned refineries—the Seydi refinery in Chardzhou Raion, and the Turkmenbashi refinery in Turkmenbashi on the Caspian coast.¹⁸ The Seydi refinery was built in 1991 and processes petroleum in the eastern part of the country.¹⁹ The Turkmenbashi refinery was upgraded in 2002; the combined total capacity of both refineries is 37,000 barrels a day. In March 2007, Dragon Oil commissioned the New Processing Facility in Khazar, a refinery that will process its light/sweet crude oil output, creating the first foreign owned refinery in the country. Its capacity is 50,000 barrels a day, and the refinery was officially opened in June 2007.²⁰

Oil and Gas Extraction and Production

Natural Gas

Turkmenistan has enormous natural gas reserves. According to the long-awaited October 2008 Gaffney, Cline and Associates independent audit of the country's gas sector, Turkmenistan is squarely placed among the world's leaders in natural gas reserves. The report confirmed the reserves at two fields—Yashlar and Yuzhniy lolotan'-Osman—at between a quarter and 1.5 trillion cubic meters and four to fourteen trillion cubic meters of natural gas, respectively. This information places Yuzhniy lolotan'-Osman among the largest four or five fields in the world.²¹

Confirmed reserves, prior to the publication of the Gaffney report, were listed at 2.86 trillion cubic meters.²² As of 2007, natural gas production was 72.3 billion cubic meters, and domestic consumption was 14.4 billion cubic meters. Exports were listed at fifty-eight billion cubic million meters,²³ comprising fifty percent of Turkmenistan's trade income of \$5.4 billion.²⁴

Turkmenistan is the second largest producer of natural gas (behind Russia) in the former Soviet Union, and Russia is Turkmenistan's main recipient of natural gas exports, receiving fifty billion cubic meters.²⁵

Turkmenistan relies heavily on Russia for its energy export routes because of its existing pipeline infrastructure. Left over from the Soviet period when Turkmenistan became a natural gas supplier for the Soviet Union, these Russian pipelines continue to provide the majority of exit routes. At present, Turkmenistan and Gazprom have a contract that provides Gazprom with fifty billion cubic meters annually.²⁶

However, with the increase of Chinese exploration in Turkmenistan, this may change. Turkmenistan and China have signed an agreement stating that beginning in 2010,

thirty billion cubic meters of gas will begin to flow to China. Iran also imports approximately eight billion cubic meters of gas annually.²⁷ In addition, on October 28, 2008, the Iranian Oil Minister and Turkmen President agreed to increase the daily import to Iran of natural gas from twenty-five million to thirty million cubic meters.²⁸

Oil

Oil reserves are significantly smaller with proved reserves at 500 million barrels (bbl). As of 2007—the most recent available figures—oil production was 196,900 bbl/day, of which 156,000 bbl/day represents domestic production and 40,000 bbl/day exports.²⁹ These figures represent an increase over earlier production, which annually equals about 9.8 million tons.³⁰ Oil and oil products represent thirty-two percent of Turkmenistan's exports.³¹ Primary partners for exports are Russia, Iran, Italy and Turkey.³²

To date, none of the major international oil companies, with the exception of ENI (see below) has signed an agreement with the Turkmenistan government, although a number of smaller companies have been working in the country for over a decade. In the 1990s, a number of the majors expressed interest in the country, but all pulled out for various reasons.

ExxonMobil signed a Joint Technical Study Agreement in April 1998, and was investigating the possibilities of exploration, development and marketing of natural gas resources in the Amu Darya River area in eastern Turkmenistan.³³

The company also had a forty percent interest in the Nebitdag concession, including production from the Burun Field (now operated by ENI, and previously by Burren Energy). ExxonMobil had a 52.4 percent interest in the Garashsyzyk-2 PSA, adjacent to Nebitdag, and was planning an exploration well in late 2001.³⁴

Then in March 2002, ExxonMobil announced its plans to withdraw from Turkmenistan, closing down its offices in Ashgabat and Balkanabat. Company executives attributed the decision to disappointing exploration results.³⁵

ExxonMobil is not the only western major to withdraw from Turkmenistan. In 2003, Shell decided to reduce its presence in Turkmenistan to that of "observer status."³⁶ Beginning in the late 1990s, Shell had been interested in Turkmenistan, conducting a feasibility study for a gas pipeline to be built to Turkey and Europe via Iran.³⁷

However, after the death of President Niyazov, Shell was among the western oil and gas companies that engaged again with Turkmenistan to explore the possibilities of investment in a post-Niyazov environment. The Wall Street Journal reported in August 2007, "Executives from Chevron Corp., Royal Dutch Shell PLC, Total SA, BP PLC and its Russian venture TNK-BP...flocked to the capital of Ashgabat to meet Kurbanguly Berdymukhamedov...."³⁸

US officials joined the western oil and gas companies in courting Berdymukhammedov. State Department representatives traveled to Ashgabat over fifteen times in 2007 and 2008 following the death of Niyazov.³⁹ According to observers, the US government sought to reinvigorate US interests in the region, providing an alternative to Russian energy hegemony over Turkmenistan.⁴⁰ Conferences on oil and gas reserves in Turkmenistan have been held in London, Azerbaijan and Ashgabat since Berdymukhammedov came into office. The leading oil and gas companies, as well as oil services companies, have been present at these events, including Baker Hughes, BP, Chevron, ConocoPhillips, Halliburton, Marathon, Shell and others.

The November 2008 Oil and Gas Expo in Turkmenistan celebrated the country's interest in developing the hydrocarbon sector. As the Minister of Oil and Gas stated in the invitation, "The annual conference clearly demonstrates the openness to investment of Turkmenistan and our readiness to implement new oil & gas projects."⁴¹ The expo was supported by most of the major international petroleum and oil services companies and attended by government officials and corporate executives alike.⁴² Over two hundred representatives of oil and gas and oil services companies attended the event.⁴³

However, in spite of diplomatic efforts and the negotiations of the international oil companies, most of whom have at least a limited presence in the country, contracts are slow in coming. Some speculate that the government is leery of negotiating with the big internationals; others say that Russian and Chinese investment comes with fewer environmental and social strictures, and as such is more attractive to the Turkmenistan government. Regardless, no new production sharing agreements (PSAs) with western oil companies have been signed since Berdymukhammedov took office.⁴⁴

The Existing PSAs

Six companies currently have signed PSAs with the Turkmenistan government: Burren (acquired by ENI in January 2008), Dragon Oil, Maersk/Wintershall, Mitro International/Turkmenneft, Petronas, and the China National Petroleum Corporation (CNPC), which is operating in eastern Turkmenistan. Of the five in western Turkmenistan, three (Dragon, Petronas and Maersk/Wintershall) are operating offshore, and two (Burren/ENI and Mitro) onshore. CNPC is operating in eastern Turkmenistan after signing a production sharing contract in July 2007.

Burren/ENI

The Burun field, the largest onshore field, was operated by Burren Energy, a UK company that has been operating in Turkmenistan since August 1996, when it signed a PSA with the Turkmenistan government. As of 2007, \$450 million had been invested in the Nebit Dag project, of which \$95 million had been invested in the previous year.⁴⁵ Burren extracts about .6 billion cubic meters of gas per year from the Burun field.⁴⁶ Burren was purchased by ENI in November 2007 for \$3.6 billion in a move that upset the Turkmen government. Though ENI has yet to include any information about the

project in the “ENI and the World” portion of its website,⁴⁷ and failed to respond to Crude Accountability’s repeated inquiries for information, its operations in Turkmenistan are highlighted in its 2008 third quarter results as assets have led to improved production growth for the company’s portfolio.⁴⁸

Dragon Oil

Among the international companies, Dragon Oil is the largest oil producer with current average output at 42,000 barrels per day. Production has increased steadily since 2003, when it was producing only 13,000 barrels per day. In 2006, it produced 18,000 barrels a day and in 2007, 32,000.⁴⁹ As of June 30, 2008, Dragon Oil’s “proved and probable” reserves were listed at 644 million barrels. In addition, it claims 3.4 trillion cubic feet of gas reserves.⁵⁰ Dragon Oil’s oil is delivered to market in Neka, Iran and Baku, Azerbaijan, at rates of eighty and twenty percent, respectively.⁵¹

Maersk/Wintershall

Denmark’s Maersk and Germany’s Wintershall have been working together at offshore sites since 2002 when they entered into an exploration and production sharing agreement for Block 11-12 in the Caspian Sea. The area of the block is 5700 square kilometers. License shares were assigned in 2007, with Maersk holding a thirty-six percent interest and Wintershall—as operator—holding a thirty-four percent interest. India’s OMEL holds the remaining thirty percent interest.

Mitro International

Mitro International, of Austria, signed a PSA with Turkmenneft State Oil Company in 2000 and currently produces 7,000 bbl/d from the East Cheleken onshore fields, which came on stream in May 2008.⁵²

Petronas

The Malaysian oil company Petronas signed a PSA with the government of Turkmenistan in July 1996. With this agreement, Petronas Carigali Turkmenistan was awarded one hundred percent interest in Block One of the offshore field where it operates. In 2002 the company began exploration and production activities, and discovered oil and gas reserves in the Turkmen sector of the Caspian Sea.⁵³ Petronas also began to produce 10,000 bbl/d from the Diyarbekir Field in 2006.⁵⁴ The company estimates reserves of 150 BCM in the field.⁵⁵

CNPC

CNPC has been operating in Turkmenistan since 2002, when it began working at the Gumdak field in eastern Turkmenistan. In 2005, the company signed an oil cooperation agreement with the Ministry of Petroleum and Mineral Resources, and in 2006, CNPC and the Ministry reached an agreement on a joint natural gas project. In 2007, CNPC signed a production sharing contract for the Bagtyarlyk area as well as an agreement on the purchase and sale of natural gas. In accordance with these agreements, Turkmenistan will export thirty billion cubic meters of natural gas per year to China for a period of thirty years.⁵⁶

The National Companies

Turkmenistan's energy resources are fully under state control. The Ministry of Oil and Gas Industry and Mineral Resources of Turkmenistan is responsible for production of hydrocarbons, and works together with the State Concern, Turkmengas and the State Corporation, Turkmengeologiya, which is the main state organization responsible for prospecting work. In addition, Turkmenneftegasstroi is responsible for building and installing pipelines, developing oil and gas deposits, and other construction work related to oil and gas development. Turkmenneft is responsible for exploration, drilling, production and transportation of oil and gas, as well as delivery to consumer markets. Turkmenneftegas is responsible for "effective utilization" of oil and gas and other hydrocarbon resources and operates at the Turkmenbashi and Seydi Petroleum Refineries.⁵⁷ Because of the power of the executive branch, hydrocarbon development is firmly under the control of the President, and international companies hoping to operate in Turkmenistan will require the approval of Berdymukhammedov.

International firms active in Turkmenistan play a smaller production role than do Turkmenistani companies. Turkmenneft and affiliated Turkmen companies produce 111,000 barrels per day of liquids. Four ventures operated by foreign companies produce a total of 89,000 barrels per day.⁵⁸ However, oil production among international companies is rising, while, simultaneously, production from Turkmen companies is falling.⁵⁹ As foreign investment increases in the country, it is conceivable that international oil companies will play a more important role in hydrocarbon development.

Growing International Involvement

In spite of the authoritarian nature of the regime, western corporations, especially international oil and gas companies, have expressed unprecedented interest in partnering with Berdymukhammedov's government to extract and export hydrocarbons from Turkmenistan. International finance institutions are also reiterating their interest in investment in Turkmenistan, and western governmental officials are visiting Turkmenistan in waves. As profits and politics the world over become more closely entwined with hydrocarbon investments, staking a claim in Turkmenistan's oil and gas industry is a top priority for many of the world's leading companies.

Russia remains a significant partner in the export of hydrocarbons—particularly natural gas—and has strengthened its ties with Turkmenistan during the last year, signing a new contract with Turkmenistan to increase the capacity of the Turkmen part of the Pre-Caspian pipeline bringing gas to Russia, as well as developing field infrastructure and ensuring Gazprom's participation in investment projects in the natural gas industry.⁶⁰ Chinese oil and gas companies are also actively courting Turkmenistan, creating stiff competition for European and US companies, which continue to seek agreements with the Turkmen government. The natural gas pipeline to China is scheduled to begin

sending oil by 2009, and Berdymukhammedov recently called the Chinese Turkmenistan's most reliable energy partner.⁶¹

European countries, which are overwhelmingly dependent on Russia for energy supplies, are eager to see an alternative to Russian imported natural gas, and are pushing hard for Turkmen gas to enter the Nabucco pipeline project—still more a pipe dream than a reality. In November 2008, the European Commission presented its energy security measures through 2050, including the newly conceived Caspian Development Corporation, which is designed to secure energy resources for Europe by bypassing Russia.⁶² The United States continues to struggle for a piece of the energy pie in Turkmenistan as it vies for geopolitical power inside Russia's sphere of influence. US officials have made numerous trips to Turkmenistan since the death of Niyazov, as have European heads of state.

Unfortunately, Turkmenistan's abysmal human rights record has not muted the enthusiasm of governments and international oil and gas companies to conduct business with the government of Turkmenistan. In spite of reports by international human rights organizations cataloging the human rights violations in the country and the US State Department's reports, US and European governments, along with the major international oil companies, are flocking to Turkmenistan to negotiate contracts with the Turkmenistan government, whose state owned companies control the country's hydrocarbon resources.⁶³ It appears that energy trumps human rights in the current political and economic environment.

Pipelines and Transport

One of the most complex issues related to oil and gas development in Turkmenistan is transportation of hydrocarbons from Turkmenistan to consumer markets. Currently, almost eighty percent of oil and approximately twenty percent of gas produced in Turkmenistan is consumed inside the country. The rest of the resource is transported to markets outside of Turkmenistan.⁶⁴

Current export routes are dominated by Russia, and Berdymukhammedov appears to be solidifying relationships with the Russian government to continue exporting the majority of natural gas through these existing pipelines. Europe is reliant on the overland routes through Russia and Ukraine despite efforts to build an undersea pipeline that would sidestep Russia by exporting natural gas across the Caspian Sea to Azerbaijan, where it would travel further west to European markets, either through the planned Nabucco pipeline or through other means.

US attempts to reduce Russia's influence in the transportation of hydrocarbons have so far been thwarted. Efforts in the 1990s to build a pipeline through Afghanistan were similarly derailed as Unocal's negotiations with the Taliban became public and the company was outmaneuvered by Argentina's Bidas.⁶⁵

Plans for the Trans-Caspian Gas Pipeline, which has been in various stages of discussion and negotiation since 1999, have also yielded no concrete results. This is the case despite the European Union's (EU) and US State Department's concerted efforts to convince the Turkmenistan government that a pipeline across the Caspian Sea, which would exclude both Russia and Iran, is the optimal route for natural gas export to the west. Following the death of President Niyazov, the EU and United States redoubled efforts to secure energy deals with Turkmenistan. The United States has sponsored training sessions in Turkmenistan through the US Trade and Development Agency. Sessions focused on the issues necessary to manage oil and gas licensing and negotiation production sharing agreements.⁶⁶

In May 2008, The EU and Turkmenistan signed an agreement on energy cooperation, which Europe hopes will reduce its dependence on Russia.⁶⁷ The EU has made clear that human rights concerns take a back seat to energy questions with its refusal to sanction Turkmenistan for its human rights violations in spite of calls from international human rights activists to use its leverage to push for improvements in this sphere.⁶⁸

The Turkmenistan-Afghanistan-Pakistan-India (TAPI) pipeline continues to be discussed, although no significant progress has been made to date. Negotiations that were to have taken place in October 2008 yielded no concrete results, as Turkmenistan failed to provide gas certification, which was requested by Pakistan and India.⁶⁹ Instability in Afghanistan continues to be a major stumbling block to the realization of the project. The proposed pipeline would cross 1,680 kilometers and cost an estimated \$7.6 billion.⁷⁰ The Asian Development Bank is reportedly considering a comprehensive review of the feasibility study conducted for the project.⁷¹

China has made more progress in securing a greater presence in Turkmenistan's energy market than the Europeans or Americans. A new gas pipeline is under construction—the only new pipeline to break ground—with plans for the first natural gas to flow to China in 2009 and an estimated annual capacity of thirty billion cubic meters.⁷² The pipeline is estimated to cost \$30 billion and will traverse 1,818 kilometers to export natural gas from Turkmenistan through Uzbekistan and Kazakhstan, delivering it to Xinjiang, China, where it will connect to the West-to-East natural gas pipeline to Shanghai. According to the Bank Information Center, "The China National Petroleum Corporation (CPNC) is requesting a \$2.5 billion loan from the China Development Bank to fund construction for the segment in Uzbekistan."⁷³

The struggle for control over pipelines is as much about geopolitics as it is about energy. Steve Levine, author of *The Oil and the Glory, The Pursuit of Empire and Fortune on the Caspian Sea*, stated in an interview with Radio Free Europe/Radio Liberty in September 2008, "the United States fears that Gazprom's growing hold [on those supplies] is translating into political power and influence in the European theater, and the United States seeks to assert its own leverage into the equation."⁷⁴ Russia, for its part, appears to have a secure hold on energy supplies from Turkmenistan at this stage of the game. In July 2008, Gazprom signed a series of agreements with the Turkmen government on

issues related to “gas pricing, investments in the Turkmen natural gas industry and the establishment of a Gazprom representative,” in the country.⁷⁵ The same agreement set out terms to fund and build new gas mains, develop field infrastructure and increase “the capacity of the Turkmen section of the Pre-Caspian gas pipeline up to 30 billion cubic meters of gas per year.”⁷⁶ With this agreement, the Russian government reasserted its dominance in Turkmenistan, ensuring that, at least for the time being, gas will continue to flow north, and away from any proposed Trans-Caspian pipelines.

Civil Society in Turkmenistan

Few nongovernmental organizations (NGOs) exist in Turkmenistan due to the country's highly repressive political system. Opposition figures are essentially nonexistent, and most opponents of Turkmenistan's authoritarian government have been arrested, disappeared, or forced into exile. President Berdymukhammedov, who elicited some hope among western observers of creating a more progressive government, or at least a crack in the country's repressive regime, instead, is following quite closely in the footsteps of his notorious predecessor, Saparmurat Niyazov. International civil society organizations monitoring the situation, including human rights and environmental organizations, have seen little progress in the expansion and development of political and social space in the country's public life. In fact, in October 2008, President Berdymukhammedov announced the creation of a new governmental special commission to "regulate the activities of writers, poets, screenwriters, playwrights and directors."⁷⁷ Intellectuals in the country are concerned about the future of artistic freedom: 'The political state of affairs and the domination of the state ideology have finally buried Turkmen culture,' stated a Turkmen writer.⁷⁸

Recent History of NGOs

Following the fall of the Soviet Union, Turkmenistan, like other former republics, underwent a change in the composition of civil society, with nongovernmental organizations and community groups springing up in many towns and cities. Although always in smaller numbers than in other Central Asian republics, in 2000, there were approximately three hundred registered NGOs in Turkmenistan.⁷⁹ They were engaged in a wide variety of activities including environmental education and protection; women's rights; working with youth; educational exchange; rule of law; and more traditional community based activities.

A small group of international civil society organizations worked openly in the country, providing indigenous organizations with financial support, training, and partnership. Some of these organizations were financed by western governments, including the United States. Between 1992 and 2006, the US government funding for democracy assistance programs totaled \$47 million.⁸⁰ US funding of indigenous NGOs in Central Asia decreased dramatically at the end of the Clinton presidency. Simultaneously, programs were consolidated and the number of international organizations working in Turkmenistan was greatly reduced. In comparison with a decade ago, US civil society involvement in Turkmenistan is focused primarily on educational exchange and community building. In addition, the Peace Corps and relief organizations such as UNICEF continue to work in Turkmenistan.

US democracy funding for Turkmenistan is currently focused primarily through the United States Agency for International Development (USAID). USAID, in its largest civil society program, finances Counterpart International, a US NGO operating in many regions of the world. Administered by Counterpart, the Urban Institute and the American Bar Association/Rule of Law Initiative, the "Turkmenistan Community Empowerment Program"

aims to “increase the skills of citizens’ groups who seek greater participation in local governance at the community level.” The program works with fifty target communities, most of which are rural, to provide information, trainings, consultations and grants to support communities through improved governance, economic growth and the provision of legal services.⁸¹

The World Bank operated a small grants program focused on civic engagement in 2008. The program provided \$35,000 small grants to six NGOs for projects that ranged from raising awareness among young people about healthy lifestyle and safety to creating a youth environmental network in Turkmenabat. It financed a project designed to raise awareness about human trafficking and another to empower women and organize trainings on domestic violence.⁸²

The 2003 NGO Law

In October 2003, Turkmenistan’s Ministry of Justice signed into law the new legislation, “On Public Associations,” replacing the 1991 law, which was in existence during the relative flourishing of civil society during the mid and late 1990s. The new law made criminal the activities of unregistered public associations and placed new legal responsibilities on individual members of NGOs. “This idea—holding people accountable for an organization’s acts—contradicts the Constitution of Turkmenistan and violates the fundamental human right to association, enshrined in international law.”⁸³ The new law is more restrictive than any other NGO law in the region, and has created a significantly more restrictive environment for civil society in Turkmenistan than had previously existed. Immediately following the enactment of this law, the International Center for Not-For-Profit Law (ICNL) stated that the new law “directly violates the rights of citizens to freely associate, and contradicts international law and practice.”⁸⁴ It also pointed to several contradictions with existing law and areas of discrimination in the new legislation.⁸⁵

According to the law, activists could be fined, sentenced to up to one year of corrective labor, or sentenced to prison for up to six months for violating the NGO law. The authorities could confiscate an NGO’s equipment, and the government could fine those convicted of violating the law with severe financial penalties up to thirty times the average salary.⁸⁶ Following international outcry about the law, in 2004, the government removed the criminal penalty for working as an NGO without registering, but it still remains illegal to work as an unregistered NGO.⁸⁷

Implications of the New Law for Civil Society

Immediately following passage of the law, a group of approximately thirty-five civil society activists were invited by the Ministry of Justice to a meeting to discuss the law, which was presented by Ministry officials. Most of those present were members of NGOs that had been denied registration for one reason or another. Many of these people had also been called into the Ministry in 2001 to talk with the Chief Prosecutor and were notified that unregistered public activities were prohibited.⁸⁸

This meeting was the first of several interactions with the Ministry, which were clearly designed to intimidate civil society activists. At the end of the meeting, participants were asked to provide information about members of their organization and funding sources. They were also asked to sign a statement confirming that the new law had been explained to them and that they had been notified of their responsibility in the event of violation of the law “On Public Associations.” No one signed the statement.⁸⁹

Following this meeting and the introduction of the new law, the major environmental organizations in the country were forced to close their doors and were not granted re-registration when they applied for it. Catena and the Dashoguz Ecology Club—two of the oldest and most respected environmental NGOs in Turkmenistan and throughout Central Asia—were denied registration, effectively shutting down the environmental movement in the country.

In this newly repressive environment, numerous civil society activists, including environmentalists, were harassed by government authorities at unprecedented levels. Farid Tukhbatullin, the Co-Director of the Dashoguz Ecology Club, was arrested on politically motivated charges, and, eventually forced into exile.

After the death of President Niyazov in December 2006, there was hope that the Government of Turkmenistan might become less repressive. And, although Berdymukhammedov has instituted a number of reforms, including reinstating the tenth compulsory year of education for students and more access to the Internet, most international civil society observers agree that little has changed.⁹⁰ According to the US Embassy, in 2007 no new organizations were able to register as NGOs in Turkmenistan.⁹¹ Reports from inside the country state that although there is an increase in Internet cafes, many informational websites are blocked, and that the cost of using the cafes is prohibitively expensive for most potential users.⁹² In its 2007 annual report on Turkmenistan, Amnesty International reported that little real progress in human rights reform and civil society advancement had occurred in the first year of Berdymukhammedov’s presidency. It noted ongoing concerns about human rights abuses in the country and called for continued international vigilance regarding Turkmenistan’s human rights record. Its 2008 report reiterated many of the concerns from the previous year.⁹³

As Crude Accountability detailed in our September 2007 report, “Turkmenistan’s Environmental Risks in the Era of Hydrocarbon Investment,” environmental activist Andrey Zatoka has been the subject of repression since his politically motivated arrest in December 2006. After his release in January 2007, when he was given a three-year suspended sentence, he was placed under virtual house arrest, unable to leave his hometown of Dashoguz for several months. He received a Presidential pardon in September 2007 in the annual “amnesty” given by the President of Turkmenistan to prisoners, including those detained for political reasons. Following this pardon, Zatoka should have been able to travel freely—both within and outside of Turkmenistan. However, he never received an official document from the Turkmenistan government

giving him this right, and as of this writing has been unable to leave the country. He is under constant surveillance by the security police, and has been denied the right to attend numerous international conferences to which he has been invited to share his professional expertise.⁹⁴

An international campaign to secure his freedom of movement was launched in June 2008, and over 150 people and organizations from around the world signed a letter to Foreign Minister Rashid Meredov asking him to immediately reinstate Mr. Zatoka's freedom of movement.⁹⁵ As of this writing, there has been no official response from the government of Turkmenistan.

Mr. Zatoka is not the only environmental activist subjected to persecution by the Turkmen government. In a case in Dashoguz, the local administration confiscated and destroyed a grain mill, which was to be operated by local residents in order to provide a local source of grain for bread. Local residents, as well as local authorities, had supported the project, which also had received assistance from USAID financed Counterpart Consortium.⁹⁶ Some of the specific circumstances around this situation are unclear, but the fact that a project as seemingly apolitical as a mill should cause disruptions and difficulty points to the repression citizens fear when they take initiative in ways that should benefit the community.

As this example demonstrates, the authorities are becoming increasingly bold in their tactics to eliminate civic initiatives. Not only are environmental organizations and activists the target of harassment and intimidation, but also vulnerable are community projects designed to benefit broad swathes of society. Friends and family members of activists also appear to be the target of focused intimidation. Many former activists have either left the movement or the country, preferring instead to focus their energies where they have a better chance of having an impact.

One civil society activist put it this way: the security police are emboldened to take away more and more of the available civic space. "Perhaps if we had fought back hard in 2003," the activist said, "we would have more civic space within which to maneuver now. But, the police have moved into what used to be safe zones and are taking more and more away. I think we made a mistake by staying quiet."⁹⁷

Current Civil Society Trends

In the fall of 2008, Crude Accountability conducted an informal survey of civil society organizations in Turkmenistan in an effort to understand what, if any, changes are currently seen in the public sector. The survey asked questions about civil society under the administration of the new president, the future of the NGO sector, possibilities for change, and impressions about the past several years. Answers were provided anonymously by a small group of activists.⁹⁸

The results of this survey demonstrate that civil society activists have little hope of improvements in the public sector. The past five years (since the creation of the 2003 NGO law) were characterized as difficult, depressing, and providing little opportunity to reach out to the public. The future appears, to most, as equally difficult with few opportunities to engage in civic work. There is a fear that if organizations are unable to register as NGOs, people will migrate to the business sector and future attempts to build civil society will be further hindered. And, in fact, this is already a noticeable trend.

Virtually all respondents noted that without changes to the NGO law, the situation for civil society will remain difficult and possibilities for impacting the community will remain limited. Some stated that a lack of political will was at the heart of the failure to implement change. Until that political will is found at the highest levels of government, the situation is unlikely to improve.

With regard to the hydrocarbon sector, most respondents believed that civil society would not be able to play an effective role in impacting the activities of oil and gas companies. Concerns were voiced about the ability of NGOs to affect the process without adequate expertise. However, those who thought civil society could impact the quality of a project identified the importance of mechanisms such as environmental impact assessments, public hearings and operating in accordance with international standards set by international financial institutions (IFIs), such as the European Bank for Reconstruction and Development. Concerns were also raised about the level of expertise of governmental bodies.

Civil Society, Environment and Hydrocarbon Development

As articulated in the responses discussed above, the ability of NGOs to impact their government directly has been severely limited by the crackdown on civil society during the past five years. As major international investment in Turkmenistan's hydrocarbon development looms ever closer, the lack of a vibrant civil society in the country poses great risks to corporations and financial institutions interested in investing. Without independent analysis from NGOs, scientists and other experts, and community members, corporations are forced to rely solely on the information provided to them by government representatives and their own experts. In a country as opaque and corrupt as Turkmenistan, this is a dangerous prospect. Following a decade of reduced education, the low level of professional expertise among Ministry officials and cadres within the state run oil and gas companies is also concerning.

In particular, the state monitoring system is currently deficient. The financial apparatus is weak, there is a lack of qualified personnel within the ministries to implement the necessary controls, and because of the destruction of the educational system under Niyazov, this problem cannot be quickly rectified. It will take a generation to fill these gaps in expertise.⁹⁹

Companies currently active within Turkmenistan may be operating with differing levels of attention to existing environmental law. However, without access to the information regarding environmental and social impacts, it is virtually impossible for Turkmen or international civil society to monitor the activities of oil companies.

Dragon Oil, the first petroleum company to obtain international financial institution financing for its oil project at the Cheleken Fields, provides an important example. Dragon Oil, which received a loan facility of up to \$75 million from the EBRD in 1999, undertook extensive public consultations, meeting with numerous civil society organizations, environmental experts and government officials as it prepared to start the project.¹⁰⁰ It presented a well-documented environmental impact assessment (EIA) in accordance with EBRD standards and Turkmenistani environmental law. According to environmental activists who participated in the process, and Dragon Oil itself, the process of public consultation prior to the start of the project was a first in Turkmenistan, and unheard of prior to its commencement.¹⁰¹

Despite this encouraging behavior at the start of the project, Dragon Oil does not have any specific information on the environmental impacts of its operations available on its website nearly a decade later.¹⁰²

As western corporations consider investing in Turkmenistan, compliance with international standards will be at the forefront of concerns raised by local and international NGOs. These include voluntary standards, and those of the IFIs, which are addressed later in this report. However, international conventions, of which Turkmenistan is a signatory, must also govern the behavior of corporations and IFIs investing in the country.

The Aarhus Convention and Turkmenistan

Turkmenistan is party to numerous international conventions, including the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (commonly known as the Aarhus Convention), which requires public participation in environmentally critical decision-making.¹⁰³ Without an active civil society, meeting the requirements of Aarhus has proved difficult in Turkmenistan, as recent history has shown. And, not only the government of Turkmenistan, but also companies and IFIs operating in Turkmenistan—particularly those headquartered in the European Union—will need to comply with Aarhus standards.¹⁰⁴

Turkmenistan was the first Central Asian country to sign on to the Aarhus Convention in 1999.¹⁰⁵ In 2004, the Moldovan NGO, Biotica, filed a complaint with the Secretariat of the Aarhus Committee stating that the government of Turkmenistan failed to comply with the provisions of Aarhus following the adoption of the new law “On Public Associations.”¹⁰⁶ As a signatory to the Convention, the government is required to uphold its provisions, which ensure the public’s right to be informed of and participate in environmentally important decision-making, as well as the right to legal recourse in

circumstances where access and participation have been denied.¹⁰⁷ Biotica claimed that the government of Turkmenistan violated Article 3.4 of the Aarhus Convention,¹⁰⁸ which requires parties to “provide for appropriate recognition of and support to associations, organizations or groups promoting environmental protection and to ensure that its national legal system is consistent with this obligation.”¹⁰⁹ Biotica also claimed Turkmenistan was not in compliance with Article 3.9, which prohibits discrimination based on citizenship or nationality.¹¹⁰

Following the submission of this complaint, the Compliance Committee of the Aarhus Convention investigated the claim and found that there were, indeed, questions about Turkmenistan’s compliance with the Convention’s terms. It corresponded with the government of Turkmenistan, outlining the noncompliances. The government of Turkmenistan initially responded by stating that it would attempt to address the concerns of the Committee. The case was discussed at meetings of the Parties to the Convention and the Compliance Committee on several occasions. However, the Turkmenistan government failed to take steps to come into compliance.

At the Third Meeting of the Parties on June 11-13, 2008 in Riga, Latvia, Turkmenistan was found out of compliance with the provisions of the Convention in a number of instances related to the 2003 Law on Public Associations. The ruling requested that Turkmenistan take timely steps to come into compliance. The Aarhus requirements included: 1) amending the Law on Public Associations to “make clear that foreign citizens and persons without nationality can enjoy the same rights as citizens in the formation of and participation in public associations;”¹¹¹ 2) to amend it to “make clear that members of the public may conduct activities on behalf of non-registered public associations in harmony with the requirements of the Convention...”¹¹² and 3) to ensure that “other legislation does not run counter to the above amendments.”¹¹³ In addition, the Parties “invited” the government to submit to the Committee periodic reports about its progress in implementing the measures for compliance and to consider allowing a mission to Turkmenistan by members of the Committee. They also asked the Secretariat and Compliance Committee of the Convention to assist the government of Turkmenistan in implementing the measures necessary for compliance. The Parties plan to review Turkmenistan’s case at the fourth meeting.¹¹⁴ The decision also noted that following Turkmenistan’s initial acknowledgment of notice of the compliance review, Turkmenistan had not sent any further correspondence, and also noted “the failure of the Government of Turkmenistan to take measures to implement decision II/5c of the Meeting of the Parties....”¹¹⁵

For its part, the government of Turkmenistan submitted an implementation report to the Third Meeting of the Parties, which was submitted late because of “resource constraints.” The report stated that Turkmenistan was not in violation of the Aarhus Convention and assured the Parties that mechanisms were in place to ensure compliance, in particular with the points of the Convention allegedly out of compliance. However, the report also states, “Full implementation of the Convention is being somewhat impeded by a lack of financial resources. In this context, it would be helpful if regional and national projects

could be launched with the involvement of international donor organizations, with a view to building the country's capacity to implement the Convention."¹¹⁶

As the Aarhus case illustrates, international institutions can place pressure on the Turkmenistan government, but they cannot force them into compliance with international conventions or to uphold international standards. This leaves civil society activists inside the country in a precarious position, and until government officials voluntarily comply with international standards, the government risks ostracism from international institutions.

Despite Turkmenistan's claim that there are no violations of the Aarhus Convention, civil society activists remain unable to work through their NGOs. As a result, a number of Turkmenistan's strongest environmentalists work with international environmental organizations representing their country as much as they can. However, because of the repressive regime, speaking out honestly about a project can be risky. There is some indication that the situation is softening under President Berdymukhammedov's leadership, but people continue to be cautious.

The Golden Lake

The boondoggle project, The Golden Lake, provides an example of a slight loosening of restrictions. In May 2008, *Science* magazine published an article about The Golden Lake, a project designed to create an enormous freshwater lake in the middle of the Karakum Desert by diverting water from irrigated fields into the Karashor Depression, a 120-kilometer long area in the Karakum Desert.¹¹⁷ Supporters of the project claim that it will create a freshwater habitat for birds as well as an inland fishery. Opponents of the project state that the chemicals and fertilizers from the irrigation run-off will create a toxic pool, and that removing the toxins is impossible. A pet project of former President Niyazov, numerous Turkmen environmental experts have stated that they believe if Niyazov had known the true environmental and economic cost of the project, he would have stopped it years ago. However, fear of speaking out against the corrupt development machine building the project kept mouths closed, and the project continued to be built. The article in *Science* provides supporters and detractors of the project—all from inside the country—with a forum to discuss the pros and cons. One contributor to the article commented that even having the debate would “never have happened under Niyazov.”¹¹⁸ “But to change the minds of decision-makers, we need strong support from the outside,” he says.¹¹⁹

Similarly large stakes are at hand in the hydrocarbon development world. Environmental impact assessments, public hearings, and assessments with stakeholders can only be successful when those participating can participate fully. In the current political environment in Turkmenistan, this is simply not possible. And those who speak out risk harassment, arrest, disappearance, and the intimidation of their family. Even in exile, environmentalists and other civil society leaders fear for retaliation against their families and friends. In numerous cases, family members are punished for the work of activists who refused to be silenced.¹²⁰

Environmental and Social Challenges of Oil and Gas Development

Although oil and gas development has begun in Turkmenistan, the major oil and gas companies have not yet begun full-scale operations in the country. As Turkmenistan's oil and gas reserves are increasingly developed, the risks to the environment and to human health will rise, just as they have in other Caspian states. Unfortunately, the record of international oil companies throughout the Caspian region is not encouraging. All of the major projects from exploration and drilling to production and export are rampant with environmental violations and risks to biodiversity, protected areas and local residents. The Baku-Tbilisi-Ceyhan pipeline, Tengiz, Karachaganak, Kashagan, the CPC pipeline—each of these projects—despite having international operators and financing, have brought considerable damage to the environment and local communities impacted by the projects.¹²¹

One of the challenges—and opportunities—for western and local NGOs is to identify the specific environmental problems associated with oil and gas development in Turkmenistan while there is still time to prevent significant damage. Identifying and implementing mechanisms for environmental protection is critical in the period leading up to the greater involvement that lies in the near future. How can civil society best encourage environmental protection when communities have yet to experience what is ahead? How can best practices be put in place in areas where western corporations will be involved? And how can we ensure that transparency and accountability are part of the equation from the beginning of project development and implementation? This is a challenge for environmentalists in Turkmenistan and throughout the Caspian region.

This chapter outlines some of the major concerns raised by on and offshore oil and gas development in Turkmenistan.

Offshore Environmental Challenges

The environmental challenges of offshore oil and gas exploration impact not only Turkmenistan, but also all of the littoral states. Because it is a closed body of water, pollutants in the Caspian Sea have a cumulative effect. There is no drainage point, no outflow, meaning that pollutants in the Sea itself, and those coming in from rivers, ships, and effluent from municipal and industrial sources, stay in the Sea, and are transboundary in nature. Soviet and post-Soviet scientists have worried about the overall health of the Caspian Sea for many years, and identify oil and gas pollution as one of the major causes of environmental degradation of its ecosystem. "Oil and petroleum products are among the principle toxics currently found in the Caspian Sea, and have a negative impact on aquatic organisms," stated scientists representing KaspNIRKH, the Caspian Scientific-Research Fisheries Institute.¹²² The accumulation of hydrocarbons, heavy metals and other toxins associated with oil and gas poses serious environmental threats to the Sea by negatively impacting biodiversity and habitat, and by causing overall degradation of the environment. These threats, in turn, pose economic and security dangers that create challenges for policymakers and investors. For example,

biodiversity loss threatens the commercial fishing industry; poaching becomes a greater problem—as it has already throughout the Caspian region—creating mafia-like organizations that control this illegal trade. In 2006 in the Caspian region, illegal sturgeon poaching yields were ten to fifteen times higher than the official catch, according to one Iranian official.¹²³ Underground economies derail official economies, thwarting law enforcement and bringing increasingly impoverished people into their orbit.¹²⁴ Throughout the Caspian region, environmental degradation has led to desperate economic conditions that create an environment in which flouting the law is commonplace.¹²⁵

Biodiversity Threats and Habitat Degradation throughout the Caspian

Turkmenistan, along with the other Caspian littoral states, faces serious biodiversity threats along the Caspian coast, most notably risk to flagship species such as sturgeon and Caspian seals.

Sturgeon

The five endemic sturgeon species have been listed as endangered in the IUCN Red Book for years.¹²⁶ First and foremost among these is the Beluga Sturgeon (*Huso huso*), a Red Book species that summers in the warm Turkmen waters of the Caspian Sea. The Beluga is highly endangered, and is at risk not only from over-fishing, poaching and increased pollution in the rivers where it spawns (principally, the Volga), but also from overall environmental pressure on the Caspian, to which a major contributor is increased oil pollution. The Beluga is found throughout the Caspian, and relies on the deeper waters of the South Caspian, especially during the summer months.

Along with the Beluga, Stellate and Russian sturgeon are endangered as a result of the Caspian's polluted water, over-fishing, and invasive species such as *mnemiopsis leidyi*, which have upset the food chain. Although CITES initiated a ban on caviar export from the Caspian region in 2006¹²⁷, despite widespread international outcry, in February 2007 CITES reinstated quotas for caviar export from the Caspian region.¹²⁸ According to Caviar Emptor, an international environmental organization protecting sturgeon, "the population of stellate sturgeon, source of *sevruga* caviar, is just 10 percent of its 1978 level, and numbers of Russian sturgeon, source of *osetra* caviar, have dropped 50 percent during the same period. The same data show precipitous declines in beluga sturgeon, suggesting a 45 percent drop in population from 2004 to 2005."¹²⁹ Environmental experts within the Caspian region and around the world agree that without constant, comprehensive protection, the Beluga may be extinct within the next two decades and the other sturgeon species are also at great risk.

All species of sturgeon winter in waters off the Cheleken (Khazar) region of Turkmenistan, and Beluga and Stellate sturgeon are also found there in the summer months. The area around Ogurchinsky Island, which is approximately twenty kilometers south of the blocks being developed by Dragon Oil, is also a known nursery for young Beluga.¹³⁰

The Caspian Seal

In October 2008, the IUCN upgraded the status of the Caspian seal—the only mammal endemic to the Caspian Sea—from vulnerable to endangered.¹³¹ In recent years, there have been at least three distinct instances of massive die-offs of both seals and sturgeon, which have been attributed to advanced toxicity in the water. Scientists squabble about the primary reason for each die-off, but it is clear that oil and gas exploration, development and transport are contributing factors to the environmental pressures placed on the Sea. The most recent widespread seal deaths occurred in 2007 off the coast of Kazakhstan, with over three hundred fifty seals, and by some accounts as many as nine hundred,¹³² washing up on the shoreline in Mangistau region.¹³³ The Kazakhstani government blamed Agip KCO, the operator at the Kashagan Field, for the seal deaths.¹³⁴ According to the IUCN, “the population of the Caspian seal has declined by 90 percent in the past 100 years due to unsustainable levels of commercial hunting, habitat degradation and pollution... Since 2005 the number of pups born has plummeted by a catastrophic 60 percent to just 6,000-7,000. A low survival rate among pups has led researchers to fear there are barely enough breeding females to keep the population viable.”¹³⁵

After wintering on the ice floes of the North Caspian, the seals migrate to the waters off the shore of Azerbaijan, Iran and Turkmenistan, placing them at further risk from offshore oil and gas development.¹³⁶ Increased exploitation in Turkmenistani waters will place increased pressure on seal habitats, particularly on Ogurchinsky Island.

Kilka

Many other species are at risk in the Caspian region including the kilka (Caspian sprat), an inexpensive and popularly consumed fish, the numbers of which have declined seriously in recent years. Kilkas spawn and overwinter off the coast of Turkmenistan, particularly in the Krasnovodsk and South Cheleken bays.¹³⁷

In total, two hundred seventy three species of fauna and one hundred ten species of flora are “rare and vanishing” as listed in the Red Books of the littoral states of the Caspian Sea.¹³⁸ The fate of many of these species can be observed in Turkmenistan’s Krasnovodsk Nature Reserve, which is under pressure from oil development along the coast. The Reserve is an important wetland and holds significance for the Ramsar Convention on Wetlands. It is home to hundreds of thousands of birds, over forty mammal species (including the Caspian Seal), reptiles, amphibians and fish, as well as over four hundred plant species.¹³⁹

The State of Turkmenistan’s Coast

Historically, Turkmenistan’s coast has been much cleaner than many other parts of the Caspian Sea. Turkmenistan’s waters hold far fewer toxic chemicals and sediment than the waters off the coast of Azerbaijan’s Absheron Peninsula, for example, or than off the coast of Atyrau, Kazakhstan.¹⁴⁰ This is due to a number of factors including intensive exploration and development in the Azeri and Kazakhstani sectors of the sea, and

leakage from uncapped offshore wells from the Soviet period (particularly in Kazakhstan). In addition, the Volga River is one of the most significant sources of pollution for the entire Caspian Sea, dumping municipal and industrial effluent into the sea, as well as heavy metals and agricultural runoff.¹⁴¹

The relative cleanliness of the Turkmenistan coast is also due, in part, to the much less intense oil and gas development and the lesser volume of tanker traffic in the Turkmen area of the sea to date. Offshore oil and gas development in Turkmenistan is growing quickly, but we have not yet seen the environmental damages that are prevalent in other areas with more intensive hydrocarbon extraction.

Nevertheless, oil and gas pollution pose a major threat to Turkmenistan's coastline. Oil pollution in the southwestern part of the Caspian Sea is easily seen on satellite images. The area of greatest offshore development in Turkmenistani waters is near Turkmenbashi and south toward Cheleken and Ogurchinsky Island. Offshore blocks are already producing, and as international corporations jockey for new PSAs, the likelihood of additional drilling is very high.

There are currently fifty-six platforms offshore near Cheleken, with one hundred sixteen wells.¹⁴² Of these, twenty-eight—located on twenty-two platforms—are currently operating; the others are abandoned, suspended or inactive. As Dragon Oil increases its offshore production capacity, it is simultaneously liquidating leakages from old wells. However, according to standard calculations, every one million tons of produced oil is accompanied by an average of 131.4 tons of losses. With planned production increases offshore at Cheleken of up to four million tons, one can expect an annual oil spill of over five hundred tons of crude oil. For all of western Turkmenistan's offshore operations, it is possible to expect about five thousand tons of spill.¹⁴³

In addition to the risks associated with oil and gas exploration, extraction and production, transportation routes create significant environmental risks. Transportation via pipelines or tankers across the Caspian Sea creates significant environmental problems. The risk of a spill as petroleum is transferred to a tanker or transported by pipeline is well documented in other parts of the Caspian, and is mirrored in Turkmenistan. As the Health, Safety and Environment Manager for Petronas outlined, the greatest possible threats of oil discharge in the company's offshore operations are posed by the following incidents: loss of well control, pipeline leak, tanker leak, tanker accidents, and release of bunker oil.¹⁴⁴

Oil spills have occurred numerous times in the Caspian. In October 2002, the Mercury II, a passenger and cargo ferry traveling from Aktau, Kazakhstan to Baku, Azerbaijan went down in a storm five hours after sending an SOS signal. The ferry left an oil slick fifteen kilometers long as it went down,¹⁴⁵ and the oil from the ferry spilled into the sea at great depths, causing grave concerns among environmentalists about the long-term implications of the spill. In July 2002, an Azeri tanker exploded in the Turkmenbashi Port. Another Azeri tanker spilled over a ton of oil at the Aktau Port in January 2006.¹⁴⁶

More recently, in February 2008, a pipeline rupture in the Republic of Dagestan created an oil spill that reached the north Caspian when the emergency barriers failed to halt surface oil flow. A few days after the spill, a government spokesperson stated “Test results have shown that the content of crude oil in the seawater exceeds the maximum permissible level by 320 times”.¹⁴⁷

Oil terminals are one of the most significant potential sources of pollution in the sea. In 2001, transport of goods from Turkmenistan’s Caspian ports was already over four million tons, of which eighty percent was oil and petroleum products. Oil and petroleum products are now transported from Ekerem in the south, Aladzha in the Cheleken Bay, and Ufra in the Gulf of Turkmenbashi.¹⁴⁸ Three million tons of oil and oil products are transported through the Turkmenbashi port on an annual basis, 2.4 million tons through Aladzha, and 1.2 million tons through Ereke.¹⁴⁹ Estimates of potential growth are up to twenty to forty million tons,¹⁵⁰ and possibly more with the newly found reserves as quoted by the Gaffney report.

Oil spill prevention and response in the Caspian region has been a topic for discussion at many national and regional conferences, workshops and meetings over the past decade. In March 2008, an OSCE-sponsored workshop on oil spill response and remediation was held in Turkmenbashi with the participation of industry, government and NGO leaders from around the Caspian as well as European oil spill experts.¹⁵¹ Despite the numerous discussions and players, and the adoption of various national oil spill response plans (including the Oil Spill Prevention and National Response Plan of Turkmenistan), there is no agreement in force to coordinate Caspian-wide response mechanisms. Unfortunately, the Parties to the Framework Convention for the Protection of the Marine Environment of the Caspian Sea remained unable to finalize and adopt the Oil Pollution Incidents (OPI) Protocol at the Second Conference of the Parties in mid-November 2008. It is clear from the Ministerial Statement released following this meeting that the next opportunity for the OPI Protocol, as well as three other protocols, to be adopted will not be until the Third Conference of the Parties in 2010.¹⁵² According to the Oil Spill Preparedness Regional Initiative (OSPRI), “signing the OPI Protocol will trigger governments’ discussions on the establishment of a Regional Centre for cooperation and the implementation of the Caspian regional plan”.¹⁵³ For now, the region is simply not prepared for oil spills in the Caspian. In its most recent assessment of the critical success factors for oil spill response in the Caspian, OSPRI classified as “partially on track or work-in-progress” key factors such as clarifying the customs and immigration processes for responders and the viability of national plans.¹⁵⁴ Alarming, OSPRI evaluates the viability of governments’ regional plans as “not yet addressed or requiring significant work in the future”.¹⁵⁵

In addition to lacking the legislative capacity to mitigate the negative impacts of an oil spill, the countries of the Caspian—including Turkmenistan—lack technical capacity. The OSPRI assessment noted that the region has not demonstrated “credible and integrated capabilities” and requires significant work in this area.¹⁵⁶ In addition, the only ship in Turkmenistan with specialized equipment for offshore oil pollution sunk in the Caspian last winter.¹⁵⁷

Onshore Environmental Challenges

Onshore production also carries significant environmental risk. One of the major sources of pollution is from “associated water,” which is typically collected in evaporation pools. Often these pools slowly seep into the soil, so that oil residues, heavy metals and other toxins leak into the groundwater, as well as posing threats to birds, livestock and other animals that may drink from the wells. Birds, in particular, risk oiling if they attempt to land on these pools. In Balkan Velayat, the total volume of associated waters is seven million cubic meters.¹⁵⁸

In other areas in the Caspian region where associated water has leaked into the water supply, we have seen serious environmental health problems affect local populations. For example, at Karachaganak, illegal dumping of effluent damaged the water table for local communities relying on well water for human consumption.¹⁵⁹ Azerbaijani communities—especially on Absheron peninsula—also suffer from lack of clean water, often times because of improper containment ponds at oil sites.¹⁶⁰ Turkmenistan’s lack of potable water, especially for rural populations, may pose a dangerous risk to communities near oil and gas communities.

Water and soil contamination also cause problems for wildlife, which are rampant throughout the Caspian region. Loss and degradation of habitat—on and offshore—creates stress on flora and fauna around the extraction and production facilities.

Flaring can cause atmospheric toxicity through off gassing of substances such as hydrogen sulfide, mercaptans, and other associated chemicals. Accounts from recent travelers to western Turkmenistan confirmed that both on and offshore flaring and emissions made breathing difficult on the coastline when the wind was blowing from the direction of the flares.¹⁶¹ Eyewitnesses have also reported extensive flaring at the Burun field, in spite the fact that ENI states in its environmental statement that it is “involved in protecting the atmosphere by managing and reducing greenhouse gases and in particular gas flaring...”¹⁶²

Gas flaring causes concerns not only for human health, which is well-documented throughout the Caspian region, but also for animals living or migrating near the site. In 2005, thousands of migrating birds died as they flew into a massive flare at Kazakhstan’s offshore Kashagan field.¹⁶³

Potential Social Impacts

Social and labor concerns also raise serious problems in oil and gas communities. Local residents are often employed during the construction phase of operation set-up, yet lose their jobs once this phase is complete. Labor unrest is not unusual on the site of oil and gas operations, particularly as workers come in from other communities. This has occurred in numerous instances in the Caspian region. Riots broke out at the Tengiz Field in Kazakhstan in 2006 between Kazakhstani and Turkish workers who fought over

wage discrepancies. Dozens of workers were seriously injured and there were reports of deaths.¹⁶⁴ Similar conflicts have arisen in Georgia and Azerbaijan along the Baku-Tbilisi-Ceyhan pipeline and at Karachaganak in Kazakhstan. The first recorded oil worker riots in the region over pay and working conditions took place in Nebit Dag (now named Balkanabat) in western Turkmenistan in 1989.

In a recent example, in an effort to optimize its financial resources, Burren Energy worked to decrease the number of more expensive international workers at the Burun Field. In 2007, one thousand workers—comprising ninety-seven percent of the workforce—were local.¹⁶⁵ Most of the operations conducted at the field, including deep drilling, overhauling wells, exploration and drilling are carried out by Turkmen workers. Every year, six Turkmen students receive scholarships to study for a master's degree in the United Kingdom.¹⁶⁶

In June 2008, six hundred ENI workers at a drilling station went on strike in Turkmenistan's Balkan Velayat. They demanded an increase in salary, stating in a letter to the main ENI office in Ashgabat that the wages they received were inadequate compensation for the hard physical labor they perform. Because of the dramatic fall in the value of the dollar in recent months, their wages were no longer providing them with enough money to cover the basic necessities for their families. According to a reporter at the scene, the workers cried, "We are not slaves of international companies." Sixty-two striking workers were arrested by Ministry of Internal Affairs representatives.¹⁶⁷

Rises in HIV and other communicable diseases, prostitution and drug use, gambling and other social phenomena associated with influx of new populations are likely to jar traditional communities on Turkmenistan's Caspian coast as they have along the BTC pipeline, at Karachaganak and in Atyrau, headquarters of ENI's Kashagan operations.¹⁶⁸

Case Study: The Balkan Velayat

In Balkan Velayat, the "oblast" or region that is home to much of Turkmenistan's on and offshore oil wealth, most of the population is divided between industrial communities and those living more traditionally. Along the coast in particular, industrial communities comprise the majority of residents, but traditional communities also exist along the shoreline, many of which rely on fishing and subsistence farming to make a living. The Balkan Velayat borders the east coast of the Caspian Sea, and covers approximately 1200 kilometers of coastline. Approximately eighty percent of the population lives in urban centers, particularly in Turkmenbashi and Balkanabat.¹⁶⁹

As the commercial fishing industry fell apart at the end of the 1990s, many of these traditional communities adapted to the new economic realities by working unofficially as fishermen, traders and small businessmen. Fishing, for example, continues to play an important economic role in rural seaside communities, including in state enterprises, where the annual catch from the Caspian totals fifteen to twenty thousand tons.¹⁷⁰ As industrial enterprises in the urban areas grew up around the oil industry, the disparity

between these two types of communities has only increased over time, leaving rural communities increasingly dependent on the wealth brought in from hydrocarbon development to neighboring urban communities and to the government. As a recent UNEP report states, “the declining biological resources of the sea combined with pollution....made it increasingly difficult for the local population to live in a healthy environment, produce food, and generate sufficient income outside of the energy sector.”¹⁷¹

Balkan Velayat produces ninety-five percent of the country’s oil and about fifteen percent of its natural gas. As a result, it has attracted about forty percent of the foreign direct investment in Turkmenistan, most of which is focused on the energy sector.¹⁷² The basic sources of pollution in the Velayat are production and processing of hydrocarbons, the chemical industry, agriculture, transportation, tourism and municipal waste production.¹⁷³

Much of the pollution related to oil and gas extraction has been described above. In terms of the chemical industry, including hydrocarbon processing, the greatest concentration of industrial facilities is in and around Turkmenbashi, where the Turkmenbashi oil refinery, a thermal power station, a transfer tank farm, and a stone quarry are located.¹⁷⁴

While we have little specific information about these enterprises, we have information that the Turkmenbashi oil refinery processes between six and seven million tons of oil per year. Phenols and hydrocarbons in the area around the refinery and tank farm exceed maximum permissible concentrations (MPC) by two to three times. (This is an improvement from the 1980s, when MPC was exceeded by ten to twenty times.)¹⁷⁵

In Khazar, in addition to oil and gas production and transportation from Chelekenneft and Dragon Oil, the Cheleken Chemical Plant manufactures iodine and bromine. It produces radioactive waste, which is currently buried on site, although transportation away from the territory and eventual deactivation of the site are planned.¹⁷⁶ The plant’s annual capacity is 4740 metric tons.¹⁷⁷ The Nebitdag (Balkanabat) Iodine Plant has an annual capacity of 2370 metric tons produced from underground brines.¹⁷⁸

Agricultural activity is primarily focused at present on cattle breeding, due in large part to the arid, salty land, which is not ideal for growing crops. Therefore, environmental impact from this sector is minimal.¹⁷⁹

As the June 2008 worker strikes demonstrated, the Balkan Velayat is an example of the potential environmental and social impact of the oil and gas boom; it is clear that infrastructure development will need to keep step with the current and planned economic boom. The population of the Velayat was 569.1 thousand in 2005 (approximately 8.4 percent of the population of Turkmenistan), up from 461.2 (8.6 percent of population) in 2000. The average salary increased from 596.8 thousand manat (US \$114) in 2000 to 1826 thousand manat in 2005 (USD \$351). Fish and meat production have continued to increase since 2001, but at a much slower rate than industrial production, which is booming. Care will need to be taken to ensure that two separate economies do not develop as a result.¹⁸⁰

Access to public services such as clean drinking water, electricity, heat, garbage removal and sewerage will also need to be increased if the region is to avoid the pitfalls of urban poverty. As one analyst of hydrocarbon development in Turkmenistan warns, "As the urban population grows, the overall standard of living in cities can become a reason for a lower level of security at oil fields controlled by western companies. This could be caused by a financial crisis or the expectation of the denomination of the manat. The recent upset at the Burren camps after the introduction of a single currency exchange rate is one example of this."¹⁸¹

Finally, a contradiction in the economic development of the coastal region is apparent. Simultaneously, the Turkmenistan government is promoting oil and gas development and tourism in the same region. In 2006, the Turkmenistan government announced, with great fanfare, plans to develop a new resort, Avaza, not far from Turkmenbashi. Avaza has been touted by President Berdymukhammedov as an income-generating project for the country, which will bring in tourists from abroad as well as from other parts of Central Asia. However, reports this summer from travelers to the region were dubious of the success of this approach. With oil platforms going up off the coastline and in view of the beaches, one traveler questioned whether tourists, particularly international visitors, would find such a destination palatable.

Following the release of the Gaffney Report in October 2008, concerns have been immediately expressed about Turkmenistan's ability to manage its vast reserves. Infrastructure, professional training, accountability, transparency and institutional capacity will need to be increased in order to manage the complex issues connected to oil and gas development. How this will be accomplished is one of the most pressing concerns facing contemporary Turkmenistan.

Transparency and Environmental Decision-making

Because the lion's share of the Turkmen budget comes from oil and gas revenues, much of the economy is not only driven by the hydrocarbon sector, but also financed by it. Environmental impacts around the country are felt not only directly, but also indirectly as a result of the oil and gas sector. If the current administration decides to continue the practices of Niyazov and finance the Golden Lake, construct fancy apartment buildings on the edge of Ashgabat, and build fountains and monuments, it will be using oil and gas revenues to perpetuate environmentally and socially harmful spending patterns of the previous administration. Or, President Berdymukhammedov can choose to heed the recommendations of civil society activists and international organizations that encourage a more responsible and accountable approach to financing development in Turkmenistan. Generating economic benefits for local populations, strengthening the health and education sectors, and creating a transparent and accountable mechanism for tracking hydrocarbon revenues would be a far-sighted and decisive change towards more sustainable development in Turkmenistan.

Relevant Conventions, Legislation and Codes of Conduct

International Conventions

Turkmenistan is signatory to a number of international conventions. These include the Aarhus Convention on Access to Information, Participation in Decision-making and Access to Justice in Environmental Matters; the Convention of Biological Diversity; the United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa; the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal; the United Nations Framework Convention on Climate Change; the Kyoto Protocol to the United Nations Framework Convention on Climate Change; and the Framework Convention on the Protection of the Marine Environment of the Caspian Sea (Tehran Convention).¹⁸² This report focuses on two conventions, the Aarhus Convention and the Tehran Convention, because they have the most immediate relevance for Turkmenistan. However, each of these conventions plays an important role in international governance, and should be carefully considered by government signatories and corporate actors as economic development occurs in the Caspian Sea region.

For example, both the UN Convention on Climate Change and the Kyoto Protocol play important roles as it becomes clearer that the Caspian region is suffering from the impacts of climate change. Scientists have already begun to catalogue changes; policymakers and government officials should heed their warnings as they choose an appropriate path of economic development. A recent report stated that a major cause of the fluctuating level of the Caspian Sea could be attributed to climate change, particularly in the Volga Basin.¹⁸³ Thus, hydrocarbon development in the Caspian region raises not only issues of environmental sustainability, but also serious questions about long-term impacts on climate and biodiversity conservation.

Aarhus Convention

The Aarhus Convention was signed by Turkmenistan early in the ratification process, and is described fully in the chapter on civil society. The Aarhus Convention is important for the Caspian region as a whole, given that Azerbaijan and Kazakhstan have also signed the Convention, as have the European countries, which are home to many of the corporations interested in investing in the region. Demanding accountability, transparency and public participation in decision-making, which have long been part of the civil society agenda, have the weight of the law. This must be an important consideration for any corporation or finance institution investing in the region.

Framework Convention on the Protection of the Marine Environment of the Caspian Sea (Tehran Convention)

The Framework Convention on the Protection of the Marine Environment of the Caspian Sea, commonly referred to as the Tehran Convention, is the first international

environmental agreement to be signed by all five of the Caspian littoral states. Signed in 2003 and ratified by Turkmenistan in 2004, the Convention was almost ten years in the making as political fighting among the countries placed environmental considerations on the back burner. However, the Convention, in fact, provides the framework for environmental protection of the Sea. The United Nations Environment Programme serves as the Interim Secretariat of the Convention and works closely with the Caspian Environment Program to implement its terms. Negotiations among the parties have been fraught with disagreement and political posturing since the Convention was signed, and civil society has largely been excluded from the processes of its implementation. However, provisions for biodiversity conservation, emergency response management, trans-boundary environmental impact assessments and monitoring land-based sources of pollution are stipulated in the Convention's draft protocols.¹⁸⁴

In the absence of a legal regime for the Caspian Sea, the Tehran Convention is particularly relevant, as it serves as the unifying Convention for environmental protection. Debates about the status of the Caspian—sea or lake—remain unresolved over fifteen years after the dissolution of the Soviet Union. Issues such as emergency response management, protection of nature reserves and biological diversity are addressed through the Tehran Convention and are essential considerations for oil and gas companies operating in the region.

In November 2008, the second meeting of the Parties to the Convention was held in Tehran, Iran, to discuss the Convention's protocols, including the protocol on oil spill response, which has yet to be signed by the Parties. According to WWF-Russia, with transport of oil through the Caspian Sea exceeding ten million tons per year, the necessity to sign an oil spill response protocol is critical.¹⁸⁵

The Tehran Convention has the potential to be an important tool to bring uniformity and standardization of environmental standards in an otherwise confusing environment, though without any protocols in effect, the Convention has yet to prove its governing power.

Environmental Law in Turkmenistan

Turkmenistan's Law on the Environment was enacted in 1991, and has been amended several times in the ensuing years. Based on Soviet environmental legislation, as in most former Soviet countries, the environmental law is relatively strict, but is unevenly applied. However, Turkmenistan, along with its other former Soviet neighbors has continued to manage protected areas, and, at least on paper, laws are in place to protect the environment.

In addition to the Law on the Environment, the Law on Hydrocarbon Resources has also been reworked, most recently in August 2008.¹⁸⁶ Previous versions of the law have stipulated environmentally appropriate clean-up and restoration should be undertaken in the event of pollution as a result of oil related activity. The law also prohibits dumping or

storing petroleum-related waste at sea, and only permits dumping waste-water at sea after it has been cleaned “to within established permitted levels of pollution.”¹⁸⁷ Specific legislation exists regarding offshore operations. Environmental impact assessments are required, including for drilling and other extraction operations.¹⁸⁸

In addition, specific provisions related to the “special ecological conditions of the Caspian Sea” are included in the law, acknowledging the fragility of the ecosystem. Health and safety as well as labor conditions are also stipulated in the law.¹⁸⁹

However, in Turkmenistan’s eagerness to attract foreign investment, it will be important for environmental experts and civil society representatives to ensure that the relevant legislation is not watered down or contradictory to legislation in other realms, including the existing Law on the Environment. It is also important for companies and investors to understand that in the absence of a vibrant civil society, many stipulations of environmental law in Turkmenistan, including conducting public hearings and environmental impact assessments, will lack vigor. There is a serious risk that companies, investors and the government will simply “check the box” of environmental due diligence rather than actually implementing it.

Voluntary Codes of Conduct

Voluntary Codes of Conduct such as the United Nations Global Compact, the Equator Principles and the Sullivan Principles offer standards of behavior on the part of Banks and Corporations that can play a role in improving environmental and social standards of international institutions. In a country like Turkmenistan, where there is little history of employing best practices with regard to environment, labor or human rights, voluntary codes of conduct may have a role to play in the introduction of best practices concepts. The UN Global Compact contains ten principles in the areas of human rights, labor, environment and anti-corruption, which are based on the Universal Declaration of Human Rights, the International Labor Organization’s Declaration on Fundamental Principles and Rights at Work, the Rio Declaration on Environment and Development, and the UN Convention Against Corruption. It asks corporations to “embrace, support and enact, within their sphere of influence, a set of core values in the areas of human rights, labour standards, the environment, and anti-corruption.”¹⁹⁰ A number of oil companies active in the Caspian region, including BP and Royal Dutch Shell, have signed on to the UN Global Compact. However, others, such as Chevron and ExxonMobil, have not.

Primarily endorsed by banks, the Equator Principles are based on codes developed by the IFIs, with the IFC standards taking a lead. They claim to provide a “financial industry benchmark for determining, assessing and managing social and environmental risk in project financing.”¹⁹¹ A number of private banks that provide financing in the Caspian region have signed on to the Equator Principles, including Societe Generale, Citibank and others. According to the provisions of the Equator Principles, banks assure themselves that projects receiving their financing comply with the principles.

The Global Sullivan Principles have been signed on to by numerous petroleum companies, including those active in the Caspian region. The principles support human rights, encourage fair labor conditions, freedom of association of employees, and other basic rights.¹⁹²

However, these codes of conduct are voluntary; corporations and banks can sign on to them, but if they violate their terms, there are no legal ramifications. Some human rights and environmental activists argue that the voluntary principles provide cover or green washing for corporations who can claim support for their principles, without actually conforming to any binding standards. In the Caspian region, this is a serious concern, as the political environment is repressive, environmental regulations are routinely ignored, and the capacity to monitor for labor, environmental or human rights violations is weak.

For example, although Chevron has signed on to the Global Sullivan Principles, and is part of a consortium at the Karachaganak Field, which has received financing from the International Finance Corporation, the oil and gas project at Karachaganak has been plagued with environmental, human rights and labor concerns. KPO, the consortium of which Chevron is a member, has been found to be out of compliance with the IFC's environmental monitoring standards. The government of Kazakhstan has found Chevron in violation of environmental laws at Karachaganak and Tengiz, and labor unrest has been reported at the Tengiz field numerous times. In addition, the US Department of Justice found US oil services company, Baker Hughes, guilty of violating the foreign corrupt practices act at the Karachaganak Field, when it paid bribes to the Kazakhstani government to obtain a lucrative contract at the field—this with both the IFC and Chevron participating in the project.¹⁹³

The Role of International Finance Institutions and Private Banks

International finance institutions (IFIs) have played an important role in financing hydrocarbon development in the Caspian region since the dissolution of the Soviet Union. Many of the major fields that have been developed in the past fifteen years have relied heavily on public financing through loans from the European Bank for Reconstruction and Development (EBRD); the World Bank and its private lending arm, the International Finance Corporation (IFC); and the Asian Development Bank (ADB). Other financing institutions, including private banks, have also played a critical—and less well understood—role, but without the stamp of approval from the IFIs, many projects may not have gone forward. IFI lending not only provides welcome financing, but also reduces the political risks that can be associated with investing in emerging economies. Tengiz, Karachaganak, Uzen and Azeri-Chirag-Guneshli are among the petroleum fields that received either EBRD or IFC financing. The Baku-Tbilisi-Ceyhan (BTC) pipeline and the Caspian Pipeline Corporation (CPC) pipeline also received IFI financing.

Turkmenistan, unlike Azerbaijan, Kazakhstan and Russia, has received little IFI financing in the hydrocarbon sector since it achieved independence in 1991. Under the leadership of President Niyazov, few IFIs were willing to invest because of the authoritarian regime, its opaque legal structure and an absence of fundamental human rights protections for Turkmenistan's citizens. However, under the leadership of President Berdymukhammedov, this may change.

The World Bank Group

The World Bank and the IFC have not financed any hydrocarbon projects in Turkmenistan. However, the World Bank is developing an interim strategy for 2008-2010, which will include activities “to support the efforts of the Government in the reform process to improve the living standards of [the] Turkmenistan population.” In 2008, the World Bank supported workshops in Turkmenistan on fiscal policy and management in resource rich countries and on the implications of global commodity growth at the Ministry of Economics and Management.¹⁹⁴ Increased World Bank involvement in capacity building may signal that the institution is preparing to engage more fully in Turkmenistan, especially as the major international oil companies consider investment.

The European Bank for Reconstruction and Development

The European Bank for Reconstruction and Development (EBRD) has, simultaneously, been the most involved and the most restrictive of the IFIs in its dealing with Turkmenistan. On the one hand, the EBRD has signed eight investment agreements in Turkmenistan, which total approximately 117 million euro.¹⁹⁵ One of these investments was in the oil and gas sector with a fifty million euro loan to Dragon Oil; this loan was significantly larger than any other single investment in Turkmenistan. The investment was

made in 1999 for Dragon's offshore joint venture with Turkmenneft, the state oil company, at the Lam and Zhdanov oil fields, which are in the southeast Caspian Sea, offshore from Cheleken. This loan was repaid early in 2006. In 1997, the EBRD also provided a twenty-five thousand euro loan for the development of the Turkmenbashi Port.

In 2006, the EBRD adopted a new country strategy for Turkmenistan, which excludes any funding of public sector of natural resource projects, due to the lack of political and economic reform in the government.¹⁹⁶ Operational through 2008, the EBRD is reviewing its policy toward investment in Turkmenistan and will publish a new country strategy in 2009. According to the EBRD, it welcomes civil society and other input into the strategy while in draft form.¹⁹⁷

The Asian Development Bank

As of the end of 2008, the Asian Development Bank has financed three projects—one in two parts—none of which is in the hydrocarbon sector. According to news reports, the ADB is considering a study of the CNPC pipeline from eastern Turkmenistan through Uzbekistan to China, but no official documentation of this prospect is available as of this writing.

Private Banks

Private banks are involved in a number of the oil and gas projects in Turkmenistan.¹⁹⁸ In the absence of IFI financing, this is standard procedure for hydrocarbon development.

However, Turkmenistan has a dubious history with its oil and gas revenues, as has been well documented by Global Witness and other NGOs.¹⁹⁹ During the Niyazov regime, untold millions of dollars of oil and gas revenues were tracked into the former president's personal bank accounts in the Deutsche Bank. Corporations and financial institutions conducting business in Turkmenistan should be aware of this history and demand accountability and transparency regarding all financing.

Policy Recommendations

For International Finance Institutions

1. The EBRD's policy not to finance state owned ventures or hydrocarbon sector investments should be continued until there is clear evidence that Turkmenistan complies with basic environmental, human rights and other international conventions and agreements. As the EBRD reviews its current policy in preparation for a new policy statement in 2009, it should engage as broadly and comprehensively as possible with Turkmen and international civil society as well as with other stakeholders.
2. Other international finance institutions, including the World Bank, ADB and IMF, should carefully examine Turkmenistan's human rights record and demand greater accountability, transparency and an improved human rights and civil society record—with measurable benchmarks—before engaging with the Turkmen government. Prior to providing financing, there must be assurances of an ability to adequately conduct financial and technical assessments and reporting with regard to any project that might be undertaken. IFIs should assure themselves that both corporations and host government officials have successfully completed adequate financial, management and professional training and that they have the capacity to successfully implement and monitor projects prior to providing financing.
3. International investments should focus on improving human health, access to clean water, improved labor practices, etc. within Turkmenistan. The World Bank, in particular, should use its poverty alleviation mandate to help Turkmenistan comply with global standards on human health, infrastructure development and institutional capacity building.
4. Investment banks should require host governments to conduct comprehensive strategic environmental assessments (SEAs) prior to IFI investment to help to understand the potential environmental impacts of projects, not only through the specific activity being financed and in the immediate area around the project, but more holistically, in relationship to the project as part of larger hydrocarbon development efforts impacting a unique and fragile ecosystem. Part of the problem with past IFI investments is that they have been treated as isolated projects, rather than as part of an overall development scheme. In the FSU context, neither Baku-Tbilisi-Ceyhan nor Sakhalin underwent SEAs prior to development.²⁰⁰
5. Investors in the hydrocarbon sector should require confirmation that the projects they are undertaking are researched, explored and monitored by independent experts, rather than by those answering to a dependent body or prescribing to a particular agenda.

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6. IFIs should require contract transparency and full disclosure of environmental monitoring of projects as a condition of financing.

For Private Investment Banks

1. Prior to granting financing, private banks should assure themselves that corporations meet the requirements of the UN Global Compact and the Equator Principles, and that projects will have a long-term sustainable and environmentally positive impact on the population of Turkmenistan.
2. Private banks should demand revenue transparency and accountability on the part of the corporations seeking financing.

For International Oil Companies

1. Exploration, extraction and transport of hydrocarbons should avoid protected areas, including those off of the coast of Turkmenistan. Because of the fragility of the Caspian Sea ecosystem, drilling in or transport through zakazniks and zapovedniks (nature parks and nature reserves) places an unacceptable strain on the environment.
2. No pipeline should be laid across the Caspian Sea without first conducting a comprehensive study to assess the likelihood of triggering the highly delicate seismic zone that traverses the south Caspian, and provision of a commitment to use the highest environmental standards and the best available technology that will not harm the surrounding environment.
3. Production Sharing Agreements should be made public. Currently, PSAs are confidential documents, which are inaccessible to the public. Stating a concern for protecting proprietary corporate information, oil companies and national governments do not share the contents of PSAs with the public, even concerning environmental or social programming.
4. International oil companies should be aware of, understand and comply with national legislation and all of the relevant international conventions and treaties impacting the region. Many oil companies operating in other parts of the Caspian appear to be unaware of the environmental and human rights legal regimes in which they are working, which causes serious problems for the corporations, the local communities and the host governments.
5. Companies should ensure that Environmental Impact Assessments are conducted properly and in compliance not only with national legislation, but also with the highest international standards. Public hearings about the environmental impacts of projects are required by law, and should be held in the most transparent and accessible manner possible. Especially in remote areas—frequently the sites of

hydrocarbon extraction—it is critical to provide transportation, adequate advance notice, interpreters, and advance materials in local languages to local community members. Relying on local government officials to inform the public is a frequent mistake that corporations make. Corporate HSE and community liaison staff should be actively involved in the organization of these hearings and should work directly with community leaders.

6. Companies should work with environmental conservation groups, including local experts, to ensure that biodiversity conservation and other environmental concerns are taken into consideration before any further development of on and offshore oil fields or transportation routes.
7. Social investments should be made directly to communities, not through central government bodies. Social investments made as part of other mega-projects in the region, including Karachaganak and Kashagan, have resulted in widespread dissatisfaction among the local population, lack of accountability for expenditures, and slow realization of projects.

For the US Government and the European Union

1. The US government and European Union should ensure that US and European corporations operate within the strictures of the highest environmental, social, human rights and labor standards. Currently, there is a perception in the FSU that the US government's interest in supporting democratic governance and its interest in building strong energy partners are at odds in the Caspian basin. Similarly, the European Union appears to be ignoring fundamental human rights violations as it seeks to secure Turkmen natural gas.

For International NGOs

1. International NGOs should monitor corporate, IFI and international organizational activity to ensure that they uphold the highest standards in environmental practice, human rights, and public participation, thereby encouraging all countries in the region to raise the bar by which they operate.
2. International NGOs should work closely with regional counterparts to ensure that projects are relevant, realistic and important for locally based communities, regional environmentalists and other activists, and not working against regional priorities.
3. International NGOs should cooperate with the media, providing them with timely, detailed information that focuses on environmental and social concerns.

For the Turkmen Government

1. The Turkmen government should invest in alternative sources of energy, including solar, to ensure long-term sustainable economic development of its country. For example, even small projects, such as the provision of solar cookers and other technology designed to improve the lives of ordinary people, could prove beneficial in rural locales where communities lack access to amenities.
2. The Turkmen government should consider joining the Extractive Industries Transparency Initiative (EITI) and seek the necessary training to enable government officials to comply with the standards of EITI.
3. The Turkmen government should immediately work to bring the country back into compliance with the Aarhus Convention, and specifically develop a legal regime in which it is possible for NGOs to register with ease and operate freely. This would provide an important resource to, and a third party check on, the development of the hydrocarbon sector.
4. The Turkmen government should use the extensive revenues it receives from the hydrocarbon sector to provide improved economic benefits for local populations, including to strengthen the health and education sectors. It should also create a transparent and accountable mechanism for tracking hydrocarbon revenues. This would be a far-sighted and decisive change towards more sustainable development in Turkmenistan.

Appendix 1: Who's Who in Turkmenistan: Petroleum Company Dossiers

In an effort to provide an accurate and detailed understanding of the corporate players in Turkmenistan's hydrocarbon sector, Crude Accountability has compiled profiles on many of the petroleum companies that are either active in the country or have expressed interest in launching operations in Turkmenistan. The dossiers are based primarily on English and Russian language news articles, press releases, company websites, information from the State News Agency of Turkmenistan, and in some cases, direct correspondence with the companies.

While not comprehensive, this list represents those companies for whom there is publicly available information about their current operations and/or plans to operate in Turkmenistan.

1. Buried Hill Energy
2. Calik Enerji (an oilfield services company)
3. China National Petroleum Corporation (CNPC)
4. Dragon Oil PLC (DGO)
5. ENI (Burren Energy PLC)
6. Gazprom
7. Lukoil-ConocoPhillips
8. Maersk Oil Turkmenistan BV (Operated by Wintershall)
9. Midland Consortium, USA and Korea
10. Mitro International Limited (Austria)/Turkmennebit Consortium (The Khazar Consortium)
11. Naftogaz
12. Petronas Carigali (Turkmenistan) SBN BHD – PC(TC)SB
13. Schlumberger: Caspian Geomarket (CAG) (an oilfield services company)
14. Scomi Group Bhd (an oilfield services company)
15. Zarit

Read individually, each dossier presents basic background information on the companies and the scope of their involvement in Turkmenistan, to the extent that the information is publicly available. Taken together, the dossiers speak not only to the current status of hydrocarbon development in the country, but also to the strong—and in some cases, longstanding—desire by companies to seal new deals with the government of Turkmenistan.

In some cases, it is not clear why production sharing agreements have yet to be signed with companies that have courted and been courted by the government of Turkmenistan. Some have theorized that delays over the past two years were the result of Berdymukhammedov's transition to power. Others have posited that the government may be holding out on the signing of new agreements in order to allow for the best possible offers to be made. To some extent, the government may have been waiting for the results of the now published Gaffney, Cline and Associates assessment of the

country's natural gas reserves, before locking itself into long-term agreements. Finally, in the case of certain offshore fields, the signing of new petroleum agreements has been hindered by the absence of a legal division of the Sea, and conflicting claims over offshore blocks by other littoral states. Whatever the reasons for the lack of newly signed production sharing agreements, it is clear that a number of companies are well positioned and eager to begin hydrocarbon development in Turkmenistan.

In this changing environment, profiles such as the ones below are certain to become outdated quickly. It should also be noted that, across the board, reliable and detailed information on the operations of petroleum companies in Turkmenistan is quite difficult to pinpoint at this time. In many cases, the absence of information on company operations raises questions that cannot yet be answered, but we hope these dossiers will serve as a starting point for understanding who's who in Turkmenistan. Crude Accountability has published these dossiers on its website (www.crudeaccountability.org) and will update the information regularly. We hope to provide an easily accessible and current overview of the petroleum sector in Turkmenistan, and welcome contributions from corporations, government, civil society and academia to this unique information portal.

In addition to the dossiers, which follow the next section of the report, we have compiled brief descriptions of petroleum and oil services companies about which very little information is available. These profiles follow the dossiers, in Appendix 2, and are also available on Crude Accountability's website. Along with the dossiers, they will be updated as new information becomes available.

BURIED HILL ENERGY

Company Information

Incorporated in 2002, Buried Hill Energy (Cyprus) Public Company Limited is an upstream oil and gas exploration company that has managed projects around the world, including in Kazakhstan and Russia.²⁰¹

Contact Information

The company has an office in Ashgabat, though no contact information for the office is listed on its website.²⁰²

info@buriedhill.com

www.buriedhill.com

History in Turkmenistan

According to its website, "Buried Hill Energy identified Central Asia as a major growth area in 2003 and 2004, and initiated the valuation and pursuit of appraisal, development and production opportunities in this region. The company has developed strong and long-term strategic relationships in Turkmenistan and hopes to initiate operations there in 2007, both onshore and offshore in the Caspian Sea."²⁰³

Current Scope of Operations

In February 2008, a Buried Hill delegation met with President Berdymukhammedov in Ashgabat. An article about the meeting, based on a report from the Turkmenistan State News Agency and posted to Buried Hill's website, states that the discussion focused on the company's progress, "including its current seismic operations over the Serdar field, following the signing of the Production Sharing Agreement for offshore Block III, with Turkmenistan late last year."²⁰⁴ Buried Hill's Chairman and CEO, Roger Haines, also confirmed that the company was on track to begin drilling at the offshore field before the year's end.²⁰⁵

Over the past decade, the offshore Serdar Field has been the source of a heated territorial dispute between Turkmenistan and Azerbaijan. Called the Kyapaz Field by Azerbaijan, the field is reputed to contain large oil reserves and has been claimed by both governments. As the legal status of the Caspian is as yet unresolved, it is unclear how the ownership of the Kyapaz/Serdar Field will be determined. Some speculate that the reopening of the Turkmen Embassy in Baku under Berdymukhammedov, and the renewed efforts on the part of both countries to develop diplomatic relations may result in a joint agreement on the development of this field.²⁰⁶

As of this printing, Buried Hill Energy has not yet responded to Crude Accountability's request for information on the status of the Serdar Field and the company's operations in Turkmenistan, including the status of its claim to a PSA. In November 2008, Buried Hill Energy was one of five "Gold Sponsor" companies for the 13th Turkmenistan International Oil and Gas Conference in Ashgabat, indicating the company's ongoing interest in Turkmenistan.²⁰⁷

CALIK ENERJI

Company Information

Established in Turkey in 1998, Calik Enerji is focused on oil and gas, power systems and telecommunications.²⁰⁸

Contact Information

www.calikenerji.com

History in Turkmenistan

The Calik Enerji Oil and Gas Group formed in 2001 to cover operations in the upstream, midstream and downstream sectors.²⁰⁹ Turkmenistan features prominently in its portfolio. In 2003, Calik Enerji and Houston-based Parker Drilling were awarded a three-year contract by State Concern Turkmenneft for two land rigs.²¹⁰ In June 2006, Calik Enerji completed a three-year drilling project in three of Turkmenistan's onshore fields (Korpedje and Akpatlawuk in Balkan Velayat, and G. Yoloten in Mary Velayat).²¹¹

Current Scope of Operations

In July 2008, Calik Enerji was awarded a contract to build a 254-megawatt capacity natural gas turbine power plant in Turkmenistan's western province of Balkanabat, scheduled for completion in March 2010.²¹²

The company was one of the sponsors of the 13th Turkmenistan International Oil and Gas Conference in Ashgabat in November 2008.²¹³

CHINA NATIONAL PETROLEUM CORPORATION (CNPC)

Company Information

China National Petroleum Corporation (CNPC) is one of the world's leading integrated international energy company with businesses covering oil and gas upstream and downstream operations, oilfield services, engineering and construction, petroleum material and equipment manufacturing and supply, capital management, finance and insurance services, new energy operations, according to its website.²¹⁴

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History in Turkmenistan

In January 2002, CNPC signed the Technical Service Contract of EOR for Gumdak Oilfield with Turkmenistan Petroleum Konzern and took a one hundred percent stake for five years. Development of the Gumdak Oilfield, which has recoverable reserves amounting to 43.92 million tons, started in 1949. After CNPC took over the oilfield, an in-depth geological research and development effect appraisal was conducted to draw up corresponding stimulation programs and countermeasures, resulting in an increase in crude production in less than half a year.

On July 20, 2005, CNPC signed an oil cooperation agreement with Turkmenistan's Ministry of Petroleum and Mineral Resources. In April 2006, CNPC and the Petroleum Ministry of Turkmenistan reached a basic agreement on a joint natural gas project.

On July 17, 2007, CNPC signed a production sharing contract on the Bagtyarlyk area at Amu Darya Right Bank in Turkmenistan and the Sino-Turkmeni[st]an natural gas purchase and sale agreement with Turkmen State Agency for Management and Use of Hydrocarbon Resources and Turkmengas State Concern respectively. According to these agreements, Turkmenistan will export 30 billion cubic meters of natural gas to China annually for 30 years.²¹⁵

Current Scope of Operations

In August 2007, Turkmenistan and China launched construction of the approximately 7000 kilometer Turkmenistan-China pipeline.²¹⁶ "In addition to building the pipeline, the CNPC will provide financing and technical know-how for the gas processing and purification facilities, pumping and compression stations and boosters. Turkmengaz and CNPC have already signed gas sale-purchase agreement but the price has not been disclosed. Some reliable sources told that the price would be above US \$ 100 per 1000

cubic meters.”²¹⁷ Construction of the pipeline is scheduled for completion by the end of 2009.

In July 2008, the State News Agency of Turkmenistan reported that CNPC had begun construction of a gas processing plant in the Samandepi Field near the Amu Darya River with an annual capacity of 5 billion cubic meters.²¹⁸ According to the Agency’s press release:

Under the Turkmen-Chinese Agreement over US\$ 6 billion are to be invested at the first stage of the works on exploration and additional exploration of the gas fields Samandepi, Yashildepi, Metepi, Gengibek included in Bagtyarlyk contractual territory and modernization of the existing infrastructure to ensure production of 13 billion cubic meters a year. The action plan stipulates for construction of gas field facilities and complementary geophysical research covering the area of 2,400 square metres, reconstruction of 27 temporarily abandoned wells, drilling of 40 exploratory and production wells in 2008-2009. The project will create about 5,000 new jobs that will foster social and economic development of the region.

The foundation for the first of two gas-purifying plants to be constructed in the Samandepi field in the nearest future was laid. Its estimated capacity is 5.5 billion cubic meters a year. Under the project the plant supplied with up-to-date equipment will include four technological systems including the units for treating, dewatering, pumping gas and the other facilities – the interdependent links of the production chain. The technological processes will be automated. Each year the gas-purifying plant will produce 5 billion cubic meters of natural gas, 170,000 tons of gas condensate and 210,000 tons of hard sulphur.²¹⁹

On August 29, 2008, CNPC and Turkmengas State Concern signed a framework agreement to expand cooperation in the natural gas field, with the aim of increasing the supply to China.²²⁰

DRAGON OIL PLC (DGO)

Company Information

Dragon Oil plc is an independent oil development and production company, registered in Ireland [Company Regn. no: 35228] and listed under a dual primary listing on the London and Irish Stock Exchanges. Approximately 52% of the Company's equity is held by the Emirates National Oil Company (ENOC) L.L.C. ("ENOC"), a company owned by the Government of Dubai.

Dragon Oil is headquartered in Dubai and its principal development and production activity is the development of its asset in the Cheleken Contract Area, offshore Turkmenistan by a Group subsidiary, Dragon Oil (Turkmenistan) Limited. A production sharing agreement was signed with a state agency of the Government of Turkmenistan in May 2000 (the "PSA"). The PSA has a 25-year term which expires in May 2025 with an exclusive right on the part of Dragon Oil (Turkmenistan) Limited to negotiate an extension for a further period of not less than 10 years.

Dragon Oil had proved and probable oil reserves at 30 June 2008 of 644 million barrels (of which Dragon Oil's share was 283 million barrels) and 3.4 trillion cubic feet of gas resources.²²¹

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www.dragonoil.com

History in Turkmenistan

Dragon Oil plc's principal development and production interest is located in the Cheleken Contract Area in the Caspian Sea, offshore Turkmenistan. The Cheleken Contract Area covers approximately 950 square kilometres (235,000 acres) and comprises two offshore oil and gas fields, Dzheitune ("LAM") and Dzhygalybeg ("Zhdanov"), in water depths of between 8 and 42 meters.

The operational focus for the Dragon Oil group is on the re-development of these two producing fields that were discovered during the Soviet era in Turkmenistan. Dragon Oil holds a one hundred percent interest in, and is operator of, the Production Sharing Agreement (PSA) for the Cheleken Contract Area. Development in the Cheleken Contract Area under the PSA commenced in May 2000.²²²

Current Scope of Operations

There are currently forty-nine active wells producing from eleven platforms. Dragon Oil's average field production rate for the first half of 2008 from the Cheleken Contract Area was 38,482 barrels of oil per day (bopd).²²³ During the third quarter of 2008, Dragon's average daily production rate was 42,320 barrels a day, which represents a twenty five percent increase over the previous year's third quarter production.²²⁴

During 2008, Dragon completed drilling on six new wells; three from the Dzheitune (Lam) twenty-two platforms and three from the Dzheitune (Lam) A platform. Two additional wells are in construction and should be completed by the end of the year.²²⁵

Dragon Oil exports oil through Neka, Iran (80 percent) and Baku, Azerbaijan (20 percent). It is considering additional marketing routes including through Makhachkala in Russia and through the Baku-Tbilisi-Ceyhan pipeline.²²⁶

Environmental Concerns

Dragon's platforms are located to the north of Ogurchinsky Island, which is home to communities of Caspian seals, listed as endangered by the IUCN. In the event of an oil spill or other accident at the Cheleken Field, Ogurchinsky Island could be at risk. Beluga sturgeon also inhabit the sea around the island during the summer months.²²⁷ According to Dragon Oil's Environmental Impact Assessment, which was conducted prior to the outset of the project, the major offshore risks of their operations include: blowouts, fires,

loss of containment from subsea equipment, non hydrocarbon fires in an offshore installation, collisions and structural failure. Onshore risks, according to the EIA, include fires, boilovers, vapor cloud explosions and escalation. Additional risks—both on and offshore—include extreme weather, land erosion, earthquakes, laying of pipeline, and installation of jackets (damage during construction of structures).²²⁸

Community Relations

The EIA was published in October 1999, and public consultation meetings took place in accordance with EBRD standards, as the project received financing from the institution. According to the EIA, Dragon Oil consulted with twenty-nine organizations and forty-two specialists during the consultation process. Dragon Oil held public meetings in Ashgabat, Nebitdag, Turkmenbashi and Cheleken as part of the public disclosure process.

Financial Disclosure

According to Dragon Oil, it paid taxes on income of US\$40 million in 2006 and US\$85 million in 2007.²²⁹ Capital expenditure for the first three quarters of 2008 was US\$200 million. Seventy percent of this figure was spent on drilling, and the rest on infrastructure.²³⁰

ENI (BURREN ENERGY PLC)

Company Information

Burren Energy of the UK is an oil exploration and production company, and also operates a tanker fleet in the Caspian. The company is operational in Turkmenistan, the Republic of Congo, Egypt and India.

In November 2007, Italy's ENI agreed to buy Burren Energy for 1.73 billion pounds (\$3.6 billion).²³¹

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http://www.eni.it/en_IT/home.html

History in Turkmenistan

Burren Energy signed a PSA with the government of Turkmenistan in August 1996 to develop Burun, the largest set of fields in the onshore Nebit Dag area. Given that ENI does not yet have information about the Nebit Dag PSA available on its website (as of December 2008²³²), one of the best sources for information on the project are archived excerpts from the now obsolete Burren Energy website.

The following is one such excerpt, summarizing the history of the project:

In 1995 Burren formed an alliance with Monument Oil & Gas Plc to acquire upstream projects in Turkmenistan which led to the signature of the Nebit Dag PSA in August 1996. Mobil joined the consortium later that year. The consortium of Monument (as operator), Mobil and Burren initiated a rehabilitation and development programme on the Burun field, the western-most field in the Nebit Dag PSA area, which led to the commencement of oil exports in May 1998. Following the takeover of Monument in June 1999 and the merger of Mobil and Exxon in December 1999, the consortium partners decided that Nebit Dag was not of strategic importance to their businesses and Burren acquired their interests, becoming operator with a 100 per cent working interest in August 2000. On taking over operational control Burren cut on-site overheads and administrative and head office costs and terminated most sub-contracting agreements, bringing these services in house. These reductions in operating costs led to operations rapidly becoming cash-flow positive.

Oil has been produced from fields within the Nebit Dag PSA area since the 1940s. The Burun field, which was producing oil at the time the PSA was signed and from

which Burren presently derives the whole of its Turkmenistan production, was brought into production in the 1970s but was still under development at the time of the break-up of the Soviet Union.²³³

More detailed information on the PSA terms and the scope of Burren Energy's operations is contained in the following 2005 excerpt from the Burren Energy website:

The Nebit Dag PSA area (1,050 km) is located onshore in western Turkmenistan and contains five developed oil and gas fields. Burren has production rights to the Burun field, at the western end of the area, as operator with a 100 % working interest. The other four fields within the PSA area (Kyzyl Kum, Kum Dag, Kara Tepe and Nebit Dag) are operated by the state oil company Turkmenneft. Burren has exploration rights over the rest of PSA area under an exploration licence which expires in February 2007. The PSA term runs until 2022, and may be extended for a further 10 years by mutual agreement with the Turkmenistan government. Burren has been the operator of the PSA since 2000.

At the end of 2005, the Burun field was producing approximately 19,000 boepd (barrels of oil equivalent per day) from 135 wells. Development to date has been primarily on the north flank of the field whilst the south flank remains to be appraised. Prior to 2004, well activity consisted of workovers to return shut-in wells to production. Development drilling commenced in 2004. Average working interest production during 2005 increased by 35 % to 15,410 boepd (2004: 11,430 boepd)."

Gas-lift is now installed on most of the Burun field wells. Oil separation, treatment and storage facilities were upgraded during 2005. A pilot water injection scheme is expected to be implemented during 2006 which, if successful, will be rolled out across the field to provide reservoir pressure support and enhance oil recovery rates.

Burun crude is a light high quality low sulphur crude with an API gravity of 33. Burren has unrestricted rights to the export of its share of crude, which is sold on an FOB basis from Turkmenistan Caspian Sea ports.

Exploration drilling outside Burun began in late 2005 and is expected to continue throughout 2006. Overall production of Burren is 33,000 bpd and the concessions are located in Turkmenistan and Congo, Egypt, Yemen and Oman..²³⁴

The following excerpt from a September 2006 review of the company provides a third party analysis of the PSA:

When its PSA was signed in 1995, the planned investment was put at \$500m. The ministry of oil and gas in 2000 said the Turkmen side was to continue to receive the same volume of crude oil, then averaging 5,000 b/d, which TurkmenNeft used to produce from Burun before the JV was formed. All oil produced over that

volume is divided between TurkmenNeft and Burren Energy.

The Nebit Dag PSA includes deep reservoirs beneath the Nebit Dag and Kum Dag fields, whose shallow formation had been virtually worked out. Nebit Dag went on stream in late 1997 and now is producing 30-36[degrees] API oil. Originally the output of this and other fields was planned to reach more than 50,000 b/d before end-2000. But the fields are producing far less than that at present. It was agreed in 1995 that these oilfields' peak production after rehabilitation should reach 180,000 b/d by 2006. Independent experts have said such a target was too ambitious and may not be reached before 2010/12.

The PSA gives the partners rights to a condensate field of Kyzyl Kum and the Kara Tepe gas field. It has been said Nebit Dag contains about 2 bn barrels, with a recovery factor of 25-35%. It is also said Garashysyzlyk block's reserves could be as great, or greater than, those of Nebit Dag. The government in 1995 said the two blocks could raise oil output in western Turkmenistan to 500,000 b/d by 2006/7. Again such a target has proved to be too ambitious and is not to be reached during this decade.²³⁵

Current Scope of Operations

In April 2007, a delegation of Burren Energy's top company representatives traveled to Turkmenistan and met with President Berdymukhammedov to discuss the possibility for additional partnerships, including prospects for developing Turkmenistan's offshore hydrocarbon reserves.²³⁶

In August of 2007, Burren Energy "announced record results from an appraisal oil well in the Burun field in Turkmenistan. The Burun B0-63 well logged 60 metres of virgin net pay in the south-west of the field... The above results have contributed to production in Burren's fields in Turkmenistan reaching a record 23,400 barrels of oil per day during the first half of August. This compares to average production of 21,800 bopd during the first half of the year."²³⁷

Financial Disclosure

According to the US 2008 Investment Climate Statement for Turkmenistan, Burren had invested a total of \$450 million in Turkmenistan.²³⁸

In 2007, ENI reported a net profit of 10 billion euro, an 8.6 percent increase from the previous year.²³⁹ The company saw increases in its oil and natural gas production over the first nine months of 2008, with its net profit up 38.5 percent to 9.70 billion euro for this period.²⁴⁰ During the third quarter of 2008 alone, ENI's net profit was up thirty-seven percent to 2.94 billion euro with an increase in oil and natural gas production up 6.3 percent to 1.76 million barrels per day.²⁴¹ ENI's acquisition of the Burren assets in Turkmenistan and the Congo early in the year is repeatedly cited in ENI's 2008 third quarter results as a major contributor to the company's improved portfolio, although specific information about revenues from Turkmenistan is not available.²⁴²

OAO GAZPROM

Company Information

Gazprom is the largest gas company in the world, with the largest natural gas reserves and the largest gas transmission system.²⁴³ The Russian Federation owns a 50.002 percent controlling stake in the company.²⁴⁴

Contact Information

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www.gazprom.ru

History in Turkmenistan

Russia and Turkmenistan entered into the 25-year Agreement of Cooperation in the Gas Industry on April 10, 2003. Under the Agreement, Gazprom export (a Gazprom wholly owned subsidiary) and Turkmenneftegas gas transmission company concluded a long-term Contract to purchase and sell Turkmen natural gas throughout the period of the Agreement.

Turkmen gas is supplied via the Central Asia – Center system of transit gas pipelines crossing Uzbekistan, Kazakhstan and Russia. In accordance with the inter-governmental agreements in-place, Gazprom transits Turkmen gas via Russia to Ukraine. Furthermore, under mid-term arrangements Gazprom serves as operator of Turkmen gas transit across Uzbekistan and Kazakhstan. On May 12, 2007, the Presidents of Russia, Kazakhstan and Turkmenistan signed a Joint Declaration to build the Pre-Caspian gas pipeline.

On December 20, 2007, the Governments of Russia, Kazakhstan and Turkmenistan entered into the Agreement on the Pre-Caspian Gas Pipeline Construction. The gas pipeline construction is targeted at transporting natural gas from fields in the Caspian Sea and other locations in Turkmenistan and the Republic of Kazakhstan to the Russian Federation. The volume of gas transportation by the Pre-Caspian gas pipeline is projected to make up: up to 10 bcmpa from Turkmenistan; up to 10 bcmpa from Kazakhstan.²⁴⁵

Current Scope of Operations

The construction of the pre-Caspian gas pipeline is scheduled for early 2009. “As of June 2008, the parties are completing the preparation for signing of an Agreement for joint principles of cooperation between the authorized companies as stipulated in the Intergovernmental Agreement. In the near future, there are plans to form a trilateral Coordinating Committee and steering groups for the Pre-Caspian gas pipeline construction project.”²⁴⁶

Gazprom’s involvement in Turkmenistan is politically and commercially important. With Russia’s growing interest and influence in Central Asia generally, and Turkmenistan specifically, the role of Gazprom is critical to the future of Turkmenistan’s engagement with China, the European Union and the United States, as well as with the Russian Federation.

LUKOIL-CONOCOPHILLIPS

Company Information

Lukoil is twenty percent owned by ConocoPhillips Co.²⁴⁷

Contact Information

www.lukoil.com

History in Turkmenistan

It was widely reported in the media in June 2007 that President Berdymukhammedov and Lukoil's CEO Vagit Alekperov had reached an agreement under which Lukoil would have the rights to operate three offshore fields.²⁴⁸ According to September 2007 reports, Lukoil and ConocoPhillips were negotiating for fifty percent ownership of blocks No. 19, 20 and 21, and Lukoil's Alekperov was quoted as stating "We hope that the contract will be signed by the end of the year".²⁴⁹

However, Lukoil released a press service statement in December 2007 stating that "information released by some mass media with reference to a Company representative alleging that LUKOIL signed a provisional agreement with the Republic of Turkmenistan on development of three offshore blocks in the Caspian is not true. In the meantime, LUKOIL with its partner ConocoPhillips are involved in negotiations with the government of Turkmenistan on joining several oil and gas projects in the Republic."²⁵⁰

Signaling its continued interest in Turkmenistan, ConocoPhillips was a "Gold Sponsor" of the 13th Turkmenistan International Oil and Gas Conference in Ashgabat in November 2008.²⁵¹

MAERSK OIL TURKMENISTAN BV (OPERATED BY WINTERSHALL)

Company Information

"Maersk Oil Turkmenistan BV provides oil and gas exploration and production services and is based in the Netherlands. The company operates as a subsidiary of A.P. Møller - Mærsk A/S."²⁵²

Contact Information

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History in Turkmenistan

"In 2002, Maersk Oil, entered into an Exploration and Production Sharing Agreement for Block 11-12, covering some 5,700 sq. kms offshore Turkmenistan in the Caspian Sea. Exploration activities are in progress. After License share assignments in 2007, Maersk Oil holds an interest of 36%. Wintershall is operator and holds 34% and OMEL holds the remaining 30%."²⁵³

Current Scope of Operations

"Block 11-12 is located in offshore Turkmenistan at north-eastern margin of the South Caspian Basin and 35 Km north east of giant Azeri-Chirag-Gunashli field, which is operated by British Petroleum."²⁵⁴

"A single exploratory well was drilled in 2005."²⁵⁵

MIDLAND CONSORTIUM, USA AND KOREA

Company Information

Midland Oil & Gas was founded in the United Kingdom, an energy venture born of a Swiss financial company. It was created specifically to explore and develop hydrocarbon deposits in the Caspian Sea region. ... Over the years, [Midland] has worked extensively with projects in Central Asia and the Caspian region, as well as every major hydrocarbon-producing region in the world...[The company's] core mission in Turkmenistan is to create environmentally responsible, long-term oil exploration and production ventures with strong financial returns.²⁵⁶

In late February 2008, it was announced that Midland Oil and Gas (UK) and Ko-Turkmenistan Caspian Sea Oil and Gas Corp. (Korea) had formed a consortium called Midland Consortium, USA and Korea "to explore the potential of joint business opportunities in Turkmenistan."²⁵⁷ The consortium is being led by Ko-Turkmen Caspian Sea Oil and Gas Corp.²⁵⁸

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History in Turkmenistan

According to the Midland Oil and Gas website, a high ranking team from the company first traveled to Turkmenistan in July 2007 to begin dialogue with government officials regarding possibilities for working in the hydrocarbon sector.²⁵⁹

During his fall 2007 trip to New York, President Berdymukhammedov met with Midland Oil and Gas Chair Robert Murphy to discuss possibilities for investment in Turkmenistan's hydrocarbon sector.²⁶⁰

In early November 2007, Midland Oil & Gas Ltd. announced the appointment of its new CEO, Dr. Mehmet Arif Yukler.

Robert Murphy, chairman of the board of Midland Oil & Gas stated, "Arif's nearly four decades of practice working in unique drilling situations, and his experience makes him a unique leader in the world of oil and gas exploration and extraction. In light of his unparalleled knowledge of the Caspian region oil and gas deposits, Dr. Yukler was the ideal candidate to lead Midland Oil & Gas."

Murphy continued, "Our Company is wholeheartedly committed to working closely with the government of Turkmenistan to help further develop their oil and gas resources in a sustainable and an environmentally friendly fashion. Dr. Yukler is completely focused on making this vision a reality."

Dr. Yukler stated, "There is no greater opportunity in the world then working with Turkmenistan to help further develop their hydrocarbon resources. I've worked in the Caspian region for decades, and I believe that Midland Oil & Gas is positioned to be a major player in the region for years to come. Leading this unique company will be the capstone to my career."²⁶¹

Current Scope of Operations

In January 2008, Midland Consortium, USA and Korea submitted several proposals to the Government of Turkmenistan. It was reported that the proposals included the following:

- 1) a proposal for oil and gas services (drilling onshore);
- 2) a proposal for three offshore blocks in the South Caspian basin of the shore of Turkmenistan;
- 3) a proposal for Turkmenbashi Seaport expansion and modernization;
- 4) a proposal for building a cement factory; and
- 5) a proposal for telecommunication system including high speed internet wireless network, dual view data and nationwide cellular dual VCL system...

The Consortium is committed to invest up to 16.2 billion for these projects and is awaiting the formal response of the Turkmen government prior to commencing mobilization of its resources.²⁶²

The Consortium representatives met with President Berdymukhammedov to discuss these proposals in January 2008. According to *News Central Asia*, "Song Hong (phonetically spelled), Director of Nara Bank of California and Yang Chang (phonetically spelled) of Alaska Pipeline project, were also present during the meeting, presumably as part of the newly formed consortium."²⁶³

As outlined on its website, Midland Oil and Gas has set the following targets in Turkmenistan:

- Successful negotiation of the terms of a production sharing agreement to explore and develop an oil field in the Western Turkmenistan;
- Execution of contractual agreements to provide world-class drilling services using most modern technology and equipment;
- Active participation in capital reconstruction and intensification of the existing and operating wells; and
- Participation in financing of large-scale projects in the oil and gas industry of Turkmenistan.²⁶⁴

MITRO INTERNATIONAL LIMITED (AUSTRIA)/TURKMENNEBIT CONSORTIUM (THE KHAZAR CONSORTIUM)

Company Information

According to *Turkmenistan Analytic* magazine:

Mitro International was established in 2000 to operate in the oil and gas sector, particularly in deposits scanning and exploration development. The company runs a registered representative office in Turkmenistan since 2001, when Pado Oil and Chemical S.A. Corporation transferred all its contractual rights and obligations on PSA Khazar project to Mitro and the company became a full member of the long-term oil and gas project. According to the Agreement, Mitro International is 100% investor to Khazar contractual territory.²⁶⁵

Contact Information

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Ashgabat, Turkmenistan

Mitro International has no website on the Internet.

History in Turkmenistan

In 2000, the state concern Turkmennebit (operator) and Austria's Mitro International Limited were awarded a PSA to develop the onshore Khazar project in western Kazakhstan.²⁶⁶

In 2002, the consortium began a five to six year drilling program to drill a minimum of thirty production wells at the East Cheleken field.²⁶⁷ According to one report, the consortium extracted 307,000 tons of oil in 2002, and expected to produce 400,000 tons in 2003.²⁶⁸

In December 2007, Mitro's CEO Boris Levenstein met with President Berdymukhammedov in Ashgabat, providing him with an update on his company's operations in Turkmenistan and expressing Mitro's readiness to participate in the development of offshore reserves.²⁶⁹

One analysis of Turkmenistan's oil sector states that Mitro International was producing "7,000 bbl/d from the East Cheleken onshore fields" as of February 2008.²⁷⁰

Financial Disclosure

According to the United States' 2008 Investment Climate Statement on Turkmenistan, Mitro has invested \$225 million in Turkmenistan to date.²⁷¹

NAFTOGAZ UKRAINE

Company Information

Naftogaz of Ukraine National Joint Stock Company, headquartered in Kiev, is the country's natural gas company and is fully owned by the state.

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History in Turkmenistan

Turkmenistan sells natural gas to Russia's Gazprom (see the Gazprom Dossier), which in turn sells the gas to Ukraine's Naftogaz, and from there it is sold throughout Central and Eastern Europe. Three quarters of the gas imported by Ukraine originates in Turkmenistan and Kazakhstan via Gazprom-controlled pipelines.²⁷²

Current Scope of Operations

In February 2008, Serhiy Taruta, co-head of the Industrial Union of Donbass, pledged to proceed with two projects—worth \$280 million—in Turkmenistan.²⁷³ Of note, Taruta was accompanied by the head of Naftogaz when he met with President Berdymukhammedov to discuss the projects.²⁷⁴

Ukraine and Russia have had long disputes over gas pricing, most recently in March 2008. For a four-day period, Gazprom cut natural gas supplies to Ukraine by thirty-five percent for nonpayment of tariffs totaling \$600 million.²⁷⁵ The companies agreed to a gas tariff rate for the remainder of 2008, but the long-term dispute has yet to be resolved to the satisfaction of either company.²⁷⁶

In early October 2008, the Prime Ministers of Ukraine and Russia "agreed on an intergovernmental gas memorandum that removes intermediary traders from bilateral energy cooperation, but didn't specify the document's destination".²⁷⁷ Though an official agreement between Naftogaz and Ukraine was not signed at that time, the agreement of the governmental memorandum (which was attended by the CEOs of both national companies), signified the removal of all gas intermediaries, a move long desired by Ukraine.²⁷⁸ On the other hand, Ukraine had to agree to a gradual transition to purchase natural gas at European market rates versus the significantly lower prices it has been paying.²⁷⁹ In late October 2008, it was widely reported that Naftogaz and Gazprom had come to an agreement on long-term cooperation. According to one report, among other items "the sides agreed to conclude by October 30, 2008, a contract for the supply of Central Asian gas to Ukraine at a price of USC 179.5 per 1,000 cubic meters in November-December 2008."²⁸⁰

PETRONAS CARIGALI (TURKMENISTAN) SDN BHD – PC(TC)SB

Company Information

Petronas Carigali (Turkmenistan) is a subsidiary of Petronas, the Malaysian national petroleum company, which is wholly-owned by the Malaysian government.

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History in Turkmenistan

In July 1996, Petronas and the government of Turkmenistan signed a twenty-five year Production Sharing Agreement (PSA) for the exploration, development and production of Block 1, including the Garagel-Deniz (Gubkin), Deyarbekir (Barinov) and Magtymguly (East Livanov) fields.²⁸¹ Block 1 is located approximately eighty km southwest of Turkmenbashi.²⁸² This was the first PSA to be awarded by the government of Turkmenistan. That same year, the government of Turkmenistan announced that Petronas planned to invest more than \$210 million in its operations.²⁸³

By 2002, Petronas had successfully drilled and tested four wells, indicating vast oil and gas reserves at a high rate of flow.

In October 2003, Petronas signed a Memorandum of Understanding with Dragon Oil to explore possible areas for collaboration. According to an article by *OilVoice*, the MOU comprised the following areas:

The MOU identified specific areas of cooperation, including but not limited to, gas development, transmission, marketing and sales of gas, drilling services, and field operations and logistics.

The Chairman Hussain M. Sultan said: 'This MOU is an opportunity for Dragon to work closely with our neighbors, Petronas, in the Caspian, to develop and plan mutually beneficial operational strategies, thereby enhancing both of our field

operations. We have decided to explore those areas of cooperation which would exploit the existing synergies between our two companies. We, Dragon, have significant gas reserves and are very keen to develop these along with our crude oil production and we can see the benefits of development of gas with Petronas.¹²⁸⁴

In June 2006, "KazTransGas, which is part of Kazakhstan's national oil and gas company KazMunayGas and Turkmenistan-based PETRONAS Charigali Sdn.Bhd, a subsidiary of Malaysian PETRONAS Carigali Overseas Sdn. Bhd,...signed a memorandum of understanding on natural gas transportation from Turkmenistan using Kazakhstan's pipeline network".²⁸⁵ A press release from KazTransGas stated that "the aim of the memorandum is to determine the definition of the areas and terms of cooperation between the countries in the transportation of natural gas from the future Beregovoi onshore terminal in Turkmenistan via Kazakhstan's operating pipelines MG Okarem-Beineu and MG SAZ-3."²⁸⁶

Current Scope of Operations

In June 2007, Petronas announced plans to construct a processing plant to extract gas in Turkmenistan, with an anticipated annual production of up to 10bn cubic meters of gas.²⁸⁷

In December 2007, Petronas was granted permission to construct oil platforms and participate in pipeline construction in Turkmenistan.²⁸⁸ According to a July 2008 article, a 1202 ton platform was installed for Petronas by Momentum Engineering in 197 feet of water offshore of Turkmenistan.²⁸⁹

Environmental Concerns

According to a March 2008 presentation by Petronas' HSE Manager in Turkmenistan, Maharip B. Juni, the "major possible threat with potential discharge of oil are most likely from the following incidents: loss of well control (blow out), pipeline leak, FSO /export tanker leak, tanker accidents, release of bunker oil and other possible sources such as discharge of diesel oil."²⁹⁰ As such, Petronas has adopted a three "tiered response strategy...for mitigation and clean-up operations, in the event of a discharge".²⁹¹ According to Mr. Juni, the first Tier includes minor discharges/spills (less than 300 bbls) in non-sensitive areas that can be controlled in-house, and Tier II includes medium discharges/spills (up to 20,000 bbls) that exceed the Tier one on-site capacities, but can be managed with the aid of resources from the Turkmenbashi Supply Base or contractors. Tier III "is a major discharge/worse case discharge that requires involvement of government agencies. The National Contingency Plan is used to coordinate the inter-agency cooperation."²⁹² In addition, Petronas "has made a retainer based arrangement through the OSR Contractor to deal with Tier III oil spill of up to 84,000 containment and clean-up operation occurring at sensitive areas or of an oil spill up to 20,000 bbls."²⁹³

Community Relations

The Petronas website features the following community relations activities in Turkmenistan:

Since the introduction of [its] scholarship programme to Turkmenistan in 1998, more than 80 Turkmen scholars have received PETRONAS scholarship awards for further studies at UTP. As part of [its] community development initiatives, PETRONAS contributed to the Children's Fund of Turkmenistan in 2004 to supply books for a children's library in Ashgabat, benefiting over 64 schools. PETRONAS also provides training to Turkmen technicians. Over 100 Turkmen have registered with the PETRONAS Carigali (Turkmenistan) Sdn Bhd's Technician Training Programme since 2005.²⁹⁴

Financial Disclosures

By early 2007, Petronas' investment in Turkmenistan totaled \$705 million, and it was reported that the company intended to invest \$600 million in 2007.²⁹⁵

SCHLUMBERGER: CASPIAN GEOMARKET (CAG)

Company Information

"Schlumberger Limited is the world's leading oilfield services company supplying technology, project management and information solutions that optimize customers' performance working in the international oil and gas industry. Founded in 1927, today the company employs over 52,000 people of more than 140 nationalities working in 100 countries...The Caspian GeoMarket, headquartered in Atyrau, Kazakhstan, comprises operations in Kazakhstan, Azerbaijan, Turkmenistan and Uzbekistan. Schlumberger employs over 1,040 people throughout the Caspian region."²⁹⁶

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History in Turkmenistan

A comprehensive history of Schlumberger's activities since it began work in Turkmenistan in 1998 is not available. Schlumberger signed two consecutive five-year agreements with TurkmenNeft, the second of which was signed in 2004. The company was contracted by Dragon Oil in 2003 to provide a number of services at the LAM Field in the offshore Cheleken block.²⁹⁷

Current Scope of Operations

According to a September 2006 article, "Schlumberger is operating at oilfields in western Turkmenistan under a five-year contract with TurkmenNeft worth \$36m signed in 2004...Schlumberger is helping the national companies increase oil production in western Turkmenistan. The contract covered operations in the Kotur Tepe, South Kamysldzha and Koperdzhe oilfields. Schlumberger has taken part in servicing the fields' wells and provides necessary equipment."²⁹⁸

Schlumberger was one of the sponsors of the 13th Turkmenistan International Oil and Gas Conference in Ashgabat in November 2008.

SCOMI GROUP BHD

Company Information

Headquartered in Malaysia, Scomi Group Bhd is global service provider, focusing on the oil and gas industry in thirty-six countries.²⁹⁹

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History in Turkmenistan

Scomi began operations in Turkmenistan in 2005, and has been awarded three contracts by Petronas Carigali Sdn Bhd alone for work in Turkmenistan.

In 2007, Scomi was awarded a contract by Dragon Oil to provide drilling fluids. "With this contract, Scomi...captured more than 80 per cent of the offshore Drilling Fluids market in Turkmenistan."³⁰⁰

Current Scope of Operations

The most recent of Scomi's contracts with Petronas, which comprises services in Drilling Fluids and Drilling Waste Management, is a three-year contract that began in May 2008.³⁰¹ Valued at approximately RM157 million³⁰², or over \$46 million³⁰³, this contract solidified Scomi's role as a leading oilfield services company in Turkmenistan.

According to its website, "Scomi's presence in Turkmenistan is supported by a diversified customer base."³⁰⁴

ZARIT

Company Information

"Zarit was registered in Moscow in May 2002 as a joint venture between Rosneft, Itera's subsidiary Gazkhiminvest (each controlled 37% of Zarit), and Zarubezhneft, which held the remaining 26% stake."³⁰⁵ In February 2004, Turkmenneft obtained a fifteen percent stake in Zarit, while Rosneft and Itera have held onto thirty-one percent each, and Zarubezhneft holds the remaining twenty-three percent.³⁰⁶

History in Turkmenistan

In 2001, Zarubezhneft and Itera signed an agreement with the government of Turkmenistan regarding their intent to participate in the development of Turkmenistan's oil and gas sector.³⁰⁷ Zarit was then formed in 2002 to develop offshore blocks 29, 30 and 31, which are located in the southeast portion of Turkmenistan's portion of the shelf, near the Iranian border. The blocks are estimated to hold vast reserves of oil and gas. A Production Sharing Agreement (PSA) was to have been signed between the government of Turkmenistan and Zarit for the development of these three blocks in 2003. The signing was postponed until 2004, but once again an agreement failed to materialize.

Also of note, in March 2004, the government of Turkmenistan and National Reserve Bank (NRB), a Russian commercial investment bank, agreed that the latter would "organize the finances and handle banking for Zarit".³⁰⁸

Current Scope of Operations

In April 2008, Itera's CEO Vladimir Makeyev announced, "We are in the final stages of talks to sign a PSA for blocks 29, 30, 31".³⁰⁹

According to *New Europe*, "One of the blocks is partially located in the Iranian section of the Caspian Sea, an unresolved issue which is believed to have held up signing of the PSA and the start of work. When asked about the negotiations with Iran, Makeyev said: 'Some of the issues are still to be coordinated.' There have been media reports that Iran may join the joint venture, but no decision has been taken yet. Itera has recently also discussed other blocks in Turkmenistan, not only offshore but also inland. Makeyev said talks on inland blocks were still continuing."³¹⁰

In an August 20, 2008 interview with the Information Agency *Finmarket*, Nikolai Brunich, the General Director of Zarubezhneft, was asked whether Zarit had yet received a response from the government of Turkmenistan to its application to develop the offshore blocks. He replied: "We have been negotiating this issue for a sufficiently long time. The main obstacle is the territorial disagreements between the countries of the Caspian basin. A meeting is planned for September between all of the governments of this region. After the summit, we hope that there will be the opportunity to approach discussion of a contact and begin conducting geological exploration. But Zarit will exist, and we still plan to obtain the right to develop the three blocks on the Caspian shelf."³¹¹

Appendix 2

Brief Profiles of Other Companies Engaged in Turkmenistan

Petroleum Companies

BP

In an August 28, 2008 letter to Crude Accountability, a representative of BP Exploration Operating Company Limited explained: "We are currently at a very early stage regarding our activities in Turkmenistan. We are fact finding and exploring the possibility of business opportunities."³¹² Further indicating that the company is intent on working in Turkmenistan, BP was the sole "Platinum Sponsor", the highest level of sponsorship, for the 13th Turkmenistan International Oil & Gas Conference, which took place November 19-21, 2008 in Ashgabat.³¹³

Chevron

In June 2007, during a meeting of company officials with President Berdymukhammedov, Chevron announced its intent to open an office in Turkmenistan.³¹⁴ At the April 2008 "Oil and Gas in Turkmenistan Conference" in London, Chevron Vice President Jay Pryor gave an address during which he enthusiastically praised President Berdymukhammedov and the government of Turkmenistan for their management of the country's hydrocarbon resources, detailed Chevron's involvement in other Caspian countries, and concluded by saying, "Chevron would be honored to be partners with the Turkmen people in hard work, care and respect as they embrace their country's energy future".³¹⁵ By all accounts, Chevron is enthusiastically pursuing leads in Turkmenistan, as evidenced by its "Gold Sponsorship" of the 13th Turkmenistan International Oil and Gas Conference in Ashgabat in November 2008.³¹⁶ Securing an agreement in Turkmenistan would add to Chevron's strong presence in Central Asia and the Caspian region.

International Petroleum Investment Co. (IPIC)

In September 2008, there was a report that Abu-Dhabi owned IPIC was considering a partnership with Shell for exploration and production operations in Turkmenistan.³¹⁷ As of this printing, Crude Accountability could not locate information from either company to confirm this report.

TNK-BP

Often listed as one of the companies interested in staking a claim in Turkmenistan, TNK-BP Vice President Yevgeny Astakhov announced in June 2007, following a meeting of company representatives with President Berdymukhammedov, that it would open an office in Turkmenistan.³¹⁸ That same month, Sergey Brezitsky, Executive Vice President, Upstream, TNK-BP refused to comment specifically on the company's plans in Turkmenistan.³¹⁹ In September 2007, Robert Dudley, TNK-BP's President, acknowledged tentative interest in Turkmenistan, and made clear that TNK-BP would not compete directly with BP in its future endeavors.³²⁰

Shell

Though widely reported to be interested in Turkmenistan's hydrocarbon sector (see IPIC entry above), Crude Accountability could not locate any publicly available information on the company's potential operations in the country. Signaling its commitment to exploring operations in Turkmenistan, Shell was one of the "Silver Sponsors" of the November 2008 International Oil and Gas Conference in Ashgabat.³²¹

StatoilHydro

Though often listed as expressing interest in Turkmenistan, Crude Accountability could not locate any substantive information on this topic. Of note, StatoilHydro was a "Silver Sponsor" of the aforementioned Oil and Gas Conference in Ashgabat.³²²

Total

Like Statoil above, Crude Accountability could not locate any substantive information on this company's intent to operate in Turkmenistan, though it is often mentioned as a possible player. Total joined Shell, Statoil and others as a "Silver Sponsor" of the 2008 Oil and Gas Conference in Ashgabat, indicating the company's commitment to Turkmenistan.³²³

Oil Services Companies

Baker Hughes

Though it is known that Baker Hughes is working with Petronas in Turkmenistan, Crude Accountability was unable to locate detailed information on the scope of work. An inquiry sent directly to Baker Hughes' Ashgabat office was not answered at the time of this printing.

Halliburton

According to a 1997 Press Release, Halliburton "received a Letter of Intent from Petronas Carigali (Turkmenistan) SDN. BHD. to provide integrated drilling services for an exploration and appraisal program in the Caspian Sea beginning in late 1997".³²⁴ Crude Accountability could find no further information on these services and an inquiry submitted to the company was not answered as of this printing.

Integra Group

The Integra Group, based in Moscow, comprises over 40 Russian oilfield services and petroleum engineering companies. In November 2007, Integra participated in an oil and gas exhibition in Ashgabat, at which time the Head of Integra "spoke about the great possibilities of developing the company's business in Turkmenistan and strengthening partnership with major Russian and foreign companies".³²⁵ The Integra Group of Companies opened a representative office in Turkmenistan in April 2008.³²⁶

Weatherford International Oilfield Services

The company lists an Ashgabat address on its website but does it is unclear for which oil fields the company is employed.³²⁷ Weatherford was a "Bronze Sponsor" of the 13th Turkmenistan International Oil and Gas Conference in Ashgabat in November 2008.³²⁸

Appendix 3

Questions About Civil Society

1. Have there been any changes in the government's behavior towards, or dealing with, civil society since President Berdymukhammedov took office? Please describe any differences you have observed.
 2. What has stayed the same in the relationship between the government and civil society in comparing the governments of Berdymukhammedov and Niyazov?
 3. Do you think there are likely to be reforms to the NGO Law of 2003 anytime soon? What do you think would be the nature of the reforms? What would need to happen for reforms to be made? Who would need to be involved?
 4. How many NGOs are officially registered in TK? How many of these are GoNGOs? How many of these are environmental?
 5. Can and should Turkmenistani NGOs and civil society impact the nature of international corporate investment in the hydrocarbon sector? If so, how? If not, why not?
 6. What sort of support does civil society receive from the "outside" world?
 7. How would you characterize the past five years for civil society in Turkmenistan?
 8. How do you see the future for civil society for the next five years in TK?
 9. What other comments do you have regarding civil society in Turkmenistan?
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¹¹⁰Aarhus Convention Compliance Committee Data Sheet, Turkmenistan, <http://www.unece.org/env/pp/pubcom.htm>, accessed June 17, 2008. Article 3.9 of the Aarhus Convention states, "Within the scope of the relevant provisions of this Convention, the public shall have access to information, have the possibility to participate in decision-making and have access to justice in environmental matters without discrimination as to citizenship, nationality or domicile and, in the case of a legal person, without discrimination as to where it has its registered seat or an effective centre of its activities." <http://www.unece.org/env/pp/documents/cep43e.pdf>, accessed September 10, 2008.

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¹¹⁷Richard Stone, "A New Great Lake—or Dead Sea?" *Science Magazine*, Vol. 320 May 23, 2008, p. 1005, www.sciencemag.org.

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¹¹⁹*Ibid.*

¹²⁰One of these cases, that of Farid Tukhbatullin, was covered in Crude Accountability's September 2007 report, "Turkmenistan's Environmental Risks In the Era of Hydrocarbon Development," which is available in PDF format on the website: <http://www.crudeaccountability.org/en/index.php?page=turkmenistan>. More information about Farid Tukhbatullin's case can also be found at:

<http://www.amnestyusa.org/document.php?lang=e&id=95DDA56D6595DEF880256FD50042ED18>. The 2007 report also describes the death of Olgusapar Muradova, an independent journalist, who died in prison under suspicious circumstances.

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About Crude Accountability

Crude Accountability is an environmental justice organization active in the Caspian region since 2003. Its founders and staff have been working in the former Soviet Union, and with a particular focus on Central Asia and the Caucasus, since the early 1990s. Crude Accountability works in close partnership with environmentalists and civil society activists in the littoral states of the Caspian region on a number of projects, including campaigns for improved environmental conditions and compliance with national legislation and international conventions in communities adversely impacted by hydrocarbon development. Crude Accountability focuses its campaigns on the local level, bringing the concerns and demands of community activists to the international arena. We provide those who live closest to environmentally harmful projects with an opportunity to address those in power whose decisions impact their lives, including World Bank representatives, government officials, and corporate executives. For more information about Crude Accountability's work, please visit our website at www.crudeaccountability.org.

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