

Iran's Chinese Energy Partners

Companies Eligible for Investigation
Under U.S. Sanctions Law

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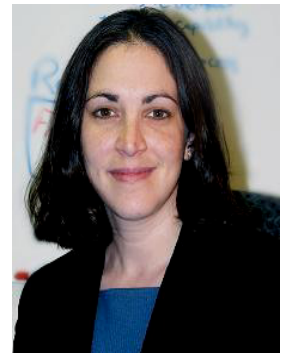
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About The Iran Energy Project

The Iran Energy Project is an initiative of the Foundation for Defense of Democracies (FDD). **Iranenergyproject.org** provides research and analysis that identifies Iran's energy vulnerabilities as part of a comprehensive sanctions strategy to end the Iranian regime's nuclear weapons program, support for terrorism, and human rights abuses. The Iran Energy Project also analyzes the prominent role of the Islamic Revolutionary Guard Corps in Iran's energy industry.

Companies still doing business with Iran now risk being sanctioned by the United States, the European Union, Canada, Australia, Japan, and South Korea. The Iran Energy Project tracks these companies using available open sources and publishes its findings on a website that is free to the public. The website also provides breaking news, critical analysis, and relevant legislation.

In recent months, many of Iran's major energy partners have ended their business ties with Iran. To assist government officials with effective sanctions enforcement, the Iran Energy Project provides updates on companies that remain in the Iranian energy sector, as well as those that resume their business ties.

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Executive Summary

The Obama administration is expected soon to blacklist foreign energy companies for doing prohibited business with Iran. Many U.S. policymakers understand that without meaningful sanctions enforcement, there will be little possibility of peacefully changing the Iranian regime's behavior with respect to its nuclear weapons program, human rights abuses, and support for terrorism.

Robert Einhorn, the State Department's top official on Iran sanctions enforcement, has highlighted between \$50 and \$60 billion in upstream energy projects in Iran that have been terminated or put on hold because of the threat of sanctions. This figure mostly reflects the decisions of European firms. Germany, Italy, and France, Iran's most important European trade partners, have recently developed a fragile political consensus in favor of tougher sanctions; their business communities, however, have not. These European businesses are concerned that Chinese companies will snap up their voided Iranian contracts.

As a result, the Obama administration faces a choice: Maintain the broadest coalition possible, with Chinese companies punching enormous holes in the sanctions regime, or punish Beijing for undermining the international community's policy toward Tehran. If the U.S. does not counter Beijing, then the progress the administration has made with the Europeans, Japanese, South Koreans, Canadians and Australians, as well as the scores of companies that have terminated their business ties with Iran, could unravel.

In the past, the U.S. government has blacklisted numerous Chinese entities for engaging in Iran-related proliferation activities. Chinese companies have a long history of challenging U.S. law, and the U.S. government has frequently succeeded in gathering sufficient information to meet the necessary evidentiary standards for sanctioning Chinese companies. Indeed, the U.S. government has sanctioned numerous Chinese companies

(including state-owned Chinese entities) without causing grievous harm to the broader U.S.-China relationship. Appendix A outlines the numerous Chinese entities sanctioned by the U.S. government as a result of their Iran-related activities.

FDD's Iran Energy Project has identified numerous Chinese companies that are active in Iran's energy sector. These companies' actions warrant further investigation under the *Comprehensive Iran Sanctions, Accountability, and Divestment Act* (the "*Comprehensive Act*") signed into law on July 1, 2010, and the *Iran and Libya Sanctions Act of 1996* (amended in 2006 to the *Iran Sanctions Act*). These laws target investment in, and the transfer of goods, services, and technology to, Iran's oil, natural gas, and refined petroleum sectors, and provide for tough penalties on foreign energy companies that do business there.

The goal of these laws is to persuade foreign companies to terminate their investment activities and other forms of support for the Iranian energy sector, which are a major source of funding for the Iranian regime. The *Comprehensive Act* expands energy sanctions authority under the *Iran Sanctions Act* to focus, for the first time, on Iran's gasoline trade as an area of vulnerability for Tehran, which depends on foreign suppliers for approximately 30 percent of its gasoline needs.

The legislation complements recently adopted European Union sanctions that target investment in, as well as the sale of technology and technical expertise to, Iran's energy sector, especially Tehran's reliance on Western technology for the development of its enormous natural gas resources. The *Comprehensive Act* also expands the definition of a sanctionable "investment" in the *Iran Sanctions Act* to include the provision of goods, services and technology to the Iranian oil and natural gas sectors. By doing so, it provides a legal basis for the Obama administration to sanction, in certain circumstances, foreign firms that pursue equipment, services and

technology deals in a manner that gives them ongoing participatory interests in Iranian energy projects.

The *Comprehensive Act* provides no company with an *a priori* exemption from the application of sanctions provisions, requires the administration to launch timely and credible investigations into sanctionable activities, and gives the President broad discretion to waive sanctions on national security grounds.

FDD collected its information about these Chinese companies from open source reports. The information is carefully sourced and footnoted, but

far from exhaustive. Rather, it provides a glimpse into how these Chinese companies do business with Iran and, in some cases, the United States and Canada, through their North American business interests, and even federal government contracts.

FDD's Iran Energy Project maintains a more comprehensive list of international companies operating in Iran's energy sector at www.iranenergyproject.org.

Drawing from this list, FDD has identified the following Chinese companies as having substantial operations in Iran:

COMPANY	ACTIVITY IN IRAN
China National Offshore Oil Company (CNOOC)	Exploration & Production
China National Petroleum Company (CNPC)	Exploration & Production; Gasoline Supply
Shanghai Zhenhua Heavy Industry (ZPMC)	Technology & Equipment Supply
China Petroleum & Chemical Corporation (Sinopec)	Exploration & Production; Gasoline Supply
Zhuhai Zhenrong Corporation	Gasoline Supply
The Kerui Group	Equipment; Engineering Services
Kingdream PLC	Technology & Equipment Supply
Panyu Chu Kong Steel Pipe Company, Ltd.	Technology & Equipment Supply
Shanghai Sunry Petroleum Equipment Company, Ltd.	Technology & Equipment Supply

Introduction

President Obama faces a critical decision in the coming months. Will he sanction Chinese companies that continue to violate U.S. energy sanctions against Iran? And, if not, could it mean the dissolution of the Iran sanctions regime his administration and Congress worked so admirably to construct over the past year and a half, before it has a chance to pressure Iran's leaders?

Some will argue that the U.S. cannot afford the diplomatic and economic fallout that would surely result from imposing stiff sanctions against Chinese companies.

Moreover, after spending significant political capital to secure China's support for the recently-adopted UN Security Council Resolution 1929, some will say that now is not the time to cross Beijing. Opponents of tough sanctions will make that case that Beijing could retaliate by accelerating its activities in Iran; opening Hong Kong and other coastal areas as transshipment points to Iran; blocking further action against Iran at the UN Security Council or the International Atomic Energy Agency; or retaliating against vital U.S. economic and security interests elsewhere.

Wouldn't it be better, critics may ask, to sanction companies from less politically sensitive countries to show that the Obama administration is serious about enforcement without picking a fight with Beijing?

Other countries of concern include Russia, India, Turkey, Venezuela, Malaysia, Thailand and South Africa, whose companies continue to do business in the Iranian energy industry. Japan, Australia and South Korea recently have passed their own sanctions and now need to demonstrate that they are serious about enforcement by persuading their own companies to terminate their Iranian ties. Furthermore, if European countries are not committed to enforcing their own sanctions, companies from

Germany, Italy, France, the Netherlands, Austria, Sweden, Switzerland, Norway and Denmark are also possible targets for U.S. enforcement.

With the possible exception of Russia, however, no other country is more important to the effective enforcement of Iran energy sanctions than China. No other country, including America's most stalwart allies, will force its companies to abandon lucrative opportunities in Iran if Chinese firms take their stakes in every deal. And sanctioning less politically sensitive countries could backfire by sending a message that the U.S. is interested in symbolic sanctions rather than meaningful ones.

In the end, the U.S. will set the bar: If it refuses to sanction the most egregious violators, others may do little to help enforce sanctions. But China has strong ties to Iran and its growing dependence on Iranian energy makes it more difficult to persuade Chinese energy companies—most of which are state-controlled—to terminate their Iranian business relationships.

This report examines China's energy needs, Iran's growing dependence on China to develop its energy sector, the critical energy areas in which China cannot easily replace Western companies, and the specific energy-related deals between Chinese companies and Iran. Finally, this report highlights the Chinese companies that are most active in the Iranian energy industry, and notes their North American business operations—potential points of leverage for the U.S. and Canadian governments, which both recently passed energy sanctions laws against Iran.

China's Energy Sector

Since the 1990s, China's role in global energy markets has increased dramatically. Between 2000 and 2008, China enjoyed an average annual GDP growth of 10 percent, peaking at 13 percent in 2007.¹

¹ U.S. Energy Information Administration, "China," *Country Analysis Briefs*, July 2009, p. 1. (<http://www.eia.doe.gov/cabs/China/pdf.pdf>)

To fuel this growth, China has had to import substantial amounts of energy. Accordingly, by 2006, it was the world's third-largest net importer of oil.² In 2008, according to the U.S. Energy Information Administration, China consumed an estimated 7.8 million barrels of oil per day, of which it imported 3.9 million, "making it the second-largest oil consumer in the world behind the United States."³

China's growth is expected to continue. The International Energy Agency predicts that China will overtake the U.S. after 2025 as the world's largest purchaser of imported oil and gas.⁴

To support this growth in long-term energy demand, China launched a "going out" policy that encouraged its national energy companies to invest in upstream projects overseas in an effort to secure long-term resources.⁵ Through this policy, Chinese firms have increasingly invested in oil and gas exploration and production projects in a variety of countries, including Iran. The Chinese companies detailed in this report illustrate this trend.

These companies have invested in Iran's oil and natural gas sectors, provided Iran with key energy equipment, technology and services, supplied Iran with refined petroleum, and purchased Iranian petroleum products.

Iran's Energy Sector

The reasons are obvious why China has an interest in working with the Iranian energy sector. Iran

holds the world's third-largest proven oil reserves and has natural gas reserves second only to Russia's.⁶ Oil export revenues constitute more than 24 percent of Iran's gross domestic product,⁷ according to U.S. Government Accountability Office estimates, 80 percent of its export earnings,⁸ and up to 76 percent of its government revenues.⁹ Yet, in spite of the country's enormous reserves of natural resources, Iran's energy infrastructure is rusting. *The Wall Street Journal* noted that "Iran's beleaguered oil industry could be on its way to passing an ignominious milestone: being replaced [by 2015] by its onetime nemesis, Iraq, as the Middle East's second-biggest oil producer."¹⁰

Iran's energy infrastructure sustained heavy damage during the Iran-Iraq War (1980-1988), and while Tehran has sought international partners to help rebuild and modernize it, the threat of energy sanctions has had a serious impact. According to a 2009 Congressional Research Service report, the mere possibility of sanctions has "constrained Iran's energy sector significantly."¹¹ The U.S. State Department estimates that \$50 to \$60 billion in Iranian oil and gas development projects have been terminated or put on hold in recent years, primarily by European companies, as a result of the threat of sanctions.¹²

Owing to its inadequate refinery capacity, Iran has also been unable to produce sufficient amounts of refined fuels to meet growing demand, forcing it to import approximately 30 percent of its gasoline from foreign suppliers. The gasoline trade has also come under significant strain as the

² Ibid.

³ Ibid.

⁴ International Energy Agency, "World Energy Outlook 2009," 2009, p. 7. (http://www.worldenergyoutlook.org/docs/weo2009/WE02009_es_english.pdf)

⁵ Carrie L. Currier and Manojeh Dorraj, "Lubricated with Oil: Iran-China Relations in a Changing World," *Middle East Policy*, Summer 2008. (Accessed via Nexis)

⁶ U.S. Energy Information Administration, "Iran," *Country Analysis Briefs*, January 2010, p. 1. (<http://www.eia.doe.gov/emeu/cabs/Iran/pdf.pdf>)

⁷ Joseph A. Christoff, "Iran Sanctions: Firms Reported to Have Commercial Activity in the Iranian Energy Sector and U.S. Government Contracts," *Testimony before the Senate Homeland Security and Governmental Affairs Committee*, May 12, 2010. (<http://www.gao.gov/new.items/d10721t.pdf>)

⁸ U.S. Energy Information Administration, "Iran," *Country Analysis Briefs*, January 2010, p. 7. (<http://www.eia.doe.gov/emeu/cabs/Iran/pdf.pdf>)

⁹ Joseph A. Christoff, "Iran Sanctions: Firms Reported to Have Commercial Activity in the Iranian Energy Sector and U.S. Government Contracts," *Testimony before the Senate Homeland Security and Governmental Affairs Committee*, May 12, 2010. (<http://www.gao.gov/new.items/d10721t.pdf>)

¹⁰ Spencer Swartz and Benoît Faucon, "Iran's Falling Oil Output Means Less Revenue, Clout," *The Wall Street Journal*, June 26, 2010. (<http://online.wsj.com/article/SB10001424052748704569204575328851816763476.html>)

¹¹ Kenneth Katzman, "The Iran Sanctions Act," *Congressional Research Service*, June 4, 2009, p. 4. (<http://italy.usembassy.gov/pdf/other/rs20871.pdf>)

¹² Robert J. Einhorn, "Implementation of Iran Sanctions," *House Committee on Oversight and Government Reform*, July 29, 2010. (<http://www.state.gov/t/isn/rls/rm/145348.htm>)

threat of sanctions has reportedly caused Iran's main suppliers to cut their shipments. Gasoline shipments to Iran fell by 50 percent between May and July 2010, and almost 90 percent from August 2009 to August 2010.¹³ Prices for gasoline imports have also increased by approximately 25 percent, as suppliers have demanded higher premiums from Iran for their willingness to risk sanctions.¹⁴

China – Iran Energy Trade

China and Iran have rapidly expanded their energy ties. As Iran moves forward with its illicit nuclear program and international competitors exit the Iranian market, China has become one of the few countries willing to continue its operations in Iran's energy sector.

China and Iran first established diplomatic relations in August 1971.¹⁵ The relationship continued even after the 1979 Islamic revolution. In 2000, Beijing and Tehran signed a joint communiqué agreeing to increase bilateral cooperation.¹⁶ In 2009, bilateral trade between the two countries reached \$21.2 billion, up from \$14.4 billion three years earlier.¹⁷ China first imported crude oil from Iran in 1974.¹⁸ Today, Iran is China's third-largest crude oil supplier, behind Saudi Arabia and Angola, accounting for 11 percent of its supply.¹⁹ Crude oil accounts for roughly 80 percent of Iran's exports to China.²⁰

In 2009, China surpassed the European Union as Iran's largest trading partner, according to the *Financial Times*, with bilateral trade of \$36.5 billion.²¹ In March 2009, the National Iranian Oil Company (NIOC), a company designated by the U.S. Treasury as an entity owned or controlled by the government of Iran,²² opened an office in Beijing.²³ To support its relations with China, Iran opened its first commerce center in Shanghai in 2009 and it has plans for four more commerce centers throughout China.²⁴

In August 2010, Iranian oil minister Masoud Mir-Kazemi visited Beijing for investment and trade talks and met with executives from Zhuhai Zhenrong – China's Iranian crude lifter.²⁵ The visit occurred after the UN Security Council imposed new sanctions against Iran. In the same month, the Iranian press announced that a consortium of Chinese and Australian firms had won a contract worth as much as \$750 million to develop three Iranian oil fields in the southern Bushehr province.²⁶

China and Iran's Oil Industry

When China looks at Iran's enormous untapped energy reserves, it sees multiple opportunities to develop, extract and produce the resources it needs. As Carrie L. Currier and Manochehr Dorraj write in *Middle East Policy*, "Given the proper amount

¹³ Alaric Nightingale, "Iran's Gasoline Imports Decline 50% After Sanctions, EMC Says," *Bloomberg*, August 2, 2010. (<http://www.iranenergyproject.org/1286/irans-gasoline-imports-decline-50-after-sanctions>) and "Iran Fuel Imports Set to Fall 90pc in Aug," *Reuters*, August 19, 2010. (<http://www.iranenergyproject.org/1465/iran-fuel-imports-set-to-fall-90pc-in-aug>)

¹⁴ David Sheppard and Humeyra Pamuk, "Exclusive-Update 2-Iran Pays 25 pct More for Gasoline," *Reuters*, August 5, 2010. (<http://www.iranenergyproject.org/1317/exclusive-update-2-iran-pays-25-pct-more-for>)

¹⁵ Carrie L. Currier and Manochehr Dorraj, "Lubricated with Oil: Iran-China Relations in a Changing World," *Middle East Policy*, Summer 2008. (Accessed via Nexis)

¹⁶ Cherie Canning, "Pursuit of the Pariah: Iran, Sudan and Myanmar in China's Energy Security Strategy," *Security Challenges*, February 2007, p. 56. (<http://www.securitychallenges.org.au/ArticlePDFs/vol3no1Canning.pdf>)

¹⁷ Laurent Maillard, "China Takes Over from West as Iran's Main Economic Partner," *AFP*, March 15, 2010. (<http://www.google.com/hostednews/afp/article/ALeqM5h1e1RZxX3uwz8Zc7Ez7SFDR6X4cg>)

¹⁸ Carrie L. Currier and Manochehr Dorraj, "Lubricated with Oil: Iran-China Relations in a Changing World," *Middle East Policy*, Summer 2008. (Accessed via Nexis)

¹⁹ Ibid; drawing from Mohamed Bin Huwaidin, *China's Relations with Arabia and the Gulf* (Routledge-Curzon, 2002), pp. 153-154.

²⁰ Ibid.

²¹ "China Passes EU in Trade with Iran," *UPI*, February 9, 2010. (http://www.upi.com/Science_News/Resource-Wars/2010/02/09/China-passes-EU-in-trade-with-Iran/UPI-55541265737793/)

²² U.S. Department of the Treasury, Office of Foreign Assets Control, "Iran: What You Need to Know About U.S. Economic Sanctions." (<http://www.treasury.gov/offices/enforcement/ofac/programs/iran/iran.pdf>)

²³ "IOC Opens Beijing Office," *Upstream Online*, March 9, 2009. (<http://www.upstreamonline.com/live/article173716.ece>)

²⁴ "Iran Opens New Trade Centers in China," *Press TV* (Iran), April 21, 2010. (<http://www.presstv.ir/detail.aspx?id=123941§ionid=3510213>)

²⁵ "Iran Oil Min Visits China for Investment, Trade Talks," *Reuters*, August 4, 2010. (<http://www.iranenergyproject.org/1307/iran-oil-min-visits-china-for-investment-trade>)

²⁶ "Chinese-Australian Consortium To Develop 3 Iranian Oil Fields," *Mehr News Agency* (Iran), August 15, 2010. (<http://www.iranenergyproject.org/1399/chinese-australian-consortium-to-develop-3>)

of investment and technology, Iran would have the capacity to boost its production substantially and become an even larger provider of energy for China.”²⁷

In recent years, Chinese companies have increasingly invested in both upstream and downstream energy projects in Iran, primarily through large state-owned companies like the China National Petroleum Corporation (CNPC) and Sinopec. CNPC is active at a number of sites in Iran, including the Masjed-i-Suleiman, North Azadegan, South Azadegan, and Kuhdasht oil fields, as well as in the South Pars gas field. Balancing CNPC’s heavy involvement in upstream activities, Sinopec has also been working to help increase Iran’s petroleum refining capacity.

By helping Iran develop its oil and gas reserves, China ensures continued access to meet its energy needs. In July 2010, Iran’s deputy oil minister Hossein Noqrehkar Shirazi stated that China had invested approximately \$40 billion in Iran’s energy sector, that “the volume (of Chinese investment) in upstream projects is \$29 billion,” and that China had signed roughly \$10 billion worth of contracts with Iran for petrochemicals, refineries and pipeline projects.²⁸

Despite these impressive numbers, Iranian government claims are often notoriously unreliable. It is also difficult to determine from Chinese sources which of these deals have moved beyond a letter of intent. As Erica Downs of the Brookings Institution notes,

“It’s also not clear that Chinese companies

are in any rush to actually pump large sums of money into Iran. Unfortunately for Tehran, these firms have a history of signing agreements for projects in which they have no intention of making substantial investments until after sanctions are lifted and geopolitical risks reduced.”²⁹

In addition to investing heavily in developing Iran’s hydrocarbon resources, China also purchases them. In 2009, China imported around 460,000 barrels per day (bpd) of crude oil from Iran, “about 15 percent more than contracted supplies.”³⁰ However, China’s imports of Iranian crude dropped in 2010 as China moved to reduce its dependence on Iran. During the first half of 2010, while remaining Iran’s third largest supplier, Iran reportedly delivered 9 million tons of crude oil to China, a 31.2 percent drop in its supply over the same time period in the previous year.³¹

China and Iran’s Natural Gas Industry

China also sees opportunities to invest in Iran’s growing natural gas industry. In 2007, natural gas comprised only 3 percent of China’s energy usage.³² However, the Chinese government has plans to increase this percentage to 10 percent by 2020.³³ This will require China to import increasing amounts of natural gas and develop a domestic infrastructure for processing and distribution.³⁴ In 2005, China did not have the infrastructure to import natural gas.³⁵ However by the end of 2009, China had three liquefied natural gas (LNG) import terminals in operation, two in the process of being built and several more in the planning stages.³⁶

²⁷ Carrie L. Currier and Manochehr Dorraj, “Lubricated with Oil: Iran-China Relations in a Changing World,” *Middle East Policy*, Summer 2008. (Accessed via Nexis)

²⁸ “China Investment in Iran Oil Sector Put at \$40b,” *AFP*, July 31, 2010. (<http://www.omantribune.com/index.php?page=news&id=73908&heading=Other%20Top%20Stories>)

²⁹ Erica Downs, “Beijing’s Tehran Temptation,” *Foreign Policy*, July 30, 2009. (http://www.foreignpolicy.com/articles/2009/07/30/chinas_tehran_temptation?page=full)

³⁰ FACTBOX-Iran’s Crude Export and Fuel Import Customers,” *Reuters*, April 13, 2010. (<http://www.reuters.com/article/idUSLDE63A01120100413>)

³¹ “FACTBOX-Ties binding China and Iran,” *Reuters*, August 5, 2010. (<http://af.reuters.com/article/energyOilNews/idAFTOE67403820100805?sp=true>)

³² U.S. Energy Information Administration, “International Energy Outlook 2010,” July 2010, p.44. (<http://www.eia.doe.gov/oiaf/ieo/pdf/0484%282010%29.pdf>)

³³ Ibid.

³⁴ U.S. Energy Information Administration, “Country Analysis Briefs: China,” July 2009. (<http://www.eia.doe.gov/cabs/China/NaturalGas.html>)

³⁵ U.S. Energy Information Administration, “International Energy Outlook 2010,” July 2010, p.54. (<http://www.eia.doe.gov/oiaf/ieo/pdf/0484%282010%29.pdf>)

³⁶ Ibid.

While this presents an opportunity for Iran as a natural gas supplier, Iran does not currently have the infrastructure to liquefy and transport its natural gas to China.

China currently has natural gas import contracts with Australia, Indonesia, Malaysia, and Qatar, with no one country contracted to provide more than 37 percent of China's imported natural gas.³⁷ These countries have been able to meet China's natural gas needs as they have the infrastructure to export the gas. In addition to building its infrastructure to import LNG, China is also pursuing natural gas pipeline projects, including some with Kazakhstan and Turkmenistan which were completed in 2009. An additional pipeline from Myanmar is scheduled to be complete in 2013. China is also discussing two pipeline projects with Russia with deliveries currently set to begin in 2014-2015.

While China has signed contracts with Iran to import LNG, little progress has been made on the deals. While China can play a significant role in providing Iran with capital to develop its natural gas reserves, Chinese companies cannot provide critical technology. As Erica Downs notes:

“Chinese firms—and their Iranian counterparts—do not have the technology needed to liquefy Iran's natural gas and can't gain access to it due to U.N. and U.S. sanctions. Although Chinese companies are working to develop their own such technology, it will probably take them several years to match that of the major international oil companies. Additionally, Chinese companies lack experience in managing large, complex projects like gas liquefaction ventures.”³⁸

For its own LNG infrastructure, China has relied on European and American firms. As an example, China National Offshore Oil Corporation (CNOOC) teamed up with BP to build China's first LNG terminal in Guangdong province.³⁹

Most of the companies that own the rights to the liquefied natural gas (LNG) technologies that make gas cheaper to transport are American or European - German, in particular. The sanctions that the EU enacted in July 2010 prohibit the transfer of technology and technical assistance to Iran's energy sector, making it difficult for Iran, and Chinese companies working there, to access critical LNG equipment. These sanctions are already having an impact: Iran recently suspended two major LNG projects, and announced that it will instead prioritize the use of pipelines to distribute its natural gas.⁴⁰ This decision was made despite a May 2010 announcement that Iran was planning to purchase six liquefied natural gas (LNG) tankers from China, each costing over \$200 million.⁴¹

This is a major problem for Iran: Oil can easily be transported by pipeline. But Iran needs to liquefy its natural gas to transport it by tanker to liquefaction terminals in far-off markets in Asia and Europe, where it can be reconverted into gas before distribution to end-users. Without LNG technology from Europe, Iran can only sell as much natural gas as it can distribute through its pipelines.

To reach important markets in Europe, India and Pakistan, Iran needs access to pipeline projects including the Nabucco pipeline from Turkey to Austria and the India-Pakistan-Iran (IPI) pipeline. Iranian participation in both projects remains highly uncertain. The Nabucco project partners recently announced that they will not use Iranian natural gas.⁴² Although Iran and Pakistan signed

³⁷ Ibid.

³⁸ Erica Downs, “Beijing's Tehran Temptation,” *Foreign Policy*, July 30, 2009. (http://www.foreignpolicy.com/articles/2009/07/30/chinas_tehran_temptation?page=full)

³⁹ “CNOOC Eyes LNG Future,” *China Daily*, March 15, 2005. (<http://hyconference.edu.cn/english/BAT/122832.htm>)

⁴⁰ Jay Deshmukh, “Iran Drops LNG Project Under Energy Policy Review,” *AFP*, August 7, 2010. (<http://www.iranenergyproject.org/1333/iran-drops-lng-project-under-energy-policy-review>) and “Iran Reconsiders Second LNG Project,” *AFP*, August 12, 2010. (<http://www.iranenergyproject.org/1351/iran-reconsiders-second-lng-project>)

⁴¹ “Economic Performance: Iran to Buy Chinese LNG Tankers,” *Country Report Select*, June 10, 2010. (Accessed via Nexis)

⁴² “No Iran Role in Nabucco ‘at this Stage,’” *UPI*, August 11, 2010. (<http://www.iranenergyproject.org/1369/no-iran-role-in-nabucco-at-this-stage>)

a final agreement on the IPI project in June 2010, India has backed out of negotiations, though it has not officially withdrawn from the project.⁴³ Without an LNG option, China could remain out of reach of Iran's natural gas.

Chinese companies can help Iran build pipelines or supply it with LNG tankers, but they do not yet have the technology or expertise to build gas liquefaction terminals overseas. While this limits China's ability to support Iran's energy sector, Chinese companies can still undermine sanctions in key areas of the Iranian energy economy.

China and Iran's Gasoline Trade

In the gasoline trade, six companies have been Iran's primary providers: the Swiss-Dutch energy trading giants Vitol and Trafigura, the Indian multinational Reliance Industries, the Swiss trader Glencore, the Dutch-British energy firm Shell, and the French energy firm Total. All of these companies — many with long-standing ties to Iran — have reportedly terminated gasoline sales to Iran, or elected not to enter into new trading agreements with it.⁴⁴ Other suppliers, Malaysia's Petronas and Kuwait's Independent Petroleum Group, have also reportedly stopped their sales.⁴⁵

Chinese companies have recently stepped in to fill the void. Chinaoil, the trading arm of China National Petroleum Corporation (CNPC), had not delivered

gasoline to Iran since January 2009, but in April 2010, it sold two shipments to Iran.⁴⁶ The same month, Unipec, the trading arm of Sinopec—the China Petroleum and Chemical Corporation—also resumed gasoline sales to Iran, after a nearly six-year hiatus.⁴⁷ According to *Reuters*, China's Zhuhai Zhenrong has been shipping a cargo or two of gasoline to Iran each month for at least a year,⁴⁸ sometimes in cooperation with Russia's Litasco, the trading arm of Lukoil.⁴⁹

China's Position on Targeting Iran Through Sanctions Laws

China generally opposes sanctions in principle,⁵⁰ but it reluctantly agreed to support UN Security Council resolutions against Iran. In September 2009, Chinese foreign ministry spokeswoman Jiang Yu remarked "China always believes that sanctions and pressure should not be an option and will not be conducive to the current diplomatic efforts over the Iran nuclear issue."⁵¹

Despite this expressed reluctance, China supported the recently adopted UN Security Council Resolution 1929, whose preamble emphasized "the potential connection between Iran's revenues derived from its energy sector and the funding of Iran's proliferation-sensitive nuclear activities."⁵² The resolution also expressed concern that "chemical process equipment and materials required for the petrochemical industry have much in common with

⁴³ M Azizur Rahman, "Govt Wants Details on Iranian Offer for Cross-Border Gas Pipeline," *The Financial Express* (Bangladesh), September 14, 2010. (http://www.thefinancialexpress-bd.com/more.php?news_id=111762&date=2010-09-14) and "Iran Inaugurates New Cross-Country Gas Pipeline," *PTI* (India), August 24, 2010. (<http://ibnlive.in.com/generalnewsfeed/news/iran-inaugurates-new-crosscountry-gas-pipeline/257264.html>)

⁴⁴ Luke Pachymuthu and Chen Aizhu, "UPDATE 1-China Zhenrong Resumes Gasoline Sales to Iran," *Reuters*, July 26, 2010. (<http://www.reuters.com/article/idUKLDE66P1DD20100726>) and Carola Hoyos and Javier Blas, "Total Moves to Tighten Screw on Tehran," *Financial Times*, June 27, 2010. (<http://www.ft.com/cms/s/0/9a90e994-8207-11df-938f-00144feabd0c.html>)

⁴⁵ Niluksi Koswanage and Luke Pachymuthu, "Petronas Halts Fuel Sales to Iran as Sanctions Loom," *Reuters*, April 15, 2010. (<http://www.iranenergyproject.org/385/petronas-halts-fuel-sales-to-iran-as-sanctions>) and Bill Murray and Paul Sampson, "Iran Sanctions Foster Bipartisan Support in US Congress," *International Oil Daily*, April 30, 2010. (<http://www.iranenergyproject.org/524/iran-sanctions-foster-bipartisan-support-in-us>)

⁴⁶ Luke Pachymuthu and Seng Li Peng, "Exclusive: China's Top Oil Firms Sell Gasoline to Iran-Trade," *Reuters*, April 14, 2010. (<http://www.iranenergyproject.org/373/exclusive-chinas-top-oil-firms-sell-gasoline-to>)

⁴⁷ *Ibid.*

⁴⁸ "China Firms Selling Fuel to Iran as U.S. Sanctions Loom," *Reuters*, September 23, 2009. (<http://www.reuters.com/article/idUSTRE58M1BK20090923>)

⁴⁹ Luke Pachymuthu and Vladimir Soldatkin, "Russia's LUKOIL Resumes Gasoline Supply to Iran – Trade," *Reuters*, August 11, 2010. (<http://www.iranenergyproject.org/1368/russias-lukoil-resumes-gasoline-supply-to-iran>)

⁵⁰ Willem van Kemenade, "China vs. the Western Campaign for Iran Sanctions," *The Washington Quarterly*, July 2010, p. 100. (http://www.twq.com/10july/docs/10jul_vanKemenade.pdf)

⁵¹ *Ibid.*, p. 102.

⁵² UN Security Council, 6335th Meeting, "Resolution 1929 (2010)," June 9, 2010, p. 3. (http://www.defenddemocracy.org/images/UNSC_Resolution_1929_6_9_10.pdf)

those required for certain sensitive nuclear fuel cycle activities.”⁵³

While supporting Resolution 1929, China made it clear that its companies will continue to do business in the Iranian energy sector. Since the U.S., EU, Canada, and Australia imposed new sanctions on Iran, Chinese officials have continued meeting with Iranian officials on joint energy projects. During Iranian oil minister Masoud Mir-Kazemi’s trip to Beijing in August 2010, he and Chinese officials pledged publicly to continue their cooperation.⁵⁴

Recommendations

Persuading Chinese companies to end their business in Iran should be a top priority for the Obama administration. The administration should continue encouraging China’s other energy partners to help the Chinese meet their energy needs through other means. In spring 2010, Saudi foreign minister Saud al-Faisal assured China that his country would be able to meet China’s energy requirements should Beijing reduce its reliance on Iranian energy at the urging of U.S. Secretary of State Hillary Clinton.⁵⁵ While this should only be considered as a short term solution given the potential risks to U.S. security interests from a more expansive Sino-Saudi relationship, this approach appears to have had some impact: Chinese purchases of Iranian crude oil have dropped by 31.2 percent during the first half of 2010 from the previous year while Chinese purchases from Saudi Arabia increased by nearly 25 percent year on year during the first half of 2010.⁵⁶

In addition, as this report details, Chinese firms have extensive business operations in the United States and Canada, which afford Washington and Ottawa an opportunity to put them to a choice between Iranian and North American energy deals.

Canada has a particularly important role to play to achieve this objective given the prominent role of Chinese companies in Canada’s energy sector.

On July 22, 2010, the government of Canada passed regulations under the *Special Economic Measures Act* (SEMA) with respect to Iran.⁵⁷ The regulations include prohibitions on arms exports, goods that could be used to refine oil and gas or contribute to Iran’s proliferation activities, new investments in Iran’s oil and gas sector, and financial services relationships with Iranian banks. The regulations, however, apply only to “any person in Canada and any Canadian outside Canada.” As a result, a Chinese energy company doing business with Iran can claim that it is not subject to SEMA because its operations in Canada are carried on through a subsidiary and the parent is not “in Canada” within the language of SEMA. This legal distinction reduces Canada’s leverage over the numerous Chinese companies that operate in its jurisdiction.

The Obama administration should encourage Ottawa to use the energy sanctions laws it passed in July 2010 to compel Chinese companies to choose between operating in Canada’s lucrative energy sector and in Iran’s. But to do so, the Canadian government will need to address a major loophole in Canadian energy sanctions law that absolves foreign companies from liability if their parent companies operate in Iran and their subsidiaries operate in Canada.

The importance of a non-U.S. market like Canada illustrates the potential for increased leverage over these Chinese companies. Indeed, the 32 countries that recently have passed sanctions against Iran (the U.S., the 27-member European Union, Canada, Australia, Japan and South Korea) represent over a billion consumers, and, in the case of Canada and Australia, are also energy and natural resources

⁵³ Ibid.

⁵⁴ “China Pledges Iran Cooperation as Oil Minister Visits,” *AFP*, August 6, 2010. (<http://www.google.com/hostednews/afp/article/ALeQm5haEpe8jKNjmxCafj6B6WsoqovjA>)

⁵⁵ Aaron Mattis, “Oil Sheik-Down: Saudi Arabia’s Struggle to Contain Iran,” *Harvard International Review*, Spring 2010. (Accessed via Nexis)

⁵⁶ “FACTBOX-Ties Binding China and Iran,” *Reuters*, August 5, 2010. (<http://af.reuters.com/article/energyOilNews/idAFTOE67403820100805?sp=true>) and “China Cuts Iranian Crude Oil Imports by 30% in H1 2010,” *Tenders Info*, July 27, 2010. (Accessed via Nexis)

⁵⁷ “Special Economic Measures (Iran) Regulations,” Regulation No. SOR/2010-165, *Canada Gazette*, July 22, 2010. (<http://canadagazette.gc.ca/rp-pr/p2/2010/2010-08-04/html/sor-dors165-eng.html>) and “Special Economic Measures (Iran) Permit Authorization Order,” No. SOR/2010-166, *Canada Gazette*, July 22, 2010. (<http://canadagazette.gc.ca/rp-pr/p2/2010/2010-08-04/html/sor-dors166-eng.html>)

powerhouses. Increasingly, the choice for these Chinese companies should be between doing business with Iran and doing business with several much larger consumer and producer markets.

Enforcing sanctions against Chinese companies is not without precedent. The U.S. government has sanctioned many Chinese entities for providing nuclear-related equipment and technology to Iran. In particular, the *Iran, North Korea and Syria Nonproliferation Act* (“*INKSNA*”), signed into law in March 2000 as the *Iran Nonproliferation Act*, imposes sanctions against foreign individuals, entities and governments that engage in proliferation activities. Entities identified in violation may be subject to a number of measures, including ineligibility for government contracts, denial of U.S. government sales of any item from the U.S. Munitions List, and denial and/or suspension of export licenses.⁵⁸ Nearly 40 different Chinese companies have been sanctioned under *INKSNA* (See Appendix A). Given how hard Beijing fought—with some success—to have these designations lifted in exchange for Chinese support of UN Security Resolution 1929, it is clear that U.S. sanctions had some impact.

The growing presence of Chinese companies in the Iranian energy sector presents the Obama administration with a difficult choice: to sanction any Chinese company found in violation of Iran sanctions laws, or ignore the most flagrant violators of these laws, and in so doing, reduce the likelihood that the EU, Canada, Japan, South Korea, Australia and other countries will enforce their own energy sanctions.

Targeting any Chinese companies may present a significant political cost to the Obama administration, as Beijing is sure to respond in unpleasant ways. But given the state of Iran’s nuclear weapons program, and the limited time that remains for sanctions to stand a chance of changing the calculus of Iran’s

leaders, the choice is not between good and bad options but between bad and worse options.

If sanctions fail—as they may if the U.S. permits China to violate sanctions laws with impunity—the Obama administration will be left with two awful choices: a nuclear-armed Iran or a military strike to forestall that possibility. When that decision arrives, President Obama may not think it so difficult to have chosen to sanction Chinese companies.

Conclusion

The 10 companies listed in this report represent a cross-section of Chinese companies that are investing in Iran’s energy business, providing goods, technology and services or selling refined petroleum products to Iran, according to open-source reporting. While this list is not exhaustive, the Obama administration should investigate these companies for possible sanctions violations.

⁵⁸ 106th United States Congress, “Iran Nonproliferation Act,” March 24, 2000. (<http://www.govtrack.us/congress/bill.xpd?bill=h106-1883>)

CHINA NATIONAL OFFSHORE OIL COMPANY (CNOOC)

The China National Offshore Oil Company (CNOOC) is one of China's largest state-owned firms. Formed in 1982 to focus primarily on offshore crude oil and natural gas exploration and production, the company is active in Iran, the United States and Canada on its own and through subsidiary firms. Through CNOOC, China is diversifying its oil and gas supplies.

Iran

In December 2006, CNOOC signed a \$16 billion Memorandum of Understanding to develop the North Pars gas field and construct liquefied natural gas (LNG) facilities there over a period of eight years.¹ In May 2009, the company signed a contract for the project under which the company aims to produce 10 million tons of natural gas per year.²

As part of the agreement, CNOOC subsidiary firm CNOOC Service will use an offshore drilling platform "to explore the area for additional hydrocarbon resources," and supply its Iranian partners with drilling platforms in the future.³

As of August 2009, CNOOC and Iran were in ongoing talks.⁴

United States

CNOOC Limited, a subsidiary of CNOOC, has been listed on the New York Stock Exchange (NYSE: CEO) since February 2001.⁵ According to a CNOOC

Limited filing with the Securities and Exchange Commission (SEC), CNOOC indirectly owns 64.41 percent of CNOOC Limited's shares as of March 31, 2010.⁶ CNOOC had a market capitalization of \$79.36 billion as of September 9, 2010, which values CNOOC's 64.41 percent shareholdings at over \$51 billion.⁷

The parent company's Iranian ties should be of interest to shareholders of CNOOC Limited as well as U.S. regulators, and other interested parties. *The Comprehensive Iran Sanctions Accountability and Divestment Act of 2010* provides sanctions that could be applied to CNOOC including a prohibition against transactions in foreign exchange, a prohibition against credit or payments between CNOOC and any U.S. financial institution, and a prohibition against CNOOC from acquiring, holding or trading any U.S.-based property. This could impact CNOOC's business ties with CNOOC Limited as well as several small firms directly or indirectly owned by CNOOC including OOGC America, Inc, based in Delaware.

In 2005, CNOOC submitted a bid to buy the U.S. firm Unocal for \$18.5 billion. However, the company later withdrew its offer amid U.S. concerns regarding the sale.⁸

In late 2009, CNOOC signed an agreement with Norway's Statoil to become a stakeholder in four Gulf of Mexico oil field leases. In the deal, Statoil remains the operator of all four fields.⁹ CNOOC signed the agreement through its subsidiary, OOGC America,

¹ Sally Jones, "Iran and China's CNOOC Sign \$16 Billion Gas Deal," *Dow Jones Newswires*, December 20, 2006. (http://www.rigzone.com/news/article.asp?a_id=39363)

² Tamsin Carlisle, "China's Global Quest for Oil," *The National*, January 9, 2010. (<http://www.thenational.ae/apps/pbcs.dll/article?AID=/20100109/BUSINESS/701099907/1005>)

³ "CNOOC to Drill North Pars Natural Gasfield," *Xinhua* (China), June 1, 2009. (<http://www.tradingmarkets.com/.site/news/Stock%20News/2352672/>)

⁴ "FACTBOX: Iran's Major Oil Customers, Energy Partners," *Reuters*, August 18, 2009. (<http://www.reuters.com/article/idUSTRE57H1UJ20090818>)

⁵ "CNOOC Limited," *New York Stock Exchange Website*, accessed August 19, 2010. (<http://www.nyse.com/about/listed/ceo.html>)

⁶ "Form 20-F – CNOOC Limited," *U.S. Securities & Exchange Commission*, April 23, 2010. (<http://secfilings.nyse.com/files.php?symbol=CEO>)

⁷ "CNOOC Limited," *Chron.com*, accessed September 9, 2010. (<http://markets.chron.com/chron./quote?Symbol=321%3A1181797>)

⁸ "CNOOC Dives into the Gulf of Mexico," *Business Daily Update*, November 6, 2009. (<http://www.allbusiness.com/company-activities-management/company-structures-ownership/13407445-1.html>)

⁹ "Statoil-CNOOC Deal Opens U.S. Gulf to Chinese Oil Cos," *Rigzone*, November 4, 2009. (http://www.rigzone.com/news/article.asp?a_id=82108)

and received a 10 percent share in the Krakatoa, Logan and Cobra fields and a 20 percent stake in the Tucker oil field.¹⁰ However under U.S. law, the deal needs to be approved by the U.S. government's Minerals Management Services which controls American oil leases.¹¹

According to USASpending.gov, CNOOC has not received any contracts from the U.S. government in the past 10 years.¹²

For its activities in Iran, CNOOC is listed by the Minnesota State Board of Investment as a restricted company,¹³ the California Public Employees' Retirement System (CalPERS) as a company being monitored,¹⁴ the Illinois State Board of Investment's list of scrutinized companies,¹⁵ and the Florida State Board of Administration as a company under continued examination.¹⁶

Canada

CNOOC is active in Canada through some of its subsidiary firms. In April 2005, CNOOC's wholly-owned subsidiary CNOOC Belgium BVBA purchased a 16.69 percent stake in the Calgary-based MEG Energy Corporation for 150 million Canadian dollars. MEG has several ongoing oil sands leases across Alberta, Canada, which holds approximately

4 billion barrels of bitumen and 2 billion barrels in reserves.¹⁷

CNOOC Ltd. and Canadian firm Husky Energy signed a contract to develop the Indonesian Madura BD gas and natural gas liquids field in April 2008. In the deal, CNOOC Ltd. agreed to pay \$125 million for a "50 percent equity interest in Husky Oil (Madura) Limited, which holds a 100 percent interest in the Madura Strait PSC [Production Sharing Contract]."¹⁸

Husky Energy is a publicly traded company listed on the Toronto Stock Exchange.¹⁹ Husky Energy's wholly-owned subsidiary Husky Oil China Ltd. is partnered with CNOOC on a gas exploration block in the South China Sea.²⁰

¹⁰ "CNOOC Dives into the Gulf of Mexico," *Business Daily Update*, November 6, 2009. (<http://www.allbusiness.com/company-activities-management/company-structures-ownership/13407445-1.html>)

¹¹ Andrew Ross Sorkin, "Statoil Sells U.S. Oil Interest to Chinese Company," *The New York Times*, November 4, 2009. (<http://dealbook.blogs.nytimes.com/2009/11/04/statoil-sells-us-oil-interest-to-chinese-company/>)

¹² *USASpending.gov*, accessed June 23, 2010. (<http://usaspending.gov>)

¹³ Minnesota State Board of Investment, *Report on Iran Required by Laws of Minnesota 2009, Chapter 90* (January 11, 2010), p. 3. (<http://archive.leg.state.mn.us/docs/2010/mandated/100088.pdf>)

¹⁴ California Public Employees' Retirement System, *Iran Related Investments – Second Legislative Report* (February 22, 2010), p. 14. (<http://www.calpers.ca.gov/eip-docs/investments/reports/iran-related-investments.pdf>)

¹⁵ Illinois State Board of Investment, *Public Act 95-616 ("Iran Act"): Annual Report* (January 1, 2010), p. 5. (http://www.isbi.illinois.gov/pdf/ISBI_Annual_Report_IRAN.pdf)

¹⁶ Florida State Board of Administration, *Protecting Florida's Investment Acts (PFIA): Quarterly Report* (July 29, 2010) p.11. (<http://www.sbafla.com/fsb/LinkClick.aspx?fileticket=LsNe4oN3SA%3d&tabid=402>)

¹⁷ "CNOOC Ltd. Acquired a Stake in Canada-Based MEG Energy," *PR Newswire*, April 12, 2005. (Accessed via Nexis)

¹⁸ "Husky/CNOOC Complete Agreement for Joint Development in Indonesia," *Marketwire*, April 17, 2008. (Accessed via Nexis)

¹⁹ David Ebner, "Husky Slashes Production Target," *Globe and Mail*, July 28, 2010. (<http://www.theglobeandmail.com/globe-investor/husky-slashes-production-target/article1654307/>)

²⁰ "CNOOC-Husky Partnership Begins Producing Gas," *Proactive Investors*, February 25, 2009. (http://www.proactiveinvestors.com.hk/stock_news/223-cnooc-husky-partnership-begins-producing-gas.html)

CHINA NATIONAL PETROLEUM COMPANY (CNPC)

The state-owned China National Petroleum Company (CNPC) is China's largest oil and gas producer and supplier, producing 54.5 percent of the country's crude oil and 82.3 percent of its natural gas.¹ The company is active in nearly 70 countries,² including Iran, the United States, and Canada.

Iran

In 2003, the CNPC subsidiary China National Logging Corporation (CNLC) provided well logging and testing services to the National Iranian Oil Company (NIOC). NIOC was designated by the U.S. Treasury as an entity owned or controlled by the government of Iran.³

In 2004, NIOC awarded CNPC a service contract to develop the Masjed-i-Suleiman oil field in Iran. In 2007, CNPC increased investment in the project.⁴ CNPC began drilling in the field in 2007, and maintains a 75 percent share in it.⁵

In May 2005, CNPC signed an \$18 million deal to develop the Kuhdasht oil block in Iran.⁶ The project was formally launched that year, and in 2007, its

first exploration well produced 1,250 barrels of crude oil in daily testing.⁷

In January 2009, CNPC and NIOC inked a nearly \$2 billion deal to develop the North Azadegan oil field,⁸ which could produce 75,000 barrels per day by 2012.⁹ The firms will develop the field in two phases over 29 years; ultimately, the field could produce up to 150,000 barrels per day.¹⁰ Pending the Iranian government's approval, drilling is slated to begin in 2010.¹¹

In September 2009, CNPC signed a deal with NIOC overseas investment subsidiary Naftiran Intertrade Company (NICO) to develop Iran's South Azadegan oil field, buying 70 percent of the project. NICO has been designated by the U.S. Treasury as an entity owned or controlled by the government of Iran.¹² CNPC will reportedly relinquish the field to NIOC after developing it, and receive payments from the field's oil production to cover its investments.¹³ In July 2010, NIOC approved CNPC's Master Development Plan (MDP) for the project,¹⁴ enabling the company to begin developing the field.

In 2009, CNPC replaced France's Total in a contract to develop phase 11 of the South Pars gas field.¹⁵

¹ "CNPC At A Glance," *CNPC Website*, accessed August 19, 2010. (<http://www.cnpc.com.cn/en/aboutcnpc/cnpcataglance/>)

² "About CNPC," *CNPC Website*, accessed August 19, 2010. (<http://www.cnpc.com.cn/en/aboutcnpc/default.htm>)

³ "Overseas Service Operations," *CNPC*, 2003. (http://www.cnpc.com.cn/Resource/english/images1/pdf/03Annualreport/Overseas_Service_Operations.pdf) and U.S. Department of the Treasury, Office of Foreign Assets Control, "Iran: What You Need to Know About U.S. Economic Sanctions." (<http://www.treasury.gov/offices/enforcement/ofac/programs/iran/iran.pdf>)

⁴ "Iran - Masjid-i-Suleiman," *APS Review Oil Market Trends*, April 13, 2009. (http://findarticles.com/p/articles/mi_hb6478/is_15_72/ai_n31566333/)

⁵ "Firms Reported in Open Sources as Having Commercial Activity in Iran's Oil, Gas, and Petrochemical Sectors," U.S. Government Accountability Office, March 23, 2010, p. 17. (<http://www.gao.gov/new.items/d10515r.pdf>)

⁶ "IRAN SANCTIONS: Impact in Furthering U.S. Objectives Is Unclear and Should Be Reviewed," *U.S. Government Accountability Office*, December 2007. (<http://www.gao.gov/new.items/d0858.pdf>)

⁷ "CNPC in Iran," *CNPC Website*, accessed April 27, 2010. (<http://www.cnpc.com.cn/en/cnpcworldwide/iran/>)

⁸ Alison Klayman, "China Works to Raise Mideast Profile," *Voice of America*, January 15, 2009. (<http://www1.voanews.com/english/news/a-13-2009-01-15-voa14-68810252.html?CFTOKEN=60235739&jsessionid=003013ee5b02ab62087b7f65367a40c754f2&CFID=285053156>)

⁹ David Pierson, "The World," *Los Angeles Times*, October 16, 2009. (<http://articles.latimes.com/2009/oct/16/world/fg-china-iran16>)

¹⁰ Xiao Wan, "CNPC to Develop Azadegan Oilfield," *China Daily*, January 16, 2009. (http://www.chinadaily.com.cn/cndy/2009-01/16/content_7402843.htm)

¹¹ "CNPC Plans Drilling in Iran's Azadegan in 2010-Source," *Reuters*, June 9, 2009. (<http://www.forbes.com/feeds/afx/2009/06/09/afx6520304.html>)

¹² U.S. Department of the Treasury, Office of Foreign Assets Control, "Iran: What You Need to Know About U.S. Economic Sanctions." (<http://www.treasury.gov/offices/enforcement/ofac/programs/iran/iran.pdf>)

¹³ "Iran, China Sign Major Deal to Develop South Azadegan," *Rig Zone*, September 30, 2009. (http://www.egyptoil-gas.com/read_article_international.php?NID=1139)

¹⁴ "CNPC's MDP for Iran's Azadegan Approved," *Shana (Iran)*, July 21, 2010. (<http://www.bedigest.com/NEWS/42915.aspx>)

¹⁵ "CNPC Replaces Total at South Pars 11," *Upstream Online*, June 3, 2009. (<http://www.upstreamonline.com/live/article179964.ece>)

CNPC has a 12.5 percent share of the project that is valued at over \$13 billion.¹⁶ The parties finalized the deal in February 2010.¹⁷

In March 2010, CNPC subsidiary China Petroleum Technology & Development Corporation (CPTDC) signed a contract with Iran's North Drilling Company (NDC) to supply an oil rig for use in the Persian Gulf.¹⁸ In the \$143 million contract, CPTDC agreed to deliver the drilling rig to NDC by November to be operational by the end of 2010.¹⁹ Reports also indicated that NDC is expected to order two more rigs from CPTDC in the future.²⁰

Chinaoil, CNPC's trading arm, has reportedly taken advantage of other sellers leaving the Iranian market.²¹ According to *Reuters*, it "sold two gasoline cargoes for April [2010] delivery to Iran." The deliveries were Chinaoil's first direct sales to Iran since January 2009.²²

United States

According to its website, CNPC does not operate in the U.S.²³ However, CNPC subsidiary PetroChina has offices in New Jersey.²⁴ PetroChina has been listed on the New York Stock Exchange (NYSE: PTR) since 2000.²⁵ According to the U.S. Securities & Exchange

Commission, PetroChina uses Bank of New York Mellon as its depository for U.S. stocks.²⁶

CNPC created PetroChina in 1999, and held successful initial public offerings for it in New York and Hong Kong in April 2000.²⁷ CNPC remains PetroChina's largest shareholder, owning 86.2 percent of the company, according to PetroChina's 2009 annual report.²⁸ JPMorgan Chase & Company reportedly holds 5.37 percent of the company's Hong Kong shares and 0.62 percent of PetroChina's total shares.²⁹ As of September 9, 2010, PetroChina had a market capitalization of \$201 billion, which values CNPC's 86.2 percent shareholdings at over \$170 billion.³⁰

CNPC's Iranian ties should be of interest to shareholders of PetroChina as well as U.S. regulators, and other interested parties. *The Comprehensive Iran Sanctions Accountability and Divestment Act of 2010* provides sanctions that could be applied to CNPC including a prohibition against transactions in foreign exchange, a prohibition against credit or payments between CNPC and any U.S. financial institution, and a prohibition against CNPC from acquiring, holding or trading any U.S. based property. This could have an adverse impact on CNPC's business ties with PetroChina.

¹⁶ "Firms Reported in Open Sources as Having Commercial Activity in Iran's Oil, Gas, and Petrochemical Sectors," U.S. Government Accountability Office, March 23, 2010, p. 17. (<http://www.gao.gov/new.items/d10515r.pdf>)

¹⁷ "CNPC Clinches South Pars Deal," *Upstream Online*, February 10, 2010. (<http://www.upstreamonline.com/live/article205885.ece>)

¹⁸ "Iran's NDC in \$143m Deal with China's CPTDC," *Mehr News Agency* (Iran), March 6, 2010. (<http://www.payvand.com/news/10/mar/1050.html>)

¹⁹ "NDC Buys 3 Offshore Rigs from China," *IranOilGas.com*, March 7, 2010. (<http://www.iranoilgas.com/news/details2/?type=news&p=current&newsID=5480&restrict=no>)

²⁰ "Iran's NDC in \$143m Deal with China's CPTDC," *Mehr News Agency* (Iran), March 6, 2010. (<http://www.payvand.com/news/10/mar/1050.html>)

²¹ Simon Webb, "UPDATE 2-Iran Relies on Friendly Powers for Fuel Supplies," *Reuters*, July 8, 2010. (<http://uk.reuters.com/article/idUKLDE6671UA20100708>)

²² Luke Pachymuthu and Seng Li Peng, "Exclusive: China's Top Oil Firms Sell Gasoline to Iran-Trade," *Reuters*, April 14, 2010. (<http://www.iranenergyproject.org/373/exclusive-chinas-top-oil-firms-sell-gasoline-to>)

²³ "CNPC Worldwide," *CNPC Worldwide*, accessed June 22, 2010. (<http://www.cnpc.com.cn/en/cnpcworldwide/default.htm>)

²⁴ "About PetroChina," *PetroChina Website*, accessed July 16, 2010. (http://www.petrochina.com.cn/Ptr/About_PetroChina/Contact_Us/picl.htm)

²⁵ "PetroChina Company Limited," *New York Stock Exchange Website*, accessed July 14, 2010. (<http://www.nyse.com/about/listed/ptr.html>)

²⁶ "Form 20-F - PetroChina Company Limited," *U.S. Securities & Exchange Commission*, December 31, 2009, p. 112. (http://www.petrochina.com.cn/resource/EngPdf/annual/20-f_2009.pdf)

²⁷ "Public Companies Operating in Sudan: The Relationship of PetroChina Company Ltd. to China National Petroleum Corporation," *KLD Research & Analytics, Inc.*, May 9, 2007, p. 3-4. (http://www.kld.com/newsletter/archive/press/pdf/KLD_Analysis_of_PetroChina_Company.pdf)

²⁸ "PetroChina Company Limited Annual Report," *PetroChina*, 2009, p. 012. (<http://www.petrochina.com.cn/Resource/pdf/xwygg/2009ANNUALREPORT%28e%29.pdf>)

²⁹ "Form 20-F - PetroChina Company Limited," *U.S. Securities & Exchange Commission*, December 31, 2009, p. 89. (http://www.petrochina.com.cn/resource/EngPdf/annual/20-f_2009.pdf)

³⁰ "PetroChina," *Chron.com*, accessed September 9, 2010. (<http://markets.chron.com/chron/quote/detailedquote?Symbol=321%3A1069947>)

In 2010, PetroChina acquired a large crude oil storage facility in the Caribbean from Saudi Arabia. The facility gives China “access to fuel and oil markets in the Americas, including the United States.”³¹

In May 2010, PetroChina inked an agreement with Boeing and China’s National Energy Administration to evaluate the sustainable aviation biofuels industry in China.³²

According to USASpending.gov, CNPC has received no U.S. government contracts in the past 10 years.³³

For its activities in Iran, CNPC is listed by Colorado’s Public Employees Retirement Association as an Iran-related company with a purchase moratorium currently in effect.³⁴

CNPC subsidiary CNPC Hong Kong Ltd. is listed by the Minnesota State Board of Investment as a restricted company,³⁵ the California Public Employees’ Retirement System (CalPERS) as a newly identified company under review,³⁶ the Illinois State Board of Investment as a scrutinized company,³⁷ and the Florida State Board of Administration as a scrutinized company.³⁸

PetroChina appears on the Florida State Board of Administration as a scrutinized company.³⁹

Canada

In January 2007, Alberta granted CNPC exploration rights for 11 crude oil fields in the province, covering approximately 260 square kilometers.⁴⁰ The company won the rights to the fields through an auction.⁴¹ These oil sand fields have an estimated 2 billion barrels of bitumen, or heavy oil.⁴² According to the *National Post*, CNPC is developing the project independently.⁴³

In May 2010, Saskatchewan province signed a Memorandum of Understanding with CNPC when the province’s premier, Brad Wall, was on a trade mission to China. CNPC is expected to visit Saskatchewan to explore opportunities in oil, natural gas, and clean-energy technology, particularly in carbon capture, enhanced oil recovery, and shale-gas extraction.⁴⁴

In June 2010, CNPC signed a Memorandum of Understanding with Canadian company Encana for a joint venture to develop three natural gas fields in British Columbia. Under the terms of the potential agreement, Encana would operate all projects, while CNPC would invest capital and “gain an advanced understanding of unconventional natural gas development through an ongoing sharing of technical knowledge.” The

³¹ “China Replaces Saudi Arabia in Caribbean Oil Storage Deal,” *UPI*, January 7, 2010. (http://www.upi.com/Science_News/Resource-Wars/2010/01/07/China-replaces-Saudi-Arabia-in-Caribbean-oil-storage-deal/UPI-16731262898000/)

³² “PetroChina to Team With Boeing to Develop Aviation Biofuels,” *People’s Daily Online*, May 28, 2010. (<http://english.peopledaily.com.cn/90001/90778/90860/7003812.html#>)

³³ *USASpending.gov*, accessed July 12, 2010. (<http://www.usaspending.gov>)

³⁴ Colorado Public Employees Retirement Association, *Report to Colorado PERA Board of Trustees Regarding the Colorado PERA Iran-Related Investment Policy* (January 15, 2010), p. 17-22. (<http://copera.org/pdf/Iran/Iran1-15-10.pdf>)

³⁵ Minnesota State Board of Investment, *Report on Iran Required by Laws of Minnesota 2009, Chapter 90* (January 11, 2010), p. 3. (<http://archive.leg.state.mn.us/docs/2010/mandated/100088.pdf>)

³⁶ California Public Employees’ Retirement System, *Iran Related Investments – Second Legislative Report* (February 22, 2010), p. 13. (<http://www.calpers.ca.gov/eip-docs/investments/reports/iran-related-investments.pdf>)

³⁷ Illinois State Board of Investment, *Public Act 95-616 (“Iran Act”): Annual Report* (January 1, 2010), p. 5. (http://www.isbi.illinois.gov/pdf/ISBI_Annual_Report_IRAN.pdf)

³⁸ Florida State Board of Administration, *Protecting Florida’s Investment Acts (PFIA): Quarterly Report* (July 29, 2010) p.11. (<http://www.sbafla.com/fsb/LinkClick.aspx?fileticket=LsSNe4oN3SA%3d&tabid=402>)

³⁹ *Ibid.*

⁴⁰ Renya Peng, “China CNPC Wins First Rights to Explore Canada’s Oil Sands,” *Dow Jones Newswires*, June 29, 2007. (http://www.rigzone.com/news/article.asp?a_id=47152)

⁴¹ Eric Ng, “CNPC Wins Right to Work Oil Sands in Alberta,” *South China Morning Post*, June 30, 2007. (Accessed via Nexis)

⁴² Renya Peng, “China CNPC Wins First Rights to Explore Canada’s Oil Sands,” *Dow Jones Newswires*, June 29, 2007. (http://www.rigzone.com/news/article.asp?a_id=47152)

⁴³ Eric Ng, “CNPC Wins Right to Work Oil Sands in Alberta,” *South China Morning Post*, June 30, 2007. (Accessed via Nexis)

⁴⁴ “China to Check Out Saskatchewan Energy Assets,” *Canwest News Service*, May 19, 2010. (accessed via Nexis)

companies anticipate that negotiations for the joint venture will take several months.⁴⁵ The final agreement will need to be approved by Encana's Board of Directors and receive the necessary regulatory approvals from Canadian authorities.⁴⁶

CNPC is also active in Canada through its subsidiary firms. In April 1991, CNPC signed a letter of intent with Alberta Oil Sands Technology & Research Authority (AOSTRA) to cooperate in developing oil sands. In June 1992, CNPC subsidiary CNPC Canada joined AOSTRA's bitumen construction project "using steam assisted gravity drainage developed at its underground test facility."⁴⁷

In June 1993, CNPC acquired a 15.89 percent stake in Canada's North Twining Oilfield and an 11.48 percent stake in a natural gas processing plant in Alberta.⁴⁸ According to *Oil and Gas Journal*, CNPC Canada was involved in this deal.⁴⁹

In 2005, CNPC signed a Memorandum of Understanding (MoU) with Enbridge, an Alberta-based pipeline operator, to build a \$2 billion, 400,000 bpd pipeline "to move oil sand-derived crude oil from Alberta to the west coast of Canada." According to the *South China Morning Post*, the MoU envisioned that half of the crude from the

pipeline would be shipped to China.⁵⁰ According to *Petroleum Economist*, CNPC subsidiary PetroChina was involved in the deal, under which the company agreed to buy up to 50 percent of the pipeline's output.⁵¹

The commissioning of the Gateway Pipeline, as the project is called, has been twice delayed; originally slated for 2009, it was pushed back to 2014.⁵² As of 2010, the pipeline will not go online until 2016 at the earliest,⁵³ and PetroChina has pulled out of the deal due to "regulatory delays."⁵⁴

In August 2009, CNPC purchased 60 percent of the Athabasca Oil Sands Corporation's (AOSC) MacKay River and Dover oil sands projects. The Investment Review Department of Canada's Federal Ministry of Industry approved the deal in late December 2009.⁵⁵ CNPC subsidiary PetroChina purchased its position in the two projects for \$1.9 billion.⁵⁶ PetroChina's wholly-owned subsidiary PetroChina International Investment Company Limited will jointly develop the projects with Canada's AOSC.⁵⁷ PetroChina agreed to invest over \$250 million to cover the costs of developing the oil sands. The U.S. is the "largest consumer of bitumen from the oil sands."⁵⁸

⁴⁵ "Encana, CNPC to Jointly Develop Natural Gas Plays in Canada," *Encana Corp.*, June 25, 2010. (<http://www.rigzone.com/news/article.asp?id=95186>)

⁴⁶ "Encana And CNPC To Develop Canadian Unconventional Natural Gas," *Eurasia Review*, June 25, 2010. (<http://www.eurasiareview.com/201006253868/encana-and-cnpc-to-develop-canadian-unconventional-natural-gas.html>)

⁴⁷ "China Stepping Up Foreign E&P Investment as Oil Imports Soar," *Oil and Gas Journal*, May 9, 1994.

⁴⁸ "CNPC in Canada," *CNPC Website*, accessed August 3, 2010. (<http://www.cnpc.com.cn/en/cnpcworldwide/canada/Canada.htm>)

⁴⁹ "China Stepping Up Foreign E&P Investment as Oil Imports Soar," *Oil and Gas Journal*, May 9, 1994.

⁵⁰ Eric Ng, "CNPC Wins Right to Work Oil Sands in Alberta," *South China Morning Post*, June 30, 2007. (<http://www.uofaweb.ualberta.ca/chinainstitute/nav03.cfm?nav03=62234&nav02=57351&nav01=57272>)

⁵¹ "China's Oil Sands Push," *Petroleum Economist*, October 2009. (accessed via Nexis)

⁵² Lee Geng, "CNPC's Canadian Oil Sand Gyration," *Energy Tribune*, September 27, 2007. (<http://www.energytribune.com/articles.cfm/642/CNPCs-Canadian-Oil-Sand-Gyrations>)

⁵³ Charmaine Noronha, "Chinese Company Invests \$985M in Canada Oil Sands," *Associated Press*, May 13, 2010. (accessed via Nexis)

⁵⁴ "Another Chinese Investment in Canada's Oil Sands," *24/7 Wall Street*, May 15, 2010. (Accessed via Nexis)

⁵⁵ "CNPC in Canada," *CNPC Website*, accessed August 3, 2010. (<http://www.cnpc.com.cn/en/cnpcworldwide/canada/Canada.htm>)

⁵⁶ "China's CNPC Gets 30 Bln Dlr Credit for Overseas Expansion," *Agence France Presse*, September 9, 2009. (Accessed via Nexis)

⁵⁷ CNPC, Press Release, "Completion of Acquisition of Canadian Oil Sands Assets," February 11, 2010. (http://www.cnpc.com.cn/en/press/newsreleases/Completion_of_Acquisition_of_Canadian_Oil_Sands_Assets_.htm)

⁵⁸ "Canada OKs Major PetroChina Oil Sands Investment," *AFP*, December 29, 2009. (http://www.google.com/hostednews/afp/article/ALeqM5jIhJhurlt0GHA2Ij6fNCNjXWu7u2_g)

SHANGHAI ZHENHUA HEAVY INDUSTRY (ZPMC)

Shanghai Zhenhua Heavy Industry manufactures and sells heavy industrial equipment for a number of industrial purposes, including shipping, steel structures and offshore products. Formerly known as Shanghai Zhenhua Port Machinery Co. (ZPMC), the company changed its name to Shanghai Zhenhua Heavy Industry Co. Ltd. in June 2009.¹ The company is majority owned by the China Communication Construction Co., Ltd.²

Iran

In July 2009, Shanghai Zhenhua Heavy Industry and Spanish marine oil and gas explorer ADHK signed a deal with Iranian Offshore Engineering and Construction to supply offshore facilities and engineering products. The deal, worth \$2.2 billion, provides for the construction of 10 offshore jack-up drilling platforms, seven land drilling rigs, and two floating cranes. According to one source, the equipment would be delivered to Iran by July 2010.³

Depending on the nature of the deal, the supply of energy-related goods, services or technology to the Iranian energy sector could be prohibited by the *Comprehensive Iran Sanctions Accountability and Divestment Act of 2010* (the “*Comprehensive Act*”). The *Comprehensive Act* modified the language in the *Iran Sanctions Act* (“*ISA*”), which had excluded the provision of goods, services and technology from the definition of a sanctionable “investment” under *ISA*. The *Comprehensive Act* now eliminates

that exclusion. If an equipment deal meets the \$20 million annual threshold for a sanctionable investment under *ISA*, and is structured to provide a participatory interest in an Iranian energy project through ongoing royalties, maintenance, service, training, customization or other payments, it may be sanctionable under U.S. law.

Shanghai Zhenhua Heavy Industry’s supply of drilling platforms, rigs, and other engineering products should be scrutinized on this basis to confirm whether it meets the definition of a sanctionable investment as now stipulated in the amended *Iran Sanctions Act*.

United States

The company has a U.S. subsidiary, ZPMC U.S.A., located in Los Angeles, California.⁴ In 2006, the company was chosen as an official contractor in rebuilding part of the San Francisco Bay Bridge, which is set to re-open in 2013. ZPMC manufactured the steel used in the project.⁵ In 2008, faulty welding practices at ZPMC’s Shanghai factory were discovered, adding fuel to American steel unions’ claims that U.S. companies should have won the historic project. The welding problems resurfaced in 2009, although executives claimed they had been corrected.⁶

ZPMC also maintains relationships with a number of U.S. port companies. The Virginia Port Authority has a long-standing relationship with ZPMC, which manufactures the port’s large container cranes.⁷

¹ ZPMC, Press Release, “ZPMC’s Name Has Been Changed to Shanghai Zhenhua Heavy Industries Co., Ltd. and Communion Meeting of On-Line Investors’ Development,” June 15, 2009. (<http://www.zpmc.com/www/7/2009-07/127.html>)

² “Brief Introduction,” *ZPMC Website*, accessed July 21, 2010. (<http://www.zpmc.com/view.php?tid=37&cid=21>)

³ “Iran, China Sign Agreement on Drilling Rigs,” *Fars News Agency* (Iran), August 7, 2009. (<http://english.farsnews.com/newstext.php?nn=8805071324>)

⁴ “ZPMC U.S.A.,” *ZPMC Website*, June 5, 2009. (<http://www.zpmc.com/view.php?tid=87&cid=98>)

⁵ “United States : Rebuilding an Iconic Bay Area Bridge,” *TendersInfo*, June 2, 2010. (<http://www.iranenergyproject.org/1152/united-states-rebuilding-an-iconic-bay-area-bridge>)

⁶ “USW Alarmed by Use of Flawed Chinese-Welded Steel in Bay Bridge Project,” *Italian Voice*, August 6, 2009. (<http://www.iranenergyproject.org/1154/usw-alarmed-by-use-of-flawed-chinese-welded-steel>)

⁷ “Port of Virginia Signs On With China Marketing Representative,” *Pacific Shipper*, October 6, 2008. (<http://www.iranenergyproject.org/1156/port-of-virginia-signs-on-with-china-marketing>)

In 2009, two of the world's largest cranes, built by ZPMC, arrived in the Port of Tacoma to be used at Washington United Terminal on the Blair Waterway.⁸ In 2009, the Port of Houston Authority approved the \$33.8 million purchase of three electric container cranes from ZPMC for the Bayport Container Terminal.⁹

In January 2010, ZPMC signed a contract with Ports America in New York, under which Ports America will purchase eight container cranes valued at approximately \$87.8 million. The first four containers are expected to be delivered in August 2012.¹⁰

According to USASpending.gov, ZPMC has received no U.S. government contracts in the past ten years.¹¹

Canada

Shanghai Zhenhua Heavy Industry does not appear to have business interests in Canada.

⁸ Lui Kit Wong, "We Get the Two Big Orange Ones," *The News Tribune*, January 27, 2009. (<http://www.iranenergyproject.org/1157/we-get-the-two-big-orange-ones>)

⁹ Peter T. Leach, "Houston Approves Crane Buy," *The Journal of Commerce Online*, February 20, 2009. (<http://www.iranenergyproject.org/1155/houston-approves-crane-buy>)

¹⁰ "Shanghai Zhenhua Heavy Industry Wins Big Supply Order from Ports America," *Chinese Business News*, January 27, 2010. (<http://www.iranenergyproject.org/1153/shanghai-zhenhua-heavy-industry-wins-big-supply>)

¹¹ *USASpending.gov*, accessed July 21, 2010. (<http://www.usaspending.gov>)

CHINA PETROLEUM & CHEMICAL CORPORATION (SINOPEC)

China Petroleum & Chemical Corporation, more commonly known as Sinopec, was incorporated by the state-owned China Petroleum Corporation (Sinopec Group) in February 2000.¹ The company is active worldwide, including in Iran, the United States and Canada.

Iran

Sinopec trading arm Unipec sold gasoline to Iran between 2001 and 2004, but reportedly ceased sales until 2010.² However, in April 2010, traders stated that Unipec had “booked a vessel to load 250,000 barrels in Singapore... with options to discharge in the Gulf. The cargo was likely to go to Iran.”³ In June 2010, industry sources reported that Unipec had purchased gasoline from independent traders in the United Arab Emirates for sale to Iran.⁴ The same month, Sinopec delivered approximately 600,000 barrels of gasoline to Iran.⁵

In 2006, Sinopec signed a €108 million contract with the National Iranian Oil Refining & Distribution Company (NIORDC) and other Iran-based

companies to increase gasoline production at the Tabriz refinery.⁶ The project is set for completion in 2010.⁷

In June 2006, Sinopec “signed an agreement with Iran’s Oil Exploration and Service Company (OESC) to jointly develop the Garmsar oil block.”⁸

In 2007, Sinopec reportedly signed a contract with Iran to drill in the country’s Yadavaran oil field, which contains 17 billion barrels in estimated reserves.⁹ According to the U.S. Government Accountability Office (GAO), the contract is valued at \$2 billion.¹⁰

Sinopec signed a \$2.7 billion deal with the National Iranian Oil Company (NIOC) in August 2006 to upgrade the Arak refinery and construct a new plant at the site.¹¹ According to the GAO, the project will be completed in 2011.¹² NIOC has been designated by the U.S. Treasury as an entity owned or controlled by the government of Iran.¹³

Sinopec also agreed to purchase 160,000 barrels of oil per day from Iran in 2008, nearly tripling its intake of Iranian oil.¹⁴

¹ “Our Company,” *Sinopec Website*, accessed August 19, 2010. (http://english.sinopec.com/about_sinopec/our_company/20100328/8532.shtml)

² “Sinopec Ships 600,000 Barrels of Gasoline to Iran,” *Reuters*, May 25, 2010. (<http://english.alrroya.com/content/sinopec-ships-600000-barrels-gasoline-iran>)

³ Luke Pachymuthu and Seng Li Peng, “Exclusive: China’s Top Oil Firms Sell Gasoline to Iran-Trade,” *Reuters*, April 14, 2010. (<http://www.iranenergyproject.org/373/exclusive-chinas-top-oil-firms-sell-gasoline-to>)

⁴ Luke Pachymuthu and Chen Aizhu, “China’s Sinopec Ships Gasoline from UAE to Iran,” *Reuters*, June 1, 2010. (<http://www1.hymarkets.com/html/news/2010/6/1/1275387396nLDE64T029.html>)

⁵ “Sinopec Ships 600,000 Barrels of Gasoline to Iran,” *Reuters*, May 25, 2010. (<http://english.alrroya.com/content/sinopec-ships-600000-barrels-gasoline-iran>)

⁶ “Overseas Projects,” *Sinopec Engineering Website*, 2009. (http://www.sinopecengineering.com/ABOUT_US/MAIN_ACHIVEMENT.asp)

⁷ “Refinery Expansion Projects,” *National Iranian Oil Refining & Distribution Company Website*, 2009. (<http://www.niordc.ir/index.aspx?siteid=77&siteid=77&pageid=979#BandarAbbasRefinery>)

⁸ “China’s Sinopec Signs a Deal to Develop Oil Block in Iran – Report,” *AFX News Limited*, June 20, 2006. (<http://www.forbes.com/feeds/afx/2006/06/20/afx2829188.html>)

⁹ Vivienne Walt, “How Iran Might Beat Future Sanctions: The China Card,” *Time*, July 16, 2009. (<http://www.time.com/time/world/article/0,8599,1910669,00.html>)

¹⁰ Joseph A. Christoff, “Firms Reported in Open Sources as Having Commercial Activity in Iran’s Oil, Gas, and Petrochemical Sectors,” *U.S. Government Accountability Office*, March 23, 2010, p. 17. (<http://www.gao.gov/new.items/d10515r.pdf>)

¹¹ Jonas Ramos, “Iran Tries to Deal with its Gasoline Addiction,” *Arabian Business*, January 1, 2007. (<http://www.arabianbusiness.com/5691-iran-tries-to-deal-with-its-gasoline-addiction->)

¹² Joseph A. Christoff, “Firms Reported in Open Sources as Having Commercial Activity in Iran’s Oil, Gas, and Petrochemical Sectors,” *U.S. Government Accountability Office*, March 23, 2010, p. 17. (<http://www.gao.gov/new.items/d10515r.pdf>)

¹³ U.S. Department of the Treasury, Office of Foreign Assets Control, “Iran: What You Need to Know About U.S. Economic Sanctions.” (<http://www.treasury.gov/offices/enforcement/ofac/programs/iran/iran.pdf>)

¹⁴ Chen Aizhu, “UPDATE 2-Sinopec Agrees Deal to Triple Iran Crude Imports,” *Reuters*, December 13, 2007. (<http://www.reuters.com/article/idUSPEK10194020071213?sp=true>)

In August 2009, the National Iranian Oil Products Distribution Company (NIOPDC) and Sinopec signed an agreement to work on two Iranian oil refinery projects, including the Abadan Oil Refinery.¹⁵

United States

Sinopec received no contracts from the U.S. government between 2000 and 2010.¹⁶ However, Sinopec subsidiary Sinopec Shanghai Petrochemical Company Limited has been listed on the New York Stock Exchange (NYSE: SHI) since July 1993.¹⁷ According to the company's Securities and Exchange Commission filing, Sinopec is the majority shareholder, owning 55.56 percent of Sinopec Shanghai Petrochemical Company's shares as of May 1, 2010.¹⁸ Sinopec Shanghai Petrochemical had a market capitalization of \$3 billion as of September 9, 2010, which values Sinopec's 55.56 percent shareholdings at over \$1.6 billion.¹⁹

Sinopec's Iranian ties should be of interest to shareholders of Sinopec Shanghai Petrochemical as well as U.S. regulators, and other interested parties. *The Comprehensive Iran Sanctions Accountability and Divestment Act of 2010* provides sanctions that could be applied to Sinopec including a prohibition against transactions in foreign exchange, a prohibition against credit or payments between Sinopec and any U.S. financial institution, and a prohibition against Sinopec from acquiring, holding or trading any U.S. based property.

This could have an adverse impact on Sinopec's business ties with Sinopec Shanghai Petrochemical.

In 2002, the U.S. Trade and Development Agency gave Sinopec a \$429,000 grant "to help an import-export subsidiary to develop an electronic procurement system."²⁰

In March 2007, Sinopec subsidiary Fujian Petrochemical Company inaugurated two joint ventures with ExxonMobil and Saudi Aramco in China, the Fujian Refining & Ethylene Joint Venture Project and the Fujian Fuels Marketing Joint Venture. The ventures will conduct refinery expansion and upgrade projects in China and manage existing service stations and terminal networks.²¹

In July 2009, Marathon Oil announced an agreement with Sinopec and CNOOC International Limited to explore and develop an offshore oil block in Angola through its subsidiary, Marathon International Petroleum Angola Block 32 Limited.²²

In March 2010, the Chinese press announced that Sinopec was considering cooperating with ExxonMobil and Saudi Aramco to expand an oil refinery and petrochemical complex in Fujian. The planned refinery would process 12 million tons of crude oil per year, nearly 88 million barrels annually. The three companies are currently conducting a feasibility study on the project.²³

For its operations in Iran, Sinopec is listed by

¹⁵ "Sinopec Said to Join Iran Oil Refinery Expansion Project," *SinoCast Daily Business Beat*, August 5, 2009. (<http://www.tradingmarkets.com/site/news/Stock%20News/2461237/>)

¹⁶ *USASpending.gov*, accessed July 12, 2010. (<http://www.usaspending.gov>)

¹⁷ "Sinopec Shanghai Petrochemical Company Limited" *New York Stock Exchange website*, accessed July 12, 2010. (<http://www.nyse.com/about/listed/shi.html>)

¹⁸ "Form 20-F/A – Sinopec Shanghai Petrochemical Company Limited," *U.S. Securities & Exchange Commission*, July 19, 2010, p. 6. (<http://secfilings.nyse.com/files.php?symbol=SHI&fg=24>)

¹⁹ "Sinopec Shanghai Petrochemical Co. Ltd.," *Chron.com*, accessed September 9, 2010. (<http://markets.chron.com/chron./quote?Symbol=321%3A1153224>)

²⁰ Matthew Godsey and Gary Milhollin, "A Shell Game in the Arms Race," *The New York Times*, February 25, 2005. (<http://query.nytimes.com/gst/fullpage.html?res=9B03E3D8173DF936A15751C0A9639C8B63&sec=&spon=&pagewanted=all>)

²¹ Exxon Mobil Chemical, Press Release, "Inauguration Ceremony in Beijing Marks the Formation of the Ventures," March 30, 2007. (http://www.exxonmobilchemical.com.cn/China-English/LCW/PA/Newsroom/Fujian_Project_Inauguration_Ceremony.asp)

²² Marathon Oil, Press Release, "Marathon Announces \$1.3 Billion Sale of 20 Percent Interest in Angola Block 32," July 17, 2009. (http://www.marathon.com/News/Press_Releases/Press_Release/?id=1308708)

²³ "Analysts Upbeat on Cooperation with ExxonMobil, Saudi Aramco," *China Daily*, March 9, 2010. (<http://english.peopledaily.com.cn/90001/90778/90861/6913314.html>)

the Florida State Board of Administration as a scrutinized company,²⁴ the Illinois State Board of Investment as a scrutinized company,²⁵ and the Minnesota State Board of Investment as a restricted company.²⁶ Sinopec is listed by the California Public Employees' Retirement System (CalPERS) as a company active in Iran that is not held by CalPERS.²⁷ Sinopec is also listed by Colorado's Public Employees Retirement Association as an Iran-related company with a purchase moratorium currently in effect.²⁸

Some of Sinopec's subsidiaries have also been listed by individual states' investment oversight boards. Company subsidiaries Sinopec Finance, Sinopec Kantons Holdings Ltd., Sinopec Shanghai Petrochemical, and Sinopec Yizheng Chemical Fibre Company Ltd are listed by the Florida State Board of Administration as scrutinized companies.²⁹ Additionally, Sinopec Kantons Holdings Ltd. is listed by CalPERS as a company currently being monitored.³⁰

Canada

In 2005, Sinopec subsidiary SinoCanada purchased a 40 percent stake in Alberta's Northern Lights oil sands project from Canadian firm Synenco Energy Inc. for \$84 million.³¹ Synenco retained the

remaining 60 percent, acting as project operator until French firm Total acquired the company in 2008.³² In April 2009, Total subsidiary Total E&P Canada Ltd. sold 10 percent of its interest in the Northern Lights Partnership (NLP) to SinoCanada, giving SinoCanada a 50 percent stake in the NLP.³³

In October 2008, Sinopec International Petroleum & Production Company (SIPC) subsidiary Mirror Lake Oil and Gas Company offered to buy Canadian firm Tanganyika Oil Company Ltd. The deal was finalized in December 2008.³⁴ Mirror Lake paid \$2 billion for the company that holds two oil production agreements in Syria.³⁵

In August 2009, SIPC completed a deal to acquire the Swiss company Addax Petroleum Corp. At 8.32 billion Canadian dollars, the deal was the largest overseas takeover by a Chinese company to date.³⁶ Headquartered in Switzerland, Addax is listed on both the London and Toronto stock exchanges.³⁷

In April 2010, Sinopec announced plans to buy a 9.03 percent stake in the Syncrude Canada Ltd project in Alberta from ConocoPhillips. The \$4.65 billion deal is set to be finalized in the third quarter of 2010. According to a *Reuters* report, Syncrude, "the largest project in the oil sands, has operated

²⁴ Florida State Board of Administration, *Protecting Florida's Investment Acts (PFIA): Quarterly Report* (July 29, 2010) p.13. (<http://www.sbafla.com/fsb/LinkClick.aspx?fileticket=LsNe4oN3SA%3d&tabid=402>)

²⁵ Illinois State Board of Investment, *Public Act 95-616 ("Iran Act"): Annual Report* (January 1, 2010), p. 5. (http://www.isbi.illinois.gov/pdf/ISBI_Annual_Report_IRAN.pdf)

²⁶ Minnesota State Board of Investment, *Report on Iran Required by Laws of Minnesota 2009, Chapter 90* (January 11, 2010), p. 3. (<http://archive.leg.state.mn.us/docs/2010/mandated/100088.pdf>)

²⁷ California Public Employees' Retirement System, *Iran Related Investments – Second Legislative Report* (February 22, 2010), p. 20. (<http://www.calpers.ca.gov/eip-docs/investments/reports/iran-related-investments.pdf>)

²⁸ Colorado Public Employees Retirement Association, *Report to Colorado PERA Board of Trustees Regarding the Colorado PERA Iran-Related Investment Policy* (January 15, 2010), p. 17-22. (<http://copera.org/pdf/Iran/Iran1-15-10.pdf>)

²⁹ Florida State Board of Administration, *Protecting Florida's Investment Acts (PFIA): Quarterly Report* (July 29, 2010) p.13. (<http://www.sbafla.com/fsb/LinkClick.aspx?fileticket=LsNe4oN3SA%3d&tabid=402>)

³⁰ California Public Employees' Retirement System, *Iran Related Investments – Second Legislative Report* (February 22, 2010), p. 18. (<http://www.calpers.ca.gov/eip-docs/investments/reports/iran-related-investments.pdf>)

³¹ "Sinopec Buys into Canadian Oil Sands," *China Daily*, June 1, 2005. (<http://www.china.org.cn/english/BAT/130646.htm>)

³² "Total Buys Synenco for \$506.6M," *Upstream Online*, August 6, 2008. (<http://www.upstreamonline.com/live/article160550.ece>)

³³ "Total Sells Stake in Canada's Northern Lights Project to Sinopec," *Total S.A.*, April 1, 2009. (http://www.rigzone.com/news/article.asp?a_id=74591)

³⁴ "Sinopec Completes Acquisition of Tanganyika Oil Co.," *Rigzone*, December 22, 2008. (http://www.rigzone.com/news/article.asp?a_id=70974)

³⁵ "Sinopec Confirms \$2B Takeover of Tanganyika Oil," *China Daily*, September 28, 2008. (http://www.chinadaily.com.cn/bizchina/2008-09/28/content_7067375.htm)

³⁶ "Sinopec Announces Acquisition of Geneva-Based Addax," *China Daily*, August 16, 2008. (http://www.chinadaily.com.cn/bizchina/2009-08/18/content_8584077.htm)

³⁷ "Sinopec Extends Addax Offer," *Upstream Online*, August 17, 2009. (<http://www.upstreamonline.com/live/article185890.ece>)

since 1978, and can now pump out 350,000 barrels a day, roughly 13 percent of Canada's overall oil output."³⁸ ConocoPhillips announced that Sinopec plans to use SIPC to purchase the stake.³⁹

Canada's Minister of Industry, Tony Clement, approved the sale in June 2010.⁴⁰ He approved the purchase under the *Investment Canada Act*, which provides parameters for foreign investment in Canada.⁴¹ Clement noted that he was "satisfied that the investment is likely to be of net benefit to

Canada."⁴² Section 20 of the *Investment Canada Act* sets out the relevant factors involved in making this determination including the "effect of the investment on the level and nature of economic activity in Canada," its competitiveness, compatibility and contribution to Canada's position in the global economy.⁴³

³⁸ Jeffrey Jones, "Sinopec to Pay \$4.65 Billion in Oil Sands Deal," *Reuters*, April 12, 2010. (<http://www.reuters.com/article/idUSTRE63B4BU20100412>)

³⁹ Edward Klump, "Sinopec to Siphon off 9% Stake in Syncrude Canada for \$4.65b," *China Daily*, April 14, 2010. (http://www.chinadaily.com.cn/bizchina/2010-04/14/content_9726768.htm)

⁴⁰ "Canada Clears Sinopec to Buy Syncrude Stake," *Reuters*, June 25, 2010. (<http://money.cnn.com/money/business/canada/archives/2010/06/20100625-134001.html>)

⁴¹ "Sinopec-ConocoPhillips Partnership Transaction Approved," *Marketwire*, June 25, 2010. (<http://www.marketwire.com/press-release/Sinopec-ConocoPhillips-Partnership-Transaction-Approved-1281864.htm>)

⁴² *Ibid.*

⁴³ "An Act Respecting Investment in Canada," Chapter I-21.8, June 20, 1985. (<http://www.ic.gc.ca/eic/site/ica-lic.nsf/eng/lk51018.html>)

China's state-run energy firm Zhuhai Zhenrong has been shipping a cargo or two of refined gasoline to Iran each month for at least a year, according to *Reuters* in September 2009.¹ In August 2010, it was reported that Russian company Lukoil through its trading arm Litasco resumed its gasoline shipments to Iran in partnership with Zhuhai Zhenrong.²

Zhuhai Zhenrong, a subsidiary of China North Industries Corporation (Norinco), was incorporated in 1994 to import crude oil from Iran.³ In 2009, the company dropped out of its Iranian fuel contract with the National Iranian Oil Company (NIOC) as a result of high commodity prices and shipping costs. In January 2010, Zhuhai Zhenrong announced that they would not be renewing its contract with NIOC for 2010.⁴ The U.S. Treasury has designated NIOC as an entity owned or controlled by the government of Iran.⁵

Zhuhai Zhenrong's parent company, NORINCO has been sanctioned by the U.S. government several times in 2003 and 2004 for allegedly supplying Iran with missile technology (See Appendix A).

Amongst its worldwide locations, the company maintains an office in Tehran.⁶

United States

The company does not have any operations in the United States, nor has it received any money from the U.S. government in the past 10 years.

Canada

Zhuhai Zhenrong does not appear to have any business interests in Canada.

¹ "China Firms Selling Fuel to Iran as U.S. Sanctions Loom," *Reuters*, September 23, 2009. (<http://www.reuters.com/article/idUSTRE58M1BK20090923>)

² Luke Pachymuthu and Vladimir Soldatkin, "Russia's LUKOIL Resumes Gasoline Supply to Iran - Trade," *Reuters*, August 11, 2010. (<http://uk.reuters.com/article/idUKLDE67A17G20100811>)

³ "Iran to Sell \$20 Billion Worth of LNG to China," *Energy-Pedia*, March 19, 2004. (<http://www.energy-pedia.com/article.aspx?articleid=104733>)

⁴ "Zhuhai Zhenrong Annuls 2010 Fuel Oil Term Contract with NIOC," *C1 Energy*, January 28, 2010. (<http://www.c1energy.com/common/2593582,0,0,0,2.htm>)

⁵ U.S. Department of the Treasury, Office of Foreign Assets Control, "Iran: What You Need to Know About U.S. Economic Sanctions." (<http://www.treasury.gov/offices/enforcement/ofac/programs/iran/iran.pdf>)

⁶ "Organization Structure," *Zhuhai Zhenrong Corporation Website*, accessed July 12, 2010. (<http://www.zhrgs.com.cn/en/2007.asp>)

OTHER CHINESE COMPANIES ACTIVE IN IRAN

In addition to China's large state-run energy companies, there are a number of smaller suppliers and firms that sell goods, services, and technology to Iran's energy industry. In some cases, many of these companies act as suppliers and contractors to China's largest firms. The *Comprehensive Iran Sanctions Accountability and Divestment Act* recently modified the definition of a sanctionable "investment" under the *Iran Sanctions Act* by including the provision of goods, services and technology in the definition. As a result, these Chinese deals may be structured in such a way as to meet the definition of a sanctionable "investment," particularly if they meet the \$20 million annual threshold and provide some ongoing participatory interest in an Iranian energy project in the form of ongoing royalties, maintenance, service, training, customization or other payments. Each deal needs to be evaluated individually to confirm whether it meets the definition of investment as now stipulated in the amended *Iran Sanctions Act*.

The Kerui Group

Based in Shandong, China, the Kerui Group designs and manufactures drilling equipment, and provides engineering services to oil fields around the world. In 2009, the company participated as an exhibitor in Iran's international oil and gas show.¹ According to one trade source, Kerui Group subsidiary Shandong Kerui Petroleum Equipment Company entered into a joint venture with the private

Iranian firm North Barite Company, forming an entity based in Iran, Petro Newtish Kish LLC.²

Kingdream PLC (China)

China-based Kingdream is an industrial supplier for energy projects, manufacturing and selling drill bits and other equipment for oil and natural gas extraction. Active worldwide, the company supplies equipment through distributors in the United States, Canada, Mexico and Russia.³

Iran

Kingdream states that it holds patents for drill bits in Iran, as well as the United States and Russia. Its most popular product is a roller cone bit used in drilling oil wells.⁴

The company has supplied the National Iranian Oil Company (NIOC) with drill bits for its extraction activities.⁵ NIOC has been designated by the U.S. Treasury as an entity owned or controlled by the government of Iran.⁶

United States

In the United States, Kingdream lists Oklahoma-based HIJET Bit, Inc. as its American distributor.⁷ Its drill bits have been used in U.S. oil fields, including the Midland field in Texas.⁸ Kingdream is listed

¹ Kerui Group, Press Release, "Exhibition Plan for Kerui Group in 2009," March 18, 2009. (<http://www.keruigroup.com/krenglish/NewsInfo.asp?NewsId=341>)

² "Shandong Kerui Petroleum Equipment Company, Ltd.," *China Exporter Catalog*, accessed August 25, 2010. (<http://exporter.globalimporter.net/company/632/626961>)

³ "Kingdream Public Limited," *Bloomberg Business Week*, August 19, 2010. (<http://investing.businessweek.com/research/stocks/snapshot/snapshot.asp?ticker=000852:CH>)

⁴ *Kingdream Company Website*, accessed July 27, 2010. (<http://www.kingdream.com.cn/Corporation/infoDetail2e.asp?cInfoId=183&dInfoId=171>)

⁵ "Performance Records," *Kingdream Website*, accessed August 19, 2010. (<http://www.kingdream.com.cn/Corporation/infoDetail11e.asp?cInfoId=183&dInfoId=177>)

⁶ U.S. Department of the Treasury, Office of Foreign Assets Control, "Iran: What You Need to Know About U.S. Economic Sanctions." (<http://www.treasury.gov/offices/enforcement/ofac/programs/iran/iran.pdf>)

⁷ "Agency in Overseas Markets," *Kingdream Website*, accessed August 19, 2010. (<http://www.kingdream.com.cn/Corporation/infoDetail10e.asp?cInfoId=183&dInfoId=176>)

⁸ "Performance Records," *Kingdream Website*, accessed August 19, 2010. (<http://www.kingdream.com.cn/Corporation/infoDetail11e.asp?cInfoId=183&dInfoId=177>)

by the Florida State Board of Administration as a scrutinized company.⁹

Canada

The company has also supplied drill bits to extraction projects in Canada.¹⁰ Kingdream lists Alberta-based J & L Supply Co. Ltd. as its Canadian distributor.¹¹

Panyu Chu Kong Steel Pipe Company, Ltd.

Based in China, Panyu Chu Kong Steel Pipe Company manufactures and exports steel pipes used in both onshore and offshore oil projects around the world.¹² In 2009, the company was an exhibitor at

Iran's international oil and gas show.¹³ According to the National Iranian Gas Company (NIGC), Panyu Chu Kong supplied NIGC with steel pipe in 2006, though it is unclear for which project.¹⁴

Shanghai Sunry Petroleum Equipment Company, Ltd.

Shanghai Sunry Petroleum Equipment Company designs and sells oil and gas well service equipment. In 2005, the company exported equipment to Iran, including swivel joints and valves.¹⁵ In 2009, the company was reportedly an exhibitor at Iran's international oil and gas show.¹⁶

⁹ Florida State Board of Administration, *Protecting Florida's Investment Acts (PFIA): Quarterly Report* (July 29, 2010) p.11. (<http://www.sbafla.com/fsb/LinkClick.aspx?fileticket=LSsNe4oN3SA%3d&tabid=402>)

¹⁰ "Performance Records," *Kingdream Website*, accessed August 19, 2010. (<http://www.kingdream.com.cn/Corporation/infoDetail11e.asp?cInfold=183&dInfold=177>)

¹¹ "Agency in Overseas Markets," *Kingdream Website*, accessed August 19, 2010. (<http://www.kingdream.com.cn/Corporation/infoDetail10e.asp?cInfold=183&dInfold=176>).

¹² "Main Markets," *Panyu Chu Kong Steel Pipe Company Website*, accessed August 25, 2010. (<http://www.pck.cn/en/markets.aspx>)

¹³ "Exhibitors," *IranOilShow.com*, accessed August 25, 2010. (<http://www.iranoilshow.com/exhibitors.html>)

¹⁴ "Chu Kong Steel Pipe Company to Supply 300.000 Tons," *Steelworld News Digest*, October 2006. (<http://www.steelworld.com/enews1006.htm>)

¹⁵ "Main Business and Services," *Sunry Petroleum Equipment Co. Ltd. Website*, accessed August 24, 2010. (http://www.sunrypetro.com/about_sunry.html)

¹⁶ "Exhibitors," *IranOilShow.com*, accessed August 25, 2010. (<http://www.iranoilshow.com/exhibitors.html>)

Appendix A - Chinese Entities Sanctioned by the United States

This appendix outlines the numerous Chinese entities sanctioned by the U.S. government as a result of their Iran-related activities. Chinese companies have a long history of engaging in activity inconsistent with U.S. law and the U.S. government has frequently succeeded in gathering sufficient information to meet the necessary evidentiary standards for sanctioning Chinese companies. Indeed, the U.S. government has sanctioned numerous Chinese companies (including state-owned Chinese entities) without causing grievous harm to the broader U.S.-China relationship.

These sanctions have occurred under the following U.S. laws:

The *Arms Export Control Act of 1979* and the *Export Administration Act of 1979* give the president the ability to impose sanctions against foreign persons deemed to be exporting, transferring or knowingly engaged in arms trade with a country that does not adhere to the Missile Technology Control Regime (MCTR).¹ Both laws impose measures that include

denying entities new export licenses to the U.S. and making them ineligible for U.S. government contracts.

The Iran Nonproliferation Act of 2000, expanded to include Syria and North Korea, in 2005 and 2006 respectively, imposes measures against entities that support Iran's weapons proliferation activities. The sanctions include ineligibility for U.S. government contracts, assistance and sales, and the denial of new export licenses.

The Iran/Iraq Nonproliferation Act of 1992 prohibits the transfer of goods or technology that could assist Iran and Iraq in developing weapons. The law imposes measures including ineligibility for U.S. government contracts and denial of export licenses.

Executive Order 12938 (November 1994) and Executive Order 13382 (July 2005) include measures that prevent designated entities from receiving U.S. government contracts, goods and services if they are found to be aiding in the proliferation of weapons of mass destruction.

ENTITY	EFFECTIVE DATE (DURATION)	SANCTION	FEDERAL REGISTER NOTICE
China Great Wall Industry Corporation	June 25, 1991	Arms Export Control Act and Export Administration Act of 1979	Vol. 56, No. 137, June 25, 1991
Liao Minglong	May 21, 1997 (at least one year and until further notice)	Arms Export Control Act and Export Administration Act of 1979	Vol. 62, No. 99, May 22, 1997
Tian Yi	May 21, 1997 (at least one year and until further notice)	Arms Export Control Act and Export Administration Act of 1979	Vol. 62, No. 99, May 22, 1997
Chen Qingchang, aka Q.C. Chen	May 21, 1997 (at least one year and until further notice)	Arms Export Control Act and Export Administration Act of 1979	Vol. 62, No. 99, May 22, 1997
Pan Yongming	May 21, 1997 (at least one year and until further notice)	Arms Export Control Act and Export Administration Act of 1979	Vol. 62, No. 99, May 22, 1997
Shao Xingsheng	May 21, 1997 (at least one year and until further notice)	Arms Export Control Act and Export Administration Act of 1979	Vol. 62, No. 99, May 22, 1997

¹ 22 U.S.C. § 2797b : US Code - Section 2797B: Transfers of Missile Equipment or Technology by Foreign Persons and "Part I of the Principal Statutory Authority for the Export Administration Regulations," Section 11b, accessed September 2, 2010. (<http://www.gpo.gov/bis/ear/txt/legalauthority.txt>)

ENTITY	EFFECTIVE DATE (DURATION)	SANCTION	FEDERAL REGISTER NOTICE
Nanjing Chemical Industries Group (NCI)	May 21, 1997 (at least one year and until further notice)	Arms Export Control Act and Export Administration Act of 1979	Vol. 62, No. 99, May 22, 1997
Jiangsu Yongli Chemical Engineering and Technology Import/Export Corporation	May 21, 1997 (at least one year and until further notice)	Arms Export Control Act and Export Administration Act of 1979	Vol. 62, No. 99, May 22, 1997
Jiangsu Yongli Chemicals and Technology Import and Export Corporation	June 14, 2001 (2 years)	Iran Nonproliferation Act of 2000	Vol. 62, No. 99, May 22, 1997
China Metallurgical Equipment Corporation, aka CMEC, MECC	September 1, 2001 (2 years)	Arms Export Control Act and Export Administration Act of 1979	Vol. 66, No. 176, September 11, 2001
Liyang Chemical Equipment	January 16, 2002 (2 years)	Iran Nonproliferation Act of 2000	Vol. 67, No. 16, January 24, 2002
China Machinery and Electric Equipment and Export Company	January 16, 2002 (2 years)	Iran Nonproliferation Act of 2000	Vol. 67, No. 16, January 24, 2002
Q.C. Chen	January 16, 2002 (2 years)	Iran Nonproliferation Act of 2000	Vol. 67, No. 16, January 24, 2002
Liyang Chemical Equipment Company	May 9, 2002 (2 years)	Iran Nonproliferation Act of 2000	Vol. 67, No. 95, May 16, 2002
Zibo Chemical Equipment Plant (Chemet Global Ltd)	May 9, 2002 (2 years)	Iran Nonproliferation Act of 2000	Vol. 67, No. 95, May 16, 2002
China Shipbuilding Trading Company	May 9, 2002 (2 years)	Iran Nonproliferation Act of 2000	Vol. 67, No. 95, May 16, 2002
China National Machinery and Electric Equipment Import and Export Company	May 9, 2002 (2 years)	Iran Nonproliferation Act of 2000	Vol. 67, No. 95, May 16, 2002
Wha Cheong Tai Company	May 9, 2002 (2 years)	Iran Nonproliferation Act of 2000	Vol. 67, No. 95, May 16, 2002
China Precision Machinery Import/Export Corporation	May 9, 2002 (2 years)	Iran Nonproliferation Act of 2000	Vol. 67, No. 95, May 16, 2002
China National Aero-Technology Import and Export Corporation	May 9, 2002 (2 years)	Iran Nonproliferation Act of 2000	Vol. 67, No. 95, May 16, 2002
Q.C. Chen	May 9, 2002 (2 years)	Iran Nonproliferation Act of 2000	Vol. 67, No. 95, May 16, 2002
Jiangsu Yongli Chemicals and Technology Import and Export Corporation	July 9, 2002 (2 years)	Iran/Iraq Nonproliferation Act of 1992 and/or the Arms Export Control Act and the Export Administration Act of 1979	Vol. 67, No. 143, July 25, 2002
Q.C. Chen	July 9, 2002 (2 years)	Iran/Iraq Nonproliferation Act of 1992 and/or the Arms Export Control Act and the Export Administration Act of 1979	Vol. 67, No. 143, July 25, 2002
China Machinery and Equipment Import Export Company Ltd.	July 9, 2002 (2 years)	Iran/Iraq Nonproliferation Act of 1992 and/or the Arms Export Control Act and the Export Administration Act of 1979	Vol. 67, No. 143, July 25, 2002
China National Machinery and Equipment Import and Export Company Ltd.	July 9, 2002 (2 years)	Iran/Iraq Nonproliferation Act of 1992 and/or the Arms Export Control Act and the Export Administration Act of 1979	Vol. 67, No. 143, July 25, 2002

ENTITY	EFFECTIVE DATE (DURATION)	SANCTION	FEDERAL REGISTER NOTICE
CMEC Machinery and Electric Equipment Import and Export Company Ltd.	July 9, 2002 (2 years)	Iran/Iraq Nonproliferation Act of 1992 and/or the Arms Export Control Act and the Export Administration Act of 1979	Vol. 67, No. 143, July 25, 2002
CMEC Machinery and Electrical Import Export Company Ltd.	July 9, 2002 (2 years)	Iran/Iraq Nonproliferation Act of 1992 and/or the Arms Export Control Act and the Export Administration Act of 1979	Vol. 67, No. 143, July 25, 2002
China Machinery and Electric Equipment Import and Export Company	July 9, 2002 (2 years)	Iran/Iraq Nonproliferation Act of 1992 and/or the Arms Export Control Act and the Export Administration Act of 1979	Vol. 67, No. 143, July 25, 2002
Wha Cheong Tai Company Ltd.	July 9, 2002 (2 years)	Iran/Iraq Nonproliferation Act of 1992 and/or the Arms Export Control Act and the Export Administration Act of 1979	Vol. 67, No. 143, July 25, 2002
China Shipbuilding Trading Company	July 9, 2002 (2 years)	Iran/Iraq Nonproliferation Act of 1992 and/or the Arms Export Control Act and the Export Administration Act of 1979	Vol. 67, No. 143, July 25, 2002
North China Industries Corporation (NORINCO)	May 9, 2003 (2 years)	Executive Order 12938	Vol. 68, No. 100, May 23, 2003
Taian Foreign Trade General Corporation	June 26, 2003 (2 years)	Iran Nonproliferation Act of 2000	Vol. 68, No. 128, July 3, 2003
Zibo Chemical Equipment Plant (aka Chemet Global Ltd., aka South Industries Science and Technology Trading Company, Ltd.)	June 26, 2003 (2 years)	Iran Nonproliferation Act of 2000	Vol. 68, No. 128, July 3, 2003
Liyang Yunlong Chemical Equipment Group Company	June 26, 2003 (2 years)	Iran Nonproliferation Act of 2000	Vol. 68, No. 128, July 3, 2003
China North Industries Corporation (NORINCO)	June 26, 2003 (2 years)	Iran Nonproliferation Act of 2000	Vol. 68, No. 128, July 3, 2003
China Precision Machinery Import/Export Corporation (CPMIEC)	June 26, 2003 (2 years)	Iran Nonproliferation Act of 2000	Vol. 68, No. 128, July 3, 2003
China Precision Machinery Import/Export Corporation (CPMIEC)	July 30, 2003	Executive Order 12938	Vol. 68, No. 146, July 30, 2003
China North Industries Corporation	September 19, 2003 (2 years)	Arms Export Control Act and the Export Administration Act of 1979	Vol. 68, No. 182, September 19, 2003
China North Industries Corporation (NORINCO)	April 1, 2004 (2 years)	Iran Nonproliferation Act of 2000	Vol. 69, No. 67, April 7, 2004
China Precision Machinery Import/Export Corporation (CPMIEC)	April 1, 2004 (2 years)	Iran Nonproliferation Act of 2000	Vol. 69, No. 67, April 7, 2004
Beijing Institute of Opto-Electronic Technology (BIOET)	April 1, 2004 (2 years)	Iran Nonproliferation Act of 2000	Vol. 69, No. 67, April 7, 2004
Oriental Scientific Instruments Corporation (OSIC)	April 1, 2004 (2 years)	Iran Nonproliferation Act of 2000	Vol. 69, No. 67, April 7, 2004

ENTITY	EFFECTIVE DATE (DURATION)	SANCTION	FEDERAL REGISTER NOTICE
Zibo Chemical Equipment Plant aka Chemet Global Ltd., aka South Industries Science and Technology Trading Company, Ltd.	April 1, 2004 (2 years)	Iran Nonproliferation Act of 2000	Vol. 69, No. 67, April 7, 2004
Xinshidai, aka China Xinshidai Company, XSD, China New Era Group	September 20, 2004 (2 years)	Executive Order 12938	Vol. 69, No. 181, September 20, 2004
Beijing Institute of Aerodynamics	September 23, 2004 (2 years)	Iran Nonproliferation Act of 2000	Vol. 69, No. 188, September 29, 2004
Beijing Institute of Opto-Electronic Technology (BIOET)	September 23, 2004 (2 years)	Iran Nonproliferation Act of 2000	Vol. 69, No. 188, September 29, 2004
China Great Wall Industry Corporation	September 23, 2004 (2 years)	Iran Nonproliferation Act of 2000	Vol. 69, No. 188, September 29, 2004
China North Industries Corporation (NORINCO)	September 23, 2004 (2 years)	Iran Nonproliferation Act of 2000	Vol. 69, No. 188, September 29, 2004
LIMMT Economic and Trade Company, Ltd	September 23, 2004 (2 years)	Iran Nonproliferation Act of 2000	Vol. 69, No. 188, September 29, 2004
Oriental Scientific Instruments Corporation (OSIC)	September 23, 2004 (2 years)	Iran Nonproliferation Act of 2000	Vol. 69, No. 188, September 29, 2004
South Industries Science and Technology Trading Co., Ltd.	September 23, 2004 (2 years)	Iran Nonproliferation Act of 2000	Vol. 69, No. 188, September 29, 2004
Liaoning Jiayi Metals and Minerals Company Ltd.	November 24, 2004 (2 years)	Iran Nonproliferation Act of 2000	Vol. 69, No. 230, December 1, 2004
Wha Cheong Tai Company	November 24, 2004 (2 years)	Iran Nonproliferation Act of 2000	Vol. 69, No. 230, December 1, 2004
Shanghai Triple International Ltd.	November 24, 2004 (2 years)	Iran Nonproliferation Act of 2000	Vol. 69, No. 230, December 1, 2004
Q.C. Chen	November 24, 2004 (2 years)	Iran Nonproliferation Act of 2000	Vol. 69, No. 230, December 1, 2004
Beijing Alite Technologies Company	December 27, 2004 (2 years)	Iran Nonproliferation Act of 2000	Vol. 70, No. 1, January 3, 2005
China Aero-Technology Import Export Corporation (CATIC)	December 27, 2004 (2 years)	Iran Nonproliferation Act of 2000	Vol. 70, No. 1, January 3, 2005
China Great Wall Industry Corporation	December 27, 2004 (2 years)	Iran Nonproliferation Act of 2000	Vol. 70, No. 1, January 3, 2005
China North Industries Corporation (NORINCO)	December 27, 2004 (2 years)	Iran Nonproliferation Act of 2000	Vol. 70, No. 1, January 3, 2005
Q.C. Chen	December 27, 2004 (2 years)	Iran Nonproliferation Act of 2000	Vol. 70, No. 1, January 3, 2005
Wha Cheong Tai Company, aka Wah Cheong Tai Company and Hua Chang Tai Company	December 27, 2004 (2 years)	Iran Nonproliferation Act of 2000	Vol. 70, No. 1, January 3, 2005
Zibo Chemet Equipment Corporation Ltd., aka Chemet Global Ltd.	December 27, 2004 (2 years)	Iran Nonproliferation Act of 2000	Vol. 70, No. 1, January 3, 2005
China Aero-Technology Import Export Corporation (CATIC)	December 23, 2005 (2 years)	Iran Nonproliferation Act of 2000	Vol. 70, No. 250, December 30, 2005
China North Industries Corporation (NORINCO)	December 23, 2005 (2 years)	Iran Nonproliferation Act of 2000	Vol. 70, No. 250, December 30, 2005

ENTITY	EFFECTIVE DATE (DURATION)	SANCTION	FEDERAL REGISTER NOTICE
Hongdu Aviation Industry Group (HAIG)	December 23, 2005 (2 years)	Iran Nonproliferation Act of 2000	Vol. 70, No. 250, December 30, 2005
LIMMT Metallurgy and Minerals Company Ltd.	December 23, 2005 (2 years)	Iran Nonproliferation Act of 2000	Vol. 70, No. 250, December 30, 2005
Ounion (Asia) International Economic and Technical Cooperation Ltd.	December 23, 2005 (2 years)	Iran Nonproliferation Act of 2000	Vol. 70, No. 250, December 30, 2005
Zibo Chemet Equipment Company Ltd.	December 23, 2005 (2 years)	Iran Nonproliferation Act of 2000	Vol. 70, No. 250, December 30, 2005
Beijing Alite Technologies Company Ltd.	June 13, 2006	Executive Order 13382	Vol. 71, No. 134, July 13, 2006
LIMMT Economic and Trade Company, Ltd.	June 13, 2006	Executive Order 13382	Vol. 71, No. 134, July 13, 2006
China Great Wall Industry Corporation (Sanctions lifted June 19, 2008)	June 13, 2006	Executive Order 13382	Vol. 71, No. 134, July 13, 2006
China National Precision Machinery Import/Export Corporation (CPMIEC)	June 13, 2006	Executive Order 13382	Vol. 71, No. 134, July 13, 2006
China National Electronic Import-Export Company (CEIEC)	December 28, 2006 (2 years)	Iran and Syria Nonproliferation Act	Vol. 72, No. 3, January 5, 2007
China National Aero-Technology Import and Export Corporation (CATIC)	December 28, 2006 (2 years)	Iran and Syria Nonproliferation Act	Vol. 72, No. 3, January 5, 2007
Zibo Chemet Equipment Company Ltd.	December 28, 2006 (2 years)	Iran and Syria Nonproliferation Act	Vol. 72, No. 3, January 5, 2007
China National Precision Machinery Import/Export Corporation (CPMIEC)	April 17, 2007 (2 years)	Iran and Syria Nonproliferation Act	Vol. 72, No. 77, April 23, 2007
Shanghai Non-Ferrous Metals Pudong Development Trade Co. Ltd.	April 17, 2007 (2 years)	Iran and Syria Nonproliferation Act	Vol. 72, No. 77, April 23, 2007
Zibo Chemet Equipment Company	April 17, 2007 (2 years)	Iran and Syria Nonproliferation Act	Vol. 72, No. 77, April 23, 2007
China Xinshidai Company	October 23, 2008 (2 years)	Iran, North Korea and Syria Nonproliferation Act	Vol. 73, No. 206, October 23, 2008
China Shipbuilding and Offshore International Corporation, LTD.	October 23, 2008 (2 years)	Iran, North Korea and Syria Nonproliferation Act	Vol. 73, No. 206, October 23, 2008
Huazhong CNC	October 23, 2008 (2 years)	Iran, North Korea and Syria Nonproliferation Act	Vol. 73, No. 206, October 23, 2008
Dalian Sunny Industries, aka LIMMT Economic and Trade Company Ltd., LIMMT (Dalian) Metallurgy and Minerals Co., LIMMT (Dalian FTZ) Economic and Trade Organization	February 2, 2009 (2 years)	Arms Export Control Act and the Export Administration Act of 1979 and Executive Order 12938	Vol. 74, No. 20, February 2, 2009
Bellamax	February 2, 2009 (2 years)	Arms Export Control Act and the Export Administration Act of 1979 and Executive Order 12938	Vol. 74, No. 20, February 2, 2009
Li Fangwei (Karl Lee)	April 7, 2009	Executive Order 13382	Vol. 74, No. 81, April 29, 2009

ENTITY	EFFECTIVE DATE (DURATION)	SANCTION	FEDERAL REGISTER NOTICE
Seibow Limited (Hong Kong)	June 16, 2010	Executive Order 13382	Dept. of Treasury Press Release, June 16, 2010
Seibow Logistics Limited (Hong Kong)	June 16, 2010	Executive Order 13382	Dept. of Treasury Press Release, June 16, 2010
Mr. Karl Lee	July 14, 2010 (2 years)	Iran, North Korea and Syria Nonproliferation Act	Vol. 75, No. 134, July 14, 2010
Dalian Sunny Industries, aka LIMMT Metallurgy and Minerals Co., LIMMT Economic and Trade Organization, and Liaoning Industry & Trade Co. Ltd.	July 14, 2010 (2 years)	Iran, North Korea and Syria Nonproliferation Act	Vol. 75, No. 134, July 14, 2010
Shanghai Technical By-Products International (STBPI)	July 14, 2010 (2 years)	Iran, North Korea and Syria Nonproliferation Act	Vol. 75, No. 134, July 14, 2010
Zibo Chemet Equipment Company	July 14, 2010 (2 years)	Iran, North Korea and Syria Nonproliferation Act	Vol. 75, No. 134, July 14, 2010



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