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**POLITICAL, ECONOMIC, SOCIAL, CULTURAL, AND  
RELIGIOUS TRENDS IN THE MIDDLE EAST AND THE  
GULF AND THEIR IMPACT ON ENERGY SUPPLY,  
SECURITY, AND PRICING**

**CHINA'S OIL DIPLOMACY AND RELATIONS WITH THE MIDDLE EAST**

STEVEN W. LEWIS, PH.D.  
*SENIOR RESEARCHER IN ASIAN POLITICS AND ECONOMICS  
JAMES A. BAKER III INSTITUTE FOR PUBLIC POLICY  
RICE UNIVERSITY*

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## Introduction

China's quiet shift to net oil importer status in 1993 marked a forced departure from the Communist Party's three decades experiment in self-sufficiency and left open the possibility that China could some day be as vulnerable as other industrial nations to unexpected world events such as the 1973 oil embargo and Iraq's invasion of Kuwait.

The impact of this realization on Chinese foreign policy formation is still playing itself out. But it is safe to say that oil security concerns are increasingly influencing China's foreign initiatives and strategic calculus. The shift to oil importer status is bringing China's interests closer in line to those of the oil-dependent West. But it is also raising a host of challenges for the West in co-opting China to its points of view.

As China imports more oil, it will become more vulnerable to pressure from energy regions, including countries seeking sensitive military equipment not being made available by the West or parties needing light arms for regionalized conflicts and civil wars. The thirst for oil has certainly convinced Beijing of concrete benefits that can be reaped from taking advantage of U.S. sanctions policies. China's oil industry is reaping spoils in the Sudan, has planted its flag in Iraq and Iran and is courting Libya. Beijing will also develop stronger ties with oil power Saudi Arabia, potentially offering the Saudis an expanding alternative market to the U.S. and Japan.

The challenge for the U.S. and its allies will be to convince an ambitious, energy-hungry China that secure energy supply for all concerned will be dependent on cooperative foreign policy that seeks to minimize geopolitical rivalry and lessen the chances for disruptive armed conflict inside oil producing areas.

China's initial inclinations seem to be pointing towards the pursuit of bilateral approaches with key oil producing states in the Middle East and Africa, and to a lesser degree in Latin America.<sup>1</sup> Bilateral approaches, in periods where oil markets are tight such as the past two years, can lead to strings attached in exchange for stable supply, especially increased pressure from oil suppliers for political concessions. At its worst, this might portend increased demands on China for

deliveries of weapons of mass destruction to these politically sensitive markets. The U.S., Japan and Europe have faced similar problems, especially in the 1970s, and have taken certain unified policy steps to lessen exposures. China, however, has yet to consider seriously a multilateral alliance with other oil consuming countries and has instead reached out in greater measure to individual oil exporting countries.

### **China's Energy Dilemma**

In recent years, in line with remarkable economic progress, China's oil demand has grown faster than its domestic oil production. In the last decade, oil consumption rose from 2.1 million b/d in 1990 to 3.5 million b/d in 1997 and is about 4.6 million b/d currently.<sup>2</sup> China's now ranks third in the world for oil products use, after the U.S. and Japan.

This growth has transformed China into a major importer of oil and mineral resources.<sup>3</sup> According to Chinese Customs agency data, crude oil imports stood at 1.2 million b/d in 2001, down slightly from 1.40 million b/d in 2000.<sup>4</sup> Net refined product imports totaled some 365,000 b/d in 2001, or 50 percent of consumption, not including an additional 70,000 b/d to 100,000 b/d of illegally smuggled gas oil, fuel oil and other products.<sup>5</sup> These product imports are expected to more than double over the next 15 years, particularly for China's economically vibrant and yet energy resource poor Southern and Eastern coastal provinces.<sup>6</sup>

The total level of these imports is forecast to grow substantially in the coming years as China's domestic oil requirements increase and its domestic oil production fails to keep pace. Depending on its pace of economic growth, China's oil use is projected to increase by between 750,000 b/d and 3 million b/d, totaling between 5.4 million b/d to 7.5 million b/d by 2010. By 2020, China's oil demand could be as high as 7 to 12 million b/d if strong economic growth continues.<sup>7</sup> Should China's oil production levels remain relatively stagnant, as has been the case for several years, China's oil import levels will grow to between 2.0 million b/d and 4 million b/d over the next ten years. If oil use in the transportation sector rises from the current 60% to 90% as is more customary in industrialized nations, Chinese oil demand in 2010 could be even higher at between

6.3 million b/d and 8.1 million b/d, and depending on GDP growth rates, between 11.4 million b/d and 17.9 million b/d in 2020.<sup>8</sup>

**Table One:**  
**Estimates of Chinese Oil Demand**  
(Millions of barrels per day)<sup>9</sup>

Year	Baker Institute (1999)	IEA (2000)	APERC (1998)	SDPC (1998)	PRC State Council (1996)	SETC (2001)
2000			4.3	4.0	4.0	
2005			5.5			4.9
2010	6.2	7.1	6.8	5.7	5.2	
2015	7.4			6.8		
2020	8.8	10.1			6.4	

While some analysts continue to predict that Chinese oil production could rebound over the next ten years, there are many factors that might work against this result. They include: capital shortages within China's major industries, fiscal deficits facing the central government, the fiscal challenge to local governments and state corporations posed by the social welfare costs of restructuring, a lack of interest among foreign investors in acreage offered for exploration, and the prospects that oil prices could remain low over the long term.<sup>10</sup>

For these and other reasons, domestic output is generally expected to remain relatively flat over the coming decade. As seen in Table Two, forecasts for 2010 among respected sources generally range from 3.0 million b/d to 3.9 million b/d. And as seen in Table Three, production in the largest and oldest fields in Northeast China has declined in recent years. These declines are only slightly offset by increases from offshore and Western areas.

**Table Two:**  
**Estimates of Chinese Domestic Oil Production**  
(Millions of barrels per day)<sup>11</sup>

Year	Baker Institute (1999)	IEA (2000)	US DOE (2001)	APERC (1998)	SDPC (1998)	PRC State Council (1996)	SETC (2001)	Wood Mac-kensie (1998)	East-West Center (1997)
2000				3.4	3.2	3.1	3.2		3.3
2005			3.1	3.6			3.4		3.5
2010	3.3	3.1	3.1	3.9	3.8	3.3		3.0	3.7
2015			3.0		4.1				
2020	3.5	2.1	3.0			3.6			

**Table Three:**  
**Daily Production in Chinese Major Oil Fields by**  
**Region, Province and Chinese Company,**  
**As Reported by Field Administration and Company,**  
**1998-2000**  
 (Thousand barrels per day)<sup>12</sup>

Field/Region	Province	Company	1998	1999	2000	1998 %Total	2000 %Total	2000/ 1998
<b>Northeast</b>			<b>1493.2</b>	<b>1462.2</b>	<b>1424.1</b>	<b>50.8</b>	<b>47.9</b>	<b>.953</b>
Daqing	Heilongjiang	CNPC	1133.9	1109.5	1079.0			.951
Jilin	Jilin	CNPC	80.8	77.4	76.4			.945
Liaohe	Liaoning	CNPC	278.5	274.3	268.7			.964
<b>North</b>			<b>745.3</b>	<b>713.2</b>	<b>722.3</b>	<b>25.3</b>	<b>24.3</b>	<b>.969</b>
Shengli	Shandong	Sinopec	531.0	509.0	519.0			.977
Zhongyuan	Henan	Sinopec	78.0	72.0	73.0			.935
Dagang	Hebei	CNPC	86.5	82.5	80.5			.930
Henan	Henan	Sinopec	37.1	(37.1)	36.9			.994
Jidong	Hebei	CNPC	12.7	12.6	12.9			1.015
<b>East/Yangtze</b>			<b>41.8</b>	<b>41.8</b>	<b>51.7</b>	<b>1.4</b>	<b>1.7</b>	<b>1.236</b>
Jiangsu	Jiangsu	Sinopec	25.1	(25.1)	30.9			1.231
Jianghan	Hubei	Sinopec	15.1	(15.1)	19.2			1.271
Anhui	Anhui	Sinopec	1.6	(1.6)	(1.6)			(1.000)
<b>Northwest</b>			<b>121.9</b>	<b>137.9</b>	<b>144.0</b>	<b>4.1</b>	<b>4.8</b>	<b>1.181</b>
Changqing	Gansu	CNPC	81.4	87.6	94.5			1.160
Yanchang	Shaanxi	CNPC	32.5	42.3	41.3			1.270
Yumen	Gansu	CNPC	8.0	8.0	8.2			1.025
<b>West</b>			<b>356.1</b>	<b>400.6</b>	<b>421.7</b>	<b>12.1</b>	<b>14.2</b>	<b>1.184</b>
Xinjiang	Xinjiang	CNPC	178.5	184.1	188.5			1.056
Tarim	Xinjiang	CNPC	78.8	85.7	89.0			1.129
Tu-Ha	Xinjiang	CNPC	63.6	63.6	61.5			.966
Qinghai	Qinghai	CNPC	35.2	38.0	40.0			1.136
Tahe	Xinjiang	Sinopec	0.0	29.2	42.7			(n.a.)
<b>Southwest</b>			<b>5.3</b>	<b>5.1</b>	<b>4.6</b>	<b>&lt;.1</b>	<b>&lt;.1</b>	<b>.867</b>
Sichuan	Sichuan	CNPC	4.3	4.0	(4.0)			(.930)
DianQianGui	Yunnan	Sinopec	1.0	(1.0)	.6			.600
<b>Offshore</b>			<b>170.9</b>	<b>168.3</b>	<b>200.1</b>	<b>5.8</b>	<b>6.7</b>	<b>1.170</b>
Nanghai East	(South)	CNOOC	105.5	88.0	90.0			.853
Nanghai West	(South)	CNOOC	20.3	35.1	46.4			2.285
Bohai	(East)	CNOOC	45.1	45.2	63.7			1.412
<b>Total</b>			<b>2934.5</b>	<b>2929.1</b>	<b>2968.5</b>	<b>100.0</b>	<b>100.0</b>	<b>1.011</b>

Table Four shows estimates, under varying growth scenarios, of China's future oil import needs. Foreign experts generally predict that China will import 3 to 4 million b/d in 2010 and 5 to 8 million b/d in 2020. Although more recent public reports suggest a convergence toward foreign projections, in recent years Chinese government agencies and industry sources have predicted China will import 1.3 to 1.9 million b/d in 2010, and from around 2 to 3 million b/d in 2020.

**Table Four:**  
**Estimates of Chinese Oil Imports**  
 (Millions of barrels per day)<sup>13</sup>

Year	Baker Institute (1999)	IEA (2000)	APERC (1998)	SDPC (1998)	PRC State Council (1996)	PRC Industry (1999)	SETC (2001)
2000			.9	.7	.9	.7	1.2
2005			1.9				1.7
2010	3.0	4.0	2.9	1.9	1.7	1.3	
2015				2.7			
2020	5.4	8.0			1.8	2.6	

Recognizing the limits to domestic oil resources and the economic and environmental costs of continuing to rely heavily on coal, China's leadership has been seeking new ways to enhance its trade and investment ties to oil-rich countries in the Middle East.

First and foremost, China has been seeking oil exploration deals in the Middle East but also increased oil supply deals. Numerous articles about the importance of launching a Middle East strategy have been crafted by Chinese foreign policy analysts and pundits.<sup>14</sup> Some Chinese authors point out, however, that the West's strong position in the Middle East could be used to limit China's access to the same supplies were China not to pursue its own bilateral ties.<sup>15</sup>

Chinese officials are thus deeply concerned about what they view as an emerging energy security threat to China's economy posed by the United States led war against terrorism in the Persian Gulf. It is worth quoting at length the views expressed in January 2002 of Chen Huai, deputy head of the Market Economy Research Institute of the State Council's Development Research Center:

After the 9.11 incident, the United States, in the name of combating terrorism, carried out a severe military attack against the Taliban regime of Afghanistan. However, many people in the know, one after the other, have pointed out that the real goal of the United States is to realize the presence of the U.S. military in Central Asia. This kind of situation constitutes a kind of actual threat to the sources and passageways of the strategic resources of our country. Not only this, in the middle and latter period of the

1990's, during the process of our country's oil strategy implementing the intention of "going out," the opportunity to purchase definite production rights and obtain "a portion of oil" was realized. However, the primary place of deployment of the successful projects was in Sudan, and other sensitive countries. This time the United States has already publicly declared in the name of combating international terrorism that any country or government that has supported terrorism is on the list for U.S. attack. Sudan and others are very possibly on this name list. Recently, after the Taliban regime fell from power, U.S. voices with regard to expanding the scope of military attacks have become unceasingly sharper. This has brought an extremely large unstable factor to China's foreign resource production areas. It is possible that the core of our country's oil security shifts from price security to foreign resource and production rights security.<sup>16</sup>

Chinese officials therefore are also concerned about the safety of the sea lanes of the Strait of Malacca, through which some 60 to 70 percent of China's oil imports from the Middle East and Africa pass. They are also worried about potential disruptions in the planned supply of oil and gas coming from Kazakhstan and Xinjiang to Eastern China via several large pipeline projects.<sup>17</sup> Chinese military analysts have publicly expressed concern about potential military ties between the United States and India.<sup>18</sup>

China also has an incentive to use military sales to forge closer links to the region while at the same time offsetting some of its oil import costs.<sup>19</sup> Although China's arms sales represent only a very small portion of its exports, and thus may not figure prominently in the creation of the central government's trade policies, the incentive operates at the firm level as Chinese industrial and trading conglomerates seek to expand product sales, including arms and machinery used in weapons manufacturing, to countries that export raw materials for their operations in China. This is likely to be especially true for arms companies, such as Norinco and Sorinco, which have exploration and transmission facility construction joint ventures with state oil and gas companies in the Middle East and Africa.

According to State Economic Trade Commission figures, China's imports from Iran jumped to 217,000 b/d in 2001, up 55 percent 2000. Purchases from Saudi Arabia have also risen sharply in the last two years, to 175,600 b/d in 2001, up 53 percent from 2000. Crude imports from

Kuwait and the United Arab Emirates have also increased somewhat; but those from Oman and Yemen saw decreases of 48 percent and 37 percent.<sup>20</sup>

As seen in Table Five, China has met its rapidly growing oil import needs in recent years by shifting from Asian sources to a few Middle East countries – particularly Iran, Saudi Arabia, Oman and Yemen – and, increasingly, to Africa, Russia and Central Asia. Overall, Africa became the second-largest source of oil imports for China in 2001, with 217,000 thousand b/d, or some 22 percent of total imports. Crude imports from Sudan increased to 99,400 thousand b/d in 2001, an increase of 50 percent from 2000. Over the same period, imports from Angola shrunk 56 percent to 76,000 thousand b/d.<sup>21</sup>

**Table Five:**  
**Chinese Crude Oil Imports from Select Middle East Countries and**  
**Regions, 1992-1999**  
 (Thousands of barrels per day)<sup>22</sup>

	1992	1993	1994	1995	1996	1997	1998	1999
<i>Oman</i>	61.2	81.6	67.2	73.0	113.0	180.6	115.8	100.4
<i>Yemen</i>	8.6	33.0	25.0	49.4	75.2	81.0	80.8	82.6
<i>Iran</i>	2.2	1.3	1.3	18.6	46.2	55.0	72.4	79.0
<i>UAE</i>	4.6	11.4	1.3	7.2	n.a.	.9	10.2	nil
<i>Saudi Arabia</i>	3.6	4.2	2.8	6.6	4.6	9.8	36.0	49.8
<b>Mid-East Total</b>	<b>80.6</b>	<b>131.8</b>	<b>98.0</b>	<b>155.2</b>	<b>239.2</b>	<b>335.6</b>	<b>333.2</b>	<b>348.2</b>
<b>Mid-East %</b>	<b>36%</b>	<b>42%</b>	<b>40%</b>	<b>45%</b>	<b>53%</b>	<b>47%</b>	<b>61%</b>	<b>48%</b>
<b>Africa Total</b>	<b>10.0</b>	<b>42.6</b>	<b>10.0</b>	<b>36.8</b>	<b>38.6</b>	<b>118.2</b>	<b>43.8</b>	<b>134.8</b>
<b>Africa %</b>	<b>4%</b>	<b>14%</b>	<b>4%</b>	<b>11%</b>	<b>9%</b>	<b>17%</b>	<b>8%</b>	<b>18%</b>
<b>Asia-Pacific Total</b>	<b>134.2</b>	<b>130.6</b>	<b>136.8</b>	<b>141.6</b>	<b>164.4</b>	<b>188.2</b>	<b>109.4</b>	<b>136.4</b>
<b>Asia-Pacific %</b>	<b>59%</b>	<b>42%</b>	<b>55%</b>	<b>41%</b>	<b>36%</b>	<b>27%</b>	<b>20%</b>	<b>19%</b>
<b>Other</b>	<b>2.2</b>	<b>8.2</b>	<b>1.8</b>	<b>8.0</b>	<b>10.2</b>	<b>67.4</b>	<b>60.0</b>	<b>112.8</b>
<b>Other %</b>	<b>1%</b>	<b>3%</b>	<b>1%</b>	<b>2%</b>	<b>2%</b>	<b>10%</b>	<b>11%</b>	<b>15%</b>
<b>TOTAL</b>	<b>227.2</b>	<b>313.4</b>	<b>247.0</b>	<b>341.8</b>	<b>452.4</b>	<b>709.4</b>	<b>546.4</b>	<b>732.2</b>

At the same time, China has also pursued oil field investment activities in the Middle East, including Iraq and Iran.<sup>23</sup> CNPC and the Chinese state-owned weapons and industrial conglomerate Northern Industries Corporation, or Norinco, signed a “post-sanctions”



memorandum of intention in June 1997 for development of the Al-Ahdab field in central Iraq. The field contains an estimated 360 million barrels of oil and would require an investment of around US \$1.3 billion. Given United Nations sanctions blocking investment in Iraq's oil industry, Chinese oil company activity has reportedly been limited mainly to surveying work on al-Ahdab. In 1998, CNPC began negotiations for a second field, the Halfayah field, but no contract has been reported as signed. CNPC has investigated the possibility of service agreements with Iran but no final transactions have been reported.<sup>24</sup> Sinopec, however, has moved forward, signing deals with the Iranian state oil company to jointly explore for oil in Zavareh and Kashan.<sup>25</sup>

China has pursued "cross investment" arrangements with Saudi Arabia.<sup>26</sup> Under such a strategy, China would allow Saudi Arabian companies to make downstream refinery and petrochemical investments in China and Chinese oil companies would pursue upstream oil field activities in the kingdom. Both Riyadh and Beijing see the benefit to some link-up as China offers a potentially growing market for Saudi crude while Saudi Arabia is important to China's future strategic interests because it remains the single largest supplier to world oil markets. As this relationship grows, the cost in hard foreign currency to Beijing will rise dramatically. China's hydrocarbon imports from the Kingdom totaled only US 155 million dollars in 2000, but in 2001, they skyrocketed to just under US 2 billion dollars.<sup>27</sup> The incentive to work out cross-investment strategies between the two countries will only increase as Saudi and Gulf State production of petrochemical feedstock rises in future years, matching the enormous demand for these from China's growing textile and light-manufacturing industries. According to petrochemical industry experts, China is already the largest importer of many olefins, and by 2006, its imports are expected to represent 57 percent of world demand.<sup>28</sup>

The diplomatic groundwork for Sino-Saudi Arabia cooperation was promoted by an oil cooperation agreement between the two countries signed in September 1999 when Chinese President Jiang Zemin visited Saudi Arabia. Under the agreement, China promised to open its downstream refining business to the Saudis. The agreement stipulated, however, that Saudi Arabia would open its domestic market to Chinese investment *except* in oil exploration and development.

In late 2001, Saudi Aramco, the Saudi state oil company, ExxonMobil and Fujian Petrochemical Company signed an agreement for a joint feasibility study for a 250,000 b/d upgrading of the Fujian refinery. Saudi Arabia has also proposed to construct a 100,000 b/d refinery in Shandong province and is negotiating with Sinopec to expand the refinery at Maoming. China, strapped for cash, is interested in Saudi financing for investment projects that would allow Chinese refineries to handle a larger amount of Saudi crude supply. Still, foreign entry into the Chinese downstream industry has proved very difficult, and few ventures have proceeded smoothly. Total SA of France holds a 20% stake in West Pacific Petrochemical Company (WEPEC) for an investment in the refinery at Dalian. Exxon, ARCO and Caltex have also pursued downstream ventures in China. BP currently owns over 20% in the Zhenhai refinery. The overall difficulty of China's investment climate in the refining sector will likely inhibit wide-scale construction of new facilities to meet rising internal demand for petroleum products, barring major reforms in the oil sector.

Political aspects accompanied China's Middle East deal making activities. China, for example, has shown support for Iraq in the United Nations. Throughout the 1990s, China joined ranks with France and Russia to call for the early lifting of United Nations sanctions against Iraq and it has opposed military strikes against Baghdad.<sup>29</sup> Chinese foreign policy officials and commentators cynically refer to the U.S. "Rogue State Policy," and the war against Iraq, as a thinly-veiled attempt to gain control of the oil resources of the Persian Gulf.<sup>30</sup> Chinese diplomats have also aggressively courted states in the Middle East and Africa, trying to persuade them to recognize the PRC and not Taiwan as the sole legitimate government of China. Saudi Arabia severed diplomatic links with Taiwan in 1990 when it established diplomatic relations with Beijing.<sup>31</sup> In 1992, China re-established relations with Israel, formalizing economic and political ties that had grown throughout the 1970s and 1980s, including extensive sales of sophisticated military technology to China.<sup>32</sup> Although China's growing economic ties with Arab oil-exporting states, and the potential for arms transfers to these by China, poses a challenge for Sino-Israel relations and continued arms sales to the PRC, China's status in the United Nations' Security Council and access to other sources of sophisticated weapons – as seen in reports of

Russia's recent sale of eight more "Kilo" class submarines to the PLA Navy<sup>33</sup> – makes it a desirable economic and political partner for Israel and Arab states alike.

Finally, China is likely to face pressure to accept some sort of linkage between oil supply from the Middle East and provision of military assistance. Beijing is considered a prime alternative for countries seeking ballistic weapons and aircraft technology that might not be available from the U.S. In 1991, China briefly assisted Saudi Arabia in developing a chemical warhead for its CSS-2 missiles, and the kingdom, in light of recent events, considers China a possible target for diversifying its arms procurement.<sup>34</sup> And although Chinese arms sales to Saudi Arabia are dwarfed by those from the United States and European countries, in 2000, the Saudis reportedly asked Beijing to continue the maintenance and training of military personnel servicing the missiles China sold the kingdom in 1988.<sup>35</sup> Meanwhile, Beijing is continuing to help Pakistan modernize its military technology. In December 2001, the first ships arrived in Karachi to deliver advanced Chinese F-7 aircraft that will replace the aging F-6 fighters currently in Pakistan's arsenal.<sup>36</sup>

Despite Chinese efforts to build ties to the Persian Gulf, barriers remain to a close oil supply link between China and key Middle East suppliers. International sanctions against Iraq have prevented China from moving forward there, and commercial factors have thwarted progress on investment plans in Iran. Moreover, so far, Saudi Arabia has only indicated a willingness to consider foreign investment in integrated natural gas projects, and CNPC says it has no strong interest in this kind of investment.<sup>37</sup> At present, Chinese sources say CNPC is pessimistic about whether it is possible to complete an oil exploration/production arrangement in Saudi Arabia but China continues to pursue a dialogue on cross-investment to keep options open.

Rising Chinese oil imports from the Persian Gulf would leave the Asian superpower more vulnerable to U.S. influence. China's military and particularly its naval buildup, though sizeable, is far from sufficient to guarantee East Asian sea-lanes, much less protect security in the Persian Gulf.<sup>38</sup> Thus, for the foreseeable future, ironically, China will be forced to rely on the U.S. military to protect its access to this oil, greatly constraining its geo-strategic options that in recent years have included support or sponsorship of nations hostile to U.S. regional allies. China's top

Party leaders do not acknowledge this dependency in public speeches or documents, but foreign policy scholars and oil industry experts have recently revived criticism of the U.S. energy and security policies, and by implication their own dependency on the US, after a brief lull following September 11.<sup>39</sup>

### **Implications for the U.S.**

On the face of it, China's emergence as a major oil and gas importing country could result in Beijing finding its strategic interests in the Middle East more closely in line with those of the West. The U.S. should exploit this possibility as a means to entice China into its orbit.

The consequences of not doing so could be costly. China's continued pursuit of stronger bilateral ties with key oil producing states such as Iraq, Iran, Saudi Arabia, the Sudan, and Libya may run counter to U.S. interests. These bilateral approaches could easily lead to pressure on Beijing for political concessions and could portend increased demands on China for deliveries of weapons systems to these politically sensitive markets and weaken U.S. leverage in these important regions. In a worst-case scenario, China's activities, if accompanied by increased arms sales and military training, could fuel existing instability that ironically could hamper the stability of both the West's and China's own oil supplies. China is obviously aware of this dilemma but knowledge is only half the battle. The need to build its own bridges to the regimes in question, to ensure energy supply and gain overall support of its "one-China" politics, may be hard to implement without the promise of side benefits such as political concessions and military assistance. The dynamic of this phenomenon could hurt U.S. chances of forging a long-term, constructive dialogue with Beijing.

The OECD governments have become experienced in utilizing international institutions and multilateral approaches for ameliorating vulnerability to oil supply disruptions and have worked together to eschew bilateral trade-offs between energy supply and political issues unrelated to oil and gas. It will be in U.S. interests to find ways to co-opt China to band together with other large consuming nations in the eventuality of an oil disruption rather than pursue go-it-alone bilateral energy relationships. Encouraging Beijing to reduce its vulnerability to an international

supply disruption through the building of a strategic oil reserve whose use could be coordinated with the International Energy Agency (IEA) countries would reduce the possibility of deleterious competition in tight oil markets and reduce the chances that any oil producer or group of oil producers could organize an oil supply cutoff to influence political events not related to oil markets. The rule making of the WTO in the energy trade area is another instrument that can be tapped to discourage bilateral agreements on non-competitive terms.

A Chinese strategic petroleum reserve would not only reduce China's vulnerability to pressure from foreign oil suppliers but also aid all consuming countries by eliminating a major importer's free-riding off other countries' stock releases. If major Asian consumers like China and India agree to build stocks and joint emergency management with the International Energy Agency, it would be a means to expand the volume of stocks available during a supply cutoff without the IEA footing the entire bill. It would also make the distribution of oil during a supply emergency more efficient and globally diffuse, thereby lessening the effects of any dislocation and the related immediate jump in world oil prices.

The Chinese government seems committed to only the gradual construction of a strategic petroleum reserve, of undetermined size and location, and it has not expressed any intention to work cooperatively with either its Asian neighbors or OECD countries to develop measures to safeguard against disruptions in supplies of oil and refined products from the Middle East.<sup>40</sup> As late as December 2000, State Economic and Trade Commission (SETC) officials publicly declared there was no pressing need to establish a reserve, and yet in March 2001 the State Council and the State Development Planning Commission included a "strategic petroleum reserve" as a key project in the new 10<sup>th</sup> Five-Year Plan.<sup>41</sup> Since then the SETC and other government agencies have proposed creating a reserve of eight million cubic meters, or 8.3 million tons and some 30 days' supply, by 2005, up from the current estimated reserves of some 21 days. Many discussions call for the storage of a two to three month supply by 2010, on par with Chinese estimates of U.S. and Japanese stockpiles.<sup>42</sup>

The creation of such a stockpile, however, will likely be hampered by disagreement over size, location and funding between Party leaders, State Council agencies, National People's Congress

deputies and the three central-owned state oil and gas companies. Significantly, China's top Party leaders, including Party Secretary Jiang Zemin and Premier Zhu Rongji, their designated heirs apparent, Hu Jintao and Wen Jiabao, and even the Minister of the State Development Planning Commission, Zeng Peiyan, have issued no public statements containing details of a strategic petroleum reserve. Wang Tao, National People's Congress standing committee member and, until 1997, president of China National Petroleum Corporation (CNPC), has proposed that the government compensate one of the state oil and gas companies for a recently-discovered domestic oil field and turn it into a strategic petroleum reserve capable of meeting import needs for three months by 2010.<sup>43</sup> Debates within the NPC for any such funding, as with the Three Gorges Dam Project, are likely to be contentious.

The three state companies, CNPC, Sinopec and CNOOC seem to be much more interested in obtaining central government subsidies and tax breaks for the exploration and development of domestic oil fields, and in pursuing their "Going Abroad" (zou chuqu) strategy of purchasing mature foreign fields in the Middle East, Southeast Asia, Central Asia, Africa and Latin America, than in constructing a domestic strategic petroleum reserve.<sup>44</sup> Neither CNPC nor Sinopec include information on investments in strategic reserves in their corporate reports or comprehensive annual yearbooks. The discussion of the location for a single stockpile facility, or the upgrading of existing facilities, is likely to be opposed by the state oil and gas companies. Because each has exclusive exploration, production and distribution rights in different parts of Chinese territory, a concrete discussion of location is by definition a means to decide which corporate entity will provide the billions of dollars necessary to create such a stockpile.<sup>45</sup>

Perhaps in recognition of the above difficulties, the State Economic and Trade Commission has downplayed the creation of a strategic petroleum reserve in its plans to guarantee the flow of materials necessary to sustain China's rapid economic growth. In November 2001, Zhang Zhigang, vice-minister of the SETC, did not even include a strategic petroleum reserve in his list of the seven elements comprising China's oil security strategy for the 21<sup>st</sup> Century: (1) increase efficiency in coal consumption; (2) develop domestic oil exploration and production; (3) promote the "going abroad" plan of state oil and gas companies; (4) increase security in oil markets; (5);

rationalize pricing of oil markets; (6) develop utilization of natural gas; and (7) promote alternative energy technologies.<sup>46</sup>

China should also explore other cooperative energy initiatives. Research and development of alternative fuels and technologies that might lessen China's rising need for imported oil have an important role to play (which incidentally could yield fruitful environmental gains as well). Japan is already working jointly with China on clean coal research and development. Initiatives to help China leap frog existing gasoline car technology to favor propane, natural gas, or more efficient hybrid and fuel cell vehicles would also greatly reduce the rise in China's need for oil while at the same time reducing its carbon and other emissions.

Finally, while political obstacles might be great, the experience of the Western hemisphere is instructive on the benefits of international natural gas and shared electricity grids in improving access to supplies and lowering costs. Several such grids have been proposed in Asia, including gas grids linking ASEAN countries. Development of resources in Russia's Far East could be instrumental in this regard in Northeast Asia.

Policy analysts in Beijing, no different than their counterparts in the industrialized West and Japan, have tended to tackle the difficult subject of oil geopolitics by emphasizing gaining an edge in what might be a difficult competition for scarce resources. But energy markets could just as easily be oversupplied as undersupplied in the coming decades, depending on how well key consuming nations band together into a cooperative framework. The war against terrorism raises the possibility that a coalition, like the one formed against terrorist networks, could be tapped to avoid the more painful scenarios that can be imagined from the rising need for oil for developing countries like China. The U.S. should take the lead in determining this better future - one where technology and political cooperation are utilized to ensure that secure, ample, cleaner energy supply is available at reasonable prices to fuel prosperity in the world economy.

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<sup>1</sup> For a broader discussion of China's quest for energy resources in other regions of the world see Amy Myers Jaffe and Steven W. Lewis, "China's Oil Diplomacy," *Survival*, Vol. 44, No. 1, (Spring 2002), pp. 115-134.

<sup>2</sup> "Asian Demand Flat, and May Get Worse", *Petroleum Intelligence Weekly*, July 30, 2001, p. 2.

<sup>3</sup> The Ministry of Natural Resources estimates that China's economic growth will force imports of 21 of 45 essential mineral resources, including petroleum, in 2010, and 39 in 2020; see, "China Will Promote Sin-Foreign Cooperation in Development of Mineral Resources," Xinhua, in English, December 23, 2000, in FBIS-CHI-2000-1223.

<sup>4</sup> Xinhua, "Production and Marketing of Crude Oil in 2001," March 12, 2002.

<sup>5</sup> Xinhua, "Production and Marketing of Fuel Oil in 2001," Xinhua, March 13, 2002.

<sup>6</sup> National estimates provided by Asia Pacific Consulting; for estimates up to 2010 of national product use and use in four Southern provinces see Sinopec, "Zhongguo shiyou shichang xianzhuang ji xiangguan zhengce", ("The Current Situation in China's Oil Market and Related Policies"), Beijing: Sinopec Information Center, 1999; for a thorough exploration of the oil, gas and oil products market in China in 2000 see China National Petroleum Corporation (CNPC), "2000 nian zhongguo shiyou shichang fenxi baogao", (In-Depth Analysis of China's Oil Market in 2000), Beijing: CNPC Information Research Center, 2001.

<sup>7</sup> Ronald Soligo and Amy Jaffe, "China's Growing Energy Dependence: The Costs and Policy Implications of Supply Alternatives", working paper, Houston: Baker Institute for Public Policy, Rice University, April 1999, available online at [<http://www.bakerinstitute.org/>].

<sup>8</sup> Ibid.

<sup>9</sup> Baker Institute figures from Kenneth B. Medlock III, and Ronald Soligo, "The Composition and Growth in Energy Demand in China", (Houston: Baker Institute, 1999), available at [<http://www.bakerinstitute.org/>]; International Energy Agency (IEA) from IEA, *China's Worldwide Quest for Energy Security*, Paris: OECD, 2000; Asia Pacific Economic Research Center (APERC) from APERC, "APEC Energy Demand and Supply Outlook: Updated September 1998," Tokyo: APERC, 1998; State Development Planning Commission (SDPC) from Shixian Gao, "China", in Paul B. Stares, ed., *Rethinking Energy Security in East Asia*, Tokyo: Japan Center for International Exchange, 2000, pp. 43-58; PRC State Council from



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China Energy Strategy Study (2000-2050), Beijing, in Chinese, cited in IEA op cit, p. 47; State Economic and Trade Commission (SETC) from SETC, "Tenth Five Year Plan for Developing the Petroleum Industry", available at [<http://www.setc.gov.cn>].

<sup>10</sup> CNPC, Sinopec and CNOOC employ more than 2 million employees, the majority of whom will lose their jobs under current downsizing plans. Restructuring, particularly further privatization, is likely to proceed very slowly, however, because local governments and employees have a strong interest to work together in opposing central government and corporate headquarter plans made in Beijing: China has no national unemployment, health care or pension system, and so the cost of establishing a social welfare plan for energy sector employees must be borne by local governments. For a more complete discussion of the restructuring and privatization of the Chinese oil and gas sector see Steven W. Lewis, "Privatizing China's State-Owned Oil Companies," paper prepared as part of "China and Long-Range Asian Energy Security: An Analysis of the Political, Economic and Technological Factors Shaping Asian Energy Markets," sponsored by the Center in International Political Economy and the James A. Baker III Institute for Public Policy, Rice University, April 1999; available at [<http://www.bakerinstitute.org/Pubs/workingpapers/claes/pcs/pcs.html>].

<sup>11</sup> Baker Institute figures from Soligo and Jaffe op cit; IEA from IEA op cit; US DOE from United States Department of Energy, "International Energy Outlook 2001", March 28, 2001, available at [[http://www.eia.doe.gov/oiaf/ieo/tbld1\\_d5.html](http://www.eia.doe.gov/oiaf/ieo/tbld1_d5.html)]; APERC from APERC op cit.; SDPC from Gao op cit; PRC State Council from PRC State Council op cit; SETC from SETC op cit; WoodMackensie from WoodMackensie Consultants, *Asia Pacific Report*, Houston: WoodMackensie, 1998; East-West Center from Fesharaki, "China's Downstream Industry to 2010: Multi-Client Study", Honolulu: Fesharaki Associates Consulting, 1997.

<sup>12</sup> Note: Figures in parentheses represent estimates based on previous year production levels; figures derived using conversion ratio of 7.3 barrels per ton; percentages do not total to 100 due to rounding; figures from CNPC, *Zhongguo shiyou tianranqi jituan gongsi nianjian, 1999*, (China National Oil and Gas Enterprise Group Corporate Yearbook 1999), Beijing: Shiyou gongye chubanshe, 2000, pg. 74; Sinopec, *Zhongguo shiyou huagong zonggongsi nianjian 1999*, (Yearbook of the China National Petrochemical Corporation, 1999), Beijing: Zhongguo shihua

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chubanshe, 1999, pp. 274, 279, 283, 287, 291, 293, 296; Annual reports and SEC forms submitted by PetroChina, Sinopec and CNOOC in 2000; numerous energy sector news sources.

<sup>13</sup> Baker Institute figures from Soligo and Jaffe op cit; IEA from IEA op cit; APERC from APERC 1998; SDPC from Gao op cit; PRC State Council from PRC State Council op cit; PRC Industry from *China Oil, Gas and Petrochemicals Newsletter*, vol. 7, no. 24, December 15, 1999, p. 1., cited in IEA op cit, pg. 47; SETC from SETC op cit.

<sup>14</sup> See Xiaojie Xu, "China and the Middle East: Cross Investment in the Energy Sector", *Middle East Policy*, vol. vii, no. 3, June 2000; also Qiang Wu and Xuemei Xian, "China's Energy Cooperation with the Middle East", *Strategy and Management*, no. 2, 1999, p. 51 (in Chinese), and others cited in Erica Strecker Downs, "China's Quest for Energy Security," (Santa Monica, CA: RAND, 2000).

<sup>15</sup> Wu and Xian 1999, op cit.

<sup>16</sup> Chen Huai, "Three Variables Worth Paying Attention to for China's Economy in 2002," in Chinese, *Liaowang*, January 14, 2002, in FBIS-CHI-2002-0123.

<sup>17</sup> See the comments of Yang Jijian, director of the International Trade and Economic Cooperation Research Institute of the Ministry of Foreign Trade and Economics (MOFTEC), cited in Peng Kailei, "China to Build Oil Reserve Base," in Chinese, *Hong Kong Wen Wei Po*, October 11, 2001, in FBIS-CHI-2001-1011.

<sup>18</sup> See an article in the official newspaper of the People's Liberation Army: Ding Zengyi, "Indian-US Military Cooperation Raises Concern," in Chinese, *Jiefangjun bao*, February 24, 2002, in FBIS-CHI-2002-0226.

<sup>19</sup> For discussions of the history of China's arms sales with the Middle East and countries in other regions see John Calabrese, "China and the Persian Gulf: Energy and Security", *Middle East Journal*, Vol. 52, No. 3, Summer 1998, pp. 351-366; and Sergei Trough, "China's Changing Oil Strategy and Its Foreign Policy Implications", working paper, Washington DC: Center for Northeast Asian Policy Studies, Brookings Institution, Fall 1999, available at [<http://www.brook.edu/neasia/papers/1999%5Ftrough.htm>].

<sup>20</sup> ChinaOnline, "China Sees Decrease in Oil Imports," March 5, 2002, available at [<http://www.chinaonline.com/>].

<sup>21</sup> ChinaOnline 2002, op cit.

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<sup>22</sup> Derived from Chinese customs data used in Xu 2000 op cit., and converted at 7.3 barrels per ton.

<sup>23</sup> For a thorough description of China's cross-investment strategy in the Middle East see Xu 2000, op cit.

<sup>24</sup> Ibid.

<sup>25</sup> see Xiaojie Xu, (2002), "China's Oil Strategy Toward the Middle East," unpublished manuscript.

<sup>26</sup> See Xiaojie Xu 2000, op cit.

<sup>27</sup> Chinese customs data cited in *Xinhua*, "Imports from Saudi Arabia," *Xinhua*, March 7, 2002.

<sup>28</sup> See James Warburton, (2002), "The Future Influence of China in the Polyolefin Markets," (CMAI consulting company), paper presented at the World Petrochemical Conference, March 20-21, 2002, Houston, Texas.

<sup>29</sup> Calabrese op cit.

<sup>30</sup> *Liaowang*, "The U.S. Reaps What It Sows – An Analysis of So-Called US 'Rogue State' Policy," in Chinese, reported in *Xinhua*, August 28, 2001, in FBIS-CHI-2001-0828.

<sup>31</sup> Calabrese 1998,op cit.

<sup>32</sup> For the history of Sino-Israeli relations see Jonathan Goldstein, ed., (1999), *China and Israel, 1948-1998: A Fifty Year Retrospective*, Westport, CT: Praeger, and for an individual account of the re-establishment of relations given by a senior Israeli diplomat, see E. Zev Suffott, (1997), *A China Diary*, London: Frank Cass; for a discussion of Israel's trade in arms with both China and Taiwan see Yitzhak Shichor, "Israel's Military Transfers to China and Taiwan," *Survival*, Vol. 40, No. 1, (Spring 1998), pp. 68-91.

<sup>33</sup> See, "China Purchases Eight More Kilo Class Submarines from Russia," *Hong Kong Sing Tao Jih Pao*, in Chinese, June 10, 2002, in FBIS-CHI-2002-0610.

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<sup>38</sup> Evan Feigenbaum. "China's Military Posture and the New Economic Geopolitics", *Survival*, vol. 41, no. 2, Summer 1999, pp. 71-88.

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<sup>40</sup> China's energy industry newspapers and government agencies have only reported an IEA proposal, made in early 2001, to establish an Asian strategic petroleum reserve; see, "Yazhou guojia jianli yingji shiyou chubei," ("Asian Countries and Construction of an Emergency Petroleum Reserve"), article from *Zhongguo Meitan Bao (China Coal News)*, March 3, 2001,

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<sup>44</sup> These are reflected in the ranking of strategies for dealing with China's oil import dependency problem, in which the companies put the strategic petroleum reserve after alternative strategies, including increasing domestic exploration, conservation and “going abroad”. For CNPC's interest in and reasons for “going abroad” see, “Zhongguo shiyou qiye ‘zou chuqu’ zhengdang

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<sup>46</sup> See, “Woguo shiyou zhanlue de fangji he mubiao,” (“Plans and Targets for Our Country’s Oil Strategy,”), *Zhong Dianxinwen Wang* (China Electronic News Net), November 16, 2001, and, “21 shiji qu woguo shiyou de fazhan zhanlue,” (“Development Strategy for Our Country’s Oil at the Beginning of the 21<sup>st</sup> Century,”) *Zhongguo Kuangchan Ye* (China Mining Industry), November 13, 2001, both reproduced on the website of the State Council’s Development Research Center at [<http://www.drcnet.com.cn/>];