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Energy Security: Implications for U.S.-China-Middle East Relations

Energy Security: Oil–Geopolitical and Strategic Implications for China and the United States

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In the 1970s, as the West struggled with the near insurmountable challenges presented by two successive Middle East oil crises, the problem failed to grab the attention of Asian elites, with a few exceptions such as Japan. Many Asian powers, notably India, China, South Korea, and Indonesia, were energy self-sufficient and thereby naturally shielded from the economic and political dislocation associated with the West's first big lessons in energy security.

Thirty years later, the situation is quite different. Asian leaders are suddenly facing the same dilemmas seen in the West three decades earlier. Strong economic growth –led by industrialization and the rise of a large middle class clamoring for consumer goods-- has dramatically increased oil use in the region, converting major players to oil importer status. As Asian oil imports have grown and with it, vulnerability to short-term supply disruptions, energy security has moved from a backburner item in places like Beijing, Seoul and Delhi to front line concerns. This trend is likely to accelerate in the coming years as oil becomes an increasingly important fuel to local economies.

At the same time, rising U.S. oil consumption has also become a major policy challenge of heightened relevance in American foreign policy debate following the terrorist attacks on the U.S. on September 11, 2001. U.S. national discourse is increasingly focused on the impact on American national security of increasing dependence on Middle East oil, and many prominent American commentators and politicians are raising difficult questions about the rising cost of U.S. military intervention of the protection of the flow of oil to the international community, both in terms of dollar expense and human lives.

For the past two decades or so, United States international oil policy has relied on maintenance of free access to Middle East Gulf oil and free access for Gulf exports to world markets. American policy in the Persian Gulf is not designed, as conspiracy theorists might argue, simply to keep the price of U.S. gasoline cheap or to make sure that American companies get handsome oil exploration contracts. Neither of these goals would likely merit the intense level of U.S. intervention in the region.

Rather, America ensures that oil flows from the Persian Gulf are available to fuel international trade and economy as part of its global superpower responsibilities. More simply put, the physical oil needs of the U.S. economy can certainly be met fully by protecting oil flows closer to home, from Canada, Mexico, South America, the North Sea and Africa. But the United States must consider the health of the overall global economic system. The oil market is a global one in which a massive shortfall of oil elsewhere would not only affect the price of oil everywhere including the U.S. but almost certainly collapse the global economic system.

The Persian Gulf today represents 25-30% of world oil supply. Saudi Arabia is the world's largest oil producer and controls the majority of the world's excess production capacity. This level of spare capacity has fallen in recent years, leaving markets highly volatile and susceptible to disruption. In fact, the sudden loss of the Saudi oil network would paralyze the global economy. Thus, the United States has a concrete interest in preventing any hostile state or internal groups from gaining control over the Persian Gulf region and using this control to amass power or blackmail the world community.

In the past, the U.S. counted on the countries of the Persian Gulf to make the sizable investments needed to maintain enough surplus capacity to form a cushion against disruptions elsewhere in the world. This spare capacity served as a vital protection to U.S. and global energy security in the 1980s and 1990s. In August 1990, when Iraq attacked Kuwait, so much spare capacity existed in the international oil market that the 5 million barrels a day (b/d) of lost production from Iraq and Kuwait was easily replaced by production increases from Saudi Arabia, Venezuela, Abu Dhabi and other OPEC (Organization of Petroleum Exporting Countries) members.[i]

Now, however, spare capacity inside the Persian Gulf is estimated at little more than 600,000 barrels a day, much of it heavy, low quality oil that cannot be refined in many refining centers in Asia and Europe. Persistently tight crude oil markets highlight the

concentration of spare capacity in Saudi Arabia and the vulnerability of the global economy to domestic conditions there. OPEC is not investing adequate amounts to meet the rise in oil demand in the United States, China and emerging economies in Asia and elsewhere. At the same time, privately held international oil companies are experiencing increasing difficulty replacing reserves, given the wide number of prolific basins that are closed off to foreign investment both inside OPEC countries and other important producing countries such as Mexico and Russia. This situation is forcing policy-makers in China and the U.S. to consider new options to ensure energy security for their citizens.

Some Asian countries, most notably China, have responded to Asia's emerging energy security challenges by seeking out bilateral energy relationships with large oil exporting countries. By doing so, Asian powers ignore the instructive, historical experiences of the West in managing oil crises and energy security. Hard lessons have been learnt in the West about the ineffectiveness of strategic bilateral relationships with key oil exporting countries to safeguard energy supply.

Not only is China's level of equity oil ownership relatively small compared to its growing import needs, but also ownership of reserves does not alter the impacts of a global change in oil prices. By hoarding oil for one's own use, equity owners would miss the chance to sell at the higher price, which would effectively cost them the same as if they bought oil on the open market. Moreover, many host oil producing countries might be tempted during a major market failure to take a larger share of rents from foreign investors, leaving less (or perhaps no) economic advantage to owning oil abroad. Equity oil itself can also be disrupted, leaving equity oil owners to scramble into spot markets in the same manner as those who didn't invest to have equity oil. Bilateral sales agreements are even less effective –as history has shown-- because suppliers are likely to sell their oil to the highest bidder during a period of market crisis or a supply emergency.

In the almost three decades since the 1973 Arab oil embargo, countries such as the US, France and the UK have realized the limitations to bilateral supply arrangements, even in light of the cases where such bilateral relations extended to extensive arms shipments and other forms of military cooperation. The impact, by contrast, of the IEA emergency stocks program has been quite successful, not only in calming markets such as seen in the early days of the US military campaign to remove Iraq from Kuwait in 1991, but also in serving as a deterrent to oil producer groups to exercise monopoly power in times of market crises or to impose politically-driven oil supply restrictions.

OECD experience has shown that multinational initiatives that group consumer nations together have produced the best results, especially where stockpiling and crisis management are concerned.

Energy Security in the West: Lessons of the 1970s

The costs of the oil shocks of the 1970s have been debated in the economic literature and varied country to country. In the early 1980s, the costs of the oil shocks were estimated at $1.2 trillion in lost economic growth for the seven largest industrial countries in the world.[ii] In the aftermath of the oil shocks, the growth rate for the industrial world came to a halt, after witnessing a strong period of 5% per annum expansion in the 1960s.

Various Western countries undertook various domestic and bilateral solutions. Germany, for example, struck a natural gas pipeline deal with the Soviet Union despite the tensions this decision would create in US-German relations.

The US, under President Richard Nixon, began a program entitled “Project Independence,” which was designed to end the need for US energy imports by 1980. Utilities that had previously been moving away from coal for environmental reasons were asked to resume coal burning. An Energy Research and Development Administration were created. Programs that apportioned the costs of domestic and imported oil among

US refiners and favored synthetic fuels failed to bring about the desired results. In January 1975, President Gerald Ford, picking up where Nixon left off, proposed a ten year plan to build 200 nuclear power stations, add 150 coal fired power stations and 20 major synthetic oil plants. In the end, not much of either plan materialized. Rather, the most substantial contributions were decisions by Congress to endorse construction of an oil pipeline from Alaska and fuel efficiency standards for US automobiles. These measures, while contributing to US energy supply and demand trends, still failed to render the oil-guzzling US self-reliant. In fact, US dependence on the Middle East rose through this period, with total US oil imports rising over 28% between 1973 and 1978.

By 1981, abandoning the hope of energy independence, President Ronald Reagan deregulated American oil prices and shifted emphasis on developing a military deterrent capability in the Arab Gulf. U.S. bilateral arms shipments and bilateral military support to the region have increased steadily over the last two decades but have failed to reduce appreciably the risks of a disruption in Persian Gulf oil exports. Oil exports from the region were curtailed severely in the 1980s during the Iraq-Iran war and again in 1990 during the Iraqi invasion of Kuwait. One could argue that the oil export cutoffs might have been larger or lasted longer but for the U.S. presence (In the Iraq-Iran war case, the U.S. did not intervene militarily in the war but a U.S. Navy reflagging program protected shipping in the Gulf). But it is clear that U.S. military assistance alone could not protect the U.S. or international economy from oil disruptions without the assistance of other mechanisms and cooperative institutions such as the IEA emergency stockpiles.

France was most aggressive in following an independent course of action in the 1980s. It pursued an ambitious nuclear power expansion program and imposed substantial taxes on gasoline consumption. France also joined Germany in purchasing natural gas from the Soviet Union. Still, France remained dependent on Middle East oil and gas supply.

To counter this latter risk, France began an aggressive policy of energy diplomacy that included selling sensitive weapons systems to Iraq include nuclear equipment. France

tried the forceful promotion of a European-Arab dialogue, took a pro-Arab stance in deliberations on the Arab-Israeli conflict throughout the 1980s and even blocked a favorable EEC response to the Egypt-Israel Camp David Accords. Paris also provided temporary residence for Ayatollah Khomeini under generous terms during his exile from Iran.

But for all this diplomacy, France has found itself no better off in terms of oil price, supply or standing in the Middle East than its industrial allies that had taken a pro-Israeli stance. Ayatollah Khomeini cancelled major French industrial contracts with Iran upon his ascendancy to power. In 1980, France, along with other customers, found itself the receiving end of a major price increase for Algerian Liquefied Natural Gas (LNG). When France tried to resist this doubling of prices, it saw its supplies cut off. France was also hit by oil supply disruptions from the Iraq-Iran war.[iii]

The lessons of the limitations of national energy policy, bilateral diplomacy, and bilateral military assistance created over the years a more cooperative framework on international energy matters among the countries of the OECD. As Daniel Yergin noted in his book *Global Insecurity* over a decade ago:

> "No single Western nation can cope with the energy problem by pursuing an isolationist or nationalist strategy, for both it and the countries most important to it would all likely wend up worse off. Problems would be inescapably transmitted through the international economy. Neither planning for dealing with a military crisis in the Arabian/Persian Gulf nor meaningful domestic responses during a supply disruption are likely to be effective without coordination with other Western countries. Nor can the consequences–whether they be balance of payments difficulties, Third World debt, economic slump, or protectionism–be effectively countered without cooperation. The failure of cooperation can be costly, as was discovered in 1973-1974 and again in 1979.[iv]

The importance of co-ordinated, joint management of strategic stocks in the current global, mostly deregulated, energy commodity market cannot be understated. Lower privately held, commercial oil inventories mean that any panic buying by a few large market players can have an immediate and dramatic effect on all users of oil.

In 1979, spot bidding on the Rotterdam cargo market to offset Iranian production losses, caused by domestic unrest and revolution, touched off a chain reaction. OPEC diverted contract oil, then priced at just over $12, to the skyrocketing spot market, breaking existing contracts and sending large buyers into the spot market to outbid other oil consumers, further bidding up prices. While the actual shortfall in OPEC supply compared to demand was only 4%, prices rose precipitously to well over $30 a barrel, mainly on added demand from countries or large entities buying panic oil for storage. Additions to world oil storage additions amounted to 1.2 million b/d over the course of 1979, at a time when one would have imagined oil inventories would have fallen.[v]

The experience was a lesson for IEA countries. While OPEC had actually increased production to tap rising oil prices, thereby replacing most of the initial loss of Iranian supplies, hoarding or other panic buying activity brought even greater instability than the underlying event itself. A series of meetings among the IEA countries brought greater commitment and co-ordination in the years that followed 1979. Governments began to understand that individual actions, rather than produce better results, could actually become counterproductive, if matched by those of other buyers. Thus, it was concluded that joint consultation and joint decision-making would help calm market players, stifling panic buying and hoarding that can drive prices even higher during a crisis. The advent of futures and forward markets also assisted in reducing volatility in the 1980s and into the 1990s as more players were able to "hedge" away price risk and thereby didn't need to respond by entering markets at times of shortfall.[vi]

Multinational Policies Adopted by the Industrialized West

On February 11-13, 1974, the Foreign Ministers from Belgium, Canada, Denmark, France, Germany, Ireland, Italy, Japan, Luxembourg, the Netherlands, Norway, the UK, and the US met in Washington DC to examine the international energy situation and to "chart a course of actions to meet this (energy) challenge which requires constructive and

comprehensive solutions."[vii] The ministers agreed that effective international cooperation was needed and agreed to put in concert national policies in the following areas:

1) Pursue conservation of energy and restraint of demand
2) Create a joint system of allocating oil supplies in times of emergency and severe shortage
3) Work toward the acceleration of development of additional energy sources, including international cooperation on energy research

The International Energy Agency (IEA) opened its doors in 1977. The 26 member organization has as its current objectives: to maintain and improve systems for coping with oil supply disruptions; to promote rational energy policies in a global context through co-operative relations with non-member countries, industry and international organizations; to operate a permanent information system on the international oil market; to improve the world's energy supply and demand structure by developing alternative energy sources and increasing the efficiency of energy use; and to assist in the integration of environmental and energy policies.[viii]

The initial motivation for establishing the strategic stockpiles that now constitute the IEA mechanism for emergency stock releases was to guard against "supply disruptions" emanating from situations as "political disruptions, deliberate export restrictions imposed to influence foreign events, production disruptions due to internal unrest in OPEC countries, sudden supply reductions for domestic economic reasons (countries reduce production to prolong useful life of their reserves), terrorist acts or sabotage against oil or oil-related installations, --war involving OPEC nations, and shipping disruptions due to superpower conflicts."[ix] The lesson of the IEA is that its members have been able to minimize the impact of supply disruptions from the Middle East by sharing resources in a coordinated fashion rather than by acting alone.

Although a major stock release was not activated immediately after Iraq's invasion in 1990, political coordination among IEA member countries, public announcements about the readiness of the IEA system and a "test" sale of the US Strategic Petroleum Reserve all helped stabilize oil markets in the early campaign of the US military to oust invading Iraqi forces from Kuwait. While hard to quantify, the existence of the emergency system made a large contribution to the functioning of markets during that extended crisis. In fact, oil prices actually fell several dollars a barrel in the first few hours of US-Iraqi battle in Kuwait as oil traders realized that shortages were unlikely to emerge.

The mere existence of the IEA stockpiling system has also served as a restraining force in the deliberations of the Organization of Petroleum Exporting Countries (OPEC). During recent times of periodic market disruption (such as Iraq's announced withdrawal of its oil from the market for political reasons), OPEC has on several occasions opted to make its own incremental supplies available. This policy reflects not only goodwill but self-interest since any OPEC failure to put extra oil on the market following a sudden, unexpected supply shortfall might invite a release in IEA stocks, leaving consumer governments to profit from any extra oil sales rather than OPEC.

Emergency Preparedness --China and the International Stockpiling System

"Free-riding" or possible "hoarding" actions by major Asian oil consumers during a crisis could hinder the IEA's ability to stabilize international oil markets in the future. As their share of world oil demand grows, this disconnect between Asia's size and importance as a consumer region and its lack of energy policy coordination with other large oil consuming countries (and/or the International Energy Agency) will create new problems and challenges for international oil markets and the international economic system.

The U.S. and China need to act together to provide leadership in revamping the emergency preparedness system for international oil markets by creating a policy framework for cooperation during a supply disruption/crisis between China, the IEA member countries and other important Asian consumer nations.

Monopsony Power against OPEC:
U.S.-China Strategic Rivalry vs Strategic Partnership

The lack of spare capacity in OPEC has created more price volatility in oil markets and enhanced OPEC's ability to push oil prices higher still, leaving major consuming countries more vulnerable to the threat of a politically-driven cut off of supplies or to an accidental disruption in exports from a major oil producing country. The result has been a rise in oil prices above $60 in 2005, causing policy makers in the U.S. and elsewhere in the industrialized world to question the wisdom of relying too heavily on Middle East oil.

The International Energy Agency has pointed out that higher reliance on OPEC to meet future energy demand under a business as usual scenario could have harmful consequences for the world's poor. While it has often been argued that the United States economy can absorb the rising oil prices that might result from OPEC gaining a higher market share of world demand, a gradual increase in energy costs led by OPEC policy would likely contribute to a widening economic gap between industrial societies and the developing world. Without a major technological breakthrough, over 1.4 billion people will still be without modern electricity in 2030 under a business-as-usual oil demand scenario – only 200 million fewer than today, according to a 2002 study by the International Energy Agency. Moreover, for the past 30 years, developing countries have been borrowing billions of dollars from international institutions such as the International Monetary Fund (IMF) and World Bank to help them pay for oil they cannot afford. This trend would likely worsen if reliance on OPEC were to increase over time.

OPEC current policies have rendered the cartel into a geopolitical force whose interests may collide with the great good of the international community. This concern is not

limited to the aspiration to capture monopoly rents at the expense of world economic growth but also includes worries about how the revenues from oil rents could be utilized to promote interests inimical to the security of various consumer nations and their allies. Excessive transfers of oil rents represent a possible source for terrorist financing and funding for the development of weapons of mass destruction by key oil states. This is not just an issue for the United States "war on terror." Oil revenues can be a source of funding for the promotion of Islamic religion and separatism inside China's borders. Middle East oil rents also represent the potential for financial support to Chechen rebels and other regional Muslim groups that are hostile to Moscow's central control.

Large oil consuming countries are empowered with influence in oil markets. Well-known energy economists Bohi and Toman in their 1996 book discuss the justification for importing countries to use their monopsony power when oil exporters exercise monopoly power opportunistically.[x] The U.S. has not fully investigated its options in this regard and has a possibility of working together with the EU, Japan, China and India to redefine of the rules of the game of energy trade and investment. One option for cooperation would be a focus on working jointly to lower overall global demand for oil through multinational energy conservation agreements, promotion of alternative energy, and/or energy taxes. Major consuming nations have also passively accepted barriers to international energy investment and trade set up by major oil producing countries such as Saudi Arabia, Mexico and Russia.

The U.S. and China, working together with other industrial countries, can do a great deal more to reverse the setbacks to international energy trade and enhance the institutional mechanisms that favor markets over political intervention by producers. An effort could be made through international architecture such as the European Energy Charter, NAFTA, WTO and other similar mechanisms to find serious ways to bring the rules of global oil trade and investment in harmony with the rules governing trade in manufacturing and services. This would mean building on open trade and investment within the IEA and discriminating actively against those countries that do not permit foreign investment in their energy resources and that limit their exports to manipulate

prices**.** This is a tough policy, but one that is essential to solve the basic problem of untimely development of resources worldwide and the denied access to private capital to the world's most promising resources.

Saudi Arabia has announced plans to invest $50 billion in its energy sector to increase production capacity to 12.5 million barrels a day by 2009 and to reach $15 million b/d by 2025. Plans for a first tranche of $14 billion in investments by 2009 –to cover expansion in the Haradh section of the Ghawar field; expansion in the Khursaniyah field; expansion in the Shayba field and new major investment in the Khoreis field—are disappointing and unlikely to result in boosting capacity much past the 11 million b/d level given the 6-7% annual decline being experienced in existing Saudi fields. This reality means that a policy of relying on Saudi Arabia and OPEC to balance market supply with rising demand would be a poor one for either China or the United States regardless of the state of bilateral Sino-Saudi or U.S.-Saudi relations. The kingdom has shown little willingness to adjust its plans or to take actions to regain control of oil price trends. Other large reserve OPEC countries such as Iran, Venezuela, and Iraq lack the organizational capability and financial capital to replace Saudi Arabia as an engine for oil supply growth. Thus, both the strategic interests of the United States and China would be greatly disadvantaged by allowing such producers to play the two major consuming countries off against each other during a supply crisis or disruption to the detriment of the interests of both China and U.S. By contrast, banded together, the United States and Chinese markets are so important that those countries' buyers' power could be an important tool of leverage in gaining concessions from major oil producing countries. A strategic alliance and policy coordination could be utilized to limit excessive rents that might be sought in exchange for oil supplies or promises to make investments.

Dealing with a Potential Nuclear Iran

Iran's geographic position and military capability give it leverage over the Strait of Hormuz, which is the main passageway for 15 to 16 million barrels of oil a day, roughly two-thirds of total world oil trade by tanker and 20% of total world daily oil demand. Oil and petroleum products from Iraq, Iran, Kuwait, Saudi Arabia, Qatar and the United Arab Emirates transit the Strait of Hormuz. Large quantities of liquefied natural gas (LNG) are also exported from Qatar through the Strait. Qatar's plans include the export of over 9 million tons a year of LNG and Iran is also building LNG export capacity. The significance of the Strait of Hormuz has become enhanced in recent years because virtually all of the world's excess spare production capacity that can be brought on line quickly to defend against the adverse effects of a sudden oil supply crisis or disruption is located in Saudi Arabia, Kuwait and the United Arab Emirates and thereby could be cut off if the Strait could be closed. At present, roughly 0.7 million b/d of excess spare production capacity exists inside the Persian Gulf countries.

Maintaining the free flow of oil through the Strait of Hormuz is of vital strategic importance to the world economy and to the United States and China. There have been several challenges to the freedom of navigation in the Strait of Hormuz and adjacent territories over the last several decades. The most prolonged threat to navigation in the Persian Gulf in recent years arose during the eight year war between Iraq and Iran. By 1984, the then three year old Iraq-Iran war entered its so-called "tanker phase" with regular bombings of shipping, oil export facilities and mining of the waters of the Persian Gulf.[xi] By 1987, the US responded to the escalation of attacks on Persian Gulf shipping by organizing a fleet of frigates, destroyers and minesweepers in the region to combat the threat against shipping.[xii] In March 1987, the US government agreed to transfer Kuwait oil and gas tankers to the American flag and in July 1987, the US navy initiated Operation Earnest Will, providing naval escorts to tankers passing through the Persian Gulf.[xiii]

More recently in April 2004, US Navy vessels were called to service to repel attacks by terrorist suicide bombers on both of Iraq's offshore oil shipping terminals and shippers from the Persian Gulf region are again asking the US military to provide naval escorts.[xiv] The possibility of terrorist attacks at the Strait of Hormuz cannot be ruled out as similar threats have already been identified in Asia against another vital oil waterway, the Straits of Malacca.[xv]

A territorial dispute between Iran and the United Arab Emirates (UAE) over three islands inside the shipping lanes of the Strait of Hormuz has continued for several decades. The islands, Abu Musa and the Greater and Lesser Tunbs, were determined to be run under co-sovereignty by the two nations in 1971 following the departure of British colonial rule from the region. However, since 1992, Iran has occupied the islands and taken steps towards unilateral control over the course of the 1990s, restricting outside access, building an airstrip and deploying SA-6 surface-to-air missiles, 155- millimeter artillery and seersucker anti-aircraft missiles on Abu Musa.[xvi] Iran test fired an anti-ship missiles near the Strait of Hormuz in 1987[xvii] and again in January 1996.[xviii] Iran has silkworm missiles deployed at Qeshm, Abu Musa Island and Sirri Island, all within range of shipping transiting the Strait.[xix] It has also been speculated that Iran could house missiles or artillery in caves around the Strait.[xx] In March 2000, Jane's Defense Weekly reported that satellite images of Abu Musa and the Tunbs did not show any evidence that Iran had fortified the islands militarily.[xxi]

There are many possible triggers for conflict. In June 2004, a UAE warship fired on an Iranian fishing vessel in waters close to Abu Musa Island.[xxii] The Arab Gulf Cooperation Council has backed UAE claims to the islands but Iran has refused to agree to international arbitration on their status. In April 2004, Iran also accused Qatar of overproducing its share of natural gas from the giant offshore North Field that straddles the Qatari-Iranian border, warning that Iran would resort to "other ways and means of resolving the issue" if Qatar did not enter new negotiations about regulating production

from the field. The North Field/South Pars gas reserves were clearly demarcated in a maritime border deal in the late 1980s.[xxiii]

The backdrop of conventional Iranian military actions inside the Persian Gulf has raised concerns about whether a nuclear Iran would use the leverage of nuclear capability to demand political or other gains by threatening traffic through the Strait of Hormuz via conventional or non-conventional means. A potential conflict between the United States and Iran on a number of issues, including international terrorism or the proliferation of weapons of mass destruction, would raise the stakes of such a risk.

To be useful to Iran, it is only necessary that it have the ability to credably threaten to target specific exports of other countries and it is not necessarily have to be carried out these threats. Currently, all of Iran's oil exports depart the country via the Straits, and the country has few, if any, options to bypass the Straits on an immediate basis (except trucking of small amounts of oil or sending oil to Iraq), making it unlikely that Iran would want to close the Straits completely. Rather, Iran would be more likely consider its options to bar passage of ships from specific countries. Iran's economy is highly dependent on oil export revenues, which constitute roughly 80% of total export earnings and 40-50% of the government budget and 10-20% of GDP.[xxiv]

Iran has traditionally been a strong advocate for higher oil prices at meetings of the Organization for Petroleum Exporting Countries (OPEC) and is considered a pivotal price hawk leader inside the producer oil cartel, inclined to ignore concerns that soaring oil prices might hurt future oil demand or damage world economic conditions. Its policy history on the subject of oil prices has been relatively consistent since the early days of the Islamic revolution, and Tehran has used its influence when it could to boost world oil price levels through a combination of public statements, diplomatic initiatives and outright threats. In the autumn of 1984 as an oil price war was looming, influential speaker of the Iranian Parliament, Hojjatolislam Hashmi Rafsanjani indicated in a sermon that Iran might attempt to block the flow of oil from the Persian Gulf if oil prices

continued to fall, warning if Iran "was one day pressured in a price-cutting war, it will create such a crisis in the region that it will be similar to the days of the revolution and oil would not flow to the other side."[xxv] Iran's minister of oil announced the country would like to see $25 oil remain OPEC's minimum price in the aftermath of the Gulf War and was able to orchestrate a high level political agreement with Saudi Crown Prince Abdullah to boost prices above the traditional $18 a barrel target price starting in 1999.[xxvi] In recent years, Iran has lobbied within OPEC to keep prices high by pressing the producer cartel to maintain a pattern of pivotal oil production cuts. It has used its leadership position inside OPEC to try to thwart attempt within the producer group to raise production during times of market disruptions.

Maintaining alternatives to shipments of Persian Gulf oil through the Strait of Hormuz will be a critical aspect to limiting the economic damage to oil importing countries of a major shutdown of the Strait. The first line of defense in this regard is the existence of the emergency stockpiling system of the International Energy Agency which includes the joint release of oil from United States strategic petroleum reserve together with strategic oil stocks of other OECD member states. However, the potential of the IEA strategic stocks is limited as it can only replace the volume of oil coming through the Strait for less than 30 days. Western industrialized nations would likely have to resort also to emergency conservation measures in combination of a major stock release to mitigate the damage of a prolonged closure of the Strait of Hormuz, barring other alternative strategies.

Western strategic oil stocks could be supplemented by unsold oil stored near end-user markets by key producers like Saudi Arabia or Russia. Such "floating" stocks were pivotal in stabilizing oil markets in 1990 when Iraq invaded Kuwait.[xxvii] Floating stocks would be beneficial in today's circumstances and should be considered.

However, other alternative strategies do exist that could give the United States and its allies time to pursue a negotiated solution or to properly prepare for a military response. Among those alternatives are to use existing pipeline and oil export infrastructure to create a bypass to the Strait of Hormuz. The costs and options for doing so have been studied in detail by the James A. Baker III Institute and the Center for Naval Analysis.[xxviii]

In addition, the United States, China and other major powers could work together to create a multinational convention to guarantee freedom of sea guarantees in the Persian Gulf that would be followed by all users of the Strait of Hormuz.[xxix] Such a convention might include a ban on sea mines in the waterway; a prevention of incidents management agreement (focused on freedom of navigation and avoidance of provocation) that more specifically defines maritime rules and regulations in the region; or creation of a multilateral organization to deal with the Strait of Hormuz. Such an initiative would have the advantage of convincing Iran that unilateral action would be counterproductive at the same time demonstrating that the U.S. does not intend to be a threat to Iran. The process of negotiating a convention would also create a coalition of countries that could respond in case Iran did pose a threat to freedom of navigation at the Strait.

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[xxiv] Barnes, Joe and Amy Myers Jaffe, "Post War Iraq and Iran's Petroleum Sector" Ed. Eugene Whitlock, "Iran and Its Neighbors Diverging Views on a Strategic Region, SWP Berlin, German Institute for International and Security Affairs, July 2003
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[xxvi] Iran Hopes $25/barrel Minimum Price Remains After Gulf Crisis, MEES, Vol. XXXIII, No. 49, September 10, 1990; Saudi Arabia and Iran See Eye to Eye on Oil Price Issue, MEES, Vol. XLII, No. 21, May 24, 1999
[xxvii] Because of weak markets in mid-1990, Saudi Arabia and Iran held tens of millions of barrels of oil afloat unsold that served as a cushion to the sudden loss of Kuwaiti and Iraqi oil production. Throughout the late 1980s and early 1990s, Saudi Arabia maintained a policy of storing oil abroad in the Caribbean, and Northwest Europe to make sure it could respond to any sudden disruption in oil markets. See the Soligo, Ronald, Amy Myers Jaffe and Peter Mieszkowski, "Energy Security," working paper, The Political, Economic, Social, Cultural and Religious Trends in the Middle East and the Gulf and Their Impact on Energy Supply, Security and Pricing, available at www.rice.edu/energy
[xxviii] For a detailed study of this subject, which is the basis for this section of this chapter, see M. Webster Ewell, Jr., Dagobert Briton ad John Noer, "An Alternative Pipeline Strategy in the Persian Gulf, available at www.rice.edu/energy under Research/Other Publications and Presentations. A classified version of the study also exists that should be revisited by policy makers given the risks to Persian Gulf facilities described in this paper (Drag Reduction Agents: An Energy Security Bargain, M. Webster Ewell, Dagobert L. Brito and John Noer), Center for Naval Analyses, CRM 99-87.09 (1999)
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