



INSTITUTE FOR
STRUCTURAL
REFORMS

המכון
לרפורמות
מבניות

The New Geo-Politics in the Middle East United States and China's Common Interests in Regional Peace

January 2013

Abstract

China's oil dependence on the Middle East and North Africa (MENA) countries has deepened over the past two decades, while the U.S has developed new ways to exploit major oil and natural gas resources and has succeeded to decrease its reliance on MENA's oil supply. In 2035, roughly 90 percent of MENA's oil is estimated to flow Eastward, to the emerging economies of Asia-Pacific. This forecast entails a geopolitical shift according to which China, for the first time, will strongly share the American interest to pursue peace and stability in the Middle East.



Table of Contents

The New Geopolitics in the Middle East - An Opportunity for Stability in the Region	2
U.S. Growing Energy Independence.....	3
China's Growing Dependence on MENA's Oil.....	4
U.S - China: Common Interests in the Middle East	5
Conclusion	7



The New Geopolitics in the Middle East - An Opportunity for Stability in the Region

MENA's Oil exports are changing course from West to East (Figure 1).

In recent years MENA's oil supply to the U.S. has been constantly declining. At the same time, due to new technological advancements, the U.S. is enlarging its domestic energy production capacity (Figure 2). China's rapidly growing transportation sector and oil demand deepens its reliance on MENA, which continues to be an important supplier and price setter of oil in the global market, which is still dominated by OPEC.

The U.S. wants to maintain its interests in the Middle East. Top American interests in the region include a stable oil price and the continuous activity of American oil companies in the region. In an era of economic interdependency, addressing China's energy demand by keeping a steady price and a supply of oil to China is essential for the American economy.

China will become more strategically involved in the Middle East. As an economic superpower which has interests in MENA's oil and its pricing, it is inevitable for China to abandon its non-interference policy. Because oil supply and price are influenced by unrest and armed conflicts in the Middle East, and more than half of China's oil imports come from MENA, we expect **China to join the American pursuit for a stable region.**

The Middle East becomes a region of high interest for Asia-Pacific nations. The growing Chinese oil dependency and the increasing oil imports from MENA combined with the American interests for a stable oil price and the interests of U.S. oil giants, creates a new shared interest for the two superpowers to seek stability in the Middle East.

Figure 1 – IEA forecast for destinations of MENA's oil exports

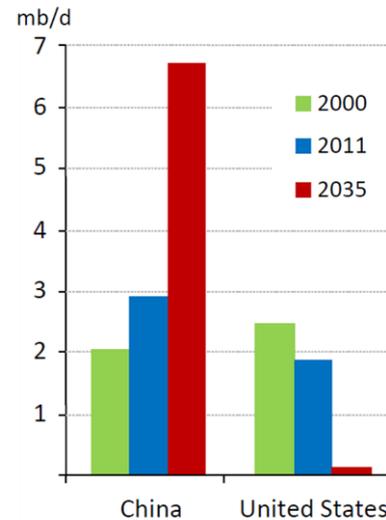
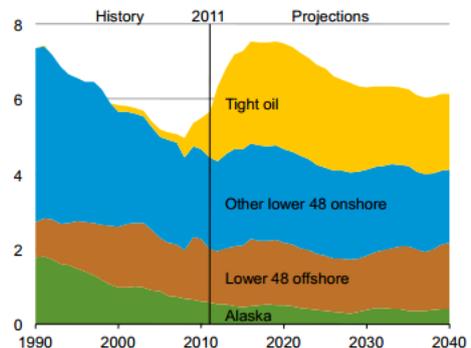


Figure 2 - EIA forecast for U.S. oil production (million bpd)





U.S. Growing Energy Independence

The U.S. has been reducing its oil imports from MENA countries while increasing domestic production of oil and natural gas.

The U.S. has become less reliant on MENA's oil supply. From 2001 to 2011 the U.S. had lowered oil imports from MENA countries by 26 percent while decreasing non-MENA oil imports by only 13 percent during the same period and whilst doing so lowered oil imports from the volatile Persian Gulf region by 32 percent (Figure 3). U.S. net imports of oil had dropped from 60 percent in 2005 to 49 percent in 2010 and are estimated to drop further to 36 percent in 2035 (Figure 4).¹ Reduced net imports are also a result of the reduced share of oil in the total U.S. energy use, as they are estimated to fall from 37 percent in 2010 to 32 percent in 2035.²

America's progress toward a greater energy independence is achieved through the exploration and production of unconventional oil and natural gas, particularly shale gas and tight oil. New Technological advancements in the form of horizontal drilling and hydraulic fracturing significantly increase the development of oil and natural gas reserves. Over the past decade, the combination of horizontal drilling and hydraulic fracturing has allowed access to large volumes of tight oil and shale gas that were previously uneconomical to produce.

U.S. production of crude oil is estimated to increase from 5.7 million barrels per day (bpd) in 2011 to 7.5 million in 2019, an increase of 31 percent.³ Onshore tight oil production is estimated to account for 51 percent of total lower 48 onshore oil production by 2040.⁴ The production of natural gas from shale formations has rejuvenated the natural gas industry in the United States (see appendix A – Map of Lower 48 States Shale Plays).⁵ These technological advancements are expected to allow an increase in domestic production of natural gas by 55 percent from 2010 to 2040.⁶ Shale gas production is also expected to more than double from 2010 to 2035, and is a major contributor to the projected growth in total U.S. natural gas production.

The U.S. is projected to become a net exporter of natural gas in the foreseeable future. The International Energy Agency (IEA) estimates that exploration and production of unconventional oil and gas will turn the U.S. into the largest natural gas producer sometime between 2015 and 2020.⁷ The Energy Information Administration (EIA) estimates that the U.S. will become a net exporter of natural liquid gas by 2016 and a net exporter of natural gas by 2021 (Figure 5).⁸

Figure 3 – U.S crude oil imports from MENA and non-MENA countries 1983-2011 (EIA)

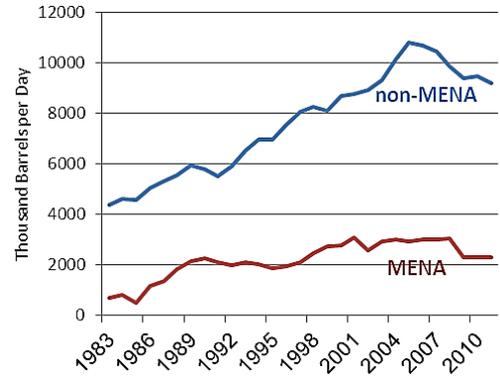


Figure 4 – EIA forecast for U.S. petroleum and other liquids (million bpd)

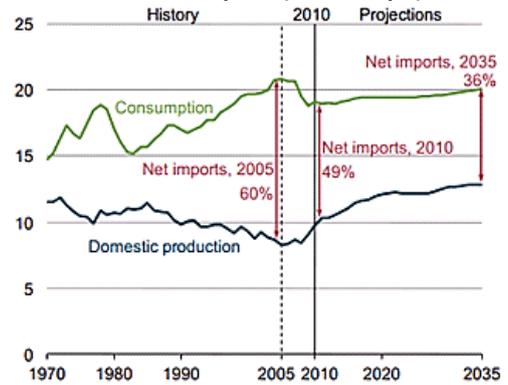
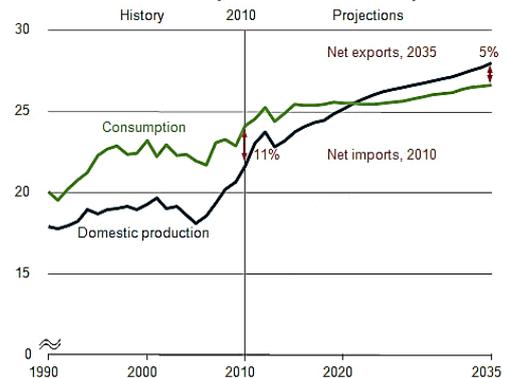


Figure 5 – EIA forecast for U.S natural gas production, consumption, and net imports 1990-2035 (trillion cubic feet)



*"In conclusion, developing these incredible unconventional oil and gas resources presents once in a lifetime opportunity for our country's prosperity and security" Dan Poneman, U.S. Deputy Secretary of Energy.*⁹



China's Growing Dependence on MENA's Oil

The growth of China's transportation sector, which increased its oil demand, made China heavily dependent on MENA. The Chinese need for oil and the dependence on MENA's supply of oil is estimated to grow in the next two decades.

The early 1990s marked the beginning of China's rapid economic growth with an annual average GDP growth of 10 percent (Figure 6).¹⁰ With the increased petroleum consumption, as of 2011, China became the world's second-largest consumer and importer of oil (behind the U.S.), the largest consumer of coal, and the fourth-largest natural gas consumer.¹¹ China's oil demand is predicted to increase in the next two decades (Figure 7).

China's transportation sector energy consumption is the largest factor in its increasing demand for petroleum and its growing dependence on MENA's oil. China's energy consumption for transportation grew at a rate of more than 10 percent a year in the last decade, and from 2008 to 2035 it is projected to increase by 310 percent.¹² By 2050 China's highway vehicle numbers are estimated to become 10 times larger than they were in 2010 (Figure 8).¹³

China's oil dependency on MENA started in the 1990s. Since then, MENA countries have assisted China to satisfy its consistently growing thirst for oil. MENA's share of China's oil net imports increased from 39 percent in 1990 to 44 percent in 2006 and this trend continues.¹⁴ In 2011, MENA supplied 51 percent of China's imports of crude oil, while the share of Saudi Arabia and Iran was 20 percent and 11 percent respectively.¹⁵ The share of MENA's Oil imports is expected to increase to 60-70 percent of total consumption by 2015.¹⁶

The main future destination of MENA's oil exports is Asia. According to the IEA, by 2035 roughly 90 percent of MENA's crude oil exports will go to Asia, as China, India and the Middle East account for 60 percent in the growing global energy demand.¹⁷ The Middle East will remain the focal point for the growing prosperity of the Asia-Pacific countries.¹⁸

Chinese National Oil Companies (NOCs) have increased their overseas acquisitions and investment in international projects. Chinese NOCs conform to the government's energy policy objectives, which encourage overseas merger and acquisition activities, domestic exploration, greater oil storage capacity, and long-term oil supply deals from overseas producers. China has also established a strategic oil reserve program (SPR) to shield itself from oil supply disruptions.¹⁹ From 2003 to 2010, Chinese energy enterprises made 74 investments in the Middle East with 146 property rights of oil fields, including infrastructures, extraction, investigation, and supply of oil and gas (Figure 9).²⁰

Figure 6 – China's economic growth and oil imports (World Bank)

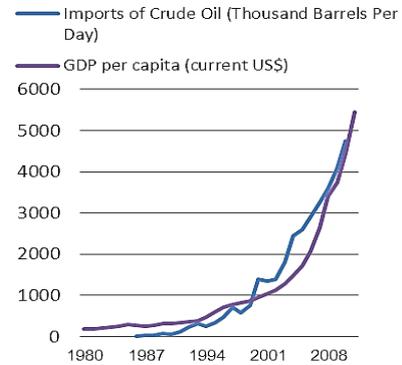


Figure 7 - IEA forecast for oil demand growth in China and OECD Americas

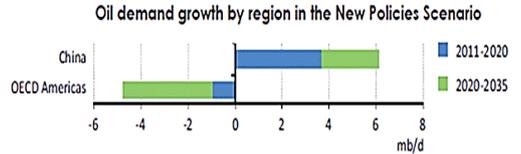


Figure 8 – China's growing transportation sector (Argonne National Library)

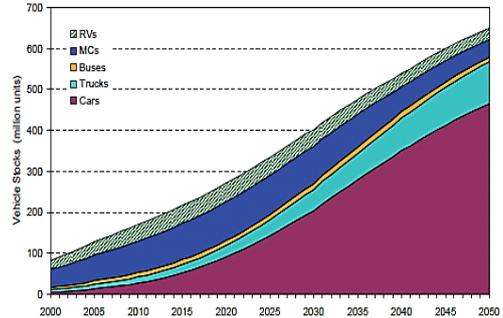
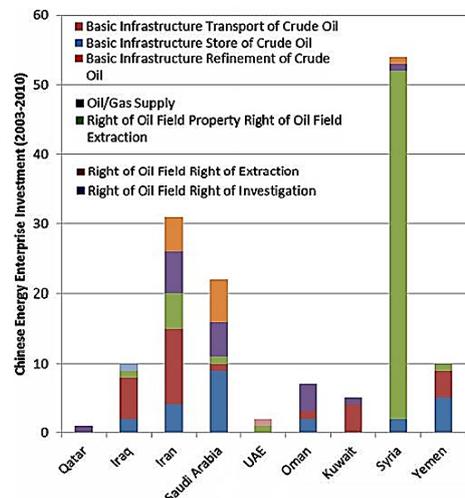


Figure 9 - Chinese energy enterprises' investment in the Middle East 2003 - 2010 (Yeh, Yu, 2012)





U.S - China: Common Interests in the Middle East

MENA countries remain influential players in the global oil market with OPEC still remaining the price setter for the near future. A stable Middle East, which leads to a steady oil price and allows an unhampered outflow of oil from MENA to the industrialized nations of Asia, is critical for sustaining U.S. and China's economic growth.

From 1980 to 2012 MENA's proved oil reserves have more than doubled - from less than 400 billion barrels in 1980 to more than 800 billion barrels in 2012 (Figure 10).²¹ During that period, MENA's share of the global proved oil reserves has averaged more than 60 percent. MENA's share of the world's total production of liquid fuels is predicted to go up from 31 percent in 2009 to 34 percent in 2035 (Figure 11).

With 55 percent of total global proved oil reserves, the Persian Gulf is the leading oil supplier in MENA.²² According to the U.S. Geological Survey, over 50 percent of the undiscovered oil reserves and 30 percent of natural gas reserves are concentrated in the region, primarily in Saudi Arabia, Iran, Iraq, Kuwait, UAE and Libya.²³

Defending the operation of U.S. Major oil companies and securing oil price stability by uninterrupted maritime transportation of oil. It is estimated that in 1991 and in 2004, the cost of defending the interests of U.S. Major oil producers in the Persian Gulf ranged between 9.5 percent and 12 percent of total U.S. military expenditure.²⁴ In 2011, over 50 percent of the world's oil was shipped by tankers through maritime routes. Over 85 percent of MENA's oil is transported through strategic shipping lanes such as the Straits of Hormuz, Malacca, and Suez (Figure 12).²⁵ The same U.S. forces who sustain the oil companies' interests are also securing the maritime transportation of oil from MENA to China. Currently there are around 65,000 troops in the Asian-Pacific region and around 35,000 in MENA and the Persian Gulf in addition to two carrier strike groups, one in each region (Figure 13).

An important aspect of oil transportation is pipelines, a vast array of pipes linking the oil and gas fields to the refineries and ports (see appendix B). Peace and stability in the region will open the possibility of new oil pipelines between the Arab countries and Israel. Thus, helping to lower the risk in transportation through naval chokepoints like the straits of Hormuz and the Suez canal, further insuring the price stability.

In spite of China's engagement in military modernization, its defense policy is mostly concerned with national development and maintenance of world and domestic stability. China lacks the ability and the desire to protect waterways and strategic sites in the Middle East,²⁶ and remains reliant on American military to secure the energy supply that is the country's lifeblood. China's current engagement in the Middle East has almost no military component. China does not aspire to overshadow Western hegemony in the region and unofficially appreciates U.S. military presence as a contributor to regional stability and energy security and welcomes every act which

Figure 10 - MENA-Crude Oil Proved Reserves - Billion Barrels (EIA)

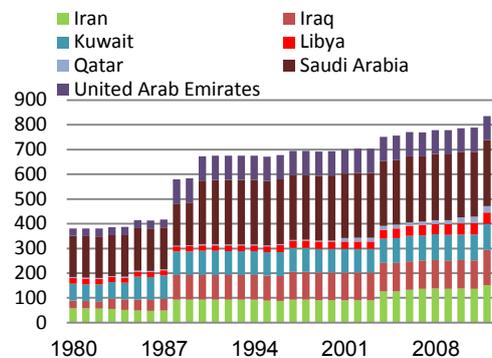


Figure 11 – EIA forecast for MENA's liquid fuels production and share of total world production – 2009-2035

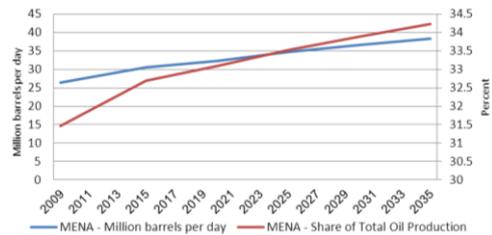


Figure 12 - Global Oil Checkpoints (U.S. Government Accountability Office)

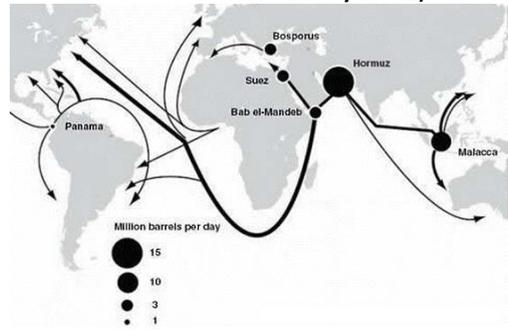
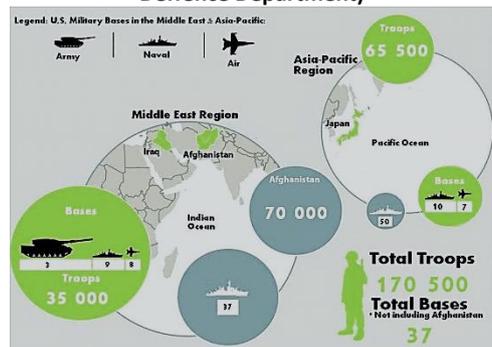


Figure 13 – U.S. Military Deployment in the Asia-Pacific and Middle East regions (U.S. Defense Department)





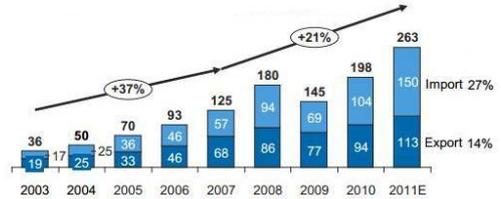
promotes stability in the region.²⁷ China officially declares that it "will never seek hegemony, nor will it adopt the approach of military expansion now or in the future, no matter how its economy develops".²⁸

China gradually becomes more strategically involved in MENA. China was engaged in the U.N Interim Force in Lebanon (UNIFIL), in 2006 it deployed 182 engineers to UNIFIL to rehabilitate Lebanese infrastructure. Moreover, China has provided health aid to Yemen and has deepened health cooperation with all Arab League nations.²⁹ Recently China took an unusual step and promoted its own four stages plan to stop the crisis in Syria, a plan that not only aimed at resolving the internal conflict and achieve stability but tried to gain strategic points in the international arena and in the Middle East.³⁰ In addition, **China has been developing commercial interests in the region.**³¹ The bilateral trade between China and the Middle East had skyrocketed from 2000 to 2008. Chinese exports to the Middle East have increased more than seven times while imports have grown five times (Figure 14).³² The McKinsey consulting group estimates that by 2020, total trade flows between China and the Middle East will reach \$350-500 billion.³³

U.S.-China Economic and Security Review Commission (USCC). In October 2000, the USCC was created in order to examine national security implications of the economic relationship between the U.S. and China.³⁴ In the 2012 fourth meeting of the Joint U.S-China Economic Track - U.S China Strategic and Economic Dialogue (S&ED) it was agreed upon that "recognizing the U.S.-China economic relationship is based on a wide range of common and overlapping interests, the two countries reaffirm their commitments to continue to promote communication and cooperation from a strategic, long-term, and overarching perspective, to add to prosperity and welfare in the two countries, and achieve strong, sustainable, and balanced growth of the global economy".³⁵

China is not only the U.S. second largest trading partner, but also holds more than \$1.2 trillion, which accounts to nearly 10 percent of U.S. debt. This adds to the already existing economic interdependency between the two superpowers.³⁶

Figure 14 – Bilateral Trade Volume Between China and MENA. Import from and Export to China, Billion USD, 2003-2011 (Booz and Co.)





Conclusion

In the past two decades a non-revolutionary revolution took place. China's increased dependence on oil import from MENA and U.S.' reduced dependence on MENA's oil supply, together with U.S. interest for sustaining its major oil companies, creates a common interest for regional peace and stability.

Both the U.S. and China recognize the global economic interdependency and the significance of coordinated policy between them in securing energy resources. The dominant U.S. military presence in the Middle East and Asia-Pacific regions is aimed at achieving stability in the region, secure the transportation of oil and at protecting the operation of the American oil companies.

The shift of MENA's oil export from west to east occurred, in contrast to common prophecies, in a peaceful manner. China, as a fast growing economy, plays a key role in the increasing demand for MENA's oil. The U.S. economy, though almost freed from MENA's oil, is still an oil import dependent economy. Therefore, both the U.S. and China would like to minimize oil price, still being defined by OPEC.

The Israeli-Arab conflict is one of the major threats for Middle East stability. Solution for this conflict has an enormous economic potential both for Israel and the Palestinians, as it is the potential center of a main oil and gas pipeline, connecting east to west and *vice versa*.

China, as a major investor in the region, cannot afford to continue its non-interference policy and will be obliged to become more engaged in the Middle East politics. We argue that China should take an active role in promoting a solution to the Israeli-Palestinian conflict.

References:

- ¹ EIA. AEO 2012 Early Release Overview. pp1.
- ² Ibid. pp7.
- ³ EIA. AEO 2013 Early Release Overview. pp1.
- ⁴ Ibid. pp10.
- ⁵ U.S. Energy Information Administration (EIA). "Energy in Brief - What is shale gas and why is it important?" Updated: 5.12.12.
- ⁶ EIA. AEO 2013 Early Release Overview. pp1.
- ⁷ Ibid. pp136.
- ⁸ U.S. Energy Information Administration (EIA). Annual Energy Outlook 2012 Early Release Overview. pp.9.
- ⁹ <http://www.youtube.com/watch?v=GiS77aLLU40>, "Unconventional Oil and Gas: Reshaping Energy Markets". CSISDC Channel (Center for Strategic International Studies). April 12, 2012
- ¹⁰ World Bank. World databank, World Development Indicators (WDI) & Global Development Finance (GDF). Last updated: 10/31/2012
- ¹¹ U.S Energy Information Administration (EIA), Today in Energy 2012
- ¹² World Bank. World databank, World Development Indicators (WDI) & Global Development Finance (GDF). Last updated: 10/31/2012
- ¹³ Energy Systems Division, Argonne National Laboratory. December 2006
- ¹⁴ Zhang Jian. "China's Energy Security: Prospects, Challenges, and Opportunities". The Brookings Institution. July 2011. pp17.
- ¹⁵ EIA – China, 2012
- ¹⁶ John, Lee. "China's Geostrategic Search for Oil". The Washington Quarterly. Summer 2012. pp76.
- ¹⁷ International Energy Agency (IEA). North America Shift in Global Energy Balance. 12 November 2012.
- ¹⁸ Lt.Col. Eduardo Abisellan. "China's Soft Power Strategy in the Middle East". The Brookings institution. July 17, 2012
- ¹⁹ EIA – China, 2012



-
- ²⁰ Hui-Chi Yeh, Chi-Wei Yu. "China's Energy Diplomacy: SOE Relations in the Context of Global Distribution and Investment Pattern". *Advances in Applied Sociology* 2012. Vol.2, No.4. December 2012. pp329.
- ²¹ EIA – Data 2012
- ²² EIA – Data 2012
- ²³ Luft Gal. "Dependence on Middle East energy and its impact on global security". The Institute for the Analysis of Global Security (IAGS). 2007. pp1.
- ²⁴ Delucchi, Mark. Murphy, James. "US military expenditures to protect the use of Persian Gulf oil for motor vehicles". Institute of Transportation Studies (UCD), UC Davis. April 1, 2008. pp2261.
- ²⁵ Zhang Jian. "China's Energy Security: Prospects, Challenges, and Opportunities". The Brookings Institution. July 2011. pp8.
- ²⁶ Yoel Gozanski. "Beyond the Nuclear Program and Terror: Conventional Military Balance in the Gulf". Institute for National Security Studies (INSS). June 2010. pp94.
- ²⁷ Shichor, Yitzhak. "The Future of the Middle East", Begin-Sadat Center for Strategic Studies. Bar-Ilan University. January 2008. pp.13.
- ²⁸ Anthony H.Cordesman and Nicholas S. Yarosh, "Chinese Military Modernization and Force Development. A Western Perspective". July 30, 2012. pp15.
- ²⁹ Alterman, Jon.B, "China's soft power in the Middle East". CSIS: Center for Strategic and International Studies. March 11, 2009. pp 72.
- ³⁰ Evron, Yoram. "The Chinese initiative to resolve the crisis in Syria". The Institute for National Security Studies. November 11, 2012
- ³¹ Alterman, Jon.B, "China's soft power in the Middle East". CSIS: Center for Strategic and International Studies. March 11, 2009. pp 63.
- ³² Ibid. pp 64.
- ³³ Lee Hudson Teslik, "China-Gulf Economic Relations". Council on Foreign Relations". <http://www.cfr.org/china/china-gulf-economic-relations/p16398> June 4, 2008.
- ³⁴ U.S.-China Economic and Security Review Commission. <http://www.uscc.gov/>
- ³⁵ U.S. Department of the Treasury. Press Center. Joint U.S.-China Economic Track Fact Sheet. 5.4.2012
- ³⁶ U.S. Department of the Treasury. Federal Reserve Board data sheet, 16.1.2013
<http://www.treasury.gov/resource-center/data-chart-center/tic/Documents/mfh.txt>