

Department of Political Science

Chair in Theories of Globalization

CHINA'S ENERGETIC "OBSESSION"

*POSSIBILITIES AND CHALLENGES OF THE
PATHS TOWARDS RAW MATERIALS:
THE MALACCA STRAIT CASE.*

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INTRODUCTION

As in previous epochs, the world in which we live in has to face several types of threats, as for example political, economic, social, military, ecological and so forth. In its physiological process of continual change, the world power structure, dominated since the fall of the Soviet Union by the United States, has began to change again. The slow decline of the American unipolar world and of its global stance, whose apex has been reached after the 2003 invasion of Iraq, has started to manifest itself, reviving the latent tensions in the international community. From the slow but steady decline, an increasingly multipolar world has begun to emerge, with old and new actors likely to perform a major role in the following decades. Countries such as China, India, Japan, Russia, with all its rivalries and prospects, with their pasts as conflicting great powers and their future as potential competitors, are just some among the actors keen to influence the new world order. In addition to these, there is a long line of emerging countries likely to exert even a small influence in the shaping of the new world order. The Middle East countries, from Saudi Arabia to Iran, from Iraq to Qatar, understanding their growing geopolitical relevance as "world's energy suppliers", are very likely to occupy a central position in the future power equilibrium, as they have already done in the decline of the American unipolar "dream". Here, old and new tensions, from the growing annoyance for the unwelcomed presence of the Western, and especially American, troops, to the old and never buried hatred between Sunni and Shiites, seem to mix and overlap in an increasingly explosive region. The latent conflicts, tapped for

virtually two decades by the American global patrolling, have re-emerged after the defeat in both Iraq and Afghanistan, and the apparent failure of the "War on Terror" launched under the Bush Jr. presidencies.

The Middle East, however, is not at all the only region to generate tensions in the international community. Several other regions and areas, for different reasons, contribute to further the global insecurity. Africa, as in the past, is bloodied by conflicts that crosses its entire territory, from the "Arab Spring" of the Mediterranean countries such as Libya, Tunisia, Egypt, whose uncompleted revolutions nurture domestic civil wars, to the terrorist groups' growing influence in countries such as Mali, Somalia, Kenya, etc. Thus, not only the international community potentially faces a growingly insecure situation and possible new crisis due to the "in fieri" power-struggle among the main actors, willing to generate, at any moment, major regional and potentially global conflicts, it has also to face new "old" threats proper of the XXI century.

These threats, nowadays defined as unconventional, are several and each of them with a very disruptive power. The spread of terrorist groups linked to religious reasons, of which Al Qaeda has become the main promoter, murder people from Afghanistan to Somalia, from Pakistan to Kenya, from India to Ethiopia, just to cite the most recent attacks. The most important Sea Lines of Communications (SLOCs), connecting the world main international hubs, and permitting the enhancement of international trade, have been recently threatened by piracy attacks and terrorists seizures. These facts have increased in pace and intensity all along the last decade, going to impact heavily on the additional costs normally charged to international shipping companies, i.e. higher

insurance costs, the need to hire a private contractors to defend the cargo, the imperative to move even further in the Oceans to avoid the possibilities of attacks. These problems would require a common managing, and strong international institutions to take charge of the issues. However, this happens only in those specific areas and regions, for example the Bab el-Mandeb Strait and the Gulf of Aden, in which the interests of all the main powers are threatened, and in which the alliances are not so strong to worth a potential international rupture. The reasons to struggle would be several nowadays: taking the place of the Unites States as the main world power has been the dream of several emerging powers with a colonial past, Russia and China above all; securing a regional influence in a strategic maritime chokepoints, i.e. the Iranian various threats to close the Strait of Hormuz since the 1979 Islamic revolutions; struggling to affirm the superiority over a given portion of earth, i.e. China's desire to assert its domain over the East and South China Seas.

The evolving situation offers also the possibility of new alliances in order to face a potential enemy or a coalition. This seems to be the cases of two old rivals, China and Russia, currently managing to constitute a coalition to oppose the Western one, including several of those countries marked as "Pariah" states, i.e. Iran, Syria, Venezuela, North Korea, Sudan, etc. In a world modifying its shape, old enmities seem to be secondary to contemporary geopolitical calculations, especially if those calculations derive from the need to avoid international isolation.

In this world order in constant changing, China holds a privileged position. It is currently among the countries accounting for the major

GDP's growth in spite of the financial crisis, and it is listed among those countries that will experience very high level of GDP's growth in the period from nowadays to 2035. Its huge size, comprising almost one-fifth of the world population, makes it a very profitable market and a source of richness, and its political party structure, dependent from its capacity to generate well-being, acts faster and more decisively according to the features of each situation. Sometimes marginalized, sometimes courted, sometimes referred to as a troublemaker, sometimes called to behave as a responsible stakeholders, China will be among the main actors, if not the most important, in shaping the future world power structure.

In the past, the main conflicts used to emerge for geopolitical interests, economic reasons or old hatred never completely buried. The XXI century potential conflicts and international wars, however, will not depend, at least mainly, from any of the above-mentioned reasons. According to Michael T. Klare, Five Colleges Professor of Peace and World Security Studies, at Hampshire College, the main causes will be the search, control, seizure, and constant disposal of energy sources. In his last book, *The Race for What's Left: The Global Scramble for the World's Last Resources* (Metropolitan Books; First Edition), as well as in several of its prior publications, he stated that the struggle for energy resources will dominate the XXI century, as the geopolitical motivations dominated the power-struggle in the first half of the XX century. He started from the assumption that the 2003 invasion of Iraq had to be considered as the first step of this new geo-energetic era. The energy security issue came to dominate the scene already in 1973, when the first oil crisis erupted as retaliation to the Western powers support for Israel. The globalization

phenomenon, at that time, had not yet started to influence the world's shaping, and thus the poor level of global interconnectedness prevented the world to fall. Nowadays, in a growingly interconnected world, and with the world most important economic regions linked to a degree never experienced before, a potential disruption could have much stronger consequences than in the past. As easy to understand, certain regions or specific areas, for their particular features, i.e. position, energies' abundance, alliances, global weight, result more relevant than other. In an energy security analysis, comparable importance has to be attributed to both energy producing and exporting regions, i.e. Middle East, Africa, Central Asia, and transiting regions and maritime chokepoints, i.e. the Strait of Hormuz, in Middle East, the Bab el-Mandeb Strait, near the Gulf of Aden, and the Strait of Malacca, in South East Asia. A potential disruption, at any point, in the SLOCs connecting oil exporters and importers countries, due to an international conflict, a blockade or an embargo, could have disproportionate consequences for almost all the world's importing countries.

China's main energy interests, nowadays, cross the Indian Ocean and the main SLOCs transiting from it. Chinese main energy suppliers, i.e. those countries providing China with oil and gas, are located for the great majority in Middle East and Africa, thus potentially prays of several kinds of disruptions, from a potential closure of the Strait of Hormuz, performed by Iran, to a piracy attack near the Gulf of Aden, with consequent seizure of a Chinese supertanker. China has been working heavily in securing its energy supply routes, both by promoting cooperation on fighting the piracy threat and by pushing, through its diplomatic channels, to avoid a potential blockade or Straits' closures.

The most important maritime chokepoint in Chinese perspective, however, has to be considered the Strait of Malacca, in Southeast Asia. It has acquired mainstream importance since almost 35% of crude oil international trade transits to this gateway, directed to the "thirsty" energy markets of China, Japan and South Korea. China is heavily reliant on the Strait for its oil needs, given that almost the 80% of its oil imports crosses the Strait. Notwithstanding the high dependence China has developed from the Strait, it has not been able to acquire a dominant role in the managing of the Strait's traffic and security. Chinese President Hu Jintao, together with several security and foreign policy's experts, renamed the situation as the "Malacca Dilemma", referring to the fact of having vital interests at stake in the chokepoint without, in exchange, being able to perform a considerable influence on its development. This situation, in light of the soaring domestic demand for energy, has acquired an even higher relevance, whose solution making has been listed among the national priorities.

This dissertation will focus mainly on the geopolitical power-struggle that currently affects the Strait of Malacca, followed by an analysis on the politicization of the concept of energy security in Chinese perspective, and some potential solutions to resize the "Malacca Dilemma", or at least trying to curb its most disruptive effects.

The first chapter will deal mainly with the explanation of the geopolitical significance of the Strait of Malacca, in light of the fact that it is encircled by emerging power with global ambitions, i.e. China, India and Japan, but is currently managed and patrolled by the littoral countries' navies, i.e. Indonesia, Malaysia and Singapore. The United States, main international

naval power, assigned to the Strait a particular geopolitical significance, in consideration of the fact that the control over this chokepoint could be the main key to curb Chinese global aspirations. In this chapter, thus, I will treat the position of each of the actors dependent from the Strait of Malacca. A special emphasis will be given to the Chinese position, through an analysis of its total consumption's structure and its "String of Pearls" strategy, directed at increasing its worldwide influence.

The second chapter will summarize the issue concerning the politicization of the energy security concept in Chinese perspective. The first section of the chapter will start from the historical evolution of the concept of energy security, when it appeared for the first time, and how it assumed the relevance currently attributed. The analysis will continue with the identification of the Chinese energy decision-makers, i.e. those bodies, organisms and companies in charge of drawing the Chinese energy policy. The second section of the chapter will analyze the Chinese position and interests in the main maritime chokepoints, i.e. the Strait of Hormuz and the Bab el-Mandeb Strait, highlighting the potential threats that Chinese energy imports have to face. I will also identify which are the main Chinese energy suppliers, both in Middle East and Africa, trying to show on which China could count more to secure its supplies. The third section of the chapter will evaluate the so-called strategy of the "Troublemakers", one of the consequences of the politicization of the Chinese energy security concept. China oil imports are not only linked to the energy security issue, but can be observed also in the optic of giving strength to those countries able to hamper the United States position worldwide.

The third chapter will deal with some of the potential solutions to resize the Chinese "Malacca Dilemma". In the first section of the chapter I will argue that the growing political, economic and energetic ties between China and the Central Asia energy suppliers have to be considered as the main improvement in the Chinese strategy of supply's diversification. In fact, not only Central Asia suppliers can provide consistent quantities of oil-and-gas through pipelines, this supplying can be performed bypassing the Strait of Malacca. The second section will deal with the analysis of the Chinese Energy Diplomacy and the implementation of its foreign aid strategy to increase the confidence-building with the recipient countries of its aid. These aid, mainly conceded through the provision of loans, serve both the Chinese interests, inasmuch as they are employed to build-up infrastructure able to reduce the distances between China and its suppliers, and of the recipient countries, that see its infrastructures enhanced through the loans' utilization. The third section of this chapter will focus on the development of a Chinese Strategic Petroleum Reserve (SPR), able to act as a counterbalance for potential disruptions or price volatility. The fourth and last section will summarize the pros and cons of a Chinese cooperative approach towards the international energy markets and, more broadly, to the international energy environment and its main institutions.

CHAPTER 1: THE MALACCA POWER GAME IN AN INCREASINGLY MULTIPOLAR WORLD

1.1 A Geopolitical Analysis of the Strait of Malacca

The Strait of Malacca is a narrow stretch of water between the Thai-Malay Peninsula and the Indonesian island of Sumatra. The strait connects the Indian and Pacific oceans, and more specifically the Indian Ocean and the South China Sea. The strait is a 520 miles long gateway, famous for being particularly narrow (only 1.5 miles wide in its narrowest point) and not particularly deep (only 21.8 meters shallow at some points). Three are the littoral countries whose shores are in the Malacca Strait: Indonesia, Malaysia and the city-state of Singapore. A residual influence in the management and patrolling of the strait is sometimes attributed to Thailand.

Malacca is the shortest sea route between African and Arabian Gulf energy's suppliers and the Asian markets-notably China, Japan, South Korea, and the Pacific Rim. It is also essential for world trade, given its bidirectional fluxes of raw materials and other imports from Europe, Middle East and Africa to the Asian countries, which in exchange export finished consumer products. Raw materials such as coal, liquefied natural gas (LNG) or iron ore, among the others, are common cargos in the strait. By far the most important cargo transported through the strait, essential both geopolitically and economically, is petroleum.

As a consequence of the various kinds of traded goods and raw materials that pass through this chokepoint, and given the particular geographical and morphological characteristics of the strait, several types of vessels

are used. Those shipping oil, for example, usually differ in size, shape and function. Furthermore, in order to fit the particularities of these waters, a naval architecture and engineering has been developed, the so-called *Malaccamax*.¹ For what concerns the specific vessels needed to carry oil, the table above helps summarizing their characteristics.

Categories and Specifications of oil Tankers

Tanker Class	Deadweight Tons	Barrels of Oil
Panamax	60,000-80,000	500,000
Aframax	80,000-120,000	750,000
Suezmax	120,000-200,000	1,000,000
Very Large Crude Carrier (VLCC)	200,000-320,000	2,000,000
Ultra Large Crude Carrier (ULCC)	320,000 +	up to 4,000,000

Source: Pacific L.A. Marine Terminal LLC

Estimates of the traffic through the strait show that, per year, more than 60,000 ships pass through the strait.² The strait has thus acquired great relevance, not only from an economic and commercial point of view (due to the consistence of trade volumes) but also from a geopolitical and geo-energetic point of view. Approximately 35% of all the world oil containers carried by water goes through the strait, with an estimated 96% of those passing through the strait addressed to the Asian Market.³ In 2011, it became the most important key chokepoint for oil trade in Asia, with an estimated 15.2 billion barrels per-day (bbd) traffic. Overall, more than one-third of the world trade directed to the Asian Market transit through this gateway.⁴

¹ Umaña, F. (2012) Transnational Security Threats in the Straits of Malacca, Threat Convergence, *Fund for Peace (FFP)*, pp. 1-32.

² Zubir, M. (2005) 'The strategic value of the Strait of Malacca', pp. 1-19.

³ Komiss, W. and Huntzinger, L. (2011) The Economic Implications of Disruptions to Maritime Oil Chockpoints, pp. 1-88.

⁴ U.S. Energy Information Administration (EIA) permanent link: <http://www.eia.gov/about/>

As easily understandable from what stated above, the interests at stake in the strait of Malacca are vital, not only for the littoral countries, but also for the so-called *users* ones. Indonesia, Malaysia and Singapore are those in charge of the patrolling and managing of the strait for what concerns traffic, safety and security. Several had been the initiatives and proposals to work together, both among the three littoral countries and in a wider regional context, in order to share the burden of the patrolling. Among the most important initiatives it seems noteworthy to cite the "*Five Power Defense Agreement*" (1971), first real effort in order to improve the strait security, that included Australia, Malaysia, New Zealand, Singapore and the United Kingdom, the "*United Nations Convention on the Law of the Sea*"-UNCLOS of 1982, not specifically focused on the Malacca strait but that put the bases for a wider comprehension (and possible solution-making) of the issue and, more recently, the "*Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia*" (ReCAAP) of 2006, a regional government-to-government agreement, including all the ASEAN and some East and Southeast Asian nations, to promote cooperative efforts against piracy and armed robbery.⁵

Notwithstanding the various initiatives promoted and approved, the three littoral countries have seen each other more as economic competitors and commercial "enemies" than as security partners in a cooperative context. All this has been translated in a certain degree of reciprocal mistrust, and in a different approach towards a possible extra-regional military presence. Particularly jealous of their sovereignty have been both Indonesia and Malaysia, developing and emerging countries,

⁵ Umaña, F. (2012) 'Transnational Security Threats in the Straits of Malacca, Threat Convergence, *Fund for Peace (FFP)*, pp. 1-32.

while Singapore has always been more prone to the possibility of an external presence to patrol the area and grant stability. These three countries, in their effort to assure security, have been sided, more or less directly, by other countries whose interests in the area are consistent: China, Japan and South Korea are among the most relevant stakeholders in the maintenance of the traffic, considering the "worst-scenario" consequences a disruption could eventually generate.⁶

Together with the "Asian" users it is possible to identify other characters that, in a wider geopolitical perspective, maintain a strong influence on Malacca, as for example the United States. The US' stance as the main intercontinental naval power, with its fleets sailing and patrolling all the oceans, give it a particular lift on this chokepoint. The US' perspective on the strait, however, is different from those of the other characters involved in the Malacca's power struggle; the United States, in fact, are more interested in the geopolitical relevance that the maintenance of the control over the strait could grant them and, more specifically, the lift it will assure on China. The latter is a developing country whose appetite for energy is growing steadily and rapidly, and a consistent part of its energetic needs are imported through the strait of Malacca.⁷ A residual, but significant, influence on the strait has to be recognized to those non-state actors like shipping companies, whose greater attention to the problem, through their more efficient security measures, e.g. "safe rooms" and secret compartments and, sometimes, the hiring of private military companies to secure the cargos, should help mitigating the phenomenon.

⁶ Ismail, S.Z. and Sani M.A.M., (2008) *The Straits of Malacca: Regional Powers Vis-A-Vis Littoral States in Strategic and Security Issues and Interests*, pp. 83-105.

⁷ Zubir, M. (2005) *The strategic value of the Strait of Malacca*, pag. 1-19.

Appendix

Map: Shipping Patterns in East Asia



Source: From John C. Fawcett-Ellis, "Maritime Security in the Straits of Malacca and Singapore – Industry's Views", MILOPS 2006, 17th-19th July, Bangkok.

1.2 China's Stance over the Strait of Malacca

The geopolitical relevance of the Strait of Malacca has been slowly increasing since the arrival of the new century, especially since the energy issue acquired the status of national priority. The strait of Malacca, as stated above, is the most important maritime chokepoint in Chinese geostrategic chessboard, and the possibility of exerting even a small influence on it would grant China an overall major degree of security.

1.2.1 *"The Malacca "Dilemma"*

“From the perspective of international strategy, the Strait of Malacca is without any question a crucial sea route that will enable the United States to seize geopolitical superiority, restrict the rise of major powers, and control the flow of the world’s energy..... it is no exaggeration to say that whoever controls the Strait of Malacca will also have a stranglehold on the energy route of China. The excessive reliance on this strait has brought an important potential threat to China’s energy security”.

— Shi Hongtao,

15 June 2004⁸

With these words, in 2004, Shi Hongtao, a Chinese scholar and energy security adviser, used to highlight the relevance that the Malacca strait was about to develop for global power balance, and all the possible implications deriving from it. The route through the Strait, to highlight its huge importance for China, as been dubbed the "lifeline of the rising dragon". From 2004 onwards, with the globalization acting as an engine to further increase the level of worldwide geo-energetic interconnectedness, the overall situation has subsequently evolved.

⁸ Shi H., ‘China’s Malacca Straits,’ *Qingnian Bao* , 15 June 2004, Beijing.

Nowadays, those powers able to control and, if necessary, block the Sea Lanes of Communications (SLOCs), e.g. the oil shipping lanes moving towards the oceans, could exert a disproportionate geopolitical power over the rest of the world.⁹ Prior to these assertions, already in 2003, the issue had been highlighted, to the Chinese Communist Party Congress, by the then-president Hu Jintao, whose aim was to describe the strategic dependence China was developing from the Strait of Malacca. Thus, the expression "Malacca Dilemma" came to denote the high dependence China has developed on the strait, both in economic and geopolitical terms, but the very little sway Beijing would have been able to exert upon the gateway in case of potential crisis or disruptions. The origins of this current "Dilemma" traces back to the end of the XX century; in 1993, as a consequence of the rapid economic development it had been experiencing since the era of the Deng's reforms, China became a net oil importer. The soaring domestic demand could not anymore be absorbed by the domestic oil supply. The very same problem, to a lesser degree, has manifested itself with other raw materials, as for example coal, of which China became net importer in 2008.¹⁰ Nonetheless, China's main suppliers of coal are Australia and Indonesia (almost the 50% of China's needs are covered by the above mentioned), thus making the Malacca Dilemma related to coal of fewer intensity.¹¹ The rapid economic development, however, has made China, year by year, more dependent on the market, especially as for what concerns the acquisition of raw

⁹ Shaofeng, C. (2010) China's Self-Extrication from the "Malacca Dilemma" and Implications, *International Journal of China studies*, Vol. 1, No. 1, January 2010, pp. 1-24.

¹⁰ Singh, M. (2013) Malacca: No More a Dilemma for China?, *Scholar Warrior*, Spring 2013, pp. 45-56.

¹¹ Tu, K.J., and Johnson-Reiser, S. (2012) Understanding China's Rising Coal Imports, Carnegie Endowment for International Peace, Policy Outlook., pp. 1-16.

materials and the energy supply. China is currently the largest consumer of energy in the world. It is, also, the world's second largest consumer, and net importer, of oil, after the United States. China's energy consumption increased by 5.82% annually, in order to underpin the average 10% annual growth of the national economy of the last decade.¹² Some data may help us in developing a broader understanding of the Chinese current energetic situation: in the five-years period 2006-11, China's per-capita primary energy consumption rose by 31%, the per-capita natural gas consumption increased by 110%, and the per-capita electricity consumption by an astonishing 60%.¹³ According to several forecasts, this is only going to increase further in the next decade. China's national oil fields are already mature, and almost the 85% of the domestic oil production capacity is situated onshore, especially in the Daqing oil field in the far north of the country.¹⁴ Moreover, China's proven oil reserves are of more than 20.50 billion barrels, currently the 15th world's largest oil reserves. China's national economy, growing constantly at an average 10% since 2000, consumes 9,250,000 barrels of oil per day as of 2011.¹⁵

For what concerns oil imports, in 2010 China was importing 4.79 million barrels per day, while in 2011 that amount increased by 6.3%, to reach almost 5.09 million barrels per day. Xinhua, the state run news agency, reports that China's dependence on oil imports grew 55.2% in the first

¹² <http://www.indexmundi.com/g/g.aspx?c=ch&v=66&l=it> (accessed 3/9/2013)

¹³ Singh, M. (2013) Malacca: No More a Dilemma for China?, *Scholar Warrior*, Spring 2013, pp. 45-56.

¹⁴ Hurst, L. (2007) China's Global Quest for Energy, The Institute for the Analysis of Global Security (IAGS), pp. 1-23.

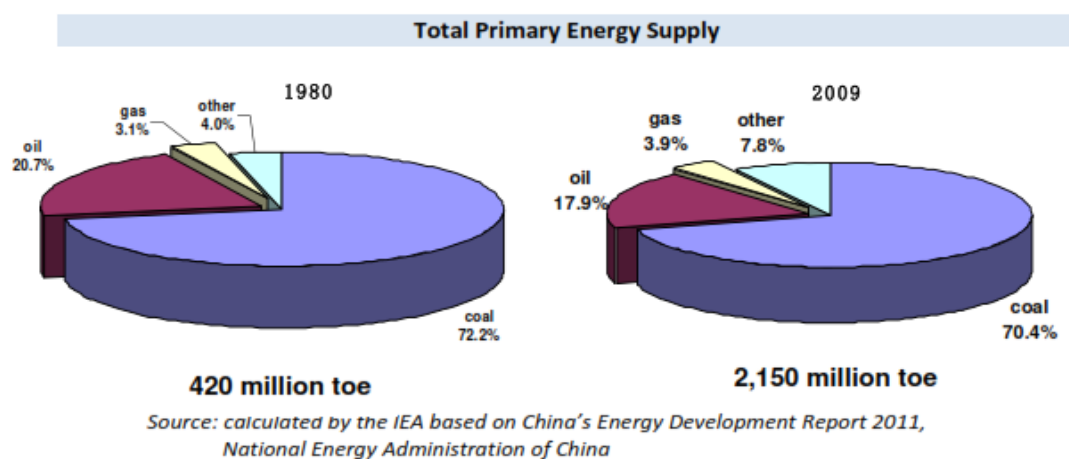
¹⁵ Saefong, M. China oil demand up 6.1% in 2011: Platts', *Wall Street Journal*, 25 January, 2012.

five months of 2011 alone, up from 55% in the entire 2010.¹⁶

Estimates by the Chinese Academy of Engineering predict that China's dependence on imported oil will increase to 65% by 2030, due to continued urbanization and industrialization.¹⁷ These data are similar in several energy reports, from the International Energy Agency (2013) one, through the ExxonMobil (2013) one, to the U.S. Energy Information Administration (2013) one. As a consequence of what stated above, the issue of the Chinese energy security can be easily regarded as among those of national security.¹⁸ China is thus trying to address its strategic vulnerability for what concerns its Sea Lanes of Communication (SLOCs), especially those moving through the Straits of Malacca.

1.2.2 China's Total Energy Consumption

In order to understand more deeply what has been defined above as the "Malacca Dilemma", it seems noteworthy to describe the Chinese energy consumption's structure, and also the related origin of each of the raw materials used in the generation of energy.



¹⁶ 'China's Imported Oil Dependence Warned', *Xinhua*, 15 August 2011, Beijing.

¹⁷ Ibid.

¹⁸ Singh, M. (2013) Malacca: No More a Dilemma for China?, *Scholar Warrior*, Spring 2013, pp. 45-56.

Coal

China currently detains the 19% of the world's coal reserves, or approximately 170 billion metric tons of coal. Nowadays, almost the 71% of China's energy consumption is coal-based, or is at least supported by coal. Of this amount, almost the 45% is employed for electricity needs, in order to sustain the increasing demand of electricity of an ever-growing middle-class, while the remaining part has industrial applications. China's coal production, in 2012, overcome the amount of 3.65 billion metric tons, while its imports were projected to be of about 270 million metric tons, or approximately 7 percent of the total domestic production.¹⁹ China's main coal suppliers during the period 2006-11 had been Australia and Indonesia, totaling almost the 50% of China's coal imports. Among the other major coal suppliers, it is possible to identify the United States, South Africa, Canada, Colombia and Mongolia.²⁰ All these countries but South Africa do not use the Straits of Malacca as gateway for shipping coal to China, thus almost zeroing the risks related to the Malacca Dilemma for what concerns coal imports. Moreover, China has already taken adequate precautions to ensure that in times of hostilities, and in case of her SLOCs being threatened, proactive means could immediately be activated to guarantee the supplying. In the specific case of coal, main arrangement to circumvent the problem would be to stepping up domestic production.²¹

¹⁹ Juan D., 'China to control coal production due to shrinking demand', *China Daily*, 12 October 2012.

²⁰ Tu, K.J., and Johnson-Reiser, S. (2012) Understanding China's Rising Coal Imports, Carnegie Endowment for International Peace, Policy Outlook., pp. 1-16.

²¹ Singh, M. (2013) Malacca: No More a Dilemma for China?, *Scholar Warrior*, Spring 2013, pp. 45-56.

Natural Gas, Renewable and Other Energies

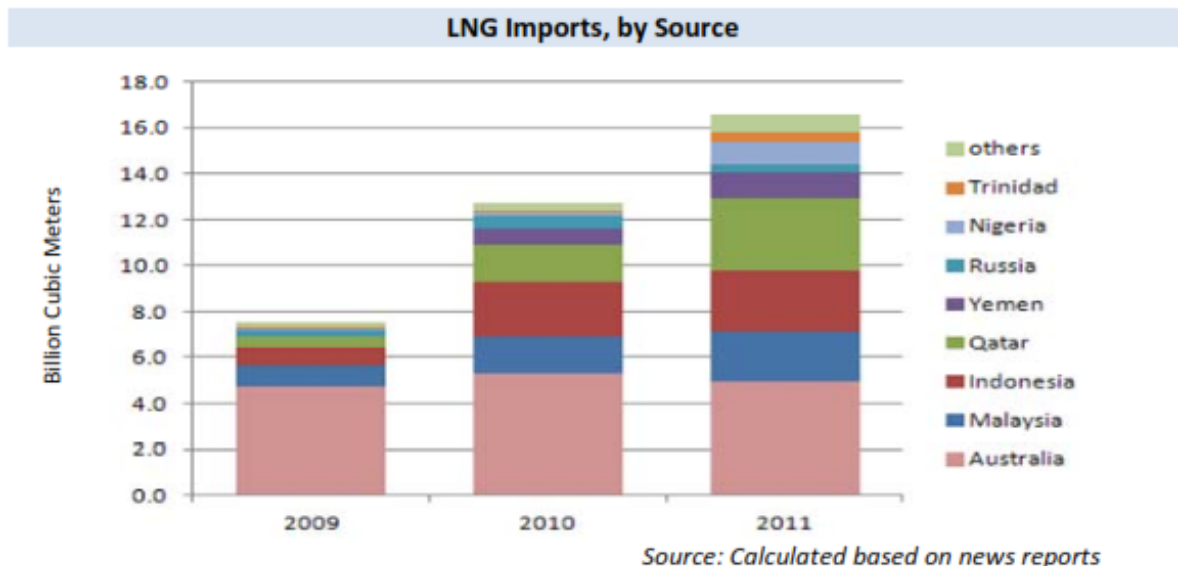
According to the 2012 data, natural gas contributes to 4.6% of the total energy consumption, of which almost the 84% is produced domestically.²² China consumes 130.9 billion cubic meters of natural gas, of which 102.7 billion cubic meters is produced domestically, and the remaining 28.1 billion cubic meters (or approximately 80 days requirement) is imported. In 2011, China's main suppliers for what concerns natural gas imports were Australia (30% of natural gas imports), Qatar (19% of natural gas imports) and Indonesia (16% of natural gas imports) and Malaysia (13% of natural gas imports). Always in 2011, in pursuing the policy of diversifying the sources of energy supplying, China started to import, through gas pipelines, some natural gas from Turkmenistan (13% of its natural gas imports). Thus, only a negligible quantity from Qatar and Yemen would be likely to pass through the Malacca Strait. China already has 1.9 trillion cubic meters of natural gas reserves. Moreover, it has 2.01 billion cubic meters as commercial reserves, and it has the capacity to stock much higher quantity of additional reserves.²³

In addition, and thank to the technological improvement, by 2015 China has planned to explore the potential of 200 billion cubic meters of shale gas. Its shale gas reserves alone, according to the current forecasts, are estimated to be 25.1 trillion cubic meters. These reserves are more than adequate to cater for any emergent needs in the event of a blockade or

²² 'China's natural gas imports up 66.7% in January', *Xinhua*, 26 February 2012, Beijing.

²³ IEA (International Energy Agency) (2012) Oil and Gas Security: Emergency Response of IEA Countries, People's Republic of China.

crisis.²⁴ Nowadays, renewable energy and nuclear energy only constitute a little more than 1% of the total energy consumption, while hydroelectric power plants amount for almost the 6% of the energy pie. However, recent developments show how China is about to change its energy consumption structure. In a report by *Bloomberg New Energy Finance* (2013) is stated that China's power capacity will be doubled by 2030, and more than half of the increase will be covered through the enhancement of renewable energy plants. This, always according to the report, will attract investment for about 1.4 trillion dollars. China's carbon emissions, currently the world's highest, will start to decline for about 2027, increasingly substituted by both renewable energies and an increase in oil consumption. This energy mix of both renewable, gas and oil's produced power capacity, according to the report's projections, should drive down the coal-fired power generation capacity to the 44% of the energy consumption's structure.²⁵



²⁴ Singh, M. (2013) Malacca: No More a Dilemma for China?, *Scholar Warrior*, Spring 2013, pp. 45-56.

²⁵ Ying, J., China's power sector heads towards a cleaner future, *Bloomberg New Energy Finance*, August 27, 2013, Beijing.

Oil

Thus, according to what stated above, it could seem as if the Malacca Dilemma had been heavily overestimated. However, in a society as the Chinese one where the middle-class is rapidly increasing, not only in quantity, but also for what concerns the purchasing power, oil assumes a huge relevance for the maintenance of the domestic stability, and consequently for the survival of the Chinese Communist Party (CCP) in charge. Even if, currently, oil accounts for little less than the 18% of the total energy consumption, the astonishing pace of change China is experiencing obliges high ranks' officials to secure the SLOCs for oil imports and supplying.²⁶ Of this 18%, little more than 45% is produced domestically, mainly from onshore and offshore oil wells situated in North East China and the Yellow Sea (e.g. the Daqing oil field). However, as stated above, the Chinese domestic oil fields are already mature, and sooner or later will enter in a declining phase. The remaining 55% of the oil imported amounts broadly to the 9% of China's energy requirements (or approximately 4.5 mbl/day at 2011 consumption rates). According to the 2012 data from IEA, China's main oil suppliers are located in two areas: Middle East and Africa. As far as the Middle East is concerned, it accounted for more than the 50% of oil imports, with projections to 2035 talking of a peak to 65-70%. By countries, Saudi Arabia, Iran, Oman and Iraq accounted respectively for the 20%, the 11%, the 7%, and the 5%, with smaller amount provided by Kuwait and the UAE. As far as Africa is concerned, it accounted for the 24% of oil imports. By countries, Angola and Sudan accounted respectively for the

²⁶ IEA (International Energy Agency) (2012) Oil and Gas Security: Emergency Response of IEA Countries, People's Republic of China.

12% and 5%, with other amounts coming from Republic of Congo (Congo-Brazzaville), Equatorial Guinea and Nigeria. Projections state that the overall Chinese dependence on African oil is intended to increase. The remaining part of oil imports is provided by Russia, accounting for the 7%, and by Central Asian countries, as for example Kazakhstan and Uzbekistan.²⁷ Recent developments, as for example the completion of the construction of oil and gas pipelines connecting Central Asia and China let us foresee a possible increase in oil imports from this area.²⁸

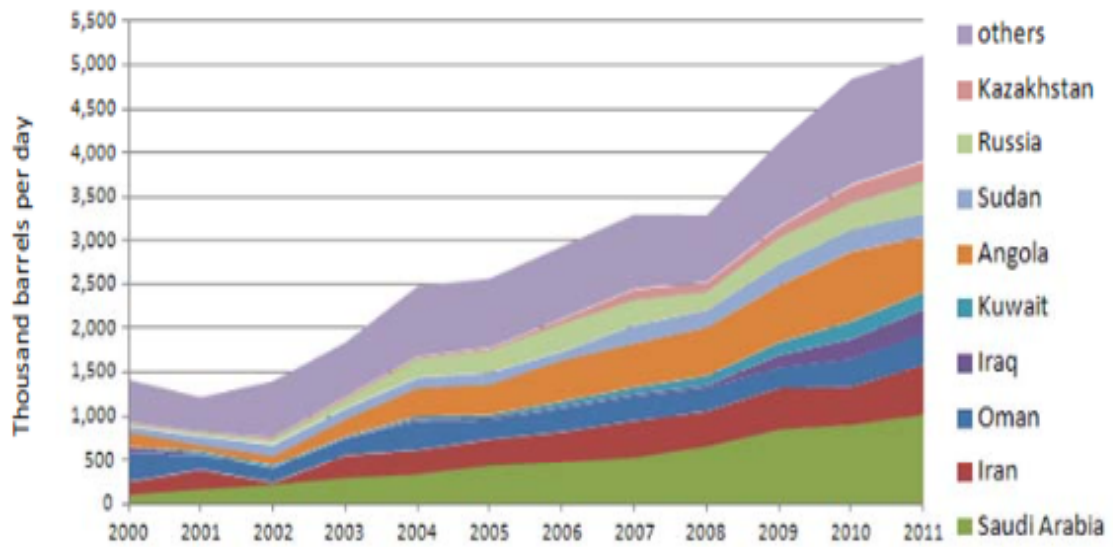
Overall, according to the data provided by *indexmundi.com* (2013), it seems even clearer how fast the pace of the Chinese's oil imports is evolving; if, in 2001, the total oil imports amounted to almost 1.2 mbl/day, this data increased five times in the decade 2001-2011, to reach the sum of 5.08 mbl/day.²⁹ In addition, it is possible to foresee an even higher level of imports, in the next decades, by observing the evolution of the Chinese people, and especially of its ever-growing middle-class, "thirsty" of energy and of consumption.

²⁷ IEA (International Energy Agency) (2012) Oil and Gas Security: Emergency Response of IEA Countries, People's Republic of China.

²⁸ Erickson, A.S. and Collins, G.B. (2010) China's Oil Security Pipe Dream: The Reality, and Strategic Consequences of Seaborne Imports, *Naval War College Review*, pp. 89-112.

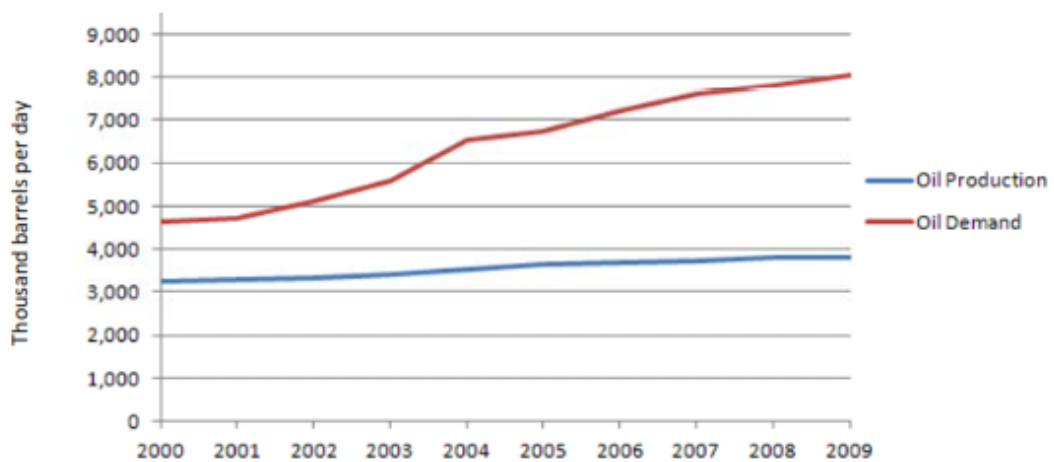
²⁹ www.indexmundi.com

Crude Oil Imports by Source



Source: China Oil, Gas and Petrochemicals

Domestic Oil Production and Demand



Source: Calculated by the IEA based on China Energy Statistical Yearbook 2010, National Bureau of Statistics of China, China Statistics Press

1.2.3 The "String of pearls" and the Chinese Blue-water strategy

In order to grant the safety of its SLOCs and the constant supplying of raw materials, China launched, more or less consciously, a strategy that the US Department of Defense, for first, dubbed "String of Pearls". This expression refers to the network of relationships, and military and commercial facilities, China has been able to develop along the main SLOCs. The SLOCs run through the main maritime chokepoints, such as the Gulf of Aden, the Strait of Hormuz and the Malacca and Lombok Straits. All along these routes China has been able to finance the development of some strategic centers, nowadays defined as "pearls"; each of them is a sphere of influence seeded and secured through the use of economic, geopolitical, diplomatic and military means, in order to upgrade the Chinese blue-water strategy of expansion towards the Indian, as well as Pacific, ocean (the so-called "Two-ocean strategy").³⁰ These strategic center, or "pearl", are the following: the Chinese "Hainan Island", which recently upgraded its military facilities; "Woody Island" in the Paracel archipelago, which hosts an upgraded airstrip; the recently completed deep-water port of "Sittwe", in Myanmar; the container shipping hub in the city of "Chittatong" in Bangladesh; the commercial shipping center of "Hambantota", in Sri Lanka; the navy base and deep-water port of Gwadar, in Pakistan. Other strategic centers are the Port Sudan, in Sudan, Sudanese major port in the Red Sea, and the project of construction of a port in "Bagamoyo", Tanzania.³¹ China's quest for pearl reflects the enlightening pragmatism, instrumentality and flexibility

³⁰ Yhome, K., The geopolitics of China's new energy route, *East Asia Forum*, June 19, 2013, pp. 1-3.

³¹ Pehrson, C.J. (2006) String of Pearls: meeting the challenge of China's Rising Power across the Asian Littoral, Strategic Studies Institute, July 2006, pp. 1-36.

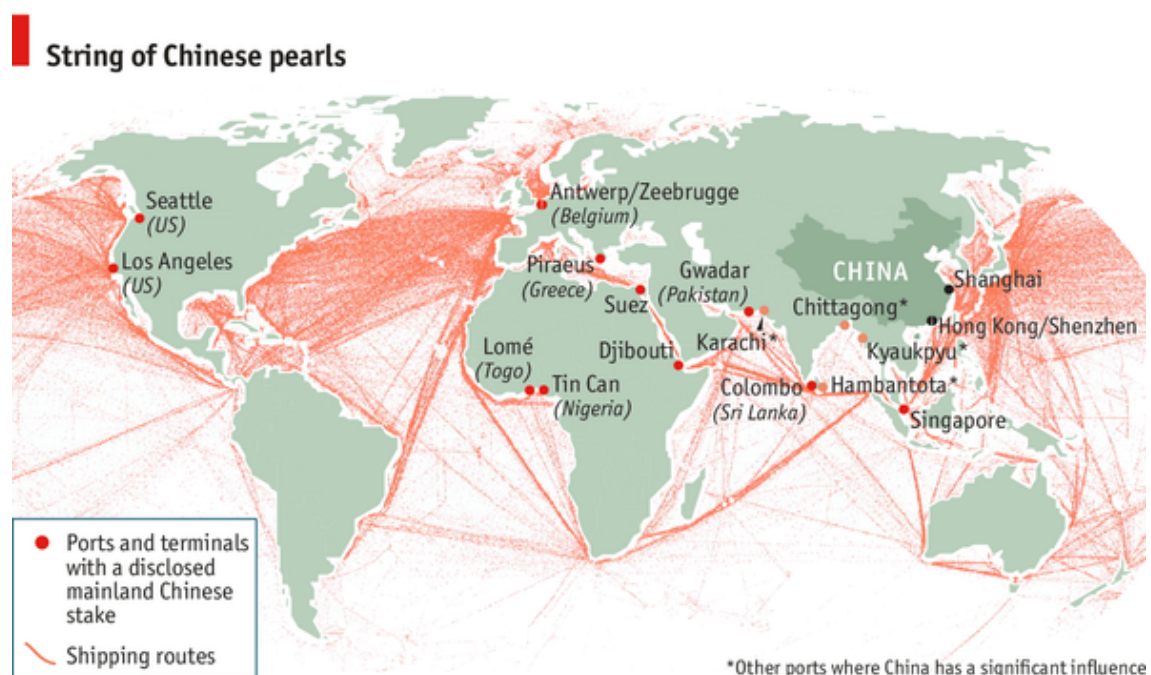
in its foreign policy, but especially its determination at maintaining, at any cost, the secure and constant access to energy resources. Several are the reasons behind the development of the "String":

- To secure transportation of energy resources thank to the construction or upgrading of ports or shipping facilities along the SLOCs. This helps shortening the time of the shipping routes and reducing the ship docking time.
- To grant access to new markets, eager for Chinese goods, so as to keep sustaining national economic growth. Moreover, the infrastructural projects in the "pearls" are often performed by Chinese companies, employing Chinese workers, so as to regain what had been loaned to these countries to finance such projects.
- To preserve the efficiency of the supply routes from source to destination, especially for what concerns oil, China can grant a constant inward flow of oil and energy sources, and can rely on each of its "pearl" to act in this perspective.
- To ensure the political stability and, more ore less directly the survival of the Chinese Communist Party (CCP) in charge, it has to continue fostering social development and economic enhancement. Moreover, all the infrastructure projects help creating new business opportunities for the Chinese multinationals in the government-sponsored "going out" strategy.³²

³² Lin, C. (2013) China's Strategic Shift toward the Region of the Four Seas: The Middle Kingdom arrives in the Middle East, *Middle East Review of International Affairs*, Vol. 17, No. 1 (Spring 2013), pp. 32-55.

- To neutralize, or at least soften, the competition for the acquisition of energy sources, especially with the other three world's biggest energy consumer, the United States, Japan and India.
- To secure the openness of the strategic chokepoints by forging alliances with countries, such as Sudan or Iran, directly involved in the maintenance of the fluxes.³³

The String of Pearls' strategy finally serves the Chinese aim at expanding its naval presence, through the constant improvement of the People Liberation Army's (PLA) navy, to reach the status of global naval power, not only for what concerns the secure supplying of energy sources, but also to send a clear geopolitical message to its global competitors.



Source: Colombo, "The new masters and commanders, *The Economist*, June 8, 2013 (<http://www.economist.com/news/international/21579039-chinas-growing-empire-ports-abroad-mainly-about-trade-not-aggression-new-masters>)

³³ Kim, S.P. (2011) An Anatomy of China's 'String of Pearls' Strategy, *The Hikone Ronso*, 2011 spring / No.387, pp. 22-37.

1.3 United States' New Asia-Pacific Strategy

The United States are the only country involved in the Malacca issue that does not depend on the strait for its energy supply. However, it would be misleading to consider its posture on the strait has less interested than that of the others countries involved. For the United States, whose super-power hegemony is (more or less) slowly being eroded, to continue influencing the world's most important chokepoints remain an issue of primary importance. Even if the Malacca Strait is not directly linked to the US' energy needs, it has always represented a vital geopolitical chokepoint for the American administration, both for commercial and energetic reasons. Nowadays, with the world's interconnectedness increasing with a surprisingly pace, and with vital economic and energetic regions turning more and more complementary, the control over the strategic chokepoints has turned to be of primary importance. US' "Asia strategy" for the XXI century focuses on the development of privileged relations with East and Southeast Asian countries. The strategy has probably reached its apex when president Barack Obama, in November 19, 2013, visited Burma, a historic ally (and protégé) of the People Republic of China.³⁴ This strategy of expanding its presence and influence in Asia has a two-fold meaning; on the one hand, and from an economic and commercial point of view, it helps the United States to secure an advantaged position over the region that will account for the highest part in the world growth of the following century, according to the World Energy Outlook's data;³⁵ on the other hand, and

³⁴ Beech H., Obama in Burma: U.S. President's Landmark Visit Brings Hopes, Criticism, *Time World*, November 19, 2012, Rangoon.

³⁵ IEA (International Energy Agency), World Energy Outlook, 2012.

from a geopolitical point of view, it serves the US' interest in containing and encircling China, one of the main US' competitor in the coming century. Thus the policy of containment of the Chinese expansion has been identified, by the US' administration, as one of the main goal. After an aborted attempt by the then- US' Secretary of State, Condoleezza Rice, in 2005, to offer China a position as global stakeholder in a potential XXI century's Sino-American G2, the strategy had necessarily been rethought. From that moment onward, the American posture with respect to China has evolved towards the containment of its expansion. Thus, several strategies have been developed and implemented by the American administration to slow down the pace of Chinese advance and, as obvious, they have been accompanied by skepticism and vehement criticism by the Chinese politburo. In fact, China accuses the United States of promoting political and military partnerships and fostering bilateral as well as multilateral cooperation in order to acquire a geopolitical advantage. To date, China has not joined any of the cooperation programs proposed by Washington, and has always criticized them as American plots against China's "peaceful development" and "harmonious world".³⁶ One of the main issue of the US' Asia strategy regards the possible developments in the Strait of Malacca. From what stated above, it results clear how important this gateway is nowadays for China, and how important it will steadily become according to the forecasts. Thus, the main US' initiatives in the region, in order to increase (or at least maintain) their control on the waters near the Strait of Malacca, are mainly three: The so-called "*Pivot to*

³⁶ Di, D., (2007) Continuity and Changes: A Comparative Study of China's New Grand Strategy, *Historia Actual Online*, pp. 7-18.

Asia", the Regional Maritime Security Initiative (RMSI), and the Proliferation Security Initiative (PSI).

China strongly fears that the implementation of these initiatives could give to the United States a disproportionate power over the Asia-Pacific area, and that all of them are developed to damage China.

Pivot to Asia

The Barack Obama's first presidency was marked by the American disentanglement from the Middle East (or at least the attempt), and by the re-orientation towards the East and Southeast Asia, and the Pacific region; this strategy as been dubbed "Pivot to Asia". It involves both the strengthening of military alliances and strategic partnerships, and the consequent repositioning of the American military forces throughout the Indo-Pacific region. Leon Panetta, the then-Secretary of Defense, at the 2012 Shangri-la Dialogue's meeting, announced a major shift in the US' naval assets disposal, with the 60% of the American navy to be deployed in the Indo-Pacific region by 2020. This shift in naval deployment will be coupled by a similar shift in the US Air Force, with the 60% of its overseas-based forces to be deployed to the Asia Pacific region by 2020.³⁷ Chuck Hagel, the Defense Secretary for the Obama's second term, at the 2013 Shangri-la Dialogue's meeting, stated even more strongly the US' involvement in the region. He affirmed the willingness of the United States to strengthen military ties with virtually every country in the region, mostly at China's expense. He emphasized the

³⁷ Symonds, P., Pivot to Asia: U.S. Military Build-up in Asia, Threatening China, *Global Research*, June 3, 2013.

substantial progress reached with old allies, as for example Japan, South Korea, Singapore and Australia; as far as Australia is concerned, he highlighted the increase in the number of US Marines deployed in the Darwin base, from 250 to 1,100 by mid-2014. He also praised the steady improvements in the relations with India, a potential competitor in an increasingly multipolar world. Bilateral understandings have been reached with several Southeast Asian countries:

- A joint vision statement with Thailand for the first time in over 50 years;
- A new memorandum of understanding with Vietnam;
- The first-ever visit of an aircraft carrier to Malaysia;
- A military-military engagement with Burma; and
- A closer collaboration with the Indonesian military.³⁸

As far as China is concerned, the tone of the discussion had been quite different; both parties called for an enhancement in the dialogue in order to reduce the risks of possible miscalculations and misunderstandings, especially between the militaries. To date, the main consequence of the US military build-up and forging of alliances in Asia has been to overheat the latent tensions in the area.

While China is currently in no position to challenge the US militarily, its huge and growing appetite for energy and raw materials is leading to frictions local the major powers over Asia, Africa and Latin America.³⁹

³⁸ Symonds, P., Pivot to Asia: U.S. Military Build-up in Asia, Threatening China, *Global Research*, June 3, 2013.

³⁹ Lin, C. (2013) China's Strategic Shift toward the Region of the Four Seas: The Middle Kingdom arrives in the Middle East, *Middle East Review of International Affairs*, Vol. 17, No. 1 (Spring 2013), pp. 32-55.

Regional Maritime Security Initiative (RMSI)

The Regional Maritime Security Initiative (RMSI) for Asia Pacific was made public in March 2004. It called for the ASEAN countries to permit US Marines to patrol the waters, especially those adjacent to the Strait of Malacca, against possible piracy and terrorist attacks. The first reactions to this proposal, not only from China, and especially from Indonesia and Malaysia, were of strong criticism. Both the littoral countries argued that the strategy, as thought from the US Pacific Command, impinged on the sovereignty of the littoral countries. They vehemently argued that the Malacca Strait was absolutely not an international strait and that, as a consequence, the primary responsibility for the safe maintenance of the area for navigation rested on the littoral countries. Thus, the United States reformulated the strategy in a softer way, arguing for the forging of strategic partnerships of states, with strong differences both in views, capabilities and capacities, but with the shared aim to act against piracy and terrorist risks, and to grant stability and safe movements in the area. The architecture of the project was based mainly on the improvement of the awareness of the problem and on the sharing of knowledge, on the maritime interdiction capabilities to improve the littoral security, and on the inter-agency cooperation.⁴⁰ The United States, in order to downplay the fears and suspicions generated by their first proposal, strongly emphasized the fact that no standing force would have patrolled the Pacific region, that no violations of their national sovereignty would

⁴⁰ Morada, N.M. (2006) Regional Maritime Security Initiatives in the Asia Pacific: Problems and prospects for maritime security cooperation, pp. 1-16.

have occurred, and that every step forward would have been taken in the absolute respect of the existing international and domestic laws.⁴¹

Proliferation Security Initiative (PSI)

The Proliferation Security Initiative (PSI) was launched on May 31, 2003. It has been thought as a global effort in order to stop, or at least curb, the trafficking of weapons of mass destruction (WMD), and of all the technology (as for example the delivery systems or the assembly materials) related to them. It would allow US personnel to guard against possible transportation of WMD on the high seas and, if necessary, to board a suspect foreign vessel. American's involvement in the PSI stems from the approval, in December 2002, of the "U.S. National Strategy to Combat Weapons of Mass Destruction". Identifying the problem as one of the most dangerous global threat, the PSI argues for more robust tools to stop the worldwide diffusion of WMD, and find in the potential interdiction one of the main answer.⁴²

When a country endorses PSI, it endorses the PSI Statement of Interdiction Principles, which commit participants to establish a more coordinated and effective basis through which to impede and stop WMD, their delivery systems, and related items. The countries thus commit themselves:

- To interdict transfers to and from states and non-state actors of proliferation concern to the extent of their capabilities and legal authorities;
- To develop procedures to facilitate exchange of information with other

⁴¹ Zhang, X. (2007) China's Energy Corridors in Southeast Asia, 2007, pag. 1-4.

⁴² Ibid.

countries;

- To strengthen national legal authorities to facilitate interdiction; and
- To take specific actions in support of interdiction efforts.

Nowadays, more than a 100 countries endorsed the PSI, all deeply concerned of the dangers of WMD falling into the hands of terrorists. Fostering individual and collective efforts towards the curb of the phenomenon, and trying to take appropriate and timely actions to meet the fast-moving situations involving proliferation threats, the United States are seeking to strengthen and expand the PSI, ensuring that it remains an effective tool to stop WMD proliferation. Moreover, they are directly contributing by providing military, customs and law enforcements, as well as security experts and assets to perform interdiction exercises.⁴³

⁴³ <http://www.state.gov/t/isn/c10390.htm>

1.4 Who's with Whom? The littoral countries between third-world rhetoric and geopolitical interests

Indonesia

In the context of the littoral countries, Indonesia's position will be the first to be analyzed. Notwithstanding positive economic growth in recent years, Indonesia continues to fight both against economic backdrops and towards the consolidation of a strong governmental authority, being an archipelago of more than 5,000 islands. It continues, for example, to struggle against the piracy phenomenon, mainly due to the poor patrolling of both its shores and waters. Several experts, both from the littoral countries and international, sustain that a very consistent part of the piracy attacks on the Strait of Malacca is performed by Indonesians.⁴⁴ Because its shores on the strait are the longest one, and its entire coastline reaches twice the circumference of the earth, the governmental authorities had found almost impossible to assure complete security in the Malacca strait. Moreover, Indonesian navy and police are not enough well-equipped to perform effectively against pirates, and would generally need more manpower, funds and advanced technology. However, an ill-will to fight against traffic disruptions, due to the poor economic benefits Indonesia receives from the maritime traffic through the Malacca strait, helps complete the picture on why the anti-piracy policy's effects are limited. In addition, it seems noteworthy to highlight the fact that, in a national perspective, Indonesia can count on other straits rather than Malacca. Sunda, Lombok and Makassar straits, in fact, handle most of Indonesia's trade, and permit it to focus less on Malacca's security problems.

⁴⁴ Ismail, S.Z. and Sani M.A.M., (2008) *The Straits of Malacca: Regional Powers Vis-A-Vis Littoral States in Strategic and Security Issues and Interests*, pp. 83-105.

Jealous of its recent sovereignty, Indonesia has specifically repudiated foreign military presence in the Malacca strait and, more generally, in its waters, even if the presence of foreign fleets would help secure the adjacent Strait of Malacca. This denial, however, has been coupled by an openness towards external assistance in the form of equipment, training, funds and international upgrading. All the above is, anyway, strictly linked to Indonesian priorities.⁴⁵ Indonesia has made itself famous when, in 1996, it threatened to close the Sunda and Lombok Straits, and the Moluccan sea, to the international traffic. In addition, Indonesia also threatened to consistently reduce the traffic through the Strait of Malacca. Such a decision, if performed nowadays, could have disruptive geopolitical consequences for any of the major actors involved, directly or indirectly, in the Malacca strait.⁴⁶

Malaysia

The second biggest littoral country, both for population and geographical extension, is Malaysia. Unlike Indonesia, whose complementary straits could help mitigate the relevance of the Malacca's one, Malaysia has much more at stake on it. With no other maritime route able to substitute the Malacca strait, Malaysia has showed a certain degree of flexibility and goodwill to preserve the safety of this strategic gateway.⁴⁷ Moreover, Kuala Lumpur, only just 20km far from the strait, is one of the biggest financial center of the entire Southeast Asia, and heavily depends on the cargos and ports situated on the strait. In fact, in

⁴⁵ Umaña, F. (2012) Transnational Security Threats in the Straits of Malacca, *Threat Convergence, Fund for Peace (FFP)*, pp. 1-32.

⁴⁶ Zubir, M. (2005) The strategic value of the Strait of Malacca, pp. 1-19.

⁴⁷ Ismail, S.Z. and Sani M.A.M., (2008) The Straits of Malacca: Regional Powers Vis-A-Vis Littoral States in Strategic and Security Issues and Interests, pp. 83-105.

its desire to increase its relevance on the strait, Malaysia has been promoting the enhancement of two strait ports, namely Port Klang and Tanjung Pelepas, as international trans-shipment hubs for container traffic. Much more active than Indonesia, Malaysia has promoted and continues to promote logistic, as well as military, cooperation with Indonesia and Singapore, in order to preserve stability both against piracy and maritime terrorism. Clear sign of its willingness to perform well in its task have been both the institution of the *Malaysian Maritime Enforcement Agency (MMEA)*, and the proposal of the so-called "Eye in the Sky" (EiS), launched in 2005 by Malaysia, Indonesia and Singapore, which grants the respective aircrafts the possibility to fly up to three nautical miles within the territorial waters of the littoral states in order to curb the piracy phenomenon and fight against maritime terrorism. This initiative has also served as a first stimulator in order to enhance mutual trust and cooperation within the triumvirate.⁴⁸ If Malaysia has strongly affirmed the need, within the triumvirate, to work together to assure the safe passage within the Malacca strait, much harder had been its posture towards the possibility for external power to assume a relevant role in the strait. In fact, Malaysia's main goal is to ensure its complete control over the Strait of Malacca without any possible infringement of its sovereignty (as for Indonesia, recently acquired) by external powers. No extra regional forces, for the purpose of securing the straits, are deemed necessary. Kuala Lumpur, however, welcomes foreign aids and technical assistance for the purpose of improving its own patrolling capacity in the

⁴⁸ Umaña, F. (2012) Transnational Security Threats in the Straits of Malacca, Threat Convergence, *Fund for Peace (FFP)*, pp. 1-32.

strait.⁴⁹ Well aware of the global need to maintain safe the passage, and of the possible pressures by *users* countries, Malaysia has been the leader in the promotion of the trilateral cooperation, avoiding both the proposal of United States and Japan to exert a stronger influence in this gateway.

Singapore

The third littoral country left is the city-state of Singapore. Well-known internationally as a member of the Asian Tigers, Singapore is one of the most important international commercial hub, and the second largest container port in the world. Located in a geographically excellent position, exactly in the heart of the Malacca strait, it is a major trans-shipment hub in the world east-west main route. Singapore is, among the three littoral countries, the economically and technologically most advanced. Being almost entirely dependent on the international trade and commercial fluxes through the strait, the safety of the Malacca's gateway has always been among its main priority. Historically distrustful of the predominantly Muslim Indonesia and Malaysia, Singapore has always been more prone to further the cooperation with external partners, as for example USA or Japan, creating tensions within the triumvirate. Aware of the possible backlashes of its pro-Western posture, Singapore has tried to foster the trilateral cooperation to curb the plague of piracy and maritime terrorism.⁵⁰ As a country heavily dependent on the functioning of its ports, it has launched some individual, as well as

⁴⁹ Ismail, S.Z. and Sani M.A.M., (2008) The Straits of Malacca: Regional Powers Vis-A-Vis Littoral States in Strategic and Security Issues and Interests, pp. 83-105.

⁵⁰ Umaña, F. (2012) Transnational Security Threats in the Straits of Malacca, Threat Convergence, *Fund for Peace (FFP)*, pp. 1-32.

regional, initiatives: the Singapore Guard Coast passed through an updating program all along the 1990s, being directly involved in the protection from piracy attacks in its territorial waters; it launched the *Interagency Maritime and Port Security Working Group*, a joint group gathering Coast Guard, Navy and Port Authority, in order to keep an eye on the vessels' traffic and monitor the traffic's fluxes; it heavily urged for a deeper extra-regional inclusion in the patrolling and maintenance of the security within the strait, especially through the creation of the Information Fusion Center, a collective effort of regional information-sharing. In contrast with Indonesia and Malaysia, being already in possess of the most technologically advanced security forces in Southeast Asia, Singapore argues for more physical presence of maritime and naval presence of external actors; in its minds a greater external presence, and specifically that of the USA, would help not merely in commercial terms but also from a military point of view, granting a deeper stability in the region.⁵¹

⁵¹ Ismail, S.Z. and Sani M.A.M., (2008) *The Straits of Malacca: Regional Powers Vis-A-Vis Littoral States in Strategic and Security Issues and Interests*, pp. 83-105.

1.5 Asia's emerging powers in the Strait of Malacca

The Strait of Malacca, vital geopolitical chokepoint, has acquired great importance not only for the littoral and the main user states (namely China and United States), but also for a set of old and emerging powers whose energetic interests are growing steadily. Under the control and the silent direction of the United States, other powers such as Japan, India and South Korea, just to name the most interested in the developments through the strait, pursue several strategies in order to both grant their supply and balance the Chinese rise in the region.

Japan

As one of the strait's major user state, and world's third largest consumer of energy, Japan has historically showed a particular interests in the evolutions and developments of the straits of Malacca. Japan's main concerns regard both the commercial and the energetic questions, with a particular emphasis attributed to the latter. The safe and uninterrupted provision of oil through tankers moving principally from the Persian Gulf, has become one of the main concern for the Tokyo's government. Notwithstanding a previous aborted attempt, in 1971, to impose an internationally controlled regime over the strait, Japan has been able to recover its relations with all the three littoral countries, especially by supporting both regional and multilateral cooperation to grant the safety of traffic and combat piracy. Moreover, it has worked with Indonesia, Malaysia and Singapore in a constant effort of confidence-building, for example by fostering joint researches, equipment sharing and joint trainings. Japan has promoted a wider cooperation not only with the littoral states, but also with the ASEAN and with its closest ally in the

region, the United States. Japan's approach to the region, apart from the 1971 "gaffe", has mostly focused on a cooperation-building approach, in order to curb the piracy phenomenon and grant the stability of the Malacca gateway.⁵² This approach has been coupled by a strong emphasis on the sovereignty of the littoral states. Among the main initiatives proposed by Japan, the "*Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia*" (ReCAAP) has been the most successful, with the key pillar of the structure, the *Information Sharing Center*, located in Singapore.⁵³ Japan's interests in the straits has been dictated mainly by a national security approach; almost the 80% of Japan's oil imports, coming mainly from the oil terminals in the Arab Gulf, pass through the straits, giving this chokepoint a huge relevance in the Japanese geopolitical scenario. In addition, a consistent amount of the mineral resources from the Indian Ocean basin, Southeast Asia and North America, necessary for the Japanese economy to perform at high levels, often transit through the straits. In addition to the energetic imports, more than 60% of Japan's imported foodstuffs pass through the strait, making Japan one of the most important among the user states. Notwithstanding the strategic importance of the straits of Malacca for Japan's survival, Tokyo has always focused more on the civilian cooperation, refraining from any direct maritime intervention other than disaster relief. However, the consequences of a possible prolonged disruption in the strait would be disastrous for Japan, and could imperil the whole Japanese economic structure. Japan notoriously

⁵² Ismail, S.Z. and Sani M.A.M., (2008) *The Straits of Malacca: Regional Powers Vis-A-Vis Littoral States in Strategic and Security Issues and Interests*, pp. 83-105.

⁵³ Umaña, F. (2012) *Transnational Security Threats in the Straits of Malacca, Threat Convergence, Fund for Peace (FFP)*, pp. 1-32.

lacks its own energetic reserves, especially for what concerns oil, and the largest part of the imported one pass through Malacca.⁵⁴

India

Another major power deeply interested in the Malacca's developments is India. As an emerging power, India's thirst of raw materials and energy needs are growing faster and stronger. India is about to become the world's fourth-largest energy consumer, after the United States, China, and Japan, and is dependent on oil for roughly 33% of its energy needs; of this 33%, almost 65% is imported from abroad.⁵⁵ In addition, Indian commercial interests are very strong in the strait. Over the 50% of its trade passes through this gateway, making the security issue, and thus the anti-piracy policy, one of the top priorities for the New Delhi's government. Almost all the Sea Lane of Communications (SLOCs) moving from Middle East and Africa through the straits of Malacca pass through the Indian area of maritime interests and jurisdiction, thus implying that any instability in the strait is a potential threat of instability for India itself.⁵⁶ In fact, India is the non-littoral power with the longest involvement in the region, having conducted joint anti-piracy operations, both with the Indonesian, Malaysian and Singaporean navies respectively, for several years. Moreover, India has also collaborated with non-littoral country with conspicuous stake in the stability of the region, as for example Thailand. In its wider "Look East" strategy, India is increasing

⁵⁴ Ismail, S.Z. and Sani M.A.M., (2008) The Straits of Malacca: Regional Powers Vis-A-Vis Littoral States in Strategic and Security Issues and Interests, p.. 83-105.

⁵⁵ Sheikh S.R., Evolving Strategic Competition in the Indian Ocean, *Oriental Review*, April 19, 2013.

⁵⁶ Ismail, S.Z. and Sani M.A.M., (2008) The Straits of Malacca: Regional Powers Vis-A-Vis Littoral States in Strategic and Security Issues and Interests, pp. 83-105.

its maritime presence both in the waters near Malacca and beyond, following an important strategic maritime goal in a period of growing interdependence between world's geo-economic regions. Indian navy's power-policy, however, is not limited only to the "East projection"; in fact, India describes the waters extending from the straits of Hormuz to the straits of Malacca as part of its "rightful domain", requiring to play a vital role in the SLOCs' security all along the Indian Ocean. India, as well as all the other main characters in the straits, sees as question of national security the maintenance of the strait secure and free from crime, in order to prevent massive increases in freight rates and shipments.⁵⁷ Moreover, the growing energetic interests, especially for what concerns oil and gas, in countries such as Myanmar, Vietnam and Indonesia, increases India's needs to grant the safety of the SLOCs, especially the Malacca's one.

The new Indian posture on Malacca, however, has been dictated not only from economic and commercial interests; India definitely understood the possible multilateral developments of the XXI century's world geopolitics, and is trying to exploit the situation in order to advance to the position of global power. The critical objectives of India, as argued before, are not only related to economic or security issues, but has to be understood in a wider scenario of "strategic autonomy". From this desire derives its decision to improve its naval capabilities and its multilateral cooperation with regional and non-regional power, as for example the United States, to whom it is allied. However, for India, the presence of extra regional powers creates tension in the region, which in

⁵⁷ Zubir, M. (2005) The strategic value of the Strait of Malacca, pp. 1-19.

the end is detrimental to its sensitive interests; India, in fact, wants to replace those powers, and make itself dominant in the region.⁵⁸ India, as well as China, understood that whoever would be able, in the XXI century, to control the maritime traffic through the Malacca strait, would also be in power to control, regulate and contain the pace of development of any Asian emerging power.⁵⁹

⁵⁸ Sheikh S.R., Evolving Strategic Competition in the Indian Ocean, *Oriental Review*, April 19, 2013.

⁵⁹ Ismail, S.Z. and Sani M.A.M., (2008) The Straits of Malacca: Regional Powers Vis-A-Vis Littoral States in Strategic and Security Issues and Interests, pp. 83-105.

CHAPTER 2: THE POLITICIZATION OF ENERGY SECURITY: CHINA'S POSITION IN THE MAIN ENERGETIC CHOKEPOINTS

2.1 Energy Security: Contextualizing the Concept in a Chinese Perspective

In order to define and understand what is the current Chinese position for what concerns *energy security*, and in order to have a broader framework of analysis able to show the geo-energetic power game *in fieri*, it seems noteworthy to start from the historical evolution of the concept for modern China, i.e. the country constituted and developed under Mao's leadership, and then come to define what features the concept of *energy security* has come to assume in the XXI century.

2.1.1 *China's evolution from energy self-sufficiency to energy security*

China's energy concerns, even if recent as for what concern the current magnitudes, have had an historical evolution whose first steps can be traced back already in 1949. Immediately after the victory in the civil war, in 1949, the United States and its allies, once understood that China was about to lean to the Communist block, decided to stop the provision of aids and loans that had characterized the civil war period. Thus, China was obliged to turn to URSS, its natural ally, for developmental, energetic and technological aid. In fact, Moscow not only provided oil, in order to grant the functioning of the industrial activities, but also and especially technological know-how and qualified personnel able to both form a Chinese class of experts and teach how to implement industrial sites and exploit their own resources. The first Chinese domestic oil field, the *Fushun* oil field, in the northeast *Liaoning*

province, however, traces back to the inter-war period, discovered, developed and controlled by the Japanese occupiers. After the IIWW, the nationalist government developed the first indigenously-managed oil project, the *Yumen* oil field, in the *Gansu* province. Soviet's teachings on the managing and exploitation of natural resources led to a peak in *Yumen's* domestic oil production, from 0.2 Mt in 1953 to 1.7 Mt in 1960. The developmental scheme used in *Yumen* was thus applied in the Daqing oil field, in the deep northeast, whose domestic oil production increased sharply, from 0.64 Mt in 1949 to 6 Mt in 1960. Thank to the development of the Daqing oil field, in 1963, China reached the condition of *energy self-sufficiency*. This concept, if in a certain way can be identified as the "ancestor" of the modern concept of *energy security*, it could not be fully assimilated to the latter. In fact, *energy security* implies that energy supply and demand, and their consequent management, serves the purpose of developing its economy and society. The exhausting relation with the URSS, the end of the Soviet's aid program, and the growing enmity with the United States along the 1960s, obliged China's leadership to build-up the so-called "Third Front", postponing the utilization of national resources for developmental goals. The Cultural Revolution's consequences almost exhausted China's self-sufficiency, and brought China on the verge of the collapse. However, the geopolitical evolutions in the global power-game brought China to the 1970s' "rapprochement" with the historical enemy, the United States. This implied some first tentative steps for the opening towards the international community and international market, later implemented, after Deng took the power, from 1978 onwards. Net oil exporter, now part of the international market system, China used its excesses in

domestic crude oil's production to satisfy the growing quest for energy from the region, especially from Japan, Thailand, Philippines and other Asian and Southeast Asian countries. China, in exchange, asked for developmental aids for industrial plants and technological transfers. However, slower growth in domestic production, coupled with growing energy consumption (especially of oil and gas) and a soaring domestic demand, implied a slow decline in oil exports already in the 1980s. Two are the dates that definitely marked the end of the Chinese energy self-sufficiency: the 1993, when China became net importer of oil-made products and the 1996, when it became net crude oil's importer. However, the appearance of an "energy security issue" was not an immediate consequence of the shift from exporter to importer of crude oil. Only with the turn of the century, and with a peak in the volume of China's oil imports (from 36.2 Mt to 70.2 Mt only in 2000), the problem acquired a geopolitical and geo-economic relevance.⁶⁰ Among the several causes that facilitated this shift, two deserve to be mentioned here: the first one was that domestic crude production was not anymore sufficient to satisfy national consumption; Chinese industries were slowly moving towards what would have been their role in the XXI century, i.e. the "world's factory", and thus towards an economic export-oriented model. The second one, instead, regarded the technological improvements Chinese oil refinery's companies were experiencing; it resulted in the enlargement of the plateau of the types of oil that could be refined, thus implying a peak in the imports of different types of crude oil. The XXI century's developments saw China steadily increasing its energy needs

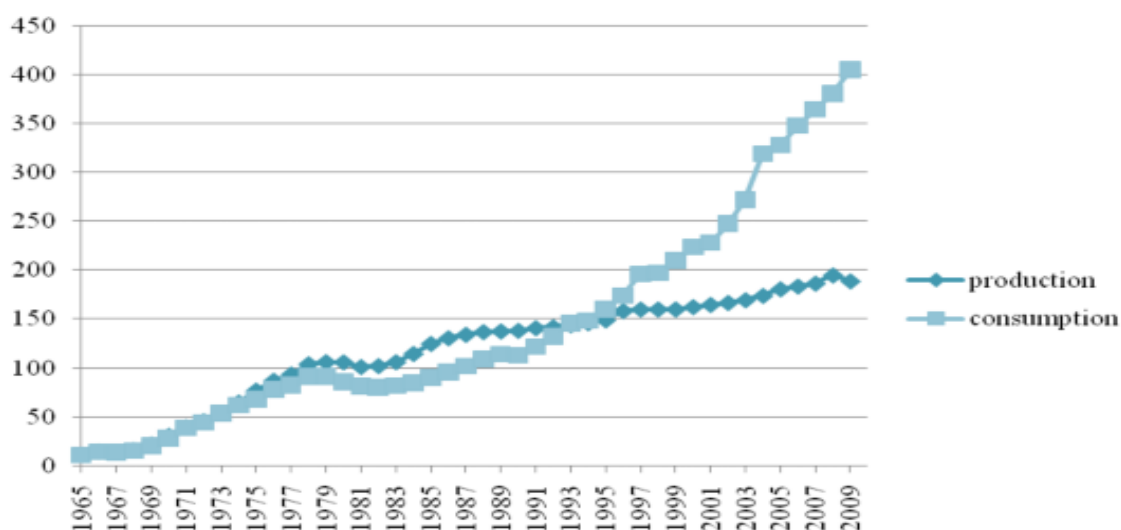
⁶⁰ Daojiong Z. (2010) Oiling The Wheels of Foreign Policy? Energy Security and China's International Relations, *Asia Security Initiative Policy Series*, Working Paper No.1, pag. 1-18.

and, as a consequence, its energy imports. The concept of *energy self-sufficiency*, if ever existed at all, has been widely replaced by that of *energy security*, and its maintenance has evolved into a national priority.

Table 1. The Development History of China's Oil Industry

Phase 1: 1978 - 1992	Self-reliance and self-sufficiency are the key objectives of energy policy. The National Development and Reform Commission is founded and placed in charge of the energy sector. State-owned enterprises can access limited foreign markets.
Phase 2: 1993 - 1999	Production of oil can no longer meet domestic demand. Government starts to conduct reform to increase competitiveness of the SOEs. Enterprises start to seek oil in foreign markets
Phase 3: 2000 - 2008	"Go global" starts to become the main slogan and government encourages firms to go abroad. China's accession to WTO further increases domestic business competition. SOEs and private firms expand their business worldwide.
Phase 4: 2008 - present	"Go abroad and buy," is the response to the financial turmoil that began in 2008, and hastened China's investment expansion at the global level. China's investment in resource and energy sectors have increased dramatically.

Figure 1a. China's Oil Production and Consumption, 1965-2009 (million tonnes)



Source: BP Statistical Review of World Energy 2010

In the XXI century, concept such that of *energy security* has come to dominate the world's geopolitical mainstream. Such a kind of concept does not have a standard definition, and it varies a lot according to the specific conditions of each country, i.e. the availability of resources, the degree of dependence on energy imports, the security of the main SLOCs, and the level of potential energy self-sufficiency. In addition, the peculiar conditions of each energy supplier, i.e. the degree of control of the central government over the whole country, the domestic political stability (or instability), the possibility of revolutions, the degree of security of the producing and refining sites present on its soil, technical difficulties and so forth, play a central role in the final development of the concept for each country. Often, energy security finds itself directly linked, or even twined, with that of geopolitical security. This interconnection implies a certain degree of difficulty in giving a satisfactory definition of the concept, especially in consideration of the fact that each country chooses differently its geopolitical priorities. For several energy-importing countries, for example the United States and Japan, to cite the first and third world's biggest consumer of energy, the concept of energy security is declined through two main characteristic: the *reliability* and the *constancy* of the supply of energy. This definition moves from the assumption that international commodities markets, especially those related to the raw materials, are efficient and trustworthy. To these two characteristics, the Chinese concept of energy security adds a third one, as important and fundamental as the first two: the *cheapness* of the supply. Distrusting the international markets, defined as influenced by non-supply-demand factors, i.e. subject to major international political, military and economic events, as well as

dominated by Western multinationals, China pursues its own strategy to secure energy supplying.⁶¹ If, on the one hand, China actively participates in the international commodity markets, on the other hand it works on its own to avoid the consequences (or better the damages) that supplies or prices disruptions could imply. However, conscious of the level of interconnectedness that the various energy regions have developed, and perfectly aware of the impossibility of patrolling alone all the vessels commercially related to its mainland, China agreed on the drafting and approval of the so-called "*Petersburg Declaration*" on global energy security. At the G8 summit of 2006, in St. Petersburg, all the G8 members decided that, in light of the growing importance energy supplying was assuming for each of them, a more cooperative approach would have certainly eased the international climate, and would have helped granting prices and supplies at a normal level. This declaration laid out principles, aims and proposals for action, and has to be thought and evaluated as a global, cooperative energy policy's framework. It stresses the need for more transparency, efficiency and competition within the energy markets, an equitable, efficient and transparent legal and regulatory framework, and an enhanced dialogue among the most relevant stakeholders. More practically, the declaration states the need to secure the critical energy infrastructures, for example from acts of piracy or international terrorism, in order to both enhance the energy security and reduce the level of global energy poverty. Moreover, it argues for the importance of the environmental aspects, highlighting the need for energy efficiency and energy saving, the substitution of old, obsolete, polluting plants with

⁶¹ Lee, J. (2012) China's Geostrategic Search for Oil, Center for Strategic and International Studies, *The Washington Quarterly* • 35:3, pp. 75-92.

renewable, low-carbon emissions' ones, and the high priority that must be assigned to technological energy innovation.⁶²

2.1.2 China's energy policy-makers

The Chinese system of policy-making varies a lot from that to whom we are used to, essentially the Western Liberal-Democratic systems. In fact, the Chinese one-party structure, with the Chinese Communist Party (CCP) pervading almost every space of the society, concentrates in few hands the decision-making powers, making it faster and more responsive to sudden changes. From this premise derives the fact that there is a strong, intimate connection between the Chinese Communist Party's structure and members and the high rank managers of the State-Owned Enterprises (SOEs), as for example the Chinese National Oil Companies (NOCs). Rather often, in fact, SOEs' high ranks managers are chosen within the framework of the CCP's ranks. Thus, former public officials come to detain relevant decision-making position in semi-private companies. One of the most remarkable consequence of this strong interconnection within public and private sector is the extensive political and economic assistance granted to National Oil Companies (NOCs) in their search to acquire offshore oil assets (for example political protection granted to national companies investing in pariah states) or to conclude deals to lock up guaranteed supplies from offshore oil fields. Notwithstanding the fact that, prior to 1989, the Chinese political economy was mainly private-sector driven, there had been a sort of reverse gear started in the 1990s, with the state presence

⁶² Qinhua X. (2007) Global Energy Security, China's Energy Diplomacy and its Implications for Global Energy Security, *FES Beijing*, Briefing Paper 13, pp.1-8.

strongly re-appearing, especially in those sector defined as of "national priority" (banking and finance, insurance, construction, infrastructure, chemicals, media, information technology, telecommunications and, obviously, energy). What can be inferred from this reverse path is that China's authoritarian and state-dominated political economy tends to coalesce political with commercial interests, thus resulting in a necessary linkage among energy security, regime security and national security. The main national bodies in charge of the energy policy-making are the National Development and Reform Commission (NRDC) and, above it, the National Energy Administration (NEA) and the National Energy Commission (NEC).

The National Development and Reform Commission (NDRC) is a macroeconomic management agency under the control of the Chinese State Council. It is in charge of studying and formulating policies addressed to the improvement of the economic and social conditions, of maintaining a balance of economic aggregates and of leading the economic structure's restructuring. The predecessor of the NDRC had been the State Planning Commission (SPC), instituted in 1952 and remained in charge until the 1998, replaced by the State Development Planning Commission (SDPC). After the merging of several Offices, Agencies and Commissions, in 2003 the State Planning Commission was restructured into the National Development and Reform Commission. The latter deepened the reforms necessary for the transition from a planned to a "socialist market economy", playing a fundamental role in shaping the access to the market for the participation of national companies.

The principal functions of the NDRC include:

- To formulate and implement strategies for national economic and social development, to draw up long-term plans and annual plans, and to develop industrial and price policies;
- To monitor and, if necessary, adjust the performance of the national economy, to supervise the balance of economic aggregates, and to optimize major economic structures;
- To examine and approve major construction projects;
- To lead and advance economic system restructuring;
- To implement strategic readjustment, to upgrade industrial structure, to coordinate the development of agriculture and rural economies, and to guide the development of the industrial sector;
- To formulate plans for the development of the energy sector and to manage national oil reserve;
- To promote a sustainable development strategy, coordinated development of regional economies, and the implementation of the "Western Region Development Program";
- To engage in extensive cooperation with government's agencies and people.

In 2008, in its willingness to rationalize the control over the energy sector, the National Energy Administration was established. From a broader and more general supervision performed by the NDRC, and within its own structure, the National Energy Administration was specifically in charge of watch over the energy sector.

The principal functions of the National Energy Agency are:

- To formulate and implement energy developmental plans and industrial policies;
- To promote institutional reforms in the energy sector, administering energy sectors including coal, oil, natural gas (including Liquefied Natural Gas), power (including nuclear power), new and renewable energy and so forth;
- To take charge of the energy conservation and comprehensive utilization of resources in the energy sector;
- To guide scientific and technological advancement, organizing and fostering domestic R&D of important equipment, and guiding the assimilation and innovation of imported technology;
- To organize and supervise key energy-related demonstration projects, promoting the deployment of new products, new technologies and new equipment;
- To approve, review, or examine fixed asset investment projects in the energy sector within national plans, and the scale of annual plans in accordance with the authority stipulated by the State Council;
- To conduct energy forecasting and precautions, to participate in energy operations coordination, and to develop emergency responses in case of crisis;
- To formulate and implement national oil reserve plans and policies;
- To take the lead in launching international energy cooperation and promoting common energy frameworks and regulations;

- To participate in the formulation of policies related to energy such as resources, finance and taxation, environmental protection, and climate change;
- To make recommendations on energy price adjustments and imports and exports' aggregate;

However, due to the difficulties in coordinating efficiently the administrative aspects, the NEA has been sided (some say substituted) in favor of the National Economic Commission (NEC), founded in 2010. The latter appears to be similar to a “super” ministry (it seems noteworthy to highlight that a Ministry of Energy had been already founded, in 1988, but it lasted just five years before being disbanded), or a smaller version of the State Council. Under the direction of the Premier and Vice-Premier, the NEC is made up of 21 minister-level members. The peculiarity of the NEC is that its members come not only from the ministries under the State Council, but also from the Chinese Communist Party, the National Security Authority and the People’s Liberation Army (PLA), which is quite unusual and broader than expected. The composition and multilayered origin of its members, taken by the most powerful and diverse Chinese structures, seem to show how the Chinese leadership is determined to consider as a major national priority the energy security issue. Since the energy industry relates to a variety of sectors, and its issues range from electricity, coal, oil and gas, to pricing reform, market entry, taxation, imports/exports, and national security, the establishment of a high level organization like the NEC should help coordinate goals among different authorities.⁶³

⁶³ Jian, Z. (2011) China's energy security: prospects, challenges and opportunities, The

The intimate connection between the CCP and the SOEs management comes to light when we analyze the flow of capital within the Chinese system. Even if the SOEs currently account for the 30-50% of the national output, they receive over the 75% of the loans granted by state-controlled banks, with an astonishing 95% of the money lent in the period 2008-2009. In 2012, the specific commission in charge of supervising the overall condition of the SOEs, the *State-owned Assets Supervision Administration Commission (SASAC)*, indicated that SOEs assets amounted to over the 66% of total national assets, foreseeing an even higher increase. In 2009, two SOEs, i.e. *China National Petroleum* and *China Mobile*, made profits higher than the top 500 private firms in China combined. Moreover, the revenues of the 20 centrally-managed SOEs amounted to over the 50% of China's GDP in the same year.⁶⁴ The same state-dominated scheme of managing can be noticed in the oil sector. In 1993, with the end of the era of the oil self-sufficiency, China reorganized oil and gas assets and entities into two main SOEs: *China National Petroleum Corporation (CNPC)* and *China Petroleum and Chemicals Corporation (Sinopec)*. The former, together with its listed entity *PetroChina*, accounts for over the 66% of China's oil output. The latter, instead, is leader in national downstream activities such as refining and distributing. To these two, working mainly on onshore exploration and exploitation, it has to be added the *China National Offshore Oil Corporations (CNOOC)*, quasi-monopolistic player in offshore oil exploration and production.

The 11th Five-Year plan (2006-2010) already focused its attention on energy security and energy conservation, stating three main objectives

Brooking Institution center for Northeast Asia policy studies, pp. 1-32.

⁶⁴ Lee, J. (2012) China's Corporate Leninism, *The American Interest* 7, N° 5, pp. 36-45.

for the period: the first one regarded the achievement of economic efficiency through the shift from a planned to a market-oriented economy in the energy sector; this would have implied an improve in energy efficiency to be coupled with a reduction of energy intensity. The second regarded the reduction of poverty, focused on the social impacts of energy security. The third one regarded the environmental preservation, thus implying a reduction of low-carbon emissions.⁶⁵

The 12th Five-year plan (2011-2015), while updating and re-defining the quantitative targets already present in the 11th Five-year plan, explicitly argues for the need for "national champions", i.e. the State-Owned Enterprises (SOEs), to take the lead in strategic emerging industries. Moreover, in the plan it is made clear that the government will fuel state capital into industries, considered as fundamental to national security, through discretionary and rational capital injections. Four are the strategies reported as of national priority in the plan:

1. The need to diversify energy resources by increasing the domestic production of natural gas and nuclear power, and developing clean energy technology to generate gasoline and diesel from coal; in addition, a strong focus is assigned to the renewable energies such as solar and wind powers.
2. The enhancement of the existing oil and natural gas supply sources, while continue exploring, at a global level, in search for new producing locations; in addition, in order to reduce the risks presents through the SLOCs moving from the Middle East and

⁶⁵ Lee, J. (2012) China's Geostrategic Search for Oil, Center for Strategic and International Studies, *The Washington Quarterly* • 35:3, pp. 75-92.

Africa, to diversify its import routes by increasing imports from Central Asia and Russia.

3. Increasing energy exploration and production of new oil fields domestically while encouraging international cooperation in offshore oil exploration and production.
4. Increase and improve number and the capacities of the Strategic Petroleum Reserve (SPR) sites and raising mandatory stockpile requirements for major oil firms.⁶⁶

In conclusion, since private-sector companies are prevented from acquiring a relevant role in the energy sector, commercial decisions tend to be disproportionately dependent from political interests and considerations. "China's state-dominated domestic and international approach to energy security hedges against strictly market outcomes by prioritizing a CCP-first mindset in the domestic market and a China-first mindset in international oil markets" (Lee 2012).⁶⁷

2.1.3 "China's First" and "China's Going-out" strategies

Beijing, in its willingness to secure the free passage of energy sources along the main SLOCs, from the producers, mainly located in Middle East and Africa, to its territory and ports, pursues an economic nationalist agenda dubbed "*China-First*" strategy.

Beijing's "*China-first*" geostrategic approach has two main connotations, one domestic and one international. The *domestic* one regards the need to

⁶⁶ Jian, Z. (2011) China's energy security: prospects, challenges and opportunities, The Brookings Institution center for Northeast Asia policy studies, pp. 1-32.

⁶⁷ Lee, J. (2012) China's Geostrategic Search for Oil, Center for Strategic and International Studies, *The Washington Quarterly* • 35:3, pp. 75-92.

maintain stable, or even increase, the economic performance, limiting the risks of economic stagnation and avoiding the development of unbridled inflation. Moreover, in the last decade, the problems related to pollution and greenhouse-gas emissions have come to dominate the national scene. Ensuring the continuation of the economic growth has been the cornerstone of the Chinese domestic and foreign policy since Deng took the leadership and started the process of China's "opening-up" towards the market. The accession into the World Trade Organization (WTO), on November 2001, marked the conclusion of a gradual path China walked towards the full inclusion into the global economy.⁶⁸ This accession can be considered as the apex of the market-oriented reforms started under Deng Xiaoping in 1978 that, especially after the 1992 Deng's "last trip to the South", turned fully China into a "socialist market economy". Having almost completely lost the legitimation given by the Communist doctrine, the latter has been replaced by the constant provision of economic well-being, and by the steady improvement of both economic and social conditions of the Chinese people. Furthermore, the energy security issue results even more important in the case of an emerging country, growing at very high rates, like China. In its process of modernization and urbanization, China is trying to substitute old and polluting technologies, still dependent on coal, with new ones (even if still polluting) based on oil, gas. Moreover, current forecasts talk about a doubling of the energy capacity for 2030, with more than the half of this increase provided by renewable energy's

⁶⁸ Decision on the Accession of the People's Republic of China, World Trade Organizations, 2001/11/10.

technologies.⁶⁹ Thus, since the turn of century, there has been a new and urgent focus on the need to ensure reliable, continued and cheap access to energy supplies. In this scenario, energy turns to be an arena where old and new security conceptions and practices overlap and coincide. The domestic component of the "China's First" strategy strongly impacts on the external perceptions generated by the Chinese struggle for energy security. Among the most critical perceptions of the problem there is the possibility that this unbridled search for energy sources, almost an "obsession" for the Chinese policy-makers, could result in economic insecurity and disadvantages for others, given the fact that a huge, and constantly growing, demand such as the Chinese one could finally alter both prices and distribution on a global scale. As easily understandable from what stated above, the fact of being totally dependent on the free acting of the markets, and thus being possibly exposed to sudden hikes in prices or cuts in supplies (e.g. international wars, political instability, blockades, embargoes, and so forth) could eventually result in a curb of the economic growth, in mass protests and, as an extreme scenario, in the fall of the CCP.⁷⁰ The *international* one, instead, regards China's ambitions for the XXI century, and the international environment within China finds itself obliged to act nowadays. Notwithstanding the Chinese apparent lack of interest for the proposal, made by Condoleezza Rice in 2005, of forging a G2 structure, China has shown several signs of its willingness to acquire a global status. China is continuously increasing the proportion of GDP spent on military expenditures for the People's

⁶⁹ Ying J., China's power sector heads towards a cleaner future, *Bloomberg New Energy Finance*, August 27, 2013, Beijing.

⁷⁰ Kennedy, A.B. (2010) China's New Energy-Security Debate, *Survival*, vol. 52 no. 3, pp. 137–158.

Liberation Army Navy (PLAN), in order to increase the number of vessels at its disposal and upgrade the qualities and capabilities of those already available. Within the framework of PLAN itself there is a lively debate on what should be the main purpose of this constant increase; some analysts affirm that the acquisition of medium-sized conventionally powered carriers could help China in its stance towards East and South China Seas; others, instead, raise even higher the expectations, pointing to the need for naval forces to range much more widely, in order to confirm on the sea the global role China already has economically. The acquisition and subsequent restoration of the aircraft carrier *Varjag* in 1998, a Soviet remnant left uncompleted to Ukraine after the URSS's fall, has to be intended as a move into that direction. Renamed *Liaoning* (16), it officially entered into force as the first Chinese aircraft carrier on September 25, 2012. Moreover, given the forecasts arguing for increase in imports need from now to 2035, PLAN's analysts called for greater investments in capabilities for "Far Sea Defense" (*yuanhai fangwei*). China keeps open several cases over disputed islands and archipelagos with all the actors in the South China Sea, from Vietnam to Malaysia, from Philippines to Japan, from North Korea to South Korea, in consideration of the scientific forecasts defining the region as rich in raw materials and fisheries. The most vividly contended archipelagos in the South and East China Seas are: the *Spratly islands*, lying off the coasts of Philippines, Malaysia and Vietnam, and to whom China results heavily interested; the *Paracel islands* (*Xisha islands* in Chinese), lying off the coasts of both China and Vietnam, currently under the administration of the Chinese Hainan province; and the *Senkaku islands* (*Diaoyu islands* in Chinese), currently under the Japanese administration but disputed by

China, since the 1968's findings that oil and gas reserves could be present in the near waters. China, despite the regulations and recommendations of the international community system and structures, continues, more or less tacitly, to maintain political, economic and commercial relations, and to invest massive amount of money, with countries such as Iran, Syria, Venezuela, Sudan, Algeria, Angola, Somalia, etc., i.e. those states often defined as "basket" or "pariah" states, trying to forge an independent coalition of faithful countries.⁷¹

This "China First" geostrategic approach has been coupled by a new commercial and geo-energetic posture, partially modifying the strategy towards the energy security issue. In fact, in 2003, President Hu Jintao and Premier Wen Jiabao launched the "China's Going Out" (or "China's Going Global") strategy. The overall strategy regarded the expansion of the presence of Chinese multinationals in the international commodity markets. Substantial funding have been granted to those companies and enterprises able to compete and gain market shares in the most various sectors. This strategy has been promoted and implemented not only to increase the Chinese companies' presence worldwide, launching the Chinese "brand" on a global scale, but also to start rationalizing the huge dollars' reserves, especially of US' treasure bonds, that China had gathered during the two last decades. In fact, as for what concerns the US' treasure bonds, China nowadays detains more than 25% of the American public debt, amounting to 1.13 trillion dollars. Obviously, the energy issue has come to acquire enormous importance in the strategy. The Chinese National Offshore Oil Company (CNOOC) had been the

⁷¹ Daojiong Z. (2010) Oiling The Wheels of Foreign Policy? Energy Security and China's International Relations, *Asia Security Initiative Policy Series*, Working Paper No.1, pp. 1-18.

first in charge of acquiring overseas assets and companies in order to secure offshore oil supplies. However, the other two Chinese oil giants, the Chinese National Petroleum Company (CNPC) and the Sinopec, through their international subsidiaries, joined soon after. Two of the CNPC's international subsidiaries, i.e. THE CNCP International (CNCPI) and the China National Oil and Gas Exploration Development Corporation (CNODC), now accounts for over two-third of CNCP's profits.⁷² After some internal discussion, already in the mid-1990s, Chinese NOC's paved the way for the internationalization of their energy's portfolio. In their paths towards international Mergers&Acquisitions (M&A), four periods can be identified:

1. The first period, from 1992 to 1995 roughly, had been characterized by CPCP's small investments in existing oil field in Canada, Thailand and Peru, and in a limited offshore exploration in Papua New Guinea. Complementary to this first expansion had been the buying of shares in producing oil field in Indonesia. The main characteristic of these first investments was the low risk attached to it; they were all directed to fields with proven oil reserves.
2. The second period, from 1996 to 1997 roughly, was characterized by a first surge in the amount of the investments. In fact, CNCP started to invest in fields with higher productions' forecasts mainly located in Kazakhstan, Venezuela and Sudan. As for 2012, these three countries accounts for over the half of foreign oil directly controlled by Chinese NOCs.

⁷² Lee, J. (2012) China's Corporate Leninism, *The American Interest* 7, N° 5, pp. 36-45.

3. The third period, from 1998 to 2006 roughly, was characterized by two moments: the first one, from 1998 to 2001, in which Chinese NOCs experienced a period of restructuring; and the second one, until 2006, characterized by a peak in infrastructural and equity oil investments. Since 2003, the year in which President Hu Jintao and Premier Wen Jiabao were "elected", the amounts of investments were of more than 20 billion dollars spread in over 30 countries. The estimates are even more paradoxical if we consider that over the 75% of the overall investments, in the 1998-2006 period, was contracted in the last two years, 2005 and 2006. These investments saw an expansion through the African continent, i.e. in Algeria, Sudan, Gabon and Angola, the Middle East, i.e. Egypt and Iran, and the American continent, i.e. Argentina, Brazil and Canada.⁷³ More confident in their capacities to work globally, Chinese NOCs adopted a more aggressive acquisition strategy.
4. The fourth period, from 2007 onwards, can be considered as the period of the maturity for Chinese NOCs. Only in 2009 and 2010, the Chinese NOCs spent more than 45 billion dollars in M&A and license deals, with main target a further expansion in Middle East, Africa, Latin America and Canada. It is estimated that, at the end of 2010, Chinese NOCs accounted for almost the 20% of global deal value, against few percentage points at the beginning of the century.⁷⁴ As for 2010, NOC's operated in over 30 countries, and had controlling stakes in actual offshore oilfields in at least 20.

⁷³ Lee, J. (2012) China's Geostrategic Search for Oil, Center for Strategic and International Studies, *The Washington Quarterly* • 35:3, pp. 75-92.

⁷⁴ Dannreuther, R. (2012) China's foreign investments in natural resources, *POLINARES*, working paper n. 62, pp. 1-16.

2.2 Hormuz and Bab el-Mandeb Straits: Struggling to secure energy supplying

The politicization of the Chinese energy security issue not only has repercussions over its position on the Strait of Malacca, but also as for what concerns other main maritime energetic chokepoints. The control of these latter, and the possible disruptions to which they could be forced, further increase, or better inflate, the risks of global hikes in prices or cuts in supplies. Thus, the possibility to exert an even minimum level of control and influence over them has to be considered as strategically fundamental. For their intrinsic nature, all the geographical maritime chokepoints are invested of a certain geopolitical relevance. The energy fluxes moving along the SLOCs permit the continuous global supplying of energy sources, fueling world's growth. Nowadays, the worlds' most important maritime chokepoints, at least for what concerns the energy security issue, are the *Strait of Hormuz*, in the Middle East, the *Strait of Malacca*, in Southeast Asia, the *Suez Canal*, in Egypt, the *Bab el-Mandeb Strait* and the *Gulf of Aden*, in Southeast Africa, the *Turkish Straits*, i.e. the Dardanelles and the Bosphorus, in Turkey, and the *Panama Canal*, in Panama. However, being the focus of this dissertation the Chinese energy security issue, and especially the concerns about oil imports, here will be analyzed only the Strait of Hormuz, in the Middle East, and the Bab el-Mandeb Strait, in Southeast Africa, i.e. the most relevant maritime chokepoints for the Chinese energy supplying.

The Strait of Hormuz and The Middle Eastern Suppliers

The Strait of Hormuz is a 3km wide maritime gateway between the Gulf of Oman and the Arabian Gulf. The Strait's littoral countries are Iran, on

the north coast, and the United Arab Emirates (UAE) and Musandam (an exclave of Oman) on the south coast. However, even if not directly present over the Strait, other countries such as Saudi Arabia, Iraq, Kuwait, Bahrain and Qatar, depend on this gateway for their energy exports, and thus are particularly interested in the maintenance of the Strait open. The Strait has a vital geopolitical importance in consideration of the fact that about the 20% of the world oil demand (an amount comprised from 15 to 17 million bpd) transits through the Strait. Moreover, the forecasts present in the 2012's World Energy Outlook, prepared by the International Energy Agency, consider the amount in constant growth, especially in the period comprised from now to 2035.⁷⁵ The overall situation of the Strait is particularly tense and agitated. In addition to the old conflict between Sunni Muslims (mainly located in Oman and in the United Arab Emirates, without taking into consideration the near Saudi Arabia) and Shiite Muslims (the highest percentage of Iran's population), the wound has been widened since the post-9/11 "War on Terror" has been declared, and the United States found precious allies in the Gulf's States. Iran, more than once since the 1979's revolution and the establishment of the Islamic Republic, threatened to close the Strait. The most serious dispute over the Strait was the so-called "Tanker War" from 1983 to 1988 (during the Iraqi-Iranian conflict of 1979-1988), when Iran attacked more than 540 oil tankers, resulting in a 25% reduction in tankers' traffic through the Strait.⁷⁶ Iran, to exacerbate the tensions both with Gulf Arab States and the United States, continues to perform annual military maneuvers and,

⁷⁵ IEA (International Energy Agency), World Energy Outlook, 2012.

⁷⁶ Komiss, W. and Huntzinger, L. (2011) The Economic Implications of Disruptions to Maritime Oil Chockpoints, pp. 1-88.

in particularly tense moments, threatens to close off the flow of oil through Hormuz. Even if Iran would probably not be able to perform a long-term blockade of Hormuz, the short-term consequences for world's functioning of a possible closure (or even the threatening of the action) could be disruptive. Thus, China faces a double-threat to its energy imports: the first one comes from a possible Iranian reaction to the strengthening of international sanctions, currently also applied to the banking system and oil exporting's industries, that could result in a Iranian blockade; the second one comes from the possibility of an American blockade, after the failure of the diplomatic talks with Iran. China's interests at stake in the Strait are very high. Current data talk about a huge and growing energy dependence from the Middle East. In fact, China imports from the region more than the 50% of its oil needs, with forecasts talking about a 65% of oil imports to 2035.⁷⁷ In a global perspective, the region assumes for China relevance almost comparable to the Strait of Malacca.

The main Chinese energy suppliers in the region are listed below:

- Saudi Arabia accounts nowadays for more than 20% of China's oil imports. In a state visit in 1999, the then-President Jiang Zemin announced a "strategic partnership" between the two countries. The growing pace of this energy relation, probably the most significant at a global level, brought China to overcome the United States as Saudi Arabia's biggest oil customer. According to 2010 data, China imported more than 1,000,000 million bpd, an amount already doubled since 2005, and in constant increase. Moreover, in

⁷⁷ IEA (International Energy Agency), World Energy Outlook, 2012.

its willingness to diversify its investments' portfolio, China continues investing billion of dollars in Saudi Arabia's technological and infrastructural enhancement. Major Saudi supply hubs are the *Al Juaymah* Terminal, the *Jubail (King Fahd) Ports*, the *Ras Al Juaymah* Terminal, the *Ras Tanura* Terminal and the *Yanbu* terminal.

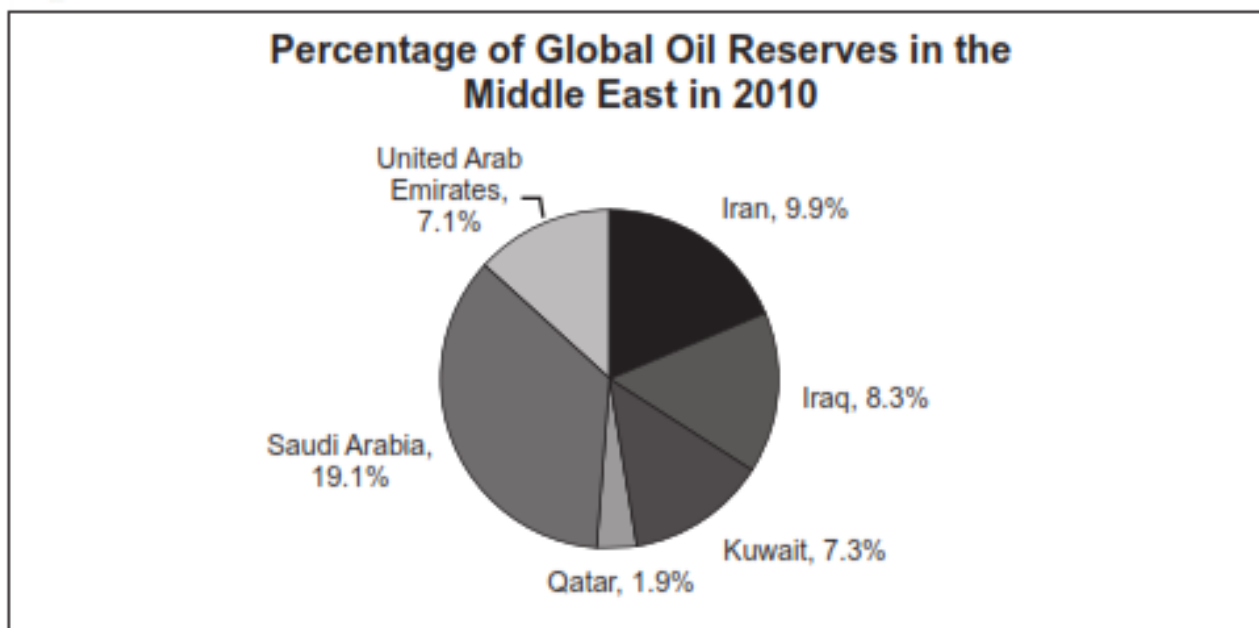
- Iran accounts for 10-11% of China's oil imports, and finds in the People's Republic of China the biggest oil customer. According to 2010 data, China imported more than 500,000 bpd. In the first four months of 2011, China had already imported more than 62 million barrels of crude oil.⁷⁸ Moreover, the two countries agreed on an overall expansion of their commercial relations (especially after the Western sanctions), with the bilateral trade estimated at more than 30 billion dollars in 2010.⁷⁹ Main offshore tankers' terminals are the *Kharg Island* Terminal, the *Lavan Island* Terminal and the *Sirri (Shiri Island)* Terminal.
- Oman accounts for 6-7% of China's oil imports, being the third biggest Middle Eastern supplier for China. According to 2010 data, Oman exports to China approximately 250,000 bpd. However, it seems noteworthy to highlight that Oman suffers less than the other Middle Eastern countries the Hormuz possible closure, being almost the entirety of its territory located outside the Strait's waters.

⁷⁸ Chinese oil imports from Iran up by 32 pct, Islamic Republic News Agency (IRNA), June 10, 2011, Teheran.

⁷⁹ Sharan, T. and Thiher, N. (2011) Oil Supply Routes in the Asia Pacific: China's Strategic Calculations, ORF Occasional Paper #24, Observer Research Foundation, pp. 1-30.

- Iraq accounts for approximately the 4-5% of China's oil imports, and has been subject of Chinese huge investments for technological and infrastructural enhancement since 2009 onwards. According to the 2010 data, Iraq exported to China approximately 200,000 bpd. Main Iraqi supply hub is the *Al Basrah* Oil Terminal.
- Kuwait accounts for approximately the 4-5% of China's oil imports, or 200,000 bpd. However, forecasts by the Kuwait Petroleum Corporation expect Chinese imports to grow to 500,000 bpd by 2015. China and Kuwait NOCs work together in several infrastructural projects, and are jointly collaborating in the development of a petrochemical complex in Guangdong province, in Southern China. Major oil terminals are the *Mina Abmadi* Terminal, the *Mina Abdullah* Terminal and the *Mina Al Zour (Mina Sand)* Terminal.
- The United Arab Emirates provides the remaining part of the Chinese oil imports from the Middle East. Exporting to China approximately 100,000 bpd, according to 2010 data, the estimates are about to grow to almost 200,000 bpd by 2014, thank to a 20-years oil supply deal of July 2011.⁸⁰ Main supply hubs are the *Das Island* Terminal and the *Ruwais* Terminal.
- Qatar provides a very tiny percentage of China's oil needs (around the 2%), but is slowly acquiring relevance for its huge LNG reserves. Moreover, given the steady increase in LNG's presence in China's total energy consumption's structure, it is possible to infer that its relevance will continue to increase.

⁸⁰ Sharan, T. and Thiher, N. (2011) Oil Supply Routes in the Asia Pacific: China's Strategic Calculations, ORF Occasional Paper #24, Observer Research Foundation, pp. 1-30.



Source: BP Statistical Review of World Energy 2011

Major Terminals In Saudi Arabia	DWT Limit	Max Tanker Size
Al Juaymah Terminal	700,000	ULCC
Jiddan Refinery Terminal	100,000	Aframax
Jubail (King Fahad) Ports	500,000	ULCC
Rabigh Terminal	312,000	VLCC
Ras Al Juaymah	700,000	ULCC
RasTanura Terminal	500,000	ULCC
Yanbu' Terminal	500,000	ULCC

Source: Xu X., (2011) Chinese NOCs' overseas strategies: Background, Comparison and Remarks, The James A. Baker III Institute for Public Policy.

Major Terminals In Iran	DWT Limit	Max Tanker Size
Bandar Abbas Terminal	100,000	Aframax
RasBahregan Terminal	250,000	VLCC
Kharg Island Terminal	500,000	ULCC
Lavan Island Terminal	300,000	VLCC
Sirri (Shiri Island) Terminal	330,000	VLCC

Source: Hongtu, Z. (2010) China's Growing Role in Middle East: Implications for the Region and Beyond, The Nixon Center.

Terminals	Country	DWT	Max Tanker Size
Al Basrah Oil Terminal	Iraq	300,000	VLCC
Mina Abdullah Terminal	Kuwait	276,000	VLCC
Mina Ahmadi Terminal	Kuwait	375,000	ULCC
Mina Shuaiba Terminal	Kuwait	100,000	Aframax
Mina Al Zour (Mina Saud) Terminal	Kuwait	370,000	ULCC
Ruwais Terminal	UAE	330,000	ULCC
Fujairah Terminal	UAE	320,000	VLCC
Jebel Dhanna Terminal	UAE	280,000	VLCC
Das Island Terminal	UAE	410,000	ULCC
Zirku Island Terminal	UAE	320,000	VLCC
Abu Bukhoosh Terminal	UAE	300,000	VLCC
Mubarraz Island Terminal	UAE	250,000	VLCC
Arzanah Island Terminal	UAE	280,000	VLCC
Fateh Terminal	UAE	300,000	VLCC
Hulaylah Terminal	UAE	300,000	VLCC

Source: US-China Economic and Security Review Commission (2006), China's Overseas Investments in Oil and Gas Production, *Eurasia Group*.

In case of prolonged closure of the Strait, a certain amount of oil could be diverted towards other major terminals, in order to bypass the Strait. Obviously, the bypassing would need the use of oil-and-gas pipelines, some already constructed and some others in design phase. Anyway, the use of pipelines would imply increased rates of transportation. Main pipelines to reduce the intensity of the disruption would be the *Petroline*, also known as East-West Pipeline, running across the Saudi Arabian territory from Abqaiq to the Red Sea; its flow capacity would be of about 5 million bpd. The *Abqaiq-Yanbu* natural gas liquids pipeline, running parallel to the *Petroline*, could reach a flow of about 290,000 bpd. The Iraqi pipelines running through Saudi Arabia (temporary deactivated) could flow 1.65 million bpd, and other 500,000 bpd could be flowed through the *Tapline* to Lebanon. In July 2012, the *Habshan-Fujairah* oil

pipeline, also known as Abu Dhabi Crude Oil Pipeline (ADCOP), was inaugurated. With an estimated capacity of 1.5 million bpd, it permits to bypass Hormuz by connecting the *Habshan* port in Southwest with the Fujairah port, an international shipping hub, in Northeast of the UAE.⁸¹ It seems noteworthy to highlight that China, through the Chinese National Petroleum Corporation, both invested in and carried out the project of construction together with the International Petroleum Investment Company of Abu Dhabi.⁸²

Bab el-Mandeb Strait and the Gulf of Aden: An evolving strategic cooperation

The Bab el-Mandeb Strait is located between Djibouti, Yemen, and Eritrea. The Strait is located to the North of Somalia, and connects the Red Sea to the Gulf of Aden. In 2006, an estimated 3.3 million bpd of crude oil transited through this gateway. Most significant sources of risk in the Strait, as for Malacca, are the possible attack of both pirates and terrorist groups, and the risk of vessels' hijacking and confiscation. The terrorist organization of Al Qaeda has been very active in the area. In 2002, it attacked a French supertanker off the coast of Yemen. As a consequence of the attack, the insurances premiums rocketed, and the insurances companies charged triple the tankers and supertankers passing through the area. Another episode of hijacking took place on November 17, 2008, when the oil tanker "Sirius Star" was attacked by pirates, giving to the problem a much higher relevance. Even if the

⁸¹ Komiss, W. and Huntzinger, L. (2011) The Economic Implications of Disruptions to Maritime Oil Chokepoints, pp. 1-88.

⁸² Sharan, T. and Thiher, N. (2011) Oil Supply Routes in the Asia Pacific: China's Strategic Calculations, ORF Occasional Paper #24, Observer Research Foundation, pp. 1-30.

biggest part of the oil shipped through the Strait goes northbound, given the growing pace of Chinese oil imports from the region, it is not wrong to infer that this area will acquire central importance in the Chinese geopolitical and geo-energetic chessboard. Being the piracy problem limited not only to the Strait, but extended to the Gulf of Aden and the Somali territorial waters, the security of the SLOCs for Chinese commercial vessels or oil tankers and supertankers turns out to be a national priority. China's deployment of three warships off the coast of Somalia and the Gulf of Aden, on January 2009, can be seen as a major turning point in China's blue-water strategy. In fact, this operational deployment had been the first one outside Asian waters. Not only China ordered the deployment to secure its commercial vessels from possible threatens, but also to launch a worldwide signal on how China was involved in the maintenance of the security along the main SLOCs.⁸³ At the beginning, China showed its willingness to work independently from the international community, mainly focusing on the protection of its vessels transiting through the region. However, US-China talks found some common points in the analysis of the problem, as for example the danger presented by ungoverned maritime areas along the SLOCs, easy prays for terrorists or pirates, and the huge costs due to the uncoordinated action of patrolling. The role China performed in the region generated doubts about the consistency, the entity, and the duration of Chinese involvement in the region. In addition, it generated curiosity on the possible "realistic" cooperative approach to anti-piracy operations the PLA-N could finally undertake. In 2009, after several

⁸³ Kennedy, A.B. (2010) China's New Energy-Security Debate, *Survival*, vol. 52 no. 3, pp. 137–158.

talks, the *Combined Task Force 151* (CTF-151), a multinational naval task force, was set up. Main goal of the project was to curb piracy attacks in the Gulf of Aden and off the eastern coast of Somalia. Its mission was defined as to disrupt piracy and armed robbery at sea, and to engage with regional and other partners to build capacity and improve relevant capabilities in order to protect global maritime commerce and secure freedom of navigation.⁸⁴ To date, China has not joined the CTF-151, but several signs work in favor of a possible Chinese external collaboration. In fact, CTF-151 has the necessary characteristics that would lead Beijing to participate: the first and most important one, it is authorized by a UN Security Council Resolution; the second regards the fact the Somali government requested international assistance; the third one regards UNCLOS' acceptance of possible anti-piracy operations, if requested. Chinese activities, said to be independent but in reality coordinated with the US, would permit cooperation even while retaining differences over interpretations of international maritime law. The "US-China Defense Policy Coordination Talks" between Defense ministries did resume in Beijing on February 27, 2009, and the US and China discussed how to coordinate and implement their antipiracy efforts in the Gulf of Aden. Some analysts argued for the need by the US and China, as major responsible powers, to strengthen cooperation to counter both traditional and non-traditional security threats. The talks resulted in a first move towards a higher degree of cooperation, and with the US and Chinese navies sharing information through unprecedented daily communications at both tactical and operational level. China's

⁸⁴ Christoffersen, G. (2010) China and Maritime Cooperation: Piracy in the Gulf of Aden, ISPSW Institute for Strategic, Political, Security and Economic Consultancy, pp. 1-21.

participation represented a globalizing expansion of Chinese national security interests beyond geographic boundaries, and showed its willingness to be a responsible stakeholder in the maritime security issue.⁸⁵ However, the main turning point in the Chinese cooperative-approach's evolution in the Somali anti-piracy issue arrived when, on October 19, 2009, a Chinese vessel, the *De Xin Hai*, was hijacked by Somali pirates. Far from the area, the PLA-N would not have been able to mount a proper rescue operation, facing a possible delegitimizing effect domestically. The only possibility was thus to expand the level of anti-piracy cooperation, working in concert with other regional and non-regional actors, clarifying area of responsibility and arranging better coordination.⁸⁶ The extent of US-China cooperation began to unfold when PLA-N affirmed its willingness to guard also non-Chinese ships off the coasts of Somalia. This slow process of confidence-building brought the United States and China, and their respective militaries, to an unprecedented level of military cooperation and tactical sharing. China itself showed a much more positive and realistic approach to anti-piracy cooperation, seen as a necessity given the huge costs of an independent international patrolling force.⁸⁷ The Somali deployment, however, presented some side effects. In fact, Malaysia and Indonesia, but also Southeast Asia more generally, were concerned about the precedent the Somali deployment had generated, and what could be the possible long-term consequences of the latter for the Malacca Strait. Nevertheless, China stated that the Somali action were due to a lack of

⁸⁵ US notes positive transformation in Chinese army, *International Herald Tribune*, March 4, 2009.

⁸⁶ Buckley, C. "China mulls military options over hijacked ship", *Reuters*, October 22, 2009.

⁸⁷ Christoffersen, G. (2010) *China and Maritime Cooperation: Piracy in the Gulf of Aden*, ISPSW Institute for Strategic, Political, Security and Economic Consultancy, pp. 1-21.

patrolling capacities by the coastal countries, and that it believed the MALSINDO could perform efficiently its tasks.

China's African Oil Suppliers

China financing mechanism in Africa is particularly different from the Western model. If, on the one hand, Western's loans to African governments for large-scale infrastructural programs are linked to requirements such those of transparency or improved governance, on the other hand, the Chinese model does not ask for any of these requirements. In fact, the Chinese situation is different inasmuch as African governments propose infrastructural projects to the China Export-Import Bank (China EXIM Bank), which concede the loan provided that the recipient can pay for it with a resource. Obviously, there are certain conditions that have to be respected, as for example that the governments must use Chinese contractors, and that at least the 50% of the contract's sourcing must come from China.⁸⁸ For China, the main goal of this new win-win scheme of financing is to bring its suppliers closer. For its suppliers, and recipients of the loans instead, is a huge possibility to receive loans without any political requirements as bounding condition. A modernized railroad, a high-speed train railway, a complex telecommunications infrastructure are all projects that strictly link the recipient countries to the Chinese expertise and companies, securing in addition a constant supply of resources for China.⁸⁹

⁸⁸ Alessi, C. and Hanson, S. Expanding China-Africa Oil Ties, *Council on Foreign Relations*, February 8, 2012.

⁸⁹ Bracken, A., Hajj C., Hartman K. and Sivalingam S. (2012) China's Quest for Energy Security: Redefining and Driving Foreign Aid-An Analysis of China's Involvement in Central Asia and Africa, pp. 1-24.

Two are the main Chinese African Oil suppliers: Angola and Sudan. Smaller percentages of China's oil imports are provided by Equatorial Guinea, the Republic of Congo (Congo-Brazzaville) and Nigeria.

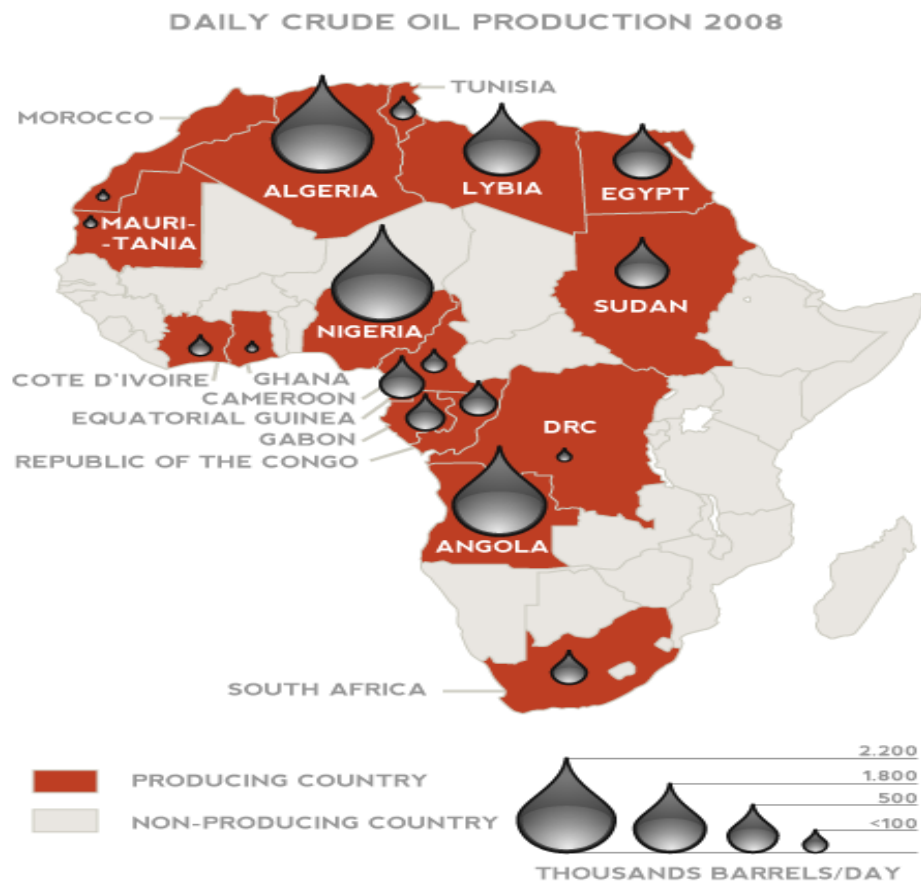
- Angola has been the most important African source of oil, and main regional partner, since the beginning of the century. However, at the beginning, China found it harder to enter the Angolan oil market, given the presence of Western International Oil Companies (IOCs) on the soil. Despite of a consistent presence of Western companies, China's share of Angolan crude oil's production (and also the percentage of Angolan oil directly traded by Chinese NOCs) is steadily increasing, in accordance with forecasts stating a growing Chinese dependence from the country.⁹⁰ China has invested heavily on the country given the overall political stability, and it is not interested in Angolan domestic issues. Angola accounts nowadays for almost the 11-12% of China's oil imports, or approximately 500,000 bpd. In addition to this amount, the securitization of the loan China granted to Angola to build up its infrastructure again after the civil war grants to China an initial 10,000 bpd to become 120,000 bpd by the end of the 17 years' loan.⁹¹
- China has been the main source of investments and oil demand for Sudan, engaged in a civil war that brought to the secession of South Sudan in July 2011. Despite the risks connected to the

⁹⁰ Source: Bracken, A., Hajj C., Hartman K. and Sivalingam S. (2012) China's Quest for Energy Security: Redefining and Driving Foreign Aid-An Analysis of China's Involvement in Central Asia and Africa, pp. 1-24.

⁹¹ Shiin, D.H. Africa, China, the United States and Oil, Center for Strategic and International Studies.

possible outcomes of the civil war, China has continued to do business with the country. In fact, China acquired oil fields that have been already under Chevron's control, and that the latter abandoned for the civil war. In 2006, Sudanese oil fields under CNCP's control produced more than 500,000 bpd, and are expected to increase to approximately 750,000 bpd in the years to come. China invested heavily also in infrastructural project in Sudan, especially in consideration of the fact that Port Sudan, one of the main national shipping hub, has been listed as one of the "Pearl" of China's "String of Pearls" strategy. Sudan, accounting for the 6-7% of China's oil imports, exports to China an amount of approximately 250,000 bpd. Moreover, forecasts state that Chinese oil imports from the country will steadily increase in the years to come.⁹²

⁹² Zhao, S. The Geopolitics of China-African Oil, *China Briefing*, April 13, 2011.



Source: Bracken, A., Hajj C., Hartman K. and Sivalingam S. (2012) China's Quest for Energy Security: Redefining and Driving Foreign Aid-An Analysis of China's Involvement in Central Asia and Africa, pp. 1-24.

Main African Sources of Oil for China				
	OPEC member?	Oil resources	Oil exported to China	Major deals and partnerships
Angola	Yes	Largest source of oil in Africa (about 50 percent) – largest crude oil exporter in Africa in 2009 <u>Largest investors:</u> ChevronTexaco (U.S.), Exxon Mobil (U.S.), BP (UK), Total (France)	Largest African oil provider to China	2004: US\$2 billion loans and aid 2005: Nine agreements signed, including long-term oil supply
Sudan	No	Oil exports account for 90 percent of country's total revenue <u>Largest investor:</u> China National Petroleum Company (entered 1996). U.S. companies not allowed to invest.	Second-largest oil provider to China (60 percent of its oil goes to China) China is largest importer of Dar Blend (high-acid crude oil)	1997: 2007: Interest-free loans for building construction 2008: US\$2.8 million humanitarian aid package
Republic of Congo (Congo-Brazzaville)	No	<u>Largest investors:</u> Total (France) and Eni (Italy). Around 20 U.S. companies, including Chevron and Murphy Oil.	Third-largest oil provider to China (around 50 percent of its oil goes to China)	2006: Cooperation to build airport and infrastructure 2010: Chinese Development Bank to help create SEZs
Equatorial Guinea	No	Oil accounts for over 80 percent of total revenue <u>Largest investors:</u> ExxonMobil (U.S.), Hess (U.S.), Marathon (U.S.)	Around 12 percent of its oil exports go to China	2009: China gained exploration and drilling rights in areas
Nigeria	Yes	Second-largest oil reserves in Africa – oil accounts for over 90 percent of country's exports, 80 percent of total revenue <u>Largest investors:</u> Royal Dutch Shell (British/Dutch), ChevronTexaco (U.S.), Exxon Mobil (U.S.), Agip (Italy), Total (France)	Small amount of oil to China (in 2009, 28,000 barrels/day)	2006: US\$4 billion in oil and infrastructure projects in exchange for drilling licenses 2010: US\$23 billion to build oil refineries and infrastructure

Source: Zhao S., The Geopolitics of China-African Oil, *China Briefing*, April 13, 2011.

2.3 China's Oil Diplomacy and the Troublemakers' Strategy

China's "oil diplomacy" has been firstly developed for obvious energy needs; its domestic crude oil's industry was slowly reaching the maximum rate of production, and it was about to be overcome by a soaring domestic demand. Thus, first and main reason behind the development of Chinese oil diplomacy has been the energy security issue, with all the strategic implications deriving from it. However, looking at the Chinese "modus operandi" internationally, and at its relations with the world's main oil producers and exporters, it seems plausible to infer that the above strategy has experienced an evolution from its original goal within the last decades. In fact, several political and geopolitical analysts nowadays state that there is a strategy-within-the-strategy in the Chinese posture with respect to certain energy exporters countries. The evolution would seemingly consist of a set of implications, i.e. it would imply that the Chinese oil diplomacy, both for what concern NOCs acquisitions on the international market and China's imports for domestic energy consumption, would not only be linked to its energy needs, but also to its willingness to give strength to the main opponents of the United States, the so-called "troublemakers", i.e. Iran, Venezuela and Russia. In addition to this, there would also be a sort of exchange between China and some of its energy suppliers, i.e. Angola, Sudan, Syria, etc., that would find its implementation in the scheme "energy-for-protection" within the international institutions and organisms, more

precisely at the UN level, implemented several times in order to secure oil-and-gas supplies.⁹³

There are several signs showing that the overall strategy is already under implementation. First and most important condition for the success of the strategy is the maintenance of the crude oil price stable at around 105-115\$ per barrel. For countries such as Russia, Iran, Venezuela, which make of energy exports their main revenues, the constancy of the oil price at the above-mentioned level is essential to continue playing a central role in the strategy; the more the oil price grows, the more revenues they will collect, and the more they will be able to cause some kind of troubles to the United States. Moreover, China works with these countries also from a commercial point of view, utilizing its current immense dollars' reserves to continue entertaining bilateral trade relations with all these actors, despite of the embargoes or limitations sanctioned by the international community. The very same fact of being at the borderline of the international community gives China certain geopolitical, geo-strategic and geo-energetic advantages.⁹⁴

Venezuela, with prices stable at between 105-115\$ per barrel or higher, could eventually be pushed to act unilaterally with respect to the United States, playing a pivotal role in the Latin American continent. An example of this had been the expulsion, by the then-President Hugo Chavez, of the United States Ambassador, Patrick Duddy, in September 2008, under allegations of conspiring against the Bolivarian Republic of

⁹³ Lee, J. (2012) China's Geostrategic Search for Oil, Center for Strategic and International Studies, *The Washington Quarterly* • 35:3, pp. 75-92.

⁹⁴ Martell, W. C. "An Authoritarian Axis Rising?", *The Diplomat*, June 29, 2012.

Venezuela and preparing a coup.⁹⁵ However, the diplomatic mean is not the only weapon in Venezuelan hands. Another possible Venezuelan (re)action against the United States, especially if China would develop the capabilities to absorb the demand, could be to cut off the oil supply directed to the United States, currently accounting for approximately the 15% of American energy needs. Since 2004, when President Hugo Chavez visited China for the first time, their relation improved consistently. Only in 2004, the two countries signed eight energy cooperation agreements, steadily reinforcing their relation in the following years.⁹⁶ Chavez also commissioned to China the construction of some oil supertankers, in order to curb Venezuelan dependence on renting these latter from Western companies. Not only China extends loans to Venezuela as part of the "loan-for-oil" deals, it sometimes does it in *Renmimbi*, the Chinese currency, so as to lock Venezuelan government into buying Chinese equipment and hiring Chinese Companies, increasing their mutual interdependence.⁹⁷ In recent years, Venezuela has attempted to diversify its crude oil export destinations away from the United States. One of the fastest growing destinations of Venezuelan crude oil exports has been China. In 2011, China imported 230,000 bpd of crude oil from Venezuela, up from only 19,000 bpd in 2005. Several signs show how the relation between these two countries is in constant evolution.

⁹⁵ Carroll, R. "Venezuela: Hugo Chavez expels US ambassador amid claims of coup plot", *The Guardian*, September 12, 2008.

⁹⁶ Hurst, L. (2007) China's Global Quest for Energy, The Institute for the Analysis of Global Security (IAGS), pp. 1-23.

⁹⁷ Zhang, Z. Shifting Energy Geopolitics, *The Conference on Energy Security in a Multipolar World The Royal Society*, London, December 12, 2012, pp. 1-42.

Iran, already mentioned as one of the main Middle Eastern supplier of crude oil for China, holds a privileged position in the Chinese geopolitical and geo-energetic chessboard. With an estimated reserve of approximately 157 billion barrels of crude oil, Iran is said to host in its soil the second-largest pool of conventional petroleum, behind the Saudi Arabia's one.⁹⁸ However, in contrast with Saudi Arabia, already producing at nearly its maximum rate (approximately 11 mbd), forecasts over Iran talk about a possible increase from the current 4 mbd to an estimated 7 mbd, producing at the maximum rate. Moreover, Iran is currently the main Chinese bridgehead in the region, precious ally in the XXI century power rebalancing. The great advantage China holds in Iran derives from the fact that Western companies are prohibited to buy in light of the embargoes implemented by both the United States and the European Union. So, China constantly incremented both its presence and its oil imports from Iran in the last decade. Not only China satisfies its oil-and-gas imports need buying from Iran with virtually no competition, it also strengthens its position in the country through the provision of basic necessities, commodities, loans, weapons and weapons' technology.⁹⁹ After the tightening of the sanctions to Iran, now including also the banking system and the oil industries, the consumer prices peaked, coupled with a fall in the value of its currency, the *rial*. Recent speculation suggests the hypothesis that China could start purchasing additional Iranian oil as a way to help its main ally in the region. Given the constant worsening of the Iranian domestic situation,

⁹⁸ BP (British Petroleum) (2013), Statistical Review of World Energy, June 2013. (bp.com/statisticalreview).

⁹⁹ Hurst, L. (2007) China's Global Quest for Energy, The Institute for the Analysis of Global Security (IAGS), pp. 1-23.

and with Tehran turning increasingly desperate, there could be also an advantage for Beijing in the form large discounts, knowing its dependency on foreign oil. These moves could only strengthen the growing relation of mutual interdependence.¹⁰⁰

Russia plays a vital role in China's geopolitical structure. Former ally and former competitor, Russia nowadays has realized the potential of a Sino-Russian understanding, in order to curb United States' hegemony and face its global democratizing project. The Sino-Russian relation has improved particularly in the aftermath of the re-election of Vladimir Putin for the third presidency. For Russia, as for both Venezuela and Iran, the loan-for-oil-and-gas deals remain the best way to attract Chinese funding. In 2004, CNCP extended to *Rosneft*, a Russian centrally-managed international oil company, a 6 billion dollars' loan in exchange for a supply of 180,000 bpd of crude oil through 2010. These loan-for oil agreements had, as a major consequence, to divert hundreds of thousands of barrels per-day from the international oil market, thus implying a huge potential advantage for China in case of international disruptions. On February 17, 2009, the relation even improved, as a mega loan-for-oil deal was signed; China loaned to *Rosneft* and *Transneft*, the two biggest Russian oil companies, 25 billion dollars in exchange for an oil supply of approximately 300,000 bpd between 2011 and 2030.¹⁰¹ Moreover, in a rebalancing of oil exports to East, Russia again enhanced its strategic energy cooperation with China. In fact, in June 2013, Russia and China agreed on a 25-years loan-for-oil deal worth 270 billion dollars.

¹⁰⁰ Martell, W. C., "An Authoritarian Axis Rising?", *The Diplomat*, June 29, 2012.

¹⁰¹ Zhang, Z. Shifting Energy Geopolitics, *The Conference on Energy Security in a Multipolar World The Royal Society*, London, December 12, 2012, pp. 1-42.

China will receive an amount doubled with respect to that provided in the former deal, or approximately 600,000 bpd, with projections of 900,000 bpd in the near future. *Rosneft*, the recipient of the loan, will receive as an advance some 60-70 billion dollars, so as to reduce its level of indebtedness and invest in the development of unexplored or unexploited oil-and-gas fields in Siberia and the Arctic region.¹⁰² China, in securing its energy position in Russia for the decades to come, has also helped a potential ally to move out from a hard situation. As for what concerns the interests at stake, this is one of the biggest energy deal never signed, and brings with it several geopolitical implications. The first and most obvious is the diversification of Russia's oil exports towards Asia, and especially China, region and country that will account for the main energy growth in the next decade. The second consequence is the reduced importance attributed to Europe, mired in a crisis from which it appears not able to recover. The third is the enhanced energy security, geopolitically essential, for China; in fact, it strongly reinforces the relation with a non-Opec member, reducing its dependence from the oil shipped through the Strait of Malacca. Thus, China uses its immense dollars' reserves to extend loans in exchange for oil and gas supplies and to buy and sell oil in quantities higher than that it really needs, so as to influence the oil market's price and shape the world' geopolitical equilibriums.¹⁰³

China's "Troublemakers' Strategy" has also a central domestic implication. In fact, the more these countries are able to divert the

¹⁰² Marson, J. Russia agrees \$270 billion oil deal with China, MarketWatch, *The Wall Street Journal*, June 21, 2013.

¹⁰³ Lee, J. (2012) China's Geostrategic Search for Oil, Center for Strategic and International Studies, *The Washington Quarterly* • 35:3, pp. 75-92.

American attention from the Asia-Pacific region and the South and East China Seas, the more China is able to pursue its "Pragmatic Nationalism" in the region, currently the most important geopolitical goal.

Recently, some analysts argued about the possibility for the development of what has been dubbed the "Axis of Evil", gathering together China, Russia, Iran and Venezuela, with the addition of Syria and North Korea. What had been observed was the fact that the above countries, sharing undemocratic and authoritarian features, were increasingly looking at each other to improve their coordination and break the isolation some of them had been obliged to by the Western sanctions. The first and main characteristic of the axis' coordinated foreign policy is a reflexive opposition to the United States, coupled with a constant effort in restraining its power and influence. The second characteristic regards the systemic paralysis of the United Nations Security Council, through the veto power of both Russia and China. In fact, both China and Russia have prevented the UN Security Council from passing a resolution authorizing the intervention in Syria against Bashar Al-Assad and his government, accused of the employment of chemical weapons against the Syrian rebels, and fiercely opposed the tightening of international commercial sanctions against Iran for its nuclear enriching program. The third and last characteristic is, apparently, the simplest one: all these states pursue the politics of protecting each other no matter what. In fact, China and Russia protect Iran and Syria to bolster their own power, defend their last allies in the Middle East, and weaken or distract the United States.¹⁰⁴

¹⁰⁴ Martell, W. C. "An Authoritarian Axis Rising?", *The Diplomat*, June 29, 2012.

CHAPTER 3: RESIZING THE MALACCA DILEMMA: BETWEEN ENERGY DIVERSIFICATION AND INFRASTRUCTURAL ENGINEERING

China is currently investing in several different projects, and in various fields, in order to resize its dependence from the Strait of Malacca or, as an alternative, to reduce the intensity of the threats currently posed by this gateway. These fields move from the improvement of the relations, both politically, economically, commercially and militarily, with Central Asia countries (well-know for their energy "richness"), to a policy of aid and loans towards the energy suppliers' countries, from the increasing relevance attributed to the formation of a Chinese Strategic Petroleum Reserves (SPR), to the evaluation of the possibilities and challenges offered by a more cooperative approach towards the international energy institutions, and especially the International Energy Agency (IEA).

The first move passes through the enhancement of its relations with Central Asian oil-and-gas suppliers, i.e. Russia, Kazakhstan, Turkmenistan, Uzbekistan, Kyrgyzstan and Tajikistan. This move is being implemented both by creating joint companies in order to manage new oil fields' exploration and exploitation, and by building-up infrastructural facilities to improve and make easier the connections within the region and China mainland, i.e. high-speed railways, oil-and-gas pipelines, oil refineries, etc. This enhancement is also being pursued through the increased weight attributed to the Shanghai Cooperation Organization (SCO), composed by the above-mentioned countries plus China (Turkmenistan is only a "Guest" in the organization), and engaged in the struggle against non-conventional security threats such as

terrorism, separatism and extremism, threats to which these countries are exposed.

The second way implies the enhancement of the Chinese "Energy Diplomacy" i.e. the utilization of its huge dollars' reserves to grant loans at interests inferior to the Western countries' ones, coupled with less conditions as for what concerns more transparency and improved governance. These loans should be accompanied by the funding of infrastructural projects able to diversify the supplying paths to China.

The third way is partially dependent on the first two, and regards the need of financing the adequate sites to develop a Strategic Petroleum Reserve (SPR), that could grant China the possibility of survival, for a certain period of time, in case of disruptions or blockade, wars or international embargoes. To this, it must be added the Chinese effort to reduce the technological gaps with the Western International Oil Companies (IOCs) as for what concerns energy efficiency, productivity and development of know-how.

The fourth way would regard the enhancement of the confidence towards the international commodities market, especially those related to energies resources such as oil and gas (and liquefied natural gas), and thus the development of a more cooperative approach towards the international institutions empowered with both the task of regulating the energy markets and enhancing the cooperative climate among the main actors involved. First and most important institution empowered with the above-mentioned tasks is the International Energy Agency (IEA).

3.1 China's Growing Energy Interests in Central Asia

Chinese relations with Central Asian countries date back from before the fall of the Soviet Union, and they have steadily improved since the definitive Soviet's fall and the consequent formations of the current nation-states. In fact, since 1991, in order to counterbalance the growing (and old) influence Moscow was trying to exert on the newly established states, these latter looked at Beijing as a potential partner. The countries with which China maintains the most important energetic relations (and with which its is trying to forge a Central Asian countries' alliance) are the above-mentioned, i.e. Russia, Kazakhstan, Uzbekistan, Kyrgyzstan and Tajikistan, with the addition of Turkmenistan. The overall trade between China and the five Central Asian countries rose from \$527 million, in 1992, to approximately \$40 billion, in 2011. Chinese expansion towards the region serve both its energy needs, granting near and medium-term oil-and-gas supplies, and its logistic necessities, in consideration of the fact that several international commercial hubs in Central Asia could facilitate transportation and regional trade. As a consequence, China is investing in infrastructural projects, mostly high-speed railway, oil-and-gas pipelines and oil refineries, so as to bring these countries the nearest possible. In fact, it has increased its investment in building roads, tunnels, refineries and even some spurs from the existing pipelines in both Kyrgyzstan and Tajikistan, in developing the Kazakhstan's oil sector, both through exploration and exploitation of new oil fields, and in improving and enlarging the capacity of the 1,800-kilometer natural gas pipeline from Turkmenistan. In Central Asia, China has sought to establish a regional free trade zone, partially as a way of

tapping into the region's vast energy resources, according to several forecasts the world largest after Middle East.¹⁰⁵

3.1.1 Sino-Russian's cooperation and the Eastern Siberia-Pacific Ocean pipeline (ESPO)

We have already mentioned, in Chapter 2, the growing relevance that the Sino-Russian relation has been steadily acquiring in a global perspective. Not only China and Russia are reciprocally helping each other to solve their individual problems, i.e. Russia is helping China to meet its growing oil-and-gas needs by consistently increasing its exports, while China is helping Russian International Oil Companies (IOCs), *Rosneft* and *Transneft*, by providing them with the liquidity necessary to both reduce its indebtedness and to start with the exploration and exploitation of Arctic and Siberian oil-and-gas fields, they are also creating a common front against the global expansion of the American presence. The very fast evolution of their geopolitical and geo-energetic collaboration, and the hundreds-of-billion dollars' loan-for-oil-and-gas deals signed from 2004 onwards, is symptomatic of the growing strength of this axis. The main deals between the two giants have been analyzed in Chapter 2, but it seems noteworthy to highlight again the main passages so as to locate them within the wider Chinese "Central Asia Strategy".

Since 9/11 and the 2003 intervention in Iraq, the global geopolitical evolutions have strongly signaled the passage to a new era, the one of the geo-energetic wars. From that moment onwards, all the main actors in the global chessboard have started to re-evaluate their alliances, to forge

¹⁰⁵ Fazilov F. and Chen X., China and Central Asia: A Significant New Energy Nexus, *The European Financial Review*, April 19, 2013.

new ones, and to try to re-balance the disproportionate power the United States were about to acquire.¹⁰⁶ Thus, in 2004, China and Russia signed their first important energy deal, and *Rosneft* became the recipient of a six billion dollars' loan in exchange for a supply, through 2010, of 180,000 bpd. In the same year, China's total oil imports amounted to approximately 3.2 million bpd.¹⁰⁷ With the steady growth of the Chinese total oil consumption, and with the outbreak of the 2007-2008 financial crisis, the Sino-Russian deal was renegotiated. In 2009, in fact, the Chinese government extended to *Rosneft* and *Transneft* loans for an overall value of twenty-five billion dollars, in exchange for an increase of oil supply, from 180,000 to 300,000 bpd, through 2035. China's total oil imports, in the same year, amounted to approximately 4.6 million bpd.¹⁰⁸ This strategy seemed a "win-win strategy", in light of the fact that China secured a higher oil supply, necessary to sustain its soaring growth, while Russian IOCs received liquidity to be employed both for debts' reduction and oil-and-gas fields' exploration.¹⁰⁹ In June 2013, the Sino-Russian loan-for-oil deal had been renegotiated again, so as to reach an immense consistence. For the next 25 years, China will be supplied with a daily amount of 600,000 barrels of crude oil, with possibility of a further increase to 900,000 bpd would it be necessary. Russia, and more precisely the oil giant *Rosneft*, will receive a 270 billion dollars' loan, extended in a 25 years period, but with an advance of 60-70 billion dollars (the exact amount has still to be defined) to solve some financial

¹⁰⁶ Klare M., 'Tomgram:Michael Klare, Oil Wars on the Horizon, May 10, 2012. (www.tomdispatch.com/blog/175540)

¹⁰⁷ <http://www.indexmundi.com/g/g.aspx?c=ch&v=93>

¹⁰⁸ Ibid.

¹⁰⁹ Zhang, Z. Shifting Energy Geopolitics, *The Conference on Energy Security in a Multipolar World The Royal Society*, London, December 12, 2012, pp. 1-42.

turmoil and continue in its development of unexplored or unexploited oil-and-gas fields in Siberia and the Arctic region.¹¹⁰ Chinese government's data about domestic oil imports, for the month of July 2013, talked about a 6.13 million bpd, in continuous increase.¹¹¹ The oil is currently being imported through a branch of the *Eastern Siberia-Pacific Ocean Pipeline (ESPO)*, pipeline running from *Taishet, in Irkutsk Oblast*, to the Far East port of *Kozmino, near Nakhodka*. The original project was addressed to pump oil to the emerging Asian markets, i.e. China, Japan and South Korea. In April 2009, the construction of a spur to connect the ESPO directly to China, and more precisely to the *Daqing* refineries, in Northeast China was initiated, and finally came into operation in 2011. China, through its NOCs, CNCP and Sinopec, covered almost entirely the costs of connecting the line from *Skovorodino* to *Daqing*, given the fact that the vast majority of the spur runs into Chinese territory. The management of the *Eastern Siberia-Pacific Ocean (ESPO)* oil pipeline has been attributed to the Russian company *Transneft*.¹¹² There are also several talks about a projected *Yakutia-Khabarovsk-Vladivostok* gas pipeline, expected to be complete in 2016. It should transport natural gas and liquefied natural gas (LNG) present in the *Yakutia* region, in Eastern Siberia, to *Primorsky Krai* and the Far East countries, namely China, Japan and South Korea. It would run alongside the ESPO, and should be directly connected to the North of China gas terminals as it worked for the ESPO.

¹¹⁰ Marson, J. Russia agrees \$270 billion oil deal with China, MarketWatch, *The Wall Street Journal*, June 21, 2013.

¹¹¹ Sharples B., "WTI Oil Fluctuates as China Crude Imports Climb to Record High", *Bloomberg*, 8 August, 2013.

¹¹² Singh, M. (2013) Malacca: No More a Dilemma for China?, *Scholar Warrior*, Spring 2013, pp. 45-56.

3.1.2 Sino-Kazakh's cooperation and the Kazakh-China Oil Pipeline (KCOP)

According to several statistics, Kazakhstan accounts for the largest share of the potential crude oil reserves present in Central Asia. This energy "richness" permits to Kazakhstan to pursue a "multi-vector" foreign policy, i.e. to maintain good relations with all the countries with which it has commercial (and especially energetic) relations. The Sino-Kazakh relations are extended to several sectors, from geopolitical to energetic, from commercial to unconventional threats' cooperation. China and Kazakhstan share a "hot" border, where the overlapping of ethnic belonging and political separatism still creates several troubles. The main unconventional problem regards the managing of the Uyghur community, present both in the Chinese Xinjiang province and in Kazakhstan, and its Islamic branch, the *East Turkestan Islamic Movement*. The launch of the Shanghai Cooperation Organization (SCO) had been mainly due to the need to cooperate over the minorities issue.¹¹³ For what concerns the energy issue, Kazakhstan massive oil reserves, accounting for approximately 30 billion barrels of crude oil and 45.7 trillion cubic feet (Tcf) of natural gas, makes it one of the world's major oil-and-gas producers.¹¹⁴ Estimates affirm it has the potential to expand its current crude oil production from 2 million bpd (data from 2010 production) to 3.5 million bpd by 2015.¹¹⁵ The largest Kazakh' oil field,

¹¹³ Bracken, A., Hajj C., Hartman K. and Sivalingam S. (2012) China's Quest for Energy Security: Redefining and Driving Foreign Aid-An Analysis of China's Involvement in Central Asia and Africa, pp. 1-24.

¹¹⁴ BP (British Petroleum) (2013), Statistical Review of World Energy, June 2013. (bp.com/statisticalreview).

¹¹⁵ Fazilov F. and Chen X., China and Central Asia: A Significant New Energy Nexus, *The European Financial Review*, April 19, 2013.

recently discovered, is the *Kashagan* oil field, among the five largest in the world. Chinese interest over Kazakhstan has consistently increased, especially after the discovery of the *Kashagan* oil field, with a first proposal to build-up a pipeline connecting the two countries already in 1997. The construction of the *Kazakh-China Oil Pipelines (KCOP)*, a 2,789-kilometers long infrastructure, officially started in 2004, becoming operational in 2011. The pipeline, moving from *Atyrau*, in Kazakhstan, to *Alashankou*, in the Chinese Xinjiang province, had been build-up by a joint venture of the Chinese CNCP and the Kazakh KazTransOil, a subsidiary of the Kazakh national oil-and-gas company KazMunayGas. In addition, CNCP totally covered the costs of building-up a spur connecting *Atasu*, in Kazakh territory, to *Alashankou*, and later to the refinery in *Dushanzi*, always in Xinjiang province. The overall cost of the spur amounted to 806 million dollars. The pipeline is currently managed by a joint stock company, the *MunaiTas North-West Pipeline Company CJSC*, backed by both the Chinese company CNCP and the Kazakh company *MazMunaiGaz*. Its potential capacity is estimated at 600,000 bpd, even if it is currently running at a lower level, 400,000 bpd.¹¹⁶ China, in order to allow crude and refined products' circulation towards the Chinese territory, built-up a pipeline moving from *Shanshan*, in Xinjiang province, to *Lanzhou*, a refining center in Gansu province, already connected to the domestic pipelines' network, and so able to serve Central and South-Western China. Thus, not only China heavily improved its oil-and-gas supplies, it also promoted inland economic development with the hopes

¹¹⁶ Erickson A.S., and Collins G.B. (2010) China's Oil Security Pipe Dream: The Reality, and Strategic Consequences, of Seaborne Imports, *Naval War College Review*, pp. 89-112.

to partially appease the Uyghur independent movement through potential economic improvement.

In the process of constant enhancement of Sino-Kazakh relation, in 2005, CNCP acquired a Canadian international oil company operating in Kazakhstan, the *PetroKazakhstan (PetroKaz)*, transferring the 33% of its shares to KazMunayGas (KMG), the Kazakh national oil-and-gas company. As a counterpart, China acquired the full ownership of the *Kumbol South* oil field and the 50% share of *Kumbol North* oil field. The Sino-Kazakh relation has continuously improved in the last decades, and not only for issues strictly connected to the energy one. In 2008, China invested in Kazakhstan nearly 700 millions dollars in several fields and various projects. In 2009, China became the Kazakhstan second-largest trade partner, and extended loans totaling 10 billion dollars for exploration and exploitation of oil-and-gas fields, for the development of infrastructural projects, and for the diversification of Kazakh's economy. In 2010, China became the biggest export destination for Kazakh's products.¹¹⁷ As easily understandable, Sino-Kazakh relation has turned out to be a win-win relation, because China has gained secure oil supplies outside the spectrum of the Strait of Malacca, while Kazakhstan has gained both a new (huge) market for its oil exports, a new (huge) market for Kazakh products, and a crude export route independent from Russia.¹¹⁸

¹¹⁷ Bracken, A., Hajj C., Hartman K. and Sivalingam S. (2012) China's Quest for Energy Security: Redefining and Driving Foreign Aid-An Analysis of China's Involvement in Central Asia and Africa, pp. 1-24.

¹¹⁸ Erickson A.S., and Collins G.B. (2010) China's Oil Security Pipe Dream: The Reality, and Strategic Consequences, of Seaborne Imports, *Naval War College Review*, pp. 89-112.

3.1.3 Turkmenistan, Uzbekistan and the Central-Asia-China Pipeline

Turkmenistan is currently one of the world largest gas exporters. In 2012, its proven natural gas reserves were of approximately 620 trillion cubic feet (Tcf).¹¹⁹ China-Turkmenistan bilateral relation draws back to immediately after the Soviet's fall, more specifically since 1992. Being the main driver of this relation the energy factor, in 2006 the two countries signed a deal for the construction of a gas pipeline, and a long-term deal for the supply of natural gas. In 2007, China reached an agreement with both Uzbekistan and Kazakhstan for the pipeline's transit towards their territory. The *Central-Asia-China Pipeline* began to take shape and, in 2007, China and Turkmenistan signed a supply-deal under which Turkmenistan would supply China with 30 billion cubic meters (bcm) of natural gas annually, for the next 30 years. The pipeline maximum discharge has been estimated at 40 billion cubic meters per year. The effective supplying, however, started in December 2009. Several forecasts state that the supply, if deemed necessary, could reach the amount of 65 bcm per year. Thus, Turkmenistan is expected to become China principal natural gas supplier via the pipeline crossing Uzbekistan and Kazakhstan. Thus, the double aim of Chinese expansion in Turkmenistan has been of securing huge natural gas supplies, in its intent to diversify its plateau of suppliers, and of acquiring greater flexibility of movement towards the Central Asian region. As for China-Kazakhstan relation, China-Turkmenistan relation seems to be a win-win game for both the parts. Turkmenistan has doubled its supplies to its "thirsty"

¹¹⁹ BP (British Petroleum) (2013), Statistical Review of World Energy, June 2013. (bp.com/statisticalreview).

Chinese customer, circumventing both Iranian and Russian competitions, while China has diversified its natural gas supplies so as to be less dependent (at least for what concerns natural gas imports) from the Middle East. According to IEA forecasts, China's natural gas imports should be of approximately 30-40 bcm per year, while Turkmenistan potential exports' capacity could reach approximately 60 bcm per year. By 2020, China's domestic natural gas production should be in the range of 120-140 bcm per year, while its domestic consumption of approximately 180-200 bcm. These data clearly show the possibility of a further improvement of the bilateral energetic relation between the two countries if deemed necessary.¹²⁰

Sino-Uzbek relation has consistently improved within the last two decades and, as for the other central Asian countries, especially after the fall of the Soviet Union. In 2012, several statistics estimated to approximately 40 trillion cubic feet (Tcf) the Uzbek proven natural gas reserves.¹²¹ In order to acquire a significant foothold in Uzbekistan, China has invested several billion dollars in inland development and infrastructural engineering, and has set up several ventures to work *in loco* with Uzbek companies. Main promoters of the improvement of the bilateral relation have been the Chinese company CNCP and the Uzbek national oil-and-gas company *Uzbekneftegaz*. The first agreement on energy cooperation was signed in 2004, and two years later the two countries agreed, in two different deals, to explore and develop possible oil deposits in five onshore blocks of the Aral Sea. In 2007, to add

¹²⁰ International Energy Agency (IEA), "Natural Gas in China Market evolution and strategy," Working Paper Series, 2009.

¹²¹ BP (British Petroleum) (2013), Statistical Review of World Energy, June 2013. (bp.com/statisticalreview).

momentum to an already profitable relation, the *Uzbekistan-China Pipeline* was connected to the biggest *Central-Asia-China Pipeline*, and Uzbekistan began supplying natural gas to China in August 2012. Moreover, the two countries are currently negotiating the construction of a third line for the *Central-Asia-China Pipeline* (the so-called "Line C"), parallel to "Line A" and "Line B". The overall project should reach a potential capacity of 25 bcm. As for the other Central Asian countries, the Sino-Uzbek seems to be a win-win relation. Chinese investments in Uzbekistan have exceeded 4 billion dollars, and China has already become Uzbekistan's largest investor and third largest trading partner. In addition, China has secured consistent gas supplies and a new market for Chinese products, while Uzbekistan has been able to attract Chinese investment in its energy sector with spillover effects in other sectors of its economy.¹²²

¹²² Fazilov F. and Chen X., China and Central Asia: A Significant New Energy Nexus, *The European Financial Review*, April 19, 2013.



Sources: "China's Worldwide Quest for Energy Security" International Energy Agency 2000;

3.2 Uninterested Help? China's Energy Diplomacy and its Foreign Aid strategy

China is currently exploiting its huge dollars' reserves to put in place a global foreign aid policy, moving from Africa to Asia, from Latin America to Oceania. This global foreign aid policy, performed through the extension of several types of loans and aid, according to the circumstances, serves both the interests of the recipient countries and of China. If, on the one hand, China acquires growing influence in several regions around the world, so being able to influence and secure the local energy market, on the other hand the recipient countries experience the advantages of the Chinese loans, addressed at developing local infrastructure and at enhancing bilateral and multilateral cooperation. China, as any other country, has strong interests in investing in each of these regions, especially in those sectors such as transportation and energy; the most advanced the infrastructures of a given country are, the largest is the saving deriving from the elimination of additional costs due to infrastructural backwardness. Chinese policy of energy diversification and resizing of dependence from the Strait of Malacca resulted in infrastructural projects such as the Sino-Burmese oil-and-gas pipelines, effectively operational since 2009, and in the projected Pak-China oil pipeline, still in design phase.

3.2.1 Chinese Global "Assistance" Policy

In its continual search for "energy", China has developed several

different ways to maintain friendly relations with countries producers and suppliers of raw materials and energy resources, and even with those countries potentially able to disrupt the SLOCs or sabotage the pipelines. We have already mentioned above the "loan-for-oil-and-gas" deals, i.e. those kinds of long-term loans (usually not less than 10 years) through which China is able to secure a certain amount of supply for a given period of time (hundreds-thousands barrel per day as for what concerns oil, billion cubic meters per year as for what concerns natural gas, and so forth). These loans have been one of the main drivers of the Chinese energy diplomacy and of the Chinese foreign economic policy. In 2011, in order to clarify and classify the ways in which China operates globally, and increase its transparency, the Chinese government published the *White Paper on China's Foreign Aid*. This paper explains in details how China foreign aid's strategy works, which ones are its main drivers, and which are the major purposes. The rationale governing Chinese foreign aid strategy has to be identified in the "Eight Principles Governing China's Aid to other countries, dating back to Premier Zhou Enlai. The principles are:

1. China's provision of aid is based on a mutual gain relation rather than on one-sided grants.
2. China never attaches conditions or ask for any privileges.
3. China will provide interests-free or low-interests loans as economic aid, with the possibility to postpone the payments if necessary.
4. China's provision of aid aims at the independent development of the recipient countries rather than to an excessive reliance on

China.

5. China aims at developing projects that generate quick results with small investments.
6. China will provide Chinese manufactured goods at a competitive market price.
7. China will provide technical assistance, training and best-quality equipment.
8. Chinese citizens sent to work in those nations receiving Chinese aid will not be able to make any special demands or ask for privileges, and will be paid at the level of their host country nationals.

This old structure, even if still considered as an important general framework, has been modified along the decades, and updated for present days. The 2011' White Paper contains the new provisions and directives for foreign aid strategy, as well as its classification. A very important remark present in the White Paper regarded the fact that Chinese aid as to be seen and understood as a new cooperation model, with its proper characteristics, and that falls into the category of "South-South Cooperation". Three are the main "new" forms of loans, i.e. *Grants, Interest-Free Loans and Concessional Loans*, according to the entity and consistency of the project in question:

- *Grants* are mainly addressed to the development of infrastructural projects such as hospitals, schools, low-cost houses, as well as water-supply projects; all those small and medium projects for the creation of a social welfare. In addition, all those projects related to human resources, developmental cooperation, technical

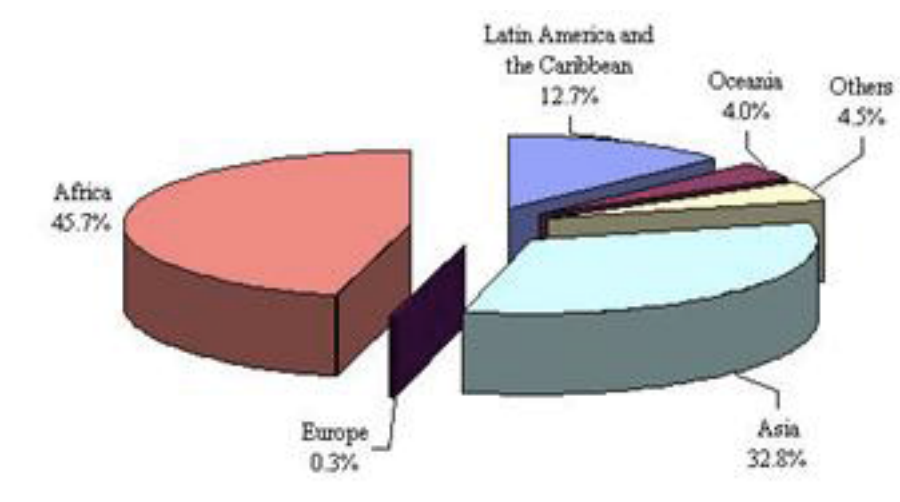
assistance and humanitarian emergency aid fall into the category of grants.

- *Interest-free loans* are mainly addressed to the construction of public facilities, and more in general to those projects aimed at improving people's livelihood. These loans usually have duration of 20 years, and are divided into two phases of approximately ten years each, the first of enjoying of the loan and the second of repayment.
- *Concessional loans* are mainly addressed to the construction of medium-to-large productive infrastructural projects, able to generate both economic and social benefits. The main projects regard the construction of high-speed railways, train infrastructures, mechanical and electrical plants, oil refineries and gas plants, and so forth. The *Export-Import Bank of China* is the organism in charge of providing Concessional Loans, usually with an annual interest between 2-3%; the period of repayment is identified at between 15 and 20 years.¹²³

Chinese assistance is usually preferred to the Western one inasmuch as it provides loans and investments, even consistent amount of money, very quickly and easily, without attaching conditions as for what concern political, social, or domestic issues not properly related to the loan. China often invests in geographic areas and sectors marginalized by both Western countries and multinationals because considered too unfriendly or infeasible, and in infrastructural projects that leave clear and tangible signs, i.e. cultural centers, stadiums, highways, train railways and so forth.

¹²³ White Paper on China's Foreign Aid, Information Office of the State Council, The People's Republic of China, April 2011, Beijing.

In addition, the manner in which China performs its foreign aid program has a very powerful symbolic reference; it never talks about aid programs but of "assistance", strongly highlighting the relevance of that single particular relation to China, thus strengthening the above mentioned "South-South cooperation".



Source: White Paper on China's Foreign Aid, Information Office of the State Council, The People's Republic of China, April 2011, Beijing.

The chart above shows the recipient regions of the Chinese foreign aid programs, and the percentage provided for each area. Africa accounts for the highest percentage, followed by Asia, Latin America, Oceania, etc. Chinese investments in *Africa* are largely related to its need to secure oil-and-gas supplies from the region. African oil accounts for approximately the 80% of China's trade in the area, and almost the 20% of its total crude oil imports. More than two-third of the Chinese investments are located in energy-rich countries such as Angola, Nigeria, Ethiopia, Sudan, Equatorial Guinea and the Democratic Republic of Congo. As stated above, in countries such as Angola, Sudan and the Republic of Congo,

China prefers the "loan-for-oil-and-gas" deals. In 2008, the overall amount of the bilateral trade China-Africa amounted to 106 billion dollars.¹²⁴

As for Africa, the main goal of Chinese foreign aid programs in *Latin America* is that of securing energy supplies, i.e. oil from Venezuela and Brazil, and opening new markets for Chinese manufactured goods. Moreover, China is heavily interested in agricultural and meat imports, considering the soaring domestic demand for food, especially meat, due to the constant industrialization and urbanization. China's largest trading partners in the region are Brazil, Mexico, Chile, Argentina and Peru, with the obvious addition of Venezuela, whose bilateral relation with China has been steadily increasing in relevance. In 2008, the overall amount of the bilateral trade China-Latin America amounted to 142 billion dollars.

Southeast Asia has to be considered a special recipient of Chinese loans and investments, inasmuch as all the economic activities in the region seem to be more addressed at creating long-term peaceful environment for bilateral relations than short-term economic benefits. Some commentators defined Chinese overall strategy towards the region as the "Charm Offensive" strategy, aimed at enhancing the bilateral and multilateral relations and cooperation.¹²⁵ China is the most important supplier for what concerns military and economic assistance for Myanmar, Cambodia and Laos, and it is also very active in funding infrastructural projects, especially those energy-related, as for example

¹²⁴ Lum, T. (2009) China's Assistance and Government-Sponsored Investment Activities in Africa, Latin America, and Southeast Asia, *Congressional Research Service*, November 25, 2009, pp 1-23.

¹²⁵ Shaofeng, C. (2010) China's Self-Extrication from the "Malacca Dilemma" and Implications, *International Journal of China studies*, Vol. 1, No. 1, January 2010, pp. 1-24.

the Sino-Burmese oil-and-gas pipelines, recently completed.¹²⁶ Moreover, China provides funding to Vietnam, Philippines and Indonesia for developing railway infrastructures, hydroelectric plants and ship building facilities. In 2008, the overall amount of the bilateral trade China-Southeast Asia amounted to 230 billion dollars. In the period 2002-2007, for what concerns economic assistance and infrastructural investments, Africa, Latin America and Southeast Asia, accounted respectively for 33, 26.7 and 14.8 billion dollars.¹²⁷

3.2.2 Infrastructural engineering to bypass the Strait of Malacca

In its willingness to diversify as much as possible its energy supplying, so as to be dependent the lesser possible on shipping through the Strait of Malacca, China has paved the way for several infrastructural projects, i.e. oil-and-gas pipelines in Myanmar and Pakistan, the possibility of financing the creation of a canal through the *Kra Isthmus*, in Thailand, or even the possibility to divert, with little additional costs, the supertankers directed to China to the *Sunda*, *Lombok* and *Makassar Straits*, in Indonesia.

Sino-Burmese Oil-and-Gas Pipelines

The idea of the construction of *Sino-Burmese oil-and-gas pipelines*, as the majority of the energetic infrastructural projects promoted by China along the last decade, has been imagined after (and probably as a

¹²⁶ Lum, T. (2008) U.S. Foreign Aid to East and South Asia: Selected Recipients, Updated October 8, 2008, pp. 1-41.

¹²⁷ Lum, T. (2009) China's Assistance and Government-Sponsored Investment Activities in Africa, Latin America, and Southeast Asia, *Congressional Research Service*, November 25, 2009, pp 1-23.

consequence of) the 2003's American invasion of Iraq. Talks about the possibility of financing the project had already started in 2004, and the following year the "Refining Industry Development Overview", prepared by the National Development and Reform Commission (NDRC), definitely stated the feasibility of the project. The pipelines would run from the port of *Sittwe*, in Myanmar, to the municipality of *Kunming*, *Yunnan* Province, in Southwest China, to be then connected to the national oil-and-gas pipelines' network. The construction of both the pipelines started in 2009, and they were officially completed in 2013. The Sino-Burmese oil pipelines, with an overall length of 771 km and an overall cost of 1.5 billion dollars, is projected to run an initial capacity of 200,000 bpd, with possible increase to a maximum of 400,000 bpd if coupled with the construction of technologically advance refineries both in Kunming and Chongqing. The Sino-Burmese natural gas pipeline, with an overall length of 2,806 km and an overall cost of 1.04 billion dollars, is projected to run alongside the oil pipeline to Kunming, to be then expanded through the South of China, to reach *Guizhou* and *Guangxi* Provinces. The projected maximum discharge of the natural gas pipeline would be of approximately 12 billion cubic meters (bcm) per year. The constructions of the pipelines have been performed by an enterprise jointly owned by the Chinese CNCP (50.9% shares) and the state-backed Myanmar Oil & Gas Enterprise (49.1%).¹²⁸ The project has to be analyzed from two different points of view: on the one hand, and from an economic perspective, these kinds of infrastructural projects promote inland economic development, create jobs and stimulate the

¹²⁸ Leung, G.C.K. (2011) China's Energy Security: Perception and Reality, Hong Kong Energy Studies Centre, Hong Kong Baptist University, Kowloon Tong, Hong Kong Special Administrative Region 2011, pp. 1330-1338.

overall development of provinces such as *Yunnan, Tibet, Guizhou, Guangxi* and the municipality of Chongqing, less developed than the Chinese Eastern provinces. Moreover, in each of these provinces, arrival points of pipelines, there are several talks about the feasibility of the construction of stocking and refining plants in order to increase the pipelines capacity. Thus, the cost of the pipelines' construction would be compensated by the enhancement of Chinese domestic pipelines' network, making easier and faster for oil and gas to reach the overall Chinese territory. Moreover, such projects could help to appease the socio-political situation in region very far from the central power and thus harder to manage, especially when located in border's regions, i.e. Xinjiang Autonomous region. On the other hand, from a security perspective, Sino-Burmese pipelines, as potentially any pipeline, do not grant the level of safety required. Not only they pass through Burmese regions pray of ethnic separatism and thus with risks for potential sabotage, they also provide an easy target for strikes in case of wars.¹²⁹

The Pakistan-China Oil Pipeline

The possibility to build-up a Pakistan-China oil pipeline falls within the Chinese overall strategy of diversifying its supply sources and reducing its dependence on the Indian Ocean and on the Strait of Malacca. Since Pakistan, and especially the port of *Gwadar*, became one of the Chinese "pearl" in the overall "String of Pearls" strategy, and China acquired its managing control, the bilateral relations have steadily improved. Not only Pakistan could currently perform the role of potential troublemaker

¹²⁹ Erickson A.S., and Collins G.B. (2010) China's Oil Security Pipe Dream: The Reality, and Strategic Consequences, of Seaborne Imports, *Naval War College Review*, pp. 89-112.

for India's operations in the Indian Ocean, clearly in favor of China, it could also help the latter in its plan to slowly bypass the Strait of Malacca. The potential Pak-China pipeline would run from the ports of Gwadar, through the port of Karachi, to the city of Kashgar, in Xinjiang Autonomous region. The pipeline would have a potential capacity of 250,000 bpd of crude oil, even if the costs related to the lift of oil could result much higher than any other pipeline currently functioning, given the geographical difficulties present along the route. In fact, from the sea level of the port of Gwadar and Karachi, the oil should be pumped up to the approximately 5 km high *Khunjarab* Pass, requiring immense pumping power and constant supply of electricity, not easy to grant in a country like Pakistan, where terrorist groups and insurgent commandos threaten the overall stability. Moreover, given the harsh temperature present at those heights, there should be also the potential problem of oil freezing.¹³⁰ However, and notwithstanding the several concerns and doubts that have been raised over the project, the Chinese and Pakistani government have steadily continued their talks, reaching a primary understanding over the feasibility of the project. In July 2013, after a meeting between Pakistani Prime Minister Nawaz and Chinese President Xi Jinping, the project received a further boost ahead. In fact, the two leaders paved the way for a possible connection Iran-Pakistan-China through the so-called "Energy Corridor" to Western China.¹³¹ In the past, Iran had already advanced the hypothesis of building-up an oil-refinery in the port of Gwadar, with a potential capacity of up to 400,000 bpd. The direct connection among the three countries, bypassing the shipping

¹³⁰ Ibid.

¹³¹ Bhutta Z., Pak-China pipeline project: Nawaz to offer China the shortest oil route, *The Express Tribune*, July 5th, 2013.

SLOCs through the Indian Ocean and the Strait of Malacca, would be a great breakthrough for Chinese energy security concerns.¹³²

3.2.3 A Comparative Analysis of Oil imports' costs: Supertankers vs. Pipelines

The main problem in dealing with supertankers and pipelines, apart from the security problems to which both of them, for different reasons, are constantly concerned, is that of the costs associated to their construction and maintenance. In fact, taking as an example the construction of the Sino-Burmese oil pipeline, for an overall cost of 1.5 billion dollars (and with a prospected capacity between 200,000-400,000 bpd), it would have been possible to buy 13 new Very Large Crude Carrier (VLCC), or even 18 in case of purchasing second hand VLCC. Each VLCC is assumed to have the capacity to carry approximately 2 million barrels. Given that it takes for each VLCC approximately 11 days to move from the most important ports and terminals in Middle East to the Chinese territory, and that a round trip would conservatively take 25 days (without stopping), each VLCC would be able to provide approximately 80,000 bpd. Thus, in case of 13 "new" VLCC, the overall potential amount shipped daily to China would be of more than 1 million barrels, while in case of 18 "second hand" VLCC that amount would raise to approximately 1.5 million barrels. The example of the purchasing of VLCCs acquires even higher relevance in light of the fact that Chinese oil imports performed through supertankers are all but the 10%

¹³² Bhutta Z., Oil pipeline: Chinese team arriving to hold crucial talks, *The Express Tribune*, August 20th, 2013.

performed by foreign companies shipping to China. Thus, in case of massive conflicts or embargoes, several shipping companies could potentially be denied to ship to Chinese ports and oil terminals, as currently happens with Iran.¹³³ In addition to these reflections, it is worth considering the fact that crude oil is tradable at any points in its supply chain; this means that it is traded to get the best available price. Crude oil being sold in the market is usually purchased two months in advance with respect to the final shipping date. In fact, once the companies of a given nation purchase crude oil from producers, the second step is to hire shipping companies with the task to perform the "material" supplying. Once en route to its "primary" final destination, the oil could anyway be sold to the best offer, and thus re-routed towards the new destination.¹³⁴ Moreover, for what concerns the specific case of the Strait of Malacca and its security problems, it would be possible, at any moment, to divert the route through the *Sunda* and *Lombok* straits, two other Indonesian maritime chokepoints located to the South of Malacca. In fact, the Sunda Strait, separating Java from Sumatra, with an estimated extra 1600 km (or approximately 3 days more of trip) could be a viable route in case of potential disruptions in Malacca. It seems noteworthy to highlight that its geographical conditions, i.e. its 3.2 km wideness and its 18 meters shallowness, would not permit an easy passage for vessels with a tonnage like VLCCs. The Lombok Strait, between the islands of Bali and Lombok, with an estimated extra 2960 km (or approximately 5 days more of trip), could be a much viable

¹³³ Sharan, T. and Thiher, N. (2011) Oil Supply Routes in the Asia Pacific: China's Strategic Calculations, ORF Occasional Paper #24, Observer Research Foundation, pp. 1-30.

¹³⁴ Singh, M. (2013) Malacca: No More a Dilemma for China?, *Scholar Warrior*, Spring 2013, pp. 45-56.

solution, given that its narrowest point is about 18 km wide, and its shallowest point is about 250 meters deep. This route could be used even for vessels with huge tonnage such as the Ultra Large Crude Carrier (ULCC), able to ship up to 4 million barrels per trip. These re-routings would cost between 1 and 2 dollars more per barrel, with oil prices more or less stable at around 100-105\$ per barrel.¹³⁵ Thus, considering the dispute supertankers vs. pipelines merely from an economic point of view, the former would largely be more efficient than the latter. However, as emerged from what stated all along this dissertation, Chinese energy security issue has to be considered from several points of view, especially the geopolitical one. The construction of oil-and-gas pipelines, together with all the other infrastructural projects China has developed or is about to develop, is just one part of the overall strategy of acquiring growing influence in countries producers and exporters of energy sources. Furthermore, through the development of a international pipelines' network under its "partial control", China increasingly expands its position in those countries through which the energy sources must transit. From the Chinese perspective, all the infrastructural projects able to bring nearer far countries are considered as an improvement and an enhancement for its international trade, and consequently possible new markets for Chinese products.¹³⁶

¹³⁵ Sharan, T. and Thiher, N. (2011) Oil Supply Routes in the Asia Pacific: China's Strategic Calculations, ORF Occasional Paper #24, Observer Research Foundation, pp. 1-30.

¹³⁶ Singh, M. (2013) Malacca: No More a Dilemma for China?, *Scholar Warrior*, Spring 2013, pp. 45-56.

Additional Time for One VLCC's Oil to Reach China through Alternative Routes		
Alternative Routes	Extra Days	Total Days per Trip
Malacca Strait	0	11.3
Sunda Strait	2.5	13.8
Lombok Strait	4.8	16.1
1. Estimated at a speed of 14 knots 2. 7000 km between Saudi Arabia and China. Extra 1600 km to go through Sunda Strait. Extra 2960 km to go through Lombok Strait		

Source: Sharan, T. and Thiher, N. (2011) Oil Supply Routes in the Asia Pacific: China's Strategic Calculations, ORF Occasional Paper #24, Observer Research Foundation, pp. 1-30.

Cost of Building Pipelines vs. Cost of Building Ships				
	Total Cost (USD)	Cost per Km (USD)	Equivalent Number of New VLCC Tankers	Equivalent Number of Used VLCC Tankers
Kazakhstan-China Pipeline	\$700,000,000	\$730,000	6	8
Burma-China Pipeline	\$1,500,000,000	\$630,000	13	18
Kazakhstan-China Pipeline	\$700,000,000	\$730,000	6	8
Russia-China Pipeline	\$800,000,000	\$660,000	7	9.5
1. Based on VLCC carrying 2,000,000 barrels of oil (Maritime Connector) 2. Cost of new VLCC tankers approximately \$116 million and five-year-old tankers approximately \$84 million in 2009 (UNCTD, 2010)				

Source: Sharan, T. and Thiher, N. (2011) Oil Supply Routes in the Asia Pacific: China's Strategic Calculations, ORF Occasional Paper #24, Observer Research Foundation, pp. 1-30.

3.3 Chinese Strategic Petroleum Reserve (SPR): A shield against potential disruptions

The increasingly growing weight in the international community, coupled with growing needs from an energetic point of view, requires China to develop a system able to prevent, or at least soften, the possible consequences of international supply disruptions. For what concerns oil, currently the most contended among the energy sources, the solution has been found in the development of a Strategic Petroleum Reserve (SPR). Such reserve normally consists of a given amount of million of barrels of crude oil, corresponding to a certain amount of days of survival according to the domestic oil imports and consumption's rates, to be released in the national market to curb the effects of price volatility or of potential disruptions. The development of a strategic petroleum reserve could usually require several years according to the size and level of consumption of a country, and it is usually influenced by the average price of crude oil in a given period of time (the less the crude oil costs per barrel, the more is possible to retain and accumulate in a SPR). China started the development of its own national strategic petroleum reserve in 2001, according to the dispositions contained in the Chinese "10th five-years plan" (2001-2006), with a projected three-stages process. The sum of the three stages should be able to totalize, through 2020, an overall target of more than a hundred days of reserves at 2009 net imports rates, very near to the forecasts attributed to the American and Japanese strategic petroleum reserves of about 100 days.¹³⁷ The first stage of the process of constitution of the reserve, inaugurated in 2001,

¹³⁷ Singh, M. (2013) Malacca: No More a Dilemma for China?, *Scholar Warrior*, Spring 2013, pp. 45-56.

was completed in 2009, with an estimated 102 million barrels, or approximately 26 days at 2009 net imports rates. The sites identified to accumulate the reserves of the first stage had been the following:

- *Zhenhai*, in Zhejiang Province, with an estimated 32.7 million barrels reserve, completed in 2006.
- *Zhoushan*, in Zhejiang Province, with an estimated 31.4 million barrels reserves, completed in 2007.
- *Dalian*, in Liaoning Province, with an estimated 18.9 million barrels reserve, completed in 2008.
- *Huangdao*, in Shandong Province, with an estimated 18.9 million barrels reserves, completed in 2008.¹³⁸

The second stage of the process started with the construction of new refining and stockpiling fields to be filled as far as they are completed. The selected sites are *Dushanzi*, in the Xinjiang Uyghur Autonomous Region, *Lanzhou*, in Gansu Province, *Jinzhou*, in Liaoning Province, *Huizhou*, in Guangdong Province, *Jintan*, in Jiangsu Province, *Zhanjiang*, in Guangdong Province, *Shanshan*, in Xinjiang Uyghur Autonomous Region and municipality of *Tianjin*. The overall second stage, to be completed for 2012, should have a designed capacity of almost 170 million barrels, or approximately 44 days at 2009 net imports level.¹³⁹ Estimates for the third stage's facilities, to be completed for 2020, are of about 200 million barrels of potential capacity that added to the first two stages' capacity should totalize more than 470 million barrels. In addition

¹³⁸ Sharan, T. and Thiher, N. (2011) Oil Supply Routes in the Asia Pacific: China's Strategic Calculations, ORF Occasional Paper #24, Observer Research Foundation, pp. 1-30.

¹³⁹ IEA (International Energy Agency) (2012) Oil and Gas Security: Emergency Response of IEA Countries, People's Republic of China.

to these 470 million barrels, it seems noteworthy to highlight that the main NOCs, i.e. CNCP, Sinopec and CNOOC, had been authorized by the Chinese government to accumulate oil reserves in stocking fields independently from the governmental ones, for a planned total of approximately 210 million barrels. The overall amount of approximately 700 million barrels would grant approximately 120 days of reserves at 2009 net imports level, and approximately 90 days at 2009 consumption rate. Since May 2010, however, the SPR business had been opened also to several private enterprises, thus further increase the potential capacity of the Chinese final reserve.

Given the volatility of crude oil price, and its being dependent on the main geopolitical evolutions, especially in Middle East, the given target would be modified according to the situation. In addition, China's soaring consumption rates could contribute to a delay in the development of the third stage of the process. The "12th five-years plan" (2011-2015) contains several remarks about the need to improve the domestic energy infrastructure and the refining and stockpiling capabilities. This improvement could be reached by both building-up new plants and rationalizing and improving the available through new technologies' implementation. This element could be vital in the overall evaluation of a potential strategic petroleum reserve; rationalizing and improving the efficiency of the total domestic consumption, for example through the development of oil refining' advanced plants or low-consumptions technologies could definitely help the accumulation of reserves to be employed, in case of extreme need, both to influence the market and soften the effect of potential disruptions.

Chinese Strategic Oil Reserves			
Site	Completion	Million Barrels	Days of Net Imports at 2009 Levels
First Phase:			
Zhenhai, Zhejiang	2006	32.7	8.4
Dalian, Liaoning	2008	18.9	4.9
Huangdao, Shandong	2008	18.9	4.9
Zhoushan, Zhejiang	2007	31.4	8.1
Total		101.9	26.3
Second Phase:			
8 Locations	exp. 2012	170	43.8
Total		271.9	70.1
Third Phase:			
Undetermined	exp. 2020	204	52.6
Total		475.9	122.7

Source: Reuters

3.4 International Energy Markets: Pros and Cons of pursuing a more cooperative approach

Chinese search for raw materials, even if the diversification process is steadily advancing, both in terms of suppliers, i.e. Middle East, Africa, Central Asia, Latin America, and in terms of physical supplying infrastructures, i.e. the construction of several pipelines being promoted and built-up along the main SLOCs to accompany the supply through supertankers, cannot be delinked by the international "energies" market. China's huge reserves of dollars made it possible to secure very profitable "loan-for-oil-and-gas" deals with virtually every world big energy suppliers. However, China still buys the majority of its energy imports, and especially oil-and-gas imports, through the international commodity markets. This implies that, even if China is steadily creating a structure of "secured supplies", being the loan-for-energy almost a guarantee of success, it is still the Chinese approach to the market that makes it harder, or at least dangerous, the overall environment. China, since the 2006 G8 Summit St. Petersburg Declaration, had been pursuing a bi-directional policy as for what concerns its energy supplying. If, on the one hand, it continues to secure privileged deals with several world' largest oil-and-gas suppliers, and in certain cases deliberately helps countries at the border of the international community, i.e. Iran, on the other hand it strongly stresses the importance of the creation of a more cooperative and collaborative international environment for energy issues. The 2006 St. Petersburg Declaration, in fact, stated the need for more cooperative, transparent and open international energy markets, given the growing relevance the energy issue had been acquiring for the

world's largest stakeholders. In addition to this, the declaration stated the importance, or better the need, for the development of competitive markets able to grant access to each and every player, within an effective legal and regulatory framework.¹⁴⁰

Some commentators even affirmed the need for China to redraw its own concept of energy security through a more conciliatory model. A more collaborative approach could imply mutually beneficial evolutions for energy supplying, and avoid useless tension due to the lack of communication or of a common regulatory framework. Apart from the benefits for the international environment of China playing within the rules, its positive posture towards the international energy markets could result in its improvement for what concerns statistics, estimates and data, with potentially less distortion due to the opaqueness of the Chinese energy structure, and in its enhancement, considering that a stakeholder like China could make the markets safer and more reliable. Furthermore, China's full-membership in one of the most important international energy organization, the International Energy Agency (China currently participates as non-member country and cooperates only in certain projects), could imply several improvements, both for China itself and the international energy environment. Being the IEA mainly a forum of importing countries, greater coordination among its members, for example through policy coordination, development of common regulatory frameworks, the enhancement of the information sharing, and the provision of mechanisms to respond to energy emergencies, could

¹⁴⁰ Qinhu X. (2007) Global Energy Security, China's Energy Diplomacy and its Implications for Global Energy Security, *FES Beijing*, Briefing Paper 13, pp.1-8.

facilitate emergency oil sharing programs.¹⁴¹

The potential development of an effective and efficient international energy regime, i.e. the institution in charge of regulating and governing the relations among the major international energy powers, would require the willingness of all the major world powers to participate; the setting of rules, standards, and mechanisms for its functioning would only be the consequence of a more harmonious international energy environment. However, the current international energy regime is in constant modification, in consideration of the fact that it is strictly connected to the geopolitical needs and calculations of both energy importers and exporters, and to their changeable position within the international community structure. Moreover, the above-mentioned structure has been thought, developed and implemented by the developed countries, and according to the emerging countries forged in light of their interests and advantages. China, India and Russia, to cite three among the main actors in the international energy environment, are not members of the IEA, and do not show any real interests in deepening their collaboration with this agency, despite of statements or declarations.

China's main problem with the current structure of international markets regards its professed unreliability and untrustworthy. China considers the international markets, and especially the International Energy Agency, as mere instruments of the Western, and more specifically American, foreign policy. Its dislike is due to the fact that it is convinced that,

¹⁴¹ Giljum, J.P. The Future of China's Energy Security, *The Journal of International Policy Solutions*, Spring 2009 | Volume 11, pp. 12-24.

through the international institutions, the United States and its allies could exert a higher control over its activities being in possession of more detailed information and data. In Chinese perspective, the majority of the times, the international energy cooperation has been understood as bilateral trade and investment deals with oil exporting countries.

However, the multipolar evolution that has been observed within the international community, with the slowly erosion of the American unipolar primacy, seem to show a potential cooperative pattern. In an international perspective, China had been collaborating with the other major maritime powers to secure the SLOCs, and make the naval traffic the safer possible. Examples are both the Chinese experience in the Gulf of Aden, since 2009, and in the Strait of Malacca, through the sign of the Regional Cooperation Agreement on Combating Piracy and Armed Robbery against ships in Asia (ReCAAP), where China is engaged along with others in the struggle against piracy and terrorist attacks. In a domestic perspective, China faces serious threats; it is currently the world's largest emitter of greenhouse gases, thus having a consistent share in the climate-change issue. The 2006 St. Petersburg Declaration, apart for promoting a more efficient and mutually beneficial cooperation, stated the need to develop a resource-conserving and environmentally friendly society, boosting the cooperation and information-sharing for what concerns renewable energies.¹⁴² Chinese contributions to the overall international energy environment could also come in the sector of renewable energies, in which it is currently the largest technologies'

¹⁴² Kennedy, A.B. (2010) China's New Energy-Security Debate, *Survival*, vol. 52 no. 3, pp. 137–158.

producer and developer.¹⁴³

Chinese doubts for what concerns a deeper participation in the international energy market and a more cooperative approach to the energy security issue are mainly of geopolitical origin. China currently faces a kind of encirclement, in Chinese perspective directed by the United States, that generates mistrust towards a system that China itself sees as dominated and orchestrated by the American "competitor". The energy security issue thus assumes a different relevance in light of this belief, and the majority of its countermoves are to attribute to its need to get out from this geopolitical strategic trap.

¹⁴³ Qinhua X. (2007) Global Energy Security, China's Energy Diplomacy and its Implications for Global Energy Security, *FES Beijing*, Briefing Paper 13, pp.1-8.

CONCLUSION

The Strait of Malacca poses serious potential threats to the Chinese energy security for several reasons. China is heavily dependent on the Strait for its energy supplying, and all the solutions currently being implemented by China seem to be effective only in compensating the new hundreds-thousands barrels per day required by a continuously soaring imports' demand. The presence of so many competitors able to disrupt the fluxes over the Strait virtually in any moment leaves China with the existential need of enhancing its supply diversification. India, apart from the United States, seems to be the most important Chinese competitor for what concerns the control and managing of the SLOCs crossing the Indian Ocean. The competition is fierce, and it is not only centered over the energy issue; it acquired a global geopolitical perspective due to the fact that both countries have, more or less covertly, affirmed its stance to become global naval power able to patrol all the Oceans. China, in order to make it harder for India to create troubles, heavily invested in countries such as Pakistan, Sri Lanka, Bangladesh and Myanmar. The facilities China contributed to build up in these countries can be considered as a sort of encirclement strategy at India's damages. The same geopolitical competition can be noticed for what concerns the region adjacent to the Chinese territory, i.e. South and East China Seas, with Japan. Researches affirming the presence of huge reserves of oil-and-gas near the coasts of Paracels and Spratly islands only exacerbated a situation already tense due to the historical development that had characterized Sino-Japanese relations. Here, the situation is potentially more destabilizing given the several islands'

disputers to which China has to respond for its behavior. The American expansion towards the Asian region, with the overall aircraft carriers' disposition changed for the first time since the end of the Second World War, with the 60% deployment through the Asian region, clarifies what will be the majesty of the American presence. Since the United States would be able to influence the development through the Strait of Malacca, both through its military presence or through its soft power, China would never be quiet and safe. The littoral countries, i.e. Indonesia, Malaysia and Singapore, seem more prone to argue on trivial reasons that try to cooperate on making the Strait safer. Moreover, if on the one hand China could utilize, with Indonesia and Malaysia, the fact of being an emerging country delinked from the old Western powers, on the other hand China faces the competence of the United States for what concerns Singapore, deeply involved in trying to grant free passage through the Strait to the American navy. This potential development could bring China on the verge of collapse. The poor and mostly inefficient patrolling provided by the littoral countries adds to the potential risks of a blockade those of piracy and terrorist attacks, further increasing the danger on the gateway.

As easily understandable in observing Chinese evolution and growth, the energy security issue assumes a very peculiar feature in the overall national priority structure, often enmeshed to geopolitical and national survival issues. Several are the energy decision-makers, with an overlapping between governmental organism, as for example the NDRC, the NEA and the NEC, and private and semi-private companies, such as the National Oil Companies (NOCs). This double-level sometimes flows

in inefficiency and potential corruption, making the central power accountable for faults not necessarily perpetrated. It seems noteworthy to highlight that the NOCs, even with the higher degree of independence conceivable, have to be considered mainly as a geopolitical instrument in the hands of the Chinese Communist Party. This latent control derives mainly from the need to secure a consistent amount of supplies, both of oil and gas, in case of potential disruptions. Chinese government's strategy thus takes for granted that the international acquisitions of shares in international oil-and-gas companies, together with the purchase of oil fields all over the world, could possibly be diverted to China in case of a potential blockade, embargo or major international disruptions. The evolution of the energy security concept thus passes through the improvement of the bilateral relations (for China seems a "taboo" to talk about international cooperation) with oil-and-gas producers and suppliers. China is strictly dependent on the Middle East oil, and especially from countries such as Saudi Arabia and Iran, together accounting for more than the 30% of Chinese oil imports. The enhancement of the relation with the former is mainly pursued through loan-for-oil deals and joint infrastructural projects, as for example the construction of refining oil fields or new spurs for the pipelines running through the Saudi territory. For what concerns the latter, Iran, China is pursuing a multi-vector aid policy. China is constantly supplying Iran with Chinese manufactured goods, primary necessities and dollars. In fact, China continues purchasing immense amount of barrels of crude oil from Iran, approximately 500,000 bpd, with projections to increase its imports as the overall situation for Iran gets worse in light of the international sanctions. Thus, China is slowly increasing its weight on

Iran by helping it both domestically, granting loans and stuff's provision to avoid potential demonstrations and continue buying crude oil, and internationally, by granting through its veto at the UN Security Council a minimum level of international protection. China's dependence over the African oil is steadily increasing too, especially from countries such as Angola and Sudan, accounting together for approximately the 20% of Chinese oil imports. Sudan owes much to China, one of the few international investors likely to invest in a "basket" country like Sudan in the midst of a civil war. China has steadily acquired influence over Sudan through the infrastructural projects financed and developed, and by a consistent campaign of purchasing of Sudanese oil fields; it seems noteworthy to highlight that Sudan is listed among those countries central for the success of the Chinese "String of Pearls" strategy. China, however, does not maintain relations with oil and gas producers only to enhance its energy supplying. In fact, China views some potential favorable implications from a geopolitical point of view. Among the main energy provider, and especially for what concerns oil, it is possible to identify countries such as Russia, Iran, Syria and Venezuela. All these countries share mainly two features: the first is the consistent weight they can exert over the world energy supplies' routes, being them among the main producers and exporters; the second is the deep enmity and aversion towards the United States. Thus, China takes advantages of both these features by forging an alliance with potential repercussions on its energy supply, and that could go against the United States if oil price remains over 100 dollars per barrel. It is possible to infer, thus, that China, through its huge amount of dollars' reserves, acts on the market to influence its prices, so as to give strength to its "team of

troublemakers". All the stated above, however, helps certifying the features and consistency of the "Malacca Dilemma", being the vast majority of crude oil and gas bought from the regions shipped through Malacca.

China, in its paths to diversify its energy supplies, is pursuing a multi-regional policy of loans-for-oil-and-gas deals and of infrastructural engineering. It is steadily securing supplies of both oil and gas from the Central Asia countries, according to the IEA the second largest region for reserves of both oil and gas. Kazakhstan and Turkmenistan, apart from Russia, are the main Chinese energetic partners, the former accounting for the highest share in oil supplying and the latter accounting for the highest share in natural gas supplying. The oil-and-gas pipelines through which the supply is effectively performed are the Kazakh-China Oil Pipeline (KCOP) and the Central-Asia-China Pipeline. Both of them have been co-funded by the Chinese NOCs, which detains a share in the companies running the pipelines. In this way China acquires managing power over the pipelines, to be redirected to the Chinese territory in case of international disruptions. These two pipelines are not the only one directly funded by China. In fact, the Chinese government, always through its NOCs, funded pipelines' projects in both Myanmar and Pakistan. The former pipelines, one for oil and one for gas, have been completed and became operational in 2013. Even if several concerns had been raised about the security of the project, Chinese government decided to pursue the project seeing a potential different supply route, able to bypass the Strait of Malacca, as a potentially good solution. China has also initiated talks with the Pakistani

government for the construction of a pipeline running from the Chinese directly-managed port of Gwadar through Karachi to the Chinese territory. Also for this project several concerns had been raised about the security and feasibility, coupled with the huge costs the project would imply. However, as for the Sino-Burmese pipelines, the potential diversification, in Chinese perspective, worth the money spent. The talks seem already arrived to the final stage. In its intent to increase its control over the international energy markets, and to be able to influence the market prices, China since 2001 started the construction of a Strategic Petroleum Reserve (SPR), to accumulate the products of its diversification's policy. Until now the picture presented is that of a Chinese government exclusively interested in securing a constant energy supply. Even if the situation is not that different from what stated above, it seems noteworthy to highlight the presence of some Chinese commentators, experts in energy issues, arguing for a more cooperative approach towards the market and its main actors. Not only they highlight that the highest share of imported crude oil comes from the market, they also affirm that a more cooperative approach could imply for China more supplies at lesser prices, thus in line with the above-mentioned Chinese version of the energy security concept.

The situation is in continuous evolution, especially now that the geopolitics seems to overcome the objective best choices. China does not trust the international energy markets, and more in general all the institutions related to them. The international energy community trusts China from time to time, thus increasing Chinese mistrust and dislike. Geopolitical calculation and the recent forging of the "Axis of Evil" let

us consider that the situation will not change, in the short term, towards a more cooperative approach. Instead, all the features point to a further departure of the Chinese position from the international energy community. China has been composing, through the empowerment of the "Axis of Evil", a coalition able to grant energy supply and markets for its products in exchange for loans. Often the best relations are not the ones moved by sincere feelings but those animated by pure mutual convenience.

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