AALBORG UNIVERSITET

What are the reasons for the closer and closer energy dialogues between the European Union and China?

什麼原因促使歐盟和中國之間就能源的對話日益緊密?

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Abstract

This thesis attempts to illuminate the Sino-European relationship in the area of energy resources and consumption. Current events show China and the European Union working together more and more closely in energy management. I try to find the reasons for this and summarize the interests behind the cooperation. Political rapport cannot exist between two great powers without "common good"; while they may not benefit equally, certainly neither suffers from their relations. I try to present the evolution of their interaction from the beginning. I examine this issue from the perspective of the European Union. By analyzing the history of their energy consumptions, the current energy situations and the development of their relationship, I address the main question: ***What are the reasons for the closer and closer energy dialogues between the European Union and China?***

Its sub-question concerns the particular motivations of the European Community for changing its energy policy and turning to China: what are the goals behind its strategy? ***Why has the European Union changed its energy policy so that it now regards China as one of its main partners in the energy issues?***

I use two famous theories, Realism and Neo -Liberalism, as tools of my analysis to examine the relation between security and interdependence concerning the EU-China cooperation. I focus on oil, gas and coal, fossil fuels whose value is rising as reserves diminish.

After analyzing the EU's and China's energy policy according to the elements of Realism and Neo-Liberalism I draw conclusions from the findings discovered during my research. We can see that 2006 was a milestone in the EU –China relationship. By that time both the EU and China had realized the necessity of their higher level corporation because of their common political and economic interests. These interests are for example the pressure of the USA, the shift of the world economic center from West to Asia, the common energy operation fields, the dropping amount of energy sources and China gains legitimacy.

I have chosen this subject not only because of the importance of energy issues, but also because of the great effect of such issues on international policy. In the process of my research I did not find any essays addressing this particular segment of the EU-China energy cooperation in adequate depth.

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I. Introduction

Energy has become one of the most important fields of international policy since many countries have become aware that energy sources are finite. We can classify countries into different groups by their energy reserves. The country which has relevant energy sources can be called the "supplier" and the country without any or enough energy reserves can be called a "buyer." "Suppliers" realized their energy advantages and started using them as the new tools of international policy. They know that all countries need energy but only a few have it, so exporting countries have economic leverage according to their resources. "Buyers" are more and more dependent on "suppliers," as the value of energy on the international market increases.

Considering the above mentioned principle I have selected the European Union and China as two main actors of my project. According to the definition above, both the European Union and China are "buyers." Which raises the question: why are the European Union and China making closer and closer cooperation with each other in the energy field, when both of them are "buyers"? One can understand perfectly tight collaborations between "buyers" and "suppliers" in order to secure their commerce, as is the case between the EU and Russia. However, the reasons for tight cooperation between two "buyers" and why the tight cooperation is beneficial to both parties are less clear and worth investigating.

The European Union was the second largest energy importer in 2008, after the USA. The EU's energy demand has been growing since starting its expansion. According to the Green Paper of the European Commission in 2006, the level of the dependancy on external sources was 50 % in 2006. The Green Paper estimated that the energy dependancy level would reach 70% in 20 to 30 years. The European Union imports oil, natural gas and coal. Though the EU has its own sources of all these fossil fuels, these sources are not nearly plentiful enough and some of the sources would be even more expensive to exploit than it would be to buy comparable quantities elsewhere[1].

In contrast to China, the European Union has existed as a relevant consumer on the global energy market for a long time because of its early industrialization. European economic growth was more gradual and thus more balanced. It is the EU's big advantage, because the EU could develop its common energy and security policy slowly, step by step. Even since the

[1] http://europa.eu/documents/comm/green_papers/pdf/com2006_105_en.pdf , 28.02.2010. (Communities, 2006)

beginning of the European Union, the energy issue has been an important element of its integration process[2]. The conventional energy security policy of the European Union was changed drastically in the last few years. The EU has been highly dependent on other states because of its significant energy demand. The aim of the new EU's energy security strategy is to diversify energy import among different exporter countries. Furthermore, the EU plans to establish new relationships with other possible energy suppliers[3]. Finally, the European energy and security policy has a new direction for energy efficiency focused on the better usage of already existing sources.[4]

Studying the past few decades, the development of China's energy market can be divided into three stages. The first stage covers the period from 1953 to the early 1970s. During this time China's energy consumption grew relatively slowly and domestic production could follow it. The second period was from 1973 to the beginning of early 90's, in which total energy output exceeded total consumption with a moderate annual growth rate. The third began in 1992. Since then China's energy consumption has overtaken domestic production and the country has become a net energy importer[5].

Today China is the second largest energy consumer in the world after the USA[6]. China's primary energy consumption is now equivalent to a fifth of OECD total. That is one tenth of the world's total primary energy consumption. The International Energy Agency expects that China alone will be responsible for 23 percent of the world's primary energy demand increase between 1995 and 2020. According to Dale Allen Pfeiffer, the growing energy demand of China will bring it into conflicts with the developed world[7].

China has its own energy sources such as oil, natural gas and coal, but they are not enough to serve the great Chinese economic transformation. That is why China appeared as one of the biggest importers in the international energy market. China has even started to challenge the already existing international energy regime with its rapidly increasing demand.

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[2] Theo Hitiris, European Union Economics fifth edition, Prentice Hall 2003, P.p.:314-317.
[3] Energy security: EP adopts blueprint for the EU's future energy strategy, Press Release, 03-02-2009 - 13:26
[4] http://www.euractiv.hu/belugyek/hirek/nyugodtan-assuk-el-a-szemetet-co2-a-fold-alatt 01.03.2010. (Euractiv, 2010)
[5] Xingjun Zhao, Yanrui Wu, Determinants of China's Energy Imports: An Empirical Analysis, (Xingjun Zhao, 2007)
[6] Eurostat statistics 2010 in European Commission Directorate-General for Energy and Transport (DG TREN), EU ENERGY IN FIGURES 2010, P. 77.
[7] Dale Allen Pfeiffer, Sizing Up the Competition -Is China The Endgame? *FTW* Contributing Editor for Energy, 2000, http://www.fromthewilderness.com/free/ww3/092502_endgame.html 01.03.2010.

1.1 Problem formulation:

What can be the common points in the energy issues of the European Union and China? Is it the dependency on external suppliers? That is right, but dependency is not the only one element of their cooperation. The continuously rising demand of these countries makes this situation even more difficult. It creates a situation in which "buyers" are defenseless.
A decade ago this scenario would not have caused any concern or discussion in the EU, but today, with the economic development of countries such as China and India, the amount of natural energy sources is suddenly dropping quickly. With no prospect of renewable and environmentally friendly energy being a viable solution in the near future, the EU, as well as the rest of the world, faces tremendous problems, unless something is done to find alternative energy sources.

Why are these questions so relevant today? Because it is likely that China and the European Union will make policy changes in the field of global energy and security in the near future. As great political powers in the world, they will not take any drastic political steps and go against other countries directly. However, the increasing energy demand of China will shape the Chinese energy security strategy more and more distinct. Since the whole Chinese economy is based on energy, there is huge pressure on the Chinese energy security strategy to meet the economy's needs. The European Union's challenge will be able to handle the growing demands of the Chinese Energy and Security strategy. The EU is trying to discuss problems and reach bilateral agreements with China in many different fields. Every second year the two powers have an Energy Conference, they do common projects and hold sectoral dialogues**,** but it seems that China really knows what it wants and will try to achieve its aims, even while making nominal agreements with the European Union. How does the EU have to change its energy policy in order to ensure the suitable amount of energy import in the future? Additionally, we can also see confrontations of the Chinese and European energy and security policy have confrontations in the environmental issues tightly connected to energy problems.
This essay seeks objective reasons why these two buyer countries are cooperating more and more strongly in the field of energy. According to this aim, its main question is:
What are the reasons for the closer and closer energy dialogues between the European Union and China?

A sub-question will illuminate this problem from the European Union's particular point of view, showing subjective as well as objective reasoning:

Why has the European Union changed its energy policy so that it now regards China as one of its main partners in the energy issues?

1.2 Methods:

The above mentioned problem can be approached from multiple angles. Unfortunately, it is not feasible to find and analyze all the aspects of the problem. This broad field needs to be limited so that only the most relevant issues are examined.

The problem from will be more interesting and complex from the European Union's point of view because the EU had many difficulties in creating of the Common Energy Policy. My 2008 semester project, **Prospect for the European Common Energy Policy,** written with Julie Hougaard Ostby and Witold Sitko, examined the reasons why the European Union did not have common energy policy in spite of apparently shared goals in energy security for many years. The main question of the semester project was: **Why have the European Union and the member states not yet agreed on a common energy policy that links to the Common Foreign and Security Policy?** In that project we discovered the national interests of the member states and the rules of the European internal energy market. That study's conclusions can be used in analyzing the EU's external energy policy towards China in this current project.

According to that semester project, which followed Multi Level Governance theory, we can divide the energy interests in the EU two vertical levels. One of the levels is a national level. Energy policy is a relevant part of national policies in each country. The other level is the supra-national level, meaning the level of the European Union Common Energy Policy. In this project I will research my theme at the European Union's level.

Despite the different development of the regions I will examine the Chinese Energy Strategy as a representative of the whole China's interests on the international energy market.

It is worthwhile to examine other external factors that may affect European energy policy. Can current events change the European Union's approach to negotiations with China? The Russian-Ukraine crises is an example which made the EU tighten energy cooperation with its Asian partners.

My analysis will be supported by a theoretical framework comprised mainly of the theories of Realism and Neo-liberalism.

While several other theories could partly cover my approach; for instance Neo-Mercantilism[8], Globalism, Multi-Level Governance, Neo-Realism but Realism and Neo-liberalism provide the most useful, interesting explanations of the international relations in question.

Neo-Mercantilism can explain the rapid rise of China, because its economic power is based on export-led growth. "The Country has taken raw material imports from other countries and, using its cheap labor, converted them into products that it sells to develop nations like the United States"[9]. So China can be one of the countries which follows Neo- Mercantilism, deliberately discouraging imports and encouraging exports in order to grow its trade. However, in the case of energy the situation is the contrary. It needs to import energy in order to be able to keep up its economical growth and goods' import. Furthermore, this theory is not appropriate in the case of the European Union. The European economy built itself on internal trade, though of course there has always been a relevant amount of export[10]. The Multi-level Governance theory would not be appropriate for my project even if it explained perfectly the European integration process, because this theory posits that states are the only actors in the international process. When states are integrated, they give a small part of their sovereignty up to the supra-national level. Analyzing each state and its interests separately in order to figure out which part of their national interests they represent on the supra-national level in a common energy policy is not practical. It would be extremely difficult to compare the interest each of the member states with the Chinese interests. Additionally the Multi-Level Governance theory would not be able to explain the Chinese Energy Strategy because China is one state, without sub-national, national and supra-national interests.[11]

[8]Charles W. L. Hill, Global Business Today, University of Washington, McGraw-Hill Irwin, 2009, P.:164.
[9] Charles W. L. Hill, Global Business Today, University of Washington, McGraw-Hill Irwin, 2009, P.:164.
[10] Charles W. L. Hill, Global Business Today, University of Washington, McGraw-Hill Irwin, 2009, P.p.:163-165.
[11] Gary Marks, Liesbet Hooghe, Kermit Blank, European Integration from the 1980s: State-Centric v. Multi-Level Governance, Journal of Common Market Studies Vol. 34. No. 3. September 1996. 371-373.

It would be reasonable to employ the Interdependence theory of Robert O. Keohane and Joseph Nye to illustrate the approach of Neo-Liberalism. Additionally, it will be necessary to give a short definition of interdependency. The 1+4+11 approach of Interdependency Theory tries to find the main political powers in the world. According to this approach, the USA is the main political power (1), and beside the USA there are 4 regional powers in the world. They are namely the EU, Japan, China and Russia. It means that the international energy market has moved from a bipolar system to a multi-polar one. However, according to Neo-Realism theory Japan may be said to be "bandwagoning" with the U.SA. "Sometimes smaller states "jump on the bandwagon" of the most powerful state."[12] Some scientists think [13]that after World War II, "states may seek to balance threats rather than raw power; U.S. power was greater than the Soviet power but was less threatening to Europe and Japan (and later to China)"[14]. If we agree with the above mentioned "bandwagoning" idea we can consider the USA, the EU, China and Russia as great powers on the international energy market. However, Neo-Realism alone is not enough to explain the current movements and interests of China and the EU. Realism offers a practical way of energy policy based on the utility without looking for the "common good". Neo-Liberalism tries to follow the moral way of international policy even if it is less beneficial. Neo-Liberalism states that "common good" can be achieved. So these two theories have antagonistic views of international policy. Realism is combined with Neo-Liberalism gives a more persuasive explanation.

The issue of security is also important. Though the two theories mentioned above provide a general explanation of security, a more precise definition is necessary in order to make clear the conceptual background of this thesis. The Theory of Security Complex by Berry Buzan provides a better understanding of security. His theory, presented in "People, States and Fear" in 1983, tried to discover the role of national security in international relations. The security complex approach treated the European Union as the one regional security complex which consists of several sub-complexes. As mentioned earlier, the EU can be considered a single unit. Although the member states have their own interests, they will not be considered individually. The EU will be treated as a single entity and only a part of the security complex

[12] Joshua S. Goldstein, Jon C. Pevehouse, International Relations eight edition 2008. P.52.
[13] Walt, Stephen M. The Origins of the Alliances, Cornell, 1987.
[14] Joshua S. Goldstein, Jon C. Pevehouse, International Relations eight edition 2008. P.52

theory will be employed in the analysis. I will use only those Buzan's ideas which are related to national security and international relations.

These theoretical concepts together with background information on the relationship of European Union and China will constitute the core part of this thesis. Since the main question focusing on the examination of the reasons for the tighten cooperation between the EU and China the nature of my thesis will be mostly explanatory. This research aims to discover what reasons lies behind the European- Chinese strategic cooperation. Information from international data bases will provide figures and illustrations of energy consumptions, imports, historical movements and distribution of energy sources.

The project will involve an analytical part giving a short but substantive overview of the energy situation in the European Union and China. Statistical information from international databases will provide overviews in numbers about their oil, natural gas and coal energy sources and the usage of them. And brief outlines of external energy policies for both the EU and China will allow more thorough and objective analysis.

This essay will examine the two powers individually before giving a framework of the EU-China cooperation since the beginning of their bilateral energy dialogues. The analytical part includes the discovery of the common fields of their cooperation. This chapter will examine some of the current assumptions about why energy dialogue is getting tighter and tighter between the two countries.

The Analysis part will use the dates and information of the analytical chapter and examine them through the divisions of Realism and Neo-Liberalism.

After the analysis, a summary of the important findings will be summed up into the conclusion, where the valuable information, coherences and conclusions discovered will answer the main- and sub-questions noted above. In the course of the investigation, plenty of relevant information not determined by my original questions will provide a more comprehensive understanding of the issues in question and their context.

II. The Theoretical framework

2.1 The general concepts of Energy Security and the necessity of energy security strategies*:*

Two interesting schools of thought, which particularly seek the necessity of energy security strategy can be labeled "realist" and "liberal" schools explain the problems of energy security from different points of view. Their approaches are the products of the last few decades. They try to find successful definitions of Energy Security and whether its existence is necessary or not for a state. Energy security as a concept is often used in media and in academic research, but its definitions are vague and sometimes limited only to the economic aspects of the phenomena. Energy security definitions often emphasize "the need to secure sufficient supply and reasonable price for energy."[15] This definition of energy security is not complete, because it covers only the economic aspect of the phenomenon. It is important to examine this issue from both economic and political points of view. As there is a tight interaction between them, they often merge together in energy policy-making.

The first of the above mentioned school of thought is that Christian Constantin called "realist," mainly views energy security as a struggle to control strategic energy resources, for example oil. If oil becomes a highly priced, geographically concentrated commodity, it can be used as a "weapon" of blackmail on the international scene. The "realist" approach offers some solutions for governments to avoid situations in which they are at the mercy of other powers by growing amount of their work. It suggests that governments need to diversify their energy sources and secure the necessary amount of energy reserves[16]. This approach considers energy security to be a "completely state driven geopolitical competition for energy resources, transit routes and so far.[17]"So governments following this theory will have not only much more work but much higher expenses as well. The "realist" approach is exemplified by the relation of the European Union and China. We can see clearly that Europe

[15] Mikko Palonkorpi, Energy Security and the Regional Security Complex Theory, Aleksanteri Institute, University of Helsinki, P.1. http://busieco.samnet.sdu.dk/politics/nisa/papers/palonkorpi.pdf (12.03.2010.)

[16] Christian Constantin, China's Conception of Energy Security: Sources and International Impacts, Center of International Relations, Working Paper No. 43, March 2005. P.p. 3-4.

[17] Mikko Palonkorpi, Energy Security and the Regional Security Complex Theory, Aleksanteri Institute, University of Helsinki, P.5. http://busieco.samnet.sdu.dk/politics/nisa/papers/palonkorpi.pdf (12.03.2010.)

has aims similar to China's "desire to enhance the availability of oil and gas to the world and the security of energy transportation routes, and the need to improve the management of China's energy sector with positive consequences for its economy and for the regional and global environment."[18]

The second school of energy security can be called "liberal". According to William W. Hogan, Philip Andrews-Speed and Sergei Vinogradov, "oil being a fungible product, diversification is counterproductive and energy security is better protected by the markets, so the best strategy a country can follow is to decrease barriers to trade and investments in production and limit its intervention."[19] This approach considers energy should be treated as an ordinary commodity whose market is determined by the natural balance of energy supplies and demands. It means that governments do not have to do any additional work; they do not need their own energy security strategies.

The "realist" view on energy security justifies the existence of energy security strategies for the EU and China. "China is perhaps one of the few countries that regards energy security as a vital component of their national interests.[20]" The next important issue is the question: what does security mean?

2.2 The definition of security

Though the term "security" has been used for a long time by scientists and practitioners, it seems that it still lacks a precise definition. David A. Baldwin[21], an American professor of Political Science and World Order studies at Columbia University, tried to find the reasons why the concept of security failed to be defined in his "The concept of security" paper. In his paper Baldwin divided the existing methods for defining "security" into three classes.

[18] Philip Andrews-Speed, China's energy policy and its contribution to international stability. Facing China's rise: Guidelines for an EU strategy, Chaillot Paper, Institute for Security Studies, Paris, December 2006., P. 80.
[19] Christian Constantin, China's Conception of Energy Security: Sources and International Impacts, Center of International Relations, Working Paper No. 43, March 2005. P.5.
[20] Li, Xing, Eyeing on the Arctic Region: China's Search for Energy and Maritime Transportation Security 2009, p.4.
[21] David A. Baldwin, The concept of security, *Review of International Studies, British International Studies Association (1997), 23,*

The first class is called "**Conceptual analysis**." "Conceptual explication attempts to specify the logical structure of given expressions: Taking its departure from the customary meanings of the terms, explication aims at reducing the limitations, ambiguities, and inconsistencies of their ordinary usage by propounding a reinterpretation intended to enhance the clarity and precision of their meanings as well as their ability to function in hypotheses and theories with explanatory and predictive force.[22]"

The second class is "**Security as a neglected concept."** "If military force was relevant to an issue, it was considered a security issue; and if military force was not relevant, that issue was consigned to the category of low politics. Security has been a banner to be flown, a label to be applied, but not a concept to be used by most security studies specialists.[23]" Buzan's puzzlement about how a central concept such as security could be so thoroughly ignored disappeared after he realized that not security but rather military force had been the central concern of security studies[24].

The third class is "**Security as a contested concept."** Some scholars have described security as an 'essentially contested concept'[25]. "Essentially contested" concepts are defined as "so value-laden that no amount of argument or evidence can ever lead to agreement on a single version as the 'correct or standard use'"[26]. Although security was classified as an essentially contested concept, Berry Buzan suggested that some of the reasons are questionable. However, Baldwin warned that the "designation of security as an essentially contested concept as an excuse for not formulating one's own conception of security as clearly and precisely as possible"[27].

Specifying the security problematique was the next point of Baldwin's study. Arnold Wolfer's definition of security highlighted a common point of the previous approaches: we use security in the case of situations where acquired values are threatened by a certain power. His characterization of security as "the absence of threats to acquired values"[28] seems to capture the basic intuitive notion underlying general use of the term "security". Since the expression "absence of threats", is somewhat ambiguous, Wolfer reformulated it to "a low

[22] Carl G. Hempel, Fundamentals of Concept Formation in Empirical Science (Chicago, 1952), p. 12.
[23] David A. Baldwin, The concept of security, Review of International Studies, British International Studies Association (1997), 23,P.9.
[24] David A. Baldwin, The concept of security, Review of International Studies (1997), 23, P.9.
[25] Buzan, People, States, and 'Peace, Power'; and Little, 'Ideology and Change'. For the original formulation, see W. B. Gallie, 'Essentially Contested Concepts', Proceedings of the Aristotelian Society, N.S., 56 (1956), pp. 167–98.
[26] W.B. Gallie, 'Essentially Contested Concepts', Blackwell Publishing, London, 1956. P. 168.
[27] David A. Baldwin, The concept of security, Review of International Studies (1997), 23, P.12.
[28] Arnold Wolfers, "National Security" as an Ambiguous Symbol, Political Science Quarterly, The Academy of Political Science, Vol. 67. 4, December. 1962. P.485.

probability of damage to acquired values,"[29] thus excluding unpreventable natural events such as earthquakes.

All of the approaches above view security as a certain political aim that a state can achieve. This raises the question of whether it is possible for a state to achieve the status of absolute security. Or is absolute security an unachievable ideal? This in turn raises the question: is security is a gradable value? This question has not been answered unambiguously by theorists yet. Some academics reject the idea of different levels of security. For instance, Barry Buzan thought that something either can be secure or insecure but nothing in between. "The word itself implies an absolute condition and does not lend itself to the idea of a graded spectrum like that which fills the space between hot and cold.[30]" Another group of academics is convinced that the different levels of security exist. Arnold Wolfer is one of the scientists who perceives security as a gradable value[31].

2.3. The definition of interdependence

The question of security is an essential part of international relations, but it is not the only one. Security considerations alone are not adequate justification for the EU and China's closer collusion. The relations of energy importer and supplier countries can be built only on security, but the relation between the two biggest importer countries must take in other considerations. It appears that the two powers have realized that they are interdependent on each other in many fields such as trade, finance and energy and it can explain their interests in close cooperation.

The theory of complex interdependence came up in 1977. According to this Neo-Liberal approach, which was developed by Robert O. Keohane and Joseph S. Nye[32], political relations in world politics have been changing since at the end of the Cold War. Based on this

[29] A. Baldwin, The concept of security, Review of International Studies (1997), 23, P.13.

[30] Barry Buzan, People, States and Fear: An agenda for international security studies in the post –Cold War era, second edition, New York, Harvester Wheatsheaf, 1991. P. 18.

[31] Arnold Wolfers, "National Security" as an Ambiguous Symbol, *Political Science Quarterly*, The Academy of Political Science, Vol. 67, No. 4. (Dec., 1952), P. 486.

[32] Robert O. Keohane (1945-) is an american Professor of the International Affairsat hte Woodrow Wilson School at Princeton University. He published the „Power and Interdependence" book with Joseph S. Nye in 1977. They highlighted the basic changes of the modern international system and developed the concept of complex interdependene. Keohane published the „After Hegemony" book and he became on of the main figure of the Neo-liberal school. Joseph S. Nye is a Distinguished Service professor at the Kennedy School of Government at Harvard University. He is also relevant figure of the Neo-liberalism.

they worked out a new theory called Complex Interdependence, which suggests the growing interdependence among international actors and societies is a positive trend, in contrast with the Realistic approach that emphasizes the negative characteristics and consequences of interdependence.[33] Barry Buzan also shared the idea of interdependence but he regarded the rising density of interaction networks as the driving force of interdependence. Furthermore, he says that the interaction networks are tied together by the international system.[34] According to Realism, only sovereign states can be international actors. The Complex Interdependence theory changed this fundamental point of Realism, asserting that although the states are important elements of international politics, they are not the only ones. They consider international regimes and institutions to be as important as states. International institutions do not have mandates like governments do; they help to facilitate cooperation among states or international actors. They help governments to manage their own interests through cooperation. "Building information-rich institutions is as important in relations among the superpowers, where confidence is a key variable, and in arms control negotiations, in which monitoring and verifications are of great importance, as in managing political-economic relation among the advanced industrialized countries. Institutions-building may be more difficult where security issues are concerned, but is equally essential if cooperation is to be achieved." [35]

The rising density of interaction networks can be the consequence of the several factors which have been changed since the 1950's. Greater interdependence in the international policy can be driven by increasing population, developing technologies, and increasing numbers of organizations and financial capabilities. The accelerated world affects people's activities for better or worse.[36]

Neo-Liberalism says that the rise of destiny of interaction networks has affected the general character of the international system. The Complex Interdependence Theory stresses that actors have to make themselves interdependent on each other. "In common parlance, dependence means a state of being determined or significantly affected by external forces. Interdependence, most simply defined, means mutual dependence. Interdependence in world

[33] Tamás Kende, Tamás Szűcs, Petro Jeney, European public law and policy, Complex kiadó- Jogi és Üzleti tartalom szolgáltató KFT, Budapest, 2007. P. 225.
[34] Barry Buzan, Is international security possible? In New Thinking about the Strategy and international security, London, Harper Collins, 1991, P.p. 41-42.
[35] Rober O. Keohane, After Hegemony: Cooperation and discard in the world political economy, Princeton University Press, 1984. P.247.
[36] Barry Buzan, Is international security possible? In New Thinking about the Strategy and international security, London, Harper Collins, 1991, P.p. 41.

politics refers to situations characterized by reciprocal effects among countries or among actors in different countries.[37]" There is a certain connection among the participants. Michael Nicolson defined interdependence through interest. The actors of the international policy have their own interests, but at the same time they are dependent on other actors' interests. "They can not entirely separate their interests from those with whom they closely interact"[38] This means that any step or decision of an international actor can influence either negatively or positively the other actors who are in close connection with them through a certain interaction network.

Traditional diplomacy managed cooperation through a single channel; Complex Interdependence states this is not enough and that only by creating many different links between states can political deadlock be resolved. [39]

Using elements of the approaches above, I give my own definition of interdependence: It is mutual but not equal dependences among the international actors, which can have positive and/or negative effects but are nevertheless necessary and unavoidable in the age of globalization.

2.4 The relation between security and interdependence in Neo Liberalism

Now I will show how security and interdependence are related according to Neo-Liberalism. The relationship between the two is different in the case of Realism and Neo-liberalism. Realism argues that security and interdependence are antagonistic concepts. Neo-liberalism, on the other hand, suggests that the existence of security necessarily affects the existence of interdependence.

Neo-liberalism was created as a theoretical approach in response to changes in the international arena such as globalization and the extension of international networks in the second half of the twentieth century. The theory focuses on policy and economics and does not emphasize the issue of security as Realism does. Rober O. Keohane and Joseph Nye are

[37] Robert O. Keohane, Joseph S. Nye, Power and Interdependence, second edition, Scott, Foresman/Little, Brown Series in Political Science, SCOTT, FORESMAN AND COMPANY, Illinois, Glenview, 1989. P. 8.
[38] Michael Nicholson, International relation, A concise Introduction, second edition, New York, New York University Press, 2002. P. 98.
[39] Tamás Kende, Tamás Szűcs, Petro Jeney, European public law and policy, Complex kiadó- Jogi és Üzleti tartalom szolgáltató KFT, Budapest, 2007. P. 226.

considered the founders of Neo-Liberalism. Keohane published his book, After Hegemony, which laid down the main principles of Neo-Liberalism, in 1984. Neo-Liberalism states that the keys to the stability of the international system are institutions and organizations. The main questions for Neo-Liberals are: what is the relation between cooperation and institutions? and what is the connection between cooperation and stability? The Neo-Liberal approach agrees with Realism that the international area is an anarchical system, but it does not accept that the creation of international cooperations is difficult. The simple existence of states necessarily imply that they are threats to one another, any more than it means that they will cooperate for their mutual benefit.[40] "Game theory" can help to demonstrate the different views of Realism and Neo-Liberalism of international relations. Realism's claim that international relations are "zero sum games," in which one country's gain is another's loss, Neo Liberalism believes in "plus sum games," where all players benefit. Their relations are characterize by the "mutual good". The relevant number of global interlockings in financial and economical areas became visible at the Oil Crises in 1970'[41]. The emerged interdependences highlighted the necessity of international co operations. According to neo liberalists the best way, how conflicts in international relations can be solved is the cooperation. Implementing cooperation is easier and more effective through international regimes or organizations.[42] The use of force between democratic countries is not an acceptable method of international policy. International security depends on the cooperation of democratic states and regimes. Active military power just increases insecurity. Democratic governments should aim to end war among states. States have to remove the barriers of international trade, creating an interdependency network among them. Consequently it will be a more peaceful area for international cooperation and businesses. Interdependent states have a strong incentive not to wage war on each other because the war would be harmful for all of them.[43]

[40] Gergely Egedy, Bevezetés a nemzetközi kapcsolatok elméleteibe, HVG ORAC Lap- és Könyvkiadó KFT. 2007. P.p. 37.

[41] András Szörényi**,** Kiindulópontok a nemzetközi kapcsolatok elméletében a nem állami szereplők természetének és szerepének értelmezéséhez, Grotius the scientific review of the International Studies Department at the Corvinus University of Budapest. 14.12.2009. P.7.

[42] Robert O. Keohane, Joseph S. Nye, Power and Interdependence, second edition, Scott, Foresman/Little, Brown Series in Political Science, SCOTT, FORESMAN AND COMPANY, Illinois, Glenview, 1989. P. 41.

[43] Simon Hix, The political system of the European Union, Second edition, Palgrave Macmillan, 2005. P. 269.

2.5 The relation between Security and Interdependence in Realism

Edward Hallett Carr published his book the "Twenty Years Crisis" in 1939. He thought that liberal internationalism was just a utopian dream, and he worked out his own theory, which became Realism. The realistic approach focuses on reality, examining matters as they appear in practice, rather than in theory. Liberalism tries to reach an ideal situation. Realism tries to make the best of the situation that exists. Liberalism could be called a theory of "should be" while Realism is a theory of "is."[44]

E. H. Carr based his concept on three main ideas. His points are fundamentally consistent with Machiavelli's thoughts. The first point is that historical processes are determined by cause–and-effect relations. His second point is that practice creates theory and not the other way around. The third point is that it is not morality that determines policy[45]. The level of morality in the case of states cannot be exactly the same as the level of humans'. He thinks that the goals of diplomacy are power or financial resources. The driving force of the whole international system is the limited amount of financial resources.[46]

Realism became the most dominant theory in the area of international relations when Hans J. Morgenthau[47] published his book, Politics among Nations: The Struggle for Power and Peace, in 1948. Inspired by Hobbes, Morgenthau laid down the most important principles of the classic realist school. He saw the driving force of international relations differently than Carr did. He stressed that a certain part of human nature was originally bad and humans wished to have power over other ones. This inherent dark side of humans drives them to get power because power means security. The Realists state that "struggles among states to secure their frequently conflicting national interests are the main actions on the world

[44] Márton Békési, The ballance of Super powers or enternal peac? Konzervatórium, 16.07.2008. http://konzervatorium.blog.hu/2008/07/16/nagyhatalmi_eroegyensuly_vagy_orok_beke 01.03.2010.
[45] Gergely Egedy, Bevezetés a nemzetközi kapcsolatok elméleteibe, HVG ORAC Lap- és Könyvkiadó KFT. 2007. P.33.
[46] Gergely Egedy, Bevezetés a nemzetközi kapcsolatok elméleteibe, HVG ORAC Lap- és Könyvkiadó KFT. 2007. P.p. 32-34.
[47] Hans Joachim Morgenthau (1904-1980) He is one of the most famous figure of the international studies in the XX. century. He had German origin but he was an American professor at the University of Chicago. His book is the fundamental literature of the realist school.

stage."[48] Furthermore, both Realism and Neo Realism agree that the international anarchic order is static and probably will not be changed.[49]

Morgenthau defined six points about power-oriented international relations and human nature. First, he notes that the international policy is based on objectives rules, which reflects human nature. The second point is that countries have to secure their own interests first, because the other countries are unlikely to help them unless they share an interest. These interests are rational and objective. However, the fight for the power in some cases can become independent from states' interests.[50] The third point is that interests are not constant; they change according to certain situations, parallel to the changing character of political power. His forth point is the morality of policy. Politicians have to make political decisions with an eye to how their results will be judged. States cannot always follow morality-based policy. They must balance prudently morality and national interests. (Forde, 1992; Russel, 1990). This balancing act finds expression in the cynical philosophy, "do good if the price of it is low!"[51] The fifth point is that no single nation's interests can be universal interests. Finally in the sixth point, he drastically divided the principles according to political executive power, into policy, law, economy, and ethics. However, that international actors cannot examine their decision from the political point of view alone, because they become "political predators."[52]

Realism has a fundamental criterion saying that a country has to be armed because the world is dangerous. To adopt an idea from Darwin: country-eat-country. It means that stronger states make weaker countries dependent on them. The best way to achieve peaceful relations with other countries is to be powerful and well armed.

Realism does not recognize the existence of international economy as a part of international relations. Realism regards international economy as a perfectly separate issue and ignores it

[48] John T. Rourke, University of Connecticut, International Politics on the world stage, sixth edition, Dushkin/McGrav Hill. 1997. P.17.
[49] Simon Hix, The political system of the European Union, Second edition, Palgrave Macmillan, 2005. P. 374.
[50] Leslie H. Gelb, Necessity, Choise and Common Sence, Vol. 88. N^{o} 3. May. 2009. , Leslie Howard Gelb (1937-) he was the head of Council on Foreign Relation and he had several positions in the American executive system.
[51] John T. Rourke, University of Connecticut, International Politics on the world stage, sixth edition, Dushkin/McGrav Hill. 1997. P.18.
[52] András Szörényi**,** Kiindulópontok a nemzetközi kapcsolatok elméletében a nem állami szereplők természetének és szerepének értelmezéséhez, Grotius the scientific review of the International Studies Department at the Corvinus University of Budapest. 14.12.2009. P.p. 2-3.

in its analysis on international relations. However, Realism does not recognize that economical interests can be one of the main reasons why the states start to cooperate.[53]

As mentioned, this approach does not consider international organizations and institutions to be international actors even though they affect every aspect of the states' behavior. Realism excludes them. Yet the European Union is an embodiment of the 27 member states' interests and of course it has a great influence on them.

Realism emphasize that the world is an anarchical place where winning states cause a great loss to losing ones, meaning that international relations are "zero- sum games." It argues the same about security, too. Unfortunately, Realists did not see the consequences of this statement. If a country starts an arms-race, other states feel threatened and insecure themselves. Thus they start to upgrade their own armies. It becomes a self-perpetuating problem[54]. If these arguments are true, that suggests international politics constitutes a dynamic system in which "the balance of power" is constantly changing among the actors.[55] Can this movement of power be stable? In "balance of power" politics, each state has an interest in equilibrium of power in world policy "in order to prevent any other country or collaboration of countries from dominating the system.[56] The palette of different methods is wide: states can build up their own strength, and they can try to divide their rivals too. Failing that, a state can try to make alliances with others. However, such an alliance means interdependence and thus, uncertainty. The most secure state is a powerful one that can intimidate or dominate others if necessary. Morgenthau warned that countries should avoid a self-sacrificing policy when they league or cooperate with other countries. Realist theories stress that dependency on others has to be minimized. Each state increasing its power "may be desirable to the extent that it increases one's leverage over those other states."[57]

Thus it would appear that Realism strictly refuses interdependence as a useful method of peace. Rather, this school of thought suggests interdependence can even be the reason for conflicts and insecurity. Autonomy and separation from other states are necessary to peaceful

[53] Michael Nicholson, International relation, A concise Introduction, second edition, New York, New York University Press, 2002. P. 104.

[54] Barry Buzan, Is international security possible? In New Thinking about the Strategy and international security, London, Harper Collins, 1991, P.p. 31-34.

[55] Stanley H. Hoffmann, International relations: The Long Road to Theory, Arend Lijphart, World politics, The writings of theorists and practitioners classical and modern, University of Barkly, Allyn and Bacon inc. Boston, 1967. P.41.

[56] John T. Rourke, University of Connecticut, International Politics on the world stage, sixth edition, Dushkin/McGrav Hill. 1997. P.19.

[57] Paul R. Viotti, Mark V. Kauppi, International Relations Theory: Realism, Pluralism, Globalism and Beyond, third edition, Prentice Hall, New Jersey, 1998. P. 58.

international relations according to the Realist way of thinking, which views politics as a "world fight," wherein each state is an enemy in the struggle to gain political power.

Can this notion of determined separation explain closer and closer energy cooperation between the European Union and China? Not by itself. Obviously, security of energy sources and imports are relevant to both of them. Also, they clearly have well-defined interests that they cannot sacrifice to common interests. Where neither theory alone would be adequate, Realism and Neo-Liberalism together can approach a complete explanation of the developing dialogues between the two energy consumer giants.

Table 1. illustrates 6 relevant divisions and how they are addressed by Realism and Neo-Liberalism.

Table 1.[58]

Divisions	**Realism**	**Neo- Liberalism**
Goals of Actors	Military security will be the primary goal.	Goals of states vary by area. Goals of Intergovernmental politics are difficult to define. International actors will follow their own goals.
Instruments of state policy	Military force seems to be the most effective method. Economic and other instruments can be used in order to achieve goals. Using Self-helper strategy to achieve their aims.	Power resources specific to issue areas will be the most relevant. The major instrument of policy is the manipulation of interdependence, international organization and international actors through summits, cooperation, and common strategies.
Agenda formation	Potential shifts in the balance of power. Security threats set the agenda of "high politics" and strongly influence other agendas. Countries make their own agenda, aiming to strengthen themselves and conceal weaknesses such as energy dependence. Internal and external policy are separated. "billiard ball" effect	The agenda is affected by changes in the distribution of power in the issue areas, the status of international regimes, changes in the importance of international actors, linkages from other issues, political considerations due to rising sensitivity to interdependence. Internal and external policy have the same importance and both are determined by international relations.
Linkages of issues: "Militarily and economically strong states will dominate a variety of organizations and a variety of issues, by linking their own policies on some issues to other states' policies on the other issues.[59]"	Linkages reduce differences in outcomes among issue areas, reinforcing international hierarchy.	Linkages between strong countries are more difficult to make, since force is ineffective. Linkages between weak sates through international organizations erode rather than reinforce hierarchy. Linkages can be created by common interests of states and the reason of common good too.

[58] Robert O. Keohane, Joseph S. Nye, Power and Interdependence, second edition, Scott, Foresman/Little, Brown Series in Political Science, SCOTT, FORESMAN AND COMPANY, Illinois, Glenview, 1989. P. 37.
[59] Robert O. Keohane, Joseph S. Nye, Power and Interdependence, second edition, Scott, Foresman/Little, Brown Series in Political Science, SCOTT, FORESMAN AND COMPANY, Illinois, Glenview, 1989. P. 30.

Roles of international organizations	Minor, limited by states' power and the importance of military force. International organizations are virtually excluded from international policy.	Setting agendas such as coalition-formation, and acting as arenas for political action by weak states; providing an organizational forum for an issue and mobilizing votes. International organizations are important because they can facilitate agreements, contracts and decentralized enforcement of agreements among governments and international actors.
Opinion about interdependence and security	Interdependence rejected as a route to peace. Security and interdependence are contrary.	Interdependence among democratic states is the best way to the world peace and financial-economical growth.

2.6 The Methodology of the Analysis

The theoretical section above provides the foundation for the analytical section that follows. The two main theories will not compete with each other in the analysis; on the contrary, they will complement each other throughout, based on the divisions perspectives shown in Table 1. In the analytical chapter, background information will establish the analysis well. I intend to record briefly the European Union's energy policy development, and examine it through numbers. I wish to investigate how the policy of the EU has changed in accordance with variations in the International energy market. Then I am going to give a short overview of the current energy consumption and importation of the European Union. Examination of the common providers to the EU and China will be an important and interesting part of my analysis. The common import regions inform the external energy strategy of the EU as China becomes a more relevant competitor in them.

After examining the EU I will do comparable research on China in order to discover its aims, energy strategy and necessities. This information about both of the countries will help identify the reasons, movements, and directions of their policy. The external energy policy of the European Union reacts to the movements and strategy of China and the other countries, meaning Chinese behavior can shape European energy policy.

After that, I will give a short overview of the history of EU-China energy cooperation since the beginning to show the evolution of interests and aims.

In the analysis part I will use the aspects of Table 1., which listed the elements of Realism and Neo-Liberalism in 6 divisions. I would like to use these 6 divisions, namely: goals of actors, instruments of state policy in energy issues, agenda formation, linkages of issues, roles of international organizations, and opinion about interdependences and security in the cases of the EU and China. First I am going to collect information relevant to the 6 elements and then look at how it applies to analyzed countries as the following table (Table 2.) shows. At the end of my analysis, I will draw conclusions from the information contained in Table 2. This will help me answer my main- and sub-questions, as the analysis with the help of Realism and Neo-Liberalism will describe the directions of the past, current and future external energy polices in the cases of the EU and China

Table 2.The elements of Realism and Neo-Liberalism in relation to the EU and China

Divisions	**People's Republic of China**		**European Union**	
	Realism	Neo Liberalism	Realism	Neo Liberalism
Goals of Actors				
Instruments of the state energy policy				
Agenda formation				
Linkages of issues				
Roles of international organization or regimes				
Opinion about interdependences and security				

I have to add an important explanation to this methodology. "Security" does not mean particularly physical security against military attacks. Rather, it refers to the security of national economies and the security of states from a political point of view. The politically unstable state will have economical instability or vice versa. Political or economic instability creates social insecurity and dissatisfaction, which is not beneficial for states.

To the analytical and analysis chapters I will use international databases like the Archive of the European Union, U.S. Energy Information Administration, Deutsche Bank Researches, Statistics of EuroStar and BP Statistical of World Energy. Journals often provide more

relevant information than books, since the significant actions happening these days have not been discussed in published books yet. Most of the sources used are working and conference papers discussing current events.

As for the theories, I do not want to measure mathematically which theory is better, how much better it is, or which can be better used to analyze the relation between EU and China. I want to use both theories in concert to explain the elements of the two countries' cooperation. Even if I could give a precise measurement of these theories' quality the circumstances of the EU-China relations and the world energy market are changing so fast that the judgment would not be true even in the next hour.

III. The Analytical part

3.1 The Energy Situation in the European Union

3.1.1 The development of external energy and strategy policies

The direction of the external energy and security policy of the European Union has changed drastically in the last few years. One of the reasons for this was the Russia-Ukraine crisis in January 2006.[60] This crisis showed that the EU has to pay more attention to the security of its energy supply and be well prepared for unexpected situations. For a long time Russia has been the primary energy provider for large parts of the EU. When, in 2006, it cut off the gas supply for political reasons, the dangers of such heavy dependency on one provider became clear.[61] The EU revealed the degree of its vulnerability because of its significant energy demand. It became clear that a new energy security strategy would be necessary for the prosperity of the EU.

According to the International Energy Agency, the EU has such an extended economy that cannot be self-sufficient[62]. Even if the European Union oil, gas and coal, the supply would still not be enough to make the region self-sufficient.

The European Union has had a history of energy issues since the Treaty of Rome, and in recent decades the issues have become more and more urgent. The Green Paper for the European Union energy policy, published on 23 February 1995 defined the main objectives of the energy policy in the European Community. However, it did not provide guidelines for implementing the policy in the future or the role of the Commission. That is why the Commission published the White Paper on 13 December 1995, presenting further challenges and offering possible solutions to the problems of Community energy policy. It defined the major guidelines for policy as well as the role of the Commission. According to this paper, companies were the major actors that had to encourage investments and innovations in an

[60] André Sapir, Fragmented Power: European and the Global Economy, Brussels, 2007, Coby van der Linde, External energy policy:old fears and new dilemmas in a large Union, Bruegel Books, p.273.

[61] Mártoni János, András Kacsó, The energy policy of the European Union and Hungary, Politikatudományi szemle- the official journal of the Hungarian Academy of Science. XIII.year, 2004. N.o. 4. 171-176.

[62] http://www.euractiv.hu/gazdasag/hirek/az-iea-szerint-jo-iranyba-halad-az-unios-energiapolitika, 27. 04. 2009.

efficient legal and fiscal framework. The international energy strategy had to be adjusted to oil crises; it had to examine supply situations of other energy sources besides oil and possibilities for diversification of energy sources. It emphasized the necessity of strengthening cooperation with energy suppliers within and outside of the EU. The SYNERGY and THERMIE international programs, which would execute technology transfer. Additionally, it included environmental protection, energy efficiency, energy technology and instruments for energy policy.

The Green Paper, adopted by the Commission on 29 November 2000, established three truths upon which to base a European strategy for the security of energy supply. The first is that the European Union will become increasingly dependent on external energy sources. Unfortunately, the enlargement of the EU will not change this situation. Based on statistics of 2000, seventy percent of Europe's energy will come from outside sources in 2030. The second statement is that the European Union has a very limited scope to influence energy supply conditions. The EU has to intervene in its energy demand and manage consumption as much as it can by promotion of energy saving in buildings and the transport sector. Thirdly, the European Union is not in a position to respond to the challenge of climate change. The EU cannot accept the obligation of the Kyoto Protocol.[63]

Six years after the 2000 Green Paper, the EU issued the next Green Paper "European Strategy for Sustainable, Competitive and Secure Energy." This did not aim to reduce the dependence to zero. The Green Paper was published in 2006 to give directions and suggestions for the member states and help them to form the Common Energy Policy. At the same it, it opened up new challenges. The Green Paper brought up the question of whether the EU in fact needed the Common European Strategy for Energy or not. The six issues the 2006 Green Paper was concerned with were: competitiveness and internal energy markets, diversification of energy mix, solidarity, sustainable development, innovation and technology and external policy. I would like to emphasize the importance of external policy. The fundamental principles of external energy strategy were laid down in this paper, which stated, "A coherent external energy policy is essential to deliver sustainable, competitive and secure energy."[64] The EU will not be able to speak on "one voice" without such a policy. In the external energy paragraph, five sub-points described possible methods for implementing external energy

[63] Green Paper, Towards a European strategy for the security of energy supply, European Commission on 29 November 2000. Office for Official Publications of the European Communities, Luxemburg, 2001.P.13.

[64] Green Paper, A European Strategy for Sustainable, Competitive and Secure Energy, 08.03.2006. P. 14.

policy. The first point emphasized the importance of a clear policy on securing and diversifying energy supplies. The second point, one of particular relevance to this project, described the importance of energy partnership with producers, transit countries and other international actors. This point declared that "energy issues are a growing feature of the EU's political dialogues with other major energy consumers (such as the US, China and India), including through multi-laterally, like the G8."[65] In 2006 co-operation with other energy consumers looked like a good but not overly important idea. The multi-lateral agreements usually meant loose relations between states. The paragraph goes on to mention the necessity of dialogue with major energy producers and suppliers and the necessity of developing a pan-European Energy Community. Here, "dialogue" indicates some kind of cooperation among partners tighter than the multi-lateral agreement. The third point in the paragraph of the Green Paper in question was the imperative of effective reaction to external crisis situations. Fourth was the integration of energy with other policies in foreign policy. The fifth point was a declaration about how energy can promote development. Conlusion from these papers that the 2000 Green Paper did not mention the necessity of cooperations with other countries and especially not with other energy importers. The 2006 Green Paper particularly emphasized the crucial role of external energy policy and dialogues with major energy suppliers. However, it already mentioned briefly bilateral or strategic partnership with other energy consumers including multilateral fora.

External relations became more important at a rate proportional to the increase in value of energy sources. While energy prices were getting higher and higher the demands of the EU were also increasing. To slow this trend, the European Union needed to limit the constantly increasing amount of energy imported; already, its own energy sources did not cover even fifty percent of its energy consumption. If we take the price of energy in 2007 and multiply it by the EU's energy consumption in 2007 (57% of its total energy use) it comes to an estimated €350bn. This means that this much or an even larger amount of money flow outs from the EU's economy into energy supplier countries every year. This amount of money will increase if it cannot reduce its energy demand.

In March 2007, the European Council accepted the new Energy and Environment Policies of the European Union. It established a forward-looking political agenda in order to achieve the Community's core energy objectives of sustainability, competitiveness and security of

[65] Green Paper, A European Strategy for Sustainable, Competitive and Secure Energy, 08.03.2006. P. 15.

supply. The EU also introduced the idea of "20-20-20" in September 2007[66]. This sets a goal of reducing greenhouse gas emissions by 20%, increasing the share of the renewable energy sources in the energy consumption to 20% (compared to 8.5% in 2007) and improving energy efficiency by 20%, all by 2020. These goals and guideline for internal energy strategy affect the EU's external energy strategy too.[67]

The Second Strategic Energy Review of the Commission to the European Parliament which was called "An EU Energy Security and Solidarity Action Plan" was published in Brussels on 13 November 2008. The paper says that the EU has to enhance its efforts to develop an effective external energy policy. It must deepen its relations with energy suppliers, transit countries and consumers. The contents of the paper are five points: infrastructural needs and a diversification of energy supplies, external energy relations, oil and gas stocks and crisis response mechanisms, energy efficiency, and the best use of the EU's indigenous energy resources. The paper mentions the phenomenon of increasing interdependence evolving with energy demand. "Cooperation with partners such as…the US as well as emerging consumer countries should be deepened to promote a common view on global energy security, to improve the transparency of global energy markets and to address the issue of sustainability. Cooperation frameworks are being developed with countries like China and India, bilaterally and multilaterally…."[68]

The paper also mentions that energy efficiency is equally important in other industrialized countries. "Progress on a global agreement on climate change would create major new incentives for cooperation on energy efficiency. Energy efficiency should be one of the main objectives of the Energy Community in the coming years. The Commission will build on the International Partnership on Energy Efficiency Cooperation agreed in the G8 context with China, India and Korea in July 2008 to promote common product standards and ambitious efforts throughout the world…[69]"

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[66] Communication from the Commission to the European Parliament, The Council, The European Economic and Social Committee and the Committee of the Regions, Second Strategic Energy Review, An EU Energy Security and Solidarity Action Plan, COM (2008) 781, Brussels, 13.11.2008. P.2.

[67] Communication from the Commission to the European Parliament, The Council, The European Economic and Social Committee and the Committee of the Regions, Second Strategic Energy Review, An EU Energy Security and Solidarity Action Plan, COM (2008) 781, Brussels, 13.11.2008. P.2.

[68] Communication from the Commission to the European Parliament, The Council, The European Economic and Social Committee and the Committee of the Regions, Second Strategic Energy Review, An EU Energy Security and Solidarity Action Plan, COM (2008) 781, Brussels, 13.11.2008. P.9.

[69] Communication from the Commission to the European Parliament, The Council, The European Economic and Social Committee and the Committee of the Regions, Second Strategic Energy Review, An EU Energy Security and Solidarity Action Plan, COM (2008) 781, Brussels, 13.11.2008. P.3.

Article 194 of the Treaty of Lisbon created the common energy policy which came into force on 1 December 2009. Looking at the long period without common energy policy, it is evident that huge economic power cannot be used or grown effectively without forming a common voice. The treaty mentioned fore points labeling the aims of the Common Energy Policy. The first point is to ensure the functioning of the energy market[70]. The second aim is to ensure the security of energy supply in the European Union. The third point includes the necessity of energy efficiency and energy saving. Furthermore, it is included the development of renewables. The forth point is the promotion of the interconnections of energy networks. Additionally it does "not affect a Member State's right to determine the conditions for exploiting its energy resources, its choice between different energy sources and the general structure of its energy supply.[71]"

I will explain an interesting coherence that I recognized through the statistics of energy sources and the changing strategy of external energy policy hereafter in the next followings.

3.1.2 The development of external energy policy through numbers

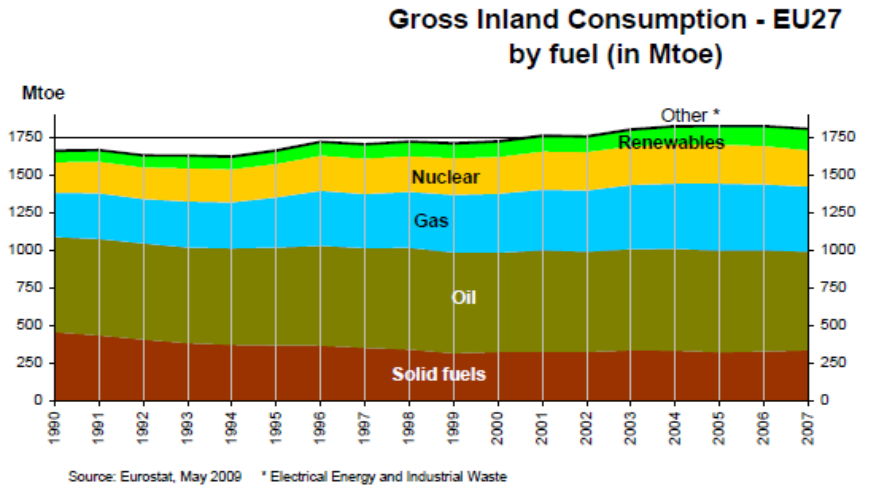

Figure 1. Gross Inland Consumption- shared for Oil, Solid fuels (black coal, brown coal…), Gas, Renewable and Nuclear power from 1990 to 2007[73].

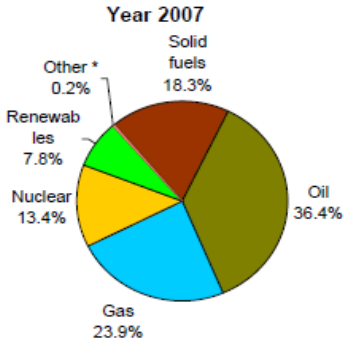

Figure 2. Gross Inland Consumption in 2007[72].

[70] The treaty on the functioning of the European Union, Official Journal of the European Union, 9.5.2008. p.p.134-135. http://eur-lex.europa.eu/JOHtml.do?uri=OJ:C:2008:115:SOM:EN:HTML

[71] The treaty on the functioning of the European Union, Official Journal of the European Union, 9.5.2008. P.135. http://eur-lex.europa.eu/JOHtml.do?uri=OJ:C:2008:115:SOM:EN:HTML

[72] Eurostat statistics 2010 in European Commission Directorate-General for Energy and Transport (DG TREN), EU ENERGY IN FIGURES 2010, P. 12.

[73] Eurostat statistics 2010 in European Commission Directorate-General for Energy and Transport (DG TREN), EU ENERGY IN FIGURES 2010, P. 12.

What can we discover in this expressive graphic (Figure 1.)? Clearly, energy consumption by the European Union is constantly rising. This figure shows the gross inland consumption of the EU from 1997 to 2007. We can see how it was changing the mix of oil, gas, renewables and solid fuels in the total consumption during this period. Figure 2. shows the gross inland consumption of the EU in 2007. The first Green Paper that I found in the Archive of the European Union in the energy area was written in 1995. It was called the "Green Paper, The European Union Energy Policy." At the time the price of oil began growing.

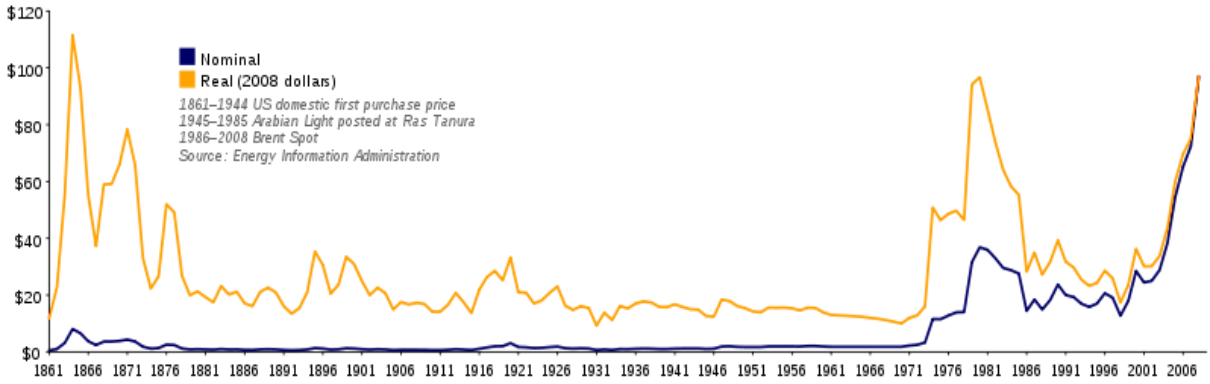

Figure 3. Oil price history from 1861 to 2006[74].

Figure 3. shows the oil price history from 1861 to 2006. Comparison of figure 1. with figure 3. will help us to understand the objective of the 1995 Green Paper. That Green Paper said: "In 1986, the Council adopted a strategy based on horizontal and sectoral objectives for 1995. Progress was made towards the achievement of the horizontal objectives. However, because of changing economic conditions, particularly the drop in oil prices in 1986, developments in energy market trends and the energy implications of growing environmental awareness, it has not proved possible to attain the sectoral objectives individually[75]". This paragraph explained why there was not significant energy strategy before 1995. The price of oil was almost standard or lower than before. In 1995 the oil price was rising slowly with occasional drops and in parallel with it, as figure 1. shows, the consumption of the community was growing significantly. That could be the reason that Green Paper wrote the above statement in 1995. The main goal of this paper was to secure energy sources while shaping a strong international

[74] U.S. Energy Information Administration Independent Statistics and Analysis in 2008, Oil price history from 1861 to 2006 http://www.eia.doe.gov/ 12.12.2009.

[75] COMMISSION OF THE EUROPEAN COMMUNITIES, Green Paper FOR A EUROPEAN UNION ENERGY POLICY, Brussels , 23. 02. 1995. P.9.

cooperation among member states in the energy field to be the base of a common energy policy in the future. Furthermore, it aimed to strengthen storages and other co-operative security measures intended to cope with an interruption of supplies.

The price of oil was rising until 2000, when the EU published the 2000 Green Paper Towards a European Strategy for the Security of Energy Supply. The energy consumption of the EU was also growing, nearly reaching 1750 Mote per year. The price of oil was still rapidly growing until 2006. At the time the EU tried to focus on the security of energy supply while China's energy market development came into its third period.

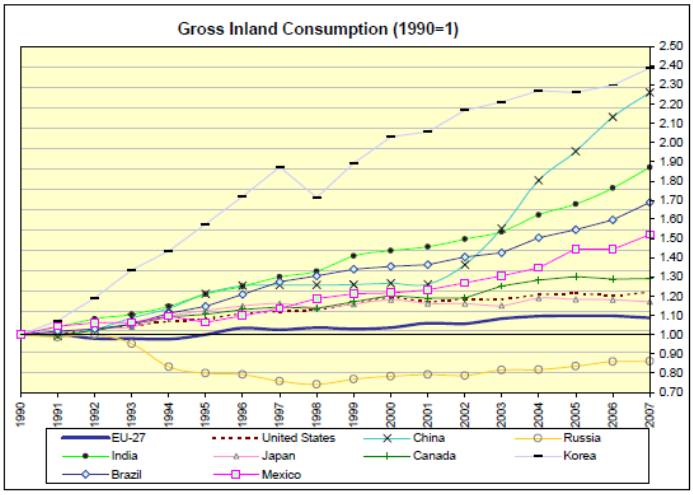

Figure 4. Gross Inland Consumption from 1991 to 2007[76]

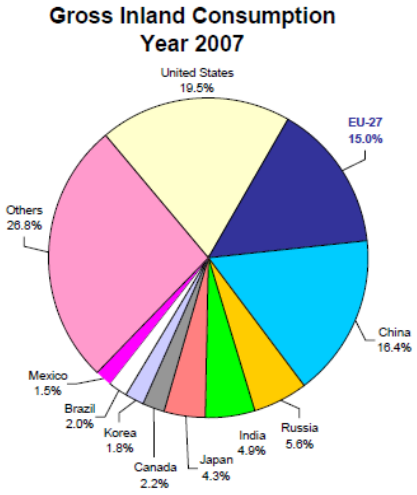

Figure 5. Gross inland Consumption in 2007[77].

The third period of chinese development started at the begining of the 90's and continues today. Since it began, China's energy consumption has overtaken domestic production and the country has become a net energy importer. Figure 4. shows the different speed of growth of the EU and China energy consumption. According to figure 4. Chinese energy consumption started to grow rapidly from 2001. As a result, the EU could not concentrate only on its own problems; fierce competition among countries required that they engage one another. The growing energy demand of the EU together with Chinese consumption and the rapidly growing oil price forced the EU to pay more attention to its energy policy. The 2006 Green Paper, outlining the European Strategy for Sustainable, Competitive and Secure Energy, already included the requirement of energy dialogues and multi-lateral cooperation with other energy consumer countries. At the time, the price and the consumption of oil were

[76] Eurostat statistics 2010 in European Commission Directorate-General for Energy and Transport (DG TREN), EU ENERGY IN FIGURES 2010, P. 77.
[77] Eurostat statistics 2010 in European Commission Directorate-General for Energy and Transport (DG TREN), EU ENERGY IN FIGURES 2010, P. 77.

still rising constantly. The new energy policy, which quickly followed the most recent Green Paper in 2007 recommended cooperation "with other energy consumer partners." International Partnership on Energy Efficiency Co-operation with China, India and Korea. The number of the summits, meetings and cooperation has been growing proportionally to gross world energy consumption and the increasing oil prices.

In the last twenty years China has become a leading energy consumer, even ahead of the EU. Figure 5. shows clearly that the China's consumption was 1.4 percent larger than the EU's in 2007. Countries exporting resources to the European Union are also a relevant issue.

Hard Coal Imports into the EU-27
(in kilotonnes by origin)

Hard Coal Total

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Share 2007 (%)
Total EU-27	110 828	126 465	136 076	112 220	113 295	124 472	123 390	134 467	132 892	131 414	151 575	173 041	171 629	180 360	196 062	197 043	213 809	214 358	100.0
Russia	3 945	4 057	11 122	9 476	9 257	8 906	6 928	7 738	7 768	10 252	14 976	20 875	23 033	26 545	40 382	48 304	55 544	56 117	26.2
South Africa	24 538	25 862	28 256	26 711	27 796	29 093	32 716	34 038	35 359	35 264	40 177	49 273	53 961	56 932	54 190	51 698	53 080	46 121	21.5
Australia	17 778	20 743	22 201	19 949	21 427	19 544	16 440	19 355	22 256	25 459	28 600	29 450	29 337	31 004	30 838	27 013	27 147	29 069	13.6
Colombia	9 065	11 642	12 087	11 717	11 437	11 478	18 271	19 870	18 952	19 079	23 132	22 633	21 398	22 908	24 224	24 147	26 068	29 018	13.5
United States	47 013	53 855	49 262	34 567	29 936	41 487	35 881	36 115	29 503	20 689	20 447	20 119	14 082	12 619	15 416	15 673	17 370	20 833	9.7
Indonesia	256	678	2 384	1 937	3 554	3 402	3 844	5 466	7 151	7 739	9 097	10 254	11 540	13 004	13 980	14 704	21 092	17 594	8.2
Other	8 233	9 628	10 764	7 863	9 888	10 562	9 310	11 885	11 903	12 932	15 146	20 437	18 278	17 348	17 032	15 504	13 508	15 606	7.3

Figure 6. Hard coal imports to the EU-27[78]
Source: Eurostat, May 2009

Countries exporting oil, gas and coal to the EU are relevant because China also imports huge quantities of these energy sources. If the EU and China have common energy importers, it will doubtless influence their energy dialogue. According to figure 6., the main hard coal provider to the European Union is Russia with 26 percent. The rate of Russian import has been increasing drastically. South Africa and Australia follow it with 21.5 and 13.6 percent of the whole amount of their import. Colombia, the Unites States and Indonesia have 13.5, 9.7 and 8.2 percent. All other countries supply only 7.3 percent. Complementary information about the hard coal can be added. The rate of hard coal usage is not the highest compared with the rate of oil and gas in the European Union. It is 18.3 percent from the total energy consumption.

[78] Eurostat statistics 2010 in European Commission Directorate-General for Energy and Transport (DG TREN), EU ENERGY IN FIGURES 2010, P. 15.

Crude Oil Imports
into the EU-27 (in Mio tonnes)

Origin	2000	2001	2002	2003	2004	2005	2006	2007	Share 2007(%)
Russia	112.4	136.8	154.7	170.8	188.9	188.0	189.6	185.3	34.0
Norway	115.9	108.1	103.1	106.4	108.6	97.5	89.1	84.3	15.5
Libya	45.5	43.8	39.2	45.9	50.0	50.6	53.2	55.5	10.2
Saudi Arabia	65.1	57.5	53.1	61.5	64.5	60.7	51.1	39.5	7.2
Other, Middle East	54.7	48.3	43.2	27.8	28.5	30.0	32.5	34.4	6.3
Iran	35.5	31.4	25.9	34.7	35.9	35.4	36.4	34.1	6.2
Kazahkhstan	9.9	9.1	13.4	15.9	22.2	26.4	26.8	18.3	3.4
Nigeria	22.4	25.7	18.4	23.2	14.9	18.6	20.2	15.5	2.8
Other Origin	58.3	62.3	64.2	56.6	56.6	66.2	66.0	78.1	14.3
Total Imports	**519.8**	**523.0**	**515.3**	**542.9**	**570.1**	**573.4**	**564.7**	**545.0**	**100.0**
in Million barrels	3794	3818	3761	3963	4162	4186	4122	3979	

Source: Eurostat, May 2009

Figure 7. Crude oil importers into the EU-27[79]

The import of cured oil is more divided among importers as figure 7. shows. According to this figure Russia supplies 34 percent, twice as much as than the next supplier, Norway, which supplies only 15 percent. Libya, Saudi Arabia and other countries from the Middle East provide 10.2, 7.2 and 6.3 percent, respectively. According to the new declared strategy, the EU would like to strengthen cooperation with Iran and Uzbekistan in the future.[80] However, the recent events like the caricatures of the Prophet Mohammed in a Danish newspaper and the Iraq war have made the relation between Europe and the Middle East unstable. Iraq provides 6.2 percent, which is a significant amount, so good relations with the Middle East are necessary. Kazakhstan, Nigeria and other importers give 3.4, 2.8 and 14.3 percent of the whole import.

Gas Imports
into the EU-27 (in TJ, terajoules)

Origin	2000	2001	2002	2003	2004	2005	2006	2007	Share 2007(%)
Russia	4539 709	4421 515	4554 744	4895 252	4951 044	4952 879	4937 711	4685 365	40.8
Norway	1985 231	2136 379	2601 569	2699 473	2801 723	2671 779	2844 237	3061 751	26.7
Algeria	2203 075	1957 181	2132 477	2158 803	2042 137	2256 826	2132 236	1943 976	16.9
Nigeria	172 020	216 120	217 882	335 929	410 260	436 319	563 905	588 317	5.1
Libya	33 442	33 216	25 536	30 390	47 809	209 499	321 150	383 615	3.3
Qatar	12 443	27 463	87 952	80 414	160 170	195 713	232 721	275 496	2.4
Egypt						202 419	327 394	221 305	1.9
Trinidad and Tobago	36 334	24 498	19 120	1 365		29 673	163 233	104 917	0.9
Other Origin	112 810	199 256	125 425	100 023	313 245	409 387	227 147	213 995	1.9
Total Imports	**9095 064**	**9015 628**	**9764 705**	**10301 649**	**10726 388**	**11364 494**	**11749 734**	**11478 737**	**100.0**
in Mio Cubic meters	240 610	238 509	258 326	272 530	283 767	300 648	310 840	303 670	

Figure 8. Gas Importers into the EU-27[81]

NOTE: Gross calorific value of 1 million cubic meter of Natural Gas can vary between 37.5 and 42.5 terajoule

[79] Eurostat statistics 2010 in European Commission Directorate-General for Energy and Transport (DG TREN), EU ENERGY IN FIGURES 2010, P. 14.

[80] Energy security: EP adopts blueprint for the EU's future energy strategy, Press Release, 03-02-2009 - 13:26

[81] Eurostat statistics 2010 in European Commission Directorate-General for Energy and Transport (DG TREN), EU ENERGY IN FIGURES 2010, P. 14.

Russia is far and away the leading provider of gas, with 40.8 percent as figure 8 shows. For the EU, it is a scary number, clearly signifying that the EU has a serious dependence on Russia. Northern, Central, and Eastern Europe import natural gas from Yamburg.[82] Norway is the second biggest importer of gas with 26.7 percent. Algeria, Nigeria and Libya taken together do not provide even as much as that. They provide 25.3 percent. Qatar, Egypt, Trinidad and Tobago, and other countries represent only the remaining 7.1 percent of the EU's gas imports. Additionally, Northern Europe complements its gas demand with liquid gas.

3.2 The Energy Situation in China

3.2.1 The Development of external energy and strategy policy

Chinese energy policy has a much different historical background than its European counterpart. It took for the EU approximately 50 years to bring about the Common Energy Policy. Since the ratification of the Lisbon Treaty, the EU has had a "common voice" on the energy issue and can shape a common direction for its external energy policy. In contrast with the EU, China even does not have an energy minister and ministry. According to Hongtu Zhao,[83] China has energy strategy rather than energy policy. The National Development and Reform Commission (NDRC) is the main policy-making and regulatory authority in the Chinese energy sector. Additionally, four ministries control the various elements of the country's oil policy. The National Energy Administration (NEA) was established by the government in July 2008 to be the key energy regulator in the country. The NEA is linked

[82] Directorate- General for Energy and Transport, Europe's energy position present & future, Luxemburg, 2008. P.8.

[83] Hongtu Zaho is the researcher of the China Institutes of Contemporary International Relations, Beijing. He had a presentation about China's Energy Security Policy and Its International Implication on the Energy Security and Climate Change Workshop in Beijing, 20-21 October 2007.

with the NDRC and it is responsible for approving the new energy projects in China and setting the domestic wholesale energy prices. Also, it is responsible for implementing the central government's policy of energy issues and other duties. The NDRC is a department of the Chinese highest executive power, the China's State Council.[84] Evidently, what constitutes energy policy in China and its place in the political system is quite different than in the rest of the world.

Diplomacy in the field of energy has become more and more important for China's energy security.[85] As the whole Chinese economy is dependent on energy, there is no more important issue for its continued prosperity and security. Thus, a smooth system of supply is as critically important to maintain as it is difficult to secure: "China's market economy has locked itself in a "tiger-riding dilemma" i.e. any slow-down in economic growth would put the country in a risky situation which might lead to social unrest and popular resentment."[86] The most critical elements of Chinese energy importation are oil and natural gas because they must import them from overseas. Their strategy for dealing with this and the other challenges of fueling their economy can be divided into four areas according to the paper China's Energy Policy and its Contribution to International stability written by Philip Andrews-Speed.

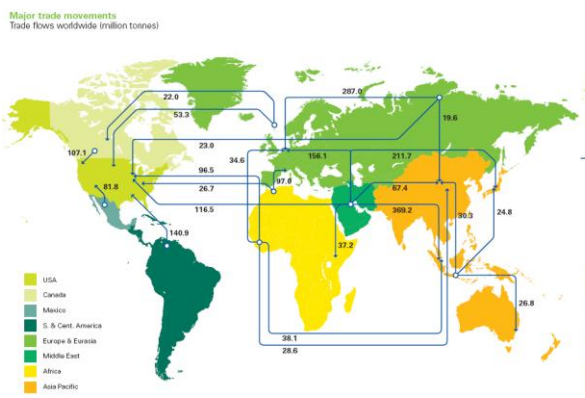

Figure 9. Map of major oil trade movements[87]

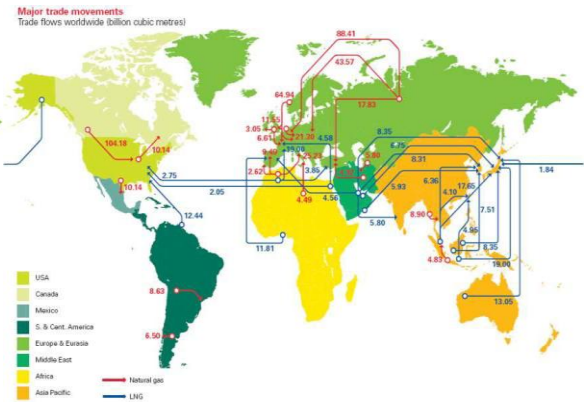

Figure 10. Map of major natural gas trade movements[88]

Source: ***BP Statistical of Word Energy 2006***

[84] EIA U.S. Energy Information Administration, Independent Statistics and Analysis, China, July 2009. P.1. http://www.eia.doe.gov/emeu/cabs/China/Oil.html
[85] China's Energy Diplomacy and its Implication for Global Energy Security, FES Briefing Paper 13, August 2007. P.2.
[86] Li, Xing, Eyeing on the Arctic Region: China's Search for Energy and Maritime Transportation Security 2009, p.5.
[87] Mikko Palonkorpi, Energy Security and the Regional Security Complex Theory, University of Helsinki, 2006, P.11.
[88] Mikko Palonkorpi, Energy Security and the Regional Security Complex Theory, University of Helsinki, 2006, P.11.

3.2.1.1 The first is the diversification and security of oil import. Figure 9. shows the main routes of oil import. In the figure one can see clearly the sources of oil imports to China. Later, specific numbers will clarify the situation, but the map gives a sense of the diversity of Chinese imports. The second area of energy strategy has a tight connection with the first one:

3.2.1.2 The second is to secure the energy transport routes. A significant quantity of fuel is imported through the shipping industry (figure 9. and 10 shows the routes). To avoid the risks inherent in that means of transport, China plans to build pipelines. The pipelines would reduce the Chinese dependency on sea-lanes but their existence might damage the relations with those who benefit from Chinese sea transports.[89] The second area covers event Liquefied Natural Gas (LNG) transport (figure 10.) and other raw materials. This security of these transport routes is so imperative that China decided in December 2008 to send three warships to give protection from pirates to Chinese vessels and crews near Sudan. China is ready to protect its energy transportation by force if necessary.[90]

3.2.1.3 The third area of the Chinese energy strategy is overseas investments. At the government's instigation in 1993, "China's National Oil Companies (NOCs) began going abroad to acquire stakes in oil field…"[91] This program was called "Going Global". At the beginning of the program it was a slow process and not as public as nowadays. China had participated in 58 overseas oil and gas projects until 2003.[92] In 2006 China started a sub-program of "Going Global" aiming to produce 60-80 national big multinational enterprises, which would be able to compete with the biggest existing international companies. They have become the "national champions" of China. PetroChina was the biggest multinational company in the world in August, 2007 and seven out of the top thirty companies in the world are Chinese firms and with parts of them owned by the Chinese government. This impressive performance in international rankings shows the significant and still increasing role China plays in international markets. The Chinese dominance is even more notable in the banking sector; among the top five banks listed, three are Chinese.[93]

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[89] Zhang Jianxin, Oil Security Reshapes China's Foreign Policy, Center on China's Transnational Relations Working Paper No. 9. The Hong Kong University of Science and Technology, 2006, P.p.5-6.

[90] Li, Xing, Eyeing on the Arctic Region: China's Search for Energy and Maritime Transportation Security 2009, p.8.

[91] Philip Andrews-Speed, China's energy policy and its contribution to international stability, Facing China's rise: Guidelines for an EU strategy, Institute for Security Studies, Paris, December 2006, P.75.

[92] China's "going global" overseas investment shows five traits, People's Daily Online, 21.09.2004. http://english.peopledaily.com.cn/200409/20/eng20040920_157654.html

[93] András Inotai, Ottó Juhász, Barna Tálas, The Chinese strategy: Continuity and Fluctuation ,Hungarian Academi of Sciences 2008. P.:75

The Chinese transformation is most visible in two major areas of the world market. One of these is trade, capital flow and global raw material and energy demands. The other is connected with monetary policy. Energy has a strong connection with capital flow and foreign direct investments of China. The leaders of the overseas investments come from the Chinese government and from NOCs.[94] The government promotes the idea that the Chinese enterprises hold the production right of overseas oil sources as a back-up plan for when their mainland supplies run out. At such a time, "national champion" oil companies will be able to expand overseas. NOCs can be used by the government to support wider diplomatic and strategic goals all over the world. Chinese government can discover the needs of the host governments. Additionally, some of the host countries need help from NOCs in order to fulfill their own political goals. China is ready to offer its help in exchange to secure its energy supply from these countries. We can classify the "problematic" countries from investment point of view into 5 classes. The first class includes the countries in which the USA or Western governments prohibit their own companies from investing. Iran, Sudan, Burma, Syria and Myanmar are all in this class. The second class consists of the countries wishing to break the monopoly of western companies, for example, Equatorial Guinea and Libya. The third class includes the countries which want to twist the tail of the West or the USA like Venezuela. The next class includes states that are ready to pay with their energy sources for aid and infrastructure that China provides. This is the situation for Angola, Sudan and Nigeria. In the last group we can find the governments that wish to get back the control over their resources. Kazakhstan and Russia are good examples of this type.[95]

Figure 11. China's Outward Foreign Direct Investment from 1979 to 2006[96]

[94] Xin Ma and Philip Andrews-Speed, The Overseas Activities of China's National Oil Companies: Rationale and Outlook, Minerals and Energy, vol. 21, no. 1, 2006, P.p.1-14.
[95] Philip Andrews-Speed, China's energy policy and its contribution to international stability, Facing China's rise: Guidelines for an EU strategy, Institute for Security Studies, Paris, December 2006, P.76.
[96] http://www.usc.cuhk.edu.hk/webmanager/wkfiles/6538_1_a1.gif 20.03.2010.

Figure 11. shows how the Chinese FDI flowed abroad. We can see that the amount of the investments abroad has been growing since the launch of the "Going Global" program in 1993. Not, however, without a significant drop from 1998 to 2000.[97] The cause of this was the Asian Financial Crisis. During that event, Chinese export levels were almost static. In 2000 the economy became stable and the outward FDI started to grow again.

Date	**The current status of negotiation**	**Chinese share In percent**	**The offered price (million euro)**	**The object of the business**	**Country**	**Chinese buyer**
June 2001.	Closed	100	1154	Hyundai Display Technology	South Korea	BOE Technology
January 2002.	Closed	86	672	Repsol- YPF	Indonesia	CNOOC
October 2003.	In progress	13	593	Gorgon natural gas field	Australia	CNOOC
November 2003.	Closed	67	450	Thomson SA	France	TLC
July 2004.	Closed	49	419	Ssangyong Motor	South Korea	Nanjing Auto
December 2004.	Closed	100	1303	IBM (IC sector)	USA	Lenovo
May 2005.	Broken	100	15255	Unocal	USA	CNOOC
June 2005.	In progress	100	370	Petro China International	Indonesia	CNPC, PetroChina
June 2005.	Broken	100	1050	Maytag	USA	Hai'er
July 2005.	Closed	100	72	Mg Rover	UK	Nanjing Auto
August 2005.	Closed	100	3204	PetroKazakhstan	Canada	PetroChina
January 2006.	In progress	45	1894	Akpo oil field	Nigeria	CNOOC

Figure 12. Chinese firms most relevant international investments from 2001 to 2006. Source: Deutsche Bank Research in 2006.

Figure 12. shows that China National Offshore Oil Corporation CNOOC and PetroChina are the most active in the energy investments. Their investments are mostly acquisition investments not the green field investment. The difference between the two investments is that acquisition investment means: one buys an existing company and starts a new business

[97] Wing Thye Woo, Jeffrey D. Sachs and Klaus Schwab, The Asian Financial Crisis Lesson for a Resilient Asia, Massachusetts Institute of Technology, Cambridge, 2000, P.p. 28-29.

there. The green field investment when one builds up a new company[98]. The aims of these investments to increase the Chinese national security through safe energy supply.[99] I have already mentioned that PetroChina is a huge multinational enterprise, but, as we can see in figure 12., there are many other big enterprises. China National Petroleum Corporation (CNPC) alone has a responsibility for 60 percent of the total oil and 80 percent of the total gas output of China. PetroChina is the publicly-listed arm of CNPC. Figure 13. illustrates the operation fields of CNPC overseas.

E&P means exploration and production

Figure 13. CNPC overseas Investment Projects[100]

China Petroleum and Chemical Corporation (Sinopec) is another company owned by the Chinese government. Since 1997-1998, due to the reorganization of state-owned oil and gas companies, Sinopec and CNPC have been responsible for the Chinese upstream and downstream of the oil market. Those two companies along with China National Offshore Oil Company (CNOOC), which has responsibility for offshore oil exploration and production,

[98] Charles W. L. Hill, Global Business Today, Sixth Edition, McGraw-Hill Irwin, New York, 2009. P. 428.

[99] András Inotai, The economical relations of the European Union and China, Foreign Economy journal, LI. Year, 2007/11-12. P.6.

[100] Hongtu Zaho is the researcher of the China Institutes of Contemporary International Relations, Beijing. He had a presentation about China's Energy Security Policy and Its International Implication on the Energy Security and Climate Change Workshop in Beijing, 20-21 October 2007.

are in charge of the internal energy market. However, as a result of growing attention to offshore zones, CNOOC's role has become more important.[101] The company is now a keystone of the Chinese External Energy Strategy.

3.2.1.4 The fourth part of the external energy strategy is the role of oil and gas diplomacy.

The connection between the Chinese government and NOCs is getting closer and closer both at home and abroad. The government uses NOCs as part of external energy diplomacy. In countries strategically important for China, the government operates and plays the lead role in negotiations. The strategically important countries are Kazakhstan, Iran, Saudi Arabia, Sudan, and, most importantly, Russia. Other countries are less important from a strategic point of view, but the government's role can be significant in the cases of Angola and Venezuela. In less important countries, the role of the government is only that of a supporter, it puts NOCs forward in the negotiation process. Usually, a relationship with the government comes together with a package of Chinese offers, which can be a wide range of investments or trade as can be seen in several African nations. It may include substantial aid packages for poorer countries. However, it more frequently means the transfer of civilian or military technology.[102]

The technique of sending NOCs all over the world to acquire oil and gas resources is not a new one. Other countries have practiced this tactic for a long time. The USA, for instance, began investment in international energy sources long before China did. With more players on the field, the game changes: What happens when two or more consumer countries encounter one another in the arena of operations?

This situation has two significant consequences. The first is that the price of the energy source will increase because of the growing demand. It has already happened. According to the calculation of the International Energy Agency, half of the increases in oil price can be traced to China's arrival as a major consumer. Mr. Yu Jiao, a researcher for Sinopec, has tried to argue that this is too near-sighted. He suggests the price of oil has changed for of many

[101] EIA U.S. Energy Information Administration, Independent Statistics and Analysis, China, July 2009. P.1. http://www.eia.doe.gov/emeu/cabs/China/Oil.html 26.02.2010.

[102] Andrea Goldstein, Nicolas Pinaud, Helmut Reisen and Xiaobao Chen, The Rise of China and India. What's in it for Africa? Development Centre Studies, OECD, ParisP.65.

other reasons such as fluctuation of foreign currencies, terrorist attacks or speculations.[103] The second consequence is that consumer countries feel less secure when faced with competitors for their energy sources, which may increase the instability of their international relations. China has been very sensitive to external threats from other major powers; at present the USA presents the greatest menace to them.[104] Wolfgang Hirn wrote that the European Union compared to USA is just a "paper tiger" for China at the moment [105].

3.2.1.5 Some additional elements of Chinese energy policy besides the four groups

There remain some elements of Chinese energy policy outside the four groups described above. For example, the creation of a better environment for investments is also important. According to Minxin Pei, the Chinese NOCs want the government to support the investments abroad and to regard the foreign investments as a aspect of energy security. Hongtu Zhao brings up an interesting issue: Who drives whom? Do NOCs drive the government or vice versa? It is a difficult question and opinion is divided on it. The Chinese Energy Security policy has some goals in the internal market: to improve energy efficiency and make it fit the economic structure, continue the liberalization and transition of energy market, discover new and develop renewable energy sources, pay more attention to international relations and establish an emergency response system.[106]

3.2.2 What are the different points in the European and Chinese energy strategies?

China' energy policy has two significant advantages compared with the liberal policy of the European Union. "The first relates to China's willingness to ignore international opinion in its dealings with 'states of concern' such as Iran, Sudan, Burma, Myanmar, Turkmenistan, Venezuela, Uzbekistan and a number of states in central and west Africa.[107]" The second

[103] Wolfgang Hirn, Kína a nagy falat, Miként változtatja meg életünket Kína felemelkedése, HVG press KFT. Budapest, 2006. P. 119.
[104] Philip Andrews-Speed, China's energy policy and its contribution to international stability, Facing China's rise: Guidelines for an EU strategy, Institute for Security Studies, Paris, December 2006, P. 73.
[105] Wolfgang Hirn, Kína a nagy falat, Miként változtatja meg életünket Kína felemelkedése, HVG press KFT. Budapest, 2006. P. 119.
[106] Inotai András, Juhász Ottó, Tálas Barna, KÍNA-STRATÉGIA: FOLYAMATOSSÁG ÉS VÁLTOZÁS, Hungarian Academy of Science, Budapest, 2007, P.82. http://www.mta.hu/fileadmin/2008/11/02-kina.pdf 20.02.2010.
[107] Philip Andrews-Speed, China's energy policy and its contribution to international stability, Facing China's rise: Guidelines for an EU strategy, Institute for Security Studies, Paris, December 2006, P. 79.

advantage of China is the capability to ignore the internal policy of the energy supplier countries. It means that China do not take care about politics of the countries where it invested in, it does not try to make any influence on the supplier countries' political life ,China is non-comittal and uninvolved in any domestic affairs of them. This policy is undermining the western countries' policy, which tries to encourage good governance, democracy, and help the states to promote their own interests. China comes into conflict with the EU's interests in these countries.[108] Africa provides several examples of this. One can see how China's FDI and aid focus on the investments, which help to take the energy sources out of Africa into China. The Chinese FDI is mostly concentrated on the infrastructure in Africa. Chinese expansion is harmful to the European Union's interests in Africa because China offers higher prices for the raw materials. The EU cannot buy enough raw materials at low prices if China continues gaining ground in Africa. The two powers' methods of diplomacy and the aims are sometimes extremely different. The EU tries to establish projects, protect human rights, and liberalize the supplier country. These are commendable aims, but they can be even harmful from a purely commercial point of view. China has more utilitarian aims than the EU and it does not want to invest energy, money and efforts to make changes in the supplier countries. China's exclusive focus in these situations is business.

[108]China's Energy Outlook 2004, The compiling Team of China's Energy Outlook Institute of Nuclear and New Energy Technology, Tsinghua University, Tsinghua University Press P.p.:89-90.

3.2. 2 The development of energy strategy through numbers

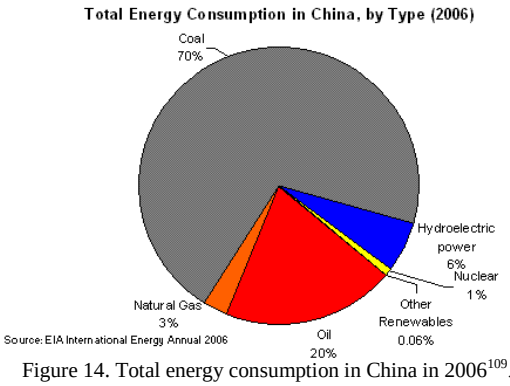

Figure 14. Total energy consumption in China in 2006[109].

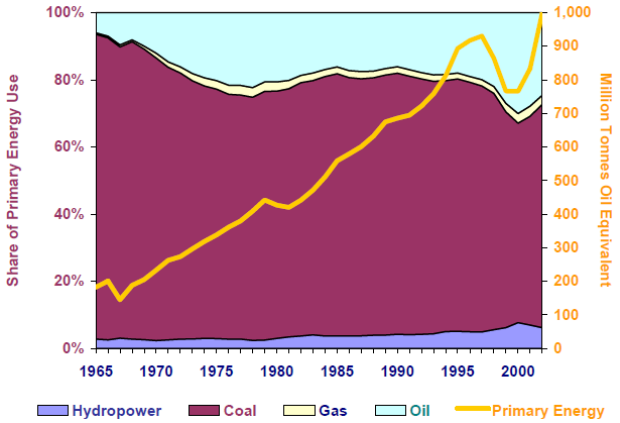

Figure 15. China's Growing Primary Energy Consumption and Energy Mix from 1965 to 2002[110]

Figure 14. shows the unequal energy mix, skewed heavily toward coal consummation. The hard coal consumption of China is about 70 percent of its total energy consumption. The government is working to decrease the role of coal in the energy mix because of international pressure. Such heavy coal usage drastically effects the environment by its CO_2 emission. The government plans to emphasize the importance of renewable energy sources in order to increase the present 1.5 percent to 6 percent until 2020. This implies the replacement of huge amount of coal-power with power from biomass, wind or water energy.[111] This proposal was still not perfectly acceptable to the EU. In figure 15. one can see the constantly growing rate of the renewable energy, designated "primary energy," as well as water energy. Oil represents 20 percent of the total consumption and it is the most significant challenge to the external energy strategy (figure 14.). The government and NOCs pay special attention to this energy source. According to figure 15., oil usage has been constantly increasing since 1965.

Natural gas does not represent a significant portion of the energy consumption total; it is only 3 percent. Natural gas has been complemented with LNG and government programs have been created to launch more LNG ports in China. LNG and renewable resources will help diversify the energy the coal-dominated spectrum.[112]

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[109] U.S. Energy Information Administration Independent Statistics and Analysis, China, Background, July 2009. http://www.eia.doe.gov/emeu/cabs/China/Background.html 21.03.2010.

[110] Yanjia Wang, ENERGY IN CHINA: TRANSPORTATION, ELECTRIC POWER AND FUEL MARKETS, ASIA PACIFIC ENERGY RESEARCH CENTRE, Tokyo, 2004. P.10. http://www.ieej.or.jp/aperc/pdf/CHINA_COMBINED_DRAFT.pdf

[111] Clean Energy journal, 02.06. 2009 http://naplap.eu/kina-nagyot-valt-es-megzoldul

[112] U.S. Energy Information Administration Independent Statistics and Analysis, China, Background, July 2009. http://www.eia.doe.gov/emeu/cabs/China/Background.html 21.03.2010.

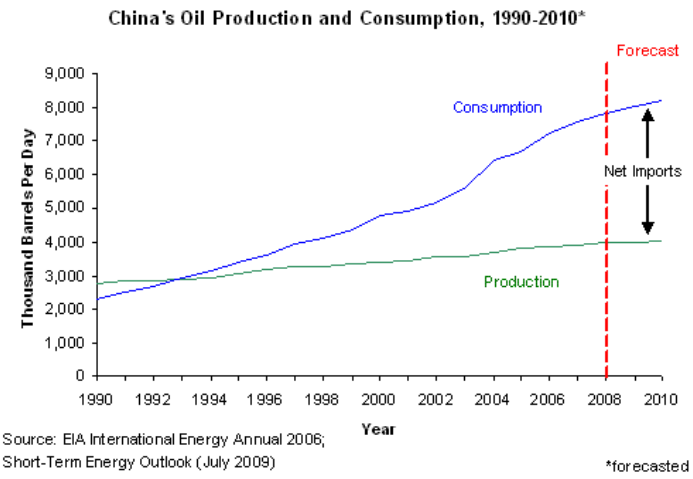

Figure 16. China's Oil Production and Consumption from 1990 to 2010[113].

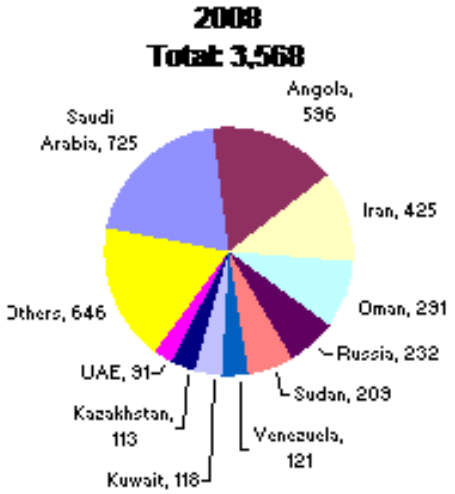

Figure 17. China's oil importers' mix in 2008[114]
Thousand Barrels Per Day

According to the U.S. Energy Informational Administration, China is the third biggest oil importer in the world, importing 3858 thousand barrels per day, and the second biggest consumer.[115] As mentioned above, the Chinese consumption has soared above domestic production since China became a net importer of oil in the early 90s. Figure 16. shows this and the strong positive trend in demand for oil. Figure 17. describes the relevant importers with their rates. One third of the Chinese imported oil came from Saudi Arabia and Angola in 2008. Iran, Oman, Russia, Sudan, Venezuela, Kuwait and Kazakhstan follow them with much smaller fractions. It is important to note that China, in contrast with the EU, has its own quite significant oil production. As figure 16 shows, China was self sufficient until the 90s. China still has significant oil reserves as the figure below shows:

[113] U.S. Energy Information Administration Independent Statistics and Analysis, China, Background, July 2009. http://www.eia.doe.gov/emeu/cabs/China/Background.html 21.03.2010.
[114] U.S. Energy Information Administration Independent Statistics and Analysis, China, Background, July 2009. http://www.eia.doe.gov/emeu/cabs/China/Background.html 21.03.2010.
[115] http://tonto.eia.doe.gov/country/index.cfm 21.03.2010.

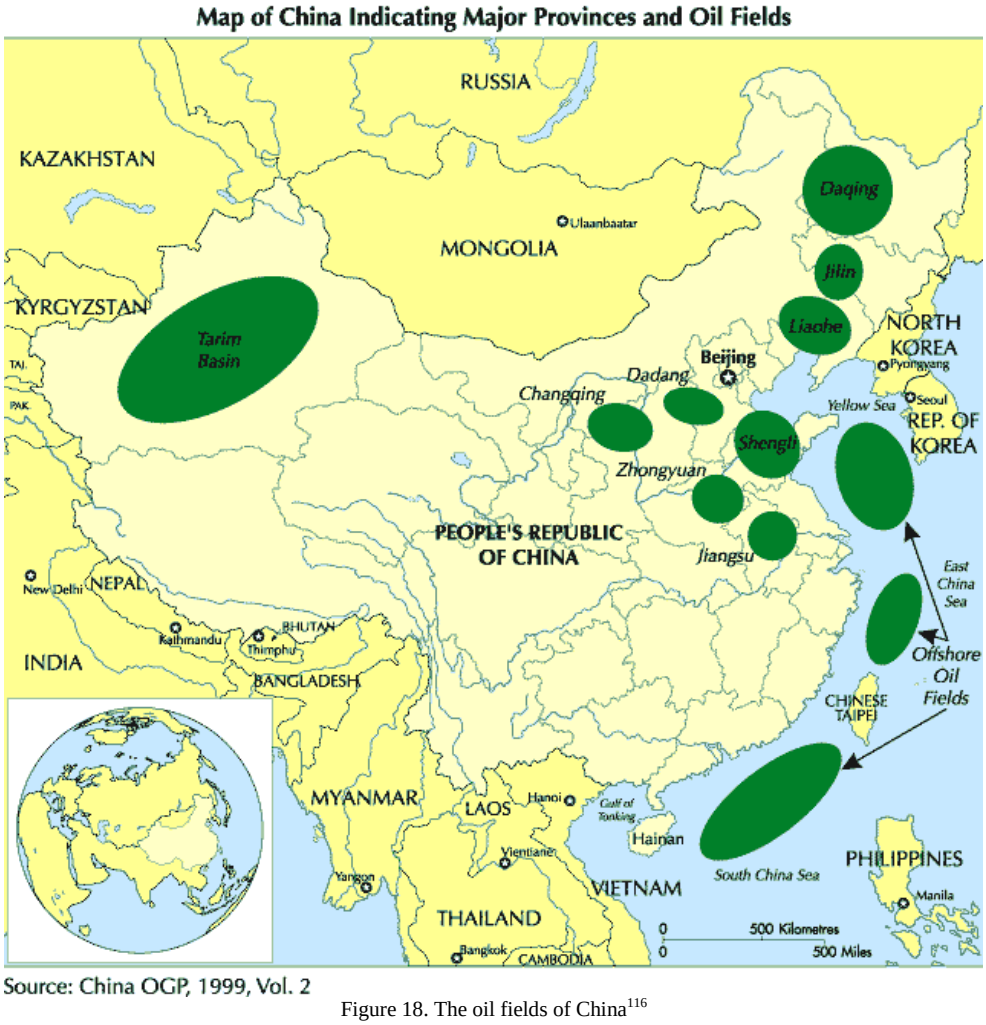

Figure 18. The oil fields of China[116]

Tarim Basin is one of the Chinese regions with a significant oil reserve. Approximately as big as Poland and entirely desert, scientists estimate that there may be 80 Gb oil under it. China has many other unexpected oil reserves, but exploitation is made difficult in some cases by a deep pay zone, complex geology or a high drill costs. High subsurface pressure and temperature do not help exploitation, making installation of equipment difficult and workers' lives hard. In the case of a successful exploitation, they have to face the problem of missing appropriate infrastructure.[117]

[116] Dale Allen Pfeiffer, Sizing Up the Competition -Is China The Endgame? From the wilderness publications 2002. http://www.fromthewilderness.com/free/ww3/092502_endgame.html

[117] Dale Allen Pfeiffer, Sizing Up the Competition -Is China The Endgame? From the wilderness publications 2002. http://www.fromthewilderness.com/free/ww3/092502_endgame.html

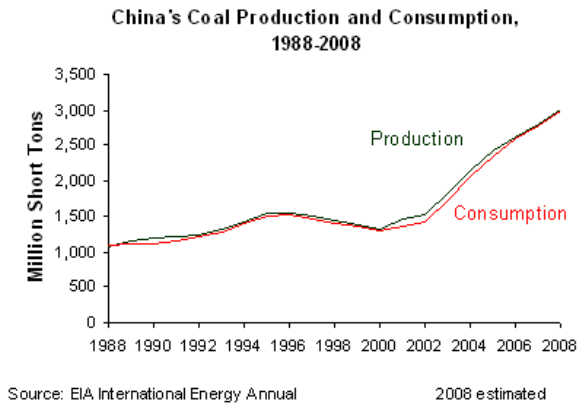

Figure 19. China's Coal Production and Consumption from 1988 to 2008[118]

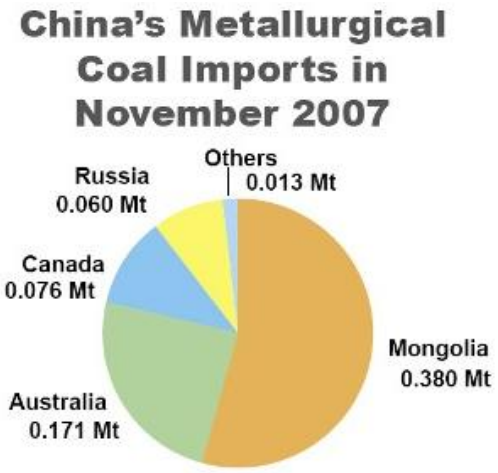

Figure 20. China's Coal Import in 2007[119]

When it comes to coal, China is almost self-sufficient (figure 19.). This is a huge advantage for China. Compared to the EU, China uses much more coal in the industrial sector and it is almost independent from other countries, meaning that the industrial sector is in a much more secure situation than the EU's is.

The price of coal has not increased at the same speed as those of oil and gas. The EU uses much more gas and is thus dependent on other countries. The small amount of coal that China imports comes from Mongolia, Australia, Canada and Russia (figure 20.). However, China faces the difficult challenge of drastically decreasing its coal usage in the near future to curb skyrocketing pollution levels. It is no easy task to replace such particularly cheap and effective energy source, especially considering the degree to which China depends on coal.

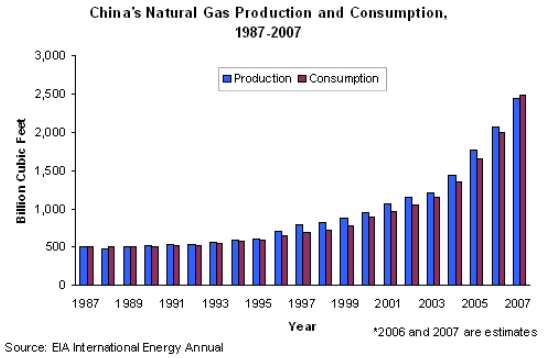

Figure 21. China's Natural Gas Production and Consumption[120]

[118] U.S. Energy Information Administration Independent Statistics and Analysis, China, Coal, 2009. http://www.eia.doe.gov/emeu/cabs/China/Coal.html

[119] http://images.google.com.hk/imgres?imgurl=http://www.gulfsideminerals.de/MongCoal.jpg&imgrefurl=http://www.gulfsideminerals.de/&usg=__c3d0y8CylFoE0n5cgZSyCjgjDUY=&h=282&w=300&sz=20&hl=en&start=39&sig2=4Q39tOsNpeAK1jAj4detPg&tbnid=qPNbEzmSerixyM:&tbnh=109&tbnw=116&prev=/images%3Fq%3Dchina%2Bimports%26gbv%3D2%26ndsp%3D18%26hl%3Den%26sa%3DN%26start%3D36&ei=Y8b2SY3SLJSGkAXRrq3qCg

National natural gas production was enough for the Chinese economy until 2006. China has significant gas producing regions like Ordos Basin, Changqing Basin, Tarim, Chungeer and Caidamu Basin. These fields provide 65 percent of the Chinese total gas consumption. The natural gas sector is similar to the oil sector in that state owned companies, namely, CNOOC, Sinopec and CNPC, transact the three-fourths of the upstream and downstream businesses. CNOOC's long term policy includes the goal to spend 29 billion US dollar until 2020 for foreign direct investment on the South China Sea and the Bohai Bay in order to secure its future supply.. Recently, liquefied natural gas has become very popular and the government started an LNG project in 2009. The government expects LNG to change significantly the Chinese energy mix.[121] China imported its first shipment of LNG in 2006. CNOOC in the major actor in importing LNG. The contract between CNOOC and the Australian North West Shelf liquefaction terminal was established 25 years ago. The Chinese government has also made agreements with Indonesia and Malaysia. Figure 22. shows the existing and the planned terminals. LNG has two short term advantages compared with natural gas: the price of the gas pipelines is high, their expenditures are too small to build an LNG terminal, and it takes much more time to build a pipeline than to build an LNG terminal. Of course the LNG will be more expensive for a long time, but it provides a short term solution for the Chinese government. China will have a small deficit form natural gas in 2010, because domestic production will be 90 bln and according to forecasts consumption will be 110 bln this year. The Malaysian's Petronas will supply LNG to the Shanghai LNG Company LTD. According to recent reports, the National Iranian Oil Company (NIOC) will soon finalize a deal with the CNOOC that Iran will supply 3 mln metric tons of LNG in every year to CNOOC for 25 years.[122]

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[120] U.S. Energy Information Administration Independent Statistics and Analysis, China, Natural Gas, 2009. http://www.eia.doe.gov/emeu/cabs/China/NaturalGas.html 21.03.2010.

[121] Wan Zhihong, LNG projects are changing China's energy mix, China Daily, 2009-08-10 08:22, http://www.chinadaily.com.cn/bizchina/2009-08/10/content_8548057.htm

[122] Forbes. Com, China natural gas import demand seen at 20 bln cubic meters by 2010 - report 12.06.06, 8:42 PM ET, http://www.forbes.com/feeds/afx/2006/12/06/afx3234584.html, 29.03.2010.

Figure 22. Key LNG terminals- Current and Proposed[123]

Key LNG Terminals – Current and Proposed				
Terminal Name	**Status/Online Date**	**Developer**	**Initial / Expansion Capacity (MMcf/d)**	**Possible Supplier**
Dapeng/ Guangdong	Operational; Expansion: 2011	CNOOC, BP	650 / 520	Australia NWS
Fujian	Operational; Expansion: 2011	CNOOC	340 / 170	Indonesia - Tangguh
Shanghai	Construction: 2009; Expansion: 2012	CNOOC; Shenergy	390 / 390	Malaysia - Petronas
Dalian	Construction: 2011; Expansion: TBD	PetroChina	390 / 390	QatarGas II
Rudong/Jiangsu	Construction: 2011; Expansion: TBD	PetroChina/ Pacific Oil & Gas	460 / 460	QatarGas IV
Zhejiang/Ningbo	Approved: 2012; Expansion: TBD	CNOOC	390	TBD
Qingdao	Approved: 2012	Sinopec, Huaneng Group	390	TBD
Zhuhai	Construction: 2010	CNOOC, Yudian Group	260	TBD
Shenzhen	Construction: TBD	CNPC, CLP	390	TBD

[123] U.S. Energy Information Administration Independent Statistics and Analysis, China, Natural Gas, 2009. http://www.eia.doe.gov/emeu/cabs/China/NaturalGas.html 21.03.2010.

3.3 The framework of the EU-China cooperation

3.3.1 Generally speaking about the cooperation

Since 1998, relations between the two powers have taken the form of a three level dialogue including summits, energy conferences, and the sectoral dialogues. The Summits has the highest rank in the cooperation. This is the yearly meeting of the ministers. This is the widest forum in their cooperation. The participants discuss the topics which were compiled by the sectoral dialogues and working groups. They discuss not just particularly the energy. They confer every issue which came up during the year between the two countries. The second level is the EU-China Energy Conference which is held in every other year. This conference is just for the different energy issues and it is organized by the Chinese Ministry of Sciences & Technology and the Directorate General Transport & Energy. They agree in common projects like SYNERGY or EU-China Energy and Environment Programme (EEP) which are working in parallel with the conferences. The third level is the sectoral dialogues which prepare the problems and plans for the Summits and Energy Conferences. The sectoral dialogue means a permanent communication with the two countries. Now there are 24 sectoral dialogues between the EU and China. Usually, at the end of the Summits and Energy Conferences the participants sign the joint declaration about the topic and future plans which were agreed in the actual meeting.

3.3.2 The history of the EU-China cooperation

The visit of Christopher Soames, first European Commissioner in Beijing, established diplomatic relations between the European Union and China in May 1975. Initially, discussions mostly focused on trade between the two regions; energy cooperation was not one of the primary topics. Only in 1981 did the EU feel it necessary to develop an energy policy specific to China. Thereafter, energy cooperation became one of the most significant and active fields of the two regions' bilateral Science and Technology relations. They started the first science and technology project in 1983.[124] From 1989 to 1990 relations froze because of the incidents in Tian An Men Square. However, in the early 90's cooperation became much more intense. A new bilateral dialogue was established in June 1992.

[124] http://www.chinamission.be/eng/kj/t72211.html 01.03.2010.

The partnership between the EU and China was extended through sectoral dialogues, one of these devoted specifically to energy. The sectoral dialogue of energy aims to identify those areas of energy concerns where common interests could be advanced. The first Energy Cooperation Conference was held in 1994. The two parties agreed to set up their dialogues and create an institutional framework for it. This was to include meetings at ministerial, senior official and expert levels.[125] The cooperation was extended to other countries under the SYNERGY program (from the early 90's to 2002). This program "provides support to implement technical activities with other specific programs such as THERMINE (1994-1998). Synergy provided assistance to set up energy institutions and support the design of energy policy instruments".[126] The Commission published the Communication from the Commission to the Council "Toward the new Asian Strategy" paper on 13 July 1994. This paper included[127] the new trade and cooperation strategy of the EU to Asia, but it did not say anything about energy issues. Meanwhile, the "XVth Chinese Communist Party Congress in 1997 ushered in the post-Deng era by endorsing an ambitious economic and social reform agenda for the next five years. This can be seen as a clear signal of China's intention to consolidate, accelerate and complete the transition already underway."[128]

The White Paper of 1995, mentioned above, emphasized the importance of developing diplomacy with Asia in the field of energy. It also mentioned the of elaboration of an Asian energy policy. The Commission established the first Communication with the title "A Long-term policy for China-Europe Relations" on 15 July 1995. However, in this "long-term policy" there is only a single paragraph about energy issues. It mentioned the support of gas industry, transfer of technology and know-how through the use of European products but nothing about cooperation of fossil fuels or security of supply. The paper's primary concern was trade relations.[129]

The second EU-China Energy Cooperation Conference was taken place in Beijing from 13 October to 15 October 1996. The EU's energy commissioner visited the People's Republic of

[125] European Commission, General Report on the activities of European Union 1994, ECSC-EC-EAEC, Brussels, 1995. P.309.
[126] European Commission, General Report on the activities of European Union 1994, ECSC-EC-EAEC, Brussels, 1995. P.124.
[127] The Communication from the Commission to the Council, Toward the new Asian Strategy paper, 13. 07. 1994. COM (94) 314
[128] Commission of the European Communities, Communication from the Commission, Building a Comprehensive Partnership with China, 25. 03. 1998. P.3.
[129] Communication of the Commission, A Long Term Policy for China- Europe Relations, COM (1995) 279/final, Annex 4. 1995

China from 13 to 19 October. His mission was to strengthen relations between the EU and China in the energy sector. This conference was held under the SYNERGY program and with the help of the State Science and Technology Commission of China.[130] During it, the commissioner and his Chinese counterparts exchanged ideas about different technical and strategic approaches to be used in the electricity, oil, gas and coal sectors by both the EU and China. They signed a joint declaration promoting the development of the Chinese energy infrastructure and announcing that the European energy industry would participate in this project.[131] They agreed to set up a standing Working Group for Energy issues based on the framework of the European Community-China joint Committee. The "Europe-Asia Cooperation Strategy for Energy" was published on 18 July 1996. It layed out three objectives: to strengthen the security of supply in Asia and in Europe, to participate in Asian energy markets, and to protect the global environment. This paper concerned not specifically China but Asia generally; its aims were valid for the members of ASEN (Asian- European Meeting).[132]

ASEM is an abbreviation for the Asian- European Meeting[133], started in 1997. Today ASEN includes 45 countries and the head of the states and governments hold biannual meetings. They discuss the fields of their cooperation and the energy issues that have been one of the most important points of their agenda since the 7th ASEM Foreign Ministers' Meeting in 2005.

The Commission published its communication, "Building a Comprehensive Partnership with China," on 25 March 1998. It encouraged China to play proactive and responsible role in global issues and discussed the increasing energy demands of China. It warned China of the significant environmental pollution afflicting industrialized countries. The C2. part of the paper contained a paragraph particularly about energy: "Europe should offer its environmental and energy know-how to China to help it to develop efficient and clean industries and also to established a presence in its potentially lucrative market for green technology, along the lines set out in the Commission's Communication on a European- Asia

[130] European Commission, General Report on the activities of European Union 1996, ECSC-EC-EAEC, Brussels, 1997. P.151.
[131] http://cordis.europa.eu/synergy/src/review2.html#2.8 02.03.2010.
[132] European Commission, General Report on the activities of European Union 1996, ECSC-EC-EAEC, Brussels, 1997. P.p. 344-349.
[133] The European Commission External Relation, ASEM, Asian-European Meeting, 05.04.2010. http://ec.europa.eu/external_relations/asem/index_en.htm

Cooperation Strategy for Energy."[134] Elsewhere, the paper promoted energy efficiency, development of clean coal technologies, alternative energy sources. It emphasized that natural gas should be the prior energy source in China because of its relatively low environmental consequences compared to coal.[135] The first EU-China Summit was held on 2 April 1998 in London. They agreed to meet for yearly summit to discuss at the highest level cooperation between the two regions. At such summits they would discuss every topic of mutual concern that had arisen in the preceding year. The first Summit closed with the ratification of a joint declaration that introduced the phrase, "multipolarity."[136]However the summits mentioned energy as a general field of their cooperation, but they did almost nothing. The real energy issues were discussed in the EU-China Energy Conferences. Additionally, they signed Scientific and Technological cooperation on 22 December.[137]

The third EU-China Energy Conference was held from 4 to 5 March 1999. The Chinese Vice-Minister of Science and Technology, Mr. Xu Guanhua, visited the Commission.[138] At the end of the Energy conference, the participants signed a joint statement reaffirming and strengthening their cooperation in the energy field.[139] Almost simultaneously, third meeting of the EU-China Energy Working Group convened in Brussels. The working group evaluated the successful projects of the previous year and identified new cooperative projects. At the end of the year the second EU-China Summit was held in Beijing on 21 December[140] .

The year 2000 was much less successful from the point of view of energy cooperation. The attention of all parties focused on China's future membership in the WTO. Though Prime Minister Mr. Zhu Rongji of China paid his first visit to Brussels on 11 July, the third EU-China summit was held in Beijing on 24 October without significant progress being made in energy relations.

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[134] Commission of the European Communities, Communication from the Commission Building a Comprehensive Partnership with China, COM (1998) 181 final, Brussels, 25. 03. 1998. P. 21.
[135] Commission of the European Communities, Communication from the Commission Building a Comprehensive Partnership with China, COM (1998) 181 final, Brussels, 25. 03. 1998. P. 21.
[136] Jing Men, EU- China relations: Problems and Promises, Jean Monnet/ Robert Schuman Paper Series Vol. 8. No. 13. June 2008. P.4.
[137] European Commission- External Relations, http://ec.europa.eu/external_relations/china/index_en.html 02.03.2010.
[138] European Commission, General Report on the activities of European Union 1999, ECSC-EC-EAEC, Brussels, 2000. P.134-135.
[139] ChinaTaiwan. Org, EU-China relation, http://www.chinataiwan.org/english/ac/ctw/200305/t20030513_103350.htm 23.03.2010.
[140] European Commission- External Relations, http://ec.europa.eu/external_relations/china/index_en.html 02.03.2010.

The forth EU-China Energy Conference was in Beijing on 18 June 2001. They discussed the energy-environment cooperation program, which fostered common goals in key areas.[141] These fields were clean coal, natural gas, energy efficiency and renewable energy. On 15 May, the Commission published a communication on the EU's new strategy on China. The fourth EU-China Summit, on 5 September 2001, was held with the attendance of Mr. Guy Verhofstadt, President of the European Council, Mr. Prodi, Commission President, Mr. Zhu Rongji, The Chinese Prime Minister, Mr. Patten, Mr. Lamy, Mr. Solana, Mr Jiaxuan the Chinese Foreign Minister and Mr. Shi Guangsheng the Trade and Economic Cooperation Minister representatively. Among the many topics discussed, environmental cooperation was not least.[142]Here we can see that China and the EU are engaged in extensive diplomatic relations, but we are not getting much clear evidence as to their motivations.

The Chinese government and the EU signed a cooperation agreement in energy and environmental programs called EU-China Energy and Environment Programme (EEP). This program lasted from 3 April 2002 to the end of 2009. The EEP had four elements: Energy policy Development (EPD), Improving Energy efficiency (EE), Increasing the use of renewable energy (RE) and Increasing the use of Natural Gas (NG). The executive author of the EEP was the Ministry of Commerce of the People's Republic of China. The other fields of the EU-China dialogues were also fruitful this year.[143] The fifth EU-China Summit was in Copenhagen on 24 September.[144]

The year 2003 was the most exciting since energy policy began to be a diplomatic issue between the EU and China in 1981. It was the first year in which China published a paper on energy policy relations with the European Union. On October 13 more than twenty years of diplomacy without China establishing an official strategy toward the EU came to an end. It sounds impossible, but it is true: every paper and document specific to the field of energy policy mentioned above was published by the European Union. China's designation of the European Union as a "paper tiger" comes to mind once more.[145] The Chinese policy paper is an extremely brief and generally defined paper without any concrete aims. Only one

[141] Mission of the People's Republic of China to the European Union, China-EU Scientific and Technological Cooperation and Exchange, http://www.chinamission.be/eng/kj/t72211.htm, 03. 09. 2004.
[142] European Commission, General Report on the activities of European Union 2001, Office for Official Publications of the European Communities, Brussels, 2002. 334.
[143] Energy and Environment Program, http://www.eep.org.cn/index.aspx 02.03.2010.
[144] European Commission- External Relations, http://ec.europa.eu/external_relations/china/index_en.html 02.03.2010.

[145] Wolfgang Hirn, Kína, a nagy falat, hogyan változtatja meg életünket Kína felemelkedés, HVG press KFT. Budapest, 2006. P.141.

paragraph makes even passing mention of energy cooperation: "China-EU cooperation will be expanded in such fields as energy structure, clean energy, renewable energy, and energy efficiency and saving. Exchanges on energy development policies will be promoted. Efforts will be made to ensure a successful EU-China Energy Conference. The energy working group mechanism will be strengthened. Training on energy technology and cooperation in demonstration projects will be boosted to promote application and transfer of technology.[146]" It seems that the Chinese partner did not take the cooperation too seriously until 2003. After all, the European Commissioner visited China in 1975 but the Chinese prime minister first visited the European Union only twenty-five years later in 2000. This visit was just before China joined the World Trade Organization in 2001 and was currying favor with the European Union. However, this dismissive attitude toward the EU seems to have changed recently. The EU is one of the biggest trade partners of China and without the European market Chinese trade would be in a seriously bad situation.

The European Commission adopted a policy paper in the same year 2003, "A maturing partnership: Shared interests and challenges in the EU-China relations," on 10 September. The sixth EU-China Summit was held on 30 October 2003.[147] In addition to it, the EU inaugurated a strategic partnership with China as part of the European Security Strategy. In the same document, they promoted their cooperation in the field of energy as well.

The fifth EU-China Energy Conference was organized in Brussels on 25 and 26 May 2004. The conference was attended by Mrs Loyola de Palacio, the vice president of the European Commission, and Mr Ma Songde, the Vice Minister for Science and Technology of the People's Republic of China, as well as more than one hundred fifty high-ranking representatives from the European and Chinese industry, industrial associations and public sectors. They discussed renewable energy sources and clean coal technologies. They also considered the possibilities for oil and gas cooperation in the future when the security of the supply becomes a major problem for both powers. The conference recognized the problems of climate change and environmental protection must be considered by all major fossil fuel consumers. The importance of environmentally friendly technologies and the situation of the coal sector were major issues on the table. All parties declared that it was in their common

[146] China's EU policy Paper, October 2003, http://74.125.77.132/search?q=cache:4r2v1w2hBU8J:www.mfa.gov.cn/eng/topics/ceupp/t27708.htm+13+october+china+Eu+policy&cd=4&hl=hu&ct=clnk&gl=hu

[147] European Commission- External Relations, http://ec.europa.eu/external_relations/china/index_en.html 02.03.2010.

interests to cooperate closely in the above-mentioned areas.[148] The seventh EU-China Summit was on 8 December 2004.[149]

The EU-China Working Group meeting was organized to establish two common programs in the field of energy in Mach 2005. The program of the Strategic Dialogue on Energy and Transport was signed at the 8th EU-China Summit in Beijing on 5 September 2005. However, the group first met in Brussels only on 21 March 2006. They focused on three major areas of energy issues: energy policies, energy efficiency and savings, environmental impacts of energy and technology cooperation, and renewable energy sources. At this summit another significant program was laid out in the "Joint Declaration on Climate Change between China and the EU." This program included energy efficiency, energy conservation, new and renewable energy, clean coal, methane recovery and usage, carbon capture and storage (CCP), hydrogen and fuel cells, and power generation and transmission. The project aimed to reduce CO_2 emissions to near-zero by 2020 with the help of carbon capture and storage technology. The "Action Plan on Clean Coal" and the "Action Plan on Industrial Co-operation Energy Efficiency and Renewable Energies" too also focused on reducing CO2 emissions.[150]

The sixth EU-China Energy Conference was held on 20 and 21 February 2006. The Energy Conference was centered around five main topics: reinforcing the security of energy supplies, promotion of renewable energy, increasing energy efficiency, strengthening nuclear safety and security, interactions between energy policy and research, and environmental policies.[151] In addition to this, a memorandum of understanding (MOU) on "Cooperation on Near-Zero Emissions Power Generation Technology through Carbon Capture and Storage" was signed by Commissioner Piebalgs and Ministry of Science and Technology Deputy Minister Ma Songde in Shanghai on 20 February 2006.[152] The ninth EU-China Summit was in Helsinki on

[148] Europa -Press Releases Rapid, EU and China meet to discuss common energy concerns, IP/04/706, 02.06. 2004. http://europa.eu/rapid/pressReleasesAction.do?reference=IP/04/706&format=HTML&aged=1&language=EN&guiLanguage=en, 02.03.2010.
[149] European Commission, General Report on the activities of European Union 2004, Office for Official Publications of the European Communities, Brussels, 2005. 264.
[150] European Commission Energy, External Dimension, China, http://ec.europa.eu/energy/international/bilateral_cooperation/china/china_en.htm, 26.02.2010.
[151] European Commission Energy, External Dimension, The 6th EU-China Energy Conference, Shanghai, 20 and 21 February 2006, http://ec.europa.eu/energy/international/bilateral_cooperation/china/conference6_en.htm
[152] European Commission Energy, External Dimension, China, http://ec.europa.eu/energy/international/bilateral_cooperation/china/china_en.htm, 26.02.2010.

9 September.[153] This Summit was a step forwards to the new level of their cooperation. It was the first time when a "summit mentioned that the EU and China share a common concern for ensuring reliable, economical and sustainable energy supply[154]". Furthermore it was the first time when they mentioned the necessity of their cooperation in Africa and in other regions in the field of energy. It emphasized the significant importance of EU-China High Level Working Group on Energy. This means a much more opened dialogue between the EU and China[155]. 2006 marked a new beginning in real practical cooperation between the EU and China in their areas of mutual interest. In the face of common necessity, they began to consider themselves allies rather than rivals.

The tenth EU-China Summit was organized in Beijing on 28 November 2007. At the end of the summit, the two powers signed the document called "Joint Statement of the 10th China-EU Summit Beijing on 28 November." The participants agreed to consultation and coordination in the case of Africa, Myanmar, Iran, Middle East, Kosovo, and ASEN on major international and regional issues as the relevant parts of their cooperation. They agreed to more practical cooperation in Africa. The EU has the EU-Africa Summit and China has the China-Africa Cooperation, after the EU-China summit, each power was invited to attend the other's summits with Africa. Common diplomatic relations in the case of Iran also emerged. Furthermore, they pledged to promote open and transparent regional cooperation in Asia. Environmental protection was defined as a common goal in the statement. "The two sides maintained that the energy issue is a global issue which is closely related to the economical and social development of all nations. Both China and the EU recognized the importance of enhancing bilateral communication and cooperation on this issue, and agreed to take effective measures and continue to promote their mutually beneficial and practical cooperation in the energy field."[156] These recent agreements show increasingly specific plans for each area of EU-China relations, and testify to the growing trust and mutual-reliance of the two countries. Where earlier their diplomacy was much more general and speculative, without any concrete

[153] European Commission- External Relations, http://ec.europa.eu/external_relations/china/index_en.html 02.03.2010.
[154] Ninth EU-China Summit Helsinki 9 September 2006 Joint Statement, Brussels, 11 September 200612642/06 (Presse 249). P.6.
[155] Ninth EU-China Summit Helsinki 9 September 2006 Joint Statement, Brussels, 11 September 200612642/06 (Presse 249). P.p. 5-7.
[156] Joint Statement of the 10th China-EU Summit Beijing, 28 November 2007, point 23. http://www.eu2007.pt/NR/rdonlyres/C9CF2CC6-7B8D-4830-8A95-5C99370D73C7/0/20071203JointStatementChinaUE.pdf

plans or steps, both the parties have since started many common projects in the practical field of energy technology development.

Despite the apparently warmer relations, in 2008 Wen Jiabao cancelled the EU-China Summit planned for December for the reason of the Dalai Lama's visit Europe. This increased the tensions between the EU and China.[157] Nevertheless, the seventh EU-China Energy conference met successfully in Brussels on 6 and 7 November 2008. The conference was organized by the Chinese Ministry of Sciences and Technology and the Directorate General Transport & Energy. The discussions focused on six topics: first, renewable energy sources for power generation, particularly wind and solar, second, the increasing role of biofuels to decrease oil consumption, third, the promotion of hydrogen energy and fuel cells, fourth, coal and gas hydrates, fifth, Carbon Capture and Storage technology, and, sixth, the issue of nuclear energy.[158]

The postponed 11th EU-China Summit was held in Prague on 20 May 2009.[159] This conference continued discussions along the lines of its predecessor. The goals were the cooperation in the field of climate change, energy security and exchange of views on regional issues. The regions particularly discussed were the Korean Peninsula, Myanmar, Iran, Pakistan, Sri Lanka, and Afghanistan[160].

The most recent Summit was held in Nanjing on 30 November 2009.[161] In a common statement, the leaders of the attending countries "welcomed the recent deepening of their Energy Dialogue, with a view to enhancing the use of clean and sustainable energy as well as global energy security. They also welcomed concrete cooperation in the fields of renewable

[157] Euractive.com, EU and China agree to reschedule cancelled summit, 02.02.2009. http://www.euractiv.com/en/foreign-affairs/eu-china-agree-reschedule-cancelled-summit/article-179033
[158] European Commission Energy, External Dimension, The 7th EU-China Energy Conference, Brussels, 6 and 7 November 2008, http://ec.europa.eu/energy/international/bilateral_cooperation/china/conference7_en.htm
[159] European Commission Energy, External Dimension, China, http://ec.europa.eu/energy/international/bilateral_cooperation/china/china_en.htm, 26.02.2010.
[160] Council of the European Union, 11th EU- China Summit Prague, 20. May. 2009. 10234/09 (Presse 147) P.2. http://www.consilium.europa.eu/uedocs/cms_Data/docs/pressdata/en/er/107965.pdf
[161] European Commission Energy, External Dimension, China, http://ec.europa.eu/energy/international/bilateral_cooperation/china/china_en.htm, 26.02.2010.

energy, clean coal, bio fuel and energy efficiency. They thus called for further deepening of cooperation in the energy field."[162]

3.3.3 Summary of their cooperation

The fields of their cooperation have been expanding since the beginning. At first, technology transfers and energy policy help constituted the basis of relations. The focus of the cooperation was on the oil, gas and coal sources. Later, they jointly took up renewables as another energy option. The next common fields, explored in the Energy Conferences were environmental and energy efficiency issues. They established more specific common projects and decided on specific common actions in the common fields. The next big step was the clear and transparent talks about the energy supply and its security. The most recent significant change to their strategies was a proposed deeper cooperation in their energy supplier areas such as Africa or the Middle East. They discussed this first in 2006, recognizing that rivalry was beneficial to neither region. It was a big step for both countries and a huge change in their energy strategies. It represented a greater sense of linked interests and acknowledgement on the part of the EU that China's rise was the driving force behind the increasing price of oil and other resources.

3.3.4 Challenges and opportunities of their relationship

However, some topics still inhibit smooth cooperation between the EU and China. The first issue causing tension is the EU's criticism or in some cases flat-out opposition to aspects of Chinese international energy policy. The EU should understand the Chinese concerns and the main inducements behind its behavior. China seems the only one country in the world engaged in creating and following strategies.[163] "History suggests that countries and governments follow a learning curve with respect to their understanding of and trust in international oil markets, and China's mercantilist approach may well evolve, not least as a result of increasing coasts."[164]

[162] European Commission Energy, External Dimension, On 30 November 2009, the 12th EU-China Summit was held in Nanjing (China), http://ec.europa.eu/energy/international/bilateral_cooperation/china/summit_en.htm

[163] Pierre Noel, China's International Energy Security Policy- Implications and Responses, presentation to the EPRG Spring Research Seminar, Cambridge, 19. 05.2006.

[164] Philip Andrews-Speed, Axel Berkofsky, Peter Ferdinand, Duncan Freeman, Francois Godement, Eberhard Sandschneider, Antonio Tanca and Marcin Zaborowski, Facing China's rise: Guidelines for an EU strategy, Institute for Security Studies, Paris, December 2006, Philip Andrews- Speed, China's energy policy and its contribution to international stability, P. 80.

The second challenge, according to Kenneth Lieberthal and Mikkal Herberg is for the EU to encourage China's integration into the international energy and economic system and institutions. It must help China to understand and to believe in the international energy markets and encourage deeper cooperation with organizations like the International Energy Agency. A third challenge is proposed by Philip Andrews, who suggests creating a cooperation program directly in the domestic energy sector of China. He would share it two elements: the 'soft' and 'hard' components. The hard component would include technologies, skills and capital to promote China to take rapid and massive steps in the area of energy efficiency, energy conversation, clean energy and renewables such as the clean coal program and biofuels. The soft component would consist of assistance in energy policy formulation and strategy, help in energy data collection and management furthermore while encouraging European and Chinese energy industrial companies' commercial cooperation.[165]

[165] Philip Andrews-Speed, Axel Berkofsky, Peter Ferdinand, Duncan Freeman, Francois Godement, Eberhard Sandschneider, Antonio Tanca and Marcin Zaborowski, Facing China's rise: Guidelines for an EU strategy, Institute for Security Studies, Paris, December 2006, Philip Andrews- Speed, China's energy policy and its contribution to international stability, P.81.

IV.The Analysis

My analysis will based on the listed aspects of Realism and Neo Liberalism in Table 1. I will examine these elements one by one as they apply to the respective cases of the European Union and China. Because of the disparities between the two countries, one theory is often inadequate to analyze both.

4.1 The first point of my analysis is to identify the Goals of Actors:

The Realist elements of China's Energy Strategy: Today not military force as Realism suggests but insurance energy for economy means real security for countries. It seems able to identify its necessities and, with minimal moral impediments, use the easiest and most effective way to achieve them. The goal of the Chinese energy strategy is to ***ensure a reliable energy supply***, consisting mostly of oil, coal, and natural or liquefied gas. China would like to decrease its dependency in the future because in contrast to the EU, China owns viable oil and gas sources in foreign countries not only buy energy product like the EU does . These are the most important goals of China in the area of energy and it intends to reach them in any circumstances. Furthermore, it has several other subsidiary aims. One of these is the ***security of energy transportation routes***; China is ready to defend its vessels and crews even with military force. Additionally, the ***security of economic growth*** is vital to Chinese stability Basically, the Realist theoretical approach usefully explains the above-mentioned goals.

The Neo-Liberalist elements of China's Energy Strategy: The ***overseas investments*** point of the Chinese energy strategy seems to be more explicable by Neo-Liberal ideas, because the NOCs follow their own goals to find beneficial investments. The NOCs get directions from the government, but they can decide where and how much to invest. The advantages from overseas investments are good for both the government and for the investing companies. However, one should not forget that the overseas investments are just one element of Chinese energy strategy The other elements such as ***energy efficiency***, ***development and usage of renewable energy sources***, ***increased attention to international relations***, ***establishing an energy emergency response system and environmental protection*** exist as sub-goals in the Chinese energy strategy; they are less important than the oil itself. Neo-Liberalism says that

the goals of states can vary according to the area in question; this is true for the above mentioned goals of China. China has been more and more focused on these goals since the beginning of its stronger cooperation with the EU.

The Realist elements of European Union' Energy Policy: The Realist goal of the EU can be to ***serve and secure its energy demands*** but the EU, in contrast with China, does not readily defend its energy sources with military force.

The Neo-Liberalist elements of European Union' Energy Policy has more moral barriers on the way to its goals. As the Neo-Liberalists say, the European energy policy also focuses on higher number of goals than the Chinese strategy. This might be the reason for its less effective energy policy on each field. Other aims of the EU include ***diversification of energy sources, the development and promotion of renewable energy sources, energy efficiency, sustainability, encouraging investment and innovation, environmental protection, energy technology development, reducing greenhouse gas and making wider energy cooperation with other consumers or suppliers.*** Furthermore, the EU tries to ***establish democracy and peace in its energy supplier countries***.

4.2 The second is the <u>Instrument of the States' External Energy Policy</u>*:* is an interesting category because the two states have such different ideas about international politics.

The Realist elements of China's Energy Strategy: China's *energy diplomacy is hyperactive* compared to that of the EU. The ***Chinese 'national champions'*** work effectively all over the world to reach the most important goals of the Chinese Energy Strategy, sometimes providing a nominally private cover for direct government action. The stability of China is based on ***continuously kept up economical growth***, which requires energy sources. It is a locked situation for China. China's main instrument is not ***military force,*** but it is used where necessary. One instance is the ***'help' that the Chinese government or NOCs provide their host countries' governments,*** sometimes expressively against the interests of the USA or other Western countries. China ***shares the EU's member*** states if it is beneficial for it. Sometimes it is specifically favorable for China because it follows a ***self-helper strategy*** and

use it as ***economical power***. The ***lack of transparency*** in Chinese energy strategy helps protect China from falling victim to other states' interests.

The Neo-Liberalist elements of China's Energy Strategy: China uses discussions with the EU to provide *a* ***peaceful international area for its further investment***s. This method seems to accord with Neo-Liberalism, which suggests the manipulation of interdependences as a method of policy. China became a member of some ***international organizations****, for example, the WTO, the UN, and ASEN*, which seems to indicate readiness to engage other states in mutually-beneficial diplomacy. Additionally, the FDI China established all over the world ***increases the interdependences*** among countries. Furthermore, China established ***partnerships and cooperation*** with several international organizations such as the EU and takes a primary part in regional discussions such as the regularly held China-Africa Summit.[166]

The Neo-Liberalist elements of European Union' Energy Policy: European Union promotes and believes in the ***international organizations***, *such as the* International Energy Agency, considers them the useful instruments of international energy policy. According to the EU, international cooperation can work more easily and more effective through ***international regimes***. Additionally, the EU promotes the legitimacy of ***International Law*** and believes that ***peace and democracy*** are indispensable goals for international policy-making. The notion that ***military force is not an acceptable*** instrument among democratic states, according to the EU; suitable ***cooperation, partnerships or common strategies with competitors*** can be much more beneficial to all of the participants than the continuous unfriendly competition ***Summits, Energy Conferences, common projects*** are useful for the EU in that they help to reveal other states' interests, providing greater opportunities for diplomacy. Legislation such as the common energy policy is a useful implement for external energy policy, allowing the member states to speak with one voice. The ***Green Papers*** show the evolution of the energy policy and represent the way the EU is able to adapt policy to changing conditions. The ***manipulation of international actors and interdependences*** represents the EU's regular employment of Neo-Liberal notions in their policy and practice. Compared with China, which seems to embody aspects of both theories, the EU is almost uniformly Neo-Liberal.

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[166] BBC News, Trade to top China-Africa summit , Friday, 3 November 2006, 12:56 GMT, http://news.bbc.co.uk/2/hi/6112360.stm, 26.03.2010.

4.3 The third division is the Agenda formation.

The Realist elements of China's Energy Strategy: In the case of **China** the ***shifts in the balance of power*** that occurred after the Chinese economic transformation became visible to the leading powers in the world have ongoing effects. China appears as a powerful state in the already existing energy regime, but the members of the energy regimes are still seems too strong for it. The leader of this regime is still the USA, which started its foreign investment strategy much earlier than China. The policy of the US is more aggressive than the EU's. The military power of US is the strongest in the world and China has not been able to develop its army significantly since the EU established an ***arms embargo*** towards China in 1989. The embargo still exists even if the USA sold arms to Taiwan in January 2010.[167] China has to ***move to the direction of the EU*** *in* order to reach its goals and find cooperative partnership. The EU China relation is strongly affected by US interests. Basically, the ***Chinese fear of the USA*** has a great effect on its energy strategy. As a result of the above mentioned conflict, China tries to achieve international legitimacy through its relationship with the EU. China is ready to organize or participate in the conferences, summits and so on, just to gain the support of the EU. In its agenda formation the above-mentioned ***external factors*** mean a lot. On the flip-side of its apparent eagerness for good relations with the EU there is China's ***willingness to ignore the opinion of international actors*** in business. China seems ready to ignore international opinions about certain countries; the others' views do not have any influence on their agenda formation. It is also willing to ***ignore the nature of the political leadership in energy supplier countries***. China has its ***own energy agenda*** and this external energy strategy ***strongly influences other agendas***. China tries to *hide its weakness*, energy dependency while working to reduce it, strengthening its security. However, it cannot escape the fact that ***changes of the internal energy demand*** strongly affect all consumer nations. The ***separation of internal and external policy*** also characterizes the Chinese policy because it makes external steps in order to protect or serve its internal policy. It is equal to the "billiard ball" thesis.

The Neo-Liberalist elements of China's Energy Strategy: Of course, as it becomes more interested in engaging the west, Neo-Liberal motives can be perceived in China's agenda

[167] Free Tibet website, China and the arms, 30. January 2010. http://www.free-tibet.hu/2010/01/30/kina-es-a-fegyverek/

formation as well. China's external energy policy is becoming more open in international relations. It ***participates more actively in the international organizations*** which reset its agenda. China has interdependences on the EU not only in the energy field; they have the *rising* ***number of interdependences*** in trade relations as well. The agenda formation is affected by the ***changes of the linkages*** from other trades, commercial and environmental issues. China has ***reevaluated the EU*** since 2006 and now seems to regard it as a more serious international actor or partner.

The Realist elements of European Union's Energy Policy: Of course, according to Realism, the EU tries to ***hide weaknesses*** such as its dependence on oil, gas and coal imports with cooperation and partnerships. It tries to make alliances and long term agreements with suppliers and partnerships or other relations with fellow-consumers in order to make understand their energy strategies and their potential implications for EU security. The ***internal energy demand*** and the ***interests*** of the member states determine the directions of the common energy policy.

The Neo-Liberalist elements of European Union's Energy Policy: The **European Union**'s agenda formation process is based on different ideas. The existence of ***Common Energy Policy***, which came into force on 1 December 2009, is a recent instance of the liberality of its policy. The ***linkages between energy policy and environmental protection, technology transfer and common projects*** are in keeping with the character of Neo-Liberalism. The ***changes in the importance of international actors*** point of Neo-Liberalism can explain the rising importance of China in the eyes of the EU. According to Liu Wei-Yu, the world economic center is moving to the Asia-Pacific region and the EU recognized this movement. ***Internal and external policies have the same importance*** in the case of the EU and both are ***determined by international relations***, these features can be grouped into the Neo-Liberalist ideas. The Russian-Ukraine crisis catalyzed the shift of EU energy strategy towards south Asia, but the shift was also motivated by the necessity of reliable sources and the diversification of energy supply. Finally, the ***win-win ideology*** of the European Union and its pursuit of common good are tell-tale signs of a Neo-Liberal outlook. The ***morality*** of the EU narrows its latitude in the international energy market.

4.4 The forth division linkages of issues.

The Realist elements of China's Energy Strategy: The linkages are ***not positive things*** according to Realism because they reduce differences in outcomes among issue areas. This might not be such a big problem, except that it implies the reinforcement of the existing international hierarchy**.** This is what China really does not want. Chinese economical growth is much faster than that of the other major powers in the world. The aim of China is ***not to reinforce the existing energy regime*** and **reduce *differences in outcomes among issue areas***. On the contrary, China is ***challenging*** the international energy regime and requiring a more prominent place in it. China follows a Realist agenda, largely ignoring the European Union's opinion about the linkages issues.

The Neo-Liberalist elements of the European Union's Energy Policy: According to Neo-Liberalism, linkages can be ***created by common interests of countries*** for their ***common good.*** It is equivalent to the win-win idea. From this point of view, ***linkages are positive*** for a state. However, the Neo-Liberal approach about strong countries' cooperation does not fit the EU. The EU was created on the idea that smaller states can link together to further their common interests among the great political powers of the world.

4.5 The fifth division is the Roles of international organizations:

The Realist elements of China's Energy Strategy: However the Chinese attitude and actions in the case of Iraq war towards the USA are typical of Neo–Liberalism. Although China believes that resolutions to the problems through international regimes or institutions are ***limited by state power*** and believes in the ***importance of military force in some cases***. However, China does not reject military force in the case of Taiwan or Tibet and seems not to care about anyone's opinion, including the warning of the United Nations.[168] This shows China is willing to ***exclude the international organizations*** when the time comes to solve its own problems, but prefers to defer to them in cases that might curb the power of other states,

[168] UN News Center, UN High Commissioner for Human Rights Louise Arbour, China: UN rights chief voices concern over tensions in Tibet Autonomous Region, 14 March 2008, http://www.un.org/apps/news/story.asp?NewsID=25980&Cr=arbour&Cr1#

especially its rivals. At times, China seems opportunistic in its European strategy: when necessary ***it does not consider the EU as a representative of the European states*** and tries to divide the member states. Presently, France, Germany and UK are contestants to gain China as a major economical and trade partner. This shows that perhaps China does not really believe in the indivisible and uniform international institutions; it ***sees the states behind the international organizations*** when that perspective is in its interests.[169]

The Neo-Liberalist elements of China's Energy Strategy: It is a complex issue from the **Chinese** point of view, as it moves slowly from the Realist camp toward Neo-Liberalism. At this point, China ***does not pay too much attention to the international organizations***, but it ***has joined*** the WTO, the UN, and ASEN, international organizations that try to solve international problems by diplomatic methods. China was strongly *against* the USA in the case of *Iraq war* because the USA did not ***consider the opinion of the United Nations***. The USA did not seem to consider different opinions and protestations concerning Iraq.[170] China did not support the war because of its significant investments in the areas of Iraq and Iran.[171] China sees the USA as a competitor in energy investments.

The Neo-Liberal elements of the European Union's Energy Policy: The European Union is a much simpler case from this point of view because the ***EU is an international institution***, so it must believe in the power and efficacy of international regimes. The EU ***sets agendas*** that include ***coalition formation and it acts as an arena for political actions*** but not just for weaker states. The EU believes that international organizations ***can be helpful*** not just for small and weak countries. Furthermore, they can promote the decentralized enforcement of agreements among governments and international actors. The EU promotes this approach perhaps partly because from such a perspective it ***looks stronger on the international stage***. In many arenas, the EU is not as strong as China, but through its

[169] Péter Vámos, Az Európai Unió és Kína kapcsolatai, Külügyi Szemle, VIII. Year 2009/2,P. 231. , China-Eu: Common Future, Stanley Crossick- Étienne Reuter, Singapore: World Scientific, 2007. P. 238., China- Europe Relations: Perceptions, policies and prospects, David Shambaugh, Eberhard Sandschneider, Zhou Hong, London-New York, Routledge, 2008. P. 354.

[170] Steve Holland and Hassan Hafidh, Putin Calls Bush, Sides with France and Germany in Resisting War, The Washington Post, Thursday, January 23, 2003; 12:52 p.m., http://www.washingtonpost.com/wp-srv/world/articles/allies012303.html

[171] Zhang Jianxin, Oil Security Reshapes China's Foreign Policy, Center on China's Transnational Relations, The Hong Kong University of Science and Technology, Working Paper No. 9, 2006. P. 5.

participation in international regime and cooperation it seems much stronger. The EU cannot, for example, compete with China as a consumer able to offer better prices and fewer objections, moral or otherwise.

4.6 The sixth point of the analysis is the two countries' respective opinion about the relation of security and interdependence.

The Realist elements of China's Energy Strategy: Realism *does not promote* wider and wider interdependences because it can lock the countries strongly to each other, creatig ***defenselessness and insecurity***. This outlook is evident in the **Chinese** energy strategy, which aims to decrease the energy import dependence by way of ***owning the resources instead of buying them***, as mentioned above with carbon hydroxide products. China tries to ***avoid interdependence*** until the point when it becomes unavoidable and necessary. It does not believe that the peace in the world can be secured perfectly without any military force. Interdependence includes cooperative actions and common interests with other countries. China will not give up even one single part of its interests for the sake of the common good. Interdependence requires cooperation or assistance between states, but China ***does not want to show its weakness*** to other states for the sake of possible aid. It cooperates with other states to achieve its own goals when that doesn't mean any additional expenditures or work. It accepts the visits of the European Union's delegations and sends its own delegations to Brussels, but it does not accept any restriction or agreement not beneficial to itself.

The Neo-Liberal elements of European Union's Energy Policy: The **European Union** thinks that increasing interdependences among democratic countries ***improve security in the world***. The EU does not accept the military force as an instrument of the international policy because democratic countries can arrange their problems in peaceful ways. The European Union would use ***military force only to maintain*** *peace*. It is a wise policy, in this way the EU maintains the legitimacy of its advocacy of human rights, which are badly harmed in the case of armed conflicts. Increasing interdependences will keep democratic countries far away from wars and the use of military force because they will be conscious that ***war would harm their own interests***. War is harmful to the economies of the aggressor and the victim alike. Additionally, other countries near the area of the conflict will be harmed politically and economically. The ***latitude of the international actors will be tighter and they will have***

bigger impacts on each others. The EU would not use military force in its regions such as China did against Tibet or Taiwan. The EU's Neo-Liberal attitude holds that increasing interdependence, not the use of force, means more security in world policy.

4.7 Summary of the Realist and Neo-Liberalist elements concerning the EU and China

Divisions	**People's Republic of China**		**European Union**	
	Realism	Neo Liberalism	Realism	Neo Liberalism
Goals of Actors	identify its necessities, **ensure the successful energy supply, security of energy transportation routes, security of economic growth** **(main goals)**	Overseas investment, energy efficiency, renewable energy sources and environmental protection, pay more attention to international relations, establish an energy emergency response system	serve and secure its energy demands	diversification of energy sources, development and promotion of renewable energy sources, energy efficiency, encourage the investments and innovations, environmental protection, energy technology development, sustainability reduce greenhouse gas and make wider energy cooperation with other consumers or suppliers, establish democracy and peace in its energy supplier countries
Instruments of the state energy policy	hyperactive energy diplomacy, Chinese 'national champions', continuously maintained economic growth, self-helper strategy, share member states and use mostly its economical power, sometimes military force, help to the host countries government. Lack of transparency	organize a peaceful international area for further investments, international organization, FDI increases the interdependences, partnerships, Summits and cooperation		international organization, International Law, cooperation, partnership or common strategies, peace and the democracy, military force in not acceptable, summits, Energy conferences, common projects, common energy policy, Green Papers, integration of energy issues into other policies, discover other states' interests, cooperation, manipulation of international actors and interdependence, transparency
Agenda formation	potential shifts in the balance of power, the only one way to move to the direction of the EU, Chinese fear of the USA, external factors, strong influence on other agendas, own energy agenda, changes of the internal energy demand, separation of internal and external policy, arms embargo, willingness to ignore the opinion of international actors, ignore the nature of political leadership, hide its weakness	changes of the linkages, participates more actively in international organization, rising number of interdependencies, reevaluated the cooperation with the EU	Strengthen itself and hide its weakness, internal energy demand, interests of the member states	Common Energy Policy, linkages, changes in the importance of international actors, internal and external policy has the same importance and determined by the international relation, win-win ideology, morality,
Linkages of issues	not a positive thing, challenging existing energy regime, does not want to reduce differences in outcomes among issue areas			created by common interests of countries, common good, linkages can be a positive
Roles of	limited by state power and believes in the importance of	does not pay too much attention to the		*The EU is an international institution, sets agendas,*

international organization or regimes	military force in some cases, willing to exclude the international organizations, it does not consider the EU as a representative of the European states, sees the states behind the international organizations	international organizations, but it has joined (the WTO, the UN, and ASEN)consider the opinion of the United Nations		coalition formation and it acts as arenas for political actions, facilitate agreements, can be helpful, co operations and contracts, looks stronger on the international stage
Opinion about interdependences and security	does not promote, interdependences create defenselessness and insecurity, own the resources, interdependence when it becomes unavoidable and necessary, not open up its weakness, does not believe the world without military security			The growing interdependence mean raise of the security in the world, military force only to keep up the peace, latitude of the international actors will be tighter and they will have bigger impacts on each others, war will harm them

Table 3.

As table 3. demonstrates the above listed elements of the EU's energy policy is mainly Neo-Liberalist but it has already included a few Realist elements. The proportionally dropping energy sources urged the EU to save its own interests and ensure energy for its member states. So that the EU in respects of Goals of actors and Agenda formation has changed its energy policy and turned a bit to Realism. Nevertheless, It is still following the Liberal way according to its fundamental notions.

The Chinese Energy strategy follows Realism because it wants to supply it energy demand in every circumstances. However the Chinese policy had to change a little bit its instruments in the past few years in order to be exactable business partner of the other international partners. China had to employ the methods of western policies such as dialogues, strategic partnership and common operations. Is meant that the usage of the liberal tools in shaping the Chinese Energy strategy and move towards a little bit to the Neo-Liberalist direction. The "Going Global" program or the closer and closer energy cooperation with the EU are good examples of this movement. According to table 4. we can discover the elements of the Neo-Liberalism in the case of China.

Although Chinese changed their economy but their political system is still remained. Henry Kissinger states if China, similar to Eastern European countries, had changed its political system to capitalism in 1989 now its economy would not be so successful[172].

[172] Grzegorz W. Kolodko, Megatrendek, A Hanyatló Neo-Liberalizmus és Hiábavaló Hagyatéka, Akadémiai Kiadó, Budapest 2008. P. 230.

V. Conclusions

Now I am going to draw conclusions and use them to answer the main and sub-questions of my thesis. There are very few simple answers and the answers I arrive at here are not the only answers possible, however they are essential to understanding the reality of the examined situation. I have to note that none of the international actors would cooperate with other ones if it were not beneficial for them. Thus it is clear that both the EU and China benefit from their cooperation. It might be that they do not benefit equally, but one can be certain it is at least worthwhile for both powers. My main question was:

5.1 What are the reasons for the closer and closer energy dialogues between the European Union and China?

The reasons discovered during the research can be grouped into Political- Economic reasons and Common Energy Operation Fields ones.

5.1.1 Political-Economic reasons

The EU identified the movement of the world economic center from west to east so partnership with Asian countries especially China became more important to it**.** The political pressure of the USA provides a possibility for the EU to contact China. The EU is politically well-placed in order to be a mediator between the USA and China. Good relations with the EU provide China a peaceful environment for its future overseas investments. As a partner of the EU, China appears more like a democratic country respecting the power of international law and international organizations, thus gaining international legitimacy**.** Furthermore, the EU and China already have interdependencies in fields besides energy, such as trade or commercial cooperation, which are even stronger than their current energy cooperation. One of the results of cooperation is the International Partnership on Energy Efficiency Cooperation in which China will participate with India and Korea.

The Chinese “Going Global” program did not leave out the European Communities either. The Chinese banks, among the biggest in the world, poured capital into the EU, creating several interdependences between the two actors. The liberalization of energy companies in

the European Communities could provide a chance not just for Russian but for Chinese capital and investments, too.

5.1.2 Common Energy Operation Fields

Chinese energy consumption has overtaken the EU's and it is now ranked second highest in the world. This fact reminds both powers of the need to have a beneficial relationship with the other, because they require import energy sources from the same operation fields. This competition situation, coupled with increasing world oil demand, started to inflate oil prices and rivals began to obstruct rather than help each other in those regions. It was a problem for both the EU and China. This shared problem could have been the motivation for starting common operations. The EU and China made deeper their cooperation in the 9th Summit in September 2006. As mentioned in the analytical chapter, they agreed on consultation and coordination in the case of Africa, Myanmar, Iran, Middle East and Kosovo. They urged common diplomacy in the regions in question. If we compare the oil importers of the EU and China, we will see the similarities. Russia is the most significant supplier of the EU and also provides a small amount of oil to China. This is unlikely to create problems because Russia satisfies many other countries' import demands. Saudi Arabia exports 7.2 percent of the European oil import and the biggest part of the Chinese import comes from there as well. It is especially important to notice that Iran is a common supplier of the EU and China: it gives the 6.2 percent of the European and the third biggest part of the Chinese import.[173] It seems the Chinese methods of energy policy have affected the EU, too. China has had a good relation with Iraq, Iran, and other Middle Eastern countries for a long time, but it seems that the need for energy source diversification forced the EU to push down its morality and follow economic necessity. Kazakhstan is also a common oil exporter to the two countries. China purchases its oil from Sudan as well, a country on the list of those countries prohibited to most western powers, and Venezuela, which can be classified among the states that want to twist the tail of the USA. This is no surprise from Chinese policy, but the EU's relationship to Iran is curious. Additionally China has announced that it will purchase the missing part of its

[173]Roger Stern, The Wall Street Journal, Why Europe Has Leverage With Iran, 14. August 2007, http://online.wsj.com/article/SB118705513094996781.html

gas consumption in LNG from Iran for 25 years. The common energy operation fields will create significant problems in the future among the importers of the international energy regime.

I can sum up the reasons for the closer and closer energy cooperation between the EU and China. The time has come when they become important to each other because of their common political and economic interests. These interests are for example the pressure of the USA, the shift of the world economic center towards Asia, the common energy operation fields, the dropping amount of energy sources and China gains legitimacy. These reasons pushed their cooperation to the higher level in 2006.

5.2 My sub question wanted to discover the subjective reasons of the European Union: ***Why has the European Union changed its energy policy so that it now regards China as one of its main partners in energy issues?***

The Russian-Ukraine gas crisis happened in 2006, motivating the EU to tighter cooperation with its Asian partners. It might be in connection with the diversification of energy importers to avoid dependence on only one supplier. Consequently, the EU had to get more oil from countries where China was already operating. Of course this step required some kind of cooperation between them. As mentioned above, this overture from the EU towards China came in the 9th Summit in 2006. The EU is now motivated to foster energy cooperation and operates together with China in the pending countries. The increasing energy demand of the European Communities runs parallel with the rising value of oil, and cooperation with one of its main competitors as a consumer is undeniably better than unfriendly competition. The Chinese consumption increased so much during the last two decades that the EU has been forced to acknowledge it as serious competitor. The EU still tries its energy efficiency goals in China to stop or slow down the fast growing Chinese oil consumption, which is a goal both parties can appreciate, if for different reasons.

The different historical roots of the Chinese Energy Strategy make it difficult for the EU to understand the Chinese strategy. Chinese lack of transparency also hinders the EU. The EU

would like to understand the way of Chinese thinking so that it could plan around Chinese aims and shape its energy policy through in an advantageous relationship to the Chinese goals. In some respects the Chinese energy strategy is more effective because China does not declare its aims publicly as the EU does in the Green Papers. To understand these hidden goals and strategy would be extremely beneficial for the EU.

China has become extremely strong and wields a huge quantity of capital. The Chinese performance is sometimes more streamlined because of its socialist policy than the slow but democratic actions of the European Communities. China has no party within its governing body to oppose its actions and no need to ask other powers for permission. Furthermore, it uses instruments of international policy that the EU is not ready to use because of its liberal and democratic orientation. Obviously, the EU's member states would not be brought together under a single party: the EU can exist only because of its democratic orientation. Although China occasionally undermines European energy diplomacy in the common operation countries and destroys its achievements or goals to reach the Chinese aims. Since the EU's activities were less effective in these states than China's so that the consultations with China have become more important for the EU. In order to avert price war, the EU has overcome some scruples to make closer relations with China.

To sum up the reasons for changing of the EU's energy policy we have to emphasize the most important ones. The EU wants to reduce its energy dependency on Russia, and gain new energy importer countries. Its interests often crash with China's in the common energy fields where Chinese activities are more effective than the EU's. Making corporation with China may stop the increase of oil prices originated from their competition. Furthermore, the EU has to convince China to cooperate with it in global environmental protection issues.

5.3 Conclusions of theories

5.3.1 Realism

This theory was useful for investigation especially China's Energy Strategy because it is based on Realism. It helped to discover the real aims and reasons behind the international energy policy. As energy sources diminish, this theory is coming back into the international energy policy because states must ensure security of energy supply in any case. However, Realism was established a long time ago and that is why, it cannot explain the current action perfectly. For example, according to Realism the key of security is military force. It is one of

the main goals of the Realist actors. Although, the security of domestic economy and policy became more important and took the place of military force. Interdependencies among countries and different areas spread all over the world. The existence and extension of interdependencies are necessary and indispensable in the international relations but the Realism does not promote it. Realism stresses that interdependency means insecurity. This idea is not appropriate in the current international energy situation.

5.3.2 Neo-Liberalism

This theory fits better the current circumstances than Realism. However, that benefit comes from its newly foundation. Democratic countries can employ this theory successfully in their foreign policy. The EU is mainly based on this theory. The increasing number of international organizations and regimes can be well explained through Neo-Liberalism. Realism even did not recognize them as actors of the international relations. This approach was useful to describe and understand the main goals of the European Union. Although, some parts of the theory are not as effective as Realism. I can mention the idea of "common good" which brings less problematic but more moderate benefits for the EU and helps to keep up better relations with its international partners. However, this kind of policy is less effective against the USA and China's more distinct policies.

The two theories were successfully complemented each other in my analysis and could explain all the phenomenons and questions.

5.4 Future of the development in the EU-China relationship

	EU Interests	**Chinese Interests**	**Likely Outcome**
Environmental	Global reduction in emission	Avoid constraint on growth	Conflict leading to compromise over trade measures
Energy	Secure supplies without paying a moral price	Secure supplies	Competition without animosity

Table 4.

Table 4. describes the opinion and forecast of Mr. Daniel Gros, who developed his approaches of the EU-China cooperation. His forecast on environmental and energy issues is

relevant. He thinks that the result of cooperation will be a competition without animosity.[174] He explains that Chinese energy consumption is drastically different from Europe's because the vast majority of the Chinese energy consumption is coal. He sees one advantage of China compared to the EU: "China is much less dependent on hydrocarbon imports than either the EU or the US, and the price of coal has increased much less than that for either oil or gas."[175] No doubt this has played a role in the sometimes slow and low-key cooperation of China in the energy area.

I believe that the closer and closer energy dialogue between the EU and China is useful and beneficial for both of them. The increasing interdependence seems to increase the security in their positions and brings advantages. I hope that this positive direction will continue for a long time and the European Union and China will strengthen each other in the international energy regime.

[174] Daniel Gros, Brantly Womack, Alexei D. Voskressenski, The Rise of China: Policies of the EU, Russia and the US, European Security Forum, Working Paper No. 30, February 2008. Daniel Gros, The EU and the Rise of China, P.2.
[175] Daniel Gros, Brantly Womack, Alexei D. Voskressenski, The Rise of China: Policies of the EU, Russia and the US, European Security Forum, Working Paper No. 30, February 2008. Daniel Gros, The EU and the Rise of China, P.6.

VI. Annexes

6.1 List of Abbreviations

ASEN	Asian- European Meeting
CCP	Carbon Capture and Storage
CNOOC	China National Offshore Oil Corporation
CNPC	China National Petroleum Corporation
EE	Improving Energy efficiency
EEP	The EU-China Energy and Environment Programme
EPD	Energy policy Development
EU	European Union
FDI	Foreign Direct Investment
G8	Cooperation among the seven greatest economic powers and Russia
LNG	Liquefied Natural Gas
NDRC	National Development and Reform Commission- China
NEA	National Energy Administration
NOCs	China's National Oil Companies
MOU	Memorandum of Understanding
RE	Increasing the use of renewable energy
Sinopec	China Petroleum andChemical Corporation
SYNERGY	International cooperation program of the EU with the third countries and aimed technology transfer (from the early 90's to 2002)
THERMIE	International program of the EU which would execute technology (1994-1998)
UN	United Nation
USA	United States of America
WTO	World Trade Organization

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