

SASMA Portal 2011

The condition and dynamics of fossil fuels supplies to the People's Republic of China - Pawel Bienkowski

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The People's Republic of China is the second largest consumer of energy, after the United States of America, in the world. Its increasing demand for energy is a result of the increasing demographic growth but most of all of the dynamic economic development. In the face of an extremely energy-hungry economy the demand for fossil fuels in China has exceeded the level on which the country could satisfy the demand from its own resources. In consequence, the issue of assuring a proper level of fossil fuels supply as well as of an efficient distribution of energy among individual branches of economy and geographical regions has grown since the 1990s and became a problem of national security. What is more, a positive relation between economical development and public prosperity has become the basis for government legitimization in the Communist Party of China, as a result of which the issue of assuring proper functioning of industrial production and council infrastructure by means of maintaining stable energy supplies has become crucial for politics.

Energy Security in the People's Republic of China in the First Decade of the 21st Century

The current condition of energy security of each country is determined by mutual relations between the condition of economic development, the effectiveness of energy distribution networks which supply the production units and country's infrastructure with electric energy as well as the specificity of fossil fuels and their supply assurance level. The example of China is utmost interesting because of their incredibly dynamic development through the past thirty years, which resulted in numerous disproportions concerning also the current problem with meeting the demand of multidimensional industrial production. The fundamental challenge For China in this Context was to assure incessant electric energy supplies to cities and factories and petrol supplies for means of transport which constitute a blood circulating system for the second largest economy in the world today. The pace of China's economic growth does slow down but it still maintains a level of 10% GDP from year to year (10,5% in 2010 and a forecasted 9,6% in 2011). The scale of goods production in China is reflected by the numbers defining the share of this country in world trade: export from the People's Republic of China currently constitutes almost 9% of the world goods export and import constitutes approximately 7% of the world goods import. The Chinese economy is undoubtedly export oriented and thus dependant on maintaining production continuity which on the other hand requires constant energy supplies.

According to The National Development and Reform Commission (NDRC) in 2010 over 60% of the electric energy consumed in the People's Chinese Republic came from bituminous coal which is still extracted in amounts exceeding the current demand for it. Nevertheless, this can change in the nearest future if the production effectiveness of this fossil fuel is not left behind the growing demand. Petroleum is the fifth most commonly used energy source, whereas, since 2003 China is the biggest importer of this fossil fuel. According to the experts from the International Energy Agency, the demand for petroleum in the People's Republic of China will reach in 2020 the level of 552 million tons per annum (a compared to 377 million tons in 2010) and its import will be equal to as much as 77% in 202 (as compared to 61% today) A much smallest share (in per cent) in the use of energy sources is divided among natural gas (consumption of 5.3% in 2010 mainly from national sources), hydropower (approximately 7%) and nuclear energy (approximately 1%; Nuclear energy just like hydropower is produced only on the territory of the county) The remaining renewable energy sources still have a marginal meaning for the Chinese economy.



Therefore China remains dependant on bituminous coal as the basic fossil fuel to produce electric energy; the country possesses sufficient national resources which allow meeting current demands. Any eventual shortages can be easily covered by import from such countries like the not distant Mongolia, Indonesia or Australia. The problem may arise from the effectiveness and security of bituminous coal extraction, the effectiveness of the transport infrastructure (the mining regions are very distant from the industrial production centers which generate demand for electric energy) as well as from issues concerning environment protections and greenhouse gasses emission, which are more and more vital on the international and national arena. Moreover, the 2004 electric energy shortages highlight the unsatisfactory condition of the industrial electric infrastructure which delivers electric energy to urban agglomerations and industrial centers located on the shore at the same time implicating the need to make considerable investments in this branch. Bituminous coal is still a fossil fuel which is vilely available on the territory of China thus the electric energy generated from it will remain an issue of the internal economic policy of the country.

The increasing demand for petroleum forces China on the one hand to buy it from overseas suppliers and on the other hand to develop the national petroleum distribution network and its derivatives. This issue concerns mainly importing petroleum from Russia, Middle Asia and the region of the Persian Gulf also through Myanmar thanks to the planned in this country pipeline. Import of petroleum and natural gas requires also efficient harbor terminals. Acquiring fossil fuels from diverse suppliers causes also problems connected with its processing: the chemical composition of Siberian petroleum differs considerably from petrol extracted in the Persian Gulf not even mentioning Venezuelan petroleum, what results in the need to build a specialist refining infrastructure and specialization in the process of oil production. The increasing dependence of the People's Republic of China from importing petroleum will in result have wider implications for the country's foreign policy.

The need to diversify energy sources as well as the necessity to adjust to environment protection regulations and norms, to save resources and emission of green house gases means for China that the country has to develop non-organic energy, what in the case of the People's Republic of China means focusing on developing nuclear and water power plants. The south-west part of the country, which is rich in water resources and has a favorable line of the land still does not fully use its potential of renewable energy sources. China plans to build more similar objects next to the functioning Three Gorges Dam. Seismologists and military experts warn that this enterprise carries a substantial problem. The destruction of such dams and releasing water amassed in their water bodies carries considerable risk of flooding of the industrialized regions located in the lower reaches of the rivers, in the case of the Yangzi river flooding may reach as far as Shanghai. Thus, a need to increase security of such objects arises

especially anti-aircraft and anti-rocket security. Similar restrictions apply to constructing nuclear power plants.

The energy security level of a country is also determined by the efficiency of its industrial energy infrastructure. In the case of the People's Republic of China this issue is connected mainly with the railway network which is used to transport coal, the pipeline network which is used to send petroleum and natural gas and the infrastructure to transmit energy. The intense snow falls in 2008 and the increasing level of seaside regions urbanization revealed considerable shortages in this respect which are additionally multiplied by the lack of strategic petroleum and gas reserves. The problem also lies in the low energy effectiveness of China which is defined as the relation of energy consumption to the unit of generated GDP. In absolute values, this effectiveness constitutes less than 16% of effectiveness of the best economy in the world- that is Japanese. Defined within the light of purchasing power parity its value shapes in the People's Republic of China at the level of 60-80% of developed countries. This is still too little for the dramatically growing demand. The insufficient level of strategic petroleum reserves on the territory of China is thus a much bigger problem. The infrastructure capable of amassing only a little over 100 million oil barrels (enough for approximately 30 days) makes it impossible for the People's Republic of China to survive a crisis connected with discontinuing deliveries of this fuel. Works on developing the strategic fuel reserves will undoubtedly belong to the priorities of the internal dimension of Beijing's energy policy.

Summing up the evaluation of energy security in the People's Republic of China in the first decade of the 21st century the increasing gap between the demand and supply of fossil fuels should be noted as well as the insufficient effectiveness of the existing infrastructure. The growing dependency of China from fossil fuels import implies that this issue is to be transferred to the region of the country's foreign policy.

Perception of energy security and the policy of authorities

In the field of normally perceived energy security several threads for China should be noted. They concern especially such possibilities of discontinuing petroleum supplies either through blocking of strategic straits such as the Ormuz Strait and Malacca Strait, pirate attacks or closing down of damaged pipelines. In the latter case concerns are growing when it comes to

Russia's credibility as a fossil fuel supplier, especially in the context of Russia's discontinuation of natural gas supplies to some European Union member countries in order to force more profitable contract conditions or to force through other political ambitions. This issue remains vital for China especially in the light of the developing environment protection policy. The called for shift from coal as an energy source to other fuels, such as for example natural gas, which emit less carbon dioxide and toxic gases, implies the necessity of increasing natural gas import, what in turn is closely connected with the mentioned above threads. In the end, coal which is within hand reach, despite the fact that it causes bigger and bigger environment destructions, is safer only because it remains under direct control of the local authorities. The issue of such direct control over fossil fuels will reappear many a time in the context of fossil fuels sources. What is characteristic for the policy of the People's Republic of China's government and already visible on this stage, is the fact that the energy development is subordinated to the superior rule of connecting dependence from national resources and benefits arising from China's policy to open their market on the rest of the world. Moreover, this rule also explains the maintaining dependence on exploiting national hard bituminous coal resources as well as the active search for new energy sources abroad, which is accompanied by the process of developing political and economic contacts with countries rich in those raw materials.

The attitude of the Chinese authorities to the international energy market and its institutionalization plays a crucial role here. Since in this situation, when the vast majority of discovered and exploited petroleum and natural gas resources is still in the hands of western concerns, and only less than 4% is controlled by Chinese companies, the assumption that it is impossible to rely on western countries when it comes to assuring supplies of these raw materials seems natural . This is mainly why China participates in the works of the International Energy Agency nevertheless it does not want to make the decision to join it as a full member. The People's republic of China prefers to be active in such associations in which it can play the role of the leader, such as Shanghai Cooperation Organization, Cooperation Forum China- Arabic Countries, The Chinese-African Cooperation Forum or just in unilateral relations. The Chinese also see potential in contacts with countries ostracized by the West such as for example Saddam Husain's Iraq and currently Iran or Sudan. Thus, Beijing's anxiety over the policy of "promoting democracy" forced through on the Middle East by George W. Bush's administration, which led to the American military intervention in Iraq and to the severing of energy relations with Bagdad and Beijing. The Chinese encountered actions which were aimed at blocking of the expansion of Chinese oil companies many a time. China also sees the utmost political character of the cooperation between Western countries and other developing countries, such as for example the cooperation of the USA and India in the field of nuclear energy- in the eyes of China this issue arouses controversy on the level of international law.

The identity issues of the People's Republic of China on the international arena which were described above will have their influence on the strategies of acquiring fossil fuels which are

described below. Nevertheless, the development of national political and legal directives for national energy security should be noted at the beginning. The mere term "energy security" was officially introduced in the documents of the 10th Five-Year Plan (2001-2005), which opened the way for the more complex National Energy Strategy. In 2005 two documents from the field of energy effectiveness appeared. "The Middle- and Long-Term Energy Saving Plan for China" developed by the National Development and Reform Commission and the Renewable Energy Act which was passed by the The National People's Congress The document "Conditions and Energy Policy of China" made by the State Council in 2007 determines the new directions in this field, determined by economy and efficiency trends, which are based on national resources and development of modern, clean technologies as well as on developing international energy cooperation. The assumptions of the 12th Five-Year Plan (2011-2015) are far- reaching. Their aim is to limit the use of fossil fuels to the level of 85% of the currently used amount of energy sources and to reduce the emission of carbon dioxide by 40-45% by 2020 as it was declared by Beijing on the international stage. The plan also assumes development of renewable energy sources such as water power plants, solar and wind power plants as well as construction of nuclear power plants. In the face of the March catastrophe in the Japanese Fukushima nuclear power plant the latter ruling has been radically limited to the advantage of wind energy. The use of natural gas will also increase in a large extend (from the current 3.9% to 8.3% in 2015) It is planned to reduce the use of bituminous coal by 7% by 2020.

To recapitulate, China tries to use most efficiently its national potential as a means to meet the ever growing demand for energy. It results first of all from the considerable resources which are at China's disposal as well as the adverse conditions on the international energy market. The growing use of energy and the unavoidable pressure to protect the natural environment shape and form the energy policy of the People's Republic of China which is more and more innovative and open on the world.

Acquiring fuels



In 1993 China became for the first time a shareholder in a foreign oil investment- located in Peru. By 2005 China had invested in total over 7 billion dollars in projects connected with oil extraction on the territory of Africa, Middle Asia, Oceania and Latin America. This dynamic growth is a result of a policy, which was forced through by Beijing, called *going out*. Its aim was to acquire new fuel sources. The direct contractors of this policy were three national oil companies:

China National Petroleum Corporation (CNPC), China Petroleum and Chemical Corporation (Sinopec) and China National Offshore Oil Corporation (CNOOC). What is important, the business activity of those companies is actively supported by the government which is interested in "secure oil" in the Chinese hands. As a result of a peculiar feedback, the companies have some influence on the foreign policy issues of the People's Republic of China. The main localizations which are counted as oil extraction sources are currently Middle East and Africa. New perspectives open in the face of increasing possibilities of exploring new oil deposits located in Middle Asia and on the disputed territory of the East China Sea and South China Sea.

New directions of acquiring resources in continental Asia are connected for China with new land transport possibilities- in this case with the construction of pipelines. The biggest importance for the People's Republic of China in this region have such partners like Russia, Kazakhstan and Turkmenistan. In August 2010 the part of the pipeline Eastern Siberia- the Pacific Ocean leading to China was officially opened. This pipeline was initially supposed to deliver oil also to Japan and South Korea. This branch of the pipeline will deliver 220,000 tons of oil to China per day. This project has also utmost important political meaning for the relations between the People's Republic of China and the Russian Federation. This means that the economic relations and contacts will be strengthened and the interests of both countries will be closer, especially in the face of the supposed threat for Russia which is caused by China's demographic expansion in the provinces adjacent to the Russian border and on the territory of Eastern Siberia. Moscow also gains an additional fossil fuels export destination, apart from Europe (The entire pipeline is planned to transport over 50 million tons of Russian oil to Eastern Asia in comparison to 120-130 million tons which are transported to European consumers) China, on the other hand, gains a serious source of supply, independent from sea transport, nevertheless it will be controlled by the Russian Federation. The compromise which have been reached on the line Moscow-Beijing-Tokyo as far as the route of the planned pipeline is concerned, should be noted here.

Another area in which China is interested are the resources of the Caspian Sea. This region is nevertheless still under the influence of the Russian Federation but in contacts with Middle Asian countries the People's Republic of China is more independent because it forces interests exceeding pure energy boundaries. Currently through the existing pipeline from Kazakhstan over 200,000 barrels of oil are transported to China per day with the possibility of doubling this amount at any time. What is more, CNPC directly controls parts of Kazakhstan's resources. Moreover, CNPC has majority share packages in such Kazakhstani companies as CNPC-Aktobemunaigas or Petro-Kazakhstan. Beijing also invests considerable amounts of money in Kazakhstan's economy. By creating solid dependency and control relations China builds long-term fuel supplies in Kazakhstan which should ensure oil and natural gas supplies.

In 2009 the gas pipeline Middle-Asia- China was opened. This pipeline links the exploited natural gas resources in Turkmenistan with the Xinjiang province. What is more in 2010 a project to connect this pipeline with natural gas deposits located in the western part of Turkmenistan was announced. This project is to feed the European Nabucco pipeline which is traditionally used by Russia. China also has shares in oil and natural gas extraction in Azerbaijan. By doing so they plan to connect the Asian and European railway infrastructure on the territory of this country; Beijing also perceives itself as an alternative energy market for projects similar to the Nabucco pipeline. In its actions to increase the energy security of the country, China joins "the Great Game" for the resources and influences in the region of the Caspian Sea, by trying to force through their own economic and political aims. Additionally the economic cooperation between the People's Republic of China and Iran, which is subject to further economic sanctions forced through by the USA and the European Union for its nuclear program, is also developing, China has oil processing technology which is utmost desired by Iran. China delivers petrol transports to Iran at the same time engaging itself in the development of oil fields in this country. The People's Republic of China also plans to join the Iran-Pakistan-India pipeline project, which is competitive in comparison to the American idea of the Turkmenistan-Afghanistan-Pakistan-India industrial line. The position of Beijing in the Iran issue is so strong that China remains a permanent member of the United Nations Security Council, who has the power of veto. Thanks to it China can have an indirect influence on the situation in the region, and thanks to the fact that it was excluded from the facultative economic sanctions forced through by the West, it can develop their contacts with the government in Teheran on favorable terms.

The tool which is used to assure energy security and also used by China in Central Asia is The Shanghai Cooperation Organization. This forum deals both with issues connected with energy and economy as well as those from the field of politics and regional security. It is the discourse and cooperation platform for Beijing and the countries from this region which is part of the so called "The Silk Road Strategy", forced through by the People's Republic of China with the aim to intensify its own influences, security and economic benefits on the territory of Central Asia. The stake here is not only to assure stable supplies of oil and natural gas but also to control and ease the separatist tensions and terroristic actions in the unstable Xinjiang province and on the adjacent territories. This region may in the future become an arena for a serious rivalry between China, Russia and Western countries or India- The latter ones showing interest in integrating with the The Shanghai Cooperation Organization because of the possibility to exploit the Caspian resources. In the nearest future one should expect a systematic expansion of Chinese oil companies in Eastern Asia on the basis of cooperation with other regional players. China still does not have sufficient resources and influences to decide on an open confrontation with any of the current partners.

On the territory of Middle East and North Africa China still maintains energy cooperation with such partners like Saudi Arabia, Oman, Yemen, Syria, Libya or Algeria, so in part with countries which have difficult relations with the West and thanks to it with countries which are free from the dominance of Western oil companies. The People's Republic of China, which is interested only in importing fuels, remains to be an attractive partner in comparison with the USA or the EU member countries, which often force through their influences and demands on the countries in this region. The situation looks quite similar with the constantly growing Chinese investments in Sub-Saharan Africa. Traditionally economic contacts of the People's Republic of China with this region are famous for their ease of establishment and lack of any preliminary conditions especially political conditions on the part of China. Also in Africa China tries to exploit the resources located in the alienated countries by the West generally because of the character of their political regimes. This gives Beijing freedom in shaping contacts and what follows- greater control over them.

This is how the cooperation between China and Sudan, Angola, Nigeria, the Republic of Congo, Gabon and Madagascar looks like. From Sudan the People's republic of China imports 200,00 barrels of oil per day, what makes China the biggest importer of this fuel. In return for oil and shares in extracting companies, China offers the regime in Khartoum political, military and economic support. What is most fundamental, CNPC remains deeply involved in exploitation of resources located in Darfur and South Sudan- regions which are politically unstable. The sales of Chinese arms to Sudan remains in direct relation with ensuring "hard" security for the extraction investments of CNPC on the territory of Sudan. Similar risk is connected with investments in Angola, which is still trying to recover after a long lasting civil war. On the other hand, the Chinese corporations in Nigeria are forced not only to cope with the unstable political and ethnical situation, which poses direct threat for the Chinese employees but also with competition from the Western companies engaged in extraction in this country. To sum up, special attention should be paid to the risk factors connected with investments involvement in the Third World Countries, which is not without influence on the level of national energy security.

Potential new possibilities to gain fossil fuels are seen in the direct vicinity of the Chinese region. The deep sea resources of the East China Sea and South China Sea are estimated to be the biggest ones in the world, what attracts the attention of all countries from this region. Because of this the territorial claims of individual countries are a serious problem, including the most advanced territorial claims of China. The deficiency of efficient extraction technologies of oil and natural gas from the deep sea resources causes additional difficulties, what forces China to look for foreign investors and in result to agree to numerous related compromises. On the one hand The People's Republic of China tries to highlight its physical (read: military) presence on the disputable territories, especially the Spratly or Diayu/Senkaku islands. On the other hand China tries to be ahead of the possibilities to start mutually beneficial cooperation with other investors. The Chinese-Japanese agreement of 2007 is a good example of this. The agreement determined the cooperation boundaries on the field of

energetics and environment protection additionally connected with the Japanese offer to help China develop. Moreover the agreement of June 2008 thanks to which the conflict over the Chunxiao/Shirakaba resources on the East China Seawas solved agreed on mutual cooperation and mutual exploitation of those resources.

The example of the Chinese-Japanese cooperation indicates a wider trend in the energy policy of the People's Republic of China. In the face of insufficient effectiveness of actions assuring China fossil fuels supplies, the country starts to appreciate the role of two- and multi-party contracts on this field. What is most important, the cooperation is more than not established with rivals of the People's Republic of China on the energy market, for example with India and Malaysia in Sudan and Syria or with Vietnam and the Philippines on the South China Sea. Beijing is also a party in the Petersburg Declaration of the G8 summit in 2006, which calls its members to run energy policies based on mutual cooperation, quality and competitiveness, and developing the boundaries for dialogue and cooperation as well as environment protection. The functioning of fora like the Sino-EU Energy Co-operation Task Force which aim to reach an agreement between China and European countries in the field of energetics is also a novelty. The eventual establishment of organizations like "the Energetic Union" in North-East Asia, based on the foundations of post-war models of the functional European integration arouses controversy. The first task of institutions of such type could be for example determining unified boundaries and standards for the conduction of foreign investments in the oil and natural gas extraction sector. However, in the face of contradictory interests of the countries in this region and high level of mutual mistrust it is hard to imagine a swift establishment of a stable structure which would coordinate multi-party policy of fuel extraction, what in large extend assures Beijing in their conviction that they should regardless rely only on their own solutions. On the other hand, positive examples of international dialogue signal at least a change in the attitude of players when it comes to the issue of competitiveness and rivalry on the fossil fuels market.

The situation of China in the field of energy security can easily be changed due to new sources located on the territory of the country. Present hopes are connected with exploitation of the recently explored deposits of the so called "inflammable ice", that is a hydrate of the natural gas, in which the Qinghai province is rich. 1 m³ of "inflammable ice" is characteristic for its energetic equivalent equal to 164 m³ of natural gas, what judging by the resources of this fuel in Western China estimated for at least 35 billion tons could assure People's Republic of China energy supplies for 90 years. In the consecutive years the government plans to invest approximately 100 million dollars on exploitation of "inflammable ice". Serious problems are connected with the technical peculiarities of the extraction process of this fossil fuel, as well as with considerable, negative influence which this fuel has on the atmosphere due to the burning of methane contained in it. The remaining alternative energy sources still represent a niche percentage in the national energy mix. Liquefaction of coal, bio fuels or biomass energy do not constitute an effective solution for an economy which generates such considerable

demand for energy as the Chinese economy. Bituminous coal and oil with a mix of water and nuclear energy will thus determine the national energy security for a long time.

The role of military forces in the supply assurance process

The Chinese People's Liberation Army is a vital tool in the hands of the Beijing government. The army constantly increases its potential, which is in a large extent used also to realize plans of the energy security sector. The basic task of the armed forces of the People's Republic of China is to secure the supplies of fossil fuels by means of their military presence on the routes of their transport. Despite the intensive works on the development of pipeline network which transport oil and natural gas to China, the vast majority of the transport is made by sea and one should not expect this proportion to change in the nearest future. What is more, 80% of the imported oil by the People's Republic of China is run through the Malacca Strait, what is a sensitive point prone to actions hostile for China and aimed to break the supplies continuity. Even the fully functioning Kyuakpya-Kunming pipeline, which will transport oil from the territory of the Persian Gulf and Africa through Myanmar passing over the Malacca Strait will not be able to replace sea transport. Subsequent threads are connected with the growing international pirate attacks on the seas in the Africa Horn region, as well as the tense situation on the North China Sea, which is constantly fed by the territorial conflicts between the countries located on this territory.

The occurring currently trend to modernize Chinese military forces is favorable for the development of the navy. Despite the fact that the increasing investments on the development of this kind of armed forces should be explained first of all by the general increase of military investments in the People's Republic of China, it is still difficult not to notice the relation between the intensifying aspirations of China and their development of military potential, especially in the form of the navy. This resource is currently in an increasing degree used by Beijing to assure oil and natural gas deliveries as well as to highlight the meaning of China's military presence in the regions where the fossil fuels are extracted and in the communication routes (Sea Lines of Communication – SLOCs). A real example of this phenomenon is first of all the radical activity of Chinese navy fleet vessels on the East China Sea and the South China Sea, especially on the disputable territories. The Chinese People's Liberation army is in possession of numerous military bases on islands and atolls which are subject to controversies among the countries in this region. The navy carries out military games patrols the sea routes and develops their access denial potential regularly, which is aimed at eventual threads from abroad focused on the territories being under Chinese control or influence. The fundamental access denial tool is the ever growing underwater fleet. Additionally, China began to realize a

program to build their own aircraft carriers, which should reinforce their possibility to control sea regions, what in turn also secures the fossil fuels transport routes.

The operational range of the Chinese navy has also increased. Currently they are successfully localized in the area of the Indian Ocean to actively fight with any instances of piracy. What is more, the Chinese seem to change their yearlong obstinacy against building overseas military bases by deciding to dislocate supply replenishment units on sea or by establishing networks of material support bases for military vessels operating on the Indian Ocean- such bases are beginning to be established in Oman, Yemen, Djibouti, Pakistan or Sri Lanka, most often serving the function of replenishing supplies of Chinese military navy vessels and as a consequence extending their missions. Moreover, China has engaged in developing the profitable Gwadar harbor in Pakistan as well as in installing a watching station on the islands of the Andamanian Sea thanks to the patronymic relations with the military junta which is in charge of Myanmar. It should be noted, that the soldiers of the Chinese People's Liberation Army were engaged in the modernization project of the energy infrastructure as well as in active help in recovering from the effects of snowfalls of 2008. To sum up, one should expect in the nearest future that the relation between military forces and policy of national energy safety is maintained. The development of the Chinese army's potential and its operational range is subordinate to the general aims of the country's policy, which encompasses especially economic development and assuring a stable energy base.

CONCLUSIONS

Over 30 years after the initiation of the Reform and Opening was opened, the People's Republic of China is still a developing country. A collection of features characteristic for the economy of the transformation period concerns also issues of energy use and maintaining energy safety. Firstly the role of disproportion should be noted which is clearly seen with respect to the ever increasing demand of the economy for energy and the impossibility to meet this demand due to shortages of fossil fuels. China faces the necessity to take quick and definite actions to ensure stable energy supplies which would be able to satisfy the thriving industry. Failing to reach this aim would question the issue of further economic, industrial and social development of the country.

The currently observed trends in this field seem to be ahead of the requirements of the situation, nevertheless unsolved issues may make this process more difficult. China in a visible way tries to abandon the self-sufficient fuel policy, what was inevitable in the light of the impossibility to meet the demands of the national industry. On the other hand, the strategies to acquire energy sources still remain in the People's Republic of China subordinate to the rule of gaining full control over them and not being dependant in any way on external factors. It is manifested in the trend to diversify oil and gas sources as well as to develop alternative energy sources. The influence of other countries, companies or organizations on the internal situation in China, also with respect to its economy, is perceived by Beijing as a direct threat for the national security, thus it has to face far-reaching preventive measures. One should expect Beijing to continue the policy of China's self-reliant energy security in the nearest future, especially facing the increasing economic and political potential of this country and the strengthening of its position on the international arena.

One should not expect any changes in the structure of individual fossil fuel shares in the country's energy policy. China will continue to extract bituminous coal to general electric and thermal energy. The reoccurring problem in this field will be the coal resources extraction technology and first of all emission of green house gases. In the long run the government in Beijing will not be able to avoid unprofitable effects of this phenomenon and will have to take far-reaching actions. The assumptions of the 12th Five-Year Plan seem to meet the occurring challenges. The issue of necessary improvements in the internal energy infrastructure, which current condition lowers the effectiveness of energy distribution and generates considerable losses remains in the circle of national policy.

As oil and natural gas will remain the basic imported from abroad fuels one should expect Beijing to maintain their going out strategy in the field of gaining access to foreign resources. Currently China tries to maximize possible control over the exploited resources according to the rule of "secure oil in the Chinese hands". Despite the fact that it is fairly simple to achieve in developing countries which are poor and dependant on external influences, China should notice the considerable risk connected with investing in such regions, as well as the insufficient effectiveness of solutions forced through in bilateral relations. The need to start an global energy cooperation seems to be more and more visible, especially when the world resources are shrinking. In such a situation when the market is dominated by Western companies it will be utmost difficult for china to find deposits which are not under the influence of other companies and which are at the same time easy to exploit. The reoccurring issue will be the condition and development level of the Chinese mining and extracting industry. The attempts to conclude regional energy contracts should be developed and Beijing seems not to be ready for it yet.

Finally it should be noted that the energy security is still perceived in China in terms of "hard" security, based on relative profits. The Chinese government perceives the policy of acquiring resources in a large extent as rivalry and a zero sum game, what more than not closes the way to reaching an agreement. By realizing the policy of "increasing soperpowerness" manifested by the development and growth of the military sector, China finds itself in the dangerous position of being perceived as "a Chinese thread" by other countries around the world. Despite the fact that it is impossible not to appreciate the role which plays the physical security of fossil fuels resources and their pipelines, the effective international cooperation is based more than not on multilateral agreements and compromise rather than on forcing through owns objectives. Nevertheless, it may be utmost difficult for the growing in power People's Republic of China to understand.

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