EU-China energy relations and geopolitics Challenges for cooperation



GERMANY DID NOT WAKE UP to the new geopolitical and geo-economic realities until its industry experienced mounting difficulties with its imports of raw materials because China, India, and other states were prepared to pay far more than customary international market prices for them. On 8 March 2005, the Federal Association of German Industry (BDI) held a congress on protecting Germany's supply of raw materials and energy, its first such event in more than twenty years. Since then, a high-ranking BDI group with three working groups has been created to address issues of international raw materials and to formulate a national supply concept to them until 2008. Although they have published the research results in a final report, the German government has not published its official concept on supply security for raw materials (with a focus on non-energy resources). Meanwhile, China's energy policies and strategies have become an important issue for bilateral cooperation between Germany and China, particularly in regard to renewable energy sources, energy efficiency and conservation as well as clean coal technologies.

Evolving EU-China energy cooperation

In contrast to the bilateral cooperation between Germany and China, the EU started its dialogue on energy policies already in 1994. The bilateral energy discussions are one of the oldest of the 24 sectoral dialogues between China and the EU. Those energy dialogues take place in the form of annual working group meetings and a bi-annual Conference on EU-China Energy Cooperation. It includes discussions of energy policy and development strategies, the evolution of energy markets, and security of supply and sustainable development. The 'Memorandum of Understanding on Transport and Energy Strategies' of September 2005 envisages cooperation in areas such as energy regulation, renewable energy (including alternative transport fuels), energy efficiency, natural gas, clean coal technology (near zero emissions) and other new technologies in the energy sector. Furthermore, a new EURATOM agreement with China focuses on research into the peaceful use of nuclear energy and grants researchers from both sides access to each other's nuclear facilities. Both sides are also participating in the international ITER-programme for the construction of a experimental controlled fusion reactor. In 2005, the European Commission and the Chinese Ministry for Science and Technology (Most) signed an Action Plan on Clean Coal and terms of reference for an Action Plan on Industrial Cooperation on Energy Efficiency and Renewable Energies.

Most recently, both sides have broadened their energy dialogue by including climate protection issues (in addition to the newly established EU-China Partnership on Climate Change) in their governmental and track-two energy meetings, such as working groups and conferences. At the same time, both sides are now more willing to take over more global responsibilities for coping with these global challenges, as China's efforts to create low carbon zones and eco-cities, funded jointly by Chinese and foreign sources, or common research projects on carbon capture and storage (CCS) highlight.

These forms of official cooperation and the many other common discussions on bilateral Track-2 or Track-3 Conferences have become more urgent and important for the EU for two major reasons:

China as a global challenge for energy security and climate change

During the last years, China has replaced the US as the centre of the world's raw material's market and as a price setter for these industrial raw materials. In 2009, it is expected even to surpass Germany as the largest exporter of goods in the world. Since 2000, China has accounted for 40 percent of the world's crude oil demand. In 2003, it already displaced Japan as the world's second largest energy consumer, and surpassed even the US and Japan as the second and third largest exporter (after Germany). Although having the third-largest coal reserves worldwide, China became a net importer at the beginning of 2007. Domestically, China's heavy reliance on coal in its primary energy consumption has raised enormous environmental problems and costs that increasingly threaten its future economic growth. According to an analysis of the Environment Assessment Agency of Netherlands, China has already replaced the US as the world's largest emitter of greenhouse gases (GHG) in 2006.

Like many other Asian countries (with the exceptions of South Korea, Japan, Singapore and Hong Kong), China has long subsidised energy consumption. The result has been an increasing inefficiency: China consumes up to five times as much energy to produce each dollar of economic output – a factor often underestimated in the government's energy forecasts. China's energy (foreign) policy seems to be based on a strategic approach (but with an increasing market orientation), thereby focusing on guaranteeing the rising energy imports for its social economic stability and its supply security. Until recently, it has rather neglected energy conservation, economic efficiency factors and environmental costs until very recently. At the same time, China has experienced an acute shortage of energy since 2003, which severely disrupted its industrial output and electricity supply.

China's 'neo-mercantilist' energy foreign policy and high risk diplomacy

As a consequence of its hunger for energy and industrial rawmaterials, China has become ever more dependent on imports from distant, often politically-unstable parts of the world. It was forced to conduct much more pro-active foreign and security policies both on the regional as well as global level - reflecting China's self-perception of its energy insecurity. In the last 15 years, the economic rise of Asia, and above all China, has created an enormous regional and global energy demand that raises not only important economic issues, but also countless foreign and security policy issues for both regional and global stability. In order to solve many of China's rising social economic, energy and environmental problems, the great power is dependent on a peaceful environment in its Asia-Pacific region as well as on a global scale. Internationally, Beijing seeks increased legitimacy for rising great power status which is bolstering its political stability at home. By cherishing its concept of non-interference in domestic affairs in other countries, China has been surprised by the increasing criticism not just in the US at its energy diplomacy but also in the EU and even increasingly in developed countries themselves such as in Africa and Latin America.

Given the new energy policy dependencies in the 1990s, China's foreign and security policy had to deal with regions and countries that until then had played either no or only a secondary role in its traditional foreign policy. In the future, the possibility of greater economic and political rivalry, in particular with Japan, India, the US and, in the medium and long-term with Russia in Central Asia, for shrinking global oil reserves cannot totally or principally be excluded. Furthermore, Chinese energy experts are often more sceptical about global energy reserves and do not even rule out a serious shortage of oil reserves in the next 20 years. For that reason, they frequently arrive at much more alarming analyses than Western experts.

Conclusions and perspectives

In this light, it becomes clear that, more than ever, both the EU and China need to develop integrated solutions to the energy-climate nexus in order to balance energy priorities with economic and environmental objectives. For China, even more than the EU, the primary challenge in the years and decades ahead remains how to transit to a more secure and a low-carbon energy system by taking actions without weakening the economic and social development remains.

In the past, China largely responded to environmental crisis on a rather piecemeal basis instead of a broader and comprehensive strategy in keeping a stable ecological system and on seeking sustainable development. Future research on China's energy policies and the future EU-China energy relations and geopolitics needs to address the major challenges of Beijing's energy policies as well those for bilateral cooperation, such as:

- 1. Although Beijing has set new priorities for increasing energy efficiency, such as adjusting electricity supply structure for higher efficiency or importing modern coalmining technologies with high efficiency and clean burning technology, they are insufficient and need to be an integral part of an overall comprehensive strategy which would include all sectors of the economy and private households.
- 2. Furthermore, though China does not have to fulfil any obligations of the Kyoto-protocol, international pressure on Beijing will increase to improve energy efficiency in the years ahead. Hence China needs to design more radical incentive strategies to promote energy efficiency comprehensively, thereby including renewable energy development as well as enhancing its cooperation with the international community. Given that the EU-members and Japan are the leading and most experienced countries of high energy efficiency standards, the EU's sectoral dialogues with China on energy and climate change challenges need to be based on a more comprehensive concept and integrated strategy that takes into account more systematically both the domestic challenges of China's energy-climate nexus as well as its energy foreign policy directions, which are increasingly interrelated and cannot be separated and de-linked as was the case with past EU-China energy dialogue.
- 3. The Western aim of encouraging China's integration into the international global cooperation structures, while insisting, in return, that Beijing abide by the same rules as everyone else, will remain the major strategic goal and challenge for the years to come. Decisive will be whether the EU has the political will, attention and resources as well as whether China will offer more transparency, openness, and strengthening its market orientation of its energy policies and develop integrated concepts for its energy and environmental/climate protection policies. In order to exert a larger influence on the direction of China's energy and environmental/climate protection policies, it will be important for the EU to take China's views, perceptions and political-economical priorities more into account and to develop a better understanding of them in the light of its often underestimated domestic problems and challenges. Otherwise the EU will marginalise its own future leverage and influence towards China's energy and environmental/climate protection policies.

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