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## Energy Security in EU–China Relations: Framing Further Efforts of Collaboration

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### Introduction

Energy was not a significant concern for China or Western European countries when they formally decided to re-establish their contacts after 1971, the year of tectonic change in China's pursuit of economic and political relations with the rest of the world. However, it did not take long for energy to feature as a substantive issue area in Sino-European diplomatic interactions. The trade and economic cooperation agreement signed in 1985 between China and the European Economic Community (EEC) covered industry, agriculture, science, energy, transportation, environmental protection, and development aid. Still, it was not until 1988 that China and the EEC exchanged permanent diplomatic missions, a necessary instrument for implementing cooperation agreements, and re-normalization of a comprehensive relationship did not come until 1995, when the recently established EU announced its first strategy paper on relations with China. Between 1998 and 2014, China and the EU had the possibility of discussing issues of mutual interest at no less than 17 summits, with the 21 November 2013 meeting adopting the EU–China 2020 Strategic Agenda for Cooperation. In addition, China and the EU entered into 50 sectoral dialogues. Some of these, organized under the second pillar of economic and sectoral dialogue, deal directly and indirectly with energy and climate issues, including nuclear energy, energy in general, energy security, electricity, climate change, and environmental policy.<sup>1</sup>

One basic feature of the energy dimension of EU–China relations is that trade in energy commodities between the two has been small in scale. For example, as regards crude oil, Chinese statistics list Norway as the only European (EEA, but non-EU) supplier in 2010, but the total

amount stood at 78,000 tons, a 50 per cent drop from the previous year and a negligible fraction of the 240 million tons of crude oil which China imported in that year (Tian 2011, p. 20). Neither China nor the EU treats the other as a possible source of supply in coal and/or natural gas. There is no record of oil exports from China to the EU, and geographical distances make two-way trade in electricity too ambitious to even contemplate. However, both China and the EU top the lists of energy consumers and importers, so issues of security of supply figure high on their energy policy agendas. As shown in Chapter 6 of this book, on the Chinese presence in Africa and EU reactions, they can both compete and cooperate in seeking to solve their energy dilemmas.

The absence of energy trade provides an important material background for the fact that European commentaries on China and energy security typically offer reflections on concerns about Beijing's foreign policy, rather than how that policy leads to material gain or loss to the EU itself (Taneja 2009). This may be natural, but it is inadequate in terms of managing the effectiveness of further dialogues.

A second basic feature to note is that energy development, in terms of participation in the downstream sector of China's energy economy, has been the primary feature of EU interactions with China over energy. Such participation can be summarized in three primary paradigms: technology development for energy use (technical assistance from the EU and joint R&D programmes); trade and investment by EU companies in equipment for energy extraction, processing, and utilization; and EU support to research on energy policy reforms. Chinese sources on EU involvement in China's energy development indicate such projects as dating from the mid-1980s. For example, in 1988, the European Community offered a grant to China to set up an alternative (wind-power) energy experiment on an island in Zhejiang Province (Chang 1989, pp. 20–3). By 2000, China and the EU established cooperation projects on energy development and environmental protection, again in China ('China and Europe Initiate Energy and Environment Cooperation Programme' 2000, p. 47). Substantial Chinese involvement in the European energy sector has yet to materialize, despite news reports about Chinese ambitions to acquire energy-related technology companies in Europe (Zuvela 2013).

Nonetheless, recent years have witnessed emerging interest on the part of both the EU and China to move from energy development to encompass energy security in policy interactions with each other. In May 2012, the EU and China held their first high-level meeting on energy, which resulted in the signing of a joint declaration on energy

security (Oettinger 2012). Meanwhile, while energy has received increasing diplomatic attention, the EU has yet to present a formal China-specific energy strategy. Moreover, EU member states differ widely in their interactions with China in the field of energy: for some, the relationship involves primarily market questions; for others, energy matters are more of a foreign policy concern.

This chapter seeks to frame and define the features of a EU–China dialogue on energy security. It first reviews and analyses how the EU and China understand energy security; then it presents an explanation of the rationale for EU–China energy security cooperation and policy coordination, followed by an overview of past and current energy-field undertakings between China and the EU. The chapter concludes with a set of policy proposals for the two parties to consider in their work of framing a EU–China dialogue on energy security.

## EU and Chinese energy security concepts<sup>2</sup>

### EU energy security concept

The concepts of energy security that underpin and inform the EU approach to energy policy have been transformed as the challenges in this area have broadened in recent years. Energy security ideas are particularly dynamic in the EU context as there are numerous stakeholders – EU institutions, member states, energy companies, and experts. The main drivers behind the evolution of the EU concept of energy security have been the high volatility of global energy markets, rising concerns about security of supply (notably from external suppliers), the challenge of responding to climate change, the decline in hydrocarbon reserves within the EU and a dynamic shift in the EU energy mix. In response to the considerable uncertainty as to the future energy environment, the EU has developed an increasingly comprehensive approach to energy security, launching a set of initiatives designed to enhance energy market in the EU, to strengthen the EU's external energy policy, to integrate energy policy with the emergent role of the EU as a foreign and security policy actor, and to enhance global dialogue over energy policy and the strengthening of international rules in this sector (Horn and Korsunova 2011).

Energy belongs to the realm of shared competences between the EU and its member states. Although the EU has legislated in the area of energy policy for many years, the concept of introducing a mandatory and comprehensive energy policy was approved as recently as at the meeting of the European Council on 27 October 2005. A conspicuous

change in EU primary law came with the entry into force of the Treaty on the Functioning of the European Union (the Lisbon Treaty) on 1 December 2009, which included a chapter on energy.

Article 194(1) of the Lisbon Treaty sets out the four main aims of EU energy policy: to ensure the functioning of the energy market; to ensure the security of supply in the EU; to promote energy efficiency and energy saving, and develop new and renewable forms of energy; and to promote the interconnection of energy networks. Further, the energy provisions of the Lisbon Treaty are to be executed in a spirit of *solidarity* (Pielow and Lewendel 2011).

With the creation by the Treaty of the post of the High Representative of the Union for Foreign Affairs and Security Policy – with Baroness Catherine Ashton in this role until 2014, followed by Federica Mogherini – and of the European External Action Service, the external dimension of EU energy security has been enhanced. Today energy security is pursued in the EU as a horizontal policy issue that brings together, *inter alia*, energy, foreign, environment/climate change, industrial, and competition policies.

The EU is facing a threefold challenge to its energy security:

1. *Decrease in EU primary energy production:* Primary energy production has been falling in the EU. This development reflects the depletion of indigenous non-renewable resources (oil and gas) as well as an environmental policy backed by energy-efficiency measures and the promotion of renewable resources that has restricted the use of certain fuels (notably coal) linked to climate change. The decision of some member states to phase out or review nuclear power will further reduce the EU's internal energy options.
2. *Dynamic changes in the energy mix and uncertain demand:* Due to the volatile nature of global economic and energy market conditions, predictions as to future demand for energy vary considerably. Most forecasts see a continuation of the overall decline of demand for energy in the EU (with coal and oil experiencing significant falls to 2030), even while certain energy types (notably gas, although the rate of increase in demand is predicted to slow down) experience increasing demand.
3. *Growing import dependency:* External supplies are meeting an increasing part of the EU's demand for energy. The EU is a major importer of energy resources, and its energy dependency has been growing (with oil reaching over 90 per cent, natural gas above 60 per cent, and coal at about 40 per cent). Imports are concentrated on suppliers in a few

key countries, which gives rise to concerns about *over-dependence*. For oil, the EU is reliant on OPEC and the Middle Eastern countries, with Russia the single largest supplier. Russia is also the largest supplier of natural gas – followed by Norway and Algeria – as well as of coal, and the second-largest supplier of uranium. (all data from Eurostat 2015)

Overall, these developments mean that in the future the EU's relative importance as an energy consumer and producer will decline. At the same time as the EU is seeking to institute far-reaching shifts in the energy mix, its demand for external energy resources is rising, and global competition for access to energy resources is intensifying.

Energy policy in the EU has traditionally been based on the idea that EU member states are *interdependent* in the area of energy. Common energy policy has focused on three main concepts – *competitiveness*, *security of energy supply*, and *sustainable development*. These concepts underpin an EU energy policy that has 'evolved around the common objective to ensure the uninterrupted physical availability of energy products and services on the market, at a price which is affordable for all consumers (private and industrial), while contributing to the EU's wider social and climate goals' (European Commission 2010, p. 2).

In responding to energy challenges – current and forecast to affect the EU market – the EU has steadily broadened and deepened its approach to energy security. EU institutions as a whole have become stronger actors in energy policy alongside the EU-28. In 2014, partly in response to developments in the EU's close neighbourhood involving Russia, the main external supplier of energy to the EU and Ukraine, the most important area for transit of Russian gas, the EU adopted a new strategic document on energy security, accompanied by a detailed study on those issues (European Commission 2014a, 2014b).

In the context of rising export dependency and the desire to break the over-reliance on producers (the Russian Federation in particular) the external dimension of EU energy security thinking has advanced considerably. Energy relations with third countries have assumed greater importance, notably following the natural gas supply interruptions as a result of the Ukrainian–Russian disputes of 2006 and 2009 and in response to the political turmoil in North Africa and the Middle East in 2011. The main thrust of external policy has been to diversify energy sources and routes of supply, especially in regard to gas, but also to increase cooperation with other actors, like China, that share the EU's energy-related concerns.

Strengthening the main external supply 'corridors', not least the Southern Corridor to the Caspian Sea, has been an EU priority. There have been important innovations in the EU's approaches to energy including the September 2011 decision by the European Council to mandate the European Commission to negotiate on behalf of the EU with Azerbaijan and Turkmenistan to build a Trans-Caspian Pipeline System. These questions are addressed in detail in Chapter 3 of this volume, but in the context of the present study on EU-China energy cooperation it should be borne in mind that China and the EU share an interest in gaining access to energy resources in Central Asia.

As the external dimension of EU's energy policy has increasingly been integrated with foreign and even development policy, in Central Asia the European Union Special Representative has energy issues as part of his mandate. The Commission Communication, *The EU Energy Policy: Engaging with Partners beyond Our Borders* (September 2011), noted that improving access to sustainable energy for developing countries, including addressing the issue of energy poverty, is a priority within EU development policy (European Commission 2011, pp. 14–15).

The increased dynamism in the area of energy security has seen the EU taking on an enhanced role vis-à-vis its member states in order to strengthen coordination, build a common approach, and reinforce the strategic focus. For example, member states have been required to inform the European Commission on the nature of some bilateral energy agreements in order to ensure that these are in compliance with EU legislation (Commission Regulation 2010).

### China's energy security concept

Official Chinese definitions of 'energy security' are rare. The 2007 White Paper on energy (State Council Information Office 2007) perhaps comes closest to an elaboration of China's energy security approach in a single document. It is significant this White Paper was issued by the State Council Information Office, which is not a government body directly tasked with coordinating the government's energy policy. China's energy policymaking authority has been fragmented, and still is today (for interesting historical analyses see Smil 1981; Leung 2011).

The 2007 White Paper, which is conceivably reflective of consultations among energy policymaking bureaucracies, comes close to providing a definition of 'energy security':

Guided by the Scientific Outlook on Development, the Chinese government is accelerating its development of a modern energy industry,

taking resource conservation and environmental protection as two basic state policies, giving prominence to building a resource-conserving and environment-friendly society in the course of its industrialization and modernization, striving to enhance its capability for sustainable development and making China an innovative country, so as to make greater contributions to the world's economy and prosperity.

...

The basic themes of China's energy strategy are giving priority to thrift, relying on domestic resources, encouraging diverse patterns of development, relying on science and technology, protecting the environment, and increasing international cooperation for mutual benefit. (State Council Information Office 2007)

Partly due to the absence of an official identification of energy security concepts, there have emerged numerous studies around the globe seeking to interpret what those considerations might be in relation to China's foreign policy. Considerations of geopolitics play a large role, although the extent to which such assessments can be verified is highly questionable – partly because few of the partner states with which China has entered into energy cooperation projects offer any greater transparency (Zha 2013a).

Despite the lack of a definitive official statement on energy security, there has been rising interest in the challenge of energy security in China, with a growing number of comments by government officials, military, think-tank experts, and academics on the fast-changing energy challenges. The backdrop to the discussion of energy security has been the country's remarkably rapid economic growth. In China, energy security is thus generally viewed primarily as part of domestic economic development rather than as a part of foreign policy (Odgaard and Delman 2014; Wu 2014).

In China today it is not even possible to speak of one definitive 'Chinese perspective' on energy security. There is much debate on the issue. Pervasive concern surrounds the challenges of meeting the country's energy consumption needs, while calls for reining in the pace of growth in consumption have also attracted increasing attention. As to preferred strategies for dealing with the evolution of the country's energy portfolios, stakeholder perspectives vary: industrialists put low costs on a par with security of supply; entrepreneurs see rationalization of investment flows as the key; and technophiles argue that engineering is the path to pursue. Individual consumers resist any lowering of the quality of life due to energy-price fluctuations; environmentalists voice concern

for the consequences of the extraction and consumption of energy. International relations scholars, meanwhile, weigh the costs and benefits associated with the country's dependence on foreign sources of supply, oil in particular. Thus there is no shortage of viewpoints to be taken into consideration by politicians seeking to satisfy as many interests as possible in enunciating and implementing national energy policies.

As an issue for everyday governance, energy does not have high urgency for Beijing. The government has retained a separate ministerial agency for food, land, and water management. In order to ensure food supply, the central government issues a 'Number One' policy directive at the start of each calendar year, focusing exclusively on agriculture. Energy has received no similar treatment. In 1993, China turned from being a net exporter of crude oil to a net importer – but, in the same year, the Ministry of Energy was abolished. Debate on the necessity of having a ministerial-level bureaucracy to govern the various components of the country's energy industry has been ongoing and inconclusive, although safety in coal mining has been retained as a mandate of the central government bureaucracy. True, in January 2010, China did establish the National Energy Commission, with the prime minister as its head and more than a dozen ministers as members. But thus far, the Commission has functioned on a crisis-driven basis. Moreover, the national legislature has not yet held a single hearing on energy as an urgent task to address – another indicator of the low political salience of energy. Thus, observers should research rhetoric about China's energy security against the actual policy attention accorded to energy issues in everyday governance (Zha 2013b).

The popularity of 'energy security' study in China is heavily conditioned by watershed events that cause nationwide concern for the inability to deliver energy. Success in megaprojects like the Daqing oil fields, which made the country self-sufficient in oil in 1964, contributed to a sense of normalcy. Along the way, however, there were numerous fatal disasters in coal mining, hydropower projects, and electricity transition. For example, in August 1975, the rupture of dams in the Shimatan reservoir system of Henan province led to the immediate deaths of 26,000 people, and another 145,000 in subsequent epidemics. But events like these have been treated as mistakes to be avoided through improved engineering and management (Wu 2005). China's nuclear power stations have been relatively safe, spared from major failures thus far. Events like the 2011 Fukushima nuclear reactor accident have motivated Chinese researchers to argue for strengthening the regulatory systems of their own country's nuclear industry (Wang and Xi 2012). In any case,

in government policy, meeting the immediate needs of energy supply takes decisive priority over mobilizing economic and policy resources to pursue power and/or fuel switch.

To bring together observations of these and related features in China's trajectory of energy governance, it is important to take note of the confluence in the Chinese-language expressions of 'energy security' [*nengyuan anquan*]. In Chinese, *anquan* denotes both *safety* and *security*. Performance in safety is a necessary antecedent to that of the overall, if less tangible, security concerns. This is especially true of China, a country where satisfaction of total energy demand relies heavily on coal, water, and other domestically available sources.

Difficult as it is to present a comprehensive mapping of Chinese perspectives on the country's energy security and/or vulnerability, it is worthwhile to indicate issue areas that traverse market and strategic issues arising from the overall question of China and world energy order. As discussed in the concluding part of this chapter, bearing this point in mind is useful for thinking through EU–China dialogues on energy security.

### China's structural energy challenges

Because Chinese articulations about the country's energy security and vulnerabilities have to be tested against the material challenges facing the country in a structured manner, we should recall some salient features of China's energy situation. The following list is not meant to be exhaustive but can help to indicate the broader and historical contexts of Chinese energy policies, domestic and international.

First, like most countries, China seeks to ensure a secure supply of energy for its economic development at financial costs commensurate with changes in aggregate national and per capita income, while simultaneously addressing the environmental and other concerns associated with energy consumption. Energy was first incorporated as a separate issue area in the 6th Five Year Plan (1981–1985), the country's overall economic policy instrument. Before and since then, China's energy policy has attempted to address several long-running challenges: structural and industrial adjustment, conservation, and energy development. The weight accorded to each of these pillars has varied, but it is significant that emphasis was placed on energy investment programmes and efficiency enhancement already in the early 1980s (Levine et al. 1992).

Second, China's energy resource endowment presents a profound material challenge to the pursuit of the twin goals of meeting overall

demand and transforming the country's energy mix towards a low-carbon economy. China is rich in coal resources but poor in oil and natural gas. According to 2014 BP review, China was the world's top energy-consuming economy, with a 22.4 per cent share of total consumption. Its proven coal reserves stood at 12.8 per cent of the world total. But the corresponding figures for oil and for natural gas were 1.1 per cent and 1.9 per cent, respectively (BP 2014). The geographical distribution of coal reserves – centred in the northern and western parts of the country, thousands of kilometres away from centres of population and industry in the eastern provinces, had made coal extraction and transport a constant constraint on energy development. China's coal mines are primarily underground ones, so safety maintenance is an additional concern. In 2001 the central government established the State Administration of Coal Mine Safety, a separate bureau for handling coal mining safety as a part of the State Administration of Work Safety (SAWS), although separating project management from industry regulation has been the norm since the 1990s (Shi 2009; He and Song 2012). Coal still accounts for 70 per cent of China's total primary energy consumption.

Reduction of coal use is conditioned by access to other sources of energy. Hydropower has already peaked (accounting for 23.1 per cent of the gross installed power capacity in 2010), although some Chinese assessments hold that 65 per cent of the country's hydropower resources remain untapped and theoretically available (Chang et al. 2010). Chinese hydropower companies continue to be active, although more outside the country than within (Zha 2015). The development of renewable forms of energy such as solar and wind power has been extensively discussed, but commercialization faces several problems. Regardless of the associated human, environmental, and ecological costs, coal is set to remain the most important source of energy in China for many years to come.

Third, since the 1950s, energy-sector interaction with the rest of the world has been a key component of China's pursuit of development of its own energy as well as overall economic development. In the 1950s and 1960s, China sought Soviet assistance in developing its oil industry. China also sought to export coal and other raw materials to Japan in exchange for steel, industrial goods, and technology, for three decades before the normalization of diplomatic ties between Beijing and Tokyo in 1972 (Soeya 1998). In the early 1970s, China exported crude oil and oil products to its capitalist Asian neighbour countries (Barnett 1981). Until the early 1990s, oil had an indispensable role in China's total export structure (Chow 1992). After the visit by US Secretary of Energy

James R. Schlesinger to Beijing in 1978, China invited US and European companies to participate in development of its offshore oil fields (Zha and Hu 2007).

In relating to the outside world, China has not experienced disruption to supply on a scale comparable to the oil crises of the 1970s. After the outbreak of the Korean War and until the start of the Kissinger/Nixon détente, Western embargo on trade of oil and other commodities deemed to be 'strategic' for China did affect the Chinese economy and society. Nevertheless, the prevailing mode of governance was not on developing a consumer economy during those years, and China was still able to reach out to Japan and Western European countries for trade, including that of equipment for expanding domestic energy production (Mitcham 2005).

Along with trade, China entered into numerous programmes and projects in energy technological cooperation and collaboration with the industrialized West. International development agencies such as the World Bank and Asian Development Bank funded hundreds of projects that 'helped accelerate development of large-scale efficient coal power plants, hydropower, state-of-the-art technologies for controlling power-plant emissions, and international best practice environmental assessments of energy projects' (Martinot 2001). The pattern of such interactions is that China sought foreign inputs to increase its energy production, treated energy as an ordinary export commodity, and worked to improve the technological and managerial know-how of its own energy companies.

In short, international efforts aimed at socializing Chinese policy makers towards more sustainable energy use must relate to these challenges in the Chinese society. Tangible progress in international collaboration is essential for the EU to gain Chinese acceptance of it as an ideational power in global energy affairs.

### **EU-China dialogues on energy**

Energy dialogues and other energy-related discussions have been among the most recurrent aspects of bilateral dialogues between China and member states of the EEC/EU since the early 1980s. Formal EU-China Energy Dialogue commenced in 1994. The energy dialogue was one of the first official sectoral dialogues to be established between the two sides. Six areas have been prioritized for EU-China cooperation in this field: renewable energy, smart grids, energy efficiency in the building sector, clean coal, nuclear energy, and energy law.

High-level dialogue takes place principally through two regularized and designated channels. The first channel is the EC–China Biannual Energy Conference, held every second year since 1994, involving the EC Directorate General for Energy (DG ENER) and the Chinese Ministry of Science and Technology (MOST). Through energy and other sectoral dialogues, the EU has demonstrated willingness to share its experience, while China has shown an interest in using the best practices of the ‘EU model’ in these policy areas (European External Action Service 2013).

A second channel is the EU–China Dialogue on Energy and Transport Strategies, based on a Memorandum of Understanding between DG TREN (currently divided into two DGs – DG ENER and DG MOVE) and the Chinese National Development and Reform Commission (NDRC) signed in 2005. With its establishment in 2008, the Chinese National Energy Administration has been the EU counterpart for this dialogue. The fourth EC–China Energy Dialogue was held in July 2010 in Shanghai, and, for the first time, was at the ministerial level, with Commissioner Oettinger leading the EC delegation. According to the MoU, the dialogue ‘aims at strengthening mutual understanding on energy and transport development of each party’.

In addition to these dedicated channels, energy-related topics are a firm fixture of discussions between EU and Chinese leaders during their annual summit meetings. The EU–China summit held in Beijing in November 2013 saw the signing of *China–EU Joint Declaration on Energy Security* and the launching of *China–EU 2020 Strategic Agenda for Cooperation* (European Commission 2013a). The latter mentions energy 23 times and calls for reinforcement of cooperation on energy issues, with special emphasis on global energy security within the framework of the energy dialogue: for implementation of a roadmap for EU–China energy cooperation; for further exploration of cooperation in low-carbon energy technologies; for attention to safe and secure nuclear energy development; and for greater cooperation in energy regulation in order to share experience and promote best practices, regionally and internationally (European Commission 2013b).

On the basis of these high-level dialogues and exchanges, the EU and China have carried out a range of cooperative activities in the field of energy. For example, under the EU–China Energy Dialogue, the Europe–China Clean Energy Centre initiative was launched in 2009 with the goal of assisting China’s efforts to develop a low-carbon and more energy-efficient economy, including an emphasis on renewable energy sources and sustainable biofuels. The EU–China Energy

Dialogue has also fostered exchanges and workshops between EU and Chinese officials, industry representatives, and academic experts on such issues as clean coal, renewable energy and grid integration, and smart grids.

In November 2009 the two sides signed a bilateral Cooperation Framework on Energy Performance and Quality in the Construction Sector between the EC and the Chinese Ministry of Housing and Urban–Rural Development. This framework aims to help China introduce more energy-efficient practices in its buildings and building construction processes. Other areas of close cooperation in energy issues include working with the Chinese State Council in the crafting of China’s new comprehensive energy law and a 2008 R&D cooperation agreement between China and Euratom on the peaceful uses of nuclear energy and nuclear safety.

Energy questions have also been among the key areas of focus under the four-year programme (2007–2011) of the EU–China Policy Dialogues Support Facility (PDSF), aimed at facilitating and supporting the range of policy dialogues which took place at an official level between the EU and China. The PDSF facilitated conferences, workshops, and expert exchanges on such energy-related topics as energy law, coal mine safety, environmental governance, ecological compensation, renewable energy, and energy security strategies. The PDSF programme was terminated at the end of 2012, but this does not necessarily imply a decrease in interest on both sides to continue with further exploration of pertinent energy topics.<sup>3</sup> These activities provide support to official bilateral discussions and cooperation on energy by generating policy reviews and analyses, exchanging best practices and lessons learned, and increasing awareness and understanding between the EU and China on matters of mutual concern.

Such official dialogues have also helped to foster a broad network of professionals in both the EU and China. It is nonetheless a challenge to document the scope and/or assess the impact of how these networks have served the interests of both sides. Part of the reason stems from the fact that many such networks have been initiated and funded by corporate interests, which are not always keen on informing a general audience as to the details of their activities.

We may conclude that there are two types of interactions between China and the EU in the field of energy: one government-to-government, and the other industry-led. Together, they have helped to promote efficiency in energy use and improvements in Chinese energy policymaking.

## Rationale for establishing EU–China energy security dialogue

The EU and China are two of the world's largest energy consumers. They also face similar strategic and practical challenges.

Forecasts indicate that in the future both the EU and China will increase their reliance on imported sources of energy substantially (European Commission 2014a, 2014b; IEA 2014). As a result, relations with producer and transit countries are becoming increasingly important, involving foreign/security policy issues as well as traditional energy policy. The rise in energy imports will occur at the same time as both economies seek to introduce radical shifts in their energy mixes to combat climate change and environmental challenges, notably through greater reliance on low-carbon imports (natural gas) and the domestic production of renewable resources.

The prospect of China and EU in competition over Russia as a supplier of oil and gas came closer with the May 2014 signing of a landmark 30-year deal to export Russian pipeline gas to China. In a physical sense, the Power of Siberia pipeline does not entail any reduction of existing Russian supplies to the EU. Sensible analysis also concludes that the deal is not as transformative in either the regional or global gas scene as media headlines may suggest (Jaffe et al. 2015). But the key question is how an Altai gas pipeline, if and when completed, could change the situation, making China and the EU compete for gas coming from the same Russian sources in Western Siberia.

The Middle East, North Africa, and the Arctic region, in addition to Russia, present challenges of energy supply reliability for both the EU and China. As such, both sides face a comparable macro-environment: opportunities and challenges in diversifying sources of supply and transit options and in limiting dependency on the dominant source of supply; a similar priority in implementing energy efficiency measures; comparable risks faced by their energy companies and their employees in unstable countries. Therefore, the energy security policies of both China and the EU aim at stable supply, together with risk reduction and mitigation.

In the context of an increasingly fluid and unpredictable set of global energy markets, the EU and China share a strategic interest in working together to promote an international energy order responsive to their changing needs, and a practical interest in exploring cooperation around issues of immediate concern. Despite the shared interest in energy issues, cooperation in this sector has remained underdeveloped.

This reflects the fact that the EU member states and China do not have a significant energy trade between them and are sometimes even seen as being in competition for key energy resources around the globe, as described in Chapter 6 of this volume, focusing on the activities of the EU and China in Africa.

As a relative newcomer to the global energy game, Beijing has been reluctant to rely on markets and to engage with the multilateral energy governance institutions, like the IEA, that were established before China's dramatic economic rise. The opportunities for China to build substantial dialogue with other energy consumer countries have thus been limited. This suggests that there could be a mutual interest in exploring bilateral and multilateral cooperation around the range of contemporary and emerging challenges facing energy consumer economies. In China, there has emerged greater interest in EU initiatives such as the Energy Charter Treaty (ECT), as a rule-based approach to governance of transnational energy issues (Wang 2015).

As noted above, the concepts of energy security in China and the EU are evolving. This can lead to several areas of potential convergence. These include how best to promote positive investment regimes in energy-producer countries (including investment protection), how best to manage issues of supply involving cross-border energy infrastructure (transit and dispute resolution), the role of domestic and international markets in achieving energy security, the broadening of the energy security idea to address issues of development (including energy poverty) in supplier countries, and strengthening industry-to-industry contacts. In light of the instability in energy markets caused by unrest in North Africa and the Middle East, an exchange of views on regional challenges to energy security for the EU and China could enhance confidence and build shared understandings – thereby contributing to market stability.

Beyond immediate practical challenges, there is also a common consumerist interest in fostering better governance of global energy markets, so as to ensure stability, predictability, and the availability of competitively priced energy supplies. The focus of dialogue here should be on establishing binding minimum common standards for the energy trade, to ensure fair competition, encourage investment, and promote the establishment of a level playing field for EU and Chinese energy companies and firms. Such discussions would involve exploring the opportunities for cooperation within existing institutional formats, as well as the need for reform of these institutions or the establishment of new bodies.

Enhanced cooperation between the EU and China offers the prospect of building relations that can strengthen mutual energy security in the

face of unprecedented volatility and unpredictability in global energy markets, and help to rebalance the relationship between consumers and producers. Agreement on a 'roadmap' for EU–China energy cooperation would offer a framework for exploring common issues in greater detail.

Finally, it is important to avoid misunderstandings and misperceptions. There is a case to be made for a dialogue that can fulfil the mutual need for confidence building in the field of energy security. In Europe, suspicions towards Chinese long-term strategic intentions shape perspectives regarding Chinese energy deals abroad. In China, suspicions concern the EU's normative approach of linking energy deals to the promotion of democracy and human rights, in Central Asia, Africa, and other parts of the world. In addition, there is the risk of heightened competition between the EU and China for access to third-country energy resources, with negative impacts on energy prices. If unaddressed, misunderstandings and misperceptions can spiral out, negatively impacting on other areas of the EU–China relationship.

### **Recommendations for framing an EU–China energy security dialogue**

From the outset, it must be borne in mind that framing EU–China dialogues under 'energy security' entails a higher level of concern and significance than with the previous focus on 'energy development'. Without first demonstrating and realizing mutual benefits from ongoing energy development projects, forums on Sino-EU energy security will have difficulty gaining traction. In promoting new dialogues on energy security, proponents must also consider the low level of mutual dependence on energy supplies between the EU and China, and the fact that they may compete for the same resources on the global energy market. To be sustainable, dialogues will need to relate to the creation of new business and job opportunities on the ground, in both societies.

With this background in mind – and taking into account this chapter's discussion of Chinese and EU energy security concepts, current EU–China undertakings on energy-related issues, and the rationale for EU–China cooperation on issues of energy security – we may formulate a set of proposals for how an EU–China energy security dialogue could be framed.

*Promote bilateral relations alongside multilateral relations:* In the EU, there has been the instinctive inclination to seek to persuade China to follow a normative/multilateral approach in its pursuit of energy security – like joining the IEA and the ECT. But the vision of an EU–China partnership promoting global governance of energy markets through multilateral

organizations is unlikely to deliver any concrete achievements in the short to medium term. Framing the EU–China energy security dialogue as a platform to shape China's strategic approach to multilateral energy organizations can risk derailing the whole process. Instead, the EU should focus on specific projects to be negotiated at the bilateral level and on examining key concepts of international cooperation in energy policy, especially regarding consumers. In general, the EU should avoid unilaterally decided dialogue topics, because they may lead to Chinese defensive positions on broad foreign/energy policy. Finally, the EU can learn from the Sino-Japanese experience of separating energy development dialogues from shifts in the mood of political diplomacy between the two sides (Zhenyu et al. 2011).

This is not to imply that multilateral arrangements like the ECT do not feature in Chinese debates at all. As a matter of fact, Chinese academics continue to debate the wisdom (or lack of such) in China's past decision not to join (Zhang 2012). As sovereign representation through membership in international organizations ranks rather low in Chinese foreign policymaking, greater efforts will need to be made to help shape domestic Chinese debates towards eventual formal participation in the ECT.

*Build on the 2005 EU–China dialogue on Energy and Transport Strategies and revisit the DG ENER/NDRC/NEA dialogue mechanism:* It is important for the EU to build on existing documents and policy initiatives and take stock of past successes in energy development between China and the EU (Martinot 2001). Under the 2005 EU–China dialogue on Energy and Transport Strategies MoU, an Energy Working Group was set up between DG ENER and the NDRC. An assessment of the successes and the failures of this dialogue mechanism should be conducted prior to any new dialogue proposition. In addition, the role of the DG ENER/NDRC/NEA channel should be revisited, with the aim of ensuring coordination with the other dialogue mechanisms. Bilateral consultations between DG ENER and NDRC/NEA should avoid functioning as an independent channel of communication, to avoid duplication or irrelevance.

*Favour concrete policy initiatives:* The EU and China should make the creation of actual pilot projects, not policy visions, the deliverable of each dialogue. Strategic plans, policy visions, and wishful thinking risk resulting in empty-shell agreements. In discussions conducted by the author in Beijing, Chinese experts emphasized speaking the more realistic language of common interests and starting with small, concrete initiatives as important for improving the chances that the relevant authorities will take an interest in conducting additional policy dialogue with the EU.

*Take transparency and the need for mutual reassurance seriously:* The EU and China should acknowledge their divergences in terms of energy policy approaches. While the EU tends to link energy deals to an ambitious agenda of value promotion, China prefers to integrate energy deals into comprehensive investment packages that can promote Chinese overall strategic interests in third countries. The two sides will need to overcome a certain lack of political trust regarding their respective energy ambitions and policies. Here they could emphasize two similarities in their strategic thinking: the need for international strategic stability to ensure energy supply, and the linkage between political stability, socioeconomic development, and major energy projects in third countries.

*Consider involving third parties in dialogues, and link energy security to socioeconomic development:* If an EU–China energy security dialogue is to develop into a regular forum and include discussion of specific regions, the EU should refrain from seeking bilateral understandings with China. Beijing will not jeopardize its policy interests and reputation in third countries or regions for the sake of the EU–China strategic partnership, and it will always favour bilateral channels with third countries to bilateral deals regarding third countries. However, trilateral dialogue linking energy policy and socioeconomic development would fit into the foreign policy approaches of both the EU and China.

*Continue engagement at the 1.5 track level:* There is deep Chinese scepticism regarding the need for an additional dialogue with the EU. Given the perception gap as to both energy cooperation and the need for dialogues, the EU should continue its efforts at the 1.5 track level and engage with Chinese experts, retired officials, and officials in their private capacities. It could directly commission European and Chinese think-tanks or academic institutions to conduct this effort.

## Conclusions

The ‘glass’ of energy collaboration between the EU – as a multilateral institution with member states and industries – and China is more than half full. Now that energy security has been designated as a topic for dialogue between the two, the challenge for the EU is to become an actor that can contribute positively to the realization of concrete projects on the ground. For both sides, deciding on dialogue topics and dialogue participants is arguably the key to making such an endeavour a success story. Failure to do so can easily and quickly lead to the dialogue fatigue that is already a standard feature in EU and Chinese media portrayals of

each other, negatively affecting the awareness of mutual vulnerabilities. A good general approach could be to begin by approaching the business sector with the question: in what ways can the government-to-government dialogue channel contribute to *your* desire for creating new business opportunities?

## Notes

- 1 For a complete list see [http://eeas.europa.eu/china/docs/eu\\_china\\_dialogues\\_en.pdf](http://eeas.europa.eu/china/docs/eu_china_dialogues_en.pdf)
- 2 The author wishes to thank Dr Mathieu Duchâtel, visiting scholar at the School of International Studies, 2011–2012, for his significant input in writing up an understanding of EU energy security concepts and policies.
- 3 The author was invited to lead the Chinese team of the PDSF project on energy security in 2012.

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# 6

## Energy and the Regional Players: The Odd Rivalry between the EU and China in Africa<sup>1</sup>

*Gian Paolo Calchi Novati and Marta Montanini*

### Introduction

The place of Africa in the international economy has been deeply affected by its colonial past. During the Cold War, the United States played a less prominent role in the continent than the former colonial powers, delegating to its allies the responsibility for guarding the access to African resources. Later on, George Bush included Africa in his New World Order project. The three most recent US Presidents, starting with Bill Clinton in 1998, have visited Africa in search of potential allies there. The semi-monopoly of the West in Africa became challenged around the turn of the millennium by the emergence of new players from the Global South, mainly from Asia and Latin America. The leading force in that new competition is clearly China, with its activities in Africa concentrated on the energy sector.

China's emergence in Africa is not a new phenomenon: China had never really left the continent. After the proclamation of the People's Republic of China in 1949, Africa – part of the larger area of the Afro-Asian world that Beijing chose as a preferential target for its external projection – was a key element in any strategy aimed at modifying relations between the socialist bloc and the capitalist system. In 1963, Zhou Enlai paid a visit to some African countries, discovering the symptoms of a 'revolution'. Perhaps the most important Chinese project in Africa in that period was the construction of the Tazara railroad between Zambia and Tanzania, aimed at exporting the minerals of the Copperbelt bypassing the 'white bastion' which surrounded the independent states of Southern Africa. These earlier politically motivated approaches to the newly independent African countries have given Beijing's actions a mythological aura.