

EU-China Cooperation in the Field of Energy, Environment and Climate Change

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Abstract

The evolution of the energy market and the intrinsic worldwide scope of environmental threats, such as climate change, are two elements that have pushed the world towards shared approaches to global governance via bilateral institutions and international regimes. This article, with the aid of an institutionalist approach, presents the current status of the EU-China relationship, which is characterised by high institutionalisation, and it underlines how their bilateral cooperation has progressively focused on energy and climate change-related issues. In particular, the article sheds some light on the linkages between energy, environment and climate change and how these have created the basis for the upgrade of the EU-China bilateral relationship to its current level. To do so, it underlines some of the tools, the main frameworks and some of the key outcomes of their bilateral cooperation in these fields.

Keywords

EU; China; Energy; Climate change

THE RELATIONS BETWEEN CHINA AND THE EUROPEAN UNION (EU) HAVE GONE THROUGH various phases. Snyder, for example, in his collection of official documents related to EU-China relations, defined three timeframes that could be seen as representing the evolution of their relationship over time. In particular, he identified a period of exploration and construction of their bilateral ties (1995-2003), another focused on the deepening and maturing of their partnership (2003-2006) and finally, a period where the main current challenge is managing their partnership and competition (2006-to-date).¹ Also, another possible analysis considers the areas covered by their bilateral cooperation, which are the result of domestic and international changes. The process of European integration, the period of reforms in China since Deng Xiaoping, and the evolution of international regimes have, in fact, constantly modified the underlying consideration behind the EU-China relationship. As it is shown in the coming pages, the latter started with trade and later moved to deal with a wide array of issues, before focusing on issues related to energy, environment and climate change. After reviewing this shift, the article overviews the overall institutional framework that characterises the EU-China relationship and focuses on the aspects that relate to the environment, energy and climate change.

¹ Collection of official documents. (Snyder, 2009) Pages 309-654

EU-China relations: from trade to climate change

Trade as the first milestone of the EU-China relationship

Since 1978, the structural changes occurred in China with the advent of Deng Xiaoping and its opening-up policy, triggered a swift evolution of the EU-China partnership towards trade, which clearly became the driving force of their relation. The first key bilateral accord signed by the two parties, soon after the establishment of their diplomatic relations, was in fact a trade agreement in 1978.² This was of key importance for two reasons: on the one hand it set the priority for their relationship in the early days, namely “to promote and intensify trade between them” as stated in Article 1. Trade was in fact of paramount importance at the time, as it was anticipated that it would help European countries to maintain their role in the global markets (and thus their domestic wealth) by benefiting from low cost labour, while allowing China to move towards its industrial modernisation thanks to the large investment and technology transfer from Western Europe.

On the other hand, this agreement set the precedent for the development of EU-China relations, as it created a new body to manage their relations on trade-related issues, the EEC–China Joint Committee, composed of both EEC (later EC and EU) and China representatives. This body, which is still in place today, has been at the heart of their bilateral relations. The EEC–China Joint Committee can be considered the first institution created by the two parties in order to manage a common interest which, according to Article 9, was “to monitor and examine the functioning and the implementation of the agreement” as well as “evaluate new opportunities and make recommendations”. This Trade Agreement was soon replaced by the Agreement on Trade and Economic Cooperation (TEC)³ which was signed in 1985, and is currently the main reference point for EU-China relations. The TEC was a wider agreement, which, as mentioned in Article 1, not only included trade, but also encouraged “the steady expansion of economic cooperation”. In particular, as mentioned in Article 10, their cooperation was to be boosted in the areas of: industry and mining; agriculture, including agro-industry; science and technology; energy; transport and communication; environmental protection; and cooperation in third countries. In the coming years, the TEC is expected to be replaced by a new, wider agreement, the Partnership and Cooperation Agreement (PCA). The PCA, which has been under negotiation since 2007, aims to update the overall framework of the EU-China bilateral relationship, which, in the meantime, has expanded to include 56 sectoral dialogues, as well as other high level meetings and summits that are discussed later.

The initial focus on trade was the result of the European Commission’s extensive competence on trade issues and of its understanding that Asia would soon become the hub of the world’s fastest growing economies. This belief, which was outlined in its Asia Strategy, led the EU to start prioritising the rise of its profile in the region.⁴ Soon China stood out as the most promising economy, and thus became the main target of EU policy efforts in the region, as demonstrated by the first China policy paper, which called for a “relationship with China that reflects China’s worldwide, as well as regional, economic and political influence”.⁵ From this perspective cooperating with Asia, and in particular with China, became a purpose in itself, and the aim of ‘Raising the EU’s profile in China’ became

² Trade Agreement between the European Economic Community and the People’s Republic of China OJ L123, 11.5.1978. Page 2.

³ Agreement on Trade and Economic Cooperation between the European Economic Community and the People’s Republic of China OJ L250 19.9.1985. Page 2.

⁴ (European Commission, 1994)

⁵ (European Commission, 1995)

a recurrent theme in EU policy papers.⁶ Since the 1980s, the EU, in order to achieve this, has been very much involved in providing Official Development Aid (ODA) to China, in order to boost the development of the Chinese market by building infrastructures and fostering rural development. With the reforms implemented since the late 1970s, and increasing foreign direct investment (FDI) to China from all over the world, China has become an economic powerhouse. In addition, the economies of the EU and China have become increasingly interdependent: today, China is the EU's second major trading partner, while the EU is China's main trading partner.⁷ This means, for instance, that 20.6 per cent of Chinese export went to the EU in 2007, while 12.7 per cent of imported products came from the EU. On the other hand 5.8 per cent of EU exports went to China and 16.7 per cent of products were imported from China.

A new dimension to EU-China bilateral relations

Since the entry into force of the Maastricht Treaty, the EU has started proposing for debate also a wide array of non-trade related issues, which today constitute a major share of the EU-China partnership. Since 1994, their bilateral relationship has encompassed areas such as human rights, environment, energy, development, technology and security-related issues, as proven by the flourishing of sectoral dialogues. Trade maintained a key importance, though it became at the same time the platform for their exchanges rather than the main object. This is true, particularly since China's accession to the World Trade Organisation (WTO) dramatically improved the climate for foreign investors in China. Of course key issues remained on the agenda, such as the protection of Intellectual Property Rights (IPRs), Market Economy Status and market access in certain sectors, though the discourse over the 'strategic-ness' of EU-China relations has progressively shifted to other areas, such as technology cooperation, energy, environment and climate change, which are also recognised by various European and Chinese officials working at the EU Delegation in Beijing and at the Chinese Delegation to the EU in Brussels.⁸

China, by the end of the 1990s, had begun to be seen by the EU as a rising power which, as noted in the 1998 Commission Communication⁹ "demonstrated [its] wish to be recognised as a world power" by engaging in "an unprecedented series of summits between China and some of its key world partners".¹⁰ Its accession to the WTO in 2001, which was strongly supported by the EU, was a key moment in their bilateral and multilateral relations, as it sealed China's rightful place in the international arena in light of its market size and population. However, the rise of China as an economic giant and, increasingly, as a political power, has further shifted the power balance between the EU and China eastwards, and it has also reshaped the kind of support provided by the EU, which between 2002 and 2006 moved away from ODA towards projects supporting China's social and economic reforms, environment and sustainable development, good governance and rule of law.¹¹

Since China's accession to the WTO, its relations with the EU have experienced highs and lows. When China's EU Policy Paper, the first of its kind drafted by China, was published in 2003, it described the relations between China and the EU as "[being] better than at any

⁶ (European Commission, 1998), (European Commission, 2001), (European Commission, 2003), (European Commission, 2005)

⁷ (European Commission, 2008b)

⁸ Personal discussions with European and Chinese officials. The authors of the comments do not wish to be acknowledged.

⁹ (European Commission, 1998)

¹⁰ (European Commission, 1998)

¹¹ (European Commission, 2002) Pages 4-5

time in history".¹² As also noted in a report drafted by the RAND Corporation, Europe was the most highly visited region for China's president and its prime minister from 2000 to 2005, whilst, in 2002 and 2004, the Chinese foreign minister spent more time visiting Europe than any other region.¹³ However, after the failure to lift the arms embargo in 2005, China-EU relations went through what a high rank EU official working at the delegation to China described as "a glacial period".¹⁴ External observers, including scholars and think tanks, talked extensively about how the two players, initially on their honeymoon, had finally scaled down their expectations to those of an unhappy marriage, stressing that "neither Brussels nor Beijing gets what [it] want[s] from each other".¹⁵ In this period of "failed expectations", the Commission itself took a harder line *vis-à-vis* China during the term of then Trade Commissioner Mandelson. He is reported to have commented to the European Commission President that "China should be considered as a normal country and we should use market defence mechanisms when China does not respect its [WTO related] pledges".¹⁶ It is arguably in those difficult days that the EU-China bilateral relationship was reassessed, and that it finally reached its maturity.

As it is dealt with in the next paragraphs, the efforts to find new areas of cooperation able to 'beef up' the EU-China partnership found some key elements in energy, environment, and the fight against climate change. As it is argued in the coming pages, this was facilitated by the bilateral institutional cooperative frameworks that were already in place, as well as the evolution of the climate change regime, which has highlighted the linkages among the effects of climate change and environmental degradation on economic growth, domestic welfare, international relations and diplomacy.

The structure of EU-China cooperation

Due to the relevance of institutions in the EU-China relationship, before turning specifically to energy, environment and climate change, it is worth noting the overall structure of their bilateral relationship. The frequent changes in their respective expectations, and in the object of their relationship, could have seriously hampered the development of their bilateral ties should a strongly institutionalised cooperative framework not be in place. For this reason, it is important to underline the role of the various institutions in running and maintaining their bilateral exchanges. In International Relations literature, some of the main advantages of institutions are considered to be their ability to reduce transaction costs and uncertainty and to increase the credibility of the actors involved.¹⁷ One of the clearest examples of how these advantages have taken shape in the EU-China relationship is the development of the sectoral dialogues. These have been adequately defined by Snyder as 'institutionalised, periodic and more or less well-structured meetings between European and Chinese authorities, involving staff at approximately the same levels in their respective administrative or political hierarchies'.¹⁸ It is particularly important for the objective of this article that these dialogues have tended to be less subject to the high and lows of the political climate, which, in the case of China, often depends on contingencies such as a visit of the Dalai Lama, statements by Heads of state or government, or by a European Parliament's declaration. As confirmed during a

¹² (People's Republic of China, 2003)

¹³ (Medeiros, 2009) Page 120

¹⁴ Private conversation with a high rank official working for the EU Delegation to China.

¹⁵ (Berkofsky, 2008)

¹⁶ (Centre for European Reform & Grant, 2008) Page 44

¹⁷ It is not possible to review here all the institutionalist literature dealing with these issues. Please refer to: (Jönsson & Tallberg, 2001) Page 5, (Kandori, Rob, University of Pennsylvania. Center for Analytic Research in, & the Social, 1992), Most of these issues are reviewed in (Keohane, 1988) Page 388., (Kahler, 2000) and (Simmons, 2000) Page 599

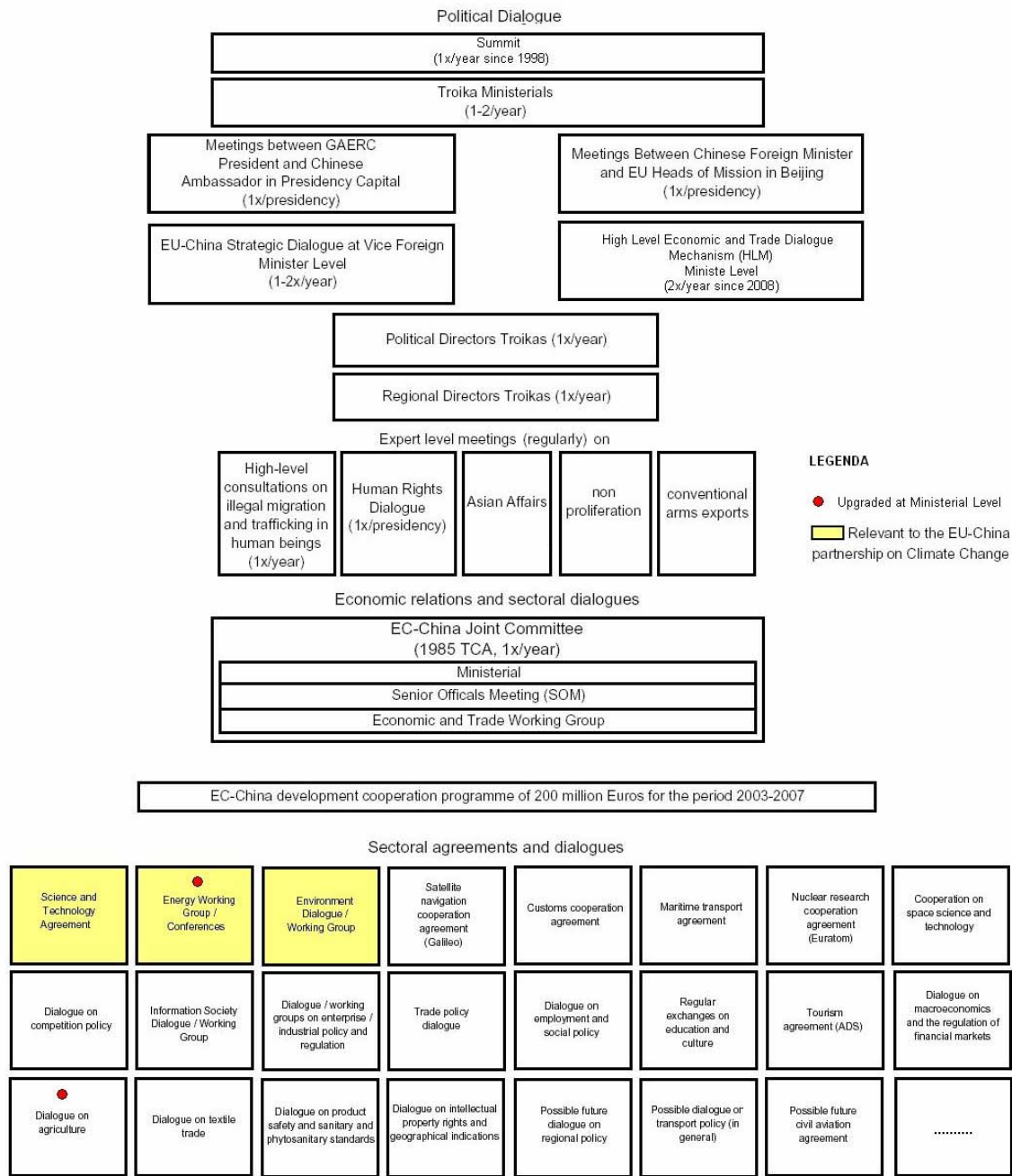
¹⁸ Collection of official documents: (Snyder, 2009) Page 710

private conversation with an EU official, these have rather affected only high level meetings such as the EU-China summit, as was the case in 2008 during the French EU Presidency, when a meeting by President Sarkozy with the Dalai Lama led to the postponement of the EU-China Summit.¹⁹

The institutionalisation that characterise the EU-China relationship has thus helped on the one hand to grant stability to the EU-China relationship, partially protecting it from 'political interferences', and on the other hand by keeping alive a constant exchange of views among the two sides. This has allowed to pragmatically find and develop new areas of cooperation and to shape new frameworks. This has been the case for the development of new sectoral dialogues, some of which have later been upgraded to ministerial level, and for the flourishing of bilateral partnerships on specific areas such as climate change. Figure 1 represents the current status of the EU-China institutional framework at the time of writing this article. At first sight, one can easily appreciate the complexity of their bilateral relations, which is composed by several hierarchical layers.

¹⁹ Private conversation with a European Commission official working for DG External Relations, who noticed that, while the highest political dialogues might also register a setback following the postponement of a Summit, the pragmatic cooperation developed through working groups or unrelated dialogues continued rather smoothly.

Figure 1: Architecture of EU-China relations



Updated/Elaborated version of: European Commission, DG Relex, http://ec.europa.eu/external_relations/china/docs/architecture.pdf

Not represented in this scheme, but still of major importance, is the China-Member States dimension, as well as the relations among civil societies. At the highest level of the EU-China relationship are the Summits, which have been held annually since 1998,²⁰ and the Troika Ministerial Meetings, which, until the entry into force of the Lisbon treaty, were attended by the Foreign Affairs Minister of the Member State holding the Presidency of the European Council, the High Representative for the Common Foreign and Security Policy, and the Commissioner in charge of external relations and the neighbourhood policy. Following the ratification of the Lisbon treaty, the High Representative for the Union foreign and security policy should participate in these meetings instead of the Commissioner and the former High Representative, and should be accompanied by the President of the European Commission and eventually the President of the European Council.²¹

Below the Summits and the 'former Troikas', there are the meetings between the President of the General Affairs and External Relations Council (GAERC) and Chinese Ambassadors, between the Chinese Foreign Minister and EU Heads of Mission in Beijing, and the EU-China Strategic Dialogue at Vice-Foreign Minister Level. Since 2008, the EU has also set up a High Level Economic and Trade Dialogue Mechanism (HLM), which in its first session comprised of eight Commissioners and eleven Ministers. Before the entry into force of the Lisbon Treaty, other EU-China meetings included the Political Directors Troikas and Regional Directors Troikas, which were composed of Directors from the Commission, Council and the country holding the Presidency. As confirmed by an official working for DG Relex during a personal conversation, the Troikas have now ceased to exist and in the future political and regional directors' level meetings will be held by the relevant European External Action Service director(s).²² These high level political gatherings are accompanied by technical meetings, such as the previously mentioned Joint Committee under the TEC Agreement, the 'High-level consultations on illegal migration and trafficking in human beings', the 'Human Rights Dialogue', as well as the meetings on 'Asian Affairs', on 'Non-proliferation' and on 'Conventional Arms Exports'.

Apart from these middle-high frameworks, an increasing share of EU-China relations is actually carried out through the previously mentioned sectoral dialogues. According to a source in DG External Relations, these, which until recently were thought to be 24, were the object of a 'census' in 2009, which resulted in at least 56 sectoral dialogues. This exponential growth is certainly of great interest. One of the main reasons for this surge is the fact that each Directorate General has institutionalised its own exchanges with its respective party in China, thus contributing to the emergence of new dialogues at various levels.²³

Overall, the EU and China hold dialogues at presidential and ministerial level, consisting of the European Commission President and the Chinese Prime Minister respectively, or the European Commissioner and a Chinese minister. Nonetheless, an increasing number of dialogues are held at deputy ministerial/Directorate General level, at director level and even at unit level. According to a source in DG Energy, their frequency may vary: sectoral dialogues at high level meet generally once a year, working groups at director or unit level can meet three or four times a year, and have additional cooperation exchanges of email and correspondence.²⁴ This clearly allows a much deeper cooperation and exchange of

²⁰ (European Commission, 2006) Page 2

²¹ Following a conversation with a European Commission official working for DG External Relations, the rotating presidency should not affect the CFSP.

²² At the time of writing this article, these officials had not been appointed yet, as added by the EU official working for DG External Relations during a private exchange.

²³ Private conversation with a European Commission official working for DG External Relations.

²⁴ This information was provided during a personal conversation with a European Commission official working for DG Energy.

information, which is of key importance to increase mutual understanding and to develop actual cooperation on specific issues. At the same time, more frequent meetings are also expected to have greater effects with regard to influencing one another's behaviour and policy orientations. The hierarchical separation among the various meetings is not rigid, and it reflects the changing importance of the issues tackled. In fact, some dialogues and meetings have gained ministerial level during their lifespan, such as the dialogue on 'Agriculture' and the working group on 'Energy'; the latter together with the 'Science and Technology Agreement' and the 'Environmental Dialogue/Working Group' constitute the backbone of the Joint EU-China Partnership on Climate Change, which is discussed below.

Finally, as highlighted by a European Commission official during a private conversation, since 2006 the European Commission has enjoyed the privilege of having a direct exchange with the State Council's legislative office.²⁵ In the Chinese bureaucratic system, the State Council is the leading governing body and is chaired by the Prime Minister. The State Council has often looked towards the European Commission to gather support in the drafting of pieces of legislation; it has often provided comments and inputs in several areas, such as environment-related standards and energy legislation. This direct link between the European Commission and the State Council is of major importance, as it allows the EU to lobby directly China to work towards common shared objectives, while increasing their mutual understanding.

Apart from the institutional formations mentioned above, other actors are also of key importance in framing the EU-China relationship. However, it is not possible to review them here in full. Certainly the reader should be aware of the fact that EU Member States, the European Parliament, the European Central Bank and the Committee of Regions and the Economic and Social Committee hold regular exchanges with their Chinese counterparts. Other organisations that have a key role in the EU-China relations are the EU delegation to China and the European Union Chamber of Commerce in China, which have a direct link with the Chinese authorities, and are often consulted with regard to prospective legislations.²⁶ In addition, as noted during a private conversation with an EU official, the EU delegation has a major task of providing a framework to coordinate EU Member States' position *vis-à-vis* China through regular 'coordination meetings' such as those gathering commercial and environmental counsellors.²⁷

All these exchanges find their origins in various official documents, which, since the early 1980s, have been produced by the European Commission, and later on by China. Despite the fact that these were rarely legally binding²⁸, they have often "established the parameters for legally binding or 'soft law' bilateral agreements, summits and dialogues, and cooperation programmes".²⁹ Specifically analysing all these documents individually would require an entire volume. However, it could be noted here that from the EU side the most relevant are the Communications 'Building a Comprehensive Partnership with China' (1998) and the relative documents assessing its implementation in 2000 and 2001, the Communication 'A Maturing Partnership – Shared Interests and Challenges in EU-China Relations' (2003) and that entitled 'EU-China: Closer Partners, Growing Responsibilities' (2006). Equally important are the 'Country Strategy Paper: China 2002-2006' and the relative National Indicative Programmes for the periods 2002-2004 and 2005-2006, and the 'China Strategy Paper 2007-2013' with the relative Multiannual Indicative Programme (MIP) for 2007-2010.

²⁵ This information was provided during a personal conversation with a European Commission official working for DG Energy.

²⁶ (European Union Chamber of Commerce in China, 2009) Page 9

²⁷ Interview with a high rank EU official working at the EU Delegation in Beijing, Science, Technology, Energy & Environment Section.

²⁸ Collection of official documents: (Snyder, 2009) Page 309

²⁹ (Snyder, 2009) Page 310

The Chinese authorities have certainly been less prolific. The single most important document is the 'China's EU Policy Paper' (2003), which is accompanied by some important statements by the Chinese Prime Minister in various official occasions. These include for instance the joint statements, which are the result of the various summits held since 1998, as well as the Memorandum of Understandings³⁰ that are often signed on those occasions.

Linkages among the energy, environmental and climate change regimes from an institutionalist perspective

As noted earlier, the EU-China relationship has continued to evolve over time, and while it started as a mainly trade-oriented relationship, it has become an all-encompassing partnership as demonstrated by the variety of sectoral dialogues and high level meetings. Also, as noted by various European and Chinese officials, their bilateral relationship has largely benefited from a sound institutional framework, which has allowed it to prosper even in difficult times, as it was the case following the postponement of the 2008 EU-China Summit.

Since 2005, as confirmed by an EU official working for the EU delegation to China, issues related to environment and climate change have been at the very heart of their bilateral relationship, and consistently in the agenda of their bilateral summits.³¹ The following pages focus further on these issues, as these have arguably become the new strategic core of the EU-China relationship.

In the past 40 years, some new themes have arisen in the security debate and have since been recurrent in international relations. The oil crises of 1973 and 1979 uncovered the problem of energy security³², while the environmental degradation due to the world's rapid economic growth has spurred concerns on environmental security, following the negative effects registered on both human health and natural diversity. To tackle those threats, two sets of institutions and organisations have been set up, contributing to the rise of two new regimes. These are the energy regime, attempting to reduce the condition of energy insecurity, which represents a very serious and direct threat to the welfare of importing countries; and the environmental regime, which has focused on areas such as the banning of substances endangering the environment (*e.g.* the Montreal protocol) or the protection of wildlife.

These two regimes present different levels of legalisation and have developed along two separate paths. Before the advent of the science of climate change, one of the main common points between these two threats was the fact that they both have a negative effect on economic growth. On the one hand, energy insecurity represents a cost in terms of the higher price paid for the same amount of supply, due to the limited availability of resources and to the need to set up (and maintain) security stocks to cover eventual supply disruptions. On the other hand, environmental degradation endangers human health, which represents a cost in terms of cures, hospitalisation and reduction of active workforce. Of course, there is also an effect on the environment itself due to pollution, which could be translated in terms of opportunity-cost: the lack of revenues coming for

³⁰ A collection of MoU is proposed by Snyder, who qualified them as follows: "Viewed from a general legal standpoint, a MOU may be legally binding on the parties; it may not be legally binding but nevertheless create legal effects; or it may be a political agreement with no legal effects. The intention of the parties is a (if not the) determining element. In EU-China relations, most, if not all, MOUs fall into the second category". (Snyder, 2009) Page 768

³¹ Interview with a high rank EU official working at the EU Delegation in Beijing, Science, Technology, Energy & Environment Section.

³² (Keohane, 1982)

other activities that could have been carried out otherwise, such as agriculture, tourism, and the potential loss in natural diversity.³³

Increased concerns related to climate change have dramatically changed the picture: climate change has in fact strongly accentuated the linkages between energy security and environmental security. Energy use is in fact one of the major sources of CO² emissions, which are one of the most detrimental substances inducing climate change. At the same time, the climate change regime has pushed developed countries to reduce their CO² emissions, as it has fostered technology transfer and contributed to focus on the use of renewable resources, which contribute less in terms of emissions. This increased awareness has had several consequences: a rally for new rules and regulations, both locally, regionally and globally; a push towards energy efficiency and renewable energies; and pressures on developed countries to support developing nations to deploy clean technologies under the principle of 'common but differentiated responsibility'. Major emerging economies are in fact still largely reliant on coal, which is considered the most polluting fuel, due to its high CO² content. To break that deadlock, the climate change regime laid the foundations for the development of clean technologies, able to reduce greenhouse gas emissions by increasing the cost of polluting and by reducing that of clean investments. This was possible thanks to the implementation, for instance, of the Kyoto protocol, which fostered investments in clean technologies and technology transfer. From a 'rational choice institutionalist' perspective, the Kyoto protocol, as a major component of the climate change regime, had clearly the purpose of modifying previously established behaviours at the national and international levels, by changing the trade-offs between different economic activities, and by easing international cooperation.

The climate change regime has thus influenced, if not shaped, the current energy mix of developed and developing countries, by touching horizontally upon both the energy and environmental sectors. Some examples are the introduction of emission standards, efficiency targets and other commitment to reduce emissions, either in absolute terms or as a proportion of GDP. In addition, these measures have often been the object of high legalisation if we consider that they have been incorporated in national legislations, as it is the case for the EU and China.

The raise in the profile of the climate change regime has also strengthened the legitimacy of the environmental regime itself, even though it should be noted that the two are not synonymous. It could, in fact, be argued that the climate change regime deals with those issues that can be considered causes and consequences of climate change. As such, these tend to include not only environmental, but also other issues, such as development, economic growth, international security and, in certain cases, even social and political stability (*e.g.* for China). The UN report on Climate Change presented by the Secretary General to the General Assembly in 2009 has, in particular, underlined the link between climate change and security, arguing that climate change acts as a 'threat multiplier'. In particular, it argues that it increases the vulnerability of states and people in terms of health and food availability, reduces the pace of development, negatively affects migration and hardens the competition for resources, such as water or fuels, which might lead to increased international conflicts.³⁴

The climate change regime, in the process of its shaping and deployment, has not only created linkages with the energy, environment and security regimes, but it has also affected the traditional trade regime, by introducing incentives and structures able to

³³ According to the Stern Report, the cost of global warming will rise to 5500 bn € between now and 2050. (Stern, 2007)

³⁴ (UN Economic and Social Development, 2009) The wording is strongly inspired by previous European communication on this topic, as also pointed out by a European official.

shape international actors' behaviours in a more environmentally conscious direction. This has been possible thanks to the adoption of trade-based mechanisms, such as the Clean Development Mechanism (CDM), the joint implementation of project in thirds countries, and emission trading at local or regional level. In addition, new measures, such as carbon taxes or other Border Carbon Adjustments (BCAs), are under consideration.

Therefore, it is clear that a strong link between the energy, environment and climate change regimes has been unveiled. It touches upon a wide array of issues: from economic growth and poverty eradication to political stability, from energy consumption and pollution to energy efficiency, and from renewable technologies to climate change. While we are far from having a unique regime dealing with all those issues, it is important to recognise their links, which constitute a system of interdependences at various levels, and which affect how international actors relate to one another and how they shape their own image.

The role of the energy, environment and climate change regimes in China-EU relations

The previous pages have underlined the institutional structure of the EU-China relationship and the increasing linkages among the international regimes dealing with energy, environment and climate change. The latter have had an important effect in shaping the EU-China bilateral relationship. This is true for several reasons, particularly because those regimes have somehow uncovered some costs, which were previously hidden, and, in so doing, modified some underlying considerations *vis-à-vis* the relevance of EU-China cooperation.

Climate change is becoming a prominent issue on the world stage: desertification, the increase in the sea levels and drought are only a few of the expected consequences. Should the current calculations prove to be correct, the economic and social impact of climate change would be economically serious and even destabilising for countries such as China whose legitimacy is linked to a high level of economic growth³⁵, necessary to absorb the increasing supply of urban workforce. Some sources talk of a cost for China equal to 3% of its GDP, while for the EU those costs might jump to €65 billion by 2080.³⁶ However, thanks to the above mentioned regimes and the institutional framework that has been set up at the bilateral level, the fight against climate change could transform the protection of the environment and energy security from being a challenge to an opportunity, at least for China-EU bilateral relations.

Chinese environmental degradation could be traced back to the time of the 'great leap forward', and more recently, to the effects of its export-led economy that has determined an 'import' of pollution from the rest of the world in the form of industries that have delocalised to China to produce at lower costs goods deemed to be exported.³⁷ To worsen the situation, the country is heavily reliant on coal, and the situation is not expected to change in the foreseeable future. This is despite the fact that China has made substantial progresses in its legislation, for instance, by drafting a Renewable Energy Law, dramatically increasing the efficiency of its coal power plants and committing unilaterally to energy intensity targets in line with its five years planning (*i.e.* a cut of 40-45% of energy use per unit of GDP by 2020).

³⁵ This issue is also supported by a variety of scholars. For example: (Holzer & Zhang, 2008)

³⁶ See: (Ash, 2007), (Euronews, 2009c) For an account of the costs related to Climate Change and non-sustainable development see: (Centre for European Reform & Grant, 2008) Page 72, (Moore, 2010), (Emerging Market Group & Development Solutions, 2008) Pages 37, 82

³⁷ About 50% of Chinese economy is due to exports. (Wenmu, 2006)

Nonetheless, Chinese pollution, due to its amount and linkages with Western economies, has become a global problem.³⁸ China is in fact aware that no viable solution can materialise without its backing, which has given the country a key position in the international negotiations. This point was already highlighted in the 2001 European Commission's Communication: "[a] country of the size of China is both part of the problem and the solution to all major problems of international and regional co-operation".³⁹

Despite the fact that its involvement has become more vocal in recent years, Chinese relevance in international negotiations on environmental issues is not new. Even in the 1990s, China laid the foundation of what has become the official position of developing nations *vis-à-vis* the climate negotiations, framing its discourse around three key issues: the 'West's historical responsibility', the right to develop⁴⁰ and China's status of developing country.⁴¹ These have later been reformulated in the principle of 'common but differentiated responsibility'⁴², which was included in the UN climate change regime and, since then, has significantly influenced any further international negotiation as a core principle of the two-track climate negotiations.⁴³ Moreover, it has determined a shift towards a system that gives China, as a developing country, the right to ask for preferential agreements over technology transfer, while avoiding any effective multilateral commitment⁴⁴ in terms of emission reduction and, potentially, to even justify calls for a waiver of IPRs protection, which otherwise would need to be protected (or paid for).⁴⁵ It is fair to assume that China is aware of the fact that those technologies, together with its mass production capabilities, will allow it to keep a steady growth in the coming years, while the amount of current investment in this field might even allow it to 'leapfrog' developed nations. In addition, these technologies would allow it to reduce the negative impact of its growth on the local environment, which is increasingly causing protests among the Chinese population.⁴⁶

Following this reasoning, and observing its behaviour in the international fora, it could be argued that China is trying to 'maximise the benefits' of the current system, which it has actively contributed to set up. This can be observed at various levels, in terms of improving

³⁸ As Peter Mandelson said at Tsinghua University on 7 November 2006, "[in] a nutshell – and this is the core of my remarks – you could identify any global problem we face and you will find that China is an essential part of the solution, with a role in framing the international agenda and assuming new leadership responsibilities as it does." In (Crossick, 2009)

³⁹ (European Commission, 2001), Page 7

⁴⁰ Literally in September 1995 the developing nations gathered in Beijing and agreed that: "The Beijing Declaration asserts that poverty, underdevelopment and overpopulation are the main causes of environmental degradation; the developed countries have the main responsibility for the environmental problems facing the world; the developing countries have the right to develop". (Heggelund, Andresen, & Ying, 2005)

⁴¹ The issue of historical responsibility was also high on the agenda in the preparation of the Cop15. For example see: (Jun, 2009)

⁴² The 'common but differentiated responsibility' principle is one of the outcomes of the Rio convention, also known as the Earth Summit, held in Rio de Janeiro in 1992. For more information on this point (Kérébel & Keppler, 2009) Page 176

⁴³ According to China, "[the] UN Framework Convention on Climate Change and the Kyoto Protocol should serve as the main channel for the international community to address climate change (...) The principle of the Common But Differentiated Responsibilities (CBDR) is the universally recognized basic norm for tackling the issue, (...) The Bali roadmap clearly identifies the requirement and direction for international cooperation on climate change." (Li, 2009)

⁴⁴ In the words of Premier Wen Jiabao: "Developing countries should, with the financial and technological support of developed countries, do what they can to mitigate greenhouse gas emissions and adapt to climate change in light of their national conditions". (Jiabao, 2009)

⁴⁵ China and India before the Copenhagen negotiation have argued that green technologies should be given to developing countries under 'compulsory licensing' as it currently happens only in certain cases for some medicines. (Euractiv.com, 2009a)

⁴⁶ (De Matteis, 2010)

its image by showing its willingness to cooperate as a 'responsible stakeholder'⁴⁷ and attracting investments and technology necessary for its future development, and with respect to its diplomatic profile, as it has had the opportunity to lead developing nations during key negotiations through the G77 plus China group.

China's developing status was challenged during the Copenhagen Summit in December 2009 by some of the poorest developing countries and by the EU. Pressures are set to further increase in Cancun on the occasion of the 16th Conference of the Parties (COP16). Instead, the EU, due to its status of developed economy, is invited to bear the 'historical responsibility' of the current climate emergency by sharing its technology and capital in order to help developing countries to fight climate change. Certainly the EU will keep trying to play a leading role in the climate negotiations as it did in the past, for instance, on the occasion of the ratification of the Kyoto protocol. Despite the fact that Europe was partially sidelined in the last meeting in Copenhagen, the role of the EU as a leader in the fight against climate change is not under discussion. For instance, Yvo de Boer, the then executive secretary of the United Nations Framework Conference on Climate Change (UNFCCC), stressed that European leaders made "significant contributions" to getting the final accord signed and is convinced that the EU has not lost leadership on climate change diplomacy, despite being sidelined on the final stretch of the Copenhagen negotiations⁴⁸. Also Jonathan Pershing, the US deputy special envoy for climate change noted that he "fundamentally disagree that the EU was either out or that we can afford to have the EU out", adding that, "it was the US sitting with the EU (...) that brought a successful outcome to this agreement".⁴⁹ This view is also reported to be shared by some Chinese scholars, such as Xin Benjian and He Jingjun, who noted that the EU played a pivotal role in setting targets for reducing greenhouse gas emissions.⁵⁰ It is, however, certain that European success will increasingly be assessed according to its ability to 'take on' board major emitters, and China in particular. In other words it could be argued that thanks to the energy and environmental regimes, and through their bilateral cooperation, both China and the EU can obtain significant international gains. China could kill three birds with one stone: it could improve its domestic economic conditions which will allow it to keep the necessary consensus among its people; it could ameliorate its international image and it could increase its energy security, which is considered a major challenge to Chinese economic growth.⁵¹

However, in order to carry out such a strategy, China needs a partner in the international community that has the technology, the financial capabilities and the interest in sharing those with an emerging power. Currently, there are only a few options: the US, Japan and the EU. While the first two countries have been reticent in transferring their technology to China, in view of their different geo-strategic perspectives, the EU has acted differently in proving to be a more appropriate partner, especially on technology cooperation.⁵² Furthermore, in contrast to the US, the EU is also keener to engage with China as a way of

⁴⁷ On this point, the US deputy secretary of State R. Zoellick said: "China to become a 'responsible stakeholder' in the international system" (Meidan, 2006) Page 76. Also the same issue has been raised in other papers such as: "China's wish to be viewed as responsible." and "What becomes more salient is China's concern for its international image and a desire to be regarded as a cooperative and responsible great power." And "China had to join such and such a treaty or process (...) because it would help improve China's image" (Foot, 2001)

⁴⁸(Euractiv.com, 2010b)

⁴⁹ (Euractiv.com, 2010f)

⁵⁰ See Xin Benjian and He Jingjun in (Benjian et al., 2010) Page 3

⁵¹As mentioned by Li Junru, Vice president of the Central Party School: "Energy is a factor that could affect China's peaceful rise and international pre-eminence, more efficiency and cooperation less pollution". Page 6, or "Energy is a factor that could affect China's peaceful rise and international pre-eminence" Page 8. Also "According to Zhang Guobao, Vice President of NDRC (National Development and Reform Committee), China's energy policy for the 21st century must emphasise energy conservation, through the increase of energy efficiency, in order to improve energy security and protect the environment."

⁵² The EU is the main source of high technology for China says Feng Zhongping in (Grevi, 2008)

raising its own international standing. To climb the 'ladder of global powers' requires the EU to act as one of them by engaging with other global powers on an equal footing. The EU, due to its current structure, has often found it difficult to present a coherent and strong position at the international level on issues which were not directly related to trade, but things might improve following the entry into force of the Lisbon treaty.⁵³ At the same time, European energy dependency and its need to increase its energy security have already pushed the EU to be more assertive on those issues, focusing on international cooperation, as well as on energy efficiency, renewable sources and better regulation. Also, with the development of the energy and environmental regimes at the international level, the measures experimented by the EU, including the widest Emission Trading Scheme, gave it an increasing say and credibility in international fora. These elements, together with the fact that the EU has been quite successful in speaking with one voice on those issues⁵⁴, and that the US did not join the Kyoto protocol, gave the EU a temporary, but remarkable, competitive advantage.⁵⁵

All in all, it could be argued that the EU has found in the environment, energy and climate change three areas in which it can play a leading role and it is currently investing in them in order to try to become an effective global power. The necessary condition to succeed, however, is to take China on board, because, as previously noted, no effective regime can be implemented without China's active membership. Both the global and domestic relevance of climate, energy and environmental challenges have thus given the EU and China the opportunity to deal with something that can be rightly defined as 'strategic'. Both the EU and China face similar challenges with regard to energy and the environment: they both wish to increase their energy security (and efficiency), they share some common energy suppliers in the Middle East and Russia⁵⁶, they are both interested in Central Asian resources⁵⁷ and they both aim to tackle environmental degradation (and the related costs). From this point of view, China and the EU have a broad potential for cooperation, leading them to work on energy efficiency, policy coordination and alternative energy sources in order to curb their respective demand, and reduce their emissions, as also required by the current regimes.

The framework for EU-China bilateral cooperation on energy and climate change

At the beginning of this century, China found itself at a crossroad: on the one hand it had the opportunity to continue towards its export lead development, whose environmental, social and economic costs would increasingly undermine the legitimacy of its ruling class. On the other, it had the opportunity to switch to a more considerate economic development that was less based on exports and polluting energy resources. The policies that have been implemented in recent years, as well as the amount of funding provided to

⁵³ The new positions of permanent President of the European Council and High Representative of the Union Foreign Affairs and Security Policy might increase the EU capabilities to act at the international level, which is something that even some Chinese analysts hope to see. (Jian & 卢鉴, 2009)

⁵⁴ As it has been the case in the management of the latest Russian-Ukrainian gas crisis or in the negotiations and ratification process of the Kyoto protocol.

⁵⁵ On this point see for instance: (Schreurs & Tiberghien, 2007) Also, According to some scholars: "European leadership only became viable once the US was removed from the emissions trading debate, and it could escape the trap that its past rhetoric had created". (Cass, 2005)

⁵⁶ Currently, the majority of Russian pipelines are directed to Europe so there is no threat in the short/medium term of a substitution of the European market with the Chinese/Asian one, even if Russia is trying to reduce its dependence from the European market while trying to increase European dependence from its own resources. It is in this light that the new Russian projects could be looked at: the new South Stream pipeline rivalling the EU sponsored Nabucco, as well as the new Russian Eastern-Siberia-Pacific Ocean oil pipeline going to Daqing, China.

⁵⁷ For example, Kazakh oil is flowing to China via the Kazakhstan-China oil pipeline, while the EU has turned to Central Asia in order to fill its foreseen Nabucco pipeline (Euronews, 2009b)

green technologies in the 2009 stimulus package,⁵⁸ show a gradual shift towards an actual attempt to boost a more harmonious growth.⁵⁹ However, it can be argued that the motives behind Chinese engagement in the international regimes (as well as bilateral cooperation), are partially different from those of the international community. Some have argued that China had to join the above mentioned international regimes, and contribute to their definition, as it anticipated that these could hamper its autonomy with regard to the definition of its economic policy, which still finds in economic development the key priority.⁶⁰ This understanding is substantiated by the fact that China, even when it puts forward some ambitious targets towards the reduction of its own emissions, as it did on the occasion of the Copenhagen summit, has never linked them to international commitments. Rather, it has always underlined how these were unilateral pledges⁶¹ to limit any international monitoring and verification by the international community. Secondly, it can be argued that the Chinese leadership is less concerned by the global effects of climate change or environmental degradation than it is of its local ones, which directly affect agriculture and the health of its population and, consequently, its economic performance (these include desertification as well as the pollution of lands, waters and air).⁶²

These issues make environmental management, energy efficiency and more broadly climate change, a strategic priority, especially in certain Chinese provinces. The energy, environment and climate change regimes are thus key tools to develop bilateral and multilateral partnerships with developed countries such as the EU, which have expertise and financial capacity to help China to tackle its own domestic challenges. As already noted, the EU is the leading investor in China by project size and value, the main provider of technology and the main trading partner. In addition, its industry is one of the most competitive in the fields of energy efficiency and renewables, and it enjoys a comparative advantage *vis-à-vis* its main partners in these fields. As noted by a Chinese official working at the Chinese delegation to the EU, compared to Japan, the EU has a much bigger market size and financial capabilities, while compared to the US the EU has stronger autonomy to deal with climate change-related issues, without being a hostage to the Congress.⁶³ Furthermore, the EU is implementing the Kyoto protocol and it has been a key player in the quest for its entry into force, a fact that has also increased the EU's credibility in comparison with the US. An additional element, which allows for smoother cooperation and that was pointed out in the China's EU policy paper, is that the European and Chinese leaderships agree that they do not have any bilateral security concern, which is not the case in US-China relations.⁶⁴

All these factors, together with the density of the institutionalisation of the EU-China relationship, have given the EU a direct or indirect capability to support (and influence) the Chinese policy-making process. In the coming paragraphs, the article focuses in particular on the bilateral frameworks that have been set up in order to deal with energy, environment and climate change-related issues.

⁵⁸ (Freeman & Holslag, 2009) And (Economic Observer - 经济观察网, 2009)

⁵⁹ Some of the major concepts in the Chinese discourse are described in (Rabinovitch, 2008)

⁶⁰ (Euronews, 2009a)

⁶¹ (An, 2009)

⁶² In particular it seems that China focuses more on energy rather than the environment, and more on pollution rather than biodiversity. (Heggelund et al., 2005) Page 18

⁶³ This point was also highlighted by a Chinese official working at the Chinese delegation to the EU.

⁶⁴ (People's Republic of China, 2003)

Energy, environment and climate change as strategic issues

The strategic role covered by energy and climate change in the EU-China relationship has been described in several recent studies⁶⁵, but it has also been underlined by EU and Chinese officials. For instance, the former Commissioner for External Relations is reported to have said that “[fight] against climate change, (...) is an issue that will sour or cement relations between the EU and China”.⁶⁶ The Chinese Vice-Premier, in a visit to Europe, instead underlined how “cooperation on energy conservation and environment protection should be further strengthened to make it one of the shining points of the trade and economic ties between China and Europe”.⁶⁷

The ‘strategic-ness’ of their cooperation on sustainable development was also explicitly mentioned on the occasion of the 9th EU-China Summit 2006 in Helsinki⁶⁸ and at the External Relations Council in 2006, where it was noted that:

Energy security, climate change and protection of environment are top priorities for the EU in achieving sustainable development and are key elements in its relations with China. Collaboration on energy security should be intensified, with a view to creating a stable, secure, efficient and clean energy environment and to promoting open and competitive energy markets. The EU attaches the highest importance to its climate change partnership with China, which should develop its full potential based on the work plan agreed on 19 October 2006. (...) China and the EU should also collaborate as closely as possible on multilateral climate change issues, in particular on the further development of the multilateral climate change regime.⁶⁹

Also, Commission President Barroso and European Council President Van Rompuy believe that these issues are of key importance in the 21st century⁷⁰ and, as such, were placed at the heart of the EU’s revamped 2020 strategy.⁷¹ Others have noted that climate change is of key importance⁷², because, as it is the case for other ‘new security issues’, it has the opportunity to create “win-win situations through international cooperation”.⁷³

As noted by various scholars, there are several drivers behind Europe’s interest in the energy partnership with China: economic interests that could be hampered by soaring Chinese energy demand, the EU’s comparative advantage in the field and the opportunity to use it to gain diplomatic leverage, the development of a potentially profitable export market of environmental goods, and the necessity to avoid confrontation on energy supply by pushing China to diversify its energy demand and to improve its energy efficiency.⁷⁴ On the other hand, as already anticipated, China has several reasons to engage with the EU, which include its experience in these areas and its necessity to implement “more sustainable growth strategies”.⁷⁵

⁶⁵ For instance see: (Scott, 2009) Page 215, Feng Zhongping position in (Grevi, 2008) Page 83. and (Centre for European Reform & Grant, 2008) Page 69 et al., and (Men, 2009)

⁶⁶ (Friends of Europe, 2009)

⁶⁷ (Xinhua, 2010)

⁶⁸ (Andreosso-O’Callaghan, 2007)

⁶⁹ (Council, 2006)

⁷⁰ For instance, the main challenges are meant to be climate change, cyber crime, nuclear proliferation and terrorism. (Euractiv.com, 2010d)

⁷¹ The main objectives are set to be employment, R&D, energy and climate action, education and poverty and the fight against social exclusion. (Euractiv.com, 2010c)

⁷² Page 216 (Scott, 2009)

⁷³ (Holzer & Zhang, 2008) Page 219. A similar position was explained by Xinning Song, a famous Chinese scholar, during a private conversation held in Beijing in 2008.

⁷⁴ (Freeman & Holslag, 2009) Page 27. Other elements considered important are the level of economic integration, the potential gains in terms of economics and image; for these see: (Holzer & Zhang, 2008)

⁷⁵ (Gill, Murphy, & Ill, 2008)

These are important elements that have boosted the EU-China relationship to focus on these fields. They also justify why, following the postponement of the EU-China Summit in 2008, at the time to resume it in Prague in 2009, energy and climate change cooperation where the only issues that made substantial progress. In the Joint Press Communiqué of the 11th EU-China Summit, the leaders “expressed their determination to strengthen cooperation, (...) to address global challenges including the financial crisis and climate change”.⁷⁶ On that occasion, in particular, the parties took the time to sign the final agreement on the establishment of the Europe-China Clean Energy Centre (EC2) in Beijing, which opened at the end of April 2010, following the visit of President Barroso to Beijing and its meeting with Zhang Guobao, the Vice Chairman of the NDRC (National Development and Reform Commission). The EC2 is of particular importance due to its institutional structure. As noted by an EU official, differently from the various dialogues that happen regularly, the EC2 is a permanent body, which is administered independently by a consortium of European and Chinese experts in the field of energy, environment and climate change.⁷⁷ As such, it constitutes a stable and independent platform for exchange on energy and environmental issues, which is expected not to be subject to eventual occasional political tensions that might arise between China and the EU.

Energy cooperation: institutional framework.

From the energy perspective, EU-China cooperation began in 1994 when a dialogue was set up involving the European Commission (DG Energy and Transport) and the Chinese Ministry of Science and Technology (MOST). The first outcome was the establishment of a biannual Energy Cooperation Conference with the aim of gathering all interested parties in energy-related issues, including scholars, enterprises and universities. The following session took place in Shanghai, and, according to an EC official working for DG Energy, focused on the post-economic crisis and on how to deal with energy under these new circumstances.⁷⁸ The cooperation on clean coal and CCS (carbon capture and storage) has been of key importance in their bilateral relationship, which is proved by the drafting in 2005 of the Memorandum of Understanding on Near-zero Emissions Power Technology between the EC and MOST. This Memorandum aimed at fostering “co-operation on the development, deployment and transfer of low carbon technologies” and planned to develop and demonstrate advanced near-zero emission power generation technology in China and in the EU by 2020.⁷⁹ On the sidelines of the 12th China-EU Summit in Nanjing in 2009, the European Commission also pledged €57 million for the Near-Zero Emission Coal (NZEC) project⁸⁰ in order to evaluate the feasibility of CCS for power generation. In the same priority line is the creation of the Institute for Clean and Renewable Energy (ICARE)⁸¹, as well as that of the already noted Clean Energy Centre (EC2).

As noted by a high rank EU official working for the EU delegation in China during a private conversation, since 2005, issues related to the environment and climate change have been

⁷⁶ ‘Joint Press Communiqué of the 11th EU-China Summit’, retrieved from <http://www.eu2009.cz/en/news-and-documents/press-releases/joint-press-communicue-of-the-11th-euchina-summit-23664/> on the 25 July 2009.

⁷⁷ Interview with a high rank EU official working at the EU Delegation in Beijing, Science, Technology, Energy & Environment Section.

⁷⁸ The 2008 Conference focused on energy efficiency, renewable energies, hydrogen energy and fuel cells, gas hydrates, carbon capture and storage and nuclear energy. (European Commission, 2008a)

⁷⁹ Memorandum of Understanding between the Ministry of Science and Technology of the PRC and the European Commission on cooperation on Near-zero Emissions Power Generation Technology through Carbon Dioxide Capture and Storage. Beijing 5 September 2005. For some updates on the progresses see: (Euractiv.com, 2009b)

⁸⁰ (Xinhua, 2009b) For an overview on Chinese involvement in this project see: (People’s Republic of China, 2009) Page 43-44. The EU is not the only actor involved in this kind of projects, as lately the US and other players have also increased their involvement. For an overview of these other partnerships see: (Xi & Jia, 2010)

⁸¹(Friends of Europe, 2009)

at the very heart of their bilateral relationship, and consistently on the agenda of their bilateral summits⁸². Since 2005, the European Commission has also established direct contacts with the National Development and Reform Commission (NDRC). The NDRC, which is arguably one of the most influential administrations in China, set up a high level energy dialogue with the European Commission, which is held annually at Deputy-Ministerial/Director General level. To date, the agenda has mainly focused on issues ranging from clean coal and energy forecast to, lately, energy security, smart grids and renewable energies. In the same year, another important energy-related Memorandum was signed with the NDRC on the EU-China Dialogue on Energy and Transport Strategies. As pointed out by a European Commission official, at the beginning, the relationship with the NDRC was mainly aimed at building trust among the parties. However, since 2009, their cooperation has started delivering concrete results by developing projects and fostering transfer of 'know how'.⁸³

A characteristic of EU and Chinese bureaucracies is their frequent change. As it is the case in the EU, with the separation of DG Energy and Transport and the creation of DG Climate Action as an *ad hoc* DG separated from DG Environment, China's energy bureaucracy has also been adjusted on several occasions. In the 1990s, for instance, the Ministry of Energy was abolished and its competences were shared among other ministries or transformed into state-owned companies with ministerial status, while, more recently, the National Energy Administration (NEA) was created under the NDRC framework. These changes have also affected the EU-China relationship: since the beginning of 2005, in fact, the NEA has replaced the NDRC and has become China's new counterpart in the dialogue with the European Commission on energy-related issues. Also, following the agreement to work on smart grid, the Commission had the opportunity to approach directly the State Grid Corporation, a state-owned enterprise, and to organise capacity building events and projects. For the Commission, as noted during a private conversation with a European Commission official working for DG Energy, this is the first time that the Commission has worked with a company rather than a ministry or an agency. Currently, no government is known to be working directly with the State Grid Corporation.

In addition, at the inaugural meeting of the High Level Economic and Trade Mechanism (HLM) in April 2008⁸⁴, a new joint body at ministerial level that aims to enlarge and deepen the EU-China economic and trade cooperation, energy was indicated as the first priority area, followed by trade in high technology, IPRs and trade facilitation. To underline the weight given to this new body, it is worth noting that the first meeting was chaired by Chinese Vice-Premier Wang Qishan and Trade Commissioner Mandelson, accompanied respectively by 10 Chinese Ministers and eight European Commissioners. Another energy related field of cooperation was outlined during the November 2009 Summit in Beijing, when the European Commission signed a Memorandum with the Ministry of Housing and Urban-Rural Development to discuss the issue of energy efficiency in buildings. As underlined by one European official⁸⁵, it took a long time before having this cooperation 'up and running' due to various reasons, ranging from the reticence to open this sector to international scrutiny, to the Sichuan earthquake. At the moment, the European Commission is one of the very few partners in this specific sector for China. The cooperation focuses on capacity building with regard to energy efficiency in the field of standards, regulations, legislations, and training, but it will not deal with commercial issues. China has for long shown interest in the EU's leading position in this field, and, according to some sources in the former DG Energy and Transport, China has extensively

⁸² Interview with a high rank EU official working at the EU Delegation in Beijing, Science, Technology, Energy & Environment Section.

⁸³ This point was highlighted during a private conversation with an EU official working for DG Energy.

⁸⁴ (Commission, 2008)

⁸⁵ This point was highlighted during a private conversation with an EU official working for DG Energy.

copied European standards on efficiency in buildings⁸⁶, thus showing the appeal of EU policies on China's policy-makers.

Another key framework for cooperation was the EU-China Trade Project (EUCTP), which ended in 2009 after the successful implementation of over 300 technical assistance and training activities. These were primarily designed to support China in meeting its WTO commitments⁸⁷, but were also linked to energy and environmental concerns. The EUCTP had a key role in supporting policy, legislative and regulatory reform efforts and in boosting the exchange of regulatory practices. This article is concerned with featuring the 'EU-China Sustainable Trade Task Force' and the 'NDRC-EUCCC Forum: Energy Efficiency and Industrial Clustering' and sees the participation of the NDRC, the European Chamber of Commerce, the Ministry of Commerce (MOFCOM), the Ministry of Environmental Protection, the Ministry of Finance, and State Forestry Administration, as well as the European Commission Directorate-General for Trade and the European Commission Delegation to China.

As previously outlined, since 2006, the European Commission has also established cooperation with the legislative office of the State Council, which has been of particular relevance as China is in the process of drafting its new energy legislation. As noted by an EU official working at the EU delegation in Beijing, this was particularly the case for the drafting of the Energy Law.⁸⁸ In particular, China appears to have contacted the European Commission on various occasions in order to obtain support and comments, which were provided through workshops and other meetings. The most important one, which starred, among others, the NDRC, the EUCCC, the EU delegation to China, the US Department of Energy, the Energy Leading Group, the International Energy Agency (IEA) and various Chinese academics, was held in Shanghai in January 2008, and, according to an EU official: "It was a fantastic exercise of openness and transparency".⁸⁹ The development of this kind of special framework is to be considered a key element of the EU-China partnership, as it allows the European stakeholders to directly share their concerns and proposals with the heart of the Chinese bureaucracy, which has proved to be keen to learn from its foreign partners in these fields.

Apart from the creation of the EC2 and the innumerable projects developed in this field, some of the other tangible outcomes of the EU-China bilateral partnership in the energy field are the implementation in China of legislation similarly drafted in the EU. This was arguably possible in light of the fact that the EU also has ongoing cooperation with the China National Institute for Standardisation (CNIS), as noted by an EU official working on environmental and energy issues at the EU delegation in Beijing.⁹⁰ Cooperation on standards, regulatory aspects and law enforcement is in fact an area where both European and Chinese experts in the energy sector suggest that the EU can have a major role, as it was further highlighted by Chinese academics and European officials during private conversations held in Beijing in December 2008.⁹¹ A key example is the efficiency labelling system applied to Chinese electrical appliances, which followed strictly the European Eco-

⁸⁶ As noted by Pirjo-Liisa Koskimaki, Head of unit, DG TREN, China copied EU building efficiency. In (Koskimaki, 2009) (minute 6)

⁸⁷ (EU-China Trade Project 中国 - 欧盟世贸项目, 2010)

⁸⁸ Interview with a high rank EU official working at the EU Delegation in Beijing, Science, Technology, Energy & Environment Section.

⁸⁹ Interview with a high rank EU official working at the EU Delegation in Beijing, Science, Technology, Energy & Environment Section.

⁹⁰ Interview with a high rank EU official working at the EU Delegation in Beijing, Science, Technology, Energy & Environment Section.

⁹¹ Personal conversation with a Chinese energy expert and prominent academic. Interview with a high rank EU official working at the EU Delegation in Beijing, Science, Technology, Energy & Environment Section.

Design directive.⁹² Another example is the implementation of the European Emission Standards for car exhaust gas, which clearly benefited from the EU-China Automobile Exhaust Pollution Control Project. Since 2008, the Beijing municipality has applied the Euro4 standard⁹³ and this should be progressively extended to those cities that currently use lower ones.⁹⁴ China has also sought inspiration from the EU in developing other energy-related policies and requirements such as a tax on SUV⁹⁵ and standards for building efficiency⁹⁶. It has also taken on board several concerns raised by EU businesses with regard to IPR laws.⁹⁷

Finally, the EU and China cooperate within the framework of EURATOM, and in particular on research in the area of peaceful use of nuclear energy. They are both part of the ITER-programme for the development of the new fusion reactor.⁹⁸

Environment and climate change cooperation: institutional framework

Already in 2003 the European and Chinese leaders were keen to strengthen their cooperation on environmental issues⁹⁹, which led to the creation of the Environmental Policy dialogue, headed by the European Commissioner for Environment and the Head of the State Environmental Protection Administration (which in 2008 became the Ministry of Environmental Protection)¹⁰⁰, and the approval of the Energy and Environment Program (EEP) aimed at encouraging the formulation of good energy policies.¹⁰¹ Before, other *ad hoc* activities were in place, including the Liaoning Integrated Environment Project, the EU-China Environmental Management Project and the EU-China Automobile Exhaust Pollution Control Project, which respectively aimed at improving energy efficiency, environmental management and policy formulation.¹⁰²

However, the backbone of the EU-China cooperation on Climate Change is the EU-China Partnership on Climate Change, which dates back to the 2005 Summit. On that occasion, the leaders underlined that their new partnership was “to address climate change issues through the promotion and development of more environmentally friendly energy technology and sources”.¹⁰³ The key areas identified for cooperation were: energy efficiency, energy conservation and renewable energy; clean coal; methane recovery; Carbon capture and storage; Hydrogen/fuel cells; and power generation/transmission.¹⁰⁴ The 2005 Joint Declaration on Climate Change foresaw the creation of a bilateral discussion framework to deal with both the environment and energy aspects of climate change, which was later created under the so-called ‘Bilateral Consultation Mechanism’ (BCM). While the partnership also included the China–EU Action Plan on Clean Coal and the China–EU Action Plan on Energy Efficiency and Renewable Energies, what is most interesting from the point of view of this study is probably the BCM: this mechanism, in fact, brought together not only the Commission, but also the Presidency and the Member

⁹² On labels see (Hollis et al., 2007) Page 62

⁹³ (AutomotiveWorld.com, 2008)

⁹⁴ For reference see for instance: (Shijin et al., 2003)

⁹⁵ (The Climate Group, 2008)

⁹⁶ (The Climate Group, 2008) and (The Climate Group, 2009)

⁹⁷ On this point see: (European Union Chamber of Commerce in China, 2009) Pages 77-78

⁹⁸ On these points see: (Umbach, 2009) and (Hollis et al., 2007) Page 34

⁹⁹ Collection of official documents: (Snyder, 2009) Page 827

¹⁰⁰ SEPA gained ministerial status in 2008.

¹⁰¹ (Freeman & Holslag, 2009) Page 59

¹⁰² Source: Minutes of the Meeting between Mrs. Margot Wallström (Commissioner for Environment, European Commission) and Mr. Xie Zhenhua (Minister, State Environmental Protection Administration, China) Beijing, 12 November 2003 Collected by (Snyder, 2009) Page 828

¹⁰³ See the Joint Declaration on Climate Change of the 8th EU-China Summit in 2005.

¹⁰⁴ See the Joint Declaration on Climate Change of the 8th EU-China Summit in 2005.

States¹⁰⁵, which are very active in the environment and climate change cooperation. In June 2005, another strategic body was established: the 'EU environment counsellors group in Beijing', which improved the coordination and cooperation on environment and climate change-related issues, fostering information exchange and the development of projects under the EU-China climate change partnership.¹⁰⁶

In 2009, a declaration following the annual summit stated that their partnership on climate change would have been the object of an update at ministerial level, so as to underline the importance of EU-China relations in this field. Such an upgrade took effect after the meeting between Climate Action Commissioner Connie Hedegaard and NDRC Vice-Chairman Xie Zhenhua at the end of April 2010, which also established a 'Climate Change Hotline' at diplomatic level. As the joint statement drafted on that occasion puts it, "the dialogue will be supported by consultations at (...) senior officials' level as well as discussions at working level". It will "include an exchange of views on critical issues in international negotiations on climate change and domestic policies and measures, as well as the formulation and implementation of concrete cooperation projects on climate change".¹⁰⁷ From an institutionalist perspective, the strengthening of the bilateral framework for the EU-China cooperation on climate change-related issues, as well as the creation of the Climate Change hotline should increase the understanding between the two sides, and it is expected to reduce the misperceptions that dominated during the Copenhagen talks.¹⁰⁸ Interestingly, the first signs of the development of this 'hotline' could be traced back to the days preceding the COP15, when Wen Jiabao called Barroso to underline the Chinese position before the climate change summit.¹⁰⁹

Another key aspect of the partnership is the Clean Development Mechanism Facilitation project, which was established in 2006 for the period 2007-2010 and was provided with a budget of €2.8 million. The CDM Facilitation aimed at helping Chinese industries to benefit from the CDM mechanism under the Kyoto protocol: as reported in various studies, China soon became the main beneficiary of the CDM, and EU countries accounted for about 60% of the total CDM initiatives in China.¹¹⁰ These measures allowed China to tackle local challenges, such as environmental degradation, which, as previously underlined, are increasingly worrying Chinese people, while obtaining some key technologies and 'know how'. Despite the success of the Facilitation mechanism, the CDM itself is currently under scrutiny as its effects in reducing CO² emissions are questionable, mainly because of the difficult applicability of the 'additionality principle'. The result is that the CDM has become mainly an offsetting mechanism, which tends to simply allow the transfer of CO² emissions not produced in China to Europe (or other Annex I countries), which can then buy them as certified emission reduction (CER), and used them to fulfil their Kyoto targets. The European Commission currently proposes that countries that have higher capabilities (*e.g.* China) should implement a new system based on 'sectoral crediting'. Such a system would still have an offsetting part, but would push for actual reduction of CO² emissions compared to the 'business as usual' scenario, identified for each industrial sector. According to Climate Action Commissioner Connie Hedegaard, discussions over the

¹⁰⁵ I will not have the opportunity in this article to examine in detail the activities of the Member States.

¹⁰⁶ (European Commission, 2007).

¹⁰⁷ (European Commission and People's Republic of China, 2010).

¹⁰⁸ This point is also supported by (Haizhou & Jing, 2010).

¹⁰⁹ In particular, Wen is said to have pressured for non-binding commitments and to keep the Kyoto protocol as the main framework; on these points see: (Phillips, 2009).

¹¹⁰ As noted during a personal discussion with a manager at Ecorescurities. Other sources are those by the Office of National Coordination on Climate Change quoted in (Scott, 2009) Page 216.

development of sectoral approaches have been held with China since July 2010, and this could be a new area of bilateral cooperation.¹¹¹

Yet, another major element of their bilateral cooperation in the environmental field is the fact that China has had the opportunity to use part of the funding provided by the 6th and 7th EU Framework Research Programmes (FPs). These are the EU's largest scientific research funds, the latter of which runs until 2014 and has a budget of €53bn. China was already heavily involved in the FP6 (which expired in 2006), and participated in over 200 science and technology projects, receiving €46 million over five years.¹¹² The FPs have also become a foreign policy tool in the hand of the EU in order to push cooperation in specific fields, and in particular in those related to the environment, energy and development¹¹³, as it is the case for the cooperation on CCS power plant under the COACH program.¹¹⁴ These funds should be added to those allocated in the various National Indicative Programs, or dedicated to the EU-China Science and Technology Cooperation, which, for instance, sponsored the China-EU Science and Technology year in 2006.¹¹⁵

The Commission is also engaged, together with the United Nations Development Programme (UNDP) and Norway in improving the implementation capacity of local administrations under the 'Provincial programmes for Climate Change Mitigation & Adaptation in China', which was launched in June 2008 and involves 14 Chinese provinces. This programme aims "at translating China's National Climate Change Programme into local action in provincial level" and it is also expected to "improve the capacity of local government to adapt to climate change negative impacts".¹¹⁶ Several parties were involved in this programme, including the National Development and Reform Commission (NDRC), the Ministry of Science and Technology (MOST), the Ministry of Foreign Affairs (MOFA), and the China Meteorological Agency (CMA). Also, as noted by Runge-Metzger, the European Commission's work on climate change is also supported by two other major EU-China environmental cooperation programmes: the River-Basin Management Programme, with an EU contribution of €25m, and the EU-China Biodiversity Programme, with an EU contribution of €30m.¹¹⁷

Finally, similarly (and closely linked) to what is the case for the energy sector, the EU has influenced China's policy-making in the field of environmental protection and climate change. Some examples are the use of the EU system for registration, evaluation and authorisation of chemicals (REACH)¹¹⁸ and arguably, the introduction of the 'Circular Economy Promotion Law' in 2008 which followed a study commissioned by the Environment and Natural Resources Protection Committee of the National People's Congress on this issue.¹¹⁹

¹¹¹ (Euractiv.com, 2010e). For the EU's position on the development of sectoral approaches in advanced developing countries see: (Euractiv.com, 2009c).

¹¹² (Gill et al., 2008).

¹¹³ (Lequeux, 2007) and (Hollis et al., 2007) Page 48

¹¹⁴ COACH is one of the two feasibility studies under the NZEC project, and it is partially funded by the 6th Framework Program (COACH, 2008).

¹¹⁵ "Some 130 joint research projects involving a total investment of around €850 million have been initiated with over 150 Chinese participants". For additional information: Launch of the 'China-EU Science and Technology Year': Cooperation for Sustainable Mutual Benefit, Policy Forum, Brussels, October 11, 2006 and (Gill et al., 2008) Page 69.

¹¹⁶ (National Development and Reform Commission, 2008)

¹¹⁷ (Runge-Metzger, 2010)

¹¹⁸ On this specific issue see: (European Commission, 2009).

¹¹⁹ (Davis and Hall, 2006)

Challenges and potential competition

Even though the two sides have high potential for cooperation, some challenges remain. As noted by some researchers, “[there] is no other area that has so much potential for fruitful cooperation between the EU and China. But there is also no area where the room for confrontation and conflict is so great.”¹²⁰ At the bilateral level, very high on the agenda is the extent to which China is able and willing to protect European economic interests by establishing a level-plain-field in which European companies can operate.¹²¹ This will increasingly influence the extent to which the EU and its companies will be in the condition to deploy their technology in China without fearing intellectual property theft and other commercially harmful practices. Should China fail in doing so, it might enjoy short term gains, but, in the long run, it might fail to find keener partners to cooperate with, which would lead to a slowdown in its path towards modernisation. It is clear that the more products move up the value chain, the more European companies will be reticent to produce in a business unfriendly China, whose developing image is slowly fading away for the benefit of a new image: the one of great competitor (at least) in the world market. This is true not only with regard to low and medium technology products, but also increasingly those green technologies that were expected to give European companies a competitive hedge in the coming years, such as efficient light bulbs, solar panels and water heater.¹²²

At the multilateral level, Chinese energy diplomacy carried out both via its national oil companies or via *ad hoc* international institutions, such as the Shanghai Cooperation Organisation or the Association of South East Asian Nations (ASEAN) (and the ASEAN Regional Forum (ARF)) might also determine a more competitive approach, unless China increases its awareness of other players’ interest in the various regions. Europeans pay particular attention to their neighbours for energy reasons, as it is the case of Central Asia and Russia, and, for historical reasons, to African countries. Chinese pragmatic policies towards the latter ought to be carried out more discretely so as to avoid interference with its partners’ objectives. Currently, however, this is not the case as the ‘Beijing consensus’¹²³ risks undermining the EU’s efforts to boost good governance and respect for human rights. Also, Russia and Central Asia could be areas of contention or of partnership according to the extent to which the EU-China relationship manages to increase mutual understanding rather than competition. As it has happened for the EU-China dialogue on Africa, an enhanced dialogue over Chinese and European policies in Central Asia and *vis-à-vis* Russia, focusing on energy resources, could increase their mutual understanding, as well as the chances of long lasting cooperation. This approach, which could put in question EU membership in the Shanghai Cooperation Organisation, or the creation of *ad hoc* fora to discuss energy-related and environmental issues, could contribute to avoid negative spin-offs on more successful aspects of their relations (*i.e.* energy efficiency, climate change and trade).

In other words, there are areas in which China and the EU have a high probability of continuing to cooperate effectively, such as energy efficiency, climate change and environmental protection, and others on which they must be keen to coordinate their policies, instead of act strategically in a zero sum game, as it could be the case for energy security. Since Deng Xiaoping’s ‘reform and opening up policy’, China has tried to keep a

¹²⁰ (Centre for European Reform and Grant, 2008) Page 77

¹²¹ Wen Jiabao proposes more protection of IPRs during the EU-China summit in Nanjing (Tong, 2009).

¹²² China’s Suntech Power has grown into the world’s third-largest solar energy company. (Freeman and Holslag, 2009) Page 28. For Beijing’s subsidies and state aid policy to enter European markets and for Chinese alleged ‘dumping practices’ see: (Scott, 2009) and (Deklerk and Men, 2010).

¹²³ On this issue, see for instance: Joshua Ramo, ‘The Beijing consensus’, Foreign Policy Centre, May 2004 in (Centre for European Reform and Grant, 2008) Page 84, (Suzuki, 2009), (Soroos, 1994) and (Mingjiang *et al.*, 2008).

low profile in international relations, founding its external action on the renowned principle of 'peaceful development' and non-intervention.¹²⁴ However, the size of its population and economy, its different political system, as well as its elevation to the rank of global power have been highly destabilising for the international system, even though this was probably not aimed by Deng. Energy and environment are two key horizontal issues¹²⁵ that will test Chinese and European abilities to cooperate at the bilateral and international levels. Their success is likely to be proportionate to the efforts that they will make in not excessively challenge each other's interests (as well as those of their other partners), while continuing to benefit from the international system, in terms of economic development or national image.

International regimes and institutions will also play an increasing role in framing bilateral relations into partnership or competition. Since the failure of the Copenhagen conference, it is increasingly unclear which kind of regime and institutions should deal with these challenges (*e.g.* G20, UNFCCC, WTO). In particular, a major uncertainty lies in their level of legalisation and in their scope, especially in light of the different expectations of developed countries, developing countries and major emerging economies. The shaping of the future energy regime, in fact, is far from being an object of consensus. For instance, the BASIC countries have opposed any shift in the climate change regime towards a more legalised one, as the EU and the US would have hoped in Copenhagen. Also, they excluded the use of the trade regime to deal with climate change-related issues¹²⁶ and have opposed the introduction of any sort of BCAs, fearing that they could hamper their economic development.¹²⁷

In the past, various attempts have been made to frame international cooperative frameworks, but to date they have not been able to provide a stable institutional framework able to reduce uncertainties and to collect the expectations of the various stakeholders to improve their potential for cooperation. Due to the limited space available, it is not possible to analyse these here. Nonetheless, it is important to note that both the EU and China have been extremely active in shaping international institutions and regimes in order to manage energy cooperation. Some examples include the Energy Charter Treaty or the Shanghai Cooperation Organisation, the former closer to the trade regime, the latter to a security organisation.

Conclusion

This article has argued that EU-China cooperation has reached a new level by focusing on energy, environment and climate change. At the bilateral level, this was facilitated by their deeply institutionalised cooperation, which has allowed the EU and China to cooperate on actual projects, legislation and in building common understanding. At the international level, instead, the evolution of the energy, environment and climate change regimes have set the foundations for their cooperation to happen, underlining the linkages among several aspects previously hidden. In addition, international regimes have constituted new fora for international negotiations, which have allowed the EU and China to reshape both their image, and have provided the occasion to upgrade their policy preferences and

¹²⁴ For a discussion of this concept see: (Lee, 2008), (Richards, 2009), (Rabinovitch, 2008) and (People's Republic of China, 2008) Page 7.

¹²⁵ As such they have already been the object of the 'mainstreaming' of these issues across policy areas both in China and the EU as mentioned by an EU official working in DG Climate (as far as the EU is concerned) and in: (Hollis *et al.*, 2007) Page 67.

¹²⁶ (International Centre for Trade and Sustainable Development, 2010)

¹²⁷ For example, Yao Jian, spokesman of Ministry of Commerce of China, has said that 'carbon tariffs' are not only in violation of the basic rules of the World Trade Organisation, but also run against the principle of 'common and differentiated responsibilities' (Mu, 2009). See also: (Euractiv.com, 2010a) and (Xinhua, 2009a).

cooperation priorities in light of both domestic contingencies and international objectives. In particular, this evolution has moved the barycentre of the EU-China relationship from trade to more strategic areas, which today involve not only economic growth, but also social stability, sustainable development and international image.

As far as their image is concerned, the energy and climate change regimes have given the EU and China the opportunity to gain in relevance in international negotiations, as the EU became a referent point in the fight against climate change, while China took the role of the speaker of the developing world in the framework of the G77 plus China group.

At the same time, as noted in the article, the development of both bilateral and multilateral cooperation in the field of energy, environment and climate change has fostered the deployment of new technologies and the sharing of good practices between China and the EU.

The current lack of effective, stable and legitimate regimes and institutions in the energy, environment and climate change sector is arguably the main potential cause of friction among the EU and China. Certainly this is the case as far as energy security is concerned, given their increasing reliance on similar 'energy basins'. On the climate change front instead, another bone of contention is the actual construction of the new post-Kyoto regime, which might also exacerbate some tensions among the EU and China in light of their different preferences *vis-à-vis* the level of legalisation that it should have, and due to their different level of development. This is particularly true in light of the fact that the EU is keen to unwind the principle of 'common but differentiated responsibility' and to challenge the status of China as a developing country, two issues that are at the heart of China's interests.¹²⁸

Nonetheless, as it has been underlined in the article, the value of their overall cooperation on energy, environment and climate change is overwhelmingly important for China to tackle its local challenges, and, as such, it largely offsets the risk of actual confrontation. Moreover, international stability is indispensable for China's development and the strong interdependence between the Chinese and European economies, together with the export-led nature of the former, make the EU an irreplaceable partner.

In conclusion, climate change, in both its energy and environmental dimensions, is by definition a horizontal issue, and it touches upon several other policy areas, not only domestically, but also internationally. As such, it requires a multi-layered approach at the local, regional, bilateral and international levels. The extent to which China and the EU will be effective partners or competitors will be increasingly affected by their willingness (and ability) to shape their bilateral partnership, as well as the international regimes, so as to reduce uncertainties and to share the relative benefits of cooperation, as in an actual 'win-win' manner. There is little doubt that energy, environment and climate change are set to have increasing relevance in cementing their bilateral partnership, as well as in defining their international standing in the coming decades.

¹²⁸ (Willis, 2010)

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