Table of contents

1. INTRODUCTION TO THE INTERNATIONAL CONFERENCE: “THE EU AND CHINA - PARTNERS FOR A GREEN WORLD” ................................................................. 3

2. CONFERENCE PROGRAMME .............................................................................................................................. 4

3. WELCOME SPEECH
   Paul Demaret ...................................................................................................................................................... 8

4. SUMMARY OF SPEECHES: THE KEYNOTE SESSION .............................................................................................. 9

5. SUMMARY OF SPEECHES: THE POLICY DIALOGUE SESSION ............................................................................. 12

6. SUMMARY OF SPEECHES: PANEL ONE ............................................................................................................ 15

7. SUMMARY OF SPEECHES: PANEL TWO .......................................................................................................... 18

8. SUMMARY OF SPEECHES: PANEL THREE .................................................................................................... 21

9. SUMMARY OF SPEECHES: PANEL FOUR ....................................................................................................... 24

10. SUMMARY OF SPEECHES: PANEL FIVE ...................................................................................................... 26

11. SUMMARY OF SPEECHES: PANEL SIX ......................................................................................................... 30

12. SUMMARY OF SPEECHES: PANEL SEVEN .................................................................................................... 33

13. CLOSING SPEECH
    Michel Lebrun .................................................................................................................................................... 37

14. GROUP PHOTO OF CONFERENCE SPEAKERS ................................................................................................. 38
On 19-20 April 2012, the InBev-Baillet Latour Chair of European Union-China Relations at the College of Europe in Bruges, together with Madariaga - College of Europe Foundation and the Committee of the Regions, organised its fourth annual international conference on EU-China relations that carried the following theme: “The EU and China – Partners for a Green World”. The aim of the two-day high-level international conference was to bring together European and Chinese policy practitioners, scholars, representatives of NGOs and of the business community, to examine bilateral relations between the EU and China with regards to the challenges and opportunities in their cooperation over supporting a green economy.

The two-day conference was considered a big success and attracted more than 60 speakers as well as 200 participants from across Europe and China. Seven panels were organised to discuss, in detail, the following topics: public diplomacy and civil society dialogue in relation to “green economy”; environmental protection; EU-China cooperation over climate change; low carbon economy; green urbanisation; green manufacturing; renewable and nuclear energy and green agriculture. The discussions at the conference highlighted both divergent and convergent interests between the EU and China and raised many unanswered questions for future consideration. The conference demonstrated that cooperation between the two actors is essential in creating a green World.

For the purpose of sharing with our readers the topics of discussion at the conference, we have edited this special issue of the EU-China Observer. The summaries of speeches are arranged according to the order of the panels presented at the conference. The summaries not only offer those who could not attend the event a glimpse of the issues discussed, they also permit our readers to gain a better idea of the themes at stake.
CONFERENCE PROGRAMME

The EU and China – Partners for a Green World

Thursday, 19 April & Friday, 20 April 2012

Rue Belliard 99-101, 1040 Brussels,
The Committee of the Regions

Thursday, 19 April 2012

09:00 - 10:00 Welcome speech (conference room: No. 52)
Paul DEMARET, Rector of the College of Europe

Keynote speeches

Jean-Pascal VAN YPERSELE, IPCC Vice-chair, Professor at the Université Catholique de Louvain
Michael KOEHLER, Head of Cabinet, European Commissioner for Energy
Artur RUNG E-METZGER, Director for International and Climate Strategy, DG Climate Action
WU Hailong, Ambassador to the Mission of the People’s Republic of China to the European Union (letter)
SUN Xuegong, National Development and Reform Commission

10:00-10:15 Group photo & Coffee break

10:15–12:00 Policy dialogue & discussion (conference room: No. 52)

Moderator: MEN Jing, College of Europe

Gerhard STAHL, Secretary-General of the Committee of the Regions
Folker FRANZ, Industrial Affairs Director, BUSINESSEUROPE
Lars CHRISTIAN HANSEN, President for Europe Novozymes
WU Jiang, Vice President of Tongji University
ZHANG Jianyu, Lead Expert Group (LEG) of China Council for International Cooperation on Environment and Development

12:00 - 13:30  **LUNCH BUFFET**

**Parallel panels**

**13:30 - 15:30**  **PANEL 1: Public diplomacy and civil society dialogue in relation to green economy and environment protection**  (conference room: No. 52)

**Chair: Pierre CHASTANET, DG Information Society, European Commission**
SONG Li, National Development and Reform Commission (NDRC)
YU Ying, Nottingham University
Emmanuel MENEUT, l'Institut Catholique de Paris
WANG Yiwei, Tongji University
WANG Binbin, Oxfam
**Discussant: Alex KIRBY, BBC**

**13:30 - 15:30**  **PANEL 2: EU-China on Climate Change**  (conference room: No. 53)

**Chair: Bernard DEWIT, Belgian-Chinese Chamber of Commerce (BCECC)**
Diarmuid TORNEY, Freie Universität Berlin
Sam GEAUL, China dialogue
ZHENG Baowei, China Renmin University
ZHANG Jianyu, Lead Expert Group (LEG) of China Council for International Cooperation on Environment and Development
Pietro DE MATTEIS, University of Cambridge, Former Visiting Fellow EU - ISS
**Discussant: Dennis PAMLIN, WWF**

15:30-15:45  **Coffee break**

**15:45 - 17:15**  **PANEL 3: Low carbon economy**  (conference room: No. 52)

**Chair: Pierre DEFFRAYNE, Executive Director, Madariaga-College of Europe Foundation**
LI Jun, Centre International de Recherche sur l’Environnement et le Développement (CIRED)
Giles DICKSON, Alstom
HE Yinan and HU Fengqiao, Zhejiang University
Cedric de Meeûs, Veolia Environment Europe Services
Susanne NIES, EURELECTRIC
Discussant: Stephen BOUCHER, European Climate Foundation

PANEL 4: Green agriculture (conference room: No. 53)

Chair: Mark CROPPER, DG Agriculture, European Commission
LAN Haitao, National Development and Reform Commission (NDRC)
Rodolphe DE BORCHGRAVE, Arcadia International and Cadmos
Michiel KEYZER, Vrije Universiteit Amsterdam
Discussant: Pierre LACONTE, Foundation for the Urban Environment

Friday, 20 April 2012

Parallel panels

09:30 - 12.00 PANEL 5: Green manufacturing (conference room: No. 52)

Chair: Niels JUNKER-JACOBSEN, DG Trade, European Commission
DU Feilun, National Development and Reform Commission (NDRC)
Frans VERSPEEK, Centre on Sustainable Consumption and Production
Maximilian RECH, Friends of Europe
SONG Yuyan, Technological and Economic Development Area (Tianjin)
WANG Shuyao, Boda
HUANG Zhen, The Asia Foundation
Discussant: Branislav STANICEK, Committee of the Regions

PANEL 6: Renewable and nuclear energy (conference room: No. 53)

Chair: Alexandra SOMBSTHAY, DG Energy European Commission
HU Runqing, National Development and Reform Commission (NDRC)
FENG Ying and ZHENG Fangneng, Institute of Scientific and Technical Information of China (ISTIC), Ministry of Science and Technology (MOST)
Rémi GRUET, Climate Change & Environment EWEA - European Wind Energy Association
Baptiste BUET, AREVA
Cora JUNG BLUTH, University of Freiburg
Discussant: Alex KIRBY, BBC

10:30-10:45 Coffee break
12:00 – 13:30 LUNCH BUFFET

Plenary panel

13:30 - 15:15 PANEL 7: Green urbanisation (conference room: No. 52)

Chair: MEN Jing, College of Europe
XIANG Wei, National Development and Reform Commission (NDRC)
WANG Xuefeng, Newcastle University
Laurent BEDUNEAU-WANG, President & Director of the Europe-Asia Finance (EURASFI) think-tank
Yu WANG-VEDRINE, Ecole Nationale Supérieure d’architecture de Paris-Belleville
LI Fengting, Tongji University
Pascaline GABORIT, European New Towns Platform/Pilot
Philippe MORGAN DE RIVERY, Urban Planning Consultant
Discussant: Thomas WOBBEN, Committee of the Regions

15:15 - 15:30 Closing speech

Michel LEBRUN, Member of the Committee of the Regions, Rapporteur on "A resource efficient Europe", Member of CoR delegation to Rio+20
WELCOME SPEECH

Paul Demaret

The Rector of the College of Europe, Paul Demaret, was honoured to welcome the guests to the International Conference “The EU and China – Partners for a Green World”, co-hosted by the College of Europe, The College of Europe – Madariaga Foundation and the Committee of the Regions. Not only was the Rector impressed by the large number of registered participants, he also noted the high calibre of the audience and was pleased to see that numerous academics, civil servants and NGO representatives had come all the way from China, to discuss the topic of EU-China cooperation with their European counterparts.

The Rector highlighted that the topic of the conference was very timely, as protecting the world’s environment is the key challenge we are facing in the 21st century. Indeed it has been made abundantly clear that if rapidly developing countries, such as China, and old industrialised countries, such as the twenty seven members of the European Union, do not effectively cooperate in the years to come, this challenge will not be met successfully. This will be at the expense of future generations. Although there are, of course, no simple solutions, argued the Rector, the programme of the conference neatly reflected the complexity and the variety of issues that need to be tackled.

The Rector thanked the speakers, coming from both Europe and China, who contributed to the programme. He also gave special thanks to Prof. Jing Men, the architect of the conference, who deployed a tireless energy to put the high-quality programme together. Professor Jing Men holds the InBev-BailletLatour Chair of EU-China relations of the College of Europe. This is the fourth conference she has organised; the three previous ones were on the EU-China Partnership and Cooperation Agreement; the EU and China in Africa; and the EU, China and the United States. The InBev-Baillet Latour Fund also offers scholarships to Belgian and Chinese graduates, who would like to study European affairs at the College of Europe.

Finally, the Rector expressed his gratitude to the InBev-Baillet Latour Fund for its support. He noted that the conference organisers were hoping to use this event as a basis to build a platform between the European Union and China, in order to foster a permanent dialogue on environmental issues. The aim is to continue discussing these issues by organising further conferences in both China and the European Union. The hope is that the current conference will be successful in identifying how the EU and China can cooperate further, in order to ensure that our planet is better protected.
Dr Jean-Pascal Van Ypersele started the conference by outlining the scientific findings of the Intergovernmental Panel on Climate Change (IPCC), according to which global warming is inevitable and an unequivocal fact. Most of the warming of the past 50 years is most likely due to increases in Green House Gas (GHG) emissions. CO₂ concentration in the atmosphere is two times more than what the system can absorb and expected CO₂ concentrations are higher than observed at any time over the last 800,000 years. Dr Van Ypersele showed some graphs picturing what the scenario would look like if we do not change our practices and decrease the CO₂ concentration in the atmosphere. The higher scenario foresees an increase in the global temperature by 6.4°C and the lower scenario by 1°C. These are huge changes, especially if one considers that the difference between now and the Ice Age is about 4-5°C. The implications of this considerable increase in temperature are numerous. They include the melting of ice caps; increased sea levels; changes in precipitation patterns and an increased likelihood of extreme events, as well as a higher rate of mortality. The combination of these factors will trigger huge consequences, especially against a backdrop of resource scarcity. Dr Van Ypersele concluded that if we want to prevent this scenario, global emissions have to decrease to a level allowing a 2°C reduction in temperature. All sectors and regions have the potential to contribute to this reduction by 2030. He then stressed the numerous benefits of mitigation and the importance in this process of the “price of carbon” in creating incentives for producers and consumers to significantly invest in low-GHG products, technologies and processes.

Dr Michael Koehler said that the transition to a low-carbon economy is now a major dimension of EU-China relations, as demonstrated by the last EU-China Summit Statement and by the upcoming visit of Vice Premier Li Keqiang. Europe has to develop an energy policy that is, in President Barroso’s words, “the next great European integration project”, through its 2020 Energy Strategy and the Energy Roadmap 2050. A solid European energy policy is needed for security, economic and geopolitical reasons and to fulfill the committed target of reducing greenhouse gas emissions by at least 80% by 2050, which means more or less removing carbon from the energy sector. The Roadmap 2050 highlights that there are solutions which seem to work in all scenarios – starting with energy efficiency, renewable energy, and the development of smart grids and intelligent networks – and which also provide opportunities for investors. The EU will not be able to move alone and, as a major importer, an EU international energy policy needs to play a strong role in international markets. The EU has a lot to offer to China both on international initiatives and bilateral cooperation, as demonstrated by the good examples of the EU-China Clean Energy Centre, the cooperation in the field of energy efficiency in the construction sector and the Science & Technology Agreement, but there are still problems of market access to be overcome.
According to Dr. Artur Runge-Metzger, the EU and China are fundamental players at a global level with regards to climate change and, in most respects, share similar visions. Their discussions over the matter started at a time when their economic development path was very different. The EU took the lead on climate measures by cutting its greenhouse gas emissions by up to 11% more than the amount foreseen by the Kyoto Protocol, and China supported and closely observed EU developments in the field, including its use of market mechanisms. The EU’s experience clearly demonstrates the importance of political will. About ten years ago China started to analyse its own pollution levels and introduced goals for energy efficiency improvements in its previous Five-Year Plan (2006-2010). Then, it started to work on the voluntary goal, set in Copenhagen, of reducing CO₂ per unit of GDP by 40-45% below 2005-levels by 2020. The Durban Conference highlighted that even if a clear positive result in the fight against climate change is still far away, the world has, at least, succeeded in deviating from the past “business as usual” trajectory. We still have enormous challenges ahead, however, and according to Dr Runge-Metzger, the EU and China have the opportunity to act as an engine of progress in this field. Negotiations in the next 3 years will have to anticipate the challenges of 2020 – 2030, which will see a very different world from the one of today. China is interested in the EU’s experience and expertise on domestic climate policies, as it is looking at technologies (such as CO₂ efficient cars, carbon capture storage, etc) as well as EU legislation and regulations, e.g. pilot projects on emissions trading and energy labelling. Although China and the EU have some different views in the aviation sector, the EU is willing to discuss them openly with its partner in order to find a mutually acceptable solution.

The Chinese Ambassador to the EU, H.E. Wu Hailong, greeted the conference with a letter of support. In this letter, he stressed the importance of green development, a major theme in future EU-China ties and a choice of necessity to achieve sustainable development. He also emphasised the huge and timely opportunities of cooperation under the EU 2020 Strategy, the 12th Five-Year Plan and the new urbanisation partnership. The latter has become a new driving force of bilateral cooperation and a channel to fuel new substance in mutual relations, as demonstrated by the High Level Forum on Urbanisation to be held at the beginning of May in Brussels.

The last speaker of this session, Dr. Sun Xuegong, from the National Development and Reform Commission, said that the difference between China and developed economies in terms of per capita GDP is 1 to 10 and that its growth pattern is imbalanced, uncoordinated and unsustainable. It needs therefore to change its pattern and green development provides a new approach, especially in decoupling economic growth from resources and pollution. The 12th Five-Year Plan strategy for green development focuses on the re-adjustment of the economic structure whereby solar, wind and renewable sources of energy play a prominent role together with the promotion of the circular economy and the creation of responsible consciousness and a green consensus. To implement these goals, the main measures include: first, further reforms to allow market incentives to act on energy prices; second, tightened environmental regulations, for instance,
stricter air quality standards; third, innovation and technology by expanding resources on R&D; and, fourth, raising civil society awareness. China has already achieved the target of cutting energy intensity by 20% (below 2005 levels), and, after the crisis, the leading sectors of the economy are clean energy and hi-tech industries. But there is still a long way ahead to claim that China has reached green growth, concluded Dr. Sun, and the EU-China partnership is essential to speed up the deployment of green technology globally and improving competitiveness of both China and the EU.
POLICY DIALOGUE AND DISCUSSION

According to Dr. Stahl, progress towards a “green transformation” needs close EU-China cooperation as the EU is the world’s largest internal market and China is one of the fastest-growing economies. To improve this cooperation, some steps were envisaged at the 14th EU-China summit, which addressed the issues of climate change, energy and the environment, and also established the China-EU Partnership on Sustainable Urbanisation. A priority for the Committee of the Regions is green urbanisation and many cities in Europe are interested in this concept. There is a Covenant of Mayors whose signatories have engaged in a binding manner to reduce energy consumption and emissions and to develop renewable energy. The results are regularly monitored and presented to the EU institutions. The Association of American Mayors is also invited to join this initiative and cooperate with its European partners. Alongside this, the participation of Chinese cities is desirable and the Covenant could be extended to them. Decentralised cooperation between cities and regions to promote the green economy should be fostered. There is also a need for a holistic approach, since the only way to succeed is by addressing all relevant factors together. Both China and the EU have understood this principle very well. As economic growth is one of its priorities, China will need to consider seriously how to grow in a “green” way. EU member states also need to re-think their model of production and consumption in order to save resources, improve energy efficiency and reduce pollution. There is a need to rebalance the development model in China by focusing more on domestic development and slowly adjusting the export-driven model. However, this issue also applies in the case of the EU, which must examine how it can contribute to creating a more-balanced macroeconomic situation. An interesting debate on these issues needs to take place. Cooperation at the international level, such as in the context of the Rio+20 Conference, is important. It is fundamental for the EU and China to contribute to international discussions with a common understanding so as to ensure that a certain global progress is possible. These discussions are of high interest to European and Chinese citizens and to decision-makers at all levels.

Mr Franz emphasised that trade relations with China are a top priority for European Businesses. Regarding climate change, BusinessEurope fully agrees with the European Commission on the need to address the challenge of climate change and it supports the Commission’s 2007 climate and energy package. Moreover, BusinessEurope supports the Emission Trading Scheme and it hopes that it will evolve into a global system. The EU has reduced its emissions significantly since 1990 but its companies have outsourced production and therefore account for emissions in other countries. In a globalised world, there is a need to work together to create a common global framework to reduce CO2 emissions. The climate change challenge is primarily a technology challenge; there is a need to innovate and improve low-carbon technologies. This should be complemented by a market-based approach: a competitive market that is regulated by policy-makers should be
encouraged so as to create a level playing field everywhere. In short, businesses ask politicians in the EU and China to work together to develop the right market conditions. Prices, such as those set by the Emissions Trading System (ETS), are needed in the EU and in China, so that companies can include the value of carbon emissions in their future investments. Standards are also needed for cooperation between the EU and China, indeed companies welcome partnerships such as the one for urbanisation and for carbon capture and storage. Generally, the more global the standards are, the more the companies will be able to develop and innovate.

According to Mr Christian Hansen, both the EU and China are highly dependent on imported oil. This dependence will increase over the next 20 years. In the EU, oil production will decline faster than consumption. In China, oil production will decrease while demand will increase. This is a cause of concern especially considering the continued trend of higher and more volatile oil prices. The bio-based economy vision forms part of the answer to this challenge. Most people do not know that biomass can do everything that oil can but in a much smarter way. At the centre of this vision, bio-refineries will gradually replace oil-refineries. Our economy currently uses oil refining for materials and energy. Similarly, a bio-based economy uses bio-refineries to convert the biomass, i.e. agricultural residues and waste into the products that we need such as advanced bio-fuels, bio-chemicals and bio-materials. Moreover, a bio-based economy puts farming back at the centre of society. Agriculture can indeed be turned into a powerful driver for growth and innovation. European and Chinese farmers and their value chain could gain supplemental income and opportunity to diversify their crops by supplying plant-derived materials to industry. The bio-based economy won’t happen overnight but the journey has already started. The EU and China are frontrunners, they will open the world’s first commercial scale advanced bio-fuels plants this year. However, getting to full commercialization of advanced bio-fuels and other bio-based products depends of course not only on the maturity of the technology - but even more on the political willingness to deploy it. Policy support is needed to fill the gap between research and market and realise the bio-based economy potential.

Prof. Dr. Wu confirmed that “towards a sustainability-oriented university” stems from the idea of the “Green Campus”, which was developed by Tongji University. This initiative aims not only to have green facilities but also to educate younger generations about the need for change. First, the project envisages an upgrading of the green campus, in order to make the campus more sustainable both in terms of facilities (infrastructure, planning, etc.) and in terms of management (water saving, etc.). Second, the initiative aims to reform education itself towards a more sustainability-oriented approach. In this respect, students participate in international conferences centred on climate issues and also live “green” lives. Universities are not only institutions of education but also there to make society benefit from scientific research. However, sustainability will not come about if the topic is solely addressed in environmental science courses. It is a topic that needs to be touched upon by all scientific disciplines. Next to this
the campus itself can serve as an example of good practice. The main 
objective of these initiatives is to make the whole society more harmonious.

In his speech Dr Zhang also stated that the China Council for 
International Cooperation on Environment and Development (CCICED) 
depends on the Chinese government, more particularly the Ministry of 
Environmental Protection, and tries to provide the latter with the best advice 
in the field of environmental protection. Many support the CCICED, including 
the EU and many European development agencies. The evolution of the 
Chinese economy and environment issues need to be addressed. The 
industrialisation process should be completed more swiftly in China. At a 
guess, the process will take about 40 years. Currently the Chinese economy is 
still based on heavy chemical industrialization processes but this is expected 
to change rapidly. Since the mid-1990s, the issue of environmental protection 
has featured prominently on the policy agenda and has started to be 
considered in the context of national economic and social development. In 
2000, with the introduction of Phase IV, a single, unified framework of development that includes environment issues was created at the strategic level. The long-term goal was to strive for a harmonious society both domestically and abroad while following a peaceful, sound and fast development road. At the end of 2010, emission reductions exceeded the emission reduction targets for the first time. Phase V will start next year and will really push for a green transformation. However, there are still several concerns. First, the issue of quantity vs. quality: although the targets have been met, air and water quality are still not that satisfying. Second, there is a need for new technologies to boost carbon reduction. Third, the impact of a “green transformation” needs to be measured. Fourth, specific recommendations for the next Five-Year Plan need to be made, and finally the integrated control of different pollutants needs to be addressed. All these issues are currently subject to internal discussions and to international cooperation.
Dr. Song Li compared China’s 12th Five-Year Plan (FYP) and the EU’s 2020 Strategy, in terms of their respective emphasis, goals, tasks and actions, taking into account the fact that China is coping with climate change for the first time. The theme of the 12th FYP is scientific, green and sustainable development and its emphasis is on strategic economic restructuring; accelerating the transformation of the pattern of economic development; safeguarding and improving people’s wellbeing and the development of a resource-conservation and environmentally friendly society. Its main goals are to achieve significant results in resource conservation and environmental protection. Its policy orientation concerns improving incentive and constraint mechanisms for conserving energy and reducing emissions. Song Li compared the merits of the 12th FYP to the Europe 2020 Strategy and underlined the different emphases of both strategies. For example, while the EU 2020 focuses on sustainable growth, the 12th FYP focuses on the development of a resource-conserving and environmentally friendly society. Different emphases are placed on goals, as the EU 2020 aims to increase the share of renewable energy resources while its Chinese counterpart aims for significant results in resource conservation and environmental protection. The presentation was concluded with a detailed overview of the different tasks at hand for both actors.

Dr. Ying Yu mentioned in her speech that in 2011, with its GDP growing at a remarkable rate of 10.3%, China became the world’s second largest economy, the largest exporter and the second largest trading nation. However, China’s stunning success in economic growth in the last three decades has been shadowed by great challenges such as environmental deterioration, a high unemployment and inflation rate, enlarging social disparity and a lack of democratic channels. With increasing awareness of and determination to solve these problems, the Chinese leadership has put greater emphasis on the strategy of sustainable development and topped its policy agenda with promoting economic, environmental and social sustainability. As an integral part of the global sustainable development, China’s pathway is not only determined by its own domestic policy-making but is also influenced by international cooperation. Notably, EU-China bilateral relations have gained significance for both parties in recent years and their cooperation has covered key dimensions of sustainable development in a more comprehensive and constructive way. It is important to look at how Chinese elites (officials, scholars, entrepreneurs, media workers and NGO workers), who are the most influential in China’s policy-making circle, view the role of the EU in engaging China on sustainable development and the prospects of such cooperation.

According to Mr. Emmanuel Meneut, with regards to possible cooperation between the EU and China over the development of a low
carbon economy, two scenarios have arisen since the Copenhagen Conference in December 2009 (COP 15). The first scenario entails China perceiving that international negotiations involve a certain risk to Chinese sovereignty. An example is the Chinese rejection of the American proposal during the COP15, which outlined the way in which GHG emissions were measured by scientists appointed by the international community in China. The Chinese delegation argued that these measurements should be based on rigorous and precise values and trends. The second type refers to a situation whereby Chinese companies are seen to be distorting the market. Two papers have been written on the detailed study of two cases that provide good examples of these types of situations. The papers analyse the nature, the features and dynamics of the obstacles. The first case focuses on the recent development of a pollution haze over Beijing and the role of the measurements made by the American embassy on Chinese public opinion. This case proved to be very embarrassing for Chinese officials and highlights the difficulties of handling official measurements and their communication to the public. If the EU wants to develop cooperation over this theme, it must do more to combat this problem. The second case draws upon the strategic use of rare earths production by Chinese companies, like Baotou Steel. The US and the EU want to bring rare earths cases to the World Trade Organisation (WTO), to fight against distortions introduced by the use of an export quota; a trade tariff; a restriction over production licenses and a set of tools to control the export of rare earths in China. In effect, such restrictions are important as China has a monopoly position of 95 percent of world rare earths production. They are no doubt serious obstacles to further industrial and political cooperation.

Prof. Yiwei Wang argued that since the EU identifies itself as a soft/civilian/normative power and China identifies itself as traditional culture community, and as no direct geo-political confrontation between China and Europe exists, the major problem between the two parties is that they share different value systems. Public diplomacy thus plays a crucial role in bringing together China and Europe with regards to global governance. As the new White Paper on China’s peaceful development indicates, China is seeking to promote the common interests and values of mankind. Common values, which are shaped when the international community collectively deals with common challenges, have become a driving force behind China’s engagement with the world. To build a green world, these common values must be promoted. Indeed, a green world, which includes a green life (way of living), a green economy (way of producing) and a green mentality (way of thinking), can, and should, be promoted by adopting new, universal values. Prof. Wang analysed how people-to-people dialogue is shaping China and the EU’s shared values with regards to promoting a green economy, green life and green world and looks into how public diplomacy provides a huge space for future harmonisation of the Chinese-European ways of thinking. As expected, China-EU high level people-to-people dialogue (HPPD) is becoming the third pillar of China-EU relations. It is attempting to bring together Chinese and European ways of thinking and is developing models of and diplomacy towards a green world.
Ms Binbin Wang introduced Oxfam’s Climate Change Communication Program for China, highlighting the role and activity of Oxfam in the country in terms of climate change. For this purpose Oxfam has published one book and several articles on climate change. On top of this, numerous events and seminars on climate change have been organised by Oxfam. These activities took place in line with the international agenda on climate change, as it figured, or as it will figure, during the Copenhagen, Cancun, Durban and Rio20 conferences. Oxfam hopes to build up a communication platform for related stakeholders through this programme, calling upon more people to fight against climate change.

After the presentations, Alex Kirby pointed out two major challenges for future EU-China cooperation in the field of environment and green economy. The first concerns the lack of understanding in the EU about China’s intentions. The second concerns the evolution (or lack thereof) in price reform in China in relation to its 12th FYP. Mr Kirby also noted that in an attempt to try to combat the geopolitical problems that arise because of resource scarcity, both actors will have to help fabricate an international regime for rare earths in the 21st century. More generally speaking, cooperation between both players seems indispensable.
PANEL 2: EU-CHINA ON CLIMATE CHANGE

Dr. Diarmuid Tomney argued that EU engagement with China on climate change has suffered from a failure on the EU side to develop a sufficiently deep understanding of the interests and domestic politics of climate change in China. The opaque nature of the Chinese political system and shifting interests within the Chinese bureaucracy with respect to climate change policy make this task particularly challenging, but also extremely important. In short, the EU needs to learn to listen, as well as to speak better. These difficulties are, to a significant extent, the result of institutional limitations on the EU side. First, the European Commission, which has primary responsibility for managing EU relations with China in this area, has devoted insufficient resources and personnel to managing the relationship. Second, the division of responsibility between DG Climate Action and the European External Action Service (EEAS), according to which DG Climate Action has assumed responsibility for EU external climate policy, reinforces the tendency to view climate policy in narrow, technical terms and limits the strategic oversight that the EEAS could provide. These institutional difficulties on the EU side have limited the scope and effectiveness of the EU-China relationship on climate change. Deepening the relationship and developing European understanding of Chinese interests and politics would benefit both the EU and the relationship as a whole.

Sam Geall’s speech focused on how the linkages between journalism and citizen engagement help to create opportunities for better cooperation on sustainability between China and Europe. Climate-change reporting in China has increased in quantity, originality and detail over the past few years. China’s media reports a wider range of opinions and angles about climate change than ever before. International cooperation has also helped to create a number of opportunities for Chinese environmental journalists, including conferences, training programmes and award schemes. Moreover, in the aftermath of the UN climate summit in Copenhagen in 2009, some high quality information about climate change in China was published. However, despite these developments, obstacles remain. First, there is confusion about the science of climate change among journalists and there is also a problem with regards to the “balance” between “believers” and “skeptics” as a frame for reporting the climate-change issue. Combined, these problems lead to a misrepresentation of the scientific consensus, which is misleading for citizens and policymakers alike. Second, widespread frustration exists among journalists at the lack of transparency in China, although recently there are suggestions that the situation is improving. A potential solution to the latter concern is to build awareness of China’s 2008 regulations to make government information accessible, since surprisingly few Chinese journalists have an understanding of how these regulations can help them gain access to information.

Prof. Zheng spoke about “climate change communication”, a field which has attracted increasing interest. Climate change communication can
be defined as a social communication activity that enables the general public to understand climate change and to help find ways of tackling it. All actors involved in the climate change debate must use media communication to communicate, to understand policies so that coordinated action can be achieved. In his project Zheng tried to include scholars from other disciplines and media experts. In China, Zheng’s centre is the first of its kind. It was born out of the Copenhagen climate change conference and Cancun, where it hosted side conferences. According to Prof. Zheng, international conferences on climate change have encouraged the government, the media and NGOs to interact more and have also highlighted that mutual benefits could be achieved by coming up with theoretical support for the fight against climate change.

Dr. Jianyu Zhang’s speech focused on the fact that a partnership between government industries, NGOs and businesses is being formulated in China, to improve climate change negotiations. Moreover, the Chinese government is becoming increasingly open to outside influence. The CCICED is encouraging various attempts to provide a boost to climate change negotiations. An important initiative is a dossier that has been compiled on low carbon farming, which outlines a whole range of low carbon farming projects being carried out in China. The CCICED made a presentation in front of an international audience in Durban on this issue and the Chinese government recognised the importance of the presentation because of the linkage it made between the Party Liaison Committee and climate change issues. Another programme the CCICED supports is the “Cool China programme”. This mainly involves working with schools and communities to promote low carbon issues. For this programme, a low carbon tour in China was organised. Next to this, the programme of “green commuting” has been put in place. The unique feature of this is to offer a commuting card that is embedded with a carbon reduction card. The aim of the NGO, more generally speaking, is not to get an endorsement but rather to get a “locking effect”, to ensure that reform will go forward and not backwards.

In his speech, Pietro De Matteis pointed out that China and the EU have become key players in the climate change debate and have benefited largely from the international climate change regime. For these reasons, both players are extremely interested in the survival of the regime which, nonetheless, needs to be reviewed in order to ensure that it takes into account the changes occurred in the international system over the past 20 years, and that it maintains its mutually beneficial nature. China, for instance, has managed to influence global climate negotiations by creating coalitions supporting its views (e.g. CBRD principle) and has largely benefited from technology and know-how transfers which have substantially improved its ability to tackle local challenges, including pollution, energy security and energy efficiency. For its part, by developing policies, technologies and standards, the EU has become a major international player in the creation of the climate change regime. This has also significantly strengthened the EU’s bilateral cooperation with China at the bureaucratic, technological and policymaking levels as the EU has helped China upgrade its legislation and know-how (e.g. Euro standards for car
exhaust gases, energy efficiency labelling, CCS technologies). De Matteis pointed out that between Kyoto and Durban the level of legalisation of the climate change regime has increased, and the rules and institutions making up the regime have become increasingly binding for emerging economies, which has the effect of reducing earlier differences in terms of commitments between developed and developing countries. Given the benefits of the current climate change regime, both the EU and China consider its continuation as a key objective. However, only stronger multilateral institutions may be able to secure win-win solutions in the medium/long term. In this light, an increasing level of legalisation of the climate change regime could be expected in the coming years.

Dennis Pamlin was pleased that the panel reflected the way in which climate discussions have been evolving over the years. Climate Change dialogue before 1992 was to a large extent a science-driven discussion: what is the problem, how should we approach it? During the last 20 years the issue has moved away from its scientific focus towards a focus on diplomacy. However, many environmental journalists do not understand diplomacy. It troubles them because they do not understand how to portray the discussions. Nowadays we have moved from focusing on diplomacy to focusing on implementation - journalists all of a sudden have to discuss technologies, of which they have limited knowledge. In particular, they have to discuss smart building and new sustainable lifestyles. The EU discourse on China focuses either on depicting China as a threat, or on the export opportunities for Europe in the Chinese market. The approach is too often an approach whereby the EU acts as a colonial power and thus does not treat China as an equal partner. Mr Pamlin noted that the panel reflected a new range of stakeholders that is needed: we need clusters that are building on different parts of society to really bring about change. The challenge is not just the climate issue in itself. We are taking the step beyond the industrial society. We are moving into a knowledge economy and a quality economy, where GDP is not our main indicator anymore. Climate change attracts the best minds but this also creates the biggest egos. The role of the media is often underestimated because the issue is so complex. However, as the focus has moved from scientific discussion to implementation, the media now has a very important role.
Mr. Jun Li stated that efforts are being made to improve climate change mitigation through using fewer natural resources (low carbon production). The hope is that this will improve the efficiency and productivity of the EU and China. The EU and China are very important economies and are relevant in terms of population, energy consumption and when it comes to producing advanced technologies or carrying out research. In terms of the global economy, they trade the most with each other and the EU is the main supplier of technology and Foreign Direct Investment to China. Equally, climate change challenges are similar to both: there is a need to mitigate and a need to cooperate to reach the 2ºC target. Another common challenge concerns maintaining growth and job creation. However, the energy supply mix poses different challenges to these two players. All in all, a paradigm shift is needed for both the EU and China to achieve their long term climate mitigation targets. Absolute emissions in China would need to peak somewhere between 2020 and 2030, while in the EU almost 80% of emissions need to be reduced by 2050 in comparison with 1990. International energy prices are correlated to carbon productivity improvement/energy efficiency, so pressure to reduce oil consumption is likely to affect oil markets in the future. However, economic agents are quite short-sighted and are unlikely to foresee the long-term, unexpected, rise in prices. Therefore, cooperation in low-carbon technologies needs to be enhanced and the dilemma is how to maintain growth and employment while lowering emissions. Stimulus packages should be combined with this paradigm shift and the private sector needs to be encouraged to invest in green sectors and R&D. China is likely to learn a lot of positive lessons in terms of improving market regulations and adopting a solid legal framework for the carbon market from the EU. The EU and China can be the de facto global leaders on this issue and the world can be encouraged to follow them. However, they will need to reconcile their growth policies with climate change mitigation measures and they will need to give stimulus to private sector investment in research and development.

Mr. Giles Dickson was quite optimistic about what is going on in China. Concerning China and the power sector, there is growth in non-fossil fuel power, including hydro and wind power. This trend is likely to continue; as pointed out by the 12th FYP, the Chinese economy is de-carbonising. Moreover, the average efficiency of power plants that use coal is higher in China than in the EU and the US. There are also many agreements on low-carbon electricity generation and several joint demo-projects for carbon capture and storage have been set up. These include two stations established jointly between Datang – a Chinese company – and Alstom in China, which should be running by 2016. Facts and figures show that in 5 years (2011-2016) nuclear, wind, hydro and solar facilities in China are going to increase very significantly. By 2020, China intends to have reduced its CO2 emissions per unit of GDP by 40%-45% in comparison with 2005. The target for
non-fossil fuels in the 12th FYP is to go from 8.3% now to 11.4% of the energy mix in 5 years. These examples highlight the fact that China is much more ambitious than the EU in terms of renewable energy promotion. The country is also increasing the percentage of GDP devoted to research and development to achieve its objectives. China is the “place to be” when it comes to low-carbon economy promotion. There are many policy initiatives to promote green development, such as the renewable energy law (2005), and plans to reduce CO2 emissions have been put in place.

According to Ms Yinan He, a possible mechanism for CO2 emission mitigation is to restructure China’s thermal power source. The main source of energy during the 11th FYP (2006-2010) – coal – has remained China’s primary source of energy and coal consumption is increasing, partially due to lacking internal energy generation. The production of electric power is over-dependent on thermal power generation (16% of the total), while nuclear power amounts to less than 2% and coal over 81%. Currently, 95% of Chinese electricity is produced by coal. Thus, there is a need for mitigation because China’s energy demand will continue to rise in the coming years. However, the Chinese energy structure is also expected to remain unchanged (less coal, more oil) in the medium-term, so it will remain difficult to reach emission reduction targets. Thus, assuming that the proportion of thermal power in electricity generation stays equal, that the annual GDP growth rate goes down slightly (from 8% to 7% over next 5 years) and that the average elasticity of electricity production towards growth of GDP will be around 1, electricity consumption will rise. The aim of her study is to try and substitute coal for oil so as to make the Chinese energy sources come to 50% oil and 50% coal by 2020, thus bringing about the possibility to reduce CO2 emissions.

Veolia Environnement is a provider of environmental services to municipalities and industries in the fields of water, energy, waste management and transportation. The presentation of Mr de Meeûs focused on the service operator’s perspective with regards to what the transition to a low carbon economy entails and it provided examples of solutions that have been put into practice in the EU and China. Addressing carbon emissions has become a focus in terms of services and is sometimes even a pre-requisite for a company to enter the market. Cities, which are usually densely populated and account for high carbon emissions and significant energy use, are central to the transition and will play a key role in the fight against climate change. Local decision-makers and communities have to be given a core role in terms of policy development, financial mechanisms and communication. The EU-China summit in March 2012 underscored this when a partnership for green urbanisation was agreed upon. A low-carbon economy goes through local agents and stretches across all services that can be provided by them: water management, waste management, public transportation and building, etc. Mr De Meeûs mentioned two examples: a thermal energy storage project in Boras (Sweden), currently contributes to the city’s objective to become free from fossil fuels. Moreover, the Urumqi Hedong wastewater treatment plant (China) produces biogas to significantly reduce its dependence on traditional energy sources, thereby reducing its carbon footprint.
Dr Susanne Nies did not agree with the optimistic point of view presented by Mr Giles. She argued that one week of Chinese emissions corresponds to a year’s worth of emissions in Europe. One should be careful when saying that China is going to de-carbonise. There are no prospects for change. The situation, whereby coal represents 80% of the power generation mix in China, is likely to stay the same in the coming years. There is an imminent need for carbon neutrality. The EU’s ETS should be the basis for change but nowadays it is in troubled waters. This is because it meets the target of reducing carbon but does not encourage low-carbon technologies. Moreover, there is no cooperation over support schemes in Europe from third countries and these schemes are very expensive for consumers. In order to improve coherence in this respect, there is a need for consistent EU and third country policies. Thanks to massive investments, we are currently moving towards increased efficiency of renewable energy resources. On top of this, there is the need to integrate European markets much more by 2014 (which should be the date of the single energy market in Europe) so as to enhance delivery capacity. The EU Renewables Directive has introduced cooperation mechanisms between the EU’s member states and between themselves and 3rd countries, however, these are nearly not used in practice. There is a need to enhance infrastructure and to integrate further the renewable energies market in Europe.

Mr Stephen Boucher closed panel session 3 on the low carbon economy. He presented a couple of questions to the panel, which were followed by a fruitful debate with participation from the audience. His main questions were:

How can political will be developed to make low-carbon policies more effective? Cooperation (at all levels, including with private sector) has been taking a lot of time to start – how can it be encouraged? What is the Chinese perception of Europe’s low carbon efforts? And, finally, what could Europe do to support China in low carbon initiatives?
According to Dr. Haitao Lan, from the year 2000 to now, green agriculture has been growing rapidly in China. The size and structure of green agricultural production has changed considerably. Moreover, the overall tendency with regards to domestic and international sales of green products is set to expand and the production mode of green agriculture is steadily advancing. However, in recent years, we can notice two opposite trends. On the one hand less-processed green products increase, while on the other hand deeply-processed green products decrease. This is mainly linked to the evolution of prices as the financial crisis has led to a decrease in exports and a new concern for food safety in China and abroad. However, what is a “green product” from a Chinese perspective? The focus is placed on the need for these products to be certified by public authorities, according to standards which are increasingly in line with international standards and which have the aim of reducing the use of fertilizers and pesticides. In the future, China’s green agricultural production will expand. It will offer a considerable market space for the export of advanced EU technologies and agricultural equipment. The European debt crisis has weakened the ability of Europeans to consume high-priced green agricultural products and thus demand for cheaper green agricultural products from China will increase. Transforming China’s economic development model is an arduous task. Environmental pollution is causing difficulties when it comes to green agricultural cooperation between China and the EU. What’s worse, China and the EU are in different stages of development. As a result, differing demands for green agriculture will further harm cooperation. Therefore, we should attempt to establish a Green Agriculture Cooperation Fund between China and the EU. At the same time, China should actively seek technical and financial support from the EU in developing green agriculture and should strengthen green agricultural research cooperation between European and Chinese research institutes and universities. In addition, China and the EU should make mutual efforts to eliminate discrepancies and reduce cooperation frictions.

The focus of Dr Rodolphe de Borchgrave’s presentation was on “food safety” as an area linked to green agriculture and one that is full of opportunities for greater EU-China cooperation. The EU has developed a “Rapid Alert System”, one aim of which is to monitor food imports that do not meet food safety standards. Products coming from China represent, by far, the ones creating the highest number of alerts. This is an indicator of safety concerns over China’s food products. A well-known example is the “Sanlu case”, when melamine was discovered in baby milk formulas. The EU has created a “Food and Veterinary Office” (FVO), which attempts to validate third countries’ control of exports to the EU market. This provides a form of food safety monitoring abroad by the EU. According to FVO, the overall situation in China is globally satisfying, but some sectors clearly have bigger concerns than others and implementation remains a problem. The example
of genetically modified organisms (GMOs) illustrates this point: Chinese official policies at the national level impose sanctions, which are sometimes contradicted by local unofficial practices of cultivation. This creates the risk of there being obstacles to trade with the EU, which has a zero tolerance policy for imports of non-approved GMO products. Against this background, Dr Rodolphe de Borchgrave identified a number of action points for future EU-China cooperation.

Prof. Michiel Keyzer pointed out that the EU and China owe their success in agriculture since the 1950s to their small and high yielding family farms. By the middle 1980s, both recognised the environmental threats of such farms and started advocating green agriculture. However, their interpretations of this concept differ. While the EU has been evolving from farmer friendly to biological farming, and has advocated moving towards a bio-based economy, China has been emphasising ecological, organic and sustainable agriculture. Both promote better land management and erosion curbing initiatives, but China traditionally gives higher priority to the re-using of organic waste, and the EU focuses on preservation of historical heritage sites, eco-systems, biodiversity and animal welfare. China significantly overuses chemical N and P fertilizers and K deficit, has a strong geographical variation across the country and suffers from contamination by heavy metals. Another problem in China involves the overuse of pesticides. This has serious detrimental effects on the environment. Current policies emphasise reduced NP use per hectare; recycling to contain the influx of contaminants and treatment of organic waste to avoid pests and diseases. These are fields where China and the EU can cooperate with each other.

Pierre Laconte closed the session on green agriculture by referring to EU policy. For the EU, the past 50 years of the Common Agricultural Policy have proven very costly. Concretely, about 50% of the EU’s budget has been assigned to the agricultural sector, (which represents about 3% of the EU’s population). Thus, changes are needed in order to adapt to an ever-more open worldwide market. Additionally, several other issues have to be tackled, including: the significant use of phosphorus in the production process; the conflict of use of land for agriculture versus for the production of biofuels of 1st generation; the debate over the possibility to develop “hydraulic fracturing” in order to make more oil available versus the impact of such a process on water resources and, more generally, on the environment.
PANEL 5: GREEN MANUFACTURING

In his speech, Dr. Feilun Du highlighted that in 2010, the Chinese manufacturing industry accounted for 54.4% of the total Chinese energy consumption. Despite a clear decrease over the past few years, the Chinese manufacturing industry remains a very high energy consumer in comparison with developed countries’ manufacturing industries. The manufacturing sector remains the main source of pollutant emissions in China, a country threatened by global record emissions of sulphur dioxide (SO2) and waste water. There are three aspects to the green transformation. Firstly, the green transformation should be tackled at the macro-strategic level to encourage a shift from resource dependency to improvements in technology so that exploitation can be more efficient. Secondly, at the industrial level, the increase in high-tech manufacturing and high value-added sectors should be pursued. Moreover, the manufacturing sector should attempt to develop a circular economy, which turns pollutants into resources. Thirdly, at the factory level, clean production and clean technology should be put into place as soon as possible. The government has to play a leading role by implementing environment taxes, green government procurement and tightened environmental standards. It should also play an active role in supporting R&D and innovation. Industry should remodel itself technologically and structurally towards a cleaner and greener production.

Mr. Frans Verspeek argued that the relevance of green manufacturing within the framework of EU-China relations stems from the interdependence of Europe and China, which pushes for a need to work together. To achieve this, there is a need for innovation as well as a need to scale up the application of what already exists, through introducing smart partnerships. This is the focus of the SWITCH-Asia Programme, a partnership between EU-based and Asian firms, funded by EU DG DEVCO from 2008 to 2013. So far, 47 projects are running in Asia, of which 15 in China focus on green(er) manufacturing. Broadly speaking, the SWITCH-Asia Programme strives towards green(er) production and consumption. Some examples include: projects strengthening the electrical and electronics sector; eco-friendly bamboo production for reconstruction; sustainable wood processing and trade; low-energy housing; sustainable building interior renovation and decoration initiative in China (SUSBIRD). The programme also seeks to involve small and medium sized enterprises (SMEs) that have to show progress in their performance within the timeframe of the projects (4 years). There are many good examples of green(er) manufacturing in China and proven good practices encompassing more and more SMEs in China, via smart partnerships with multi-stakeholder involvement. The challenge is not only technological but also systemic, managerial and behavioural. There is a need to change consumption patterns since the problem is not only about manufacturing and producing but also about how people use what is produced.
Mr. Maximilian Rech stated that China’s rare earths policy should be a wake-up call for a European resource strategy. Indeed, while China has a clear policy on rare earths, the EU lacks a strategy and as China reduces its exports, ready availability of rare earths for processing in high-tech products in Europe cannot be guaranteed anymore. If Europe strives to be the most innovative knowledge-based economy in the 21st century, a European resource strategy is long overdue. China dominates the rare earths market and 97% of all European rare earths used in Europe are imported from China. China’s 12th FYP is an important game changer because of its key elements and policy objectives, including: the conservation of rare earths resources and the move towards more value added production in China. The reasoning behind these policy objectives are: very costly ecological externalities, the need to develop an innovative and knowledge-based economy based on sustainable and inclusive growth and the need to move from an export-led to a consumption-led economy. The EU and its member states are starting to formulate strategies for rare earths, but efforts remain insufficient and are badly coordinated. In this respect, several policy recommendations will provide Europe with the priorities that are needed as it attempts to complement existing policies with the development of a European resource strategy. These include increased cooperation with the National Development and Reform Commission to develop and promote a global environmental mining standard for rare earth elements and the continued use of the WTO dispute settlement mechanism to ensure free trade of rare earth elements.

Ms Yuyan Song pointed out that the Tianjin Technological and Economic Development Area (TEDA) is one of industrial development’s success stories. Its aim is to rapidly increase economic development while at the same time reducing resource consumption and emission discharge. TEDA has developed several good practices in this regard, such as policy support provided by governments to enterprises in the form of subsidies for energy-saving projects. Furthermore, a project of industrial symbiosis (IS) was put in place in 2009, which is supported by EU funds (part of the EU Switch-Asia Project) and is implemented by a network of 800 member enterprises. This project helps to cut costs, diversify energy sources and reduce emissions. Alongside TEDA, Eco Centre was set up as the green business work platform in 2010 and it has a wide range of activities including information events (workshops, seminars, etc.); business matching; communication and showcases; international cooperation fostering; consulting and training and business incubation. TEDA’s hope is to implement more international cooperation in the market of energy conservation and environmental protection. Market analysis of green technology shows that there is a need to enhance general waste disposal and a need to produce new energy sources (biomass, etc.). A new technological park and a chemical industrial park are currently under construction in TEDA and the aim is to match the green standards of the first project.

Mr. Shuyao Wang highlighted that in recent decades, there has been a considerable shift in China’s manufacturing industry towards more value added production (an increase of 35%). Technology improvements are also
quicker due to bigger investments and there is more foreign direct investment into the industry. Additionally, there is a visible public stimulus for technology development through R&D. The main challenges faced by the manufacturing industry are its labour intensive production, the considerable damage it causes to the environment and the gap in technological experience. Furthermore, scarce energy resources are rapidly being used up to fuel intensive production. The environmental problems caused by such intensive manufacturing need to be reduced. High demand for raw materials has created excessive exploitation, which is a barrier to systemic change. There is also currently insufficient development in new technologies and an insufficient number of skilled workers working on environmental degradation issues. Solutions to these problems should be collective and would include green technology transfers as well as the injection of foreign capital. The market should also be monitored and regulated by the government. Technology has to be at the service of the manufacturing industry and the latter has to be transformed by the government, in order to ensure a holistic reform. Additionally, innovation and workers' skills should be enhanced. Finally, greater cooperation with the EU should be stimulated as the EU has more experts and leading firms in this area than China does.

Ms. Zhen Huang highlighted that the Asia Foundation is engaging SMEs in the transition towards a low-carbon economy in China and one example of this engagement can be seen in Jiangmen city. Most SMEs operate in sectors which are labour and resource intensive and export-oriented. A survey carried out in Jiangmen city shows that government agencies are the primary channels through which SMEs receive information on low-carbon development, although it is questionable whether they really understand this term and its implications. SMEs are also not familiar with the policies and standards relevant to low-carbon development. All in all, SMEs' attitudes towards this topic are mixed. Indeed, SMEs care about subsidies and are interested in low-carbon development; however, most of them have not joined the process of transition because they remain hesitant. One of the reasons is the potential costs of investment in new technologies and the uncertainty of returns. Among all possible low-carbon actions, cleaner production is the most widely taken action by SMEs in this city. Moreover, more than 60% have adopted energy-saving technologies. The reasons for this change are partly the policy shift of local authorities and, equally, the energy shortages. In 2011, there have been cuts as a result of insufficient supply, pushing companies to attempt to anticipate and bridge the possible gaps that these cuts cause. SMEs have also sought to obtain ISO certification, as their production is intended for export to countries with high standards requirements (the US, the EU). The implications for companies of joining the transition process are: reducing costs and promoting technology innovation. In general, companies believe in the positive impacts. However, some barriers still hamper their participation, such as the considerable time it takes to get a return on investment.

Mr Stanicek, in his speech, suggested organising similar discussions every year, either in the EU or in China. His main question concerned how to “jump” to the next level. There is a clear political will to change, but we have
to find concrete ways of how to achieve green growth. Mr Stanicek also believes that China will have to deal with the education challenge in order to spur the green transition. Financial investments cannot solve all environmental challenges if they are not accompanied by behavioural change and investment into human capital that enhances environmentally friendly values. Both municipalities and SMEs could become drivers of change and could be proactive in educating citizens and consumers. One option for the latter would be to promote CO2 neutral production and introduce practices to offset their carbon footprints.
Dr. Runqing Hu talked about the development of renewable energies in China. Although a rapid development of renewable infrastructures can be noted, this has not led to a strong increase of renewables in the overall energy mix of the country, which amounts to about 8.8%. Nevertheless, changes are occurring in the national planning through the “12th five year renewable energy development planning”, which commenced in 2010. The aim for 2020 is to reach a 15% share of non-fossil energy in China’s energy mix. Advantages associated with China developing non-fossil energy will be: ensuring energy safety, protecting ecology and the environment; reducing GHG emissions; boosting economic development and supporting sustainable social development. Another advantage would be the fact that economies of scale could develop quickly in the manufacturing renewable industry. In the meantime, there are obstacles to renewable energy production, including the energy pricing mechanism; the decision-making mechanism; technology improvement and industry development and know-how. Amongst the challenges, the current funds for renewables are neither sufficient for large scale utilisation, nor for grid connection and digestion of large scale renewable energy projects in China’s north and west regions. Furthermore, there are considerable barriers to distributed energy development and utilisation and safety issues arise with regards to nuclear energy. In conclusion, the following policy suggestions can be made: there is a need to establish renewable energy funds; to modify the non-fossil fuel electricity price and adjustment mechanism; to establish a mandatory renewable energy quota system; to introduce a policy and supervision mechanism for non-fossil energy industries and to promote national demonstration programs.

Dr. Ying Feng introduced the current science & technology cooperation framework on clean energy in China. She then analysed the strategic transformation of international science & technology cooperation in the energy field in China by introducing a US-EU-China international comparative study. She summarised four main differences between China and developed nations (the US/the EU) with regards to clean energy issues. Dr. Feng also introduced a Clean Energy Diplomacy (CED) concept and put forward a set of policy suggestions on how to introduce a national Chinese CED strategy and, particularly, on how to promote an international science & technology cooperation framework on Chinese CED in the coming years. The focus is on the development of CED as a national strategy for China. It is important to note that this “clean energy diplomacy” is not an official Chinese policy, but an academic view. Broadly speaking, from 2008 on, there have been two major shifts in current energy diplomacy, which is the basis of and reason for CED. First, there is a shift in focus from conventional to clean energy. Clean energy refers to both the clean utilisation of traditional energy and of renewable energies. Secondly, there is a functional shift whereby clean energy, as an economic-technological sector, is seen as one of the
largest potential growth sectors of the next industrial revolution. CED, however, has much more of a scientific and technological component than traditional diplomacy issues do. Therefore, a new understanding, a new vision and a new thinking-set towards CED need to be developed and we especially need a lot of “Crossovers”. One of these crossovers is to evaluate and then devise CED from a combined viewpoint of foreign affairs and science & technology.

The focus of Mr Rémi Gruet’s presentation was on wind energy from a business perspective. China holds the 1st market for wind power, where there is considerable local leadership of Chinese companies. However, outside China the global leaders are mostly European companies. China is slowly starting to export its wind energy knowledge and products, notably with the help of the China Development Bank, but this trend is only a recent one. As a conclusion, one can state that on the world market, there is no EU-China cooperation. On the contrary, there is a rather fierce competition to access markets. Chinese companies are leading the Chinese markets, while the European companies lead elsewhere. The European Companies have a lot of opportunities since they have a technological and competitive advantage. In fact, the EU is the cradle of renewables. In order to maintain competitiveness on the EU side, clear 2030 renewable energy targets are needed, as well as climate signals such as a higher price of carbon introduced by the ETS and more appropriate public finance allocation.

Mr Baptiste Buet presented AREVA’s activities and the companies’ solutions for low CO2 energy generation. AREVA has been present in China for over 25 years, with a focus on nuclear energy. Nowadays, 4 European pressurized reactor units are under construction, two of which are in China. AREVA is committed to developing local partnerships, partnerships for which a sustained presence in China over the long term is required in order to fully enter the local energy market. The Chinese 12th FYP offers such possibilities, and AREVA is also working through funding and projects of the European Commission to cooperate with Chinese authorities, particularly over the development of international standards for nuclear safety. The FYP aims to develop low CO2 energy, which provides possible EU-China cooperation opportunities. AREVA expects China to increasingly use nuclear energy and Asia to become the leading market for nuclear projects worldwide. Hence, cooperation between the EU (through EURATOM) and China in the field of nuclear safety will be crucial. This cooperation should continue and be strengthened so as to promote the highest level of nuclear safety.

Dr. Cora Jungbluth pointed out that China’s economy has grown at a remarkable speed in the last three decades. The flipside of this growth has been the virtually unrestrained exploitation of natural resources and the environment. In recent years, China’s alarming environmental situation has forced party leadership to take action. It has become clear that China needs to change its model of growth. In their debate on this issue, Chinese scholars and politicians believe that China has to build up a green(er) economy with strong emphasis on the application of renewable energy as a foundation for sustainable development. Dr. Jungbluth argued that China indeed has the potential to emerge as one of the world’s leading nations with regards to the
application and enhancement of renewable energy. Important foundations have been laid by the institutionalisation of environmental protection and low-carbon policies in recent years, which, on the one hand, has substantially increased governmental support for the implementation of renewable energy projects. On the other hand, preliminary evidence shows that the overall process for China to achieve a globally leading position with regards renewable energy will take up much more time and capital than anticipated by Western as well as Chinese political and scholarly circles.

After the presentations Mr Kirby spurred a rich debate by raising several questions, including: why do some people refer to renewable energies as producing “garbage electricity”? How can we increase transparency in order to accommodate the need for increased public awareness and information when it comes to energy safety (especially since the Fukushima incident/accident)? How can we deal with the critical implementation role of local layers of government? The debate was concluded with the issue on how to realistically deal with the challenge of zero CO2 emissions by the end of the 21st century.
PANEL 7: GREEN URBANISATION

Dr. Wei Xiang examined the characteristics of China’s urbanisation, which is often compared to that of developed countries and is marked by large-scale and concentrated cities that are densely populated. China’s urbanisation path has brought about problems, such as the excessive concentration of public resources and an imbalance between regions. Another difficulty is associated with the identity of an urban population that includes 210 million migrant workers who, due to the hukou registration system (household registration system), are not able to be officially registered as residents of China’s cities and therefore cannot benefit from the services. Dr. Xiang also underlines the effects of this urbanisation model on energy consumption, which is currently increasing rapidly. Even if the 12th FYP has made some progress, there is still a need to overcome the problem of mass energy consumption. Another problem is represented by the extensive use of construction land. Dr. Xiang argued that the root causes of the current state of China’s urbanisation are the concentration of Chinese growth in the manufacturing sector and the lacklustre nature of the services sector. He concluded by stating the need to improve China’s policy of green urbanisation, as China certainly has to develop in the direction of green and low carbon urbanization. This will involve readjustment on many fronts, such as space structure of urbanisation, industrial structure, land use policy and social policy.

Dr. Xuefeng Wang examined whether China can manage sustainable urbanisation or not. Unlike urbanisation in the United Kingdom or other Western developed countries, which faced a relatively simple pattern of economic growth, China’s urbanisation takes place at a time when the world is becoming increasingly globalised and the emergence of a knowledge economy/society is materialising. This means urbanisation in China has to face more complex challenges than that of developed countries. Given its vast scale of territory and severe regional disparity, China is a country where a knowledge-based economy; a Fordist (machinery dependent manufacturing-based) economy; a machinery dependent agricultural economy and a traditional labour intensive agricultural economy co-exist simultaneously. The combination of these significantly distinguished modes of production suggests that China’s urbanisation should not follow the urbanisation pattern in developed countries. The current Chinese urban system - four levels of administrative hierarchy including provincial, prefecture, county, and commune levels – enables the high level cities to oversee the low level ones. The high level cities also have privileged access to political and financial resources. High level cities therefore have comparative advantages over lower ones in every respect. Such a system has led to a relative urban concentration where better resources (even large manufacturing resources) are increasingly concentrated in higher level cities, which, as a result, lure more and more migrants. Problems stemming from this pattern of urbanisation are becoming increasingly apparent in large cities,
such as unaffordable housing, urban sprawl and traffic congestion. The policy response to this is to prioritise the development of 11 metropolitan regions/city clusters. Dr. Wang concluded with the open question of whether the city-region or the territorial development approach represents a valid answer, and stressed that more efforts should be put into studies and research in order to develop an appropriate policy on urbanisation.

Mr. Laurent Béduneau-Wang pointed out that in times of crisis, while we need to regulate financial flows better, we also need to enable financial resilience at the local level. Bottom-up solutions could complete top-down proposals. He showed a case study of the city of Curitiba (Brazil) which had problems with waste management, in particular in the favelas, without any significant budget to tackle it. The solution found by local policy-makers was to release vouchers (a kind of complementary currency) to everyone who collected waste, to be used to buy cabbage overproduced in the countryside or to get public transportation tickets. The experiment was successful, not expensive (<0.05€/Curitiba inhabitants) and brought about positive side-effects such as a reduction in criminality in the area, an increase in the population’s health, a beautification of favelas and a higher rate of schooling. This case study shows how a complementary currency can be used to solve specific local issues. Such solutions are not widely known; policy-makers are focused on financial reengineering or financial re-regulation. It could be more efficient to replicate already-efficient and local solutions, such as a complementary currency, and to reduce the thirst for financial complexity. A complementary currency could be an additional option in the public policy portfolio. Mr Béduneau-Wang wondered if Chinese policy-makers could consider this kind of solution as a way of tackling local problems. It would certainly help to prevent global financial imbalances from having negative impacts on local communities.

Ms. Yu Wang Vedrine examined the problem from an architectural point of view and provided a comparative analysis between French and Chinese sustainable policy and approaches. There is no globalised concept of green urbanisation, she said, because global intentions need to be reconciled with local action and have to take into account local land policy, geographical characteristics and the construction culture. The global approach generally highlights three main needs: to develop green networks using technologies, to foster the public transport network and to create a neighbourhood structure. This theoretical analysis was supported by two case studies: New Jiangwan (Shanghai, China) and Clichy-Batignolles (Paris). She held that the local concern of green urbanisation is not how to adopt the new “green criteria” but how to create a local green urbanisation model according to specific cultural, geographical and institutional conditions. For example, the main concern in China is at a general level and centres upon how to reconcile green urbanisation with the continuity of the Chinese construction culture, which is based on its geographical characteristics and has a high sensitivity to the sun, the wind and the orientation. At a practical level, concerns revolve around how to reduce the defects of the residential community model in the current zoning system.
Professor Fengting Li focused on the water challenge in his speech. China’s water distribution varies considerably from the North to the South of the country: in the South water resources are more abundant, but suffer from deterioration and pollution. The data for wasted water are on the rise (about 6% every year). At the same time, the quality standards for surface water are deteriorating and it is very common in many Chinese provinces (especially in the North) to have to use low quality water as a water resource. The 12th FYP envisages improvements in many regions thanks to a 3.1 trillion RMB investment plan combined with the increase in the environmental industry by up to 15-20%. But these efforts have, in his opinion, to be combined with increased re-use of water resources. A large part of the pollution that can be found in China’s water resources is attributable to the paper industry and to some heavy pollution industries. Improvements are possible. Compared with the German paper industry, China’s pollution is five to seven times larger and China has to learn from German techniques and acquire the necessary technology. As a conclusion, technology exchange with the EU is required as part of the solution to this Chinese problem.

Dr. Pascaline Garibot from the European New Towns Platform stressed the different context of challenges in China and the EU. Although the environment is considered a policy priority in Europe, the financial and economic crisis and local budget cuts have made the development of sustainable city projects difficult in recent years. In China the “3S” model of development (size, speed, scarcity of resources), associated with demographic and urban growth, intensifies the scale of the problem. Green urbanisation is a common interest and over the last few years the EU has increasingly produced regulations in this field. China’s 12th FYP made it a priority, as a widely spread sense of emergency and escalating migratory pressures are causing alarm amongst policy elites. Urbanisation in Europe is not balanced but concentrated. China faces a rapid urbanisation process (the urbanisation rate increased from 20% in the 1980s to the current 51.3%) and the urbanisation path is exacerbating the existing differences between the countryside and cities. It also acts as a catalyst to social challenges. Dr. Gaborit suggested that China should reinforce medium-sized cities. Furthermore, technology is certainly part of the solution, but urban planning is fundamental. Their EAST-Project provides some policy recommendations to improve capacities, to develop the skills of local teams (urban planners, architects, investors, local authorities) and to implement networks and knowledge exchange and local strategies.

Mr. Philippe Morgan de Rivry said that tackling green urbanisation challenges can be done through a combination of factors: green building, efficient transportation, renewable energies, health and open space, green farming and an efficient urban form. In his speech, he compared the transportation network of the Netherlands with France and China. In the Netherlands, an efficient train system has been developed and interconnected with bicycle, pedestrian and automobile networks. In 2011, 26% of the population used bikes as their main mode of transportation, whereas cars were only used for long distance transportation. This was due to the fact that city and town centres are pedestrianized and this is suitable for
the development of a sustainable model. In France, on the contrary, the linkages between suburbs are not developed and transportation networks are extremely efficient only in downtown areas, such as Paris, where only 2 million people live. However, lifestyle has also changed and suburbs are no longer just commuter towns. In one example Mr Morgan de Rivery gave, about 82% of the suburban population lives and works in the same suburb or adjacent suburban centres and only 18% of this population commutes to downtown Paris. In France, as in China, the inefficiency of the transportation network can be traced back to four factors. The first is financial: available funds are concentrated in the city centres and in both France and China, housing prices drive low income households away from downtown areas and urban sprawl continues. Second, there are challenges involved with 'retrofitability' in the densely built areas. Third, there is a perception problem due to the fact that policy-makers are generally more sensitive to the problems of downtown constituencies. Finally, there is the problem of scalability, which involves the question of whether sustainable models like the Dutch one could be implemented in Chinese cities. Mr Morgan de Rivery urged policy-makers to reflect on these problems and exchange examples of best practices and test new models and hypotheses to tackle these challenges, especially in China.

Mr. Thomas Wobben summarised the panel discussion by highlighting some key issues. First, the sustainability of the Chinese urban model, not only from an environmental but also from a social perspective. Second, the role of forward and long-term planning for developing urban areas. Third, the financing of green urbanisation projects. Fourth, the question of what the drivers of change are (top-down or bottom-up). Fifth, the difficulty of switching from economic to sustainable development, aggravated by the demographic “time-bomb” in China that is expected to unravel in approximately three to four decades. Sixth, the challenge of resource scarcity and the role that technology development and transfer could play to overcome it and seventh, the room for cooperation with the EU and the difference between national and regional competences in the EU on the matter. Mr. Wobben stressed the importance of the existing Strategic Dialogue on Regional Development between the EU and China with regards to advancing the urban agenda, as well as the forthcoming signing of a Partnership on Sustainable Urbanisation on 3 May in Brussels. Finally, he also emphasised the political momentum and expertise developed at the Committee of the Regions regarding urban issues.
CLOSING SPEECH

Michel Lebrun

Mr Lebrun emphasised that there is a need for a sound EU-China partnership over green economy and sustainable development, in order to tackle issues such as climate change and resource scarcity. Both parties have a crucial role to play in shaping the pattern of consumption and production worldwide. Furthermore, both Chinese and European cities could benefit from the partnership, in terms of boosting urban sustainability through exchange projects. In this respect, the Committee of the Regions (CoR) welcomes the “EU China Partnership on Sustainable Urbanisation”.

Furthermore, Mr Lebrun underlined the importance of efficient management of the earth’s resources in the future, since current consumption patterns are unsustainable in the long term. In this respect the CoR welcomes the initiative “A Resource Efficient Europe”, which flows from the 2020 Strategy. The CoR emphasises, in particular, the importance of development towards a zero-waste society.

Mr Lebrun also invoked the high propensity of future investment in urban areas and the importance of the sustainable character of these investments. Cities are important actors in developing a green economy and therefore the CoR supports several initiatives such as the “Compact City Model” for European cities. The CoR suggests that Chinese cities should also undertake such initiatives.

Finally, Mr Lebrun stressed the importance of the outcome of Rio 20+ summit, where the CoR will negotiate for sustainable initiatives from a local and regional perspective. Two priorities stand out: sustainable urbanisation and effective implementation, for which sufficient finance will be required from both public and private sector.
GROUP PHOTO OF CONFERENCE SPEAKERS