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CO	Confidential, only for members of the consortium (including the Commission Services)	

E-conference report with particular focus on stakeholder involvement in Germany, Italy, Sweden and UK

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1. Introduction

During the project, an e-conference accessible from the PLANETS website has been carried out. Its main objective was to ensure, by means of on-line discussions, the participation especially of the stakeholders of the PLANETS Countries (Germany, France, Sweden and UK) where project meeting were not organized. Three e-conferences have been arranged and three categories of participants were invited: all the stakeholders previously identified by the Consortium (in D2), project partners, and registered users to the PLANETS web-site.
Each e-conference lasted about one month and covered various issues that have recently emerged in the climate change debate.

The first e-conference was about the role of China in global economic and environmental issues. The second one explored the opinion of respondents on the role of carbon capture and storage (CCS), a technology that is still under development and which has the potentiality to ease the transition towards low carbon scenarios.
The third e-conference was structured in two parts. The first looked at a set of issues that have shaped the climate policy debate in Europe over the last year; the second part got back to the role of CCS, but in comparison with other mitigation options. The topic of each e-conference was chosen on the basis of the discussion that emerged during the workshops and local stakeholder meetings.

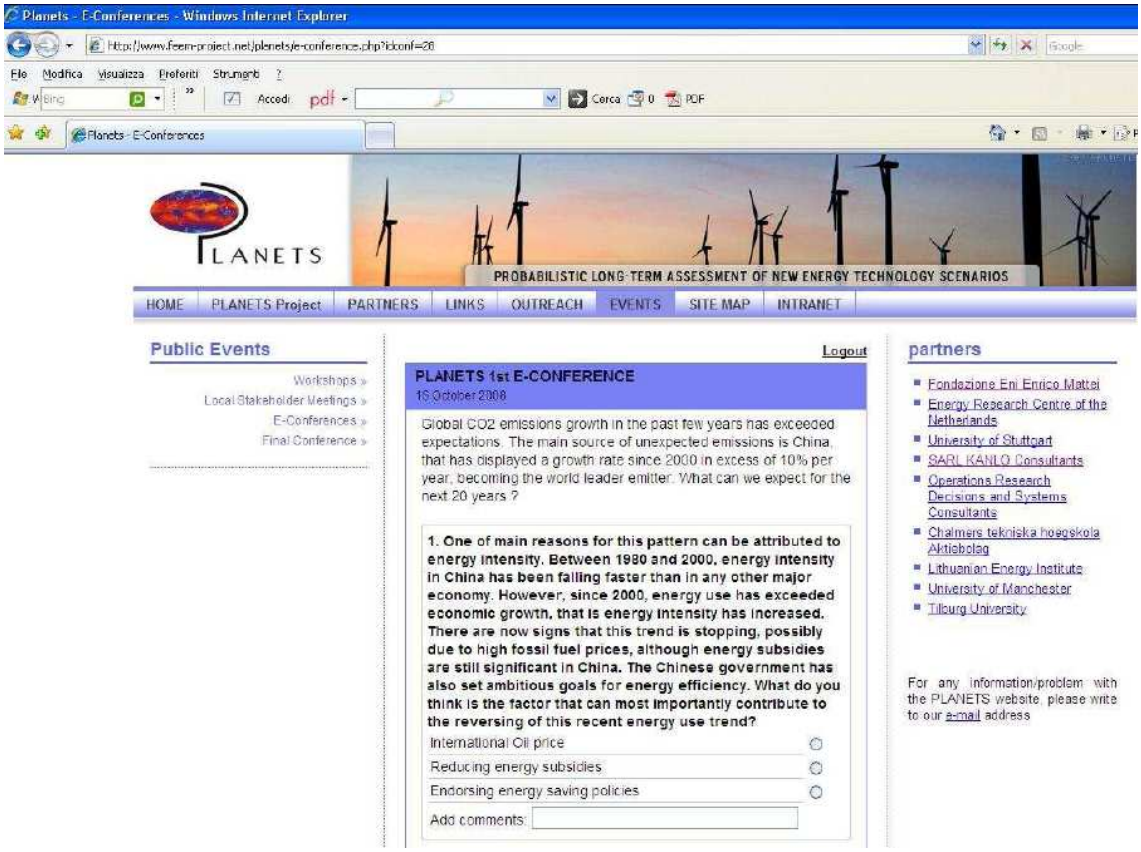
This deliverable briefly summarizes the contents and the main results of the three e-conferences. Complete comments to all results and the relative statistics have been published on the project website http://www.feem-project.net/planets/e-conference.php.

2. First e-conference. China economic and environmental trends (16/10/2008-16/11/2008)

The first PLANETS poll has focused on China energy and environmental trends. The participants have been asked to give their opinion on Chinese energy intensity, electricity mix, and carbon emission growth, with a focus on future development and potential policy measures. The poll lasted a month, and it was attended by about thirty people, including partners, invited stakeholders, and registered users.

All participants could access the questions proposed in each e-conference by the project website. Figure 1 shows an example taken from the first e-conference and it shows how the questions were proposed. For each question the user had the option to choose one from a list of selected answers. In addition, for each question there was the possibility to give specific comments.

Figure 1: Structure of the e-conference: an example



2.1 Results of the first e-conference

Despite the sharp increase in Chinese energy intensity since 2000, more recently this trend has been reverting. The poll asked the voters what could be the causes behind this change of direction. Most respondents considered endorsing energy-saving policies as a key factor that can mostly contribute to revert the recent growth of Chinese energy intensity. International Oil price has also emerged as an important driver. A participant has especially pointed to the role of increasing coal prices. Finally, reducing energy subsidies has been judged as less important, although its complementarity to energy saving policies has been highlighted.

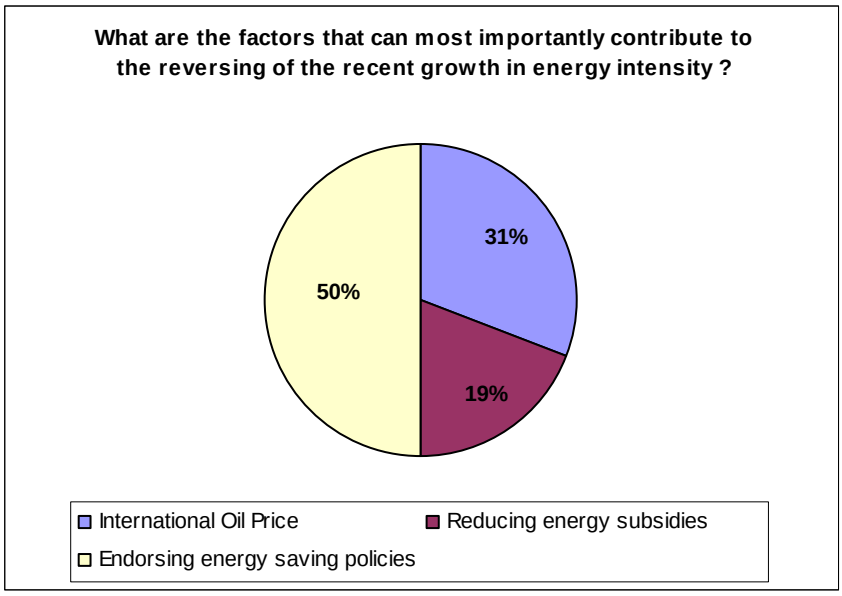
The second question was about the Chinese energy mix in the next 20 years. This question shows a general awareness that the Chinese electric power capacity additions in the next 20 years will be characterized mostly by a growing focus on nuclear, and on renewables. Only the 15% of respondents predicted a similar (coal based) trend as the one observed in the last decade.

The third question was about future projections for Chinese emissions. The majority of respondents thinks that China CO2 emissions growth in the next 20 years will follow the trend observed in the past since 1990, e.g. 6% per year, whereas 33% of votes have agreed with the latest EIA projections (4% per year) and the remaining 25% believes that it will follow the trend observed since 2000 (over 10% per year). It has been pointed out that the trend might be non linear, slowing down towards the end of the projecting period.

The respondents' comments to this poll have emphasized that Chinese authorities at various levels are increasingly taking atmospheric pollution very seriously, but that China is just starting to implement environmental policies, mostly through command and control measures, while market based instruments are still largely unused. It has also been pointed out that China still has considerable room to maneuver energy taxes in order to promote energy savings.

Figure 2 reports an example of output that was obtained using the responses to the first poll.

Figure 2: Example of output from the first e-conference



3. Second e-conference. Carbon Capture and Storage (CCS) and climate mitigation: opportunities and obstacles (30/03/2009-30/04/2009)

The second PLANETS poll has focused on the role of CCS in climate mitigation. The participants have been asked to give their opinion on what are the major obstacles to large-scale deployment of this technology, on where there are the largest potentialities and what is the role of CCS in comparison with nuclear and renewables. The poll lasted a month, and was attended by about twenty people, including partners, invited stakeholders and registered users.

Investment costs are found to be the biggest obstacle to a large scale deployment of CCS. On a slightly lower level, public acceptance and transport and storage costs are also deemed relevant factors. One participant has pointed out that each of these three obstacles is sufficient to destroy hopes about CCS deployment, while other participants have suggested other important factors such as plant efficiency and the firms' acceptance and willingness to invest. Finally, the future price of carbon is considered a key variable for CCS, taking into account that alternative GHG reduction options might be cheaper.

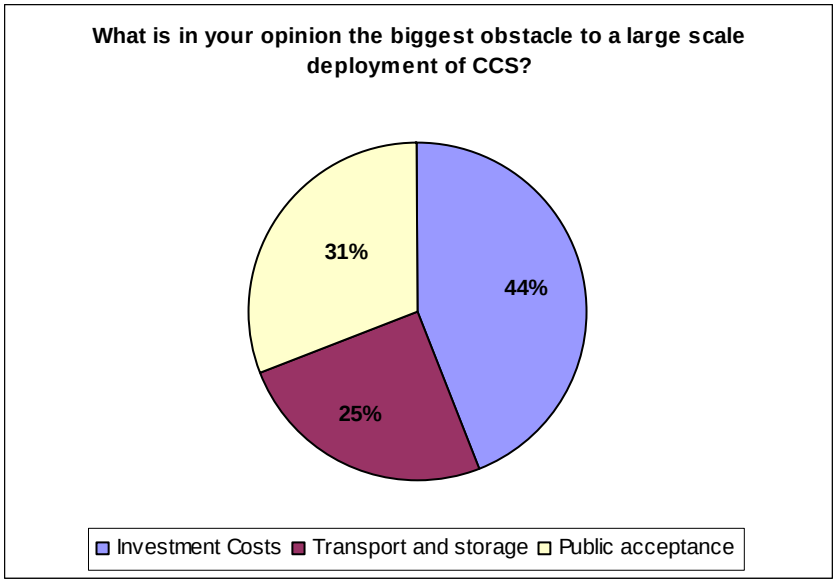
Regarding the geographic location, the majority of respondents thinks that the greatest contribution of CCS will occur in Europe, given the leading role of Europe in climate change mitigation policies, whereas the remaining half of respondents evenly splits between US and China as leading nations. It has been pointed out that US, EU and China will not act at the same time and that there is a large potential in China, but it depends more on political commitments.

Most of respondents thinks that Wind and Solar technologies hold the greatest potential in the next two to three decades. Nuclear has also emerged as a relevant technology, while CCS has been judged as less important in the short term. A participant stressed that nuclear could have great potential for the next two decades, while renewables for the following.

It has also been pointed out that the main obstacle to increase coal utilization in China may be logistics rather than climate protection; the Chinese railway system is saturated by transporting coal from the North/Northwest (coal deposits) to the South-East (most industrial activities): this is the main driver for the development of nuclear in the South-East of the country.

Figure 3 reports an example of output that was obtained using the responses to the second poll.

Figure 3: Example of output from the second e-conference



4. Third e-conference (08/02/2010-08/03/2010)

The third PLANETS poll has focused on a set of issues related to the EU climate policy (five questions) and on the future of CCS (six questions). The poll lasted a month, and was attended by about twenty people, including partners, invited stakeholders and registered users.

4.1 Climate Policy in the EU

The first bloc of questions asked opinions about setting a floor price in the EU-ETS, about how to use the proceedings from auctioning, about coupling the carbon price with other regulations such as emission performance standards (EPS), the exemption of CCS from the purchase of emission credits, and about limiting the amount of credits that can be bought on the international market.

The majority of respondents seems to support the idea the EU-ETS should be somehow regulated. Most of them are in favor of a price floor between 10 and 20 euro/tCO2 and support other regulatory measures such as EPS. In addition, the majority is in favor of some restrictions on emission permit trade. A great majority believes that auctioning proceedings should be used to finance R&D in low carbon technologies and that CCS should not be fully exempted from purchasing emission permits.

4.2 The future of Carbon Capture and Storage

The second bloc of questions asked opinions about the role that CCS currently plays in the domestic debate on climate change, about its future prospects, and about its performance relative to other mitigation options.

Most voters regard the role of CCS in their own countries as not very relevant, although the majority said that over the recent past the debate on CCS has become more lively.
Regarding the time profile of CCS, most voters believe that it will yield credits only in 10 to 20 years from now.
When compared with other technologies, CCS is better than conventional coal power but it can be considered worse than options such as hydropower, wind turbines, solar power, and nuclear fusion. The options that are more comparable to CCS for a larger number of voters are natural gas, nuclear power, and biomass/bioenergy.

Making these comparisons is not without controversies, as testified by the numerous comments raised by the respondents. Comparison with some technologies such as nuclear fusion is hard to make because it depends on its availability, which is still unknown. To some voters, the comparison with wind and solar is not totally appropriate because coal with CCS is a baseload option whereas wind and solar are not. Other comparisons that appear difficult are those with gas and nuclear.

Regarding the future availability of low carbon technologies, it seems that the most promising technology in the next 10 years is solar energy, whereas the one that is less likely is nuclear fusion. Most voters believe that CCS will probably take 20 years before being largely deployed When talking about solar, respondents stressed the importance to specify whether photovoltaic or concentration solar is meant. Regarding hydrogen power, it was commented that it cannot be regarded a real power generating technology. Regarding fuel cells, application to vehicles might be more challenging.

Figure 4 reports an example of the output that was obtained using the responses to the third poll.

Figure 4: Example of output from the third e-conference