

June 27, 2014

## “Energy sector innovation and policies in the 2015 agreement” SB40 Side Event Report

Overseas Environmental Cooperation Center, Japan (OECC)  
Prepared by Jiro Ogahara

This is a report of a side event held at the 40th Session of the Subsidiary Bodies of Implementation of the UNFCCC from June 4th to 15th 2014, in Bonn, Germany.

- Title : “Energy sector innovation and policies in the 2015 agreement”
- Date : June 12, 2014 (18:30-20:00)
- Organizer(s) : International Energy Agency (IEA)
- Venue : Tram, Ministry of Transport
- Panelist(s) :
  - Mr. Jean-François Gagné, Head, Energy Technology Policy Division
  - Mr. Juho Lipponen, Head, Carbon Capture and Storage Unit
  - Mr. Marco Baroni, Directorate of Global Energy Economics
  - Ms. Melanie Slade, Energy Efficiency Unit
  - Ms. Liwayway Adkins, Environment and Climate Change Unit
- Abstract: This event focused on two key issues: 1. The potential for stronger energy efficiency action to support ambitious mitigation contributions 2. The critical role of innovation in technological deployment and development in reducing costs and increasing feasibility.

### ■ Summary

1. Mr. Jean-François Gagné: Opening remarks
  - Mr. Gagné introduced the session by underlining the importance of energy efficiency issues, the ambition of mitigation contributions and how technology and finance play a role in these challenges. The event also served to introduce a recent publication: the World Energy Investment Outlook.
  - He indicated that it is necessary to think on short term objectives without losing the long term perspective. IEA works developing technologies but also do novel uses of existing technologies in the long term, not only through science and technology but also through public policy and behaviors.
  - He concluded by indicating that we need to combine innovation with policies.

2. Melanie Slade: “Innovation in energy efficiency policy”

- In this brief presentation, Ms. Slade talked about recent trends in energy efficiency policy providing some data.
- She also asked the audience to see the Energy Efficiency Market report which compiles recent information.
- She elaborated in energy security issues and how growth in demand for energy is also an energy security issue for some countries.
- She underlined multiple benefits of energy efficiency and how this is related to the co-benefit approach.

3. Mr. Juho Lipponen: “CCS long term goals, short term action”

- In this presentation, Mr. Lipponen talked about a specific technology of carbon capture and storage (CCS)
- He talked about recent technologies and how CCS can be used through multiple applications (e.g. Bio CCS, CCS from natural gas processing, etc.)
- He indicated that CCS technologies are ready for scale-up, and how the technologies are there but costs need to be reduced; underlining that strong policy drives investment.
- Some key actions mentioned were: to introduce financial support mechanisms for demonstration and early deployment, laws and regulations to build new power capacity, increase efforts to improve understanding among public, etc.

4. Mr. Marco Baroni: “World Energy Investment Outlook”

- This presentation introduced the special report titled the World Energy Investment Outlook, and Mr. Baroni provided the key messages of the publication.
- He indicated that investment in energy efficiency at the global level has been increasing, but the reality is that the amount of money necessary to develop a unit of energy has doubled in the last years.
- One important conclusion was that markets can mobilize investments, but also policy.
- How do we encourage investment in low carbon technologies? Reduction of cost of capital gives a lot of implications. New financing vehicles could help lower the cost of capital.
- He concluded by indicating how the role of governments in energy markets is on the rise, while private investors are wary of the political and regulatory risks. Credible policy and pricing signals are essential to redirect capital flows towards the 2 degrees target.
- The final message was that new financing vehicles can help reduce the cost of capital,

making investment in low carbon technologies more attractive.

5. Ms. Liwayway Adkins: “Recent IEA work on climate change policy”

- She introduced upcoming publications from IEA such as “Energy, environment and climate change” that will be released in September of this year.

■ Q&A

Q.1 (Hiraishi, IPCC): To Mr. Baroni: You have compared the US and Europe policies and markets and also showed big numbers of necessary investment in the coming 10 years. I assume that actual investment in renewables differ depending on the location. Lots of investment will be required in emerging economies as well. Please explain how they are related with political implications

A.1 (M. Baroni): The intention was to give the order of scale and magnitude in shale gas and renewables. This report provided data and I was also shocked. It is necessary to make an analysis of effects from policies. These policies mobilized this kind of investments, so we need to think in the future because 40 trillion will be necessary over the next 20 years. Please take note that there are substantial differences between OECD and non-OECD countries. In terms of investment it is normally the US, Europe and China that needs considerations, but developing countries might have other differences.

Q.2 (Unidentified representative from China): Please clarify about cost effectiveness of CCS projects. Now in China there are government oriented actions affected by climate change policies.

A.2 (Juho Lipponen): “Commercially viable” is the concept used to see if a project is cost effective. There are different implications depending on the sector and the country but more qualitative analysis of policies is also required.

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English:

[http://www.mmechanisms.org/e/info/event/details\\_oecc\\_SB40report.html](http://www.mmechanisms.org/e/info/event/details_oecc_SB40report.html)