June 10, 2013

"National GHG Emissions Baseline Scenarios: Learning from Experiences in Developing Countries" Side Event report

Overseas Environmental Cooperation Center, Japan (OECC)
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This is a report of a side event held at the 38th Session of the Subsidiary Bodies of the UNFCCC from June 3rd to 14th 2013, in Bonn, Germany.

■ Title : National GHG Emissions Baseline Scenarios: Learning from Experiences in Developing Countries
■ Date : 18:30 – 20:00, Monday, June 10, 2013
■ Organiser(s) : Danish Government
■ Venue : Room Metro at the Ministry of Transport of Germany
■ Presenter(s) : Jacob Krog Søbygaard (Danish Energy Agency: DEA), Andrew Prag (OECD), Daniel Puig (UNEP Risø Centre) and Andrew Marquard (South Africa)
■ Abstract: How do we develop and share good practices and ensure higher degree of transparency in baseline setting? Discussions based on the recent report by the Danish Energy Agency, the OECD and the UNEP Risø Centre on practices and lessons learned in baseline setting in developing countries have been presented.

■ **Summary**

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1. Andrew Prag (OECD): "National greenhouse gas emissions baseline scenarios: learning from experiences in developing countries"

■ This presentation is based on a publication of a report on national greenhouse gas emissions baseline scenarios. Their preparation for the publication started about two years ago.
■ Mr. Prag started his presentation by explaining what baseline scenarios are and why they are important. Ten developing countries from Latin America, Africa and Asia participated in their research. The bulk of the report consists of direct contributions from developing country experts, which is complemented by a synthesis by the editors. The report covers four main themes: modelling tools, assumptions and sensitivity analysis, data management, and transparency and inclusiveness.
■ The key messages from the publication are: 1) the importance of transparency; 2)

whether or not to include impacts of implemented policies can affect baseline scenarios; and 3) there are many uncertainties involved in developing baseline scenarios. He noted that it would be possible to do more on this area, such as, enhancing transparency and building trust between countries regarding contributions towards the 2015 agreement and sharing experience and lessons learned between developed and developing countries.

■ He explained to what extent baselines scenarios should be influenced by existing policies. In developing baseline scenarios, we need to consider which policy measure are to be included (only climate specific policies or other policies impacting on emissions) and when a new policy becomes an "existing" policy (how long it takes for a new policy to become a law). He stated that whether and how to include policy measures ultimately depends on the specific circumstances of the target country.

2. Jacob Søbygaard: "Transparency in baseline scenarios"

■ Mr Søbygaard stressed at the outset of his presentation that transparency is a key issue in terms of gaining national and international credibility. In order to enhance transparency, it is necessary to clearly show what assumptions are made based on what reasons.

■ He showed several specific country examples in their report, which include a joint baseline comparison project between Mexico and Denmark (in which two very different baseline scenarios were attributed to different assumptions on key economic indicators, such as fossil fuel prices).

■ He stated that the benefits of comparing different baseline scenarios include: positive impacts on the baseline building process, identification of sensitivity of baselines, positive impacts on climate policy, increasing transparency, and showcasing good practices.

3. Daniel Puig: "Quantifying the uncertainty of baseline scenarios"

■ Mr Puig showed at the outset of his presentation that baseline scenarios can change drastically depending on different assumptions. In many instances, it is very difficult to reduce uncertainties surrounding setting baselines, so it is in most cases more realistic to merely quantify uncertainties. Among all the sources of uncertainties, GDP is by far the most important determinant.

■ There are three ways to improve the accuracy of baseline scenarios: expert input elicitation, Monte Carlo simulations and Bayesian model averaging (a statistical technique).

4. Andrew Marquard: Presentation on South Africa's experience in setting baseline scenarios

■ He talked about South Africa's experience in setting baseline scenarios. He remarked that there were extensive discussions on which model to be adopted and specific inputs to be calibrated into the selected model. In terms of the review process, their study was reviewed by a UK team of experts as well as the World Bank. He also explained that they had extensive discussions on which policies to be included in developing baseline scenarios, but they discovered in the end that whether to include relevant policies or not would not dramatically affect their scenarios. With regard to uncertainties, he stated that baseline scenarios are by definition counter-factual, which makes it difficult to verify them empirically.

■ **Q&A**

Q. (Unidentified): Please elaborate more on the confidentiality issue in developing baseline scenarios in South Africa.
A. Mr Marquard: It has a lot to do with the fact that only two companies are virtually responsible for the bulk of emissions from the energy sector in the country.

Q. Mr. Puig: 10 countries cooperated with their research this time. Would those wearing a pink badge (members of national delegations) be interested in sharing similar information with them?
A. (A few members of national delegations raised their hands, expressing their interest.)

Q. (Unidentified): What were the conclusions with regard to uncertainties in different sectors in the report?
A. Mr. Søbygaard: Different kinds of uncertainties emerge in the context of different countries. So it is difficult to draw a general conclusion from this.

Q. (Unidentified): What are the main sources of uncertainties other than GDP?
A. Mr. Marquard: Oil prices were a major factor in the case of South Africa.

Q. (UNFCCC): How would their work be useful in developing NAMAs in developing countries?
A. Mr. Prag: Setting baseline scenarios is important for any countries to assess potential

emissions reductions in the future.

Mr. Marquard: It is important to distinguish short-, middle- and long-term NAMAs.

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To access the Side Event Reports, please refer to the following link:

English:

http://www.mmechanisms.org/e/relation/details_oecc_SB38report.html