



By ENCI-LowCarb Project (2009-12) supported by the EU 7th Framework Program



Lessons Learned

Research Institute - NGO Cooperation on Collaborative Low-Carbon Scenario Design within the ENCI-LowCarb Project

Within the ENCI-LowCarb Project (Engaging Civil Society in Low-Carbon societies), project teams of researchers and NGO-representatives developed low-carbon scenarios for France and Germany, based on stakeholder contributions. This exercise relied on hybrid models integrating macro-economic and bottom-up energy sector modelling. The Project also started a process of networking among researchers and NGO representatives on the transition to low-carbon societies and to create new researcher - NGO interactions on this topic. The Project reports outline valuable lessons to be used by others who want to produce low-carbon scenarios and strategies.

NGO-Researcher Cooperation

An important feature of the project was the cooperation between researchers and NGO representatives for the scenario development.

This cooperation opened the discussions between researchers and NGO representatives, enabling to bridge between the two working cultures.

One of the results of this cooperation was that NGOs gained experience with results of hybrid energy-economy models that are normally beyond their own purviews.

To foster viable cross-cultural communication, the German project team employed a useful communication method with formal “*wish-lists*”. First the NGOs made wish-lists with the expectations for each research group involved. Thereby each project partner gets a good understanding of how the others perceive his/her discipline. Each Project partner then presents the originally planned contributions in the Project and relates this to the wish-list items. After each presentation, some time is reserved for clarifying terms that were unclear or unfamiliar to one or more partners.

The German “wish-list” methodology and its use are explained in more detail in the article “Social Acceptance in Quantitative Low Carbon Scenarios”, Eva Schmid, *et al.*, 2011, available from the Project’s websites.

NGO-Researcher Meeting



Advanced Scenario Models

Traditionally, energy-economy models for energy scenarios have been either macroeconomic top-down models or micro-economic engineering models. Both concepts have their strengths and their weaknesses. To bridge this gap, the ENCI-LowCarb Project used hybrid models integrating bottom-up energy-sector modelling into a top-down macroeconomic framework. This methodology is state-of-the-art in the modelling of national energy strategies, similar to the models used by national energy planners and the EU. Within the Project, the REMIND-D model was developed for Germany by PIK, based on the global REMIND-R model. Similarly, the IMACLIM-R France model was adapted by CIRED to Project specifications.

The competent use of advanced models increases the robustness and, hence, the credibility of the

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scenarios. It reflects and integrates more aspects of future developments than do simpler scenarios. Once developed and tested, the hybrid models also allow quick production of new scenarios that are similar to the ones already established.

The use of the hybrid energy-economy models requires some resources, mainly in the form of research time. It also requires experienced researchers that are able to handle these computer models in a competent way. Further, it requires good input data; the model results are no better than the inputs. In the Project, the research teams in Germany and France each consisted of an experienced researcher and a PhD student who had spent the majority of his/her PhD project on the adaptation and use of the model.

Stakeholder Involvement:

A core activity of the Project was the development of a methodology for the transparent integration of stakeholders' contributions into the scenario design process to enhance their acceptance of the resulting low-carbon pathways. This is useful to strengthen the foundation of the scenarios and to increase their realism, as well as to preview the kinds of support and opposition to a given scenario that might be expected in the sectors involved.

Whom to Involve:

It is not easy to choose stakeholder representatives. They must represent prominent players and trends in a constructive way that can be used to inform scenarios for low-carbon development paths. The Project partners decided to involve a small group of stakeholders based on their importance in their respective sectors and based on their interests. Typically 12-15 stakeholder representatives were included in each group. These choices led to stakeholder discussions including contrasting views. In some cases, a consensus on measures to reach the proposed CO₂ emission reduction target was not found. The groups seem to represent well the views within the sectors, illuminating some of the challenges ahead in the transition to a low-carbon economy.



Stakeholder Meeting

How to Involve Stakeholders:

The project partners adopted a process that started with expert meetings in key sectors. This first round of meetings were followed by stakeholder dialogue meetings in the same key sectors. In Germany, then followed a final round consisting of new sectoral stakeholder dialogue meetings with feedback whereas in France it consisted of one cross-sectoral feedback meeting. Each stakeholder representative was invited to two meetings. This provided the option of informing the first scenarios with the expert meetings and of adjusting scenarios between the first and the second dialogue meeting.

To involve the stakeholders and get open discussions, it was helpful that the proceedings did not include specific quotes from stakeholders, but only summaries of stakeholder opinions. The Project partners (mainly the NGOs) used substantial time to invite stakeholders.

Networking for Low-Carbon Scenarios

In addition to developing scenarios, the Project also started the *Low Carbon Societies Network*, primarily for researchers and NGOs. This was filling a gap, as no existing network for NGOs and researchers bridged national borders and included groups working on different modelling tools for low-carbon scenarios. The network events were generally well attended, and by the end of the Project, the network's online database comprised 140 contacts.

INFORSE-Europe is committed to continue networking. The network serves as a gateway for NGOs and researchers who seek to develop low-carbon scenarios with stakeholder involvement.

Read more at www.lowcarbon-societies.eu
www.enci-lowcarb.eu.



Expert Meeting

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