The ENCI-LowCarb Project's activities for development of scenarios for France and Germany were done in each country with cooperation between a “Research Institute” with expertise in energy-economy modelling and a well established national “NGO” representing the civil society. The process was made through dialogues with “Experts” and “Stakeholders”. The results of the dialogues were translated to the modelling parameters.

The national collaborative process involved the following three general steps:

1. **Researcher / NGO Cooperation - Team Building**
   The cooperation among the “Researcher” and “NGOs” was facilitated by a team building to bridge the different traditions towards a successful cooperation. One example on how to do this was a “wish-list” method: A special challenge was that the model used for Germany could not directly represent policy measures proposed by the NGO and stakeholders. To address this, the German team employed a “wish-list” method that became part of the team-building process between the NGO members and the researchers in charge of model. The modellers received a “wish-list” that the NGOs would like to see in the model and what kind of results they expect. Each partner then presented what they originally planned to contribute in the project and relates this to the “wish-list” items. Thereby, each project partner got a good understanding on how the others perceive their discipline. Such an exercise revealed the considerations and thinking patterns of the project partners. The process also gave inputs about which stakeholders to consult for the next steps.

2. **Expert Workshops**
   During the experts workshops, the researchers clarified with sector experts that the assumptions of the model were technically and economically realistic (costs, potentials, learning curves etc.). Also the dynamics of the models themselves were discussed. The meetings further revealed that the experts do not necessarily have a consensus on a sectoral vision for decarbonisation. The outcomes of the expert workshops were then integrated in the modelling tools.

3. **Stakeholder Dialogue Meetings**
   The process included first a selection of the stakeholder representatives. The stakeholders were mapped on an interest/power grid. Those placed highest along the axis were selected.

   The number of the stakeholders were from 12 to 15 in each dialogue. The participating stakeholders were asked to define or select acceptable CO₂ emissions mitigation measures and their contributions were implemented in the energy economic model to create scenarios that are economically and technically consistent as well as acceptable by stakeholders.

   The dialogue meeting were held in two rounds for each sector. The second round was made as joint-sectoral meeting in France. This allowed cross-sectoral feedback discussions on the scenario developed with the policy measures agreed during the first round of meetings. The stakeholders filled out prepared questionnaires, and the information collected was then translated into the model’s relevant parameters and the scenario(s) was/were amended.

   For both rounds of stakeholder meetings, it was important that a professional moderator was involved and that the discussion was divided into sub-themes. With these, the meetings were considered effective from all participants. In this way the dialogues contributed to construct the scenarios around more realistic and socio-political acceptable elements, and it also provided knowledge on the strength of support and opposition that a given scenario can expect in the consulted sectors.

**Organizational structure and interaction diagram of the collaborative scenario building process.**

Additionally, there was an EU context, which is not shown on the diagram.

- 3 Posters visualising the 3-step process.
- 2 Fact sheets
- Reports from the concrete process in the respective countries.