

## Coalitions for Energy Innovation in Europe – Summary

This is a summary of a report written by the Clingendael International Energy Programme (CIEP) and CE Delft for the Dutch Transition Department IPE, in which several Dutch Ministries cooperate. The final report is for internal use of IPE only.

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### Introduction

The Dutch Government has started a specific process of energy innovation and social reform entitled “Energy Transition”. This process comprises a new policy approach, in which coalitions between Government, private- and public partners play a central role. The process is now under way for some years in the Netherlands.

Government now searches for other countries in the European Union, which have similar ambitions with energy innovation policies. Aim is to mutually learn from the different approaches applied, as well as to discuss if there are common grounds for joint positions in Brussels. It therefore has asked the Clingendael International Energy Programme (CIEP), together with its project partner CE Delft, to examine which countries could be suitable partners for cooperation. The project also has to provide a first basis for the cooperation in the form of an exploratory workshop with policy makers from these countries.

### Project set-up

Based on the request by the Dutch Transition Department, CIEP and CE have set up a project organised in five phases:

- Phase I: Investigation of the selection criteria that could be applied to find possible cooperation partners for the Netherlands in energy innovation.
- Phase II: A quick-scan of the 25 EU countries in energy innovation based on the selection criteria identified in phase I and choice of 5 to 6 potential partners
- Phase III: In-depth analysis of the 5 to 6 potential cooperation countries and preparation of a background document for a workshop to be organised.
- Phase IV: Organisation of a workshop with policy makers from the identified potential cooperation countries.
- Phase V: Preparation of a final report, comprising results, conclusions and recommendations for further steps in energy innovation cooperation for the Netherlands.

## **Project Results**

The results of this project are laid down in separate reports for each of the project's sub-phases.

In project phase I, the following criteria were identified for the comparison of the 25 EU member states on energy innovation:

- (1) Comparative advantages and economic advantages regarding energy;
- (2) Ambitions of energy innovation policies;
- (3) Activities in areas that connect with initiatives in the Netherlands;
- (4) A geographical factor.

Reason to include comparative economic advantages of countries in the list of criteria was that an insight in these advantages was thought to provide a better basis for understanding why countries would be ambitious in energy innovation and what their specific aims would be. A geographical factor was included in order to prevent a disbalance in the selection of countries over the EU, as this was considered to influence the possibilities for achieving majorities in Brussels if the cooperating countries were to act jointly towards the European Commission.

In the second project phase, the 25 EU member states were examined using the criteria identified previously. This led to a proposal to invite the following six countries for the workshop in The Hague, together with a Dutch delegation:

**- Denmark**

**- Germany**

**- Poland**

**- Spain**

**- Sweden**

**- United Kingdom**

Concrete leads for cooperation were identified in project phase 3 based on a more detailed assessment per country (Table 1). These leads were included in a workshop background document in order to inspire participants' discussions. Suggested leads included:

- Information exchange and cooperation in general steering concepts for energy transition and innovation ('best policy practices');
- Joint policy strategies in Brussels on specific issues;
- Joint awareness building at political level for the transition concept in general and the need to divide tasks internationally;
- Joint activities in the field of creating stronger societal awareness and joint research on the role of human behavior in this respect;
- Joint activities in the field of sub-soil CO<sub>2</sub> storage;
- Start-up of a team of countries that strives for strong and flexible infrastructure for energy transitions off-shore.
- Joint activities in the field of industrial ecology (existing pipeline structures and their use for new purposes);
- Joint automotive industry innovations;
- A green resources network;

**Table 1: Assessment of possible leads for cooperation in energy innovation per country**

	<b>An international coalition could benefit from the country's succesful:</b>	<b>The country could benefit from the coalition's:</b>
<b>Denmark</b>	<ul style="list-style-type: none"> <li>- biomass policy;</li> <li>- wind and offshore policy;</li> <li>- environmental awareness (building);</li> <li>- industrial ecology policy.</li> </ul>	<ul style="list-style-type: none"> <li>- Promoting energy innovation and transition in a wider, international context;</li> <li>- Other countries' experiences with wind offshore and energy infrastructure offshore;</li> <li>- Other countries' experiences with respect to industrial ecology.</li> </ul>
<b>Germany</b>	<ul style="list-style-type: none"> <li>- Economic strength and market size.</li> <li>- Advances in wind technology, and proven track record on renewables.</li> <li>- Influence in the global automotive industry.</li> <li>- Agricultural production.</li> <li>- Industry, and environmental advances therein.</li> </ul>	<ul style="list-style-type: none"> <li>- Markets, and access thereto.</li> <li>- Gas production and transport capabilities.</li> <li>- Off-shore wind resources.</li> </ul>
<b>Netherlands</b>	<ul style="list-style-type: none"> <li>- Public-private "energy transition" approach to energy innovation;</li> <li>- Experiences of the transition platforms in Sustainable Transport, Green resources, Chain efficiency, New Gas, Sustainable Electricity and the Built Environment.</li> <li>- Gas and port infrastructure, transport networks</li> </ul>	<ul style="list-style-type: none"> <li>- Learning from other countries' experiences in energy innovation;</li> <li>- Other countries' experiences with wind in general and wind offshore in particular;</li> <li>- Serving as a green resources and gas trade hub for other countries;</li> <li>- Serving as a experimental area for new mobility concepts.</li> </ul>
<b>Poland</b>	<ul style="list-style-type: none"> <li>- Coal reserves and movements towards cleaner coal production technologies</li> <li>- Connections to Russian gas</li> <li>- Advances in the cleanliness of Polish industries</li> <li>- Agricultural production, and expected growth therein</li> <li>- Enthusiasm for cooperation and multilateralism.</li> </ul>	<ul style="list-style-type: none"> <li>- Expertise in industrial efficiency.</li> <li>- Technological advances in renewable energy; wind, biomass and clean coal</li> <li>- Economic strength and market size.</li> <li>- Geology for CCS.</li> </ul>
<b>Spain</b>	<ul style="list-style-type: none"> <li>- Access to North African Gas, as well as LNG terminals.</li> <li>- Position as a wind energy leader, as well as their ambitious energy strategy.</li> <li>- Agricultural production.</li> </ul>	<ul style="list-style-type: none"> <li>- Experiences as major gas consuming (and producing) countries.</li> <li>- Developments in off-shore technology.</li> <li>- Advances in biomass applications.</li> </ul>
<b>Sweden</b>	<ul style="list-style-type: none"> <li>- Biomass policy;</li> <li>- Mobility policy;</li> <li>- Environmental awareness (building).</li> </ul>	<ul style="list-style-type: none"> <li>- Promoting energy innovation and transition in a wider, international context;</li> <li>- Other countries' experiences with coalition building between industry and government;</li> <li>- Other countries' experiences with wind offshore and energy infrastructure offshore.</li> </ul>
<b>United Kingdom</b>	<ul style="list-style-type: none"> <li>- Offshore policy;</li> <li>- CO<sub>2</sub> storage policy;</li> <li>- Gas policy</li> </ul>	<ul style="list-style-type: none"> <li>- Promoting energy innovation and transition in a wider, international context;</li> <li>- Other countries' experiences and needs with respect to sub-soil CO<sub>2</sub> storage;</li> <li>- Other countries' experiences with wind offshore and energy infrastructure offshore.</li> </ul>

The project workshop was held on the 24<sup>th</sup> of November 2006 in The Hague. In the workshop, some further examples for cooperation were given. These include mutual energy innovation business missions, stimulating of information exchange by civic society organisations, external promotion of joint actions, twinned policy research teams, signing a high-level policy intention declaration on energy innovation and bilateral working visits of policy makers.

### **Observations from the workshop**

Participants from Sweden, Denmark, Germany, Poland and the Netherlands contributed to the workshop. Their presentations can be found at [www.clingendael.nl/ciep](http://www.clingendael.nl/ciep). Some main observations ('lessons') are given here.

- Presentations given by representatives from the various countries varied strongly in character:
  - The Dutch presentation focused on the envisaged need for a new, 'transition' policy process, but did not elaborate concrete results in terms of energy efficiency improvements, renewable energy or cleaner fossil fuels. Neither concrete leads for international cooperation were expressed.
  - In the Danish presentation, it appeared that in Denmark such a transition is already taking place since the 1970s, and that with a continuation of present-day policies impressive results can be obtained (up to 80% renewables in 2025, depending on oil- and CO2 prices).
  - The Swedish presentation stressed changes due to the recent political changes in Sweden. The present Government investigates possibilities to sign an agreement with the opposition parties on long-term energy innovation. The energy innovation process in this country appears to be centred in a central innovation strategy which also covers other subjects than energy.
  - Energy innovation in Poland faces a double challenge, according to the presentation given in the workshop. Not only has Poland to do further work to comply with EU environmental regulations, but also the energy sector needs to be made competitive for a European market. In that respect, the Polish situation is quite different from the other positions towards energy innovation presented in the workshop.
  - Focus of German energy innovation policies lies, according to the presentation given, in particular in stimulating research. No 'transition' policy changes are envisaged in the near future, although the present dialogue of the Government with the energy sector parties might bring about some changes.
- Backgrounds of participants varied. It was envisaged to invite only policy makers on a strategic policy level, but in various countries the invitation sent was re-addressed to other parties, which resulted in a mixture of policy and research backgrounds of participants.
- In the workshop discussion, different meanings were given to various terms used. 'Transition', 'transformation', 'research', 'implementation', 'energy innovation' are examples of terms whose meaning was not unambiguously clear to all participants.
- Participants were generally prudently positive about increased cooperation of 'frontrunner' countries in energy innovation, although some expressed their feeling that existing forums should be used as much as possible. Further possibilities for action will depend on the reports of participants to their own Governments.

- Participants expressed their feeling that further cooperation should be centered more around concrete themes, rather than discussing broad strategies for energy innovation.
- The process of cooperation of ‘frontrunner’ countries in energy innovation is received positively by the European Commission.

Overall conclusion from the workshop is that cooperation of frontrunner countries in energy innovation is a trajectory that offers potential, but that is still quite a way to go before concrete results can be achieved.

### **Recommendations for further steps in cooperation**

Based on the workshop outcomes, the following recommendations can be given for further steps towards increased cooperation in energy innovation:

(1) The Dutch position should be made more clear. Why does the Dutch Government perceive a need for international cooperation of ‘frontrunner’ countries in energy innovation and, equally important, which concrete themes should such a cooperation encompass?

(2) The initiative for an increased international cooperation should lie more directly in the hands of high-level policy makers. The level of policy makers involved in the Netherlands determines to a large extent which level of policy makers can be addressed abroad.

(3) Organising a discussion with heads of the Dutch ‘Transition Platforms’ could be helpful in identifying needs and leads for cooperation and as such provide a better basis for the Dutch position.

(4) Once the Dutch position has become clearer, bilateral visits of policy makers to the countries participating in the workshop could contribute to identifying specific leads for cooperation. Care has to be taken that the right policy maker in each country is identified. Here too, cooperation on a high policy level would be supportive.

(5) It should be reconsidered which countries can best participate in the group of ‘frontrunners’ in energy innovation aimed at. In particular, it should be reconsidered if the geographical balance of EU countries aimed at in this project is useful or not.

(6) One option as a topic for bilateral policy visits to be planned would be to examine to what extent politicians (e.g. energy ministers) are willing to sign a ‘frontrunner declaration’, containing an intention to cooperate more intensively in the field of energy innovation with other ‘frontrunner’ countries.