



**PROPOSAL FOR A CEPS TASK FORCE ON**

**THE EU STRATEGIC ENERGY TECHNOLOGY (SET)**

**PLAN: FROM CONCEPT TO PRACTICE**

Chair: **Lars Erik Liljelund**, Chief Executive Officer, The Foundation for Strategic Environmental Research (MISTRA), Sweden, former Special Envoy of the Prime Minister of Sweden on Climate Change and Director General of the Environmental Protection Agency

Rapporteurs: **Christian Egenhofer**, Senior Research Fellow, CEPS  
**Jorge Nunez-Ferrer**, Associate Research Fellow, CEPS  
**Monica Alessi**, Research Fellow & Programme Manager, CEPS

**First meeting: 19 November 2010 (from 10h-16h)**

Second meeting: 14 December 2010 from 10:h30 to 16:h30  
Proposed date for the third meeting is January or February 2011  
(Date will be set at the first meeting)

Meeting venue:  
Centre for European Policy Studies (CEPS)  
Place du Congrès 1, 1000 Brussels

## 1. Introduction

Creating a global economy that emits a fraction of its current greenhouse gas (GHG) emissions will not only require wholesale changes in the ways economies are structured, but more importantly a new and unprecedented innovation drive in the EU and beyond. This is especially true for the energy producing and consuming sectors, which are responsible for up to 80% of total GHG emissions. There is consensus now that economic growth, welfare and competitiveness of the EU will depend on the EU's success in developing, deploying and competing in new low-carbon technologies. As a result, the EU has launched a research and development strategy targeting the energy sector, the SET-Plan.

### 2. The role of innovation in EU climate change policy and the SET-Plan

The idea of using EU funding (e.g. the EU budget or the European Investment Bank, i.e. EIB) to contribute significantly to research and development (R&D) in Europe is rather novel. Originally, research was concentrated on specific sectors originating from the Coal and Steel and EURATOM treaties. On energy, finance was limited to objectives of EURATOM. Research and Development as a public policy for promoting growth at European level has not been a major issue prior to the so-called Lisbon Strategy for Growth and Jobs in 2000.

Additional momentum has gradually been building in the context of the global climate change negotiations, where technology has moved up to the top of the agenda. Even without signing a legally binding international treaty, countries have agreed on voluntary measures<sup>1</sup> in a wide range of fields, which generally are seen as beneficial to local pollution, energy and resource security as well as the *development of new and green technologies*. The latter is generally seen as the key for future global competitiveness. Hence, the 'global narrative' on climate change has shifted from "reducing emissions" to

---

<sup>1</sup> Under the Copenhagen Accord, countries made pledges in areas as diverse as GHG emissions, renewables, energy efficiency, transport, sinks, technology deployment or agriculture.

"developing future green technologies" to stay upfront in the future race for global technological leadership.

This shifting position of R&D at EU level is allowing the rather modest R&D budget to increase in size and relevance, and the formerly loose policy on R&D to take central stage and develop into a fully fledged EU policy. The recently published Europe 2020 strategy by the European Commission again calls for a substantial reinforcement of R&D coordination and expenditure in the European Union. At the latest with the Climate and Energy Package, the link between long-term security of supply and innovation, i.e. the development of new technologies and their massive deployment has been established.

### 3. The EU R&D landscape

The central funding mechanism at EU level for research and innovation comes through the Framework Programmes; the first one originated in 1984 and today we are at the Seventh Framework Programme (FP7). Today's FP7 is providing a particularly important turning point; the EU's research strategy is based on the development of the European Research Area (ERA) initiative, which focuses on increasing the number of scientists, the level of private and public research funding (aiming to reach 3% of the EU's GDP) and the quality of research in Europe, taking advantage of the economies of scale created by cross border cooperation. In addition the EU has created the European Research Council (ERC) which concentrates on frontier research funding and a number of agencies to better manage the programmes while leaving the European Commission and the ERC to concentrate on policy and research excellence rather than procedures. To this one has to add the creation of the European Institute of Technology (EIT) and its "Networks of Excellence" which should bring together the research from all over the European Union<sup>2</sup>.

---

<sup>2</sup> The FP7 is divided into four specific programmes and EUROATOM research on fission and fusion research. The four programmes are: i) Cooperation: support for transnational cooperation in key areas; ii) Capacities: support to research and innovation capacities and optimisation of their use;

For the Financial Perspectives period of 2007-2013, the funding for the FP7 is of €53.2 billion, representing a 63% increase from the FP6 allocation (as yearly average). €2.3 billion are allocated to energy research (excluding nuclear energy), which means that on average there are €230 million available per annum. The funding for fission and fusion energy is of €2.75 billion over the life of FP7 (EURATOM) or an average of €390 per year.

The SET-Plan outline was first presented in 2006 and then further developed in 2007, 2009 and 2010<sup>3</sup>. The technology roadmap (2009b) presents a very detailed description until 2020 of the financial requirements and the areas of research. The SET-Plan was approved and officially started this year, although many of its elements have not been set-up yet.

### 3. Challenges and Issues to discuss

There is no doubt that the SET Plan presents an ambitious and integrated approach to research and development with a focus on transformation of results into actual demonstration technologies and later into commercial products. Nevertheless, to date the

---

iii) Ideas: support for basic research; iv) People: support of researchers' mobility and career development.

<sup>3</sup> EC (2006): Communication, Towards a European Strategic Energy Technology Plan, 847, Brussels, 10 January; EC (2007): Communication on a Renewable Energy Road Map, Renewable energies in the 21st century: Building a more sustainable future, 848 final, Brussels, 10 January; European Commission (2009a): Communication on Investing in the Development of Low Carbon Technologies (SET-Plan), 519 final, Brussels, 7 October; EC (2009b): A technology Roadmap, Commission Staff Working Document accompanying the Communication on Investing in the Development of Low Carbon Technologies (SET-Plan), 519 final, Brussels, 7 October; EC (2009c): R&D investment in the priority technologies of the European Strategic Energy Technology Plan, Commission Staff Working Document accompanying the Communication on Investing in the Development of Low Carbon Technologies (SET-Plan), 519 final, Brussels, 7 October; EC (2010): 2020 Communication, Europe 2020 A strategy for smart, sustainable and inclusive growth, 3 March 2010: <http://ec.europa.eu/eu2020/>, accessed 11 March 2010

SET-Plan presents mainly a set of ambitions with a significant list of unresolved issues and inherent weaknesses, on which this Task Force will need to focus.

#### a) *Level of funding*

The first incognito is how the level of financing required will be achieved. The SET-Plan requires substantial resources at European level at a junction where member states are reluctant to increase the financing of the European budget. The expectation that the private sector will finance the brunt of the increase is questionable unless the incentives structures devised are really strong.

#### b) *EU financial management*

Another perceived weakness is based on the existing framework programme evaluations, which identify important inefficiencies in the regulations and bureaucratic structures governing the financial mechanisms and the functioning of the European institutions. The financial regulations of the EU treat research funding in the same fashion as normal procurement policy which is unfit for the risk level required for the research into new technologies. Generally, the financial procedures are built on risk averseness and rigid procedures. There is a need to find new avenues using methods which are from the one side much more results driven, but from the other side more flexible, mirroring to a certain extent the mechanisms of venture capital systems.

#### c) *Patent and licensing rules*

From the side of industry, one of the major barriers for participation in projects are the rules on patents and licensing, a topic that has been subject to a recent CEPS Task Force.<sup>4</sup> One major complaint is the use of a single licence for the final product which makes components of the final products by different producers interdependent. One of the major

---

<sup>4</sup> See also *A New Approach to Innovation Policy in the European Union*. CEPS Task Force Report (Rapporteurs: Massimiliano Grancieri and Andrea Renda), July 2010; <http://www.ceps.eu/faceted/books/results/taxonomy/%3A116>

drawbacks for any company is seeing their contribution lost or delayed because of another partner's problems affecting the completion of the project. In addition, problems can arise related to the use of components of the jointly licensed product in other applications. Ownership of patentable components by the developer is a major issue.

#### d) *Governance*

The SET-Plan is revolutionising EU R&D funding. This offers a major opportunity to discuss and address – if necessary – the perceived politisation and bureaucratic interference by the European Commission on the objectives and processes of the European Technology Platforms, which may well be repeated in the European Industrial Initiatives. This could include a review of the architecture taking into consideration the needs of the stakeholders, as these are the ones which ultimately will have to deliver. With resources multiplying and expectations increasing that the private sector will also increase its expenditure on R&D, governance and regulatory issues will need to be addressed head on.

#### e) *Synergy with other EU policies*

The SET-Plan is focused mainly on R&D and demonstration of new technologies, but does not address deployment, which in large part will depend on markets. However, green technologies need a critical mass to become viable and to make a difference in the energy market. For this, other interventions may be needed such as the structural funds or rural development funds to spread the adoption of new technologies. More synergies with EU instruments could be developed.

### 4. CEPS Task Force Objectives

Although it will be up to CEPS Task Force's to agree on the final agenda, we propose to explore practical solutions to the challenges identified above or any other that the Task Force may want to focus on. Generally, the Task Force is meant to

- Assess the ongoing EU policy discussions

- Share knowledge between different key stakeholders and create a broad network of interested stakeholders;
- Work out a set of concrete recommendations to be presented to EU and member state policy-makers.

### 5. Format

The Task Force constitutes a unique forum of representatives from the European Commission (DG Research, Climate Action, Energy, Transport and Mobility, Budget etc.), European Parliament, member states, business and industry, International Organisations, NGOs, innovation experts and other stakeholders to facilitate an in-depth discussion and provide background research.

The new CEPS Task Force will meet **three times between November 2010 and spring 2011**. (A possible fourth meeting could be added if required.)

It will be chaired by **Lars-Erik Liljelund**, CEO of the Swedish MISTRA Foundation and formerly the Swedish PM's Special Envoy on Climate Change. Rapporteurs will be **Christian Egenhofer**, Senior Research Fellow, **Jorge Núñez-Ferrer**, Associate Research Fellow, and **Monica Alessi**, Research Fellow & Programme Manager, all from CEPS.

At the end of the Task Force, there will be a CEPS Task Force Report published retaining policy recommendations. This Report will be circulated among EU and member state policy circles policy.<sup>5</sup> This report will be based on discussions in the meetings supplemented by research carried out by the rapporteurs. The Draft Task Force Report will be circulated before the third meeting (in spring 2011) to be discussed and approved by the Task Force. The Final Report, with a set of recommendations will be ready prior to the decision on the EU budget Regulation.

### 6. Indicative schedule

An indicative schedule is provided in APPENDIX 1

---

<sup>5</sup> For further information, please visit [www.ceps.eu](http://www.ceps.eu).

## **7. Conditions for participation**

The CEPS Task Force is primarily designed for CEPS Corporate Members but participation is open to non-members as well, albeit at a higher fee.

The fee covers participation in all workshops, documentation, lunches and three copies of all reports produced. Upon request by participants, CEPS will mail additional copies of the final CEPS Task Force Report to persons identified by participants.

### **Participation fees:**

€ 1.000 for CEPS Corporate Members<sup>6</sup>  
€ 7.000 for non-members

For further information, see APPENDICES 1 to 3 and for registration, APPENDIX 4 at the end of this prospectus.

---

<sup>6</sup> Regarding information on CEPS Corporate Membership, please contact Staffan Jerneck, Director and Director for Corporate Relations (staffan.jerneck@ceps.eu) at +32 2 229 3910 or +32 475 903 924.

## **APPENDIX 1: THE CEPS TASK FORCE: ORGANISATION AND GOVERNANCE IN DETAIL**

---

### **Meetings:**

- Two task force meetings are arranged before the end of 2010. The first meeting will be held on 19 November from 10:h30-16h and the second on 14 December from 10:h30 to 16:h30. The third and final one is expected to be held around February 2011. Although not foreseen at the moment, the need of a fourth meeting might arise.) All meetings will be held at the offices of the Centre for European Policy Studies (CEPS).
- Ahead of the third meeting, CEPS will circulate the Draft Task Force Report including draft recommendations. The Task Force will discuss, amend and approve the final report. This report will be based on discussions in the meetings supplemented by research carried out by the rapporteurs.
- The final Task Force report, complete with recommendations will be presented on different occasions including for example in the European Parliament, in Brussels events or in member states. The Report will also be **published**<sup>7</sup> and **circulated** among EU, member state and international policy makers

### **Key staff**

The task force will be chaired by **Lars-Erik Liljelund**, Chief Executive, The Foundation for Strategic Environmental Research (Mistra), Sweden, former Special Envoy of the Prime Minister of Sweden on climate change and Director General of the Swedish Environmental Protection Agency.

Rapporteurs of the Task Force will be **Christian Egenhofer**, Head of the energy and climate programme, **Jorge Núñez-Ferrer**, Associate Research fellow, CEPS and **Monica Alessi**, Research Fellow & Programme Manager.

Outreach activities will be led by **Monica Alessi**, Research Fellow & Programme Manager and in charge of outreach for climate change and energy at CEPS.

---

<sup>7</sup> In the “Task Force Report” series: <http://shop.ceps.eu/faceted/books/results/taxonomy%3A116>

## **APPENDIX 2. WHY A CEPS TASK FORCE AND HOW DOES IT WORK?**

---

The CEPS Task Force will constitute a unique forum of representatives from the European Commission, Members of the European Parliament, officials from member states, business and industry, NGOs and other stakeholders to discuss highly topical issues in a multi-stakeholder setting. The objective of a task force is i) to create a process where issues can be analysed in open but structured discussion and ii) to publish an authoritative analysis leading to policy recommendations. CEPS will produce an (operational) synthesis report for each meeting. At the end of the Task Force, CEPS will publish and circulate among EU and member state policy circles policy recommendations together with a background report, which will be also formally published in the CEPS Task Force Report publication Series. The Report will be based on discussion in the meetings supplemented by research carried out by the rapporteurs.

For Task Forces, see: <http://www.ceps.eu/panel4>

For Task Force Reports, see: <http://www.ceps.eu/faceted/books/results/taxonomy%3A116>

## **APPENDIX 3. AGENDA FIRST MEETING**

---

First meeting of the CEPS Task Force on

### **The EU Strategic Energy Technology (SET) Plan: From concept to practice**

**19 November 2011**

- The strategic importance of the SET-Plan for climate, energy and the EU
- Finance: level of funding, instruments and management
- Agreement on final terms of reference

#### **Agenda**

Big Conference Room, Ground floor,  
CEPS, Place du Congrès 1, 1000 Brussels; tel.: +32 2 229 3911 ; [www.ceps.eu](http://www.ceps.eu) , see online map

09:00-10:00	Registration and welcome
10:30-10:05	<b>Welcome by CEPS</b> <b>Christian Egenhofer</b> , Head of the Energy Programme, CEPS
10:30-10:45	<b>Introduction by the Chair of Task Force</b> <b>Lars-Erik Liljelund</b> , CEO, The Foundation for Strategic Environmental Research (MISTRA), Sweden
10:45-11:00	<b>Short introduction to the Task Force: objectives, scope and proposed timelines</b> <b>Christian Egenhofer</b> and <b>Jorge Núñez-Ferrer</b> , CEPS
11:00-13:00	<b>Introducing the SET-Plan: achievements and future challenges (including financing)</b> <b>Philip Lowe</b> , Director General, DG Energy, European Commission (tbc)

Q&A

Comments by:

Representatives from **industry**

Representatives from **Member States**

*Discussion*

13:00-14:00

**Light lunch at CEPS**

14:00-15:30

**How to raise the necessary funding to reach the SET Plan objectives?**

**The potential of the Risk Sharing Financial Facility, Jean-David MALO, Head of Unit, DG RTD (tbc)**

**Member State views, Representatives from Member States**

**A view from Industry, Representatives of Industry**

*Discussion*

15:30-16:00

**Wrap-up of meeting and agreement on the terms of reference for further work**

16:00 (at latest)

End of meeting

**Tentative topics of further meetings:**

- **EU Financial Regulations and financing Research, Development and Innovation, are the rules adequate?**
- **Patents and licensing rules and how they affect industry incentives/participation (joint reliability, ownership of patentable components, etc.)**
- **Review of architecture of governance structure in light of rising stakes for stakeholders**
- **How to contain politisation and bureaucracy?**
- **The SET-Plan on its own will not deliver, raising the issue of synergies with other EU policies (e.g. structural fund, rural development fund, city initiatives etc.)**
- **Other topics (to be decided)**

## APPENDIX 4: Registration Form



### The EU SET-Plan: From Concept to Practice

I wish to participate in the CEPS Task Force

Name:.....

Title:.....

Company:.....

Address:.....

.....

Postcode:.....Country:.....

**VAT**

**N°**.....

**Email:**.....

---

As a corporate member of CEPS my company pays 1000 Euro (+ 21% VAT)

My company is a not a corporate member of CEPS and pays 7000 Euro (+ 21% VAT)

My company is interested in becoming a corporate member of CEPS<sup>8</sup>.

---

Please return to:

**Isabelle TENAERTS**  
**CEPS**  
**Fax: 32.2.219.41.51**  
**isabelle.tenaerts@ceps.eu**

---

<sup>8</sup> Regarding information on CEPS Corporate Membership, please contact Staffan Jerneck, Director and Director for Corporate Relations (staffan.jerneck@ceps.eu) at +32 2 229 3910 or +32 475 903 924.