Research alliances and the impact on the EU Research Agenda

The development of the European Platform of Universities Engaged in Energy (EUA-EPUE) within the SET Plan and the European Energy Research Alliance (EERA): State of Play

Dr. Lidia Borrell-Damian
Head of Unit
Research Partnerships
European University Association

HRK, Hochschulrektorenkonferenz
Information and Strategy Day of the German Rectors’ Conference for the Heads of German Universities
Berlin, 17-18 January 2013
Outline

- Brief Historical Background
- Characteristics of EUA-EPUE
- Current Activities of EUA-EPUE
  ✓ Developing the platform
  ✓ Participation in EC Energy-Related Policy Consultation Processes
- Participation in the EC Working Groups of the SET-Plan Energy Education and Training Initiative.
- The WG 13 on Coordination of Education and Training Systems.
- Towards Horizon 2020: How EUA-EPUE as a pan-European Platform can contribute
Brief Historical Background

- European Commission Strategic Energy and Technology Plan Communication (SET Plan) – 2007 – announcing the creation of the European Energy Research Alliance (EERA) and the European Industrial Initiatives (EII) to take forward the SET Plan implementation.

- EUA signatory of the European Energy Research Alliance (EERA) as an observer – October 2008 – following a decision of the EUA Council.

- EUA convened a first meeting with representatives designated by the National Rectors Conferences – March 2009: The European Platform of Universities Engaged in Energy (EPUE) was created and a small group of volunteers constituted the first Steering Group, chaired initially by Prof. Helena Nazaré (University of Aveiro, Portugal) and currently by Prof. Torbjørn Digernes, NTNU, Norway).
EPUE was conceived as an open platform for all members of EUA. Entry procedure: responding a detailed questionnaire on Masters, Doctorate and Research capacities

It entails a large group – so far 170 have announced interest in the EPUE

Reaches out into all corners of the EU27 states

The survey of the enrolment process has identified over 1400 groups constituting more than 20 000 persons

Within each of the SET Plan thematic areas, there are 20 to 100 active universities

There is a multitude of educational programs, at all three cycles of university education
Both research and education programs show extensive cooperation with external partners, industrial in particular.

The EPUE can be a platform on which to develop cooperation between universities and all the other structures of the European energy arena, as well as on international arenas.

The platform should seek to work closely with existing university networks to build on their capability.

At the Inaugural Event in TU Delft, EUA-EPUE explored with universities potential role in facilitating the European universities’ contribution to make the SET Plan a success, and pointed the way forward to how EPUE should be organised.
## Status of the EPUE respondents as of January 2013

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of institutions by country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>4</td>
</tr>
<tr>
<td>Belgium</td>
<td>7</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>1</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>4</td>
</tr>
<tr>
<td>Denmark</td>
<td>5</td>
</tr>
<tr>
<td>Estonia</td>
<td>1</td>
</tr>
<tr>
<td>Finland</td>
<td>6</td>
</tr>
<tr>
<td>France</td>
<td>7</td>
</tr>
<tr>
<td>Germany</td>
<td>17</td>
</tr>
<tr>
<td>Greece</td>
<td>1</td>
</tr>
<tr>
<td>Hungary</td>
<td>2</td>
</tr>
<tr>
<td>Iceland</td>
<td>1</td>
</tr>
<tr>
<td>Ireland</td>
<td>3</td>
</tr>
<tr>
<td>Italy</td>
<td>20</td>
</tr>
<tr>
<td>Lithuania</td>
<td>1</td>
</tr>
<tr>
<td>Netherlands</td>
<td>5</td>
</tr>
<tr>
<td>Norway</td>
<td>5</td>
</tr>
<tr>
<td>Poland</td>
<td>18</td>
</tr>
<tr>
<td>Portugal</td>
<td>4</td>
</tr>
<tr>
<td>Slovakia</td>
<td>3</td>
</tr>
<tr>
<td>Slovenia</td>
<td>2</td>
</tr>
<tr>
<td>Spain</td>
<td>22</td>
</tr>
<tr>
<td>Sweden</td>
<td>3</td>
</tr>
<tr>
<td>Turkey</td>
<td>4</td>
</tr>
<tr>
<td>UK</td>
<td>20</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>1</td>
</tr>
<tr>
<td>Georgia</td>
<td>1</td>
</tr>
<tr>
<td>Russia</td>
<td>1</td>
</tr>
<tr>
<td>Ukraine</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>170</strong></td>
</tr>
</tbody>
</table>
List of German Universities in EPUE, January 2013

- University of Freiburg
- Coburg University of Applied Sciences
- Cologne University of Applied Sciences
- University of Erlangen Nuremberg
- Mannheim University of Applied Sciences
- Ilmenau University of Technology
- Karlsruhe Institute of Technology
- University of Hannover
- Leuphana University of Lueneburg
- Münster University of Applied Sciences
- RWTH Aachen University
- Hamburg University of Technology
- Technical University Munich
- Trier University of Applied Sciences
- University of Osnabrück
- University of Paderborn
- University of Rostock

...7...
EPUE - Partnerships in Research and Doctoral Areas, and Master Programmes

- Single University - no external partners
  - Research Areas (1551): 26%
  - Doctorate Areas (607): 47%
  - Master Programmes/Themes (904): 51%

- University partnerships - no external partners
  - Research Areas (1551): 51%
  - Doctorate Areas (607): 41%
  - Master Programmes/Themes (904): 28%

- University(ies) + external partner(s)*
  - Research Areas (1551): 51%
  - Doctorate Areas (607): 33%
  - Master Programmes/Themes (904): 21%

*External partner: Industry/Enterprise partners, non-university research institution partners, governments (national, regional), Research and Technology Organisations (RTOs) etc.
EPUE - Knowledge Areas in Research, Doctorate and Master Programmes

- **Research Areas (1504)**: 90%
- **Doctorate Areas (578)**: 90%
- **Master Programmes/Themes (863)**: 95%

**Explanation of Areas**:
- **ESSH**: Economics, Social Sciences and Humanities
- **BML**: BioScience, Medical/Life Sciences
- **SET**: Science, Engineering and Technology
Current Activities (1)

Developing EPUE

- Planning the future activities of the platform in the framework of the outcomes of the EPUE Inaugural Event, particularly in reference to:
  - Mapping of energy-related research and education in Europe
  - Coordinating and facilitating information among universities and other stakeholders of the SETPlan
  - Provide platforms for exchange of practices and development of clusters of excellence in the knowledge triangle of education-research-innovation, particularly interdisciplinary
  - Articulating links with EERA and other innovation actors of particular relevance to the SET Plan
Current Activities (2)
Participation in EC Energy-Related Policy Consultation Processes

- SET Plan Energy Education and Training Initiative (13 Working Groups were set by the European Commission)

- Materials Roadmap implementation initiative Working Group (Chaired by Prof. Dr.-Ing. Harald Bolt, FZ-Jülich)

- ESFRI Energy Strategy Working Group (ESWG) (Chaired ad interim by Prof. Dr.-Ing. Harald Bolt)
The WG 13 on Coordination of Education and Training Systems

EUA-EPUE proposed the Commission to create an additional group: the horizontal group on “Coordination of Education and Training Systems” (Co-chaired by Prof. Peter Lund, Aalto University, Finland, and Prof. Torsten Fransson, KTH, Sweden).

Following a report structure given by the European Commission, common to all Working Groups, the WG 13 Report:

- Discussed the challenge of coordinating Education and Training Systems in Europe
- Discussed the identification of needs and gaps, in particular main barriers or bottlenecks for the different industrial sectors and their markets
- Provided recommendations for the European Commission to develop the SET Plan Energy Education and Training Roadmap which included the development of pilot projects for cooperation in Graduate, Master and Doctorate education.
Towards Horizon 2020: How EUA-EPUE as a pan-European Platform can contribute

Based on the outcomes of TU Delft Inaugural Event, 22-23 February 2012:

**Internally - among universities**
- Cooperation between basic research groups
- Cooperation in applied research and innovation
- Cooperation in education
- Coordination of input for policy development and external dialogues

**Externally - towards other stakeholders**
- Advocacy and dialogue with the European Commission and other European policy stakeholders
- Cooperation with the European Energy Research Alliance (EERA)
- Strengthen cooperation with industrial partners
- Dialogue with other research and educational bodies and structures
- Assisting development of international (outside-EU) cooperation
SET-Plan structure

Steering Group (EC + Member States)
Steer the implementation of the SET-Plan

SETIS
Information System
http://setis.ec.europa.eu

European Industrial Initiatives
(wind, solar, bioenergy, CCS, grids, fission, smart cities)

Support the work of

EERA
European Energy Research Alliance

EUA EPUE
European Platform of Universities Engaged in Energy Research

International Resources

cooperation financial and human
Thank you for your attention!

Contact: 
lidia.borrell-damian@eua.be

Further information: 
www.eua.be