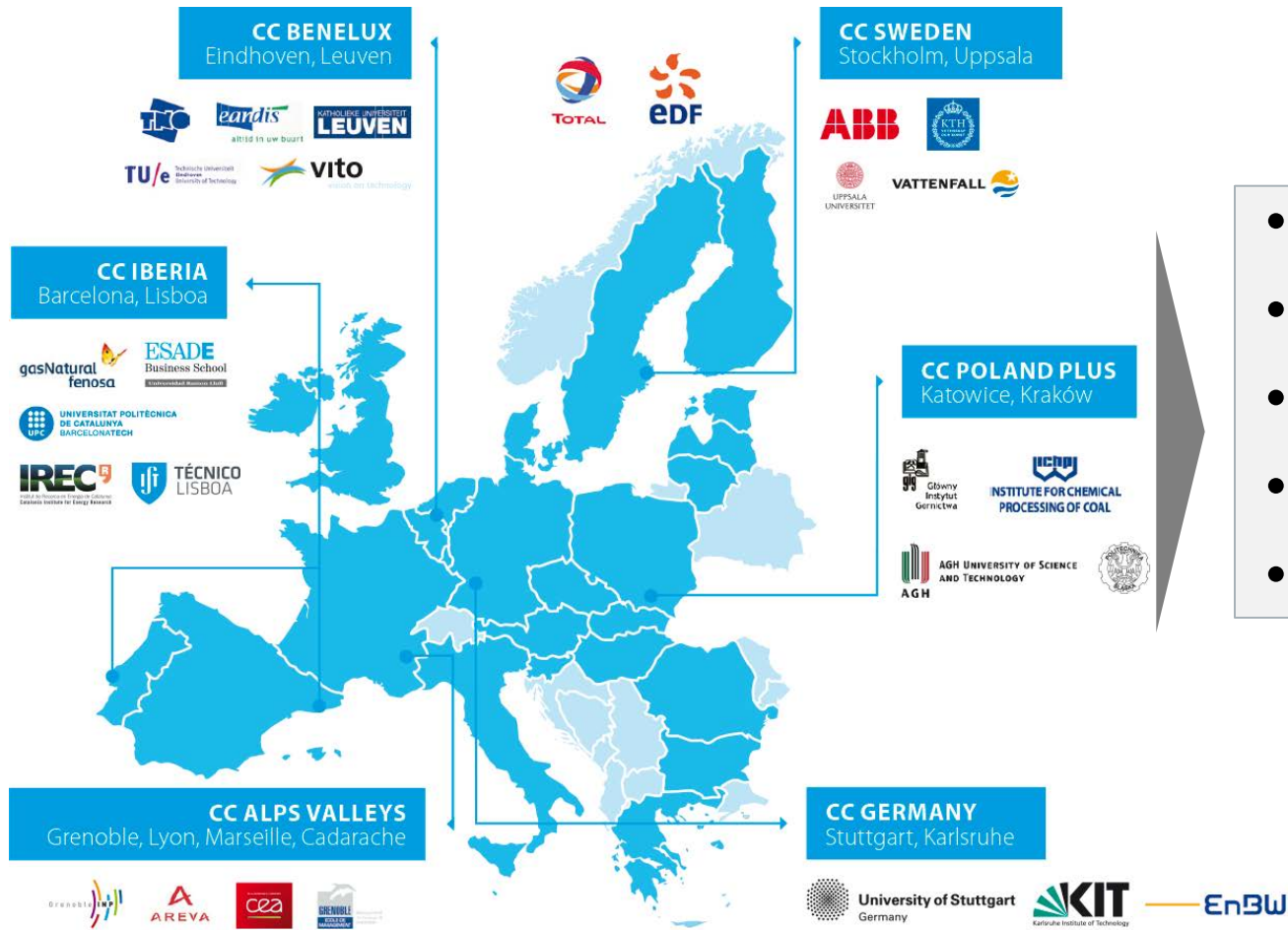


SCIENTIFIC SUPPORT TO ENERGY SECURITY IN THE BALTIC SEA REGION

How to emerge technologies to better meet innovation needs

Prof. Dr. Heydebreck – p.heydebreck@inno-group.com - July 4th, 2013 - Vilnius

- Sustainable competitiveness of institutions and regional systems is dependent on secure access to safe energy at reasonable prices (in absolute terms and in relation to prices in competing systems).
- Europe has a pent-up demand in relation to e.g. North America in terms of price worthy access to energy.
- European energy research is competitive, the efforts to valorise its results and potential results are still in a rather early stage.
- Steps have been taken to holistically address the challenge: e.g. KIC inno energy.



- Excellence
- Relevance
- Competence
- Market coverage
- Market access

Partners 2012:

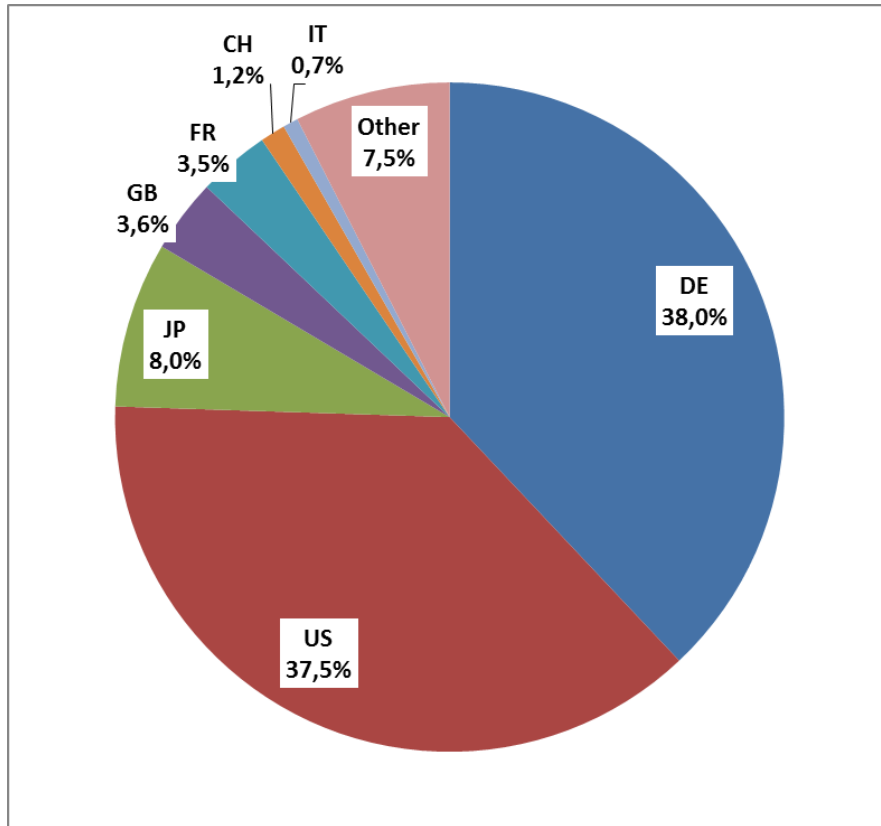
- 142 active partners
- 98 of which are from industry

The situation in the energy field is very similar to the situation in the health sector, the food sector and other fields which are characterized by a.o. a strong public intervention (through e.g. procurement power, provision of legal framework/regulations ...), a high need for innovation, and emotional concerns of the individual citizens.

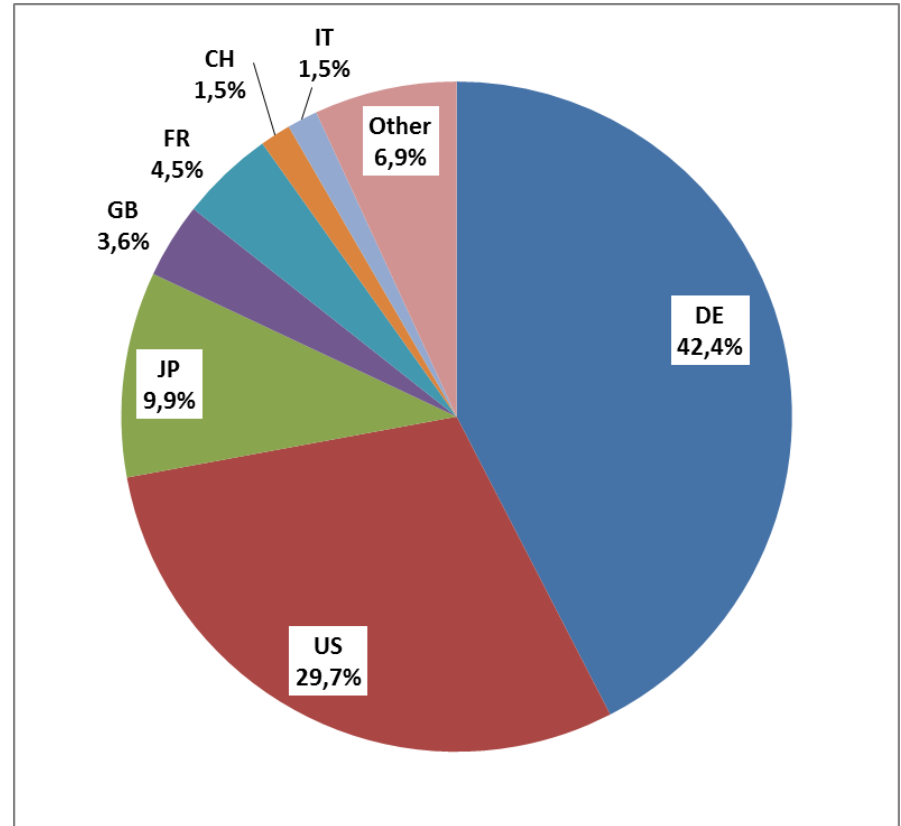
1. Crucial stakeholders in the innovation value chain are not motivated to strive for valorisation success, neither intrinsically nor are external incentives provided.
2. Crucial stakeholders ... are not fully capable to effectively contribute to valorisation success due to
 - Hampering legal framework conditions
 - Lack of resources, (financial means, management competence ...)
 - ...

1. Does the financier of key contributions to innovation success take an investor's point of view? i.e.
 - Does policy define impact objectives for research budgets?
 - Does policy demand for and support co-ordination of stakeholders and activities (balance of budgets for different policies),
 - Is there an effective system of in-process impact assessment which is designed to support policy definition and policy implementation
 - ...
2. Is valorisation a strategic horizontal theme (e.g. what role does it play in public procurement)?
3. Do research institutions have relevant incentives/sanctions linked to their efforts and success in valorisation?
4. Do individual researchers have relevant incentives/sanctions linked to their efforts and success in valorisation?
5. Are (private) investors attracted by favourable framework conditions (e.g. exit opportunities, tax regulations, ...)?

Based on German PRO Patents
(about 35,000 cited PRO patent families)



Based on German Corporate Patents
(about 1.4 million cited corporate patent families)



Source: Stolzenburg, U. /Drenkmann, M./Schmidt, A./Walter, A. (2011): Scope and Diffusion of Knowledge from German PROs, Working Paper at the Institute for Innovation Research, University of Kiel, Germany.

1. Do we commit adequate financial resources to valorisation?
2. Do we foster transparent, sustainable private public valorisation partnerships?
3. Do we have supportive legal framework conditions?
4. Do we educate, train and attract an adequate quantity and quality of people to the valorisation business?

- Motivate PROs and individuals to engage in valorisation: from nano-to-macro.
- Enable PROs and individuals to engage in valorisation
- Support creation of critical mass in research, education and valorisation
- Support triple helix engagements addressing also concerns of the individual citizen
- Support show cases (a research institution producing its own energy ...)
- Support roll out outside Europe (e.g. via UNIDO engagements)
- Attract intelligent capital: support development of attractive exit options, welcome private capital with international roots.
- ...



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Thank you for your attention!