The EIT

Sustainable Growth and Competitiveness through Innovation

Shaping the Knowledge and Innovation Communities: Sustainable Energy

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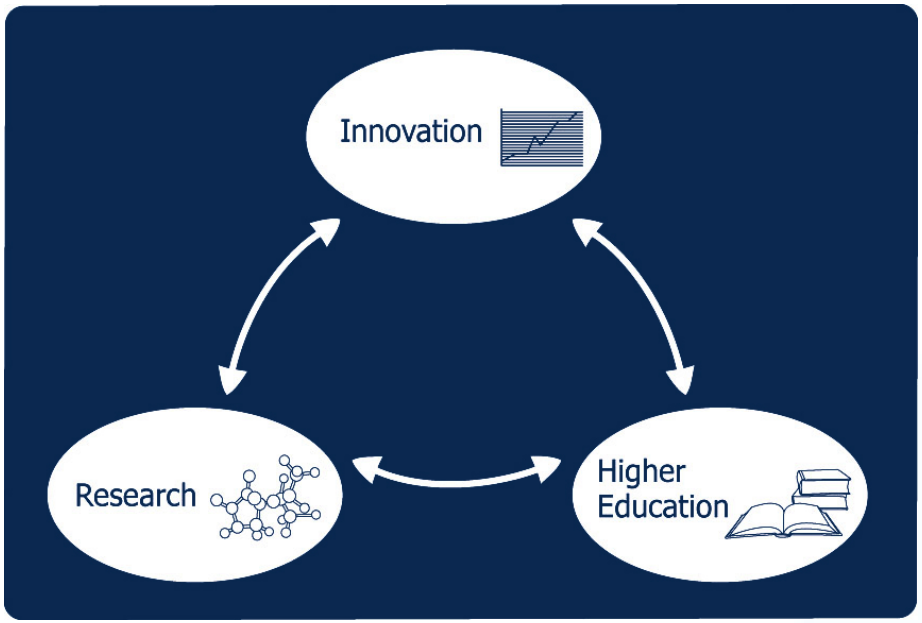
Integrating the knowledge triangle



- A new collaboration model promoting cross-national, cross-sectoral and cross-disciplinary approaches to knowledge sharing and transfer for excellence in innovation.
- For the first time, Higher Education will interact on an equal footing with other partners.

European Institute of Innovation & Technology

Stakeholders

- Business
- Entrepreneurs (including SMEs)
- Research and Technology Organizations
- Education
- Investment communities (private investors and venture capital)
- Research funders, including charities and foundations
- Local, regional and national governments

Mission of the EIT

To be the catalyst for a step change in the European Community's innovation capacity and impact

through the delivery of major new actions.

The first of these is the creation of the Knowledge and Innovation Communities, KICs.

- build innovative 'webs of excellence'
  - integrating education, technology, research, business and entrepreneurship
  - driving effective "translation" between partners: ideas, technology, culture, business models…
- create new business
  - for existing industry
  - for new endeavours
- educate and develop entrepreneurial people
  - able to work across stakeholder boundaries
- have societal impact

Strategic Objectives: focus of the EIT Governing Body

1. EIT Strategic Innovation Agenda (SIA) :
   - ideas / plans
2. KICs with unique impact :
   - KIC topics, format, selection
3. Sustainable mobilization of additional funding :
   - including EIT Foundation
   - tools

A KIC

A KIC…

- is a **high-profile, collaborative consortium**
  - a “legally and financially structured and managed entity”
  - of geographically distributed but thematically convergent stakeholders
  - open to international participation
- will become a **world leader** in its field
  - encompassing the whole innovation chain from education to economic impact
- will deliver a **measurable impacts on society**
  - economic, scientific, educational and entrepreneurial
- will have a **minimum life of 7 years**

KIC goals

- To address long-term challenges and identify new opportunities for innovation in Europe
- To transfer ideas and activities from higher education, research and innovation to the business context and on to commercial application
  - including the creation of spin-outs, start-ups and SMEs
- To attract partners and top-class talent from around the world
- To develop entrepreneurial people and embed them in businesses
- To maximize the financial contribution from the private sector

Size and lifetime of a KIC

- **50-100 M Euro total spending per year**
- **Life** 7-15 years
- **Funding :**
  - EIT 25%, fully committed, subject to evaluation of milestone delivery
  - Others 75% (leverage factor 3), for example :
    - European programmes
    - European Structural Funds
    - National and regional funding
    - Industry investment (including in-kind contributions)
    - EIT Foundation (also seed funding, scholarships…)
    - Private investors & Venture Capitalists
    - Investment banks

Ingredients for a KIC with impact

- **Geographically distributed people**
  - across the European Community and linking to centers of excellence in other parts of the world
- **Working in networks** focussed on typically **4 – 6 major nodes**
  - which are “co-location centers”, where staff from different stakeholders come to work together, face-to-face
  - and which link other partners, such as local clusters of SMEs
- Each **co-location center** should encompass a significant part of the innovation chain
- Co-location of people is critical
  - it is the key to achieving knowledge transfer and ‘translation’ between stakeholders and between science, research and business
  - effective translation is fundamental to delivery of KIC goals
- **Mobility of people** is therefore a pre-condition

KICs and People

Innovative European entrepreneurs are a major output of every KIC :

- Business people, entrepreneurs, researchers, technologists, educators, working together in ***world class*** KIC programmes
- Talented and committed academics from Europe and beyond, flexible, mobile and eager to innovate
- An environment which catalyzes movement of people between industry / business and academia
- Top quality leadership, engendering a highly developed team culture / spirit across the KIC

People management :

- Incentive schemes to attract excellent partners from across the innovation chain
- An environment which stimulates working / studying together in diverse teams in co-location centers
- Recognition of people and pride in the EIT brand: e.g. “EIT” label for students

First Call for Proposals

- **Topics**
  - Sustainable energy
  - Climate change mitigation and adaptation
  - Future information and communication society
- **Proposals must …**
  - have a clear prevailing focus
  - promote trans/inter-disciplinary approaches
  - draw on existing European programmes and projects
- **Total number** of KICs to be selected : 2 or 3
- **Future Calls**
  - Health care ?
  - Other topics ?

KIC Selection Criteria (1)

An internationally distributed collaborative consortium which :

- is composed of elite centers from business, entrepreneurship, technology, research and education
  - each with a track record in excellence, international cooperation, knowledge dissemination and translation to business
- allows collaborative people to work together in “co-location centers”
- is a legally and financially structured entity with a motivating intellectual property rights (IPR) policy
- has top quality leadership, governance, structure and accountability
- attracts public and private funding, tripling the EIT funding over time
- can include excellent partners from non-EU countries

KIC Selection Criteria (2)

Compelling, innovative proposals with future potential :

- Addressing important topics for Europe
- With (new) business and societal impact
- Making innovation an integral part of Higher Education
- A strong research and technology base, all of which is relevant and critical to the success of the KIC (including non-technological research)
- Going beyond research and technology : translation to new and existing businesses
- Key performance indicators (KPIs), targeted investment returns and drivers identified upfront
- Short, medium and long-term milestones
- Builds up continuous, self-sustaining activities
- Has broad public outrea

KIC Call, Selection and Monitoring

- **Call for proposals** for KICs by April 2009, **submission** August 2009
  - Based on KIC format and selection criteria, finalized by end March 2009
- **Selection** of the first 2-3 KICs by January 2010
  - Strong teams with the best chance of success
  - Proposals recognized as innovative, ambitious and coherent
  - Extensive publicity for the selected KICs in order to support them by all appropriate means
- **Evaluation and monitoring** of KICs starting by August 2010
  - Recognized as fair, simple and effective
  - Consistent and clearly derived from the original selection criteria
  - Rewarding good performance and achievement
  - Recognizing and communicating the EIT brand

KIC Sustainable Energy: Scope

- **Sustainable Power Generation**
  Solar, wind, marine, biomass, fossil fuels with carbon capture and storage, nuclear, hydro…
- **Electricity generation and distribution systems for sustainable energy systems**
  Local plus centralized generation, intermittency, energy storage…
- **Heat for homes, business and industry**
  Combined heat and power, district heating, biomass, heat pumps…
- **Energy efficiency in homes, business and industry**
  Insulation, smart metering…
- **Alternative fuels**
  Biofuels, the hydrogen economy…

KIC Climate Change – Mitigation and Adaptation: Scope

- **Low carbon transport**
  Land, aviation and shipping
- **Forestry and farming**
  Plants, soils, livestock…
- **Waste and landfill**
  Reduction and management of non-CO_2 GHGs
- **Energy efficiency devices and processes**
  Low energy electronics, appliances, electric motors, new industrial processes

<u>Adaptation</u>

- **Weather and flood**
- **Crops and farming**
- **Infrastructure impact**
- **…**

Overlap between the two topics

- **There are significant areas of overlap between the two topics, e.g.:**
  - Carbon capture and storage
  - Energy efficiency
  - Alternative fuels
  - Energy storage
  - The electric economy: heating vehicles etc; the hydrogen economy…
- **This is expected and is seen as a positive element of having KICs on these two critical topics.**
- **Applicants will need to identify the central topic area (Energy or Climate Change) for their application for the purposes of the assessment process.**