

Innovation & Technology Challenges for Europe

- the EIT and KICs contribution -

enhanced capacities – higher degree of integration – leadership

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Gerard de Nazelle, *EIT Director*,



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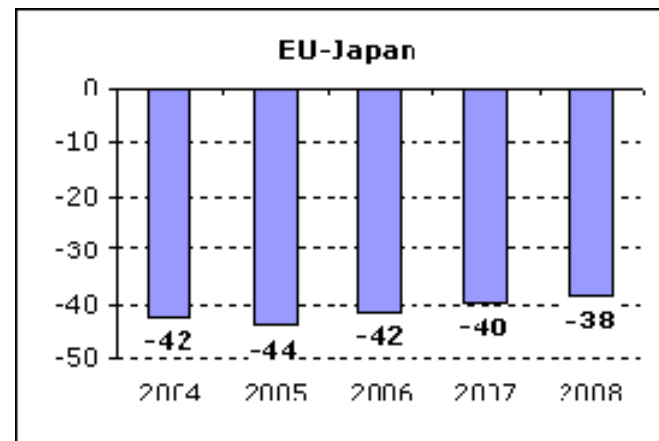
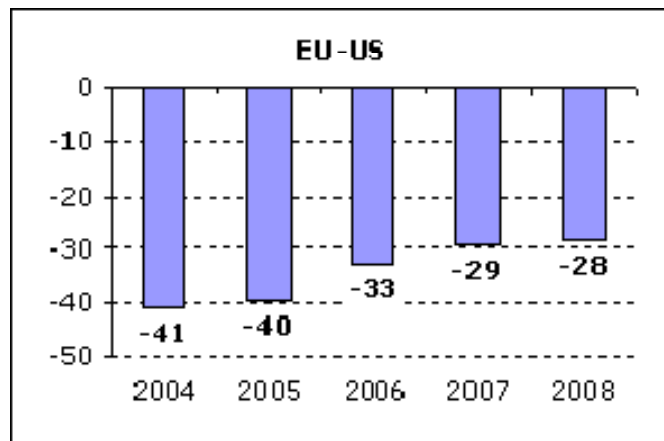
1. KIC: putting the Knowledge Triangle to the test.
2. Impact (empowering people for innovation).
3. Co-location Centres and mobility of knowledge.
4. Education: creating a new generation of entrepreneurs.
5. The very first results...

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More and better innovation is urgently needed in Europe

- Energy, demography, environment:
→ crises offer new opportunities, but others seem to act faster (*ex. China*)
- Communities / Commons:
→ creation and preservation of commons of product design and manufacturing



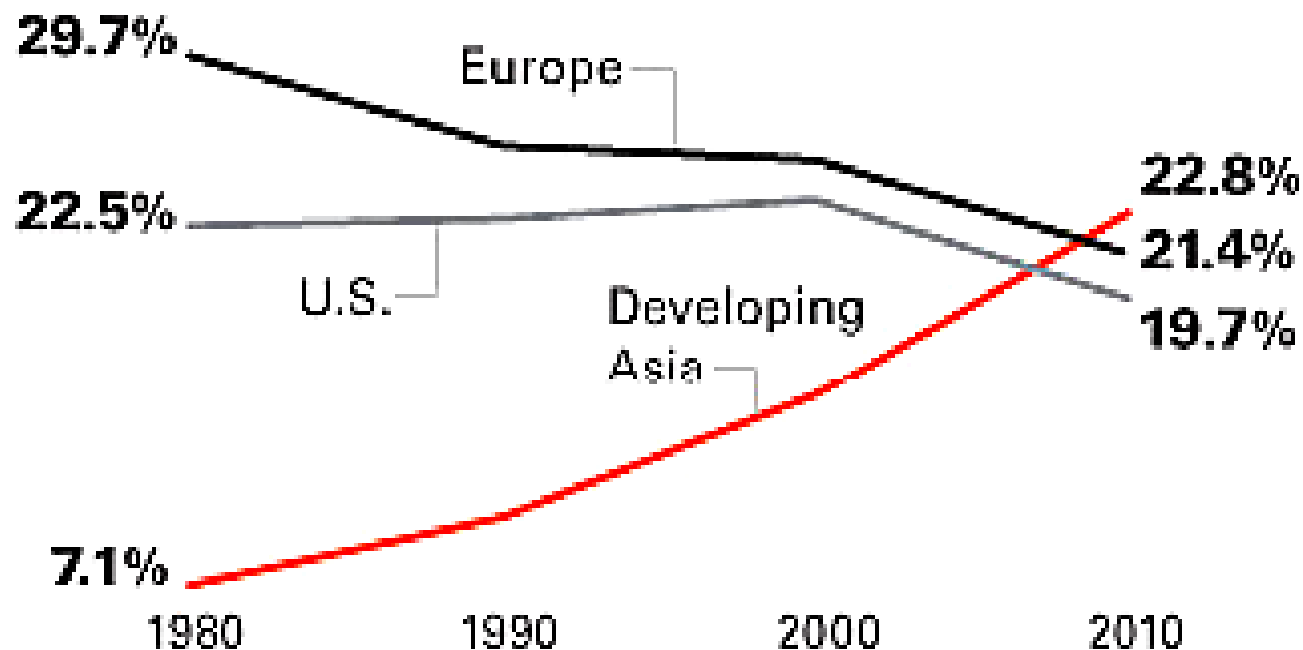
Source: European innovation scoreboard 2008

→ **EIT's mission:**

„To be the catalyst for a step change in the EU's innovation capacity and impact.“

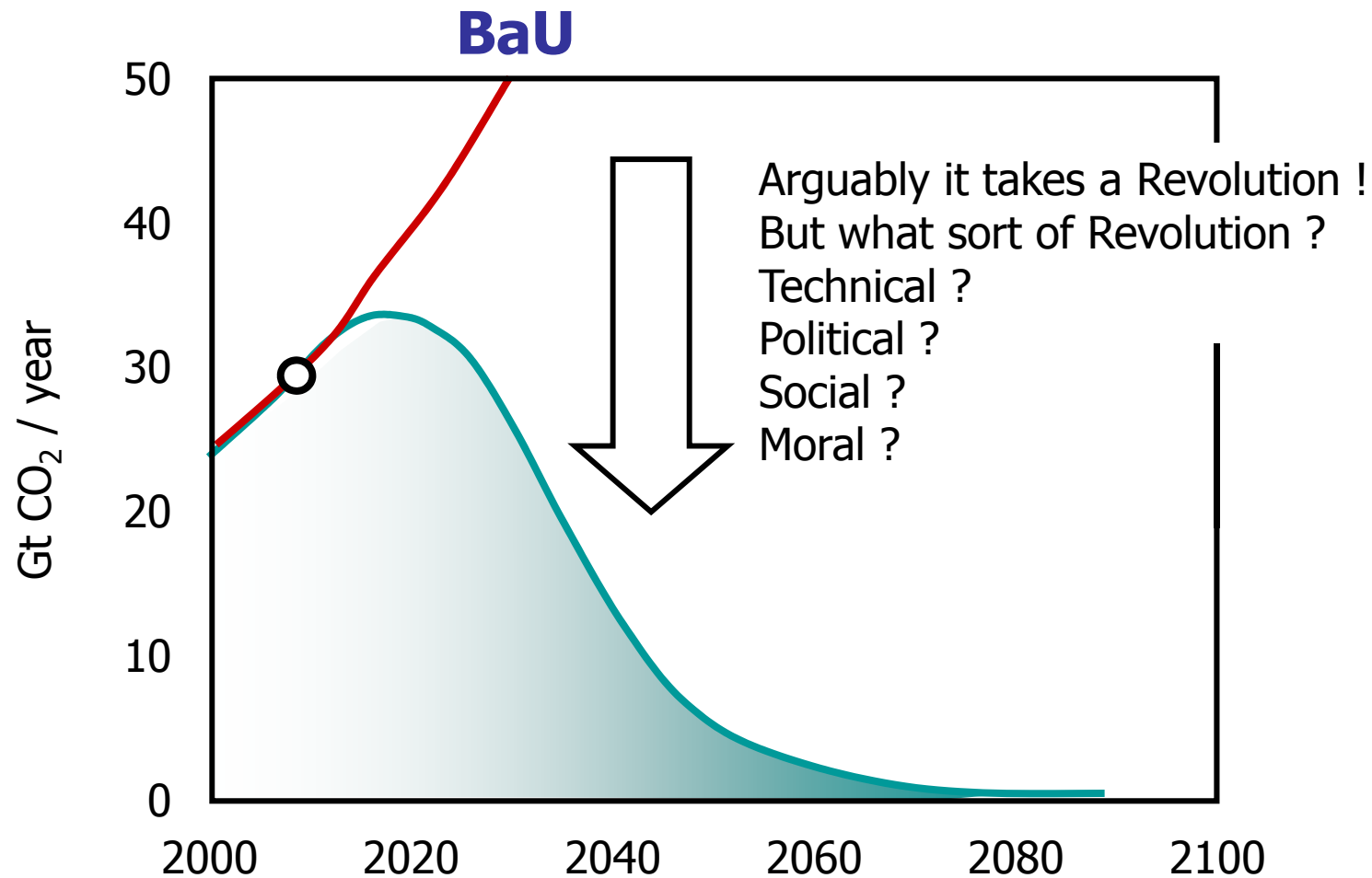
Push factors for action in innovation

Changing shares of global GDP



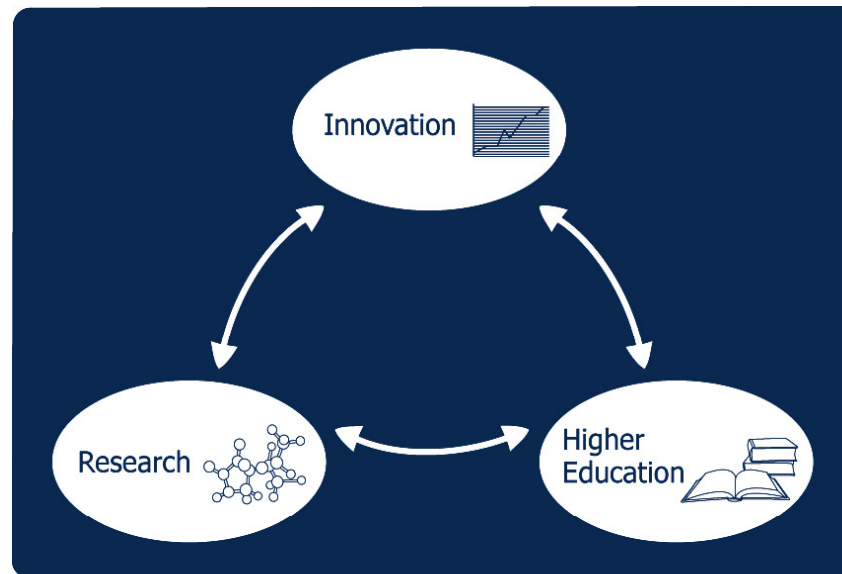
Source: IMF World Economic Outlook Database

Push factors for action in innovation



Innovation requires an integrated knowledge triangle

- Innovation can start at any place in the knowledge triangle: *Education, Research+Technology, Business+Entrepreneurship*
- Actors in the knowledge triangle are at the core of the innovation web.



enhanced capacities + high degree of integration + leadership
are prerequisites for scaling up Europe's innovation performance

KICs – putting the knowledge triangle to the test

- KICs = collaborative partnerships, legally and financially structured entity of internationally distributed but thematically convergent partners
- KIC partners = key actors from the knowledge triangle: research, education, and innovation-entrepreneurship-business
- **KIC co-location = people from diverse backgrounds** (industry, SMEs, academia, nationality, gender, discipline...) working together across the innovation web

→ KICs build innovative webs of excellence across the knowledge triangle

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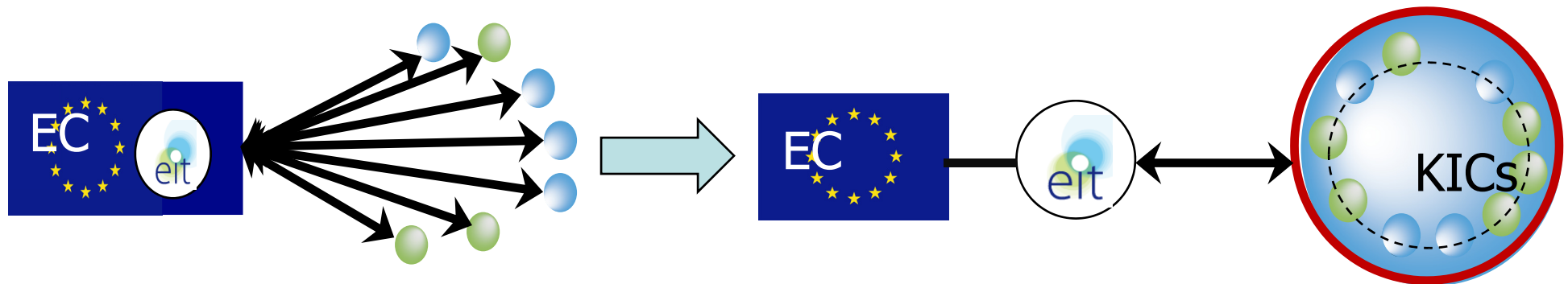
KICs – essential *challenges* for impact

- **CEO type leadership** *leading to drive and focus*
- A **monitored business plan** around deliverables with targeted investment returns and drivers identified upfront *leading to relentless focus on results/deliverables/output*
- **Drive the KIC through entrepreneurship**
- A **'can do' attitude**, stipulating *empowerment and enabling people to develop new business opportunities*
- *Keep it **simple**, be **pragmatic**, take controlled **risk***

EIT – essential *challenges* for impact

- **a simple 1 – to – 1 Agreement:**

- simplified performance monitoring: investor and entrepreneur working intimately together for success.
- simplified cost reporting: from lumpsum on input to lumpsum on results, cost for value; leveraging on external audits on KICs' financial statements.
- simplified 3rd parties accession to Grants.



- **can do, focus, simplicity, speed, results.**

EU2020: creating value by basing growth on knowledge and empowering (skills development, labour mobility) people in inclusive societies

- Contribute to ongoing developments in higher education and acting as a catalyst for ***improvements in curricula and learning and teaching methods***
- Entrepreneurship education ***delivering top entrepreneurial people***
- Working in **co-location centres** encompassing the larger part of the innovation web with face-to-face contact, thus leading to ***great mobility of knowledge***

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KIC focus

- Climate Change Mitigation and Adaptation –
Climate-KIC
- Sustainable Energy – **KIC InnoEnergy**
- Future Information and Communication
Society – **EIT ICT Labs**

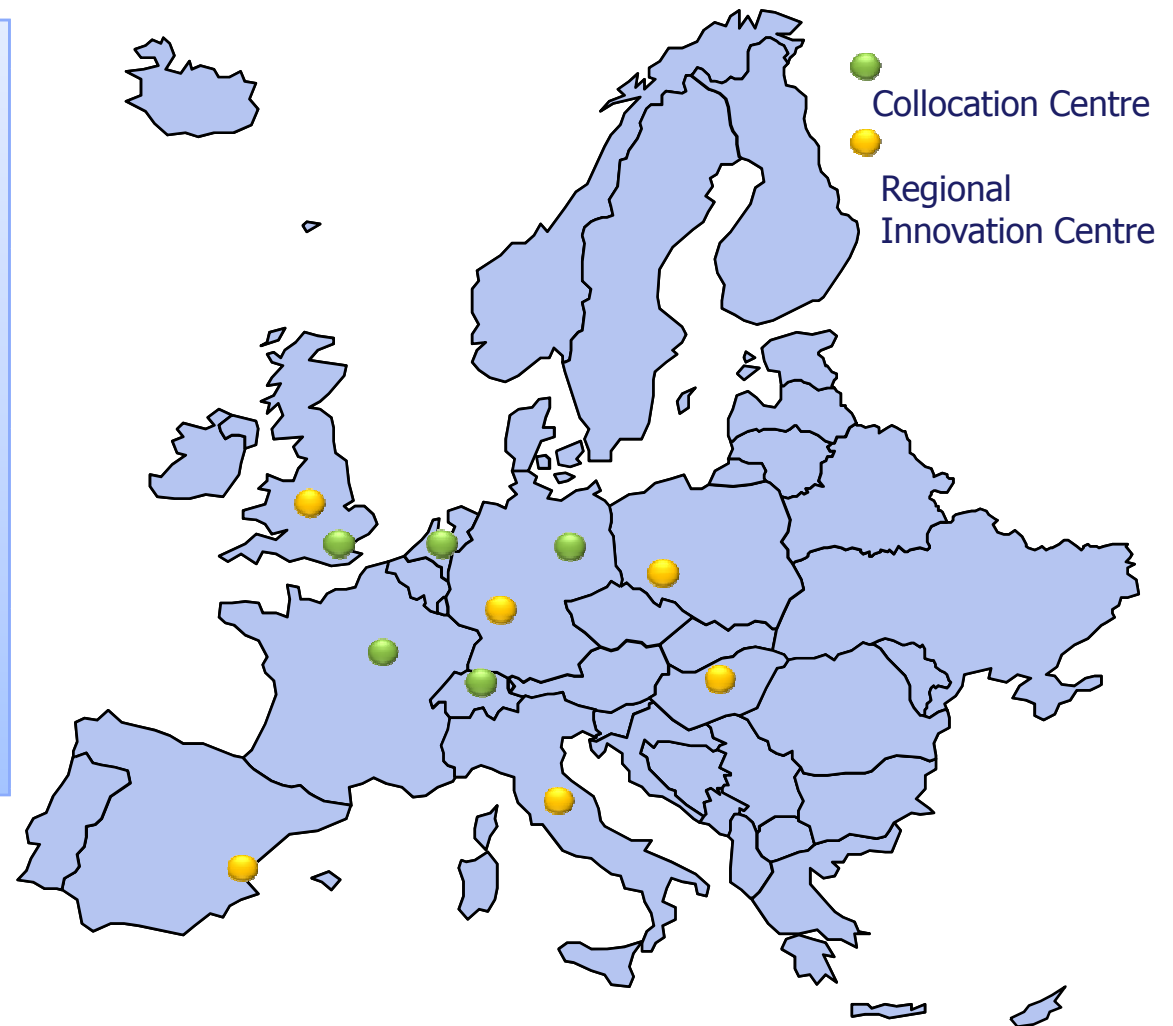
Climate-KIC

- **Climate-KIC** will focus on achieving excellence in four areas: assessing climate change & managing its drivers, transitioning to low-carbon resilient cities, adaptive water management and zero carbon production.
- **Co-location centres:** London, Zürich, Berlin, Paris, Randstad
 - **Regional Innovation centres:** Central Hungary, Lower Silesia (Poland), Midlands (UK), Hessen (Germany), Emilia Romagna (Italy), Valencia (Spain)

Climate-KIC

Vision

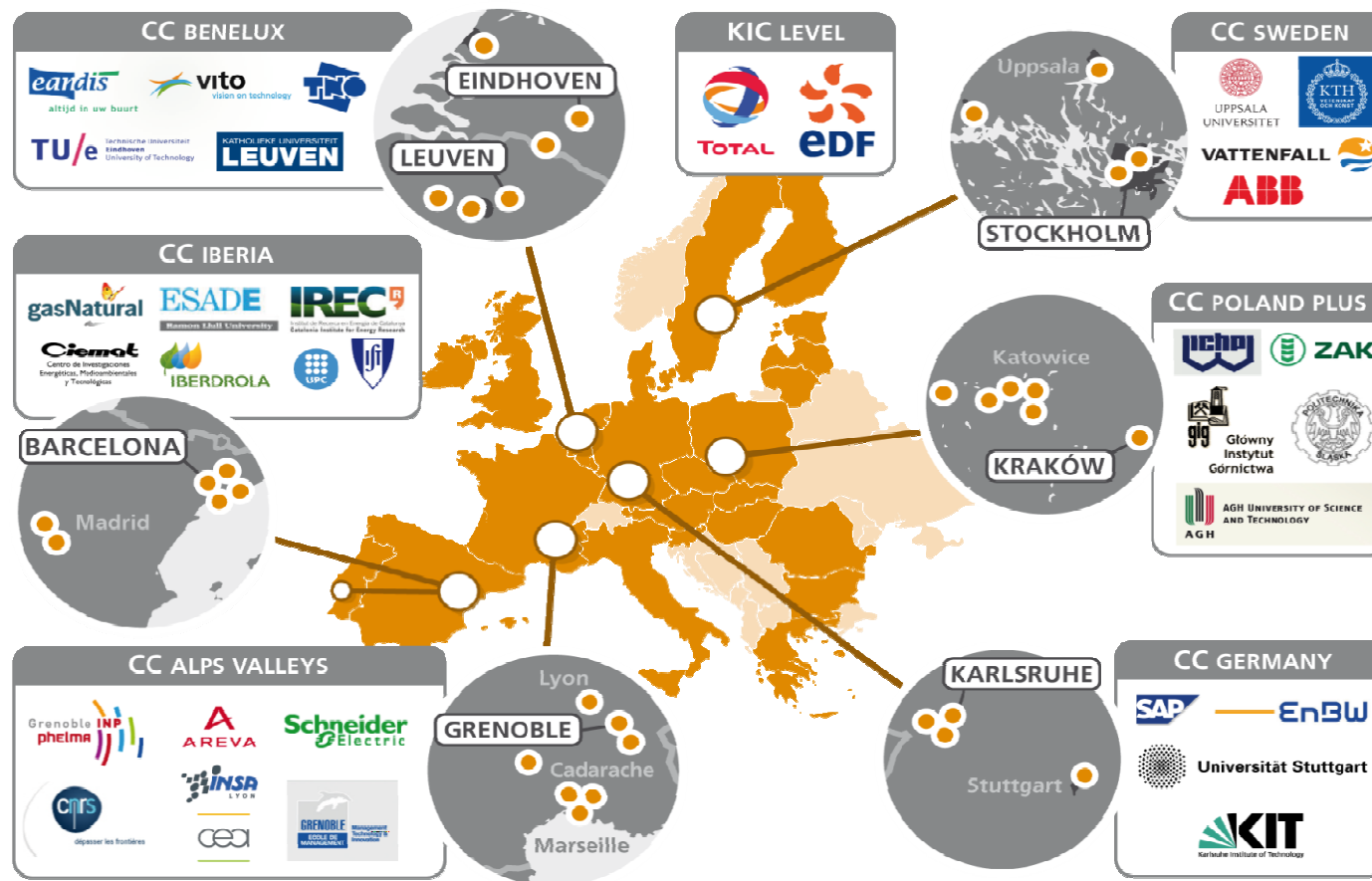
- **Catalyse** climate change innovation
- Create a **community** for climate change innovation
- Deliver **integrated** climate change innovation
- **Transform** Europe's response to climate change



KIC InnoEnergy

- **KIC InnoEnergy** envisions paving the way for an independent and sustainable energy system enabling a climate-neutral Europe by 2050 achieved by successful commercialisation of innovations.
- **Co-location centres:** Karlsruhe, Grenoble, Eindhoven/Leuven, Barcelona, Krakow, Stockholm
- Installation as a European Company (SE)

KIC InnoEnergy – A world class alliance of top European players with a proven track record



- 13 companies, 10 research institutes, 13 universities
- ~50% industry partners (incl. associated partners)
- >50% of key research players in Europe
- Covering the whole energy mix
- Knowledge triangle balanced along all dimensions
- Strong connection with VCs and local governments

EIT ICT Labs

- **EIT ICT Labs** aims at radical transformation of Europe through open innovation and venture creation into a knowledge society with an unprecedented proliferation of internet-based services.
- **Co-location centres:** Berlin, Eindhoven, Helsinki, Paris, Stockholm



EIT ICT Labs

Complete and complementary world class innovation hotspots

- 1 Goals
- 2 Co-locations
- 3 Innovation instruments
- 4 Management & governance
- 5 Business plan
- 6 Impact
- 7 Support

Berlin

Deutsche Telekom Laboratories

SAP
SIEMENS

Eindhoven



High Tech Campus Eindhoven



Helsinki

TECHNOPOLIS
Otaniemi Science Park




The Award of Excellence for Innovative Regions by the European Commission

Paris

INRIA


Alcatel-Lucent



Pôles de Competitivité

Stockholm

kista
SCIENCE CITY



+

Associate clusters in Budapest, London, Trento
Systematic build-up of innovation hot-spots outside our initial nodes

Each Co-location features at least:

- One strong research institute
- One major university
- One European-based multinational company
- Active regional network of SME
- Full national and regional support

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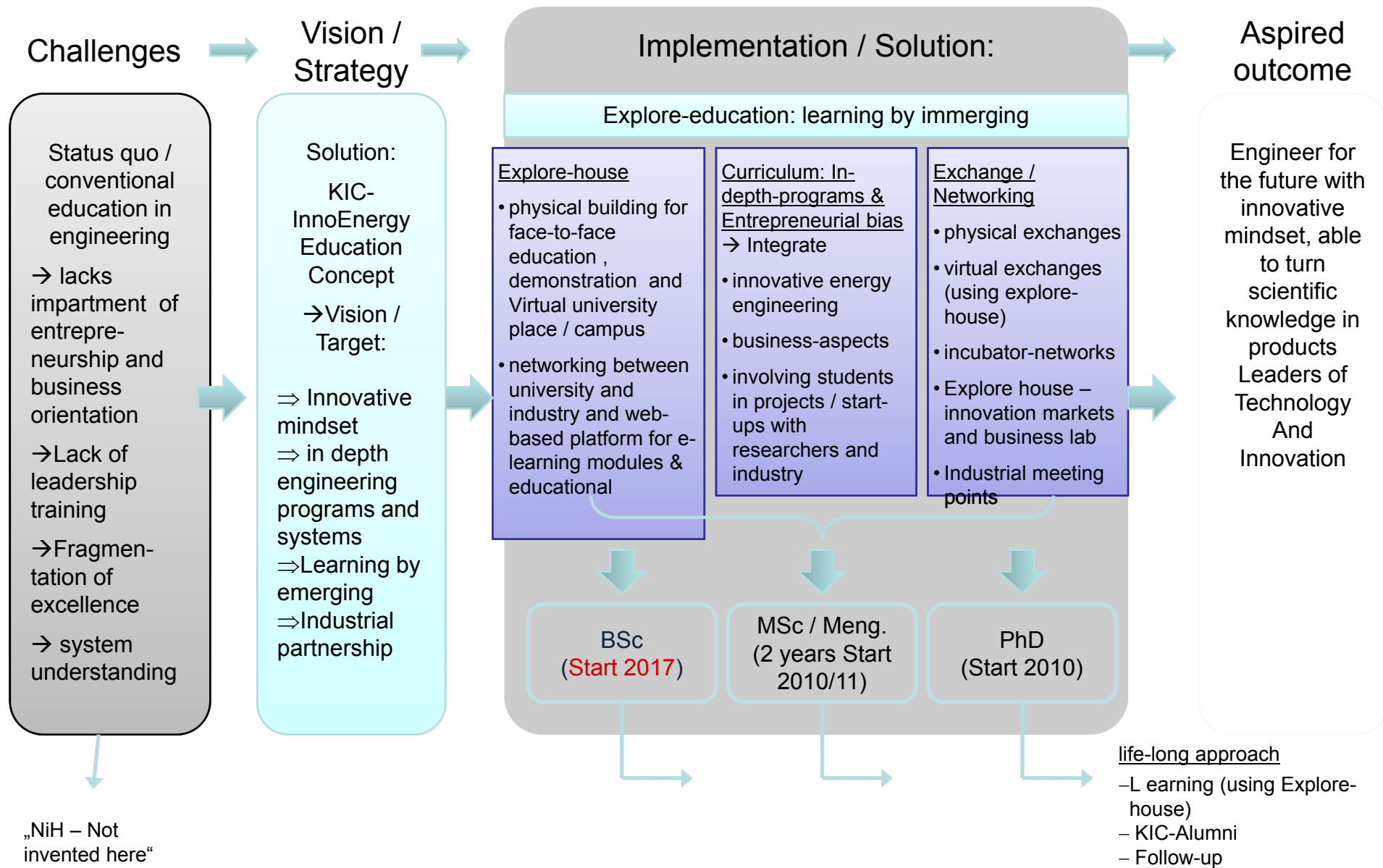
EIT labelled degrees (Master, PhD)

- **Build on the experience gained in the context of other EU actions** and in line with the main achievements of the European Higher Education Area (Bologna Process)
- **Go beyond these achievements** and enable EIT graduates to turn knowledge into marketable products and services, “from knowledge to business – from learning what to learning by doing”.
- **4 broad characteristics for EIT label quality criteria:** entrepreneurship education, integrated/innovative curricula, mobility-European dimension, openness to the world and outreach strategy.

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Example 1: Educational program set up



Example 2: Climate-KIC Summer School 2010

To become successful innovators in the field of climate change, students and young researchers will

- be in touch with **Europe's leading scientific and innovation community** on climate change mitigation and adaptation.
- get **hands-on experience** of how the latest science is translated into new services and products that have an impact on climate and economy.
- **study all aspects** influencing the market for climate change innovation, such as policy, legal and financial incentives and constraints.
- develop solutions in **multidisciplinary teams**
- investigate the possibilities of **creating successful new ventures**
- take part in a **business plan competition**

At the end of the summer school students will have developed their entrepreneurial skills as well as the understanding of the many scientific and technological aspects of climate change.

Next steps

- *2-3 June* KIC Launch Conference in Barcelona “Launching the KICs – Delivering new solutions to the European innovation landscape”
- *Summer:* KICs will sign 7 year Framework Partnership Agreement and first Annual Grant Agreement with EIT (Fin.Aut.)
- *Throughout:* Consolidation and learning from KICs
- *Second semester:* Start of consultations on the **Strategic Innovation Agenda (SIA)**
- Fall: establishment EIT Foundation



and last but not least...

The EIT & KICs will Shape the Future of Europe...

provided:

- **we recognise and accept the challenges**
- **we build entrepreneurship as the 'glue' of the knowledge triangle**
- **we continuously learn and improve**
- **we act and deliver**