EIT: Making innovation happen!

Transforming European Education through EIT Labelled Master and Doctoral Degree Programmes

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REDEEM Project Final Event
Stockholm/ 23-24 October 2017
European Institute of Innovation and Technology

Vision: Empower innovators and entrepreneurs to develop world-class solutions to societal challenges, and create growth and skilled jobs

- Cooperation of business (large corporates & SMEs), education institutions, research centres

student to entrepreneur

idea to product

lab to customer
EIT Priorities 2014 - 2020

1. Fostering growth & impact of first 3 innovation communities
   - EIT Climate-KIC
   - EIT Digital
   - EIT InnoEnergy

2. Creating 5 new Innovation Communities
   - EIT Health 2014
   - EIT Raw Materials 2016
   - EIT Food 2018
   - EIT Manufacturing
   - EIT Urban Mobility

3. Sharing and Disseminating EIT Community good practices
   - Inc. EIT Regional Innovation Scheme (EIT RIS)
EIT Innovation Ecosystems

Enablers
- Innovation Ecosystem
- Concertation
- Resource suppliers

Business function
- EU
- Businesses
- SMEs
- National Authorities
- End users

Research function
- NGOs
- Local Authorities

Education function
- HEIs
- Regional Authorities
- RTOs
- Business Angels
- Citizens
- VCs
- Public Bodies

Innovation & Entrepreneurship

Business function
- Public Bodies
- VCs
- Regional Authorities
- EU
- SMEs
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Innovation & Entrepreneurship
EIT Community across Europe
EIT Regional Innovation Scheme (EIT RIS)

- Boosting **ability to innovate** of countries and regions in Europe, ‘modest and moderate’ innovators (European Innovation Scoreboard).

- The EIT RIS is the EIT Community’s outreach scheme, which enables the **transfer of good practices and know-how** from the EIT’s unique approach to boosting innovation.

- **Synergies** between the EIT RIS and Smart Specialisation Strategies (RIS3), European Structural and Investment Funds (ESIF)
EIT’s unique approach & European added value

- Europe’s largest **innovation ecosystem** with high degree of integration
- **Long-term** strategic approach (7-15 years)
- **Autonomy and flexibility** required for innovation
- Effective **governance & business driven** / close to market
- Physical **co-location centres** (innovation hubs) across Europe
- Development of **human capital**
- **Performance-based** funding
- EIT as an **independent EU body**
  - Agile, flexible, rapid reaction
  - Efficient: administrative expenditure 1.9% only
Partnership evolution

KIC Partners at year-end

2010 2011 2012 2013 2014 2015 2016 2017 (Q2)

2017: excluding EIT Food
Cumulative Performance indicators

Start-ups created

- 2013-18: BP targets
- 2019-20: Forecast

Number of start-ups created:
- 2013: 57
- 2014: 147
- 2015: 216
- 2016: [VALUE]
- 2017: 339
- 2018: 395
- 2019: 465
- 2020: 545

Total:
- 2013-18: [VALUE]
Cumulative Performance indicators

Start-ups supported

- **2017**: 448
- **2018**: 1207
- **2019**: 2007
- **2020**: 3007

2017-18: BP targets
2019-20: Forecast
Our vision is to become the leading European initiative that empowers innovators and entrepreneurs to develop world-class solutions to societal challenges, and create growth and skilled jobs.

Kristina Tsvetanova of EIT Digital-supported BLITAB Technology wins EU ‘Rising Innovator’ Prize

18 EIT Community innovators and entrepreneurs in Forbes 30 under 30 2017!
Overview of main EIT Education Activities

1. **Master and doctoral studies**
   - International cooperation, industry involvement
   - Training on specific skills and competences
   - Mobility, internships and scholarships/fellowships

2. **Executive training and post-doctoral courses**

3. **Continuous professional development courses/modules**

4. **Learning modules and MOOCs**

5. **Alumni and outreach activities**
EIT master and doctoral programmes
Distinctive features

- Specific innovation and entrepreneurship activities focused on linking the research to the broad needs of KIC participants;
- Robust entrepreneurship education is a standard part of the programmes (“T-shaped”);
- Highly integrated, innovative "learning-by-doing" curricula;
- Strong focus on industry and business involvement in all stages of education lifecycle (from designing modules’ content to participation in delivery);
- Focus on international AND trans-organizational mobility, European dimension and openness to the world;
- Direct access to other KICs activities (incubators, accelerators)
- Graduates can benefit from being part of growing EIT Alumni community of innovators, entrepreneurs and experts
EIT Label – flagship education initiative

- The EIT Label is a quality seal awarded to excellent master and doctoral programmes with strong focus on innovation and entrepreneurship education element.

- EIT educational programmes are carried out at the KIC universities by their faculties but with the EIT specific learning outcomes and other quality criteria that are required for the EIT Label.

- A student graduating/being admitted within the validity period of an EIT-labelled programme can be awarded an EIT Label certificate.
Integrated and non-integrated masters programmes

- The integrated master’s programme is an EIT-labelled evaluation object in itself. The non-integrated master’s programme comprises 3 components; the ‘host’ programme, the academic module covering at least 30 ECTS and the coupling mechanism linking these.
EIT labelled programmes at Master and Doctoral levels

• The EIT and its KICs have jointly devised the “EIT Label Framework” that defines the processes and mechanisms for labelling and follow-up (renewal) of EIT programmes and modules at the Master and Doctoral levels.

• For operational purposes a complementary document, the detailed “Handbook for planning, developing, awarding the EIT Label, and follow-up the reviewing of EIT labelled Master and Doctoral programmes” lays down in details for the EIT Label Framework implementation process.

• “The Handbook” includes the description of the EIT-QALE model and has been recently been updated and revised.
EIT Label Master and Doctoral programmes

EIT-Labelled degrees and diplomas are based on the integration of the three sides of the knowledge triangle: education, research and business.

5 quality criteria

- The EIT Overarching Learning Outcomes (EIT OLOs)
- Robust entrepreneurship education
- Highly integrated, innovative "learning-by-doing" curricula
- Mobility, European dimension and openness to the world
- Outreach strategy and access policy

Next generation of entrepreneurs, innovators and change agents

- Creativity skills and competences
- Innovation skills and competences
- Entrepreneurship skills and competences
- Research skills and competences
- Leadership skills and competences
- Intellectual transforming
- Making value judgements
What are the Quality indicators and their individual assessment fields?

- **Quality indicator 0** - Compulsory requirements
- **Quality indicator 1** - Aligned teaching and EIT overarching learning outcomes coverage
- **Quality indicator 2** - EIT learning environment and facilities
- **Quality indicator 3** - Results
- **Quality indicator 4** - Stakeholder experiences

*new programmes*
EIT Label – flagship education initiative

- New assessment process operationally tested for the very first time in 2016 – 7 new programmes awarded (5 master, 2 PhD)

- In 2017 two independent ongoing assessment processes, first results:
  
  A) Assessment of the new candidate programmes
     -> 14 programmes recommended for the Label, 6 programmes rejected;

  B) Assessment of the existing programmes applied for the Label renewal:
     -> all 39 programmes recommended for the Label renewal
Cumulative KPIs

Graduates from EIT-labelled programmes

2013-2020:
- Number of graduates:
  - 2013: 140
  - 2014: 381
  - 2015: 776
  - 2016: 1190
  - 2017: 1829
  - 2018: 2820
  - 2019: 3870
  - 2020: 4970

2017-18: BP targets
2019-20: Forecast
### EIT’s new Performance indicators (as of 2017)

<table>
<thead>
<tr>
<th>Area</th>
<th>Outputs</th>
<th>Results/Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td># Graduates from EIT labelled MSc and PhD programmes</td>
<td># Start-ups created by Graduates from EIT labelled MSc and PhD programmes</td>
</tr>
<tr>
<td>Innovation</td>
<td># Products launched on the market</td>
<td># Start-ups created as a result of innovation projects</td>
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<tr>
<td>Business creation and acceleration</td>
<td># Start-ups supported by KICs</td>
<td>Investment attracted by ventures supported by KICs</td>
</tr>
<tr>
<td>Dissemination and communications</td>
<td># Success stories submitted to and accepted by EIT</td>
<td># External participants in EIT RIS programmes</td>
</tr>
<tr>
<td>Institutional</td>
<td>• Budget Consumption</td>
<td>KICs’ financial sustainability: revenue of KIC Legal Entity</td>
</tr>
<tr>
<td></td>
<td>• Error rate</td>
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Example - EIT Digital Master School

- 2 year programme, Entry (E) and Exit (X) universities in different countries
- 20 top technical universities in 8 member states
- 600 students, rising to 1000
- 50% from EU, remainder worldwide (50 countries) / 25% female, Scholarships to attract best talent
- Entrepreneurial motivation is selection criterion
- On-line and blended learning
- Changing-venue student events: Kick-off, Graduation, Summer Schools
Introducing young talent to entrepreneurship concepts, ideating around climate challenges, and facilitating work in interdisciplinary groups together with business coaches on a sustainable business idea. Participants gain the ability to combine scientific insights with new entrepreneurial and innovation skills.

- **3 or 5 weeks full-time** residential crash-course
- **Interdisciplinary learn-by-doing** approach.
- **Entrepreneurship and climate challenges:** site visits, workshops, expert sessions and networking events
- **2–3 different European locations.**
  → Deliverables: business plan and elevator pitch
  → Participants can continue into pre-incubation, entering the accelerator and going to market.

Climate-KIC: Journey

https://journey.climate-kic.org/
Climathon

Inspiring and high profile event – winner of the Guardian Sustainable Business Award 2016.

- Thematic challenge set in advance by host city
- Climathons held simultaneously in cities around the world interacting via social media.
- In 2016, 59 cities/regions participated.
- Solutions developed within 24 hours and host institutions encouraged to implement the winning solutions for climate impact.
Strategy for Programme Excellence & Impact

Develop Portfolio by using and scale pilots to showcase impactful training formats for our target audiences
EIT Alumni community

• EIT Alumni Startup Days

• 54 hour hackathon across 6 European cities

• Alumni to form teams, compete, and embark on entrepreneurial adventures.

• App’ero, a team born at start-up days in Paris 2016 was recently announced runners up of JA Europe Enterprise Challenge 2017
EIT Alumni in Action – Education success story

Florence Gschwend
EIT Climate-KIC PhD Student & Founder of Chrysalix

• Florence is currently completing her EIT Climate-KIC supported PhD in chemical engineering at Imperial College London.

• Her interest in entrepreneurship arose during her time at the EIT Climate-KIC Summer School.

• Her start-up, Chrysalix, which aims to replace the petrochemical industry with a bio economy by separating components in wood was awarded 3rd prize in the EIT Climate-KIC Climate Launchpad finals for 2016.

• This year she was included in the Forbes 30 under 30 list of best young entrepreneurs for 2017.
The EIT Alumni Community

“The EIT Alumni Community is an Interdisciplinary and multicultural community of change agents who share a common vision for tackling world challenges and create positive impact through innovation and entrepreneurship.”

• An EIT Alumni Board was created in May 2016 as a means of strengthening the EIT Alumni community, shaping its future, and fostering collaboration between the KIC alumni associations.

• In May 2017 a new board was voted consisting of representatives of the four existing EIT Community Alumni associations.

• The EIT Alumni have their own dedicated website - https://eitalumni.eu/

Left to Right: Laurent Roux (EIT), Esmee Kooijman (Climate), Falko Doering (InnoEnergy), Francesco Bonadiman (Digital), Miguel Amador (Health)
EIT Alumni Achievements and activities

- External representation and collaboration
  - EURODOC
  - EIT House
- Activities
  - Women@EIT events and profiles
  - EIT Alumni Start-up days
  - EIT Alumni CONNECT
- Communications & outreach
  - EIT Alumni newsletter, website and social media
  - Annual reports, work plan and strategy
  - A defined EIT Alumni Communications strategy
EIT in the Future Innovation Landscape
Human Capital for Innovation: the DNA of the EIT

• Educate and empower innovators across Europe to turn their best ideas into products and services for the market
• Capitalizing on its experience, the EIT is ready to reach out to wider circles
  • Engage with Erasmus+ initiatives
    • University Business Forum
    • HEInnovate
  • Engage in executive education, short courses and nanodegrees, online learning, and professional training
Education and the development of talent are at the core of the EIT model

• The Lamy Group states that the way forward is “to educate for the future and invest in people who will make the change”, recognizing that “there will likely be no excellent research and innovation without excellent education”

• EIT’s education agenda is key for gradually modernising education in Europe and for developing highly skilled innovators and entrepreneurs.
Outcomes of the Education review
EIT education activities value added

• Assessment of the implementation of the EIT Knowledge and Innovation Communities (KICs) educational activities in 2016

• Most added value creation occurs when programs link the Education Pillar with the Innovation Pillar and the Business Creation Pillar, creating new forms of learning experiences for students

• Graduates from EIT Labelled programs and other EIT learners tend to be more international, more interdisciplinary and more entrepreneurial than regular graduates and better prepared for future challenges through creative problem solving and team working
Enhance and promote skills and competences for a strong inclusive entrepreneurship and innovation culture

The EIT education model focuses on involving business and research and providing excellent education for innovation and entrepreneurship.
Strategic directions in education

The EIT Label – flagship initiative

• Further develop and strengthen
• Improve its quality assurance
• An acknowledged European quality seal for excellent entrepreneurship education
• Make it available to partners outside the EIT community
Strategic directions in education

Widen education offers beyond Higher Education

• To schools in line with the EU’s ‘New Skills Agenda for Europe’

• Competences for entrepreneurship, innovation and digital skills need to be developed on a much larger scale
Strategic directions in education

Provide strategic knowledge and guidance to our stakeholders

• Encourage the development of innovative forms of teaching and learning by enhancing the links between business and education partners
Strategic directions in education

Reduce skills mismatch and boost skills uptake throughout the education chain

• Higher participation of women, minorities and other under-represented groups in entrepreneurship

• Address digital issues and scientific/technical specialisations, particularly in geographies where they are currently under-represented
Strategic directions in education

Strategically guide our EIT Alumni Community

• To maximise its entrepreneurial and societal impact
Challenge - further strengthening the cross-KIC cooperation in education

• 2017: The Human Capital cross-KIC project whose priorities include:
  • Strategic shift from an Academic centric to a Human Capital approach;
  • Extension of the EIT Label towards a Life-Long Leaning concept

• Closely coordinated by the EIT

• Built on KICs strengths and potential for excellence in the educational activities

• Encouraging innovative thinking and some degree of experimentation

• Promote synergies
EIT’s 2018 Call for two new Innovation Communities

EIT Urban Mobility*
Smart, green and integrated transport

EIT Manufacturing relaunch*
Added-value manufacturing

* Subject to the outcome of the EIT’s mid-term evaluation by the European Commission.