



European Institute of
Innovation and Technology (EIT)

ENERGY KIC Proposal
Knowledge and Innovation Community
Mitigation and Adaptation of
Climate Change and Sustainable Energies
2010 - 2025

www.eit-energy-kic-proposal.eu

Contact:

Graz University of Technology
EIT - ENERGY KIC Proposal
Rector Hans **Sünkel**

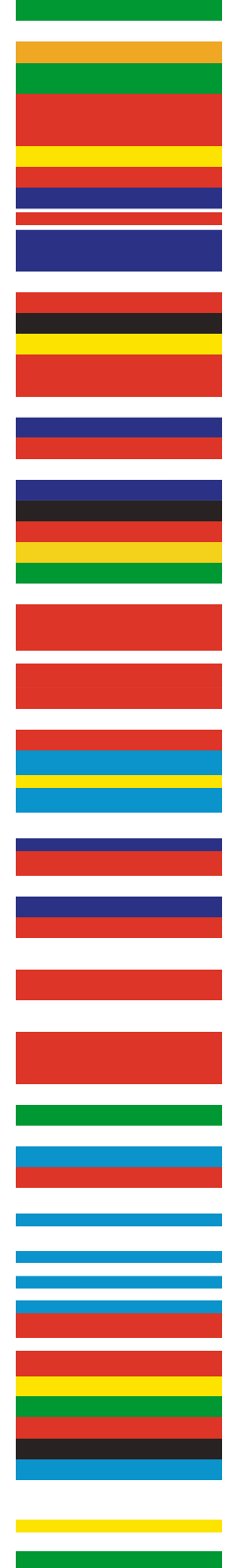
Concept, Management and Implementation:
International and Strategic Partnerships
Director: Brigitte **Hasewend**

Schlögelgasse 9/I
A-8010 Graz
T. +43 / 316 / 873 - 5281
F. +43 / 316 / 873 - 5282
isp@tugraz.at
www.eit-energy-kic-proposal.eu
www.tugraz-eit.eu

Responsible for content:
International and Strategic Partnerships, Brigitte **Hasewend**

Layout conception and production: Norbert **Prem**, Elisabeth **Auer**
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EIT: Mission and main features

EIT: A European
flagship for excellence
in innovation

Innovation is the key to growth, competitiveness and thus social well-being in the 21st century.

The European Institute of Innovation and Technology (EIT) is a new EU initiative which aims to become a flagship for excellence in European innovation in order to face the challenges of globalisation.

Although Europe already has excellent education and research institutions, their representatives are often isolated from the business world and do not obtain together the “critical mass” necessary for innovation.

The EIT is the first European initiative to fully integrate the three sides of the “Knowledge Triangle” (Higher Education, Research, Business-Innovation) and will seek to stand out as a world-class innovation-orientated reference model, inspiring and driving change in existing education and research institutions.

For further reference, please consult:

<http://ec.europa.eu/eit/>



Single point of contact for boosting innovation and spreading the knowledge of Europe's best brains

Aims and objectives



Excellence in climate change and renewable energies

The proposed knowledge and innovation community (KIC) fosters excellence-driven partnerships between universities, research organisations, companies and other innovation stakeholders worldwide with an excellent track record in research, development and implementation activities related to climate change and renewable energies.

It will promote the production, dissemination and exploitation of new knowledge products and best practices. More importantly the KIC sets out to transform the results of higher education and research activities into commercially exploitable innovation. For this purpose, the KIC focuses on delivering, disseminating and exploiting tangible outcomes together with European businesses.

There is great value to be gained from this joint venture not only because it boosts the EU innovation capacity, but also in terms of the prestige and visibility of the EIT and its partners. It is expected that the KIC will attract to the EU the best possible talents in the field worldwide.

Innovation through cooperation between the scientific and business communities



European Master's and
PhD in Climate Change
and Renewable Energies

An EU project that builds our future

The idea is to build an innovative **European education and learning platform** on mitigation and adaptation of climate change and sustainable energies. This platform tabs on latest research results and breathes the fresh wind of business development.

It integrates EU education and training modules developed jointly by involving higher education institutions as well as other recognised schools on all educational levels in close cooperation with enterprises and policy-makers. Internationally recognised professional training is seen as a major product to be generated by the platform.

The integration of projects in the knowledge triangle will be run by a proposed **European Knowledge Transfer and Innovation Centre** to be based in Austria. It integrates leading research groups in the fields of mitigation and adaptation of climate change and sustainable energies around the world. The KIC implements a strategic innovation framework together with the business community.



Planting the seeds for a sustainable future

Success stories - Graz University of Technology

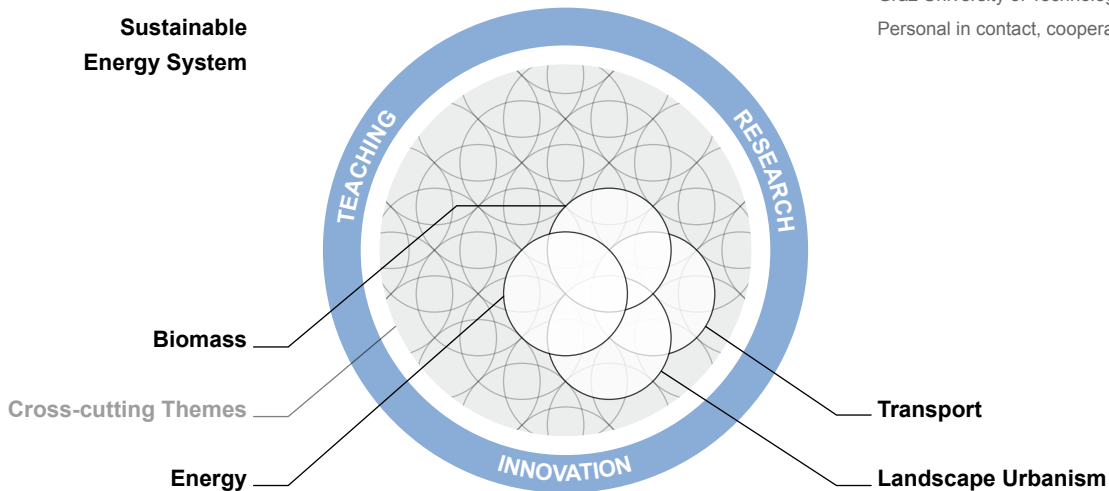
The following selected EU projects in teaching, research and innovation funded by different services within the Commission give an impression of the potential for integration and further development within the proposed KIC. The European ICT ENSURE - Environmental Sustainability Research is run by the Graz University of Technology integrating all European players in the field and providing for one Single European Information Space in Environmental Research.

Graz University of Technology
Energy Technology Portfolio



Graz University of Technology cherishes her values:
Personal in contact, cooperative and responsible in action

**Sustainable
Energy System**



■ Teaching

Graz University of Technology coordinates SOL-NET, a Marie Curie Early Stage Research Training Network. The research training network consists of nine interdisciplinary university research groups from seven different countries involving six commercial enterprises in the fields of solar energy, cooling and biomass.

In addition, Graz University of Technology coordinates several TEMPUS projects for curriculum development and establishing training centres for using solar energy in North Africa. These projects can build on an advanced process-oriented self directed learning environment developed by APOSDLE, another EU funded research project.

■ Research

Graz University of Technology hosts some of the leading international research groups in energy efficiency, low carbon economy, renewable energies and biomass research. They currently run 30 EU projects with strong participation from business, especially small and medium enterprises. All of these projects have a high innovation potential.

Examples include: DOUBLE SKIN FACADES, lessons learnt from previous projects, European benchmarking and dissemination of best practice. KAPA, prediction methods for the concentration of particulate matter in cities.

WATER, construction of devices to develop advanced river water quality monitoring schemes and professional training measures FELICITAS, to substantially improve European fuel cell and associated technology and know-how in the field of heavy-duty transport.

■ Innovation

Some of the EU research projects run by Graz University of Technology are directly dedicated to bridging the innovation gap, such as:

ACCEPT, to investigate the coaction of an ammonia reformer with fuel cells, conducted with major international partners.

ICONCONTROL, second generation of universal modification systems for organic semiconductor elements, demonstration of the applicability of these schemes, transfer to industrially relevant processing.

VITAL, environmentally friendly aero engine, low noise and low emission engine architectures, in cooperation with leading European research institutions and engine manufacturers.

BIONORM, prenormative work on sampling and testing of solid biofuels for the development of quality management. The development of European standards concerning biofuels is seen as a major driver to expand the market for solid biofuels.

Integration as a starting point for a paradigm shift in the European innovation system



Hand in Hand in research, teaching and innovation

Inviting your participation



Carrying the torch to new horizons together with our partners

Graz University of Technology is actively seeking partnerships with other leading international research groups, businesses and networks specialising mitigation and adaptation of climate change and sustainable energies. The KIC is planned to operate from 2010-2025.

Current EU projects in relevant fields conducted by Graz University of Technology cover research organisations from many countries around the globe. The involvement of enterprises is particularly high as one third of the University's budget comes from private sources.

Strategic Partners

In order for the ENERGY KIC to materialise, Graz University of Technology is building a consortium with partners from business and scientific organisations and policy-makers.

Strategic partnerships also include public research financing organisations and public bodies.