

FLAGSHIP REGION

## Green Energy Lab

# Accelerating user-centric integrated solutions for the renewable energy system of tomorrow

In order to help advance the energy transition in this flagship region, the "Green Energy Lab" works toward the target of increasing the days with 100% renewable electricity and heat fivefold by 2025. Cutting edge technologies – made in Austria – are implemented, developed and tested on a large scale. A focus of this flagship region spread over the four states of Burgenland, Lower Austria, Styria and Vienna is an energy future you can not only touch and feel, but also be involved in. The region already has the highest share of fluctuating renewable energy generation such as wind, PV or solar in Austria. At the same time, this is still not enough to cover the region's demand or the demand of cities such as Vienna or Graz. Over 100 partners from research and business work in the five central innovation fields of flexibility, digitalisation, integrated systems, customer integration and business models with thousands of lead-users in a open innovation process of innovative solutions. This should help both the advancement and demonstration of individual solutions to overall solutions for the flexible production and storage of electricity and heat including the smart integration of customers.

NETWORK-COORDINATION: Green Energy Lab Austria

PROGRAM OWNER/ RESPONSIBLE FOR THE CONTENT

## Klima- und Energiefonds

Gumpendorfer Straße 5/22 1060 Wien IN COOPERATION WITH



Bundesministeriun für Verkehi Inovation und Technologie

www.vorzeigeregion-energie.at





# Flagship region Energy

Innovative energy technologies from Austria

FLAGSHIP REGIONS

228
PARTNERS

>395 mill.€

TOTAL COSTS

# FTI-Initiative: Flagship region Energy

In the coming 8 years the Climate and Energy Fund of the Austrian government will invest up to 120 million Euros in 3 flagship regions. Over 200 project partners from business, science and research are working on our energy future and successfully positioning us at the pinnacle of the international stage.

Here the following focus areas of the FTI-initiative "Flagship region energy" are central:

- Model solutions with up to 100% renewable energy Innovative energy technologies "made in Austria" should demonstrate that a region can supply itself with up to 100% regional renewable energy. The clear goal is an optimised overall system for all market participants with a perfect interaction of production, demand, system management and storage. This will keep our energy and transport systems both fit for the future and affordable.
- for innovative energy technologies

  Austria should visibly strengthen its positioning as a leading international market, creating local jobs in promising sectors. This will help Austrian suppliers of technology to keep and improve their top position internationally.

· Strengthening Austria as a leading market

#### Largest value for the population

Involvement and active participation of users and operators is a central element of the FTI-initiative "flagship regions". With the involvement of the population the use of new energy technologies can be tested and demonstrated in as close as possible to real conditions. Furthermore, people should experience first hand the large-scale application of innovative energy technologies. Goals include awakening curiosity, getting to know innovative technologies and the creation of trust and acceptance of cutting edge, domestic technology. Furthermore, through the FTI-initiative "flagship regions" an innovation-ecosystem should be created, developing stable structures and a supportive environment in the medium-term. This will ensure the coordination of the consortia over the overall time-span of the flagship region and provide a platform for the development and implementation of the strategy.

With a time-span until 2025 and a grant budget of up to 40 millions Euros per flagship region the Climate and Energy Fund will finance up to three thematically difference flagship regions, with funds from the Federal Ministry for Transport, Innovation and Technology (bmvit).



"Bigger, better, faster - that is what we demand from the flagship region energy. We are not only testing Austria's energy future, but also demonstrating in a big way that domestic innovation is fit for purpose and sustainable. Once again, Austria is positioning itself as an international leader in energy technologies".

DI THERESIA VOGEL, CEO, CLIMATE AND ENERGY FUND

"Austrian business has the chance to help shape the global energy future now. With the flagship region energy, we want to show that energy innovations "made in Austria" work".

MAG. ELVIRA LUTTER, PROGRAM AND RESEARCH MANAGER, CLIMATE AND ENERGY FUND





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## WIVA P&G Hydrogen initiative flagship region Austria Power & Gas

The flagship region "WIVA P&G" demonstrates the transition of the Austrian economy and energy production to an energy system based strongly on hydrogen. Renewable hydrogen will play a central role toward achieving the goal of a CO2-neutral future. Particular emphasis is placed on the production and storage of hydrogen, the chemical transition to methane and on the respective combustion and reconversion to electricity. Furthermore a number of applications and process will be analysed, implemented, developed and demonstrated. The flagship region WIVA P&G demonstrates that Austria is a region perfectly suited to the transition to a system with green hydrogen. With this FTI-initiative existing and new, internationally exceptional research projects will be carried out, the results will be combined in an energy flagship region and Austria's position in the international market will be strengthened. WIVA P&G has a multi-disciplinary innovation structure, demonstrates and tests intelligent system solutions under real conditions and provides applicable systems and energy solutions for users.

NETWORK-COORDINATION: Charity WIVA P&G



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# **NEFI**New Energy for Industry

In the coming 8 years, NEFI will demonstrate the path toward complete decarbonisation for producing and energy intensive industry. Transitioning to renewable energy in order to reach the European climate targets is a big challenge for Austrian industry. This is a unique chance for Austrian technology producers to develop and strengthen their leading position in the international market. NEFI banks on a unique innovation network consisting of 80 companies, 14 research partners and 5 public institutions from all over Austria. The decarbonisation of the industrial energy system will be made possible through key technologies "Made in Austria" and will contribute to securing the Austrian industrial base in a new energy system. Furthermore, models and scenarios providing a basis for decision-making for industry and politics on the necessary infrastructure and conditions for the supply of Austrian industry with 100% renewable energy by 2050 will be created. The industrial states of Upper Austria and Styria are both committed to the program and ready to support its development.

NETWORK-COORDINATION: AIT Austrian Institute of Technology GmbH