



European Commission

Innovation Fund Programme



Overview of ongoing projects in Austria

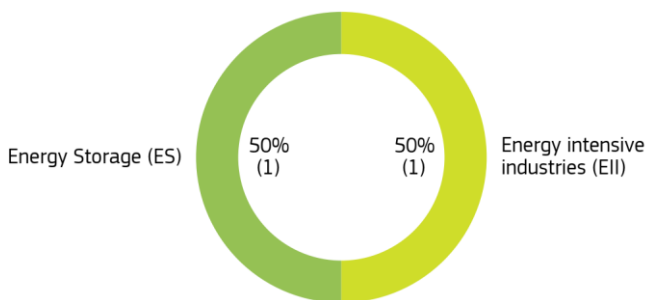
Funded by the revenue of the EU Emissions Trading System, the Innovation Fund's goal is to help businesses investing in innovative low-carbon technologies with significant GHG emissions reduction potential.

The Innovation Fund currently supports **2 projects** located in Austria, which will contribute to the decarbonisation of European industries with a total expected GHG emission reduction of **966,385 t CO₂ equivalent in the first 10 years of operation.**

The total **Innovation Fund grant in Austria is of EUR 50.9 million**, out of the **total relevant costs of EUR 140.9 million**, as defined in Art 5 of the Delegated Regulation 2019/856 on the Innovation Fund¹.

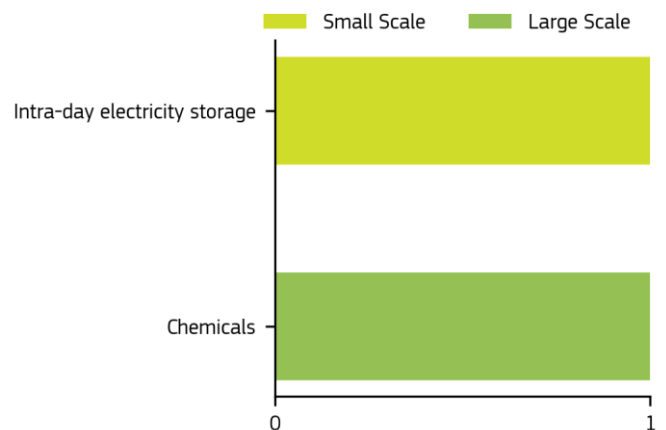
Projects per category

Number of projects and percentage of the total



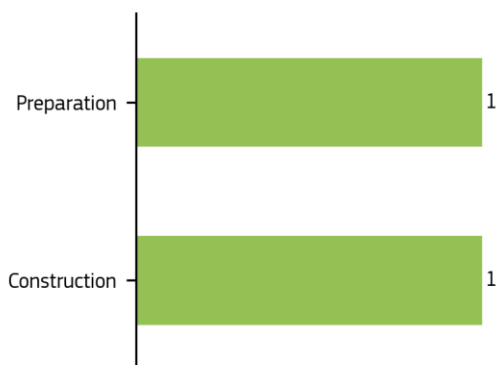
Projects per sector

Number of Small and Large-Scale projects



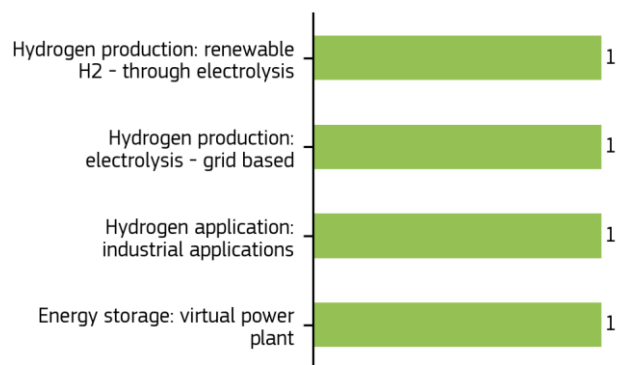
Projects per phase²

Number of projects



Top 5 technology pathways³

Number of projects



¹ OJ L 140, 28.5.2019, p. 9.

² Preparation means the period before financial close is reached; construction means the period between financial close and entry into operation; operation means that the construction is finished and the project has already started production.

³ Projects may employ several technological pathways, only the top 5 per country are kept in the graph.

List of ongoing Innovation Fund projects in Austria

| Acronym | Title | Sector | Start date | Project phase | Beneficiaries | Innovation Fund grant (EUR million) | Expected GHG emission avoidance (t CO2eq) |
|--------------------|--|-------------------------------|------------|---------------|--------------------------------------|-------------------------------------|---|
| Large Scale | | | | | | 48.5 | 931,123 |
| GRAMLI | Green Ammonia Linz | Chemicals | 01/04/2023 | Preparation | LAT NITROGEN VEB VERBUND | 48.5 | 931,123 |
| Small Scale | | | | | | 2.4 | 35,262 |
| GtF | Green the Flex: Achieving significant greenhouse gas emission reductions by intelligent electricity load shifting on the customer level. | Intra-day electricity storage | 01/01/2022 | Construction | EVN ES cyberGRID EVN KG EVN AG | 2.4 | 35,262 |

Project overview

| Acronym | Title | Description |
|---------|--|---|
| GRAMLI | Green Ammonia Linz | <p>The GRAMLI (Green Ammonia Linz) project will build a large scale Proton Exchange Membrane (PEM) electrolyser (60 megawatt (MW)), which will produce renewable hydrogen to be used in the production of renewable ammonia to decarbonise industrial processes. The primary aim of the project is to demonstrate the innovative and flexible large-scale PEM electrolyser. The electrolyser will be fully sourced with renewable energy and integrated into an ammonia plant. The renewable ammonia produced by the GRAMLI project will be fully compliant with relevant regulations and ready to supply melamine, fertilisers, and technical nitrogen products. The GRAMLI project's potential for relative greenhouse gas (GHG) emission is 156% compared to the reference scenario.</p> <p>The project will be a reference for the integration of a large scale electrolyser with an industrial ammonia facility, planning to produce 7 000 tonnes of renewable hydrogen and 40 000 tonnes of renewable ammonia per year. It will also establish an innovative business model that efficiently combines revenue streams from the production of ammonia, the provision of ancillary services to the power grid, and the utilisation of additional by-products such as oxygen and heat. The project will align with the electricity grid's emission intensity, with the facility's operation timed to use more electricity when the share of renewable electricity is high. This approach will prevent grid congestion, contribute to grid stability, and improve the project's financial viability, thereby paving the way for more renewable power in electrical grids. The project will contribute to an absolute avoidance of 931 000 tonnes CO2 equivalent of greenhouse gas emission savings over the first ten years of operation.</p> <p>The Green Ammonia Linz will contribute to the Austrian Hydrogen Strategy and the EU energy and climate goals set in the REPowerEU Plan. In particular it will contribute to the target of reaching ten million tons of renewable hydrogen production domestically by 2030, by supporting the decarbonization of the hard-to-abate chemical industry, and by facilitating the integration of additional renewable energy generation into the power grid.</p> <p>The project not only contributes to a significant CO2 emission reduction, but also supports the regional economy in Austria. The project is unique in its size and that it is the first implementation of green hydrogen in an industrial environment in Austria. The green ammonia value chain that will be established through the GRAMLI project also presents potential opportunities for other companies to benefit.</p> |
| GtF | Green the Flex: Achieving significant greenhouse gas emission reductions by intelligent electricity load shifting on the customer level. | <p>In Austria and many other European countries, the energy system is just before a major transition towards 100% renewable generation. Since renewable generation is not only seasonal but also short-term fluctuating and hard to predict we need to harmonise the electricity demand with the generation, both time-wise and region-wise. Flexibility is the ability to do exactly that by managing and optimising decentralised units.</p> <p>Based on the business plan we want to aggregate more than 2500 decentralised units in three years and use them for ancillary services, making more than 6 MW of power and more than 5 GWh/a short term load shift potential accessible to our energy system as flexibility.</p> <p>We are aiming for smaller, mostly residential units like heat pumps, electric car charging stations, hot water generation, and storage systems. Our goal is to provide easy to use applications for customers to match their demand to the behind the meter generation and enable them to directly participate on the energy markets by delivering flexibility with their devices. Additionally, we will adopt and use our systems to support Energy Communities once the respective law is passed in Austria.</p> <p>The most challenging flexibility services markets in terms of technical requirements are the ancillary services of Frequency Containment Reserve and Automatic Frequency Restoration Reserve. By scaling our solution and pooling more than 2500 customers within the next three years we want to open those two markets for customer flexibility. The flexibility can be activated within seconds. With the link between citizens and energy markets not only the electricity system gets supported but also CO2-emissions are going to be reduced. The fund enables scaling up customers' load shifting potential to a relevant size. This creates a win-win-win situation, for the customers, EVN, cyberGRID, Fronius, tiko and, foremost, the environment.</p> |