

NEW ENERGY FOR INDUSTRY

The NEFI innovation network of science, technology providers and companies demonstrates a pathway towards the decarbonisation of industry



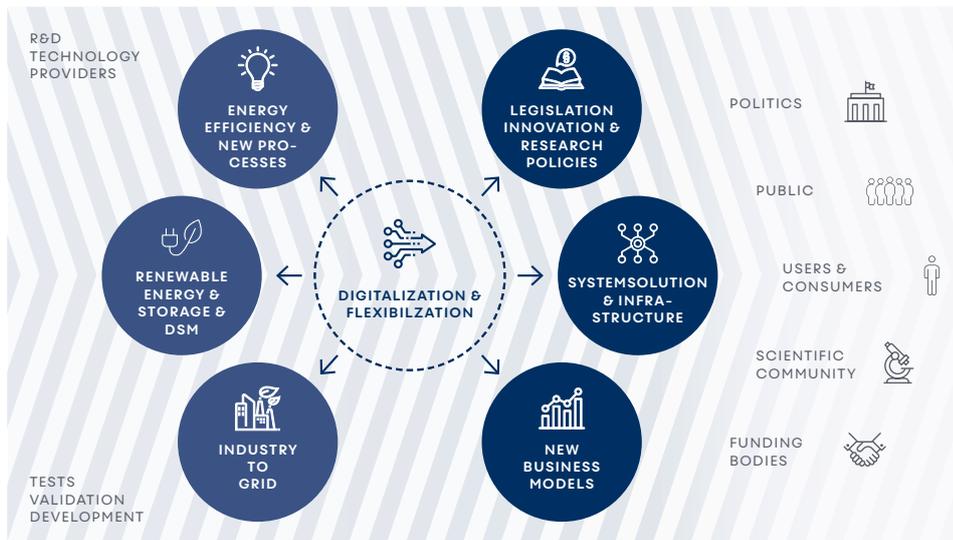
NEFI is an Energy Model Region funded by the Austrian Climate and Energy Fund.



NEFI VISION

NEFI key technologies 'Made in Austria' enable the decarbonisation of industrial energy systems and help to secure Austria's position as an industrial location. Digitalisation presents new opportunities for enhancing the flexibility of the energy system, and industrial processes and plays a core role in the NEFI innovation fields and their associated flagship projects.

INNOVATIONSFELDER



TECHNOLOGICAL INNOVATION FIELDS

SYSTEMIC INNOVATION FIELDS

We are very pleased that our consortium of more than 80 companies, 14 research institutes and 5 public institutions proves that Austrian industry will make a key contribution to the energy transition through innovative technologies 'Made in Austria'. At the same time, this is a big opportunity for all of the companies involved and for Austria as a business location.

Wolfgang Hribernik, NEFI Network Coordinator and Head of Center for Energy, AIT Austrian Institute of Technology

Competitiveness through sustainability: the collaboration of innovative production and energy technology companies enables us to demonstrate the industrial energy transition and to reach out for becoming a leading region in energy technology.

Christiane Egger, Manager of the Cleantech Cluster for Energy, Deputy Managing Director of the OÖ Energiesparverband

KEY TECHNOLOGIES

- **Increasing efficiency** and **incorporating innovative process technologies** (e.g. high temperature heat pumps) into industrial systems
- Industrial waste **heat utilisation**
- **Storage technologies** such as innovative hybrid and adiabatic compressed air energy storage
- **Load-flexible oxygen usage** in steel production
- New **solutions** for **the use of renewable energy** in industrial energy systems
- Establishing cross-company **energy communities**
- **Decarbonisation** of existing production sites
- **Load management** in **power networks** through the inclusion of tourist regions

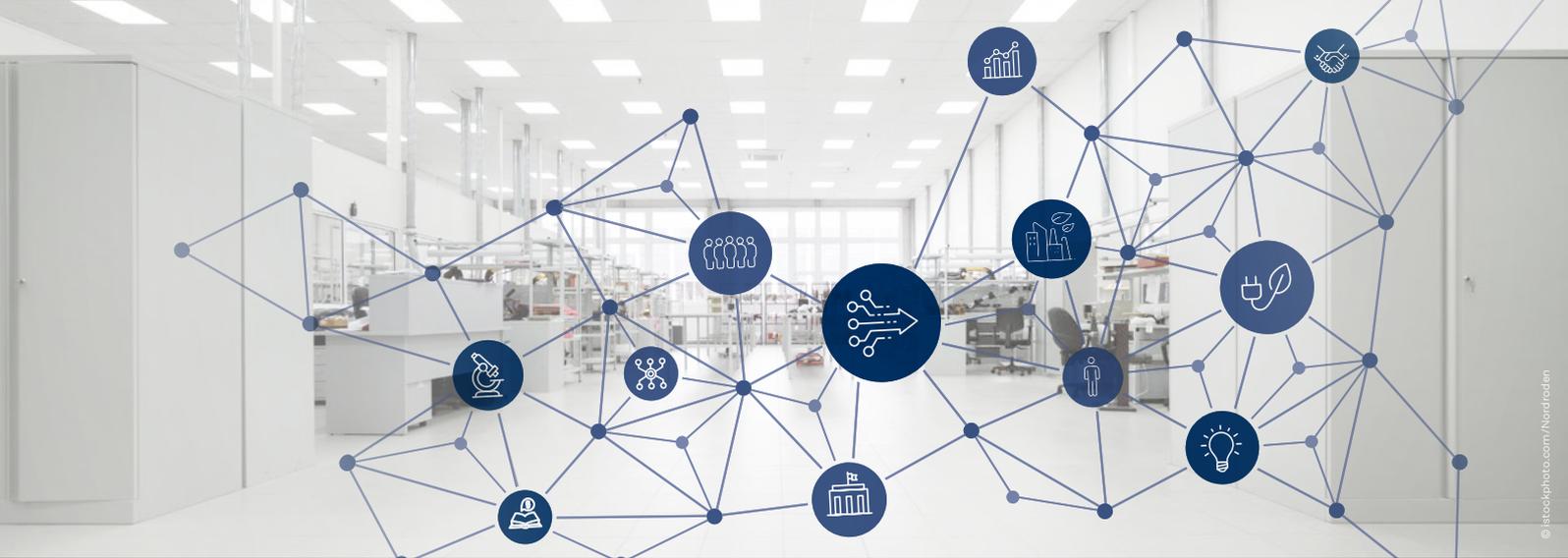
Austria has a highly effective cleantech economy with above-average growth, high R&D intensity and a strong focus on export. The Energy Model Region offers the chance to increase international visibility and develop flagship projects for decarbonisation.

Christian Maurer, Manager of the Cleantech Cluster for the Environment, Business Upper Austria - OÖ Wirtschaftsagentur GmbH

INNOVATION NETWORK

The NEFI innovation network formed around a consortium of the AIT Austrian Institute of Technology, Montanuniversität Leoben, OÖ Energiesparverband and Business Upper Austria brings together wide-ranging expertise in the fields of energy research and project implementation. Over the next 8 years, these partners will be working together to demonstrate a pathway for the DECARBONISATION of manufacturing and energy-intensive industry. NEFI is an Energy Model Region funded by the Austrian Climate and Energy Fund.





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NEFI_LAB

NEFI is based on an open innovation process which will be implemented by NEFI_Lab. Over the next 8 years, new projects will be developed and tried-and-tested technologies demonstrated and brought to market maturity together with industry, technology providers and users. The strong industrial regions of Upper Austria and Styria play a pioneering role in this context.

Decarbonisation in industry is a significant pillar in reaching our climate goals. It will only succeed if Austria can secure its position as a location for industry and maintain its pioneering role as an exporter of cutting-edge technologies for the conversion of industrial processes to renewable energy. With NEFI, we want to show that this can be realised.

**Thomas Kienberger, Manager of the NEFI_Lab,
Chair of Energy Network Technology,
Montanuniversität Leoben**



CONTACT

office@nefi.at

www.nefi.at
www.vorzeigeregion-energie.at