Renewable Energy Valleys

Europe's energy system is at a crossroad. With 95% of its oil and 84% of its gas consumed coming from outside the EU, the need for a drastic shift has never been more critical.
At the heart of Europe's energy transition are the **Renewable Energy Valleys** - decentralised systems that promise 100% self-sufficiency through renewable sources and smart technology.

Towards an European energy self-reliance

The main ambition of the REFORMERS project is to enhance renewable energy supplies through diversification and optimisation of the overall efficiency of local energy systems.
Combining **consolidated technological solutions** with the most **innovative energy management systems it's possible** to ramp up green energy production.

Project Coordinator

Flagship Valley coordinator

Consortium

CONTACTS

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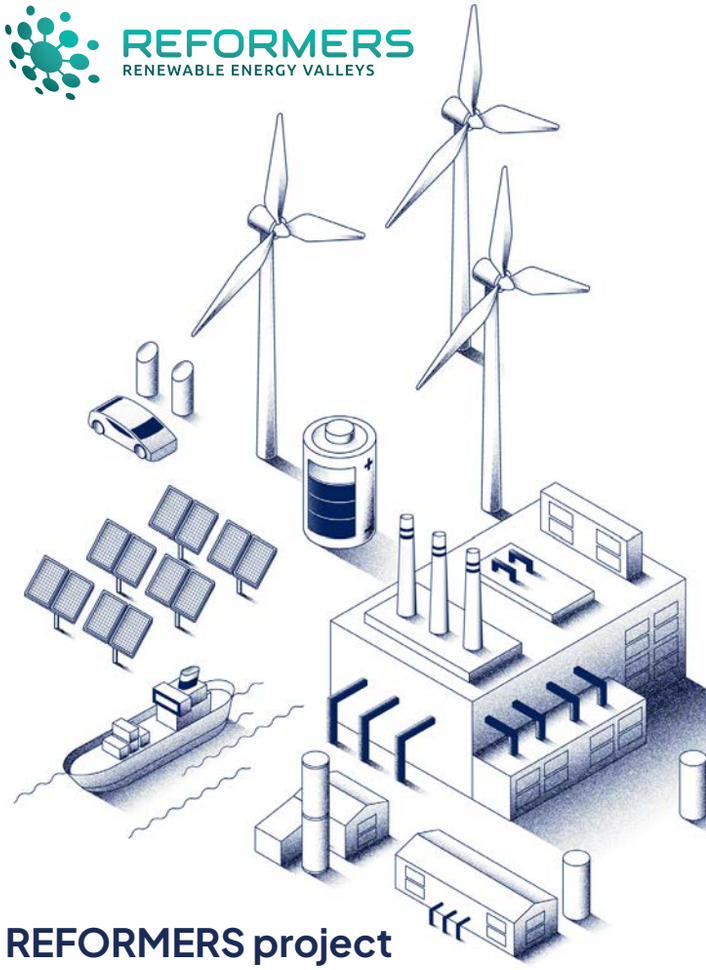
Join us

REFORMERS
RENEWABLE ENERGY VALLEYS



REFORMERS project

Regional Ecosystems FOR Multiple-Energy Resilient Systems

Funded by the European Union

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REFORMERS
RENEWABLE ENERGY VALLEYS

New energy concepts for generation, storage, and usage

1. **Deep integration of multi-vectors in local energy systems**

   REFORMERS will demonstrate a multi-actor, multi-carrier and multi-solution LES in the Flagship site in the city of Alkmaar that can serve as a **replicable approach** for developing REVs throughout Europe.

2. **Advanced digital design tools**

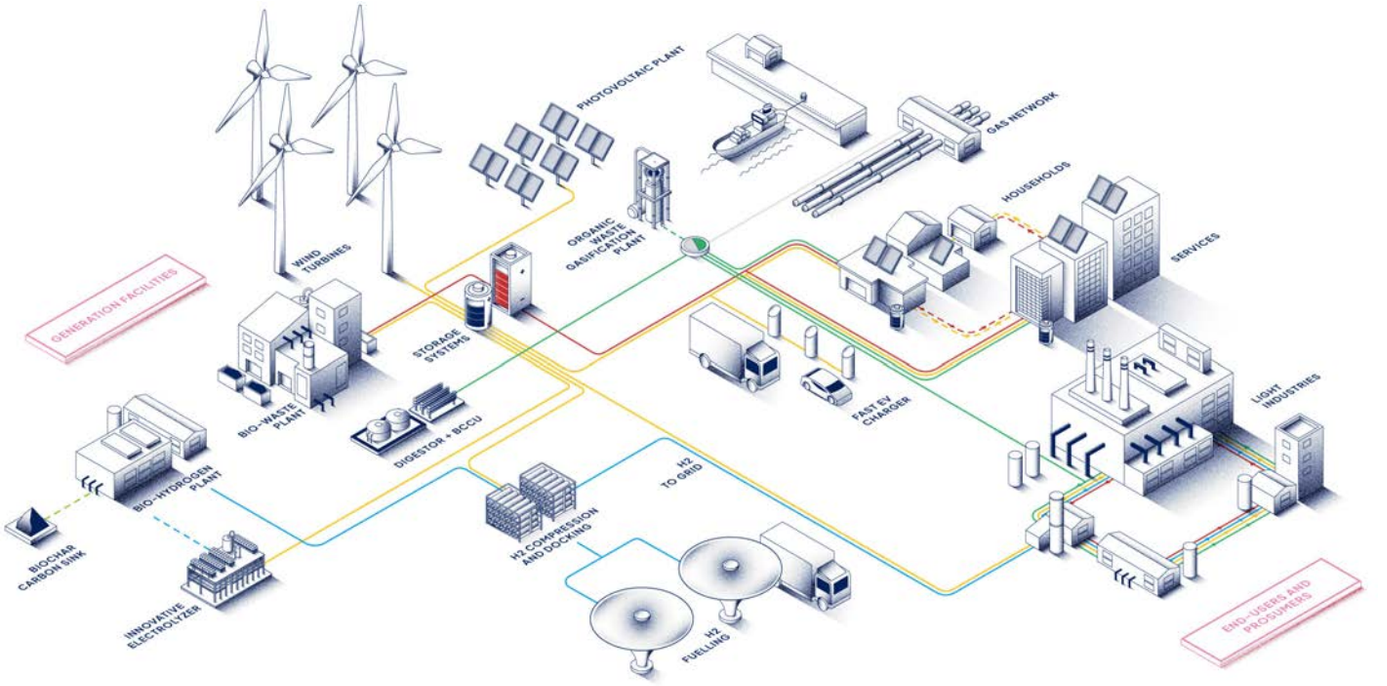
   A **Renewable Energy Valleys Toolbox** will be developed by integrating advanced calculators for Local Energy Systems (LES) into Renewable Energy Valleys (REV) establish feasible energy scenarios that meet users' needs.

3. **Intelligent operational management**

   A **Digital Twin** of the Flagship site - the detailed digital model of its energy system - will support smart operational management and will benefit informed decision-making that is accessible to end-users thanks to its service-oriented architecture.

4. **Together for a greener future**

   REFORMERS integrates Social Sciences and Humanities (SSH) to **increase energy resilience, social acceptance and adoption** of proposed solutions.



A STEP FORWARD

Converting Local Energy Systems to Renewable Energy Valley

The REFORMERS project aims to demonstrate how current technologies can transform LES into REVs. By involving local communities, businesses and decision makers, REFORMERS co-creates solutions to design, analyse and manage REVs. Thanks to the REFORMERS Toolbox communities will find out how to meet their energy needs through local sourcing, achieving a self-sustaining energy supply.

A Systemic Approach

The adopted methodology facilitates technical advancements through three stages of innovation throughout the project:

#1 **Ideas & Conviction** - Garnering support for innovative concepts.

#2 **Exploration** - Proving their feasibility and market viability.

#3 **Exploitation and policy** - Leveraging newfound insights to implement or adapt policies while supporting ongoing innovation.