

BROKERAGE EVENT IN HORIZON EUROPE

ENERGY TOPICS

4 MOTORS FOR EUROPE
3rd June

**DLR Institute of
Networked Energy
Systems**

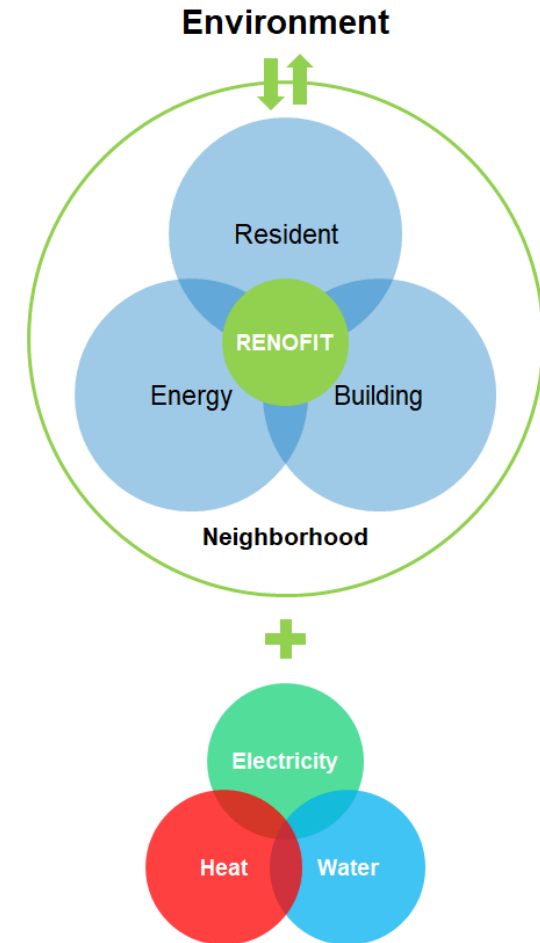
Babak Ravanbach

Our project idea

The objectives of your project proposal

The overall objective of proposed project idea is to enable European cities to design, build and manage green, positive energy neighborhoods well embedded in the local climatic, spatial, economic, technical, environmental, regulatory and social context.

The project is aimed at designing, developing, demonstrating, evaluating and validating an open framework of innovative technologies that are built from sustainable material, powered by renewable energy systems, managed by smart data, and enhanced by citizen interaction; to support European cities and the building sector value chain in their pursuit of European climate-neutrality targets.



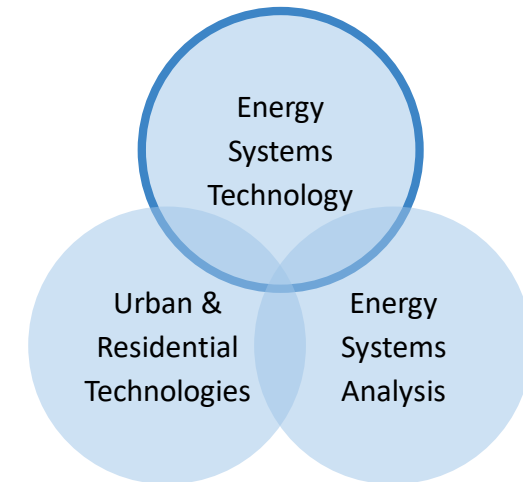
Our project idea

The expertise possessed by your company/organization

The DLR Institute of Networked Energy Systems in Oldenburg, Germany, develops with its approx. 150 employees' technologies and concepts for future energy supply based on renewable energy sources.



The Institute's three departments – Urban and Residential Technologies, **Energy Systems Technology** and Energy Systems Analysis – work on system-related issues for intelligent and efficient **linking of the electricity, heating and transport sectors**. Systems of all sizes and levels are being investigated, ranging from individual installations and **“smart” buildings to networked residential districts and cities**. The Institute also evaluates energy systems at national and international levels, using its own network structure models and technology assessment methods.



Our project idea

Involvement in previous/ongoing projects in the area

- Energetic Neighbourhood Quarter Fliegerhorst Oldenburg (ENaQ: <https://www.enaq-fliegerhorst.de/>)
- Standardised approaches and products for the systemic retrofit of residential Buildings, focusing on HEATing and cooling consumptions attenuation (BuildHeat: <http://www.buildheat.eu/>)
- New energy supply concepts for commercial multi-tenant buildings (EMGIMO: <https://www.emgimo.eu/>)
- Energy supply concepts for climate neutral logistics centers (ELogZ: <https://elogz.de/>)
- Battery system for modularity (BaSyMo: <https://www.basymo.de/>)

Keywords

Energy Positive Buildings, Buildings as Energy Nodes, Carbon-neutral Buildings, Net-zero Energy Neighborhoods, Building-integrated Smart Energy Solutions, Urban Mini-grids

Topic

The topics you are interested in

Date	Call	Funding
28 Apr 2022	HORIZON-CL5-2022-D4-01-01: Demand response in energy-efficient residential buildings	12.00 (4.00 to 6.00)
06 Sep 2022	HORIZON-CL5-2022-D4-01-02: Renewable-intensive, energy positive homes	12.00 (4.00 to 6.00)
	HORIZON-CL5-2022-D4-01-03: Smarter buildings for better energy performance	12.00 (4.00 to 6.00)
	HORIZON-CL5-2022-D4-02-04: Smart-grid ready and smart-network ready buildings, acting as active utility nodes (Built4People)	10.00 (3.00 to 5.00)

Your potential role and contribution

- Modelling and simulation of networked energy systems at the building & neighborhood level
- Modelling and simulation of LV/MV grid
- Systems integration and energy management in smart city, smart home & smart mobility
- Technologies, strategies & methods for sector integration (electricity, heat, and e-mobility)
- Systems integration of various storage technologies (batteries) and other flexibility options
- V2B & V2G studies, charging strategies and smart e-mobility load management

An indication of the existing partnership/consortium

- A team of experts from 7+ European countries comprised of city officials, architects, engineers, designers, scientists, and local facilitators with relevant EU project experiences
- In collaboration with green-minded organizations/innovation clusters in four selected demo sites in Spain, France, and Portugal, and Germany

The requirements for additional partner(s)

DSOs, Smart Appliance Designer/Manufacturers, Resource-efficient and climate-friendly building materials/components, Green Building Companies

Contact us!

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