

OpenGIS4ET

Open Geographic Information System for Energy Transition

The project aims to help authorities to develop strategies in line with RES and CO2 emissions targets

The OpenGIS4ET project aims to extend the H2020 Hotmaps platform, an open-source heating and cooling mapping and planning toolkit that provide default data for EU28 at national and local levels. These tools and data allow public authorities and energy planners to identify, analyse, model and map resources and solutions to meet energy needs in their area of responsibility in an efficient and cost-effective manner. Open-GIS4ET will add open APIs to the Hotmaps platform and new plug-ins called calculation modules (CM). These extensions will help authorities to develop local, regional, and national heating, cooling, mobility, and sector coupling flexibility strategies, that are in line with RES and CO2 emission targets at national and European level. New developed plug-ins and functionalities will be demonstrated by need-owners to reach TRL-8.

The objective of this project is to accelerate the green transition, create new transnational business and investment opportunities and ensure social sustainability and coherence with digitalization in other sectors.

This will be achieved through an open-source heating and cooling mapping and planning toolkit, which will provide default data for the EU28 at national and local levels.

ERA-Net Smart Energy Systems



This project has been funded by partners of the ERA-Net Smart Energy Systems (www.eranetsmartenergysystems.eu) and Mission Innovation (mission-innovation.net) through the Joint Call 2020. As such, this project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no. 883973.



Project Duration

01.05.2022 - 30.04.2025

Project Budget

Total Budget: € 1,963,022. -Funding: € 1,109,543. -

Project Coordinator

Prof. David Wannier (Switzerland)

Project Partners

- HES-SO (Switzerland)
- CREM (Switzerland)
- EPFL (Switzerland)
- Tu Wien (Austria)
- E-think energy research (Austria)
- Energie Agentur Smk (Austria)
- PlanEnergie (Denmark)
- FlexShape (Denmark)
- Moduldrei (Germany)
- Energiereferat Frankfurt (Germany)

Project Website

https://www.hotmaps-project.eu/

Contact

david.wannier@hevs.ch

ERA-Net Smart Energy Systems Joint Call 2020 (MICall20)

This project has been awarded funding within the ERA-Net SES Joint Call 2020 for transnational research, development and demonstration projects. 22 Mio EUR of funding have been granted to 21 projects active in 17 regions and countries.

Main Objectives

Providing a digital EU wide tool for energy planning at local level that is open source. A tool allowing to add your own data following, while respecting privacy and security, and to choose whether to share the data or results with private or public user groups.

Ensuring security of development with DevSecOps approach to mitigate vulnerabilities, failures, and risks.

Creating a community for application development with a standardised and open application programming interface (API), existing initiatives and policy processes drawing on expertise from several countries.

Main Results

OpenGIS4ET will offer:

- An Open-Source and open data solution
- High usability through co-development, iterative testing, and demonstration
- "Not-by-default-bottom-up", but well tested ways to upload one's own data.
- Transparency as key objective in all communication and dissemination (e.g., documentation of tool, step-by-step guides for potential users, training...)
- Stakeholder analysis and involvement in the planning process (local authorities and utilities as the very least)



Joint Programming for Flourishing Innovation –

from Local and Regional Trials towards a Transnational Knowledge Community

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