

Digicities

Urban Digital Layers to Support the Energy Transition of Cities

” *Digicities aims to develop interconnected data models and data exchange architectures to connect stakeholders across the digital value chain*

The energy transition requires a paradigm shift in how we generate and use energy. Increasing interconnectivity and the rise of Industry 4.0 means that more data is available but there is still a lack of semantic interoperability between datasets. This restricts the development of scalable energy oriented applications. Digicities aims to overcome the barriers to accessibility and exchange of data for decision-making at a utility and municipality scale. A data architecture will be developed around structured, interconnected digital layers that will be used in the projection of energy demands. A framework for the processing, storage and use of data sources will be demonstrated in a living lab in each partner country. The project consortium has stakeholders from each stage of the value chain. This approach considers the impact of technical advancements and regulatory changes to develop a solution that will accelerate the energy transition to a net-zero energy system.



Digicities connects stakeholders in the digital value chain. Kickoff event in Lugano, 24th May 2022.

ERA-Net Smart Energy Systems



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Project Duration

01.04.2022 - 31.03.2025

Project Budget

Total Budget: € 2,430,000.-

Project Coordinator

Empa (Switzerland)

Project Partners

- AIT (Austria)
- Supsi (Switzerland)
- Cividi (Switzerland)
- City of Lugano (Switzerland)

Project Website

www.digicities.info

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**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

- Provide a transparent source of semantically tagged data (digital layers) to support existing digital platforms and services
- Enable the projection of energy demands to support cities' decision-making in achieving their energy and climate goals
- Implement a data architecture using best available practices to preserve sovereignty and privacy
- Evaluate how the implemented solution can achieve greater renewable energy integration and energy efficiency
- Investigate new business opportunities in the value chain that could emerge from the connected digital layers

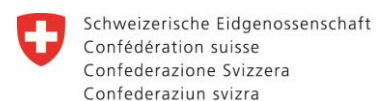
Expected Result

- Need-owners will be able to generate additional insight on their data and will have knowledge on how to exchange their data with third parties
- Data sets will be combined and improved so they are suitable for more accurate forecasting of energy demands
- Digitalization pathways involving semantic technologies will be implemented to increase the uptake and effectiveness of energy efficient and renewable energy technologies within the use cases



**Joint Programming for Flourishing Innovation –
from Local and Regional Trials
towards a Transnational Knowledge**

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