



# DigiCiti

Digital energy solutions promoting social innovation, circular economy, climate change mitigation and urban resilience

” Half of all energy usage relates to thermal processes. So, this is the focus of DigiCiti.

Thermal energy is a core component in transitioning our energy systems to a decarbonised future. Thermal processes possess an inherent flexibility due to their inertia and can therefore be used to make the whole energy system more resilient to climate change while facilitating the further use of renewable energy sources. DigiCiti will introduce transformative technologies, business models and knowledge sharing for energy user empowerment to enable a true circular energy society in a decarbonised Europe.

DigiCiti will merge recent advances in collective intelligence and data-driven AI with innovative business and investment management to fully exploit the potential of a digital society. The project will be evaluated in prototype sites and living labs covering a range of solution use cases to prove the ambitious goals for societal, environmental, and financial impact of DigiCiti

### Project Duration

01.06.2022 - 31.05.2025

### Project Budget

Total Budget: € 1,154,853. -

Funding: € 998,287. -

### Project Coordinator

NetPort science Park (Sweden)

### Project Partners

- NetPort Science Park (Sweden)
- NODA Intelligent Systems (Sweden)
- Lund University (Sweden)
- AEE Intec (Austria)
- Agrar Plus (Austria)
- Beck & Partner (Austria)
- Schneid Gesellschaft (Austria)

### Project Website

Coming soon

### Contact

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ERA-Net Smart Energy Systems



This project has been funded by partners of the ERA-Net Smart Energy Systems ([www.eranet-smartenergysystems.eu](http://www.eranet-smartenergysystems.eu)) and Mission Innovation ([mission-innovation.net](http://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.

### 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

The overall goal of DigiCiti is to create processes and technology that supports resilient and robust multi-sectorial decarbonisation in the generation, distribution and consumption of thermal energy in a circular energy system. This is broken down into four main objectives.

The edge node objective – creating a framework for autonomous software agents at the consumer side

The cluster node objective – using collective intelligence to create a climate resilient controller ecosystem

The business objective – enabling large scale replication through a multi-step investment business model

The knowledge transfer objective – to develop and implement a knowledge transfer strategy based on the project results .

## Main Results

The primary impacts of DigiCiti relate to energy efficiency at both building and network level, promotion of green investments, user empowerment and advances in the application of artificial intelligence in energy systems.

- Reduction cost of energy at 9-18 % for residential buildings and 13-27 % for non-residential buildings with 1-3 years in investment payback
- Primary energy savings of 10-25% on network level
- Improved user empowerment and thermal comfort
- Increased climate flexibility and urban area resilience



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

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