## About **Project**

The FLEdge project focuses on creating a flexible, decentralized energy management system with the aim of transforming cities into **Positive Energy Districts (PEDs)** 



City energy systems constantly evolving, requiring flexible management to adapt to shifting demands and optimize resources for urban environments.

> Scan here for more..





**Project** 

"Buildings that transform to PED Cities that Thrive"



















## **Project Partners**

**Project Coordinator: IHU** 

Partners of Sweden: CHALMERS.

THERMO-LOGIC, DOING GOOD

Partners of Estonia: TAL TECH.

elering, FinEst Centre

Partners of Bulgaria: GATE,

energomonitor, Sofia Municipality

## **Project** Goals



**Hierarchical Energy Management:** 

Develop a distributed system using Edge-Energy Management (EEM) devices to optimize energy across buildings, neighborhoods, districts, and cities.



**Energy Resource Optimization:** 

Maximize energy efficiency by renewable integrating energy. and demand-side storage, management at all levels.



**Enhanced Human** Comfort:

Prioritize resident well-being with intelligent systems that automate energy management for optimal comfort.



demand-response Implement strategies to support grid stability and zero-net emissions.



**Energy Security:** 

Use advanced forecasting and optimization algorithms to reduce energy costs and prevent energy poverty.



**Innovative Flexibility Solutions:** 

Leverage cutting-edge technologies like AI, IoT, and Digital **Twins** to create sustainable, decarbonized urban environments.

