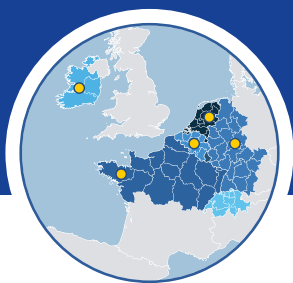


■ PARTNER



UNIVERSITY OF TWENTE.



WIRTSCHAFTSFÖRDERUNG
REGION KASSEL

■ PROJECT

The GEMS – Green Energy Management Systems for Business Parks – project is developing energy management systems for medium-sized commercial and industrial parks in Northwest Europe and testing them in pilot projects to better coordinate local energy generation, storage, and consumption, reduce grid bottlenecks, and advance the energy transition at the business park level.

Total budget
€ 5,1 million

EU funding
€ 3,08 million

Duration
Jan 2025 - Dec 2027

Lead Partner

Oost NL

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LinkedIn

Interreg



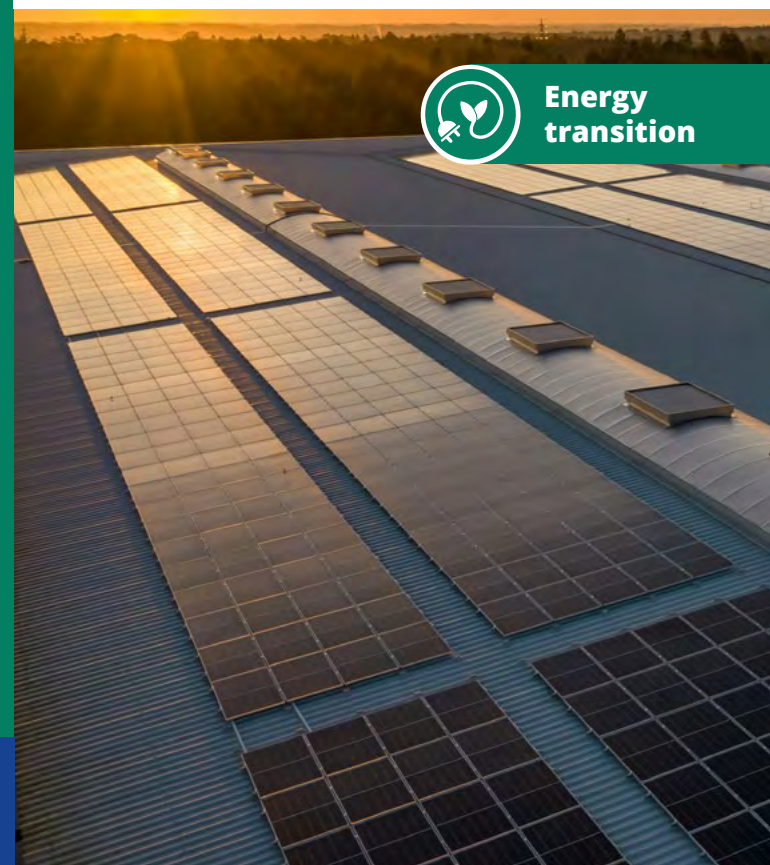
Co-funded by
the European Union

North-West Europe

GEMS



**Energy
transition**



**GREEN ENERGY MANAGEMENT
SYSTEMS FOR BUSINESS PARKS**



■ CHALLENGE

Commercial and industrial parks are facing increasing pressure amid the energy transition: Energy demand is rising steadily due to the electrification of industry, heating, and mobility, while grid capacities are reaching their limits.

Key challenges in this context include, in particular:

- a lack of transparency regarding energy consumption and potential
- limited control options for companies
- complex legal and organizational frameworks

As a result, efficiency potential remains untapped, the integration of renewable energies is stalling, and sustainable growth is being slowed.



■ GOALS

GEMS helps commercial and industrial parks evolve into smart, interconnected energy systems. The goal is to reduce energy consumption and emissions, better integrate renewable energy, and specifically address grid bottlenecks.



To this end, practical energy management systems are being developed that, where possible, allow for active control of generation, storage, and consumption. With the support of technical partners, a prototype of a digital twin for the respective SME business park is being developed. At the same time, the project strengthens cooperation within industrial parks and lays the groundwork for competitive, sustainable "smart energy hubs."



■ EXPECTED RESULTS

Through six pilot projects, proven solutions are being developed to make energy consumption more transparent, improve the use of renewable energy, and reduce costs. At the same time, they help stabilize the power grids.

Specifically, the results include:

- field-tested energy management systems in real-world applications
- a GEMS toolkit with tools, business models, and organizational approaches
- transferable solutions for other regions

In this way, GEMS helps other business and industrial parks in Northeast Europe transition to efficient, sustainable energy systems and makes a measurable contribution to climate goals and competitiveness.