



Is Europe ready for cross-border, cross-sector digital services?

Dr Alex Gluhak

Open and Agile Smart Cities (OASC)

29.01.2026



Europe needs deeper cross-sector cross-border collaboration in energy and transport

Ambitious Decarbonisation

High renewable penetration and transport electrification require seamless operational coordination across sectors and borders to balance, stabilise and optimise the system in real time.

Sovereignty & Strategic Independence

True resilience comes from shared European infrastructure and coordinated operations, reducing exposure to imports, price shocks and geopolitical risks.

Single Market & Global Competitiveness

A fully integrated energy and transport market is essential to lower costs, attract investment and compete with increasingly coordinated global economies.

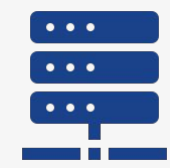




What is BEGONIA?



Europe needs to modernise its fragmented and ailing infrastructure across critical sectors such as energy and transport to remain relevant.



At the core of this initiative lies the development of advanced **Operational Digital Platforms** that transcend national boundaries.



BEGONIA is an EU-funded Coordination and Support Action that aims to expedite this digital transformation in the **energy and transport sectors**, analysing and developing the most promising solutions.

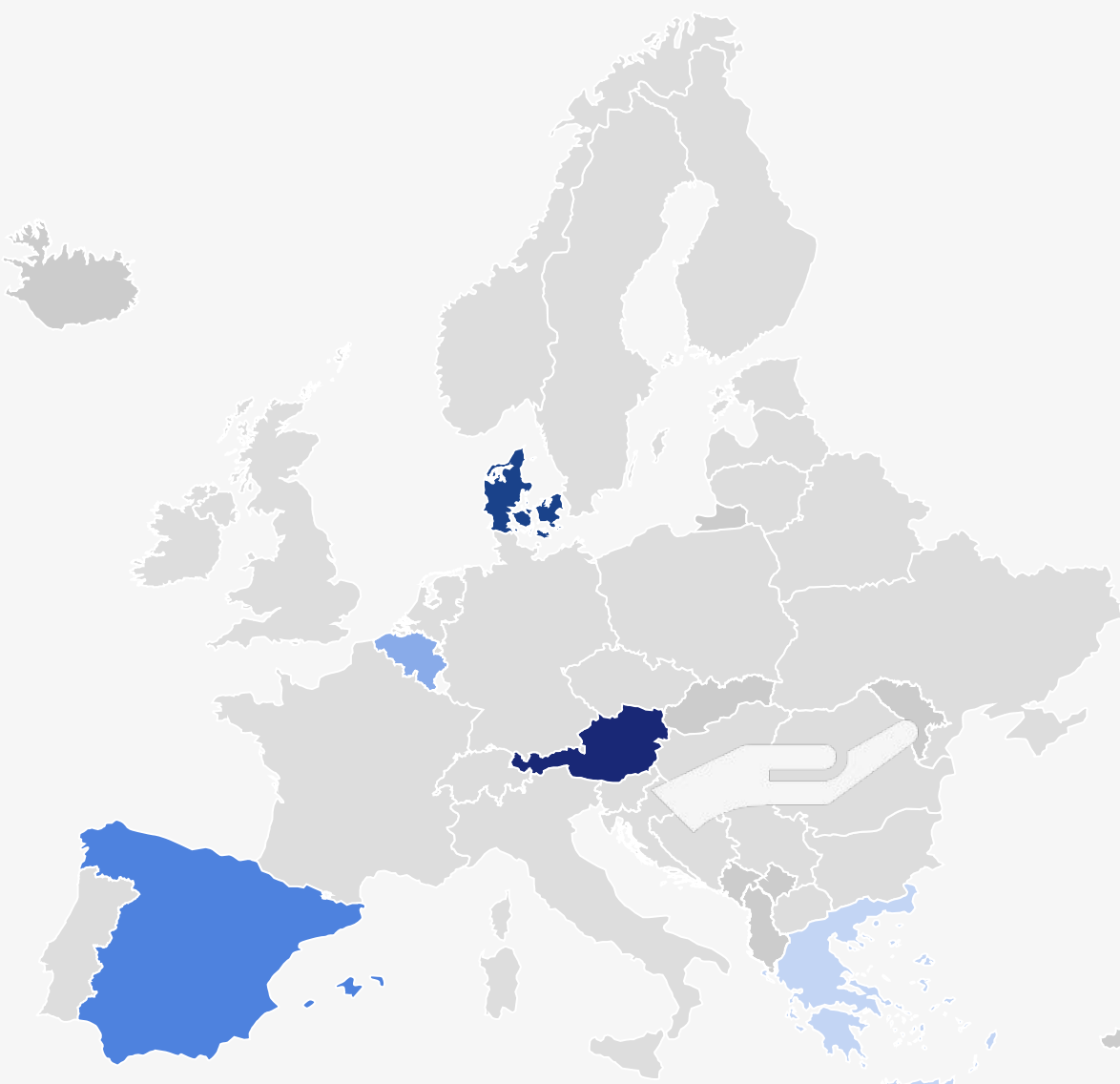




Facts and figures

BEGONIA Consortium

- DTU University
- CEMOSA
- olivoENERGY
- Wings ICT Solutions
- BluePrint Energy Solutions
- Center Denmark
- Open & Agile Smart Cities (OASC)



2,5 years
research project
Started in Jan 2024



Received 4M €
in funding from the
EU



Consortium of 7
top leading
organisations
from 5 countries



This project has received funding from the European Commission under grant agreement N°101133306.

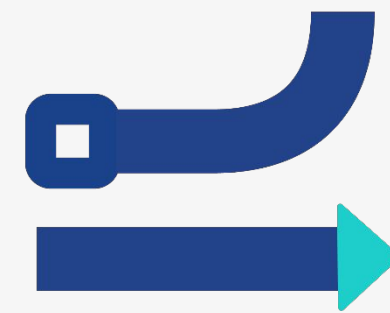


Goals & impacts



Identify and shortlist
Operational Digital Platform (ODP)

use cases in the energy and transport sectors



Conduct **feasibility studies** for the shortlisted cases to demonstrate the benefits



Prepare the Operational Digital Platforms **for deployment**



Offer feedback to the Commission for the preparation of a **new call for works** to implement the awarded project(s)



This project has received funding from the European Commission under grant agreement N°101133306.



Stages of Investigation

- We identify, analyse and develop **Use Cases of ODPs** in the energy and transport sectors
- This is an **evolutionary process** divided into **three main stages**:



1° STAGE

EXPLORATORY STUDY

- **Collect** Use Cases
- **Evaluate** the most promising ones



2° STAGE

FEASIBILITY ANALYSIS

- **Shortlist** 6 Use Cases
- **Analyze** & Develop in detail



3° STAGE

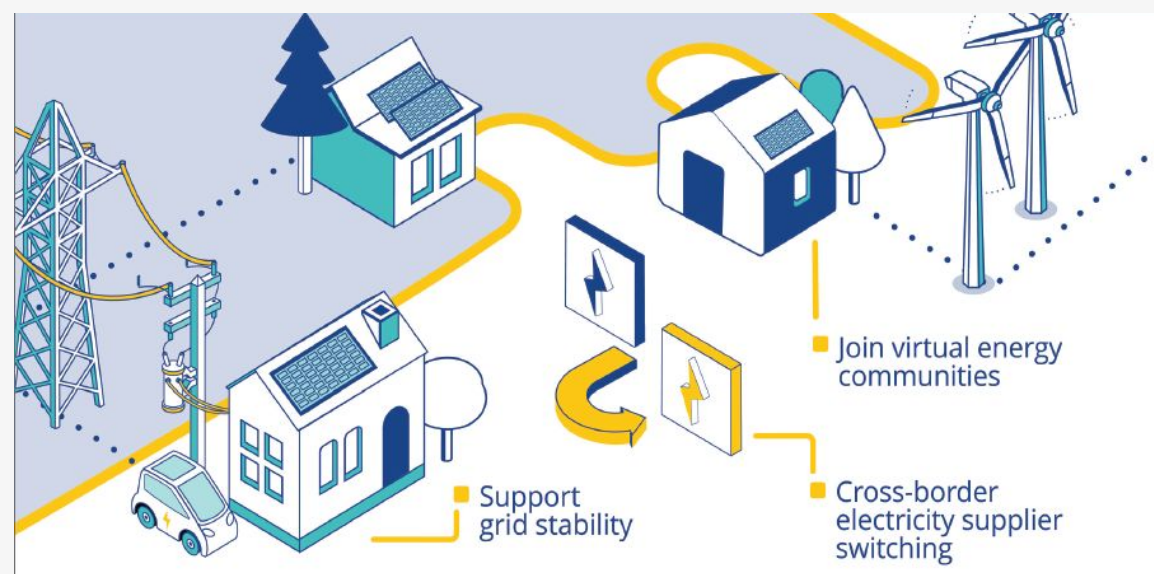
DEPLOYMENT PREPARATION

- **Prepare** for deployment 3 best ones
- Future **funds** 20 | 40 M€

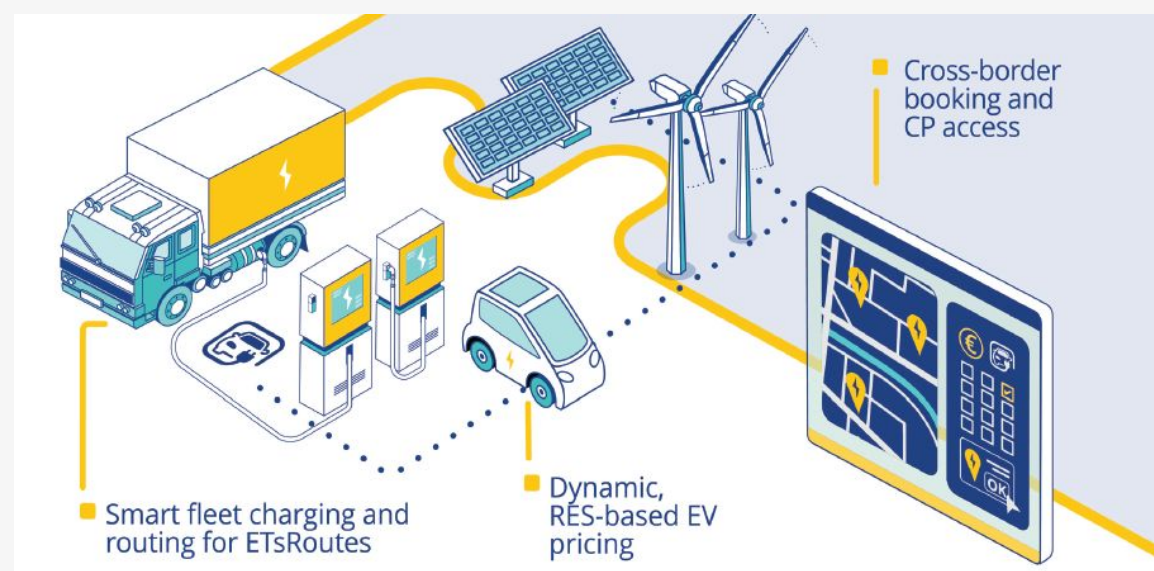




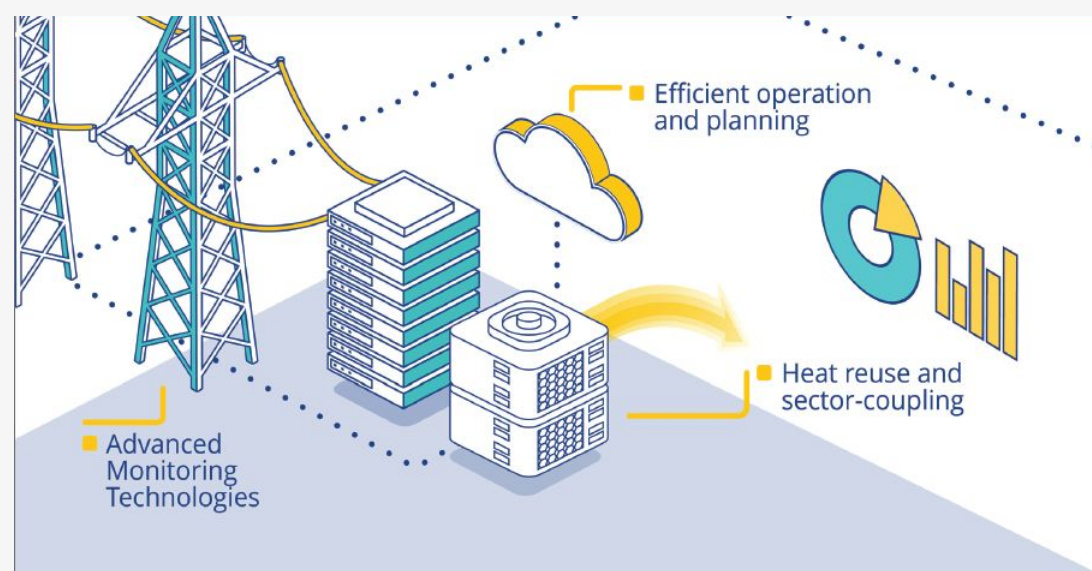
PROJECT PROGRESS - The 6 shortlisted use cases



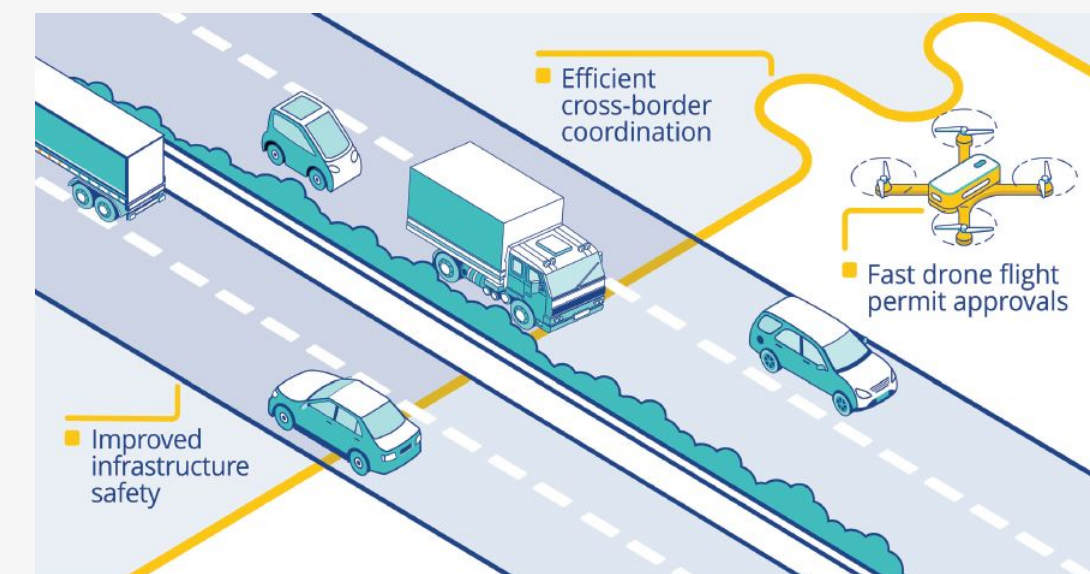
UC I ELECTRICITY CUSTOMER CENTRIC ODP



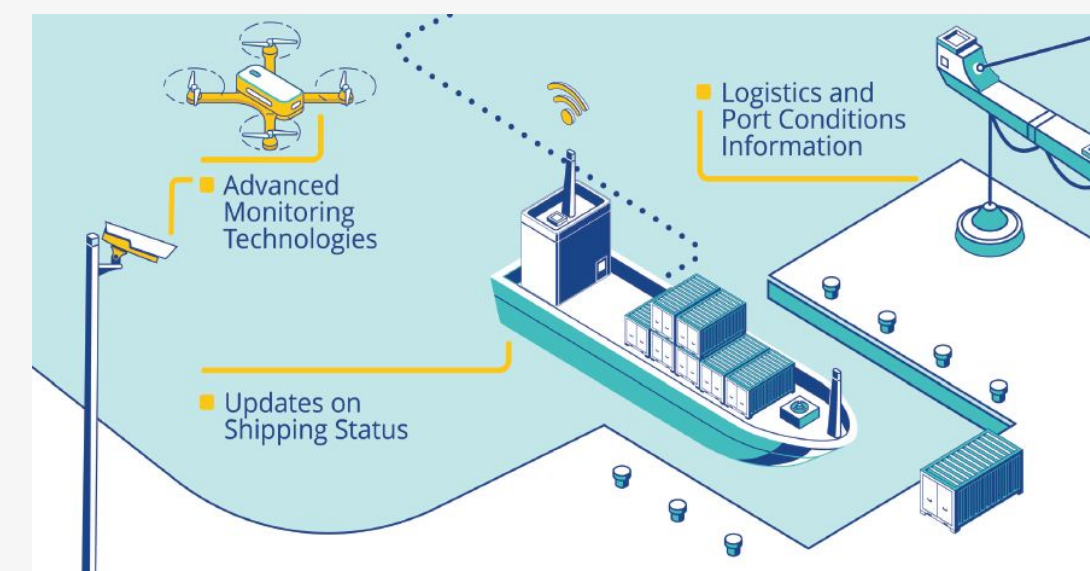
UC II AI-DRIVEN ODP FOR INTEGRATION OF EVS, ETS, RES AND GRID



UC III DIGITALIZATION OF DATA CENTERS



UC IV DIGITAL PERMITS FOR DRONE-BASED INSPECTIONS IN LINEAR INFRASTRUCTURES



UC V SMART PORTS OPERATIONS



UC VI CARBON FOOTPRINT OF PORTS SUPPLY CHAIN



This project has received funding from the European Commission under grant agreement N°101133306.



Discover the Begonia Operational Digital Platforms

BEGONIA Webinar

Thursday, 5th of February

10:00 - 11:30 CET

