Eurogia 2030

*The Eureka Network Cluster on **Low-Carbon Technologies***

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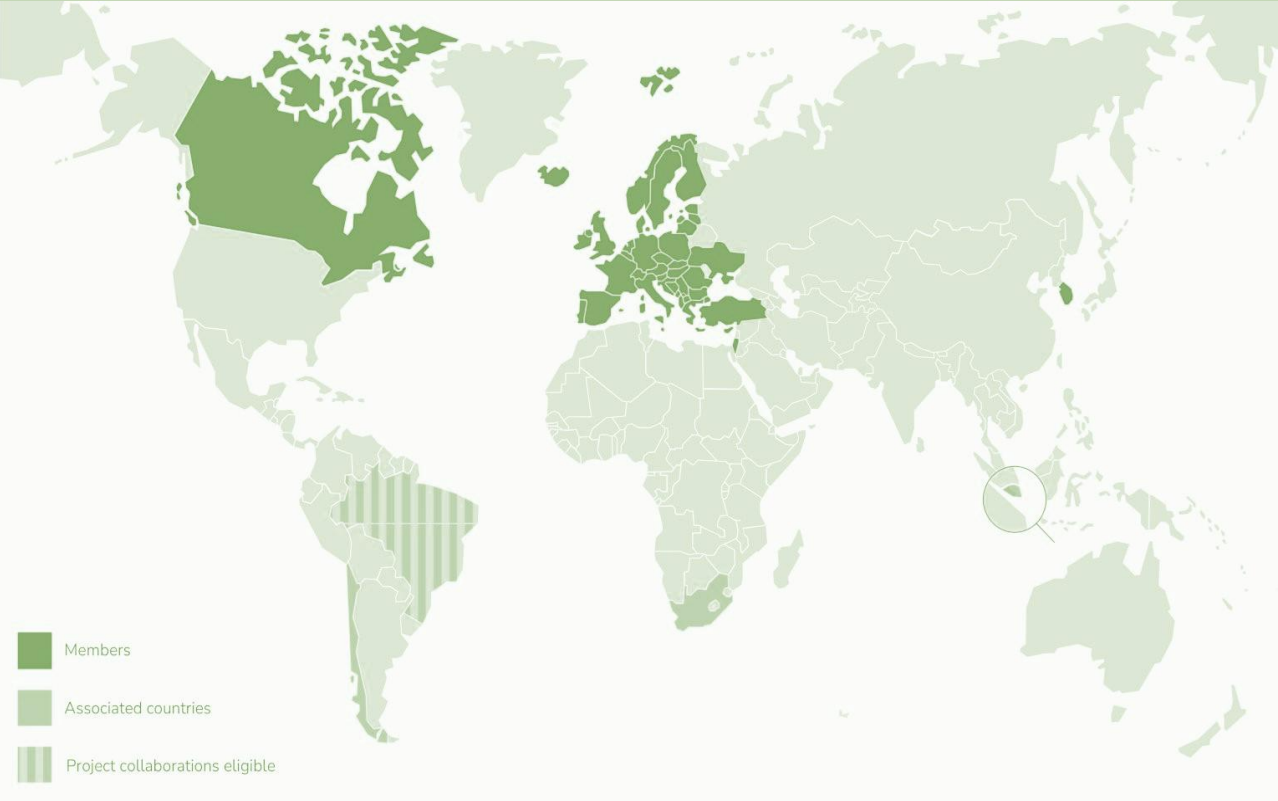
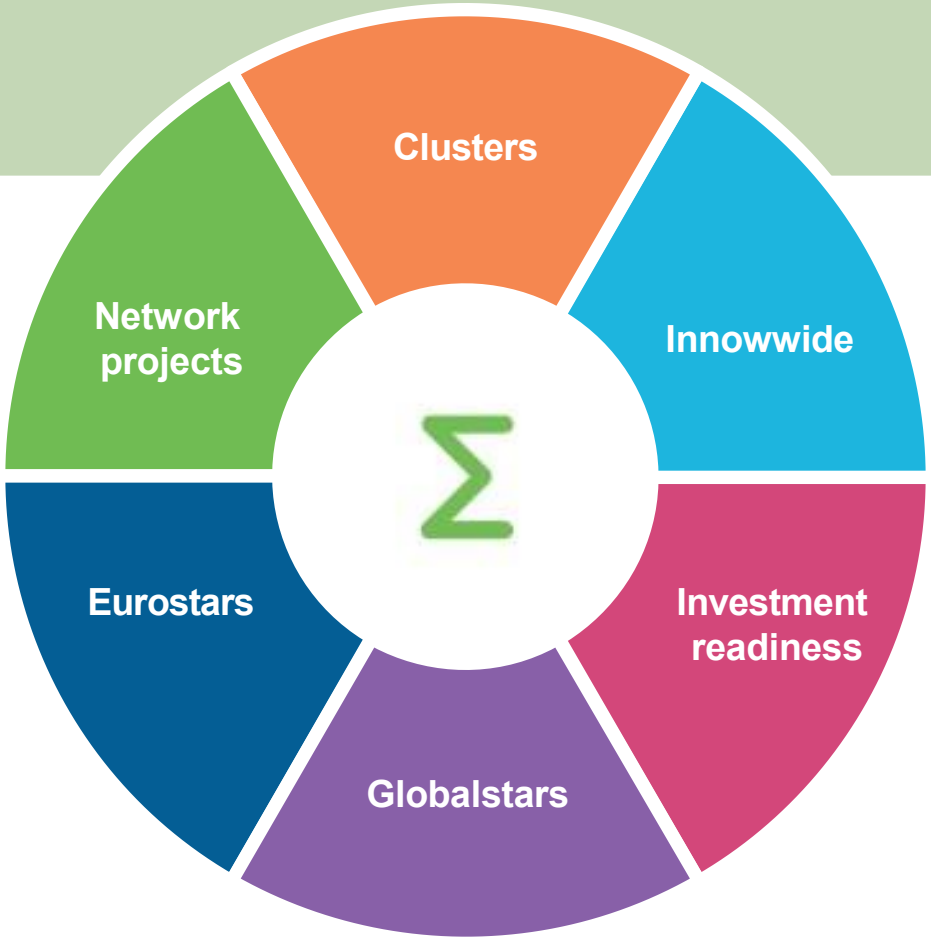
Gizlilik / Sensitivity : Genel - Public

The Eureka Network



The world's largest network of ministries and innovation agencies dedicated to supporting international research and development (R&D).

Eureka instruments



Eureka Clusters

CELTIC-NEXT
Eureka Cluster

Next-generation communications and ICT systems

Eurogia 2030

Low carbon energy technologies

ITEA 4

Software innovation and digital transition

smart
advanced manufacturing

Advanced manufacturing

Xecs

Electronic components and systems

EUROGIA2030 within

eureka
innovation beyond borders

01

The EUREKA Cluster dedicated to Low-Carbon Energy Technologies

02

Includes the full energy mix and value chain

03

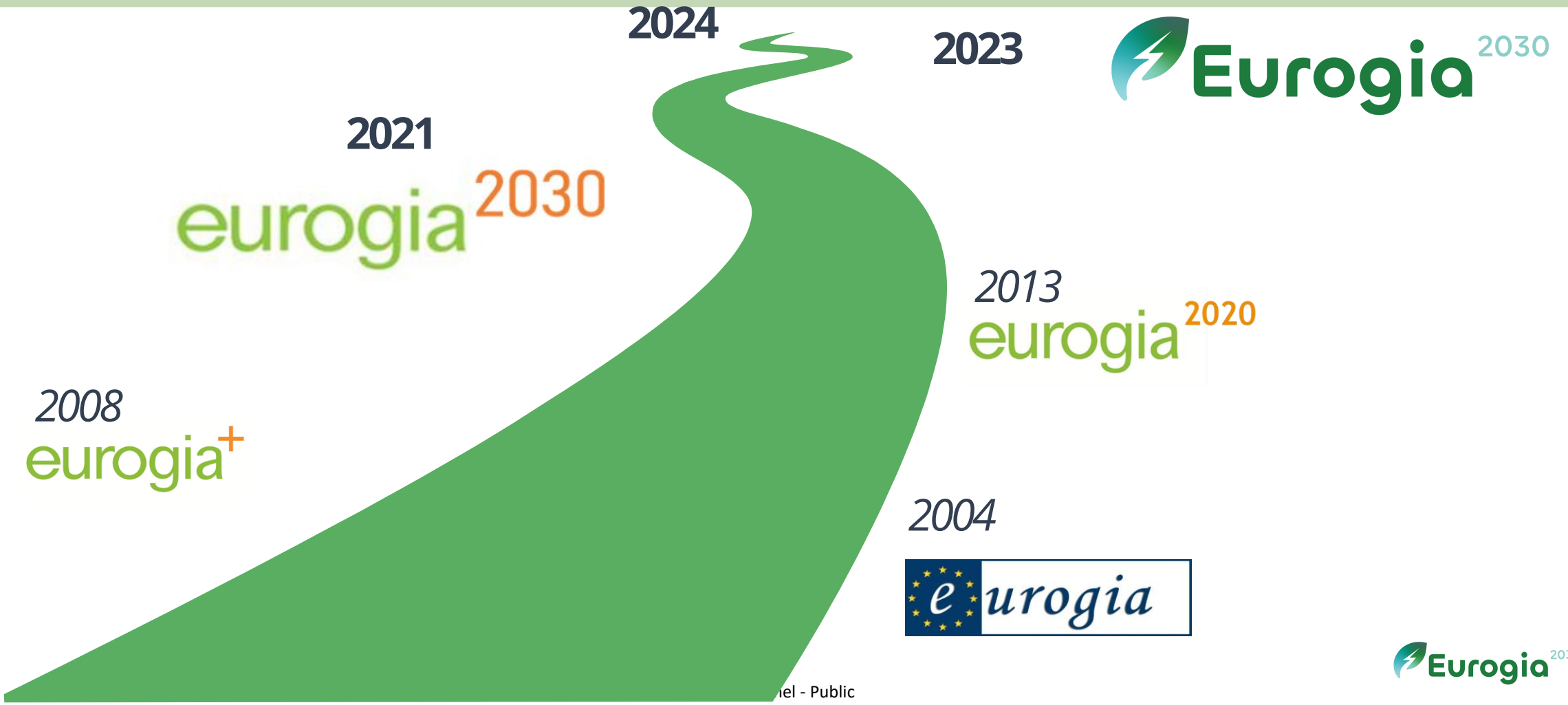
Labelled for the period 2025-2032

04

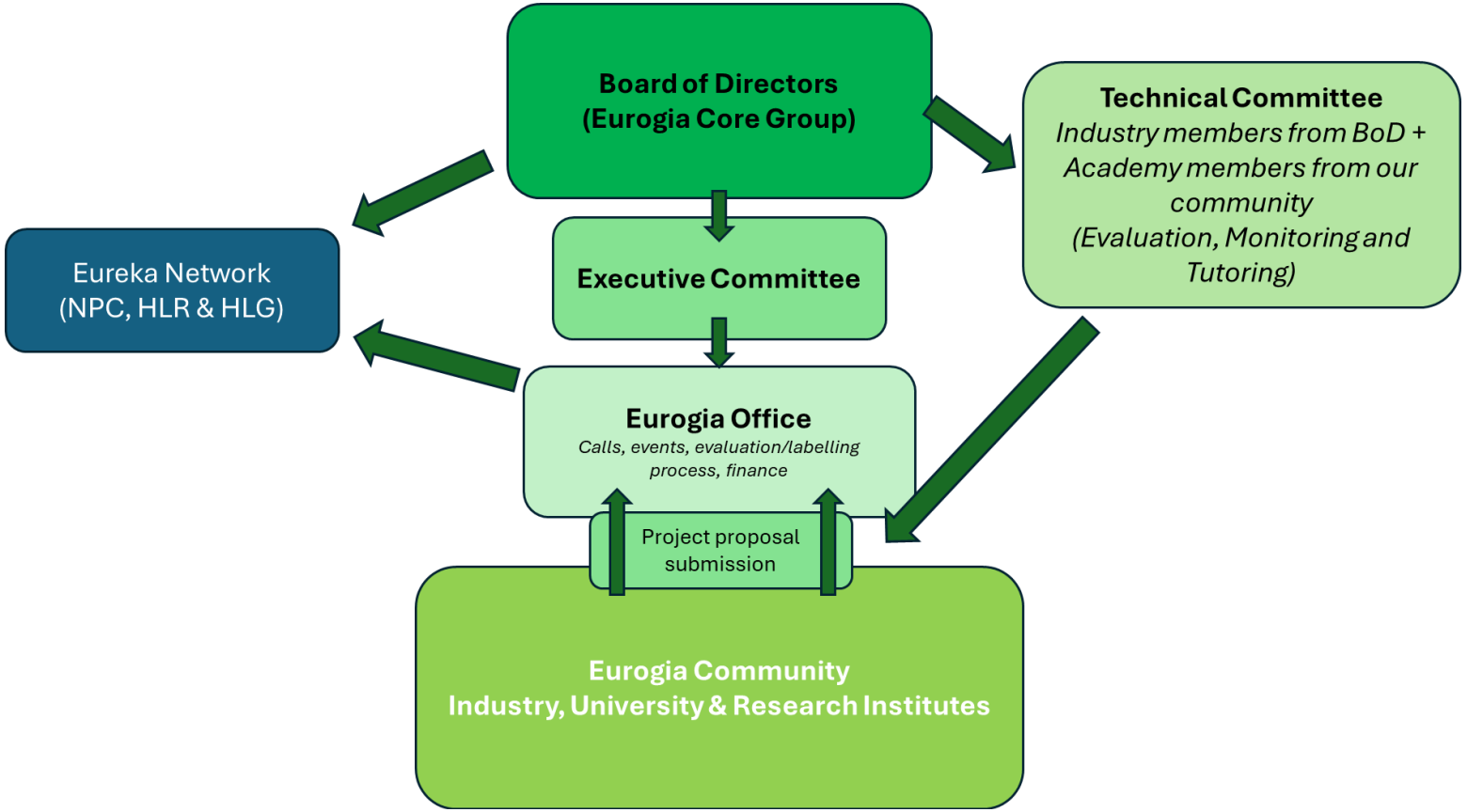
EUROGIA2030 promotes and facilitates partnerships between Industry, Universities and Governments

EUROGIA2030 The Cluster of energy transition

22 years anniversary from **fossil** to renewables



The Structure of the EUROGIA^{2030} Cluster



OUR VISION

The Eurogia2030 Cluster offers a unique programme for industrial research and innovation in the energy sector, specifically focusing on sustainable energy technologies. Its key selling point is its ability to foster cross-border collaboration among European and international companies, research institutions, and SMEs to accelerate the development and commercialization of cutting-edge energy solutions. What sets Eurogia2030 apart is its dedicated focus on energy innovation within the broader Eureka Network, providing tailored funding and support to drive industrial-scale technological breakthroughs. By bridging the gap between early-stage R&D and commercial application, Eurogia2030 helps turn promising energy technologies into viable market solutions.

Mission Statement

Eurogia2030 is on the front line in the Energy field to achieve carbon neutrality goals. Through *Low Carbon Technologies R&D solutions* Eurogia aims to contribute for a sustainable environment, for the reduction of climate change and for a sustainable growth. Some of the targeted challenges to achieve these goals are necessary, but not limited to:

- Carbon-free energy supply,
- Green mobility and Smart cities,
- Smarter housings and constructions,
- Bio resources and environment.

The Eurogia2030 5Ds Strategy

DECARBONIZATION

- **Renewable Energy resources & integration with the existing grid,**
- **Electric vehicles and charging infrastructure,**
- **Green and zero emission buildings,**
- **H2 technologies and Storage**

DECENTRALIZATION & DIGITALIZATION

- **Microgrids**
- **Smart Grids**
- **ICT, AI**
- **IOT**
- **IT&OT cybersecurity**

DEREGULATION & DEMOCRATIZATION

- **Blokchain Technologies**
- **Flexibility Management**
- **Virtual Power Plants**
- **Network Stability**
- **Peer to Peer Energy Trade**
- **Demand Side Management**

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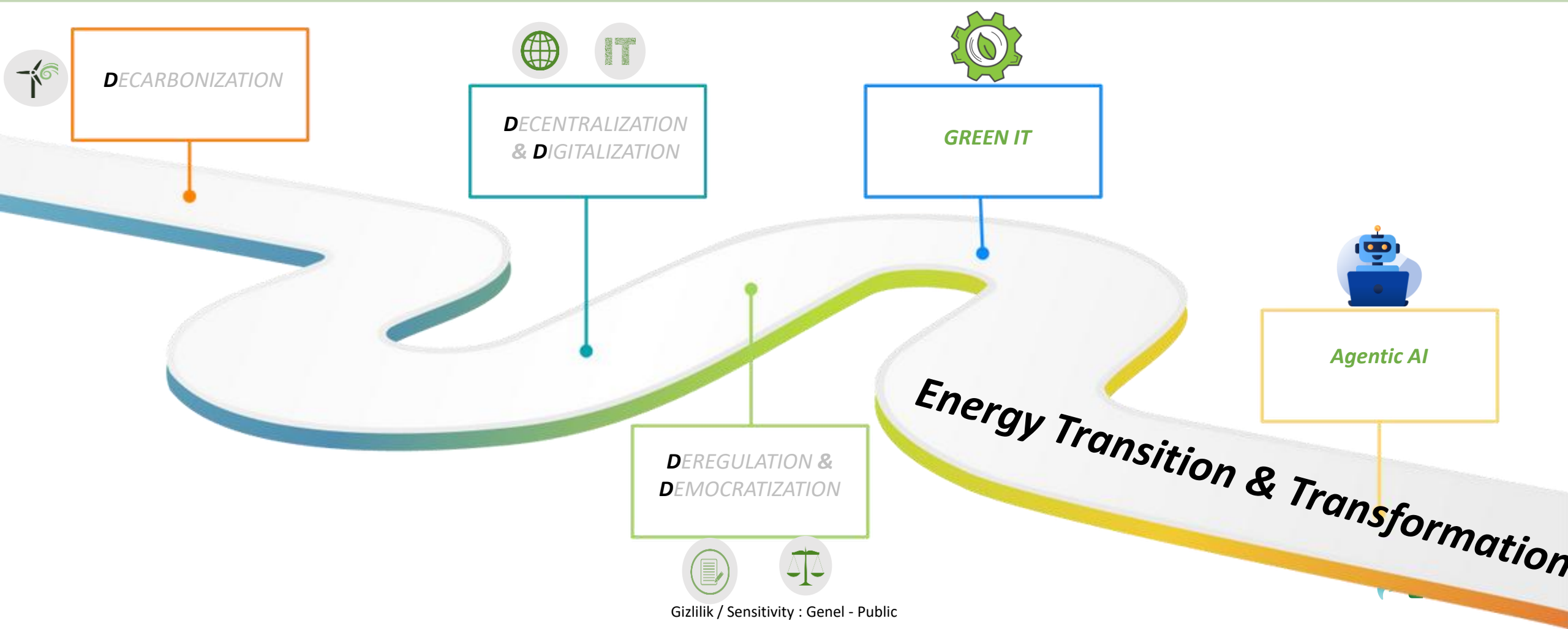
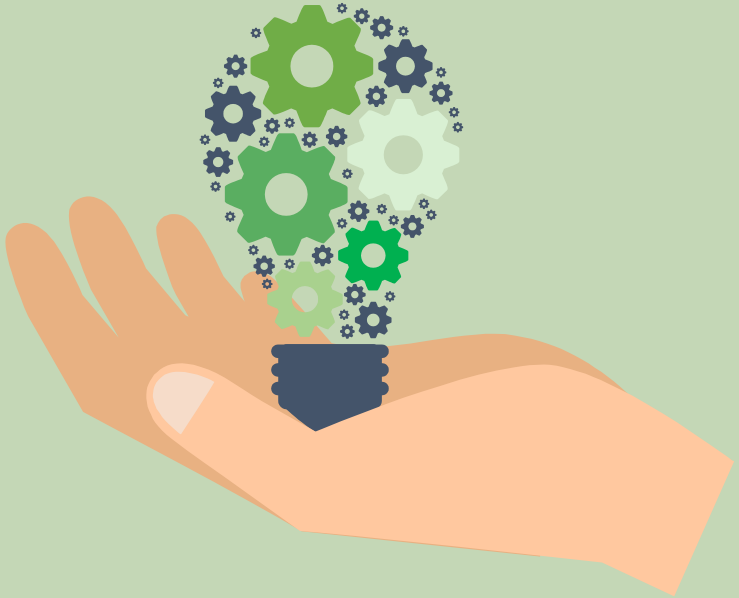
From 5D to AI Strategy (Eurogia2030 Journey)



EUROGIA2030 Technology domains

EUROGIA2030 encourages **partnerships between competencies** covering a large spectrum of disciplines and the entire energy mix



Cost effective Energy Sources

- Geothermal
- Solar
- Wind Power
- Biomass
- Hydro Power
- Waves and Tides
- Oil & Gas
- Clean Coal

Enabling Technologies*

- Energy Efficiency
- Energy Storage
- Intelligent networks and energy management
- CO2 mitigation (CCS & valorization)
- Materials (including minerals)
- Tools, fabrication & Installation
- Processes; ICT (e.g., in smart grids)

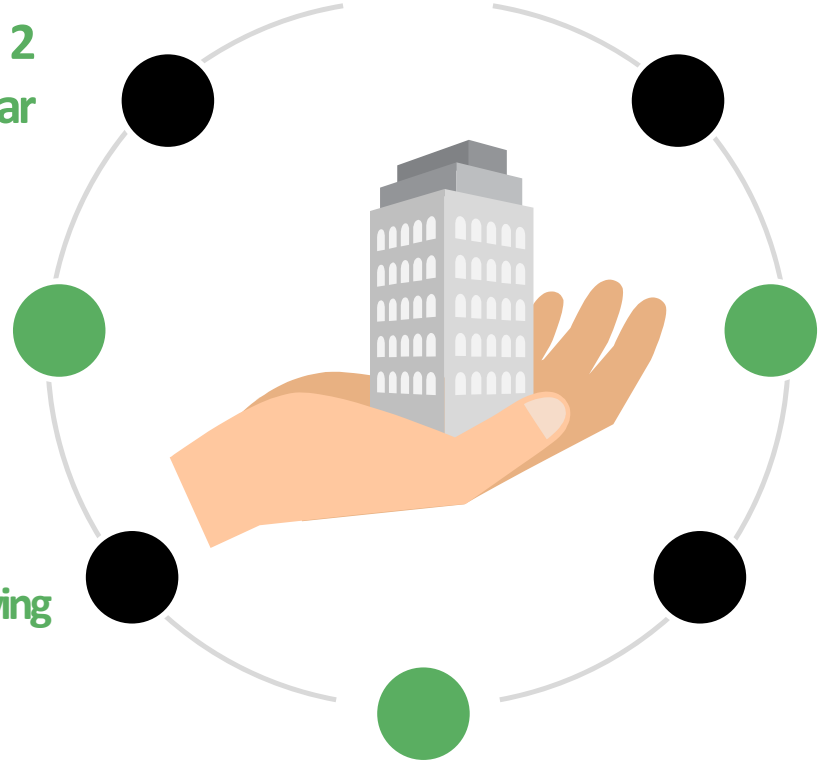
**The list is not exhaustive*

EUROGIA^{2030} A process designed by industry for industry:
Flexible, Fast, Interactive

Continuous submission with 2 cut-off dates/year

2-step process (PO and FPP)

Instrument providing expertise and support to international projects involving all the innovation landscape on Low Carbon Energy Technologies



through extensive/continuous feedback and access to the EUROGIA community

No competition between similar projects

quality of your own project is what counts

Parallel applications in each country in addition to global Eurogia2030 application; and synchronisation of funding from each country not always achieved.

Industry Community to foster Low Carbon Technology Development based on an International Public-Private Innovation-Centric Partnership

EUROGIA2030 Winning Project's Equation

Industrial Innovation

Solid concepts

Market oriented

Consortium Structure

Balanced

- Organisations types
- Competences
- Consortium Agreement

Commercial Exploitation

Commercial prospects

National Priorities & Practices

Public financial support's Rules & Availability

ROI for funding countries

Eurogia 2030

Example of Running Projects

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DEMFLEX

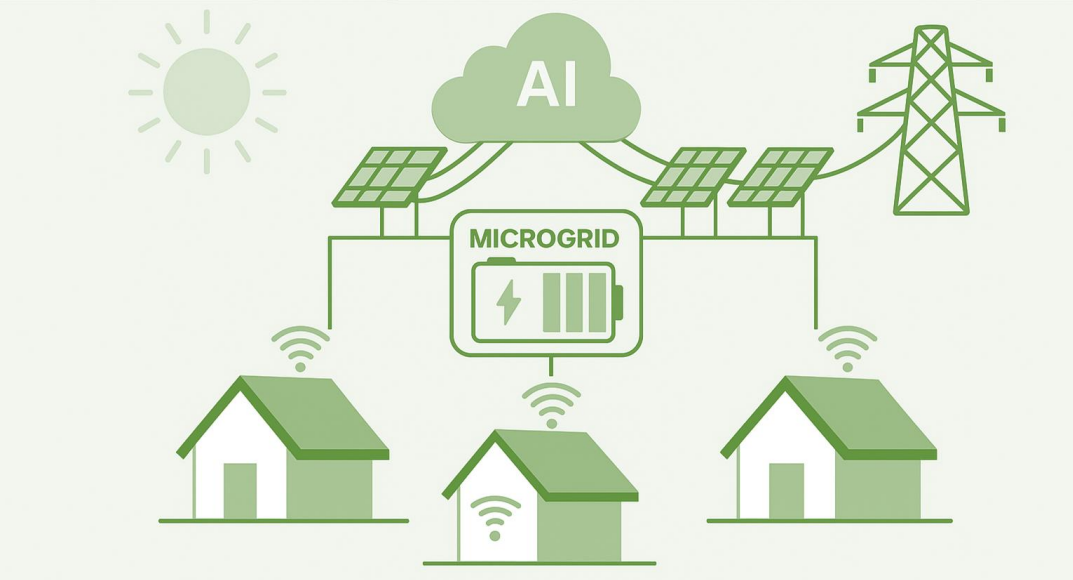
Demonstration of AI-Enhanced Energy Flexibility System for Microgrids with Connected Smart Homes

Budget: 1,4M

- Micro grid
- Artificial Intelligence
- Smart grid
- Demand Side Management

The project will develop community energy management systems (EMS) based on Entrust Smart Cloud EMS and Cleanwatts Renewable Energy Community Management Platform, which provide ideal platforms for community EMS development, in real-life implementations in the UK and Portugal. The project will develop, demonstrate and examine AI algorithms integration in the community EMS platforms and in optimising energy flexibility and energy sharing services provided by connected smart homes.

Company name	Country	Company type
Entrust Microgrid Ltd	UK	S
Cleanwatts Digital, S.A.	PT	S
Instituto Superior de Engenharia do Porto (ISEP/CISTER)	PT	U
Positive Places Ltd	UK	S
Electric Corby CIC	UK	S
University of Liverpool	UK	U



ZERO EMS

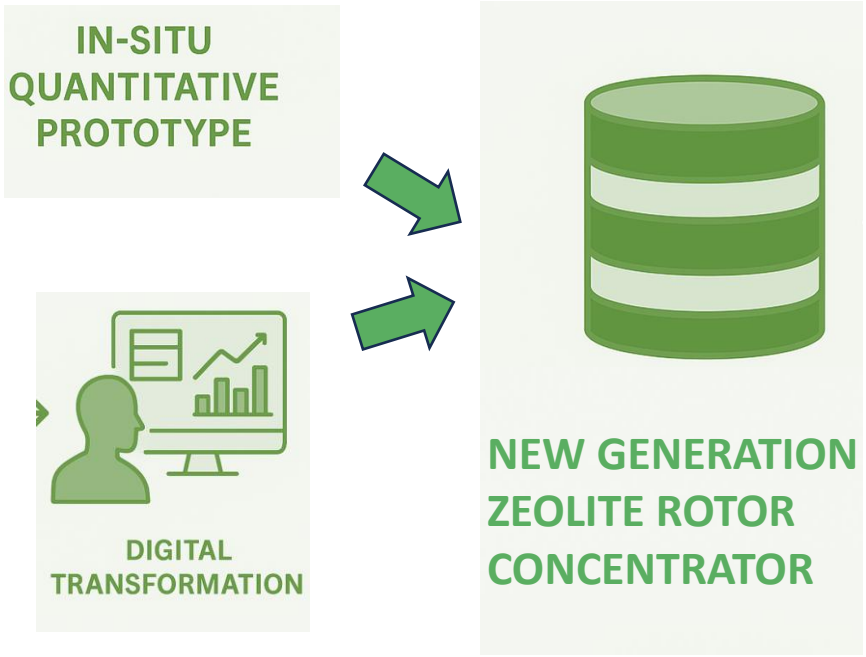
ZEolite ROtor concentrator for a highly cost-effective Environment Monitoring System

Budget: 1,7M

- Environment Monitoring Systems
- Data storage
- Artificial Intelligence

The project propose a digital driven circular production systems assisted by the mutual real-time interactions: In-situ QUANTITATIVE PROTOTYPE and DIGITAL TRANSFORMATION.

Company name	Country	Company type
Korea Institute of Materials Science	KR	R
Lithoz	AT	S
INGKLE	KR	I
IBMaterials	KR	S



RECKON

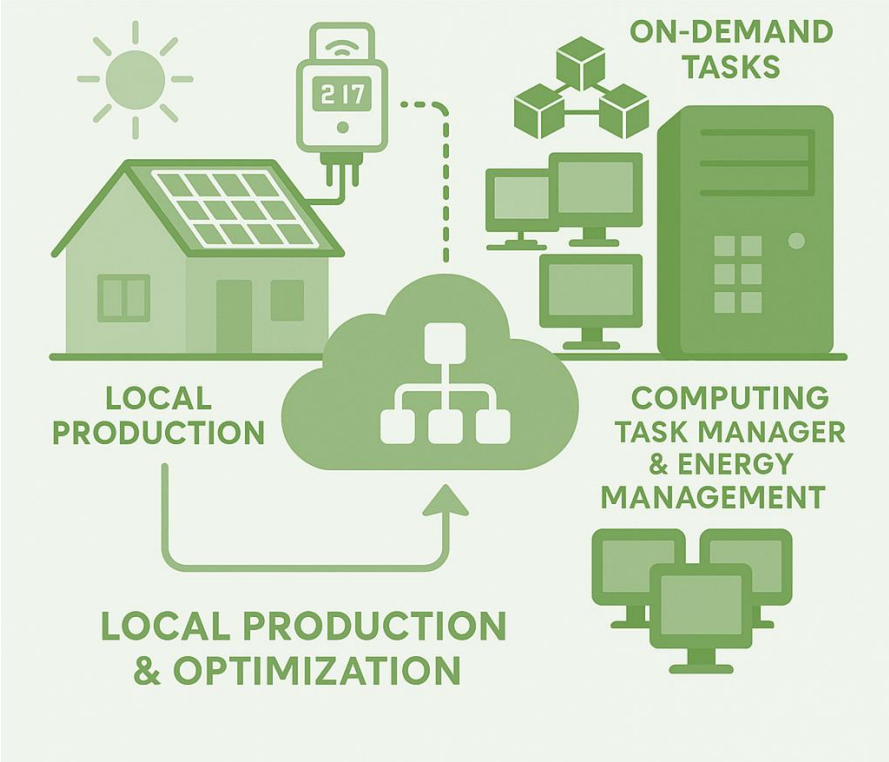
gReen Energy for Cloud blocKchain cOmputiNg

Budget: 1,3 M

- Smart grid
- Energy as a service
- Solar
- IoT
- Blockchain

RECKON aims at developing a system that would enable the utilization and optimization of available distributed electric energy production (e.g. residential and commercial PVs) surplus to run on-demand tasks on locally installed computers with high computational power capabilities and relatively high electrical energy needs locally.

Company name	Country	Company type
Smart Charging Ltd.	HU	R
EKT Solutions	HU	S
Alpplas	TR	I
Tribase Electric	CZ	S
University of West Bohenia	CZ	U
Ayrotek	TR	S



NZECSA

Nearly Zero Energy Concepts for Solar Apartment

Budget: 3M

- Solar
- Zero carbon building
- Demand Side Management
- Energy as a service

The purpose of this project is to ecologically supply nearly zero-energy solar apartments with minimal cost using optimal energy harvesting methodologies such as multi-functional building-integrated bi-facial PV with a shading function, radiant cooling without any energy or power input & radiant heating systems, which are combined together, with optimal building envelope performance depending on the season in any region in the world with ecological criteria.

Company name	Country	Company type
Sehan University	KR	U
SG Energy	KR	S
INELSO	TR	S
ELEKTROMED	TR	S
IKLIM	TR	S
Instituto Superior de Engenharia do Porto (ISEP/CISTER)	PT	U
Digitalmente	PT	S

Eurogia 2030

Eurogia2030 Supporting Countries

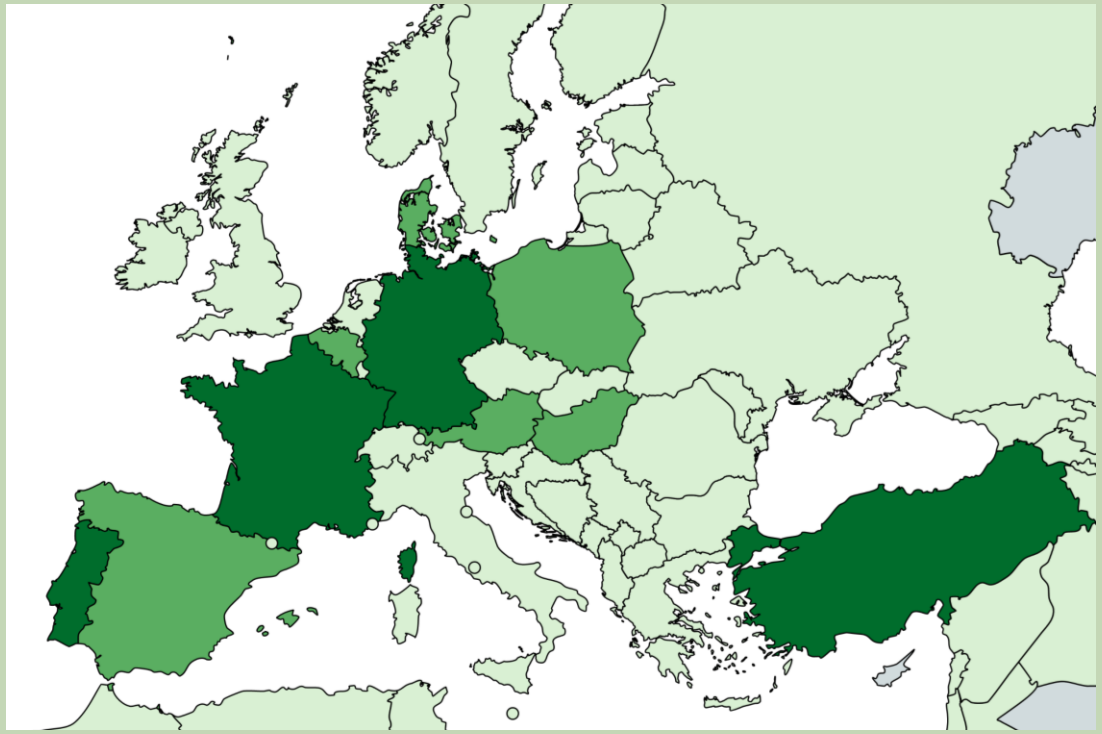
Europe

Americas

Asia

Africa

Eurogia's Main European Players



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aspilsan

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ENFORMA

SOCAR

Eurogia 2030

Thank you!

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