#### Greenet

The network of Horizon Europe Cluster 5 National Contact Point.

#### BEIA HORIZON CL5 profile

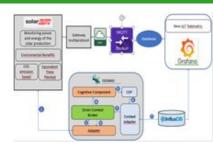
- George Suciu, R&D and Innovation Manager, george@beia.eu
- BEIA (SME) founded in 1991, team of **100 people**, with offices in **Austria, Belgium, Romania** <u>www.beia.eu</u>
- Expertise of the R&D Department: BEIA is a R&D performing SME with focus on time critical Artificial Internet of Things (AIoT) and a team with experience in R&D **service innovation** (AI, blockchain, cloud, big data, quantum security), **hardware integration** (sensors, actuators, IoT), information technologies (data analytics, back end, interfaces, front end), integration (software/hardware), communication technologies (speech processing, sentiment analysis, emotional computing), communication/dissemination/marketing, project management.
- -Over 5000 commercial projects and over 100 R&D and Innovation projects

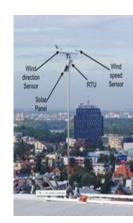




## BEIA's interest and experience for CLIMATE calls 1

- Topic to be addressed:
- DESTINATION 1. CLIMATE SCIENCES AND RESPONSES FOR THE TRANSFORMATION TOWARDS CLIMATE NEUTRALITY
- HORIZON-CL5-2025-D1-01 Climate simulations data and knowledge for optimal support of IPCC Assessments and International Policy
- HORIZON-CL5-2025-D1-05 The attribution to climate change, and improved forecasting of extreme climate- and weather-related events and their impacts
- -**Experience**: U-GARDEN, SWAM, DISAVIT, NGI-UAV-AGRO, IPSUS, WINS@HI, FARMSUSTAINABI, TelMonAer, WATER-M, ASUA, AISTOR, EV-BAT





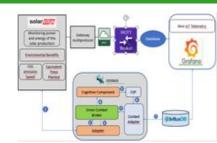






# BEIA's interest and experience for CLIMATE calls 2

- Topic to be addressed:
- DESTINATION 2. CROSS-SECTORAL SOLUTIONS FOR THE CLIMATE TRANSITION
- -HORIZON-CL5-2025-D2-08 Driving Urban Transition Co-funded Partnership
- HORIZON-CL5-2025-02-D2-10 Clean Energy Transition Co-funded Partnership
- HORIZON-CL5-2025-04-D2-02 Cost-effective next-generation batteries for long-duration stationary storage (Batt4EU Partnership)
- HORIZON-CL5-2025-04-D2-01 Development of Sustainable and Design-to-Cost Batteries with (Energy-)Efficient Manufacturing Processes and Based on Advanced and Safer Materials (Batt4EU Partnership)
- HORIZON-CL5-2025-04-D2-04 Integrating advanced material, cell design and manufacturing development for high-performance batteries aimed at mobility (Batt4EU Partnership)
- Specific contribution to the topic: carbon footprint assessment, ICT/IoT development and integration, real time telemetry of environment and critical infrastructure
- Experience: U-GARDEN, SWAM, DISAVIT, NGI-UAV-AGRO, IPSUS, WINS@HI, FARMSUSTAINABI, TelMonAer, WATER-M, ASUA, AISTOR, EV-BAT











## BEIA's interest and experience for ENERGY calls 1

#### DESTINATION 3 - Sustainable secure and competitive energy supply

- HORIZON-CL5-2025-05-D3-01 Large-scale production of liquid advanced biofuels and renewable fuels of non-biological origin in transport
- HORIZON-CL5-2025-02-D3-04 Development of hydropower technologies and water management schemes allowing for win-win situation of flexible hydropower and biodiversity improvement
- HORIZON-CL5-2025-05-D3-05 Demonstration of thermal energy storage solutions for solar thermal plants and systems
- HORIZON-CL5-2025-05-D3-07 Improved reliability and optimised operations and maintenance for wind energy systems
- -HORIZON-CL5-2025-02-D3-11- Novel inverter technologies and flexibility in PV systems
- -HORIZON-CL5-2025-02-D3-17 Control and operation tools for a RES-based energy system
- -HORIZON-CL5-2025-05-D3-14 Development of innovative solutions strengthening the security of renewable energy value chains
- -HORIZON-CL5-2025-05-D3-20 Innovative tools and services to manage and empower energy communities
- -Specific contribution to the topic: Smart grid/PV/EV systems in living lab with 300 solar panels, inverters, smart energy storage in batteries using AI, smart circuit breakers, wind turbine, heat pump, hydrogen fuel cells, micro hydropower plant, hybrid/EV super-fast chargers & vehicles, ETS smart contracts based on blockchain, collaboration with RES/DSO/TSO
  - Experience: AISTOR, MULTISCALE, TESTBED2, SealedGrid, POWER2SME, FinSESCO, EV-BAT, Hydro3D, 4D Hydrogen, BLOW









#### BEIA's interest and experience for ENERGY calls 2

- DESTINATION 4 Efficient, sustainable and inclusive energy use
- HORIZON-CL5-2025-05-D4-02 Smarter buildings as part of the energy system for increased efficiency and flexibility
- HORIZON-CL5-2025-05-D4-03 Innovative pathways for low carbon and climate resilient building stock and built environment (Built4People Partnership)
- HORIZON-CL5-2025-05-D4-04 Innovative approaches for the deployment of Positive Energy Districts
- Specific contribution to the topic: Smart grid/PV/EV systems in living lab with 300 solar panels, inverters, smart energy storage in batteries using AI, smart circuit breakers, wind turbine, heat pump, hydrogen fuel cells, micro hydropower plant, hybrid/EV super-fast chargers & vehicles, ETS smart contracts based on blockchain, collaboration with RES/DSO/TSO
- Experience: AISTOR, MULTISCALE, TESTBED2, SealedGrid, POWER2SME, FinSESCO, EV-BAT, Hydro3D, 4D Hydrogen, BLOW











## BEIA's interest and experience for MOBILITY calls 1

- DESTINATION 5 Clean and competitive solution for all transport modes
- HORIZON-CL5-2025-01-D5-01 Efficient wireless bidirectional charging solutions
- HORIZON-CL5-2025-01-D5-04 Extended lifetime of Battery Electric Vehicles
- HORIZON-CL5-2025-01-D5-05 Optimised user-centric energy efficiency design
- HORIZON-CL5-2025-01-D5-09 Innovative solutions for energy conversion and safety of low and zero-carbon fuels in waterborne transport (ZEWT Partnership)
- HORIZON-CL5-2025-01-D5-10 Demonstration of Battery Energy storage systems in Existing and New Vessels via Novel Energy Storage and Ship Design Concepts (ZEWT Partnership)
- HORIZON-CL5-2025-01-D5-15 Real-time monitoring of regulated and non-regulated emissions for all types of vessels in order to enforce emission limits in waterfront cities (topic in collaboration with the Zero-Emission Waterborne partnership and the Cities Mission)
- Specific contribution to the topic: ICT/IoT development and integration, involvement of cities and end-users (rail, river/maritime, road, underground, etc.)
- Experience: FOR-FREIGHT, VITAL-5G, FLEXI-CROSS, CitiSim, MobiWay, UFO ALMA, 5G-SAFE+, SARWS, EV-BAT













## BEIA's interest and experience for MOBILITY calls 2

- DESTINATION 6 Safe, resilient transport and smart mobility services for passengers and goods
- HORIZON-CL5-2025-04-D6-05 Approaches, verification and training for Edge-Al building blocks for CCAM Systems (CCAM Partnership)
- HORIZON CL5-2026-01-D6-08 -Accelerating freight transport and logistics digital innovation
- HORIZON CL5-2026-01-D6-10 Integrating inland waterway transport in smart shipping and multimodal logistics chains
- HORIZON-CL5-2025-04-D6-13 Safety of Cyclists, Pedestrians and Users of Micromobility Device
- -HORIZON -CL5-2026-01-D6-14 Predicting and avoiding road crashes based on AI and big data
- Specific contribution to the topic: ICT/IoT development and integration, involvement of cities and end-users (rail, river/maritime, road, underground, etc.)
- Experience: FOR-FREIGHT, VITAL-5G, FLEXI-CROSS, CitiSim, MobiWay, UFO ALMA, 5G-SAFE+, SARWS, EV-BAT







