



SUSTAINABLE SOLUTIONS

for islands' decarbonisation

TO GET GET THERE, IANOS OFFERS THE FOLLOWING SOLUTIONS FOR EU ISLANDS;

DECARBONISED,

AND YOURS?

- Development of solutions adapted to the most relevant energy resources: solar, wind, tidal, geothermal, hydro, green gas, and waste. Moreover, IANOS will consider multiple storage mediums (electricity, hydrogen, thermal) and types of end-users (transport – including vehicle-to-grid –, industry, residential, and services).
- 2. A Virtual Power Plant (VVP) based on Artificial Intelligence, considering all island energy streams, acting within multiple timeframe and offering ancillary services such as congestion management, renewable generation curtailment minimization, grid reinforcement and the integration of innovative solutions such as flywheels and hybrid transformers.
- **3.** Novel smart grid components and resources forecasting tools, especially at regional and local level, and by using Artificial Intelligence algorithms and pattern recognition intelligence for deploying predictive mechanisms that tackle the accuracy needs per service.
- **4.**Innovative business models, based on multi-stakeholder collaboration in different contexts and empowered by crowdfunding-enabling solutions.
- **5.** Novel Demand-Side-Management (DSM) and Peer-to-Peer (P2P) transactive energy schemes within the Virtual Power Plant framework, delivering new societal benefits and exploiting active flexibility possibilities for prosumers at any scale.
- **6.** An Energy Planning and Transition Suite will enhance green investments, empowering islanders to become part of the real decision-making process.
- 7. Establishment of proportionate exemptions from certain regulatory obligations that apply to mainland energy systems and deliver tailor-made regulatory approaches.



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