



Maritime ports, infrastructure and transport

OPTIMISME

DEVELOPING GLOBAL MANAGEMENT OF ENERGY FLOWS IN PORT DISTRICTS

The OPTIMISME project involved developing decision-making methods and numerical tools designed to optimise management of energy flows within the port and city of Saint-Nazaire. Both the city and its port were ideal candidates for exploiting energy recovery and were committed to France's national blue growth and circular economy objectives. OPTIMISME was rolled out in the port authority of the Grand Port Maritime of Nantes/Saint-Nazaire as part of a voluntary, environmental and industrial port initiative.

The **Datajoule** data platform deployed at the conclusion of the OPTIMISME project is distinguished from existing energy transition mapping tools. Its innovation lies in its collaborative aspect – it was developed using an open data tool – and its approach that ranges from flow management to environmental life-cycle analysis (LCA).

The **Datajoule** platform is now operational and offers results relating to three issues that are important for the region: heat, natural gas for vehicles (NGV) and solar photovoltaic. The tool is currently being used by the port authority (GPM) and Saint-Nazaire metropolitan council (CARENE) for data-sharing between different stakeholders in order to study the feasibility of a heat network.

Spin-offs and future developments

A paper was submitted to a scientific journal.

The platform has been used to upload the French local and regional authorities' **Territorial Climate-Air-Energy Plans** (**PCAET**).

In addition, the development of territorial indicators of renewable energy potential is being used in the context of French **Territorial Energy Development Strategies (SDE)**. Launched at the end of 2018, these activities have enabled Akajoule to retain the equivalent of 3 full-time posts.

Lastly, a new research project, directly following on from OPTIMISME and using its results, was officially recognised by the Pôle Mer Bretagne Atlantique cluster at the beginning of 2019. It involves research into a multi-energy, multi-use smart grid for a port district (ESTUAIRE).

Partners

Companies

Akajoule, Saint-Nazaire [Project Developer] Eicosystème, Nantes

Research center

École des Métiers de l'Environnement (EME), Bruz

Other partners

Agence d'urbanisme de la région nazairienne (ADDRN) Communauté d'agglomération de la région nazairienne et de l'estuaire (CARENE), Saint-Nazaire Grand Port Maritime de Nantes Saint-Nazaire, Saint-Nazaire

Funder

Ademe

Labelisation

17/06/2016

Overall budget

322 k€