New Energy Solutions Optimised for Islands

**EUROPEAN ISLANDS FACILITY** 

This first-of-a-kind project includes the first refuelling hydrogen station in Greece together with the first hydrogen vehicles.

The EU Islands Facility NESOI is pleased to introduce the clean energy projects receiving its support:

## **GHEKO**

## **Green Hydrogen Ecosystem on Kos Island**



Island KOS Project promoter

Municipality of Kos

Sector

Hydrogen

2.5 M€

**Project value** 



## What is the project about?

- The project concerns the creation of a hydrogen ecosystem in Kos Island, centred at the Mastichari port.
- The hydrogen will be originated by the excess electricity production from local wind farms (that otherwise would be curtailed).
- An H2 refuelling station suitable for municipal vehicles and ferries will be placed in a strategic location.

## How will the EU Islands Facility NESOI support the project?

- Assessment of the key project sizing drivers
- Identification of suitable technological options given existing project sizing requirements
- Study by a civil engineering company regarding the condition of the relevant marine structures at the site and the estimated installation cost of a project to the breakwater
- Definition of the required environmental permitting procedures
- Cost Benefit analysis and socio economic and environmental impact evaluation
- Definition of the technical, economic and financial, fiscal project inputs
- · Risk analysis and identification of available mitigation strategies
- Assessment of existing procurement options (e.g. tender, PPP, etc.)
- Financial modelling and identification of target scenario
- Identification of financing/funding options
- Action plan and identification of project monitoring procedures



Wind turbines on Kos island (Source: sani)

