

# CETFA



**FOURNOI**

**“Fournoi is an island with many protected areas. The proposed interventions should respect the ecosystem and have the warm support of local communities and environmental associations.”**



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The European Islands Facility NESOI aims to unlock the potential of EU islands to become the locomotives of European Energy Transition. To do so, NESOI aims to mobilize more than €100 million of investment in sustainable energy projects to give EU islands the opportunity to implement energy technologies and innovative approaches, in a cost-competitive way. NESOI has selected 56 such projects across the European Union and provide them with financial resources and technical support.



## Clean Energy Transition for Fournoi Archipelago

### ABOUT THE PROJECT

**Project  
Promoter**



Municipality of Fournoi Korseon



### Stakeholders

Municipality of Fournoi Korseon

Municipal Port of Fournoi

Joint Energy Community



**Country** Greece



**Sector** Energy planning



**PROJECT VALUE** 9.5 M€

#### DESCRIPTION

The Municipality of Fournoi Korseon lies in the North Aegean and includes the Fournoi archipelago which consists of Fournoi, Thymaina, Agios Minas and some smaller uninhabited islands. The objective of CETFA is the development of a Clean Energy Transition Agenda (CETA), a document mandated by the Clean Energy for EU Islands (CE4EU) initiative.

#### AIM OF THE PROJECT

CETFA is examining the following technical solutions:

- Heat pump systems (PV and batteries)
- Municipal and residential building sector Interventions (rooftop PV, solar thermal, heat pumps, replacement of appliances and insulation, etc.)
- Land and sea electromobility and car-sharing solutions

#### FUTURE STEPS

11 strategic objectives were identified for the energy transition. A set of actions to meet these objectives were defined. Depending on the global economy and energy sector, the energy transition is foreseen to be completed in 20 years time.

## HOW THE EU ISLANDS FACILITY NESOI SUPPORTS THE PROJECT

- 1 Socio-economic, territorial and environmental analysis
- 2 Definition of the energy balance of consumption and emissions of the Local Authority
- 3 Analysis of the local RES potential and of local heating and cooling demand
- 4 Climate change risk analysis and vulnerability assessment
- 5 Analysis and mapping of regional, national and European planning tool
- 6 Support in participatory processes and in the drafting of the CETA
- 7 Action plan and monitoring system, mapping of the main financial instruments available





## INTERVIEW WITH

**Manos Mitikas, Member of Municipal Council, on behalf of the opposition party of Fournoi Korseon**

**Q: What is the Clean Energy Transition plan about for your island?**

A: The Clean Energy Transition Plan for the Fournoi archipelago aims at the sustainable, fair and clean energy transition of the island Municipality. This initiative covers the current geographical, economic and demographic conditions of the island along with an analysis of the Fournoi energy system and a list of stakeholders. It also defines our vision for a decentralized, sustainable and independent energy system. The Plan includes eight pillars of the energy transition ranging from local community education to smart grid development and details the specific actions needed to achieve the goals set.

**Q: What were the challenges? How did NESOI help overcome them?**

A: The transition to clean energy in Fournoi presents challenges due to the islands' geographical and infrastructural limitations. Also, due to the significant financial investments required to implement renewable energy technologies and upgrade existing infrastructure, the need for extensive community involvement and training, and the complexity of complying with regulatory frameworks. NESOI has been instrumental in addressing these obstacles, providing critical technical and financial guidance, helping us understand and identify appropriate renewable energy technologies, conducting pre-feasibility studies and developing an actionable energy transition strategy.

**Q: What will be done next to pursue this project?**

A: The project is currently in the planning and stakeholder engagement stage. Future steps include finalizing these plans and securing the necessary funding and technical resources to further mature and implement them. We anticipate that we will need technical support for the development of renewable energy technologies and infrastructure upgrades, as well as continued assistance in identifying potential funding opportunities, in addition to NESOI support.

**Q: What are your next steps towards clean energy transition?**

A: As a Municipality, we are constantly exploring possibilities for future initiatives that align with our energy transition goals. However, at this stage, our primary focus is the successful implementation of the ongoing transition plan.

## THE IMPACT

ON LOCAL COMMUNITY



### 1 Local Economy

The expected GHG emissions avoided will improve proportionally the local environmental conditions by reducing other gaseous pollutants. Jobs will be created for the installation, operation and maintenance of all new systems and local technicians will gain significant know-how.

### 2 Social Acceptance

Social acceptance is secured through the active engagement of citizens and other stakeholders in all stages of the process. The planning of the positions of RES is done in a collective manner.

## FOCUS ON THE DEVELOPMENT OF CLEAN ENERGY TRANSITION AGENDA

This CETA was developed jointly by the Municipality of Fourni Korseon with the support of the Network of Sustainable Greek Islands (DAFNI) and the NESOI partners.

The CETFA project pays special attention to citizen engagement and energy poverty mitigation. With the installation of solar PV panels, free electricity will be provided to up to 50 energy-deprived households, most of these households are already mapped out by the municipality.

Pillars of Energy Transition, includes the actions to be taken in order to meet Fourni's vision

- Information - training of the local community
- Energy saving and sustainable use of energy
- Heating and cooling
- Electricity generation
- Sustainable transport
- Waste and water management
- Transportation to and from the island
- Development of smart grids



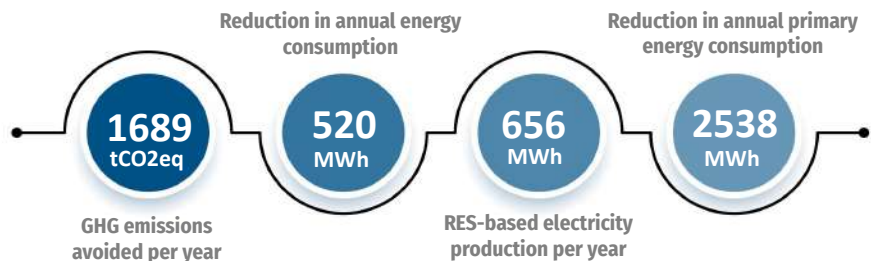
**First citizen engagement event at the town hall of Fourni**  
(Fourni citizen engagement report sent to NESOI)

The citizens see the clean energy transition as an opportunity to mitigate the challenges that the island is currently facing. For example, citizens often counter blackouts as a result of old grid infrastructure. RES in Fourni will also help to decrease the dependency from the neighboring island Samos, from where the electricity is imported.

## EXPECTED ENERGY AND GHG SAVINGS

The vision of the CETFA project is aligned to the national target of 32.5% reduction of the energy consumption by 2030 compared to 2005 emissions (National Energy and Climate Plan, 2019). Through various measures proposed in the plan, the use of fossil fuels will be reduced by 2538 MWh/yr and the greenhouse gas emissions will reduce by 1689 tCO<sub>2</sub>eq/yr.

## KEY NUMBERS OF THE PROJECT



## REPLICABILITY IN OTHER ISLANDS

Both the CETA development procedures and the proposed solutions can be replicated in Greek interconnected islands. This is especially true for islands that are not planned to be interconnected to the mainland. One possible restriction is the available capacity for new RES plants. The implemented citizen engagement activities can be replicated everywhere in the EU.