NESOI
EU ISLANDS FACILITY

Small islands making progress as leaders in energy sustainability

MAKE IT "SIMPLE"

LASTOVO

"Developing a pilot strategy for the island of Lastovo will open an opportunity for other small islands in Croatia to begin their sustainability reform."

This project is supported by the EU Islands Facility NESOI.
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EU ISLANDS FACILITY

MAKE IT "SIMPLE"

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.

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ABOUT
THE PROJECT

Project Promoter — WWF Adria - Association for the protection of nature and conservation of biological diversity

Stakeholders
- WWF Adria
- Municipality of Lastovo
- Lastovo natural park
- Waste management company
- Croatian energy company (HEP)
- Local enterprises

Country Croatia | **Sector** Energy planning | **PROJECT VALUE** 40 M€

DESCRIPTION

WWF Adria will develop an innovative guidebook for small islands' sustainable transition strategy with experts on water and waste management, funding opportunities and RES energy systems. An action plan for sustainability transition will be made for Lastovo island as a case study.

AIM OF THE PROJECT

- To create a guidebook for sustainable transition of small islands.
- To compile an action plan for sustainable transition for Lastovo island

FUTURE STEPS

Following the project, the plan is to use social networks and cooperate with organizations dedicated to islands to distribute the guidebook to representatives of small islands. In this way, the development of similar initiatives will be transferred to the local population.

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, waste and water management
3. Analysis of the local RES potential and of local heating and cooling demand
4. Analysis and mapping of regional, national and European planning tools
5. Analysis of technical solutions for water and waste management, and RES development and usage
6. Support in participatory processes, in the drafting of the SECAP and in reporting
7. Identification of measures to reach the defined objectives
8. Mapping of the main financial instruments available to finance the identified actions
9. Guidebook preparation in accordance with the results of the activities for the island of Lastovo, action plan

MAKE IT "SIMPLE"

Small islands making progress as leaders in energy sustainability - Interview

INTERVIEW WITH
MATEA JARAK, WWF ADRIA

Q: How was the project initially designed? Why choose this specific technology / sector?

A: An action plan was developed to achieve energy sustainability on Lastovo Island, a challenging community due to isolation, small population, distance from the coast, and high costs associated with work. Various existing technological methods will be applied to transform the island into a sustainable community.

Q: What are the challenges of the project?

A: The main challenge faced was administrative obstacles in procurement and consultant arrangements, causing a delay in the project's start. Recommendations for NESOI include approving travel expenses or field trips on the islands as separate locations in future projects and improving communication for faster response.

Q: How does the project affect the local population? How are local stakeholders and companies involved?

A: The study involved conducting individual interviews with the local population on the island of Lastovo to identify their biggest challenges in social, technological, and environmental aspects. Representatives from the local government were present to present the project's goals and how different technologies can contribute to achieving them. The guide, which includes legislative, financial, and technological aspects, is applicable to both larger and smaller projects and serves as a reference guide for residents to drive change at the local level. It also serves as a guideline for local authorities in developing their projects.

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

A: The project aims to create a guide and action plan for Lastovo, focusing on key results. The guide will be distributed to small island representatives through social networks and island-specific organizations. The goal is to achieve sustainability by focusing on nature protection, ecology, and climate change, rather than energy. The organization plans to focus on local stakeholders and communities in the future, transferring similar initiatives to the local population.

THE IMPACT
ON LOCAL COMMUNITY

1. **Local Environmental Conditions**
   As Lastovo island is a protected area, Nature park, making any change towards sustainability is a benefit for the protected area. Developing a green mobility and energy sustainable transition plan for public institution managing the area would reduce the GHG emissions and save energy.
2. **Social Acceptance and Impact**
   The inhabitants see the benefit of new technology and solutions on the Lastovo island especially since the cost of water and waste should decrease. Also, the tourists have a huge seasonal impact and are important stakeholders.

New Energy Solutions Optimised for Islands
NESOI
EUROPEAN ISLANDS FACILITY

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Small islands making progress as leaders in energy sustainability **– Technical Data**

FOCUS ON
SOCIOECONOMIC AND ENVIRONMENTAL CONTEXT

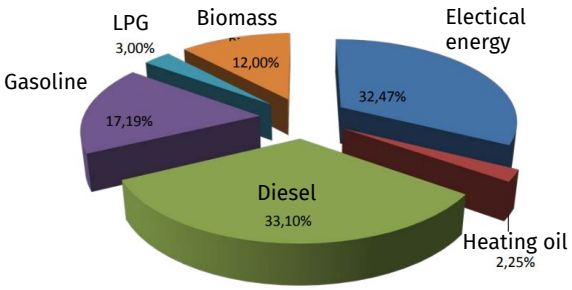
Out of 50 inhabited islands in Croatia, there are 38 islands under 100 km^2, with 31 of them having under 2000 islanders living on them the whole year. These islands depend largely on the mainland for energy, water and waste management.

According to the 2021 census, the municipality of Lastovo had 748 inhabitants. Throughout recent years, the permanent population is decreasing, and the share of population in working age has also been decreasing.

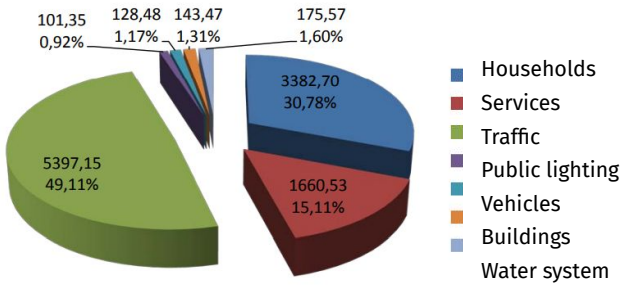
In the past, the inhabitants were exclusively engaged in agriculture - viticulture and olive growing, cattle breeding, fishing, and even coral farming and falconry. Today, most inhabitants work in tourism and trade.

Water security during summers, for personal use, but also for agriculture and tourism is one of the biggest insecurities on small Croatian islands. On Lastovo, brackish water is extracted from the ground at two locations and is processed into drinking water using the reverse osmosis system.

Traditional costume of the Croatian island (Documents sent to NESOI)



The share of individual energy sources in the total energy consumption in Lastovo in 2012 (Documents sent to NESOI)



The share of individual sectors in the total energy consumption in Lastovo in 2012 (Documents sent to NESOI)

KEY NUMBERS
OF THE PROJECT

1270 MWh	546 tCO_2eq	80%	30 years
Amount of energy saved each year*	Amount of CO_2 emissions avoided per year*	Renewable energy share	Payback period

** Calculated for transport, service, housing, public lighting, public infrastructure based on the projections made in Sustainable Energy Action Plan of the Municipality of Lastovo (2015).*

REPLICABILITY
IN OTHER ISLANDS

This project will be applicable for replication on 30 other small islands in Croatia. Other, bigger islands could be applicable for scaling, and there are 19 big islands in Croatia. There are several islands in the archipelago that could be directly replicate the Action plan made for Lastovo.

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