

Activity 4.6 Maslinica-Solta Pilot

D.4.6.4 Installation of Micro-grid system for e-vehicles and e-boats in Maslinica-Solta

WP 4 Pilots: small technological investments, equipment installations and new services start-up

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Introduction

This document gathers the proof of the achievement of the following deliverable:

- **D.4.6.4 Installation of Micro-grid system for e-vehicles and e-boats in Maslinica-Solta.**

In the following chapters, some pictures of the installations and a brief description of the investment are provided. For more details concerning the different implementation phase, the KPIs monitored and the key lessons learnt, please refer to the deliverable *D.4.6.1 Comprehensive report with results achieved during pilot implementation*.

D.4.6.4 Installation of Micro-grid system for e-vehicles and e-boats in Maslinica-Solta

The Microgrid system installed in the Martinis Marchi marina on the island of Solta includes 42 photovoltaic (single crystal) panels equipped with connecting cables (1600x990x40 mm with rated power min. 320 Wp).



Figure 1 – E-mobility service for tourists in Maslinica-Solta

The Microgrid system was placed in PP10 storage facility in the part closest to the exit wall, in order to guaranteeing an easier access to the outside and to directly reach the bike stands and the e-vehicle charger. Inside the storage facility, a separate room was made with PVC doors and barriers for safety. Air conditioning and ventilation system was placed for temperature control. Solar panels were placed on top of the marina main facility, as it was the only free place in the current layout of the marina. Panels are also connected with cables to the microgrid system. The Victron energy application is being used for monitoring the whole system. Solar panels give more than enough electricity to maintain all components of the project. From the beginning of the monitoring phase, PP10 obtained 14.496 kWh and used only 8.931 kWh (consumption of 61.6%). The highest consumption rate was recorded when an electric boat plugged into the dedicated charger. Compared to energy production in 2021, consumption increased by 128%, as the Marina implemented the panels and the monitoring system mid-year. For 2022 (until 01.10.), consumption was 33% of the energy produced with the solar panels.