Output O.4.8 - Installation of Micro-grid systems in 4 sites

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

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Introduction

This document presents an overview of the installations forming **O.4.8 Installation of Micro-grid systems in 4 sites**. More specifically, 3 micro-grid systems where installed in the following locations: Krk Island (Malinska Municipality and Ponikve) and Maslinica Šolta. The fourth system, foreseen in Venezia Giulia area, was not completed by the end of the project, therefore it is not presented in this document. Pictures and descriptions of the systems are provided in the chapters below.

Micro-grid systems in Krk Island (Croatia)

Figure 1 – Micro-grid installed by PP06 in the Municipality of Malinska-Dubasnica.

As showed in Figure 1, PP06 installed a **photovoltaic plant** of 35 kW on the roof of the Kindergarten in Malinska, in the same lot where the e-charging stations for e-vehicles, e-boats and the e-bike renting system were placed. The Photovoltaic powerplant has 94 solar panels with a total installed power peak of 35.72 kW (380W x 94).

Figure 2 - Micro-grid installed by PP12 Ponikve.

As demonstrated in Figure 2, PP12 installed a **photovoltaic plant** in the parking lot of Ponikve's administrative building, thus directly feeding the charging station for electric vehicles and the system for renting electric bicycles and scooters in the city of Krk. The parcels where the installation is located are owned by the local municipalities and the Ponikve company itself. All the mobility stations are located close but outside of the old city center (in front of the historical old town).

Micro-grid system in Maslinica Šolta (Croatia)

Figure 3 – Micro-grid system installed by PP10 Dvorac.

PP10 Dvorac, which owns the Martinis Marchi marina, placed the **solar panels** on top of the marina main facility. The panels were connected with cables to their storage facility (microgrid system). The most important thing for Dvorac was indeed the self-production and consumption of energy, as it is in the process of building a new marina. Solar panels implemented through the DEEP-SEA pilots provide more than enough electricity to maintain all pilot components.