

# Activity 4.6 Maslinica-Solta Pilot

## D.4.6.2 Installation of 1 ECS for e-vehicles and 1 ECS mooring for 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.4.6.2 Installation of 1 ECS for e-vehicles and 1 ECS mooring for e-boats in Maslinisca-Solta**

In the following chapter, 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.4.6.1 Installation of 1 ECS for e-vehicles and 1 ECS mooring for e-boats in Maslinisca-Solta

PP10 H.L. DVORAC d.o.o. installed **one electric charging station (ECS) for e-boats/vessels**, which included the purchase of a freestanding charging device for boats with two connection points and rated power 2x22 kW (3-phase, 400 V/ 32 A/50 Hz, with connection version type 2). Moreover, it included the purchase of a kit with equipment for monitoring, preparatory works, and excavation of the cable duct for laying power cables. Furthermore, the procurement of **an electric charging station (ECS) for e-cars** included the purchase of freestanding charging devices for cars. More specifically, charging devices with two connection points and rated power 2x22 kW (3-phase, 400 V/32 A/50 Hz, with connection version type 2).



Figure 1 – E-charging station for e-vehicles and e-boats installed by PP10 Dvorac at Martinis Marchi marina.

Both ECS were placed within the Martinis Marchi marina, which is owned by PP10. Concerning the e-vehicle charger, the immovable parts were placed in concrete within PP10 parking area, as shown in Figure 1. The parking area was painted with all the necessary signs for highlighting the presence of the aforementioned equipment. In addition, the cables from the micro-grid storage facility were brought directly to the ECS.

E-boat charger installation started by removing stone panels from the marina floor and drilling the wall from the micro-grid storage facility out to the marina. In addition, PP10 made a new stone structure to hide the part of the cables going next to the breakwater wall to the e-boat charger. This was the most difficult part of the project, as the project partner had to find and replace the stone panels that broke in the removal part of the process with the same ones. Through the Go2Bike application, PP10 observed that the e-vehicle charger was used in total by 25 people (3 of those employees of H.L. Dvorac). 22 e-cars were plugged into the charger for 758,52 h, which consumed 219,52 kWh per month. The e-boat charger was not used so much as there is only a small number of e-boats in the Adriatic. PP10 hosted in the marina only 3 e-boats, but only one of them used Martinis Marchi berth spots during winter. Through the Victron energy application PP10 realized that the highest energy consumption from the microgrid system was recorded when e-boats were plugged at the e-boat charger.