Act 4.6 Maslinica-Solta Pilot

D 4.6.1 Comprehensive report with results achieved during pilot implementation local experience

WP4: Pilots: small technological investments, equipment installations and new services start-up

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Notes:			

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Executive summary

This document represents D .1.1 Roadmap and evaluation report, setting the overall framework for DEEP-SEA pilot implementation, monitoring and evaluation. Coordinated by University of Split, this document presents a description of project pilots, provide the steps for pilot implementation and the KPIs useful for pilot monitoring and evaluation. It finally provides the structure of pilot reports, where results of pilot preparation, implementation, monitoring and closure should be reported periodically by partners responsible for each pilot, in order to compile a final list of lessons learnt and recommendations which will be used for service continuation and improvement in pilot areas and replication of experience outside DEEP-SEA sites.

1. Introduction

WP4 will develop and implement new sustainable mobility solutions in selected pilot sites to enhance the available services for passengers and tourists in Adriatic marinas. A new integrated approach for the inland, costal and maritime mobility services will be promoted during the project life and will continue after, thanks to its transferability actions. In order to achieve the highest impact on the marinas since the very beginning, partners will fine-tune their pilot actions according to the analysis performed in WP3, i.e. of best available solutions (Act.3.1), best practice in management and investment models (Act.3.2) and AS IS analysis of passengers' flows, needs and expectations, current mobility patterns, energy consumption and emissions (Act.3.3).

Marinas operators of DEEP-SEA pilot sites and relevant PAs are expected to keep the sustainable mobility services and energy efficiency solutions installed during the pilots fully operational in the coming years, as a starting point for further installations and increase of the range of e-sharing services, thanks to the investment plans defined for each pilot site in DEEP-SEA Act. 3.4.

The installation of the ECS for e-vehicles and e-boats will boost e-mobility in the marinas and in nautical sector in general: DEEP-SEA pilot sites will trigger further new installations along the Adriatic Sea considering the increasing demand of charging services for e-cars. The availability of e-charging stations for e-boats will support the increase of e-mobility, affecting also shipyards, operators involved in boat and yacht retrofitting and production of new boat models with electric engines.

The micro-grid installation will allow the production of energy from renewable sources and demonstrate the economic sustainability with reduction of costs in electric grid distribution and energy self-sustainability, particularly in sensitive island areas.

This document is intended to define a roadmap for the set-up of pilots, selection of results to implement in WP3 Investment Plans and to include in WP5 Guidelines, with particular attention

to terms of coherence with the overall programme and project objectives. It provides the monitoring framework for pilot evaluation through the KPIs here defined.

Pilots monitoring and measurement methodology will ensure coherence with project and Interreg Italia-Croatia Programme objectives as well, according to the agreed time plan and economic - financial sustainability. Designed as internal tool, this roadmap will ensure the correct monitoring and measurement of the new installations and e-services as well as action viability and transferability to other Adriatic Sea sites and beyond. Once the project is over, the monitoring system developed during the project life-time will be used as a tool for future monitoring of mobility services by MOs, defining KPIs for the evaluation of pilot impacts in terms of accessibility, quality of mobility services, eco-social sustainability, environmental impacts and energy efficiency. Stakeholders (MOs, PAs, end-users and others) will be called to validate the set of selected criteria and the pilot results.

Evaluation results will be collected by each pilot site every 6 months through specific pilot evaluation reports (D 4.1.2).

2. DEEP-SEA pilot description

DEEP-SEA will implement 5 pilot actions targeting marinas in 5 areas across the Italy-Croatia region, as follows:

- Venezia Giulia area, Italy, coordinated by LP ARIES and University of Trieste;
- Foggia area, Italy, coordinated by Province Foggia;
- Krk Island, Croatia, coordinated by Ponikve Krk;
- Malinska, Croatia, coordinated by the Municipality of Malinska-Dubašnica;
- Maslinisca-Solta, Croatia, coordinated by HL Dvorac.

The **Venezia Giulia pilot** area will be characterized by the:

- Startup of 1 e-car sharing services;
- Installation of 6 e-charging stations for e-vehicles;
- Installation of 3 racks with electric and muscular bicycle for sharing system;
- Installation of 1 microgrid system.

The **Foggia pilot** area will be characterized by the:

- Startup of 1 e-car sharing service for the Province of Foggia, linked to the main transport HUBs;
- Installation of 6 e-charging stations for e-vehicles and/or e-boats in the marinas selected;

- Installation of 2 racks with e-bike sharing system in the areas of Manfredonia and Vieste.

The **island of Krk pilot** area will be characterized by:

- Installation of 1 rack with electric and muscular bicycles for bike sharing services;
- Purchase of 3 e-scooter for sharing services and startup of 1 e-scooter sharing;
- Installation of 2 e-charging stations for e-cars;
- Installation of 2 e-charging stations for e-cars e e-boats;
- Installation of 1 microgrid system.

The **pilot Malinska Municipality** pilot area will be characterized by:

- Installation of 2 e-charging station: 1 combined for e-cars and 1 mooring for e-boats (in Porat Marina), a and 1 e-charging station for e-cars in Malinska;
- Installation of 1 rack with electric and muscular bicycles for bike sharing services;
- Purchase of 4 muscular and 4 e-bikes;
- Charging system for e-bikes and software for rental;
- Installation of 1 microgrid system.

The **pilot Maslinica-Solta** pilot area will be characterized by:

- Installation of 1 e-charging station for e-vehicles and 1 e-charging station for e-boats;
- Installation of 1 rack with electric and muscular bicycles for bike sharing services;
- Installation of 1 microgrid system;
- Startup of 1 e-car mobility service for tourist transport.

At the end of pilot implementation, each partner responsible will produce a final report with results achieved during pilot implementation such as local experience, findings and proposal for seamless integration (Act. 4.2.1, 4.3.1, 4.4.1, 4,5.1, 4.6.1).

2. Pilot phases

The implementation of pilots is divided into 3 individual phases:

- In the **preparatory phase** partners will have to deal with the concept design and its technical issues requirements, choose the location and arrange relations with the landowners in order to obtain permissions, if necessary, considering the related social aspects and the stakeholders involved. The partners, will then have to deal with the financial aspects, seeking negotiations with potential contractors and eventually preparing the technical specification and documentation required for the tender. Furthermore, partners will define the KPIs, the Key Performance Indicators needed to monitor and evaluate the implementation. Each partner should select the relevant KPIs and the method of measuring them, on the basis of

the type of pilot, local context, SHs involved, technical features and so on. In this phase partners should also define how the achievement of KPI targets will be measured and set the current situation for each KPI.

- In the **implementation and monitoring phase** partners will start to implement the pilot, including installation of equipment and small infrastructure, their testing, validation, service start up and operations. The progress will be closely monitored by each coordinating partner and KPIs measured periodically; progress should be reported back to the WP leader and reported into the 6-month evaluation report, one for each pilot. The pilot development will also involve local stakeholders, such as PAs responsible for local public transport, marinas operators, local and regional associations, tourism and promotion institutions. A direct action will be focused on the involvement of end-users testing the services quality and their usability. Pilots responsible will also provide feedbacks to both investment plans (Act. 3.4) and guidelines (Act. 5.1).

- In the **closure phase**, partners will compile the final documents with the results from the pilots, the lessons leant and recommendation for service continuation and replication. This information will be collected through the following documents:
  - A final 6-month evaluation report (D 4.1.2) in February 2021, delivered by University of Split;
  - The final Reports with pilot results, one for each pilot, by December 2022 (Act. 4.2.1, 4.3.1, 4.4.1, 4,5.1, 4.6.1);
  - The final results of KPIs measurements in the present Roadmap by December 2022.

  The documents above will be used for the transfer of results outside the project, as described in the Transferability Plan (D 5.4.1). The implemented services and installed equipment will remain on usage of the passengers and tourists for their inland and coastal mobility and will indirectly support the increase of e-boats in nautical mobility following project's closure.

3. Pilot monitoring and evaluation: KPIs

Below a list of KPIs is provided related to energy efficient and sustainable mobility and micro grids. Partners responsible for each pilot will select the more relevant KPIs for their sites and monitor them throughout the project.

3.1. Micro grid KPI

KPI Description		Values		
N.	KPI	Unit	Baseline (current sit.)	Target (to be achieved)

1	Energy produced using the photovoltaic system. This can be achieved using a meter at the DC MPPT output.	kWh (per month)	0	J F M A M J J A S O N D
2	Energy used for charging the e-cars should be logged. This can be achieved using a meter inside the CS.	kWh (per month)	0	J F M A M J J A S O N D
3	Energy from the grid used to fuel the car. When the car is charging, the difference between the CS energy and the ugrid energy (storage + PV).	kWh (per month)	0	J F M A M J J A S O N D
4	Charging station occupancy: the amount of time when e-cars are charging at the station should be logged.	hr (per month)	0	J F M A M J J A S O N D
5	CO_2 emissions reduction due to the use of an e-car instead of a conventional car. This value should be calculated by multiplying the e-car travelled distance per month by the average CO2 emission of a conventional vehicle (123.4 g CO2/km Source: www.eea.europa.eu)	CO2 kg./month	0	**J F M A M J J A S O N D**
6	Number of users using the CS	# People	0	
7	Stakeholders / users satisfaction / benefits from DEEPSEA pilot(s) through interviews / questionnaires	%	0	
8	Number of e-car monitored	# Car	0	
9	Number of e-cars involved in the project	# Car	0	
10	Number of E-CS monitored	# E-CS	0	
11	Number of implemented E-CS by DEEPSEA	# E-CS	0	
12	Number of stakeholders involved (municipalities, regional authorities, investors, companies…)	SH	0	
13	Photovoltaic self-consumption energy, i.e. the percentage of energy locally consumed compared to that produced.	%	0	
14	Number of e-car charging profiles collected (e-car charging power vs. time)	# profiles/ year	0	
15	Number of e-car discharging profiles collected (e-car discharging power vs. time)	# profiles/ year	0	
16	Number of main battery charging profiles collected (charging power vs. time)	# profiles/ year	0	
17	Number of main battery discharging profiles collected (discharging power vs. time)	# profiles/ year	0	

3.2. E-sharing services KPI

KPI Description		Values		
N.	KPI	Unit	Baseline (current sit.)	Target (to be achieved)
1	Number of e-vehicles monitored	# Car	0	
2	Number of e-vehicles involved in the project	# Car	0	
3	Number of users using the e-sharing services	# People	0	
4	Number of charging hours	#Hours/ year	0	
5	Number of charging calls	#calls	0	
6	Stakeholders / users satisfaction / benefits from DEEPSEA pilot(s) through interviews / questionnaires	%	0	

3.3. ECS for e-vehicles KPI

KPI Description		Values		
N.	KPI	Unit	Baseline (current sit.)	Target (to be achieved)
1	Number of e-car monitored	# Car	0	
2	Number of e-cars involved in the project	# Car	0	
3	Number of E-CS monitored	# E-CS	0	
4	Number of implemented E-CS by DEEPSEA	# E-CS	0	
5	Number of stakeholders involved (municipalities, regional authorities, investors, companies…)	SH	0	
6	Number of users using the CS	# People	0	
7	Number of charging hours	#Hours/ year	0	
8	Number of charging calls	#calls	0	

3.4. ECS for e-boats KPI

KPI Description		Values		
N.	KPI	Unit	Baseline (current sit.)	Target (to be achieved)
1	Stakeholders / users satisfaction / benefits from DEEPSEA pilot(s) through interviews / questionnaires	%	0	
2	Number of e-boats monitored	# boats	0	
3	Number of e-boats involved in the project	# boats	0	
4	Number of E-CS monitored	# E-CS	0	
5	Number of implemented E-CS by DEEPSEA	# E-CS	0	
6	Number of stakeholders involved (municipalities, regional authorities, investors, companies…)	SH	0	
7	Number of users using the CS	# People	0	
8				

3.5. Rack for bicycles and e-bikes

KPI Description	Values

N.	KPI	Unit	Baseline (current sit.)	Target (to be achieved)
1	Number of e-bikes monitored	# bike	0	
2	Number of e-bikes involved in the project	# bike	0	
3	Number of E-CS monitored	# E-CS	0	
4	Number of implemented E-CS by DEEPSEA	# E-CS	0	
5	Number of users using the CS	# People	0	
6	Number of bicycles monitored	# bike	0	
7	Number of bicycles involved in the project	# bike	0	
8	Number of implemented E-CS by DEEPSEA	# E-CS	0	
9	Number of users using the CS	# People	0	
10	Stakeholders / users satisfaction / benefits from DEEPSEA pilot(s) through interviews / questionnaires	%	0	

4. The pilot report structure

4.1. Pilot description and selection of KPIs

4.1.1. Short Description

Martinis Marchi Marina pilot site is privately owned by a limited liability company H.L. Dvorac Ltd. It is located in a small Maslinica Bay on the west side of the Island of Šolta in Central Dalmatia. The Marina's main business activity includes nautical tourism with short-term (transit) sea berth arrangement (10 to 40 m). The Marina has 50 berths, marked and illuminated, equipped with an electricity connection, a 16 to 125 A power supply, as well as water supply for each berth. An online berth booking service is available as well. The Marina has a reception, sanitary facility, as well as a food and beverage service. Among other services, the Marina also provides Wi-Fi internet access, a boat rental service, a parking area for boat owners, video surveillance, and a waste disposal corner. Placed less than 15 km from the Island's ferry port - Port of Rogač, 30 km of the main Split ferry port, bus and train terminal, and 30 km from the motorway A1 - The Marina is well connected to the main traffic nodes. The airport Resnik, as the second-largest airport in Croatia, is within a range of 20 km via sea. The main activity in the surrounding area is tourism, including diving activities, restaurants, cocktail bars, grocery stores, and souvenir shops. Regarding the collaboration with stakeholders, Marina mainly collaborates with the Croatian Employer's Association and the Croatian Chamber of Commerce via round tables, workshops, and meetings.

4.1.2. Context analysis

The Marina is privately owned and performs commercial activities which represent its major source of income. The Marina's key field of work is nautical tourism with short term berths arrangement. The internal organization of the Marina is divided into four departments: Captain, Sailors, Maintenance, and Reception. Even though Marina's energy consumption is monitored and an energy report is being published for each year, neither an Energy plan nor an Energy management system are being implemented. Accordingly, no Energy efficiency control system is present.

4.1.3. The goal

The goal of the Marina pilot site is to offer the following new services:

- Installation of 1 ECS for e-vehicles and 1 ECS for e-boats,
- Startup of 1 e-car mobility service for tourist transport,
- Installation of 1 rack with electric bicycles for sharing system and at least 6 e-bikes including a charging system for e-bikes and a rental software,
- 1 Microgrid system.

4.1.4. Chosen key performance indicators

- Energy produced using the photovoltaic system. This can be achieved using a meter at the DC MPPT output.
- Energy used for charging the e-cars should be logged. This can be achieved using a meter inside the CS.
- Energy from the grid used to fuel the car. When the car is charging, the difference between the CS energy and the ugrid energy (storage + PV).
- Charging station occupancy: the amount of time when e-cars are charging at the station should be logged.
- CO2 emissions reduction due to the use of an e-car instead of a conventional car. This value should be calculated by multiplying the e-car travelled distance per month by the average CO2 emission of a conventional vehicle (123.4 g CO2/km Source: www.eea.europa.eu).
- Stakeholders / users satisfaction / benefits from DEEPSEA pilot(s) through interviews / questionnaires.
- Number of e-car monitored
- Number of e-cars involved in the project
- Number of E-CS monitored
- Number of implemented E-CS by DEEPSEA
- Number of stakeholders involved (municipalities, regional authorities, investors, companies…)

- Photovoltaic self-consumption energy, i.e. the percentage of energy locally consumed compared to that produced.
- Number of e-car charging profiles collected (e-car charging power vs. time)
- Number of e-car discharging profiles collected (e-car discharging power vs. time)
- Number of main battery charging profiles collected (charging power vs. time)
- Number of main battery discharging profiles collected (discharging power vs. time)
- Number of e-vehicles monitored
- Number of e-vehicles involved in the project
- Number of users using the e-sharing services
- Number of charging hours
- Number of charging calls
- Stakeholders / users satisfaction / benefits from DEEPSEA pilot(s) through interviews / questionnaires
- Number of e-car monitored
- Number of e-cars involved in the project
- Number of e-boats monitored
- Number of e-boats involved in the project
- Number of e-bikes monitored
- Number of e-bikes involved in the project
- Number of bicycles monitored
- Number of bicycles involved in the project.

4.2. Preparation phase

In the preparatory phase, the Marina pilot site was focused on a strategic analysis of the external factors that affect the pilot development. More specifically, the assessments of the strengths, weaknesses, opportunities, and threats of current and prospective competitors as well as the political, economic, and technological influences that affect the Martinis Marchi Marina pilot site. The main focus of Marina was on the following procurement actions: procurement of the (1.) Electric charging stations (ECS) for 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 (2.) Electric charging stations (ECS) for 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). Also, the procurement included the purchase of a kit with equipment and software for monitoring devices, preparatory works, excavation of the cable duct for laying power cables, and marking parking places for parking electric cars along with sign installation. Moreover, the procurement of (3.) E-mobility & sharing services included both infrastructural works and the purchase of an electric car and six electric bicycles for renting. The infrastructural works implied the installation of the system for charging six electric bicycles, preparatory construction works, and excavation of the cable duct for laying power cables, setting up and parameterizing the e-bike system, connecting to a local LAN, and establishing software control over the operation of the station. Finally, the procurement of (4.) The Microgrid system included 42 photovoltaic (single crystal) panels equipped with connecting cables (1600x990x40 mm with rated power min. 320 Wp). Construction works included preparatory work, excavations, finishing work, and purchase of small building materials and supplies. Regarding the financial elements that have been considered, a simplified cost-benefit and multiple correspondences (MCA), and ROI analysis have been conducted for comparing actions in which rough financial and economic flow estimates were used to calculate financial and economic performance indicators. The total investment referred to above mentioned four procurement activities (ECS for boats, ECS for cars, E-mobility and sharing services, and Microgrid system), was 100,000 EUR. The investment was 85% financed by European Structural and Investment Fund (ESIF), more specifically European Regional Development Fund (ERDF), and 15% was financed by Marina itself.

4.3. Implementation and monitoring phase

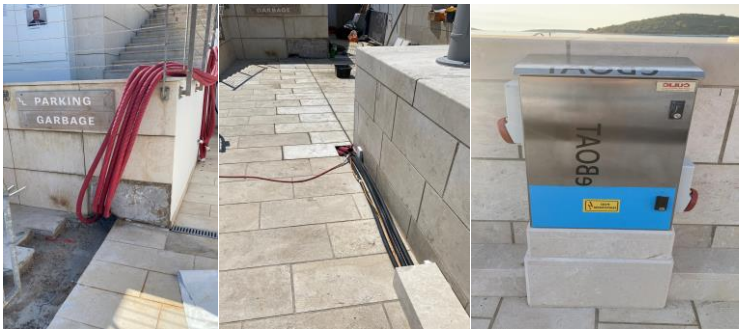
Implementation phase

The Microgrid system was placed in our storage facility in the part closest to the exit wall for easier access to the outside and almost directly under the bike stands and e-vehicle charger also for easier access. 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 our main facility in the marina. It was the only place for them in the current layout of the marina. Panels are also connected with cables to our storage facility (microgrid system).

For e-bike stands and e-vehicles charger implementation, immovable parts of the e-bike stands and e-vehicle charger were placed in concrete on the part of our parking area intended for them. That part of the parking area was painted with all the necessary signs for the equipment. In addition, the cables from our storage facility (microgrid system) were brought directly to them. The e-bike stand and e-vehicle charger were screwed on the parts in the concrete and connected to the necessary cables to them.

E-boat charger implementation started by removing stone panels from the marina floor and drilling the wall form our storage facility (microgrid system) out to the marina. In addition, we made the new stone structure to hide the part of the cables that go next to the breakwater wall to e-boat charger. This was the most difficult part of the project, as we had to find and replace the stone panels that broke in the removal part of the process with the same ones.



Monitoring phase

For data collection, we took the data that is easiest to gather through the apps for the new implemented systems (Go2Bike and Victron energy). The most important thing for us is energy production and consumption for all components as we are in the process of building a new marina, hopefully starting next year. Solar panels give more than enough electricity to maintain all components of the project. Consumption compared to production for 2021 was higher by 128% as we implemented the panels and monitoring system mid-year. For 2022 (until 01.10.), consumption is just 33% of the produced energy. The e-car that is part of the project and the e-sharing system is very economical and environment friendly. The e-car was driven 11.032 km and it used the e-vehicle charger for 487,64 h, saving 79,31 CO2 kg. /month. Its sharing service was used by 51 people. The e-vehicle charger was used by 25 people (3 of them employees of H.L. Dvorac Ltd.), it monitored 22 e-cars that were plugged into the charger for 758,52 h and consumed 219,52 kWh per month. E-bikes were used by 236 users until now. They are mostly people that come by boat, as there are approximately 6 to 8 people on the boats that come to our marina 1 user takes 4 bikes or more. E-boat charger was not used so much as there is only a small number of e-boats on the Adriatic. We had only 3 e-boats, one of them used our winter berth offer.

4.4. Pilot closure

The DEEP SEA project showed us the relevance of renewable energy sources and their integration in every modern marina. As mentioned in the monitoring phase, data collection that for us is the most important part of the project we gathered information that will help us in choosing which components to implement in our upcoming projects. Like always, we learned most from our mistakes. E-bikes that were in our budget for the project are not suitable for island terrain, as most beautiful beaches and bays are only accessible by off-road trails. Also, for their use throughout the whole island, we have to put at least one more location with charging stations in cooperation with the Municipality of Šolta. For solar panels, it was the only location to place them in the current layout of the marina, but their place is too close to the sea and now we can see that future maintenance will be a problem because of the salt. Pros of the project were e-boat and e-vehicle chargers that brought us, a new client, for the marina, hotel, and Island. E-boat charger was used the least but still brought us one winter berth

and it was the third fully electric Salona 47 in the world. E-vehicle charger brought many guests to the hotel and nearby apartments. Chargers are still scarce in Croatia, especially on the islands. E-car users choose our island just because of the charger location. The SUV e-car that we got for the project helped us organize tours to island vineyards and old army locations more easily. Not to mention it is more economical and our guests praise the choice of environment-friendly option for the touring car.

5. Final pilot evaluation and lessons learned with list of KPIs to be filled in by task leader

During the implementation of the DEEP SEA project, the Marina has expanded its business by introducing new content, which has contributed to positioning the Marina as an environmentally sustainable marina. Also, during the project implementation, the key elements of the concept of green port management were implemented in the marina's development. Moreover, as a result of several various meetings and local workshops with relevant stakeholders, a transparent and active stakeholder participation has been enforced. Therefore, a shift from sustainability as a legal obligation to sustainability as an economic driver with continuous striving towards innovation in process and technology has been implemented. Finally, you can find below the list of KPIs with detailed value descriptions from the year 2022.

List of KPIs from the year 2022

- **Micro grid KPI**

KPI Description		Values		
N.	KPI	Unit	Baseline (current sit.)	Target (to be achieved)
1	Energy produced using the photovoltaic system. This can be achieved using a meter at the DC MPPT output.	kWh (per month)	1076,45	J: 141,71 | F: 232,84 | M: 751,42 | A: 1259,90 | M: 1583,03 | J: 1736,19 | J: 1761,93 | A: 1372,94 | S: 848,09 | O: | N: | D:
2	Energy used for charging the e-cars should be logged. This can be achieved using a meter inside the CS.	kWh (per month)	219,52	J: 0 | F: 23,24 | M: 27,82 | A: 51,88 | M: 0 | J: 95,82 | J: 677,75 | A: 729,49 | S: 369,69 | O: | N: | D:
3	Energy from the grid used to fuel the car. When the car is charging, the difference between the CS energy and the ugrid energy (storage + PV).	kWh (per month)	219,52	J: 0 | F: 23,24 | M: 27,82 | A: 51,88 | M: 0 | J: 95,82 | J: 677,75 | A: 729,49 | S: 369,69 | O: | N: | D:

4	Charging station occupancy: the amount of time when e-cars are charging at the station should be logged.	hr (per month)	71,00	<table><tr><td>J</td><td>F</td><td>M</td><td>A</td><td>M</td><td>J</td><td>J</td><td>A</td><td>S</td><td>O</td><td>N</td><td>D</td></tr><tr><td>0</td><td>3,23</td><td>6,88</td><td>9,07</td><td>0</td><td>32,867</td><td>187,93</td><td>222,97</td><td>176,07</td><td></td><td></td><td></td></tr></table>
5	CO2 emissions reduction due to the use of an e-car instead of a conventional car. This value should be calculated by multiplying the e-car travelled distance per month by the average CO2 emission of a conventional vehicle (123.4 g CO2/km Source: www.eea.europa.eu)	CO2 kg./month	79,31	<table><tr><td>J</td><td>F</td><td>M</td><td>A</td><td>M</td><td>J</td><td>J</td><td>A</td><td>S</td><td>O</td><td>N</td><td>D</td></tr><tr><td>51,46</td><td>81,32</td><td>63,18</td><td>76,88</td><td>63,05</td><td>92,92</td><td>70,34</td><td>141,91</td><td>143,27</td><td></td><td></td><td></td></tr></table> **11032km**
6	Number of users using the CS	# People	25	
7	Stakeholders / users satisfaction / benefits from DEEPSEA pilot(s) through interviews / questionnaires	%	0	
8	Number of e-car monitored	# Car	22	
9	Number of e-cars involved in the project	# Car	1	
10	Number of E-CS monitored	# E-CS	1	
11	Number of implemented E-CS by DEEPSEA	# E-CS	1	
12	Number of stakeholders involved (municipalities, regional authorities, investors, companies…)	SH	0	
13	Photovoltaic self-consumption energy, i.e. the percentage of energy locally consumed compared to that produced.	%	33%	till 01.10
14	Number of e-car charging profiles collected (e-car charging power vs. time)	# profiles/ year	0	
15	Number of e-car discharging profiles collected (e-car discharging power vs. time)	# profiles/ year	0	
16	Number of main battery charging profiles collected (charging power vs. time)	# profiles/ year	0	
17	Number of main battery discharging profiles collected (discharging power vs. time)	# profiles/ year	0	

- **E-sharing services KPI**

KPI Description		**Values**		
N.	KPI	Unit	Baseline (current sit.)	Target (to be achieved)
1	Number of e-vehicles monitored	# Car	1	
2	Number of e-vehicles involved in the project	# Car	1	
3	Number of users using the e-sharing services	# People	51	
4	Number of charging hours	#Hours/ year	380,33	till 01.10
5	Number of charging calls	#calls	0	
6	Stakeholders / users satisfaction / benefits from DEEPSEA pilot(s) through interviews / questionnaires	%	0	

- **ECS for e-boats KPI**

KPI Description		Values		
N.	KPI	Unit	Baseline (current sit.)	Target (to be achieved)
1	Stakeholders / users satisfaction / benefits from DEEPSEA pilot(s) through interviews / questionnaires	%	0	
2	Number of e-boats monitored	# boats	3	
3	Number of e-boats involved in the project	# boats	0	
4	Number of E-CS monitored	# E-CS	1	
5	Number of implemented E-CS by DEEPSEA	# E-CS	1	
6	Number of stakeholders involved (municipalities, regional authorities, investors, companies…)	SH	0	
7	Number of users using the CS	# People	3	
8				

- **Rack for bicycles and e-bikes**

KPI Description		Values		
N.	KPI	Unit	Baseline (current sit.)	Target (to be achieved)
1	Number of e-bikes monitored	# bike	6	
2	Number of e-bikes involved in the project	# bike	6	
3	Number of E-CS monitored	# E-CS	6	
4	Number of implemented E-CS by DEEPSEA	# E-CS	6	
5	Number of users using the CS	# People	161	Do 01.10
6	Number of bicycles monitored	# bike	0	
7	Number of bicycles involved in the project	# bike	0	
8	Number of implemented E-CS by DEEPSEA	# E-CS	0	
9	Number of users using the CS	# People	0	
10	Stakeholders / users satisfaction / benefits from DEEPSEA pilot(s) through interviews / questionnaires	%	0	

6. GANTT

activity	R = responsible P = partecipation					start	end	2020												2021												2022											
	Venezia Giulia	Prov. Foggia	Krk Island	Mun. Malinska	Maslinica - Solta			3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
KPI definition	P	P	P	P	P																				P				P								P				P
Preparatory phase	R	R	R	R	R			R	R	R																															
Implementation phase	R	R	R	R	R						R	R	R	R	R	R	R	R	R																						
Monitoring phase	R	R	R	R	R																R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R					
Final Evaluation Report	R	R	R	R	R																																R	R	R	R	R