



Action Plan

Monfalcone Action Plan



Project Partner: PP 5-Municipality of Monfalcone

Date: 2022



ABBREVIATIONS

IRE	Interreg Europe
TEN-T	Trans-European Transport Network
SUMP	Sustainable Urban Mobility Plan
...	...

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PART I – GENERAL INFORMATION

Project	SMOOTH PORTS
Partner Organisation	Municipality of Monfalcone
Other Partner Organisations involved:	Port Network Authority of the Eastern Adriatic Sea
Country	Italy
NUTS2 Region	Friuli Venezia Giulia
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Smooth Ports project objectives

The Municipality of Monfalcone is a project partner of project Smooth Port -Reducing CO2 Emissions in Ports. SMOOTH PORTS' overall objective is to improve relevant regional policy instruments to target CO2 emission reductions caused by road traffic, taking into account the actors involved and the different reasons causing traffic and CO2 emissions.

To achieve these goals, SMOOTH PORTS PROJECT made use of the differences in the ports of the project partners. The main objective was to exchange effective tools and best practices. The topics addressed were: CO2 emissions in ports often caused also by inefficient procedures and heavy vehicle traffic, the different lack of ICT solutions as well as alternative fuels. On this basis, the strengths and weaknesses of the respective policy instruments were compared in order to contribute to improve the local policy instruments of the partners.

During the project emerged a joint effort between the different authorities, public institutions and port industry.

Dates of project implementation: 01/08/2019 – 31/01/2023

Budget of Municipality of Monfalcone: 136.350.00 Project Budget: € 1.139 601,

Partner involved:

LP- Free and Hanseatic City of Hamburg, Ministry of Economy, Transport and Innovation

2-AP Port of Hamburg Marketing



3-PP Port Authority Network Northern Tyrrhenian Sea

4 PP Port of Nantes Saint-Nazaire Authority

5 PP Municipality of Monfalcone

6 PP Regional Administration Varna

The participation in the project originates from the objective conditions that concern the reality and potential of the port of Monfalcone, starting from the environmental awareness of the city of Monfalcone and from its great experience, as LP and as a partner, in participation in European projects in the field of environmental sustainability (since 2006 more than 20 projects carried out within different European programming). In the current programming, in addition to the participation in Interreg Europe Programme with Smooth Port, the Municipality of Monfalcone participates in 6 other projects related to CO₂ reduction (Interreg Italy Slovenia, Italy Croatia and PRS- program for Regional Development).

Information about the territorial context

Monfalcone is the northernmost point of the Mediterranean Sea and it is an important rail, road and airport logistics hubs in the Friuli Venezia Giulia region.

The city is one of the major industrial centres of Friuli Venezia Giulia and its port is located at the northernmost point of the Mediterranean. In the territory of Monfalcone are located one the biggest shipyards in the world for the construction of cruise ships and other large mechanical industries. The city is the centre of an urban reality with about 50 thousand inhabitants, in which context are situate the regional airport, the railway junction, the port and the terminal of the freeway to Trieste. In the period of implementation of the project, two important innovations have occurred that have increased the centrality of Monfalcone:

- The establishment of the Unique Port Network Authority of the Eastern Adriatic See that include between the ports of Trieste, Monfalcone and Porto Nogaro;
- The establishment of a cruise ship terminal in the port of Monfalcone

In the context of the PNRR, National Recovery and Resilience Plan is foreseen an investment plan for the modernization of the Port for 60 million euros, in addition to 7 million already financed for infrastructure and 6 million for the electrification of the docks to reduce CO₂.

The new Port Master Plan provides for the lengthening of the quays, the construction of a 100.000 square meter intermodal yard and the construction of a new rail terminal.



Background and reason of participation of Municipality of Monfalcone in the Smooth Port project:

The Smooth Port which has the overall objective of improving regional policy tools to reduce CO₂ emissions caused by road traffic, has assumed a significant value for the Municipality of Monfalcone, in order to implement, based on the comparison of different partner experiences - mitigation policies for an important problem pollution of the territory. The port of Monfalcone is a reality in constant growth, due to the great availability of areas behind the Port and as a regional logistics hub (railway terminal, freeway and airport site), the city has a strategic role in the new System Port Authority with Trieste.

The contents of the project activities, which foreseen the comparison of best practices, together with the realization of research and analysis of data collected on common bases, made possible identification of the most suitable action and policy instruments in order to improve the impact and promote reduction of CO₂. The policy instrument, identified by the Municipality of Monfalcone, was the Urban Traffic Plan. This choice has been made taking in consideration that the Port of Monfalcone is located within the city's urban center and that the Urban Traffic Plan itself is linked to the new Port Master Plan, which foresees expansion of the cargo handling areas, construction of a new rail interchange terminal and the lengthening of the port's quays.

The centrality of the port of Monfalcone in the new Port System Authority with Trieste is also demonstrate by the fact that starting from 2021, the Port of Monfalcone has also become a Port for cruise ships that arriving on Saturday and Sunday. That bring also traffic from vehicles that belonging to cruise passengers.

A specific survey was carried out among the operators of the port of Monfalcone regarding the movement of vehicles and related fuel consumption to identify ways of rationalization.

Consequently, the comparison with the other project partners (LP-Free and Hanseatic City of Hamburg, Ministry of Economy, Transport and Innovation, AP Port of Hamburg Marketing, PP Port Authority Network Northern Tyrrhenian Sea, PP Port of Nantes Saint-Nazaire Authority, PP Regional Administration Varna) gave the opportunity to prepare a work plan according to the objective of reducing CO₂ both to provide for a series of regulatory adjustments to the Urban Traffic Plan and to accompany these adjustments with specific infrastructure improvement interventions in a phase of great growth and development of the Port of Monfalcone.

The management of the Project by the Municipality of Monfalcone involved, on the one hand, participation in all activities, meetings and joint visit-studies foreseen in the project and, on the other,



constant work with local stakeholders. In fact, institutional and private parties operate in the port area, which have the ownership and responsibility to manage the activities and which are, therefore, also responsible for the possibility of introducing the improvements necessary to reduce CO₂. The main institutional subjects directly involved in the management of the project activities were the FVG Region, the Northern Adriatic System Authority and the Maritime Authority (harbor master's office). The other subjects involved were the agencies of the port operators, including, from 2021, those of the cruise management companies and the Port Terminal that manages the cruise program in the System Authority.

An important phase of the project activities was the organization of the visit-study to the port of Monfalcone and the port of Trieste on 22-23-24 September 2021 which was accompanied by an important international meeting in which the more general perspectives of maritime traffic in the European context were examined and consequently an evaluation was made of the themes of the sustainability of the traffic and therefore of the automation interventions that can limit CO₂.

The project partners were also able to meet and get know the new reality of the New Logistic Platform that the company HHLA PLT of the Port of Hamburg manages in the port of Trieste. In this way, it was possible to deepen further integration on a European scale of the port management between project partners involved in the project.

Stakeholders involved in the project:

Stakeholders involved in the different phases of the project, therefore, were:

a) Institutional Stakeholders,;

-Friuli Venezia Giulia Region: body responsible for the Regional Transport Plan, which configures the regional system of transport services for infrastructural interchange.

-Port of Monfalcone as part of the Northern Adriatic Port System: competent for the development of port policies.

b) Maritime Authority, Passenger Terminal, Port operator agencies and shipping companies

Stakeholders that have been involved since the design and preparation phase of the project are: Region FVG, Port Authority of Monfalcone and Maritime Authority in order to prepare a Action plan and the policy instrument of the partner Municipality of Monfalcone.

During the course of the project, many meetings held were related to the involvement of stakeholders, both institutional and operators, both collectively and individually starting from the presentation and kick off meeting of the project that took place in September 2019.



Restrictions due to the pandemic Covid 19 and the intervening lockdown period have been faced with the realization of the moments of comparison and in-depth discussion remotely through the zoom platform. In particular, during the realization of the data collection and surveys planned in the project there was a constant comparison with institutional and public stakeholders. During 2021 there has been an intensification of meetings with stakeholders due to the approval of the new Port Master Plan and then to the development of related investments and the arrival of cruise ships that have led to an enlargement of the subjects involved also to shipping companies for the problems that have arisen for the arrival of cruise passengers.

As far as the Urban Traffic Plan is concerned, the Municipality of Monfalcone collected comments from all stakeholders before adopting variants of the Plan. A particular phase of stakeholder involvement also extended to companies and other municipalities in the area concerned the modification of the Urban Traffic Plan that prohibited the passage of trucks transporting metal material for the regional companies in urban streets, with serious consequences of CO2 pollution in the residential area and that consequently led to the transfer of these transports to other means.

2. PART II – Policy Context

The Action Plan aims to impact:

- Investment for Growth and Jobs programme
- European Territorial Cooperation programme
- Other regional development policy instrument

Policy Instrument indicated and connected to the project: Sustainable Urban Mobility Plan of Municipality of Monfalcone. That constitutes the guidelines and reference framework, aimed to develop the sustainable and optimal mobility management strategies of city of Monfalcone and near Municipalities.

Other document related to the project activities:

1) The New Port Master Plan designs overall structure of the Port, its production activities, road and railway infrastructures and identifies the characteristics and the functional destination of the various areas.



2) The Port Authority is drafting "Energy and environmental planning document of the port system" in order to pursue adequate objectives, with particular reference to the reduction of CO₂ emissions by defining strategic guidelines for the implementation of specific measures in order to improve energy efficiency and promote the use of renewable energies in the port area, on the basis of guidelines adopted by the Ministry of the Environment and Land and Sea Protection, in agreement with the Ministry of Infrastructure and Transport.

Why the policy instrument in question needs to be improved

The Municipality of Monfalcone has decided to adopt an innovative tool called the "Urban Sustainable Mobility Plan" as the problem of urban mobility is subordinate to the adoption of regulatory and infrastructural interventions aimed to develop environmental sustainability.

It is therefore a planning tool different from the traditional "Mobility Plan" as that mobility itself is interpreted in function of reducing pollution and therefore CO₂.

A characteristic of this Plan is necessarily its flexibility, as it is adapted from time to time to the problems that may arise, always in connection with better sustainability. Flexibility is a fundamental element in the port context, as well as in the industrial context, since these are productive sectors that more than others are subject to variability in relation to the evolution that takes place in logistics infrastructure, traffic and intermodality as well as ICT sector.

These evolutions therefore require the implementation of related improvements from time to time.

In the case of the port area, the expected evolution is particularly relevant and, therefore, there are foreseen improvements, connected to following aspects:

1) The New Port Master Plan designs the overall layout of the Port, its production activities, road and rail infrastructure and identifies the characteristics and functional destination of the various areas.

2) The Port Authority is preparing the "Document of energy and environmental planning of the port system" in order to pursue appropriate objectives, with particular reference to the reduction of CO₂ emissions by defining the strategic guidelines for the implementation of specific interventions to improve energy efficiency and promote the use of renewable energy in the port area, based on the guidelines adopted by the Ministry of Environment and Protection of Land and Sea, in agreement with the Ministry of Infrastructure and Transport.

The Municipality of Monfalcone, having decided to adopt a Sustainable Urban Mobility Plan, will be able to face the expected evolution through the relative improvements of its policy tool, according to the indications that emerged from the results of the Smooth port project and exchange between partners.



Consequently, based on the results of Smooth port, the policy tool will be improved by expanding its objectives and developing new measures related to CO2 reduction and improving the transport connection from the port of Monfalcone to the intermodal chain.

In particular, it is intended to address the maritime aspect of intermodality in relation to urban mobility which has not been adequately addressed in the past. The Port of Monfalcone has a wide availability of hinterland areas (1,500,000 sqm) not yet well used, which will be developed also through the adoption of the new Port Urban Plan and this will lead to a significant increase in potential traffic. The Port is located within the urban area itself and therefore the increase in traffic as well as the transport of goods - current and those expected until 2025 - could cause problems of exceeding CO2 limits. Consequently, the P.I. elaborated in the Action Plan during SMOOTH PORTS will influence the necessary adjustments of the "Traffic Plan of the Urban Area of Monfalcone (UTPM) "P.T.A.U" in order to improve the quality of the territory and of the urban environment as a whole by providing:

- new traffic limit for passage of motor vehicles in urbanized areas (City centres);
- installation of traffic bans in residential areas and the creation of new routes for the passage of motor vehicles;
- installation of tools to monitor the passage of vehicles in order to adopt additional traffic regulation measures based on the resulting surveys;
- development of alternative forms of transportation mobility.

All the indications and best practices learned from participation in the project Smooth port and the exchange of experiences (visit to port of Hamburg and Livorno) will be, therefore, used to adopt a series of regulatory measures and will be analyzed and kept in evidence for further measures to improve the policy tool and to align the next operational regional program (POR) with the needs of the territory and local industries.



3. PART III – DETAILS OF THE ACTIONS ENVISAGE

BACKGROUND

The Port of Monfalcone has become part of the Port Network Authority of the Eastern Adriatic Sea, together with Port of Trieste, projected to grow also due to wide availability of hinterland and recently introduced New Master Plan.

For this reason, Monfalcone participation in the Smooth Port project was significant, aiming to identify long-term solutions, to relieve traffic congestion in the urban area reducing the pollution and GHG emissions linked to traffics flows generated by Port activities and logistic infrastructures in the area.

The New Master Plan defined measures and guidelines with the aim of improving instruments for the urban sustainability and for the protection of environment and health in order to answer to the new directives of the EU on the Green Deal and the reduction of CO₂. The Master Plan assumes even more importance in front of the new perspectives that where opened with the inclusion of the Port of Monfalcone in the Port Network Authority of the Eastern Adriatic Sea together with Port of Trieste, and for the investments foreseen in the new Port Master Plan.

Topics tackled are related to the following issues : reduction of air and noise pollution, greenhouse gas emissions and energy consumption; guaranteeing all citizens transport options that allow them access to key destinations and services; improving safety conditions; improving the efficiency and economy of the transport of people and goods; improving the attractiveness of the area and the quality of the urban environment.

The New Master Plan of the Port of Monfalcone, which was recently presented to the citizens, is an important urban planning tool that designs overall structure of the Port, its production activities, road and railway infrastructures and identifies the characteristics and the functional destination of the various areas.

In order to exploit the full potential of the development of the Port of Monfalcone, promoted at the local and regional level, it is very important to exchange experiences and best practices with other important European ports identified by the project Smooth Port.

The topics tackled help to adopt concrete actions for CO₂ reduction in the Port of Monfalcone, at the same time improving sustainable urban mobility, intermodality as well as alternative (intermodal) transport modes (e.g. rail and / or barges), in the context of an integrated intermodal system.



ACTION PLANS

What have we learned for the implementation of the Smooth Port project and connection of exchanging experience to the Action Plans:

With regard to the regulatory changes made to the Police instrument: “Sustainable Urban Mobility Plan of Municipality of Monfalcone”, the experience of visits to the port areas of Livorno and especially Hamburg, highlight the criteria that oriented the flow of port traffic of vehicles. Especially in Port of Hamburg has been created lanes and transits that reduce the involvement of urban and residential areas to a minimum, even if this entails a wider external route for vehicles. The Municipality of Monfalcone, on the basis of these exchange of experiences, tried to optimize vehicle traffic, in a circumscribed and very limited area such as the local area. As consequences were analyzed and they were introduced three important modifications to “Sustainable Urban Mobility Plan of Municipality of Monfalcone”.

1. the prohibition of transit in via Gorizia, obligating all vehicles to a very wide circular alternative mobility through the freeway exit of Redipuglia and the provincial roads, widening a small internal junction, eliminating in this way heavy traffic in a very urbanized road;
2. the prohibition of transit of heavy vehicles in the road to the Port of Monfalcone in order to channel them through a circular mobility on the Lisert highway. This action has brought a considerable benefit of reduction of pollution and CO2 on the whole city area;
3. the introduction of regulations for the transit of vehicles, carrying material for the mechanical industries of Friuli (part of our Region) and the drafting of an intermodal system with railways and barges. This introduction has solved a long-standing problem of pollution and safety caused by to the transit of thousands of vehicles every year on one of the most important urban arteries of the city.

The analysis and reconnaissance of vehicle traffic data in the port carried out by the Smooth Port project has shown that 54% of the CO2 emitted annually in the Port of Monfalcone comes from ships at berth. On the basis of this data and the comparisons made during the meetings carried out with the project, the following interventions were decided upon

- shore power supply, i.e. the supply of electricity to berthed ships, allowing them to switch off their auxiliary engines. 6 million euros have been allocated to carry out this intervention. The intervention will be carried out by the Port Authority Sistem. In particular, an example has been taken from the visit study to the port of Hamburg where the Port Authority has decided to build the first shore power systems for container ships docking in the port, so-called cold ironing, the electrification system that allows ships to turn off their engines when they are at rest. The Hamburg project envisages starting up the system in the Burchardkai and Tollerort terminals from 2023, while in the case of the Monfalcone system the expected date is 2026.



b) Progressive replacement of the heavy port operating fleet, currently powered by diesel (medium-high emission fossil fuels), electric or hybrid, or natural gas (methane gas) to biofuels in the process of electric mobility in the Ports of Trieste and Monfalcone. The intervention was consequently proposed and financed within the PNRR. This action is also a consequence of the automation experience recorded in the other ports under study visits.

Following the example of the other partner ports of the Smooth Port project it was decided to implement an integrated system that includes monitoring actions and installation of electric charging stations in the different city area. These measures are based on the peculiar reality of the territory of Monfalcone in the light of the fact that the other ports of the project Smooth Port, and in particular Hamburg, have a consolidated system of recognition of flows to different parts of the port area and, following this model, it was considered that in the case of Monfalcone a specific mode of detection is necessary. In addition, taking into account the flow of cruise ships, given the limited area of the port of Monfalcone, has emerged that the new arrival of cars, arriving from cruise passengers embarking and disembarking at the port of Monfalcone, requires to respond to the new need, now entirely lacking in favour of hybrid and electric cars with lower CO₂ consumption, by making available the related loading systems along the axes of access to different city points and for vehicles coming from neighbouring countries.

The planned interventions are therefore following:

3.1 ACTION 1

INSTALLATION OF ONE DETECTOR aimed to monitoring trucks and assess the level of pollution

BACKGROUND

In the framework of the mentioned policy instrument and objectives of the Smooth Port project, the reduction of CO₂, necessary for the sustainable development of the local territory will foresee the installation of one detector. The place will be identified by the technical office.

The Municipality already selected a provider that will make installation in order to count trucks passing through the city. The data collected will be use to verify congestion and number of trucks passing in the city.

Objective: data collection on heavy vehicles that pass through the city in order to assess pollution and degradation of road infrastructures, with the aim to devise corrective actions.



This action perfectly suites with good practice in the Port of Monfalcone entitled Slabs modal shift - Shifting the traffic of cast iron slabs from the road to the sea and to the rail from the Port of Monfalcone to the San Giorgio di Nogaro area, for which is necessary constant road monitoring.

The Port of Monfalcone handles more than 1.000.000 tons per year of cast iron slabs. Slabs are outgoing from the port to the iron works located in the San Giorgio di Noga-ro area (48 km far away).

The slab traffic is performed by heavy trucks (total weight \cong 70 tons.) from the Port of Monfalcone to the San Giorgio di Nogaro area due to logistical and economical reasons. The slab traffic performed by truck from the Port of Monfalcone to the San Giorgio di Nogaro area has relevant impacts on the road infrastructures and road safety as well as on the pollution level of the area. The Municipality of Monfalcone, forced the heavy trucks to use highway connections instead of local roads in order to preserve the road infrastructures and prevent accidents. Nevertheless, this measure cannot impact on the externalities that this traffic has in the port surroundings and on the highway.

A study realized by the Municipality of Monfalcone highlights that the effects of the iron cast slab traffic performed by heavy trucks in the port surroundings are:

road in-frastructures life is reduced by 39%; average speed of vehicles is reduced by 3.3% with a decrement LoS from “E” to “F”; percentage of road accidents related to heavy truck is 1.4 times bigger than the one related to other vehicles; pollutant emissions (CO, PM10 and PM2.5) incremented by 21%; noise levels exceeded with more than 15 heavy trucks/day.

Therefore, the installation of a detector will be useful to control and face the number of trucks in city that still produce enormous traffic congestion and air pollution.





PLAYERS INVOLVED

- 1) Municipality of Monfalcone as the project partner of the project Smoot Port as well as local administration engaged for environmental issues and traffic congestion in the city.
- 2) Port Network Authority of the Eastern Adriatic Sea – including the Ports of Trieste and Monfalcone. The Port Authority is drafting the "Energy and environmental planning document of the port system".
- 3) Region FVG as Regional Authority that supervise and approve local actions and promote initiatives aimed to develop environmental protection and care.
- 4) Public and private companies and Citizens

TIMEFRAME: 01/03/2021-31/12/2022

In 2021 the external provider has been selected. The installation is foreseen for March/April 2022.

The office in charge is the Technical Office of the Municipality of Monfalcone that is owner of data collected. The monitoring is scheduled with exchange of information with the technical office in Monfalcone once a month. The data will be use for monitoring and of introduction of additional intervention aimed also to reduce traffic congestion and pollution.

COSTS: Est: ca. 5.000 euro

FUNDING SOURCES

The costs of this pilot action will be covered by the resources of the Municipality of Monfalcone allocated for the development of the activities and objectives of the Executive Management Plan 2018-2020 (PEG) in line with the Single Programming Document (DUP) that incorporates the strategic actions of the mandate of the Municipal Administration.

This is an essential intervention of monitoring of vehicles in transit through the city toward the port of Monfalcone in order to control the potential level of CO₂ to be able to adopt the necessary measures and limitations of containment.

3.2 ACTION 2 INSTALTAION OF 9 ELECTRIC CHARGING STATIONS.

BACKGROUND

Among the priority objectives of the Municipality of Monfalcone is development of urban viability sector, well defined and foreseen in annual Executive Management Plan of Municipality. The priority is to ensure greater services to citizens, based on better environmental conditions that can be develop through introduction of innovative technologies in the field of sustainable mobility and creation of infrastructure networks for recharging of electric vehicles.



This action related to the installation of various electric charging stations in the city, is perfectly connected to the policy instrument identify by Municipality of Monfalcone and the Port Network Authority of the Eastern Adriatic Sea – Ports of Trieste and Monfalcone, entitled: E-mobility in the Ports of Trieste and Monfalcone. This Best practice has foreseen the replacement of the internal combustion engine vehicles (ICEs) with battery electric vehicle (BEVs) in the Ports of Trieste and Monfalcone. Consequently, the installation of electric charging station is fundamental for its realization and implementation.

The development of electric mobility includes also the process of integration with other different Sharing Mobility initiatives. The Fleet decarbonization policies will be accompanied as well by the spread of the charging network (slow and fast) and incentives for the renewal of the fleet.

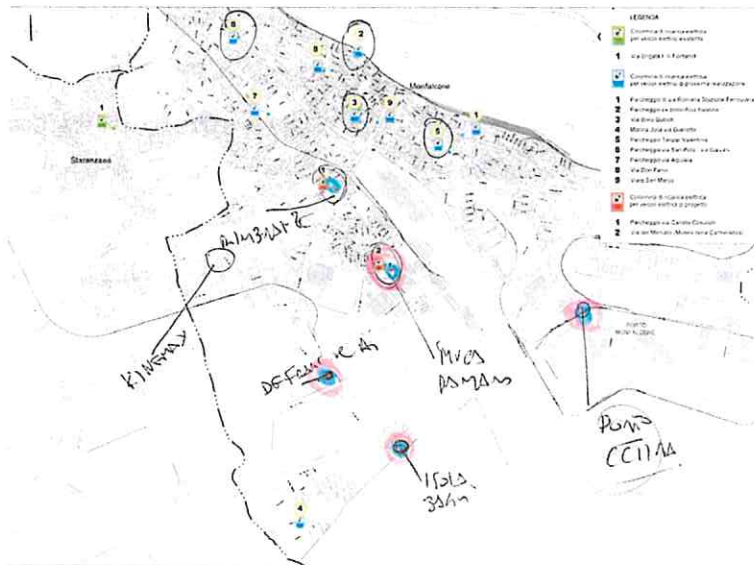
This action is related to the objectives of the project Smooth Port that foreseen reduction of CO₂ necessary for the sustainable development of the local territory.

For the realization, the Municipality of Monfalcone used a public selection process to identify interested companies that will undertake to prepare an executive design for the implementation of the electric charging stations.

This intervention is also related to the increased movement generated by the port as a result of the arrival of cruise ships that have created a strong movement of cars in the city and therefore falls within the objectives of sustainability of the Plan.

Specifically, during the study visit to the port of Livorno in the contacts with the municipality, it emerged how this reality has an ongoing plan for public charging infrastructure for electric vehicles: specifically, up to thirty total charging stations with dual dispenser, mainly of the "accelerated" type but also of the "rapid" type, and how this intervention is also functional and necessary in Monfalcone, due to the growing traffic of cruise ships/business. The comparison of the experience of these realities has led to address the prospect that has opened up at the port of Monfalcone in 2021, during the Smooth Port project, of bi-weekly arrivals of cruise ships, with related movement of vehicles.

Final Objective of this Action is to promote and encourage the use of electric and hybrid cars and CO₂ reduction in the city.



PLAYERS INVOLVED

- 1) Municipality of Monfalcone as the project partner and promoter of action
- 2) Port Network Authority of the Eastern Adriatic Sea - as institution involved in project activities and possible user.
- 3) Companies that have contacts and collaborate with the Port of Monfalcone and the Fincantieri Shipyard, future owners of electric vehicles, citizens all.

TIMEFRAME

01/03/2022-31/01/2023

The office in charge is the technical office of the Municipality of Monfalcone. One public tender has been finalized in 2020 and the external provider selected. In 2021 4 electric charging station has been already installed.

The monitoring is scheduled with exchange of information with the technical office in Monfalcone on a trimestral bases until the implementation scheduled till 31/01/2023.

COSTS

Est: between 10.000 and 15.000 euros for each electric charging station

FUNDING SOURCES

The costs of this pilot action will be covered by the resources of the Municipality of Monfalcone allocated by the Municipality for the development of the activities and objectives of the Executive



Management Plan 2018-2020 (PEG) in line with the Single Programming Document (DUP) that incorporates the strategic actions of the mandate of the Municipal Administration.

3.3 ACTION 3 – ON SHORE POWER SUPPLY IN THE PORT OF MONFALCONE

BACKGROUND

The carbon footprint analysis of the port of Monfalcone outlines that more than 50% of the CO₂eq is produced by ships moored at berth.

Hence, the Port Network Authority of the Eastern Adriatic Sea has planned to equip the port of Monfalcone with on-shore power supply in order to reduce CO₂, air pollutants and noise.

The tender for project design will be launched soon within the EALING project (European flagship Action for coLd ironING), co-funded by the CEF Programme.

Also, the Port Network Authority of the Eastern Adriatic Sea will draft the “Energy efficiency Master Plan” for the ports of Trieste and Monfalcone by summer 2021.

The only way to eliminate this source of CO₂ is on-shore power supply, i.e. the provision of electricity to ships at berth, allowing them to turn off their auxiliary engines.

ACTION

Installation of OPS in the port of Monfalcone

Objective: Reduction of port-related CO₂

The intervention foresees the "realization of a shore-connection able to electrically power from shore a passenger ship and/or a merchant ship (both "Bulk Carrier" and "General Dry Cargo Ship", as well as "Pure Carriers", provided that they are predisposed to be powered from shore), parked at berths 7, 8 and 9 of the public quay of Portorosega in the Port of Monfalcone".

Yes, the design is funded by the EALING project (Connecting Europe Facility CEF program) while the implementation is funded by PNRR (National Recovery and Resilience Plan) which is part of the Next Generation EU (NGEU) program.

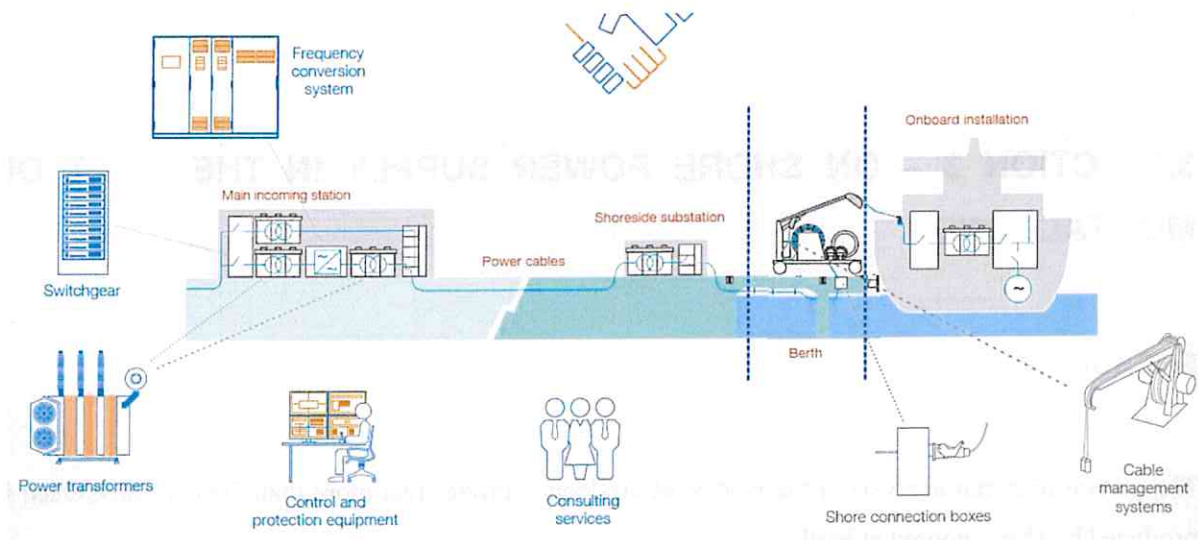


Figure 1 - OPS in ports. Source: EALING project

PLAYERS INVOLVED

- 1) Port Network Authority of the Eastern Adriatic Sea** - as the public entity responsible for the provision of basic infrastructures in the Ports of Trieste and Monfalcone
- 2) Municipality of Monfalcone** as the project partner

TIMEFRAME

01/01/2023-31/12/2026

On 21/07/2021 the preliminary project of the Electrification Works of the quay of the Port of Monfalcone was approved.

On 13/12/2021 the service for the drafting of the final design of the electrification works of the quay of the Port of Monfalcone was awarded

The implementation of the action is expected by 2026, thus beyond the end of Smooth Ports phase 2. But, to be able to monitor the success of the pilot action, we foresee the approval of the final design as a "milestone", scheduled for July 2022.



COSTS

The amount foreseen on the basis of the tender for the work amounts to € 3.935.000,00 (civil works and plants).

FUNDING SOURCES

The design is funded by the EALING project (Connecting Europe Facility CEF program) while the implementation is funded by PNRR (National Recovery and Resilience Plan) which is part of the Next Generation EU (NGEU) program.

The role of the Municipality of Monfalcone is to identified in the active collaboration/attention to finalize the administrative process of any competence or as a territorial promoter of the positive effects of the work in the containment of port carbon footprint.

Date: 26/01/2022

Signature: _____

Stamp of the organisation (if available): _____



