

Extended climate ambitions in Port Industry - Western Balkans Maritime Ports

Energy Transition in Ports and Logistics

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1. EUROPEAN GREEN DEAL AS THE CHANCE OF A GENERATION



- ❑ One of the most ambitious plans in the European History: The EUROPEAN GREEN DEAL sets out not only the measures and milestones which the EU is determined to achieve but marks a point that might be decisive for the generations to come.
- ❑ The EU can use its influence, expertise, and financial resources to mobilize its neighbours and partners to join it on a sustainable path .
- ❑ Western Balkan region as the EU's direct neighbour should be one of the main beneficiaries and partners on that path, as they are progressing on their way to EU membership in the years and decades to come.

2. EU'S SMART AND SUSTAINABLE MOBILITY STRATEGY (EU SSMS)



- ❑ One of the main elements of the Annex to the green Deal was the EU Smart and Sustainable Mobility Strategy, which was published in December 2020.
- ❑ The EU SSMS sets out a roadmap for putting European transport firmly on the right track for a sustainable and smart future. It identifies 10 flagship areas with an action plan to guide the work in the years to come. The Strategy provides a framework under which, with the right level of ambition and the combination of policy measures, the EU could deliver a 90% reduction in the transport sector's emissions by 2050.
- ❑ The strategy divides the 10 flagship areas into three strands, namely: Sustainable, Smart and Resilient. All together it identifies 82 actions within the 3 strands.

2.1. Maritime dimension of EU SSMS



- ❑ The Maritime dimension of the EU SSMS can be found in several flagships, namely the FLAGSHIP 2 – CREATING ZERO-EMISSION AIRPORTS AND PORTS and FLAGSHIP 4 – GREENING FREIGHT TRANSPORT.
- ❑ Within the Flagship 2, related to maritime, sea ports are seen as potential new clean energy hubs for integrated electricity systems, hydrogen and other low-carbon fuels, and testbeds for waste reuse and the circular economy
- ❑ Within the flagship 4, it is stated that Short-sea shipping and efficient zero-emission vehicles can also contribute to greening freight transport in Europe. As a milestone which will indicate the necessary ambition for the future EU policies, transport by inland waterways and short sea shipping should increase by 25% by 2030 and by 50% by 2050

3. GREEN AGENDA FOR THE WESTERN BALKAN AND STRATEGY FOR SUSTAINABLE AND SMART MOBILITY IN THE WESTERN BALKANS (SSMS WB)



- ❑ With the Green Agenda for the Western Balkan, the EU has extended its climate ambitions to the six Western Balkan partners that aspire to join the Union.
- ❑ The Green Agenda may be an effective tool to promote climate and environmental agendas in the Western Balkans, a region suffering from severe air pollution and little energy diversification
- ❑ Following the EU's Smart and Sustainable Mobility Strategy, the Transport Community developed the equivalent strategy for Sustainable and Smart Mobility in the Western Balkans
- ❑ The purpose of developing this strategy was to mirror the EU SSMS and to adjust goals, milestones, and actions of the EU to the realities in the Western Balkans region in addition to providing the region with a roadmap for decarbonization and digitalization of its transport sector

3.1. Maritime dimension of SSMS WB



- ❑ Within the Flagship 2, the SSMS WB recognizes ports as key actors for international connectivity and for the Western Balkans economy.
- ❑ One of the currently non – compliant TEN-T indicators for both Western Balkan maritime Ports (Durrës in Albania and Bar in Montenegro), is the availability of alternative clean fuels
- ❑ The Western Balkan maritime Ports are advised to join already existing initiatives such as the Eco Ports developed by the European Sea Ports Organization (ESPO), which will enable the Western Balkans Ports to be up to date with the latest developments on the European level
- ❑ Enhanced cooperation with the Coordinator for Motorways of the Sea is seen as a potential to increase the Maritime freight dimension as well as participation of core maritime ports of the Western Balkans to upcoming calls for project proposals under Connecting Europe Facility 2021 – 2027 as key actions.

4.1. Port of Durres - prospects and challenges in the Port greening process (1)



- ❑ Port ranks as the largest passenger port in Albania and one of the largest passenger ports in the Adriatic Sea, with annual passenger volume of approximately 1.5 million.
- ❑ Through the INTERREG project SUPAIR (Sustainable Ports in the Adriatic – Ionian region.) finished in mid-2020, Action Plan for a Sustainable and Low Carbon Port of Durres was developed. The Action Plan is focused on 4 actions: Revitalization of Green Spaces within and outside the port areas, Recycling Plan for a Sustainable Port, Mobility Plan for Durres Port Staff to increase the use of green transport modes and Clean Energy Investment (renewable).
- ❑ The overall plan of greening of the Port of Durres has to be followed in parallel with the new plans of the Albanian government to move the existing port to the new location, as envisaged by the new Port of Durres Masterplan 2030

4.1. Port of Durrës - prospects and challenges in the Port greening process (2)

Proposed actions / measures	Timeline				
	1 year	2 years	5 years	5 – 10 years	up to 15 years
A. Revitalization of Green Spaces.					
Divide the port in distinct areas, according to categories of functions				✓	
Revitalize the and create green areas within the port territory and nearby areas		✓			
B. A Recycling Plan for a Sustainable Port.					
Employee Environment training. Recycling Seminars	✓				
Waste fee reduction for sorted waste	✓				
Waste Management Plan	✓				
C. A Mobility Plan for Durrës Port Staff.					
Establish the Company bus for peripheral resident commuters' staff	✓				
Foster beaver change to the bus public transport use, addressed to the City and peripheral resident commuters' staff (soft Measure)	✓				
Introduce carpool to the other city commuters' staff (Soft Measure)	✓				
D. Clean Energy Investment (renewable)					
Conversion of all port cranes and vehicles from diesel engine to electrical ones.			✓		
Installation of Photovoltaic Plant System. (Project Proposal Already Drafted)		✓			
On-shore power supply (OPS)					✓
Grand Total	6	2	1	1	1

4.2. Port of Bar - prospects and challenges in the Port greening process (1)



- ❑ Port of Bar is Montenegro's main seaport, capable of handling ca. 5 million t of cargo. Situated on the Adriatic Sea, its location greatly helps to shorten transit times and lower transportation costs.
- ❑ As the Port Authority of Durres, the Port of Bar also participated in the SUPAIR project, through which an Action Plan for Sustainable and Low-carbon Port of Bar was developed. The overall goal of the Action Plan is to support the Port of Bar in reducing their energy consumption and mitigate their GHG and air emissions in a cost-efficient and sustainable manner.
- ❑ There are currently several ongoing EU funded INTERREG projects in the Port of Bar, which are aimed at improving the environmental and energy efficiency in the Port, further developing the concepts and elements of “Port greening process.”

4.2. Port of Bar - prospects and challenges in the Port greening process (2)

Measure	Energy sustainability assessment	Efforts for implementation	Economic assessment	Final evaluation
Energy / Emission Reduction goals	No direct reduction potential	Low	Probably cost-effective	Top priority
Energy management system	No direct reduction potential	Medium	Cost-effective measure	Top priority
Carbon offsetting	High	Low	Overall cost increase	Medium priority
Solar photovoltaics	Medium	Medium	Probably not cost-effective	Low priority
Electrification of power train (forklifts & mobile harbor crane)	High	Medium-high	Probably cost-effective	Top priority
Eco-driving lessons	High	Low	Cost-effective	Top priority
Optimization of HVAC system	Medium	Low	Probably cost-effective	Medium priority
LED terminal lighting	High	Low	Cost-effective	Top priority
LNG PowerPac	Tend to be very high	High-medium	Probably not cost-effective	Low priority
Green Port Fees	Tend to be very high	Low	Ideally cost-neutral	Medium priority
Small scale LNG terminal	Tend to be very high	High	Probably not cost-effective	Low priority
Environmental employee training	Tend to be very high	Low	Cost-effective	Top priority
Switching to LED lighting in the port's terminal buildings	Medium	Low	Cost-effective	Medium priority
Environmental employee suggestion system	Tend to be very high	Low	Cost-effective	Medium priority
Installation of air curtains	Medium-high	Low	Probably cost-effective	Top priority
Optimization of tires	Medium	Low	Probably cost-effective	Medium priority

4.3. Port of Bar - prospects and challenges in the Port greening process (3)

- Port of Bar purchased its first electric vehicle through Interreg MED project EnerNETMob.
- This action represents first steps in electromobility for Montenegro which is in the earliest phase of developing electromobility in accordance with EU regulations. Port of Bar plays integral role in the development of these activities as they are engaging in actions that protect the environment, reduce greenhouse gas emissions and promote electromobility and ICT systems.



5. FIT FOR 55 - MARITIME - WITH OR WITHOUT WESTERN BALKANS PORTS ?



❑ The European Commission released on 14th July 2021 the latest instalment of the European Green Deal: 'Fit for 55'.

The package is meant to align a wide range of EU policies with the EU's 55% net emissions reduction target for 2030

❑ Legislative package includes different proposals of relevance to ports: a proposal for Alternative Fuels Infrastructure Regulation, a new proposal to increase the use of alternative fuels by shipping (FuelEU Maritime), the extension of the Emissions Trading System to shipping (EU ETS), amendments to the Renewable Energy Directive (REDIII), and an update of the Energy Taxation Directive.

❑ For the Western Balkan core maritime ports it will be important to be up to date of the developments and the progress of the files in the coming years. Being active in joint platforms for cooperation with the European leading ports will be crucial.

❑ Only after the Council and the European Parliament reach a deal on these complex proposals, will the Western Balkan partners start their internal legal harmonization of the acts.

6. CONCLUSIONS



- ❑ Increased investment needs in critical resilience of maritime port infrastructure due to climate change are inevitable.
- ❑ “The greening of the port” means much more than greening the transport side. All industry players in the port should have their agendas, goals and plans aligned to maximise the impact of any greening initiative. This is applicable to all EU ports, including the Maritime Western Balkan ports.
- ❑ It is very important that in the process of greening of the Ports, the actions and plans which will be done are taken in the broadest term possible, because even small changes and investments can make a difference
- ❑ Leapfrogging might not be possible in terms of blitz changes and speedy progress.
- ❑ Active participation in existing EU platforms (e.g.EUSAIR) as well as diversification of funding sources (IPA, INTERREG, CEF, HORIZON, WBIF,EIB, EBRD, WB) will be crucial in the port Grening Process of the Western Balkan Martitime Ports

Thank you for your attention!

