Local Action Plan for the port of Bari

Final Version 29/07/2021

Deliverable Number D.3.3.7.

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Document Control Sheet

Project number:	
Project acronym	SUSPORT
Project Title	Sustainable Ports
Start of the project	July 2020
Duration	30 months

Related activity:	WP3 A 3.3. – Planning port environmental sustainability and energy efficiency
Deliverable name:	D.3.3.7 Local Action Plan for the port of Bari
Type of deliverable	Report
Language	English
Work Package Title	Cross-border planning of port environmental sustainability and energy efficiency
Work Package number	3
Work Package Leader	Intermodal Transport Cluster

Status	Final
Author (s)	Southern Adriatic Sea Port Authority
Version	1
Due date of deliverable	03/2021
Delivery date	29/07/2021

Contents

Introduction

The DPEASP (Documento di pianificazione energetica e ambientale di sistema portuale - Port system energy and environmental planning document), realized in September 2019 and updated in February 2020, and the analysis from the title "Inventory of Greenhouse Gases (GHG) emissions for AdSP MAM" carried out with the activity 3.2 within the WP3 highlighted the equivalent CO2 emissions emitted within the AdSP areas.

Weaknesses and Threats of the SWOT analysis included in the TNA tackled by this Action Plan

These are weakness and threats of the SWOT analysis in the document "Inventory of Greenhouse Gases (GHG) emissions for AdSP MAM":

- Weaknesses:
    - Definition of guidelines of the Green Public Procurement for AdSP
    - Existing constraints, in particular for the port of Brindisi ○ Awareness, at all levels of AdSP, of the principles of sustainability
- Threats: ○ Delays in the authorization process for the realization of new investment ○ Risk of impact of the energy transition and decarbonisation on port traffic ○ High political/social conflict in the territories on environmental issues
    - Impact of the COVID-19 pandemic on port traffic
    - Difficulty in directing the activity of port operators towards sustainable development

With specific reference to the issue of sustainability, the SWOT analysis underline all difficulties related to the info-training of both the staff of Adsp and the port operators that operate in the areas under supervision and control of Adsp.

Actions for environmental sustainability and port energy efficiency

From the analysis of the equivalent CO_2 emissions emitted within the AdSP areas it is pointed out that:

- the greatest contribution in GHG emissions in the terrestrial sector comes from heavy vehicles and electric energy (respectively 81% and 14%);
- the greatest contribution in GHG emissions in the maritime sector comes from moored ships (98%); • the greatest contribution in the overall GHG emissions comes from moored ships and heavy vehicles (respectively 67% and 26%).

So, the planned actions for the environmental sustainability and port energy efficiency are:

	Progress			
Planned action	**Design**	**In progress**	**Expected deadline**	**Finished**
Cold Ironing for one pier in port of Bari and one pier in port of Brindisi	X (executive)		End 2024	
Cold ironing for other different piers in the same ports or other ports	X (conceptual)			
Construction of structures and infrastructures for the use of alternative and non-polluting fuels by ships		X In the authorization phase by a third party investor in port areas (LNG tank)	End 2024	
Incentives to use of hydrogen/electric vehicles in port areas	X (conceptual)			
Definition of a disincentive system for the use of polluting vehicles	X (conceptual)			
Energy production from RES:				
- Photovoltaic system (Port of Brindisi)		X	End 2021	
- Photovoltaic systems (Port of Bari and Brindisi connected to the intervention on cold ironing)	X (executive)		End 2024	
- Photovoltaic systems (different Ports)	X (conceptual)			
- Wind system (Port of Bari)		X	End 2021	
- Wind systems (different Ports)	X (conceptual)			
- Wave energy production		X (experimentation)	End 2023	
- Use of geothermal energy	X (conceptual)			
Energy efficiency interventions:				
- Building		X	End 2021	
- Buildings (different Ports)	X (conceptual)			

- Public lighting (Port of Bari, Brindisi, Barletta and Monopoli - replacement of public lighting with LED)		X	End 2021	
- Public lighting (Port of Manfredonia - replacement of public lighting with LED)		X	End 2022	

Time frame and possible sources of funding

In the following table, for each action planned and illustrated in Chapter 2 above, both a possible date by which it will be carried out and a likely source of funding are indicated:

		Financing		
Planned action	**Expected deadline**	**Own funds**	**Public funds (UE, national, regional)**	**Private funds**
Cold Ironing for one pier in Port of Bari and one pier in Port of Brindisi	End 2024		X (UE, National - PAC)	
Cold ironing for other different piers in the same Ports or other Ports	End 2025	X	X (UE)	
Construction of structures and infrastructures for the use of alternative and non-polluting fuels by ships	End 2024			X
Incentives to use of hydrogen/electric vehicles in port areas	End 2023			
Definition of a disincentive system for the use of polluting vehicles	End 2023			
Energy production from RES:				
- Photovoltaic system (Port of Brindisi)	End 2021	X		
- Photovoltaic systems (Port of Bari and Brindisi connected to the intervention on cold ironing)	End 2024		X (UE, National - PAC)	
- Photovoltaic systems (different Ports)	End 2022			X
- Wind system (Port of Bari)	End 2021	X		
- Wind systems (different Ports)	End 2023			X
- Wave energy production	End 2023		X (regional)	X
- Use of geothermal energy	End 2023			X
Energy efficiency interventions:				
- Building	End 2021	X		
- Buildings (different Ports)	End 2022			X
- Public lighting (Port of Bari, Brindisi, Barletta and Monopoli - replacement of public lighting with LED)	End 2021	X	X (UE)	
- Public lighting (Port of Manfredonia - replacement of public lighting with LED)	End 2022	X		

Consistency with environmental sustainability and energy efficiency policies

All the planned interventions illustrated above are fully part of the national and international strategies relating to environmental sustainability and energy efficiency.

Conclusions

Regarding some of the actions planned (not those in the implementation phase) and reported in this document that are subject to private capital for their implementation, their realization will be evaluated by means funds from ADSP or public funds so that there can be a greater probability in their implementation.