

New Energy Solutions Optimised for Islands



EUROPEAN ISLANDS FACILITY

D7.6: Report from islands staff coaching (first part)

Authors: R2M Solution



Technical references

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Partners' review	24 July 2023	Vasiliki Palla, Giorgio Bonvicini, Jesús Rubio Conde	CERTH, RINA-C, DELOITTE
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Annex E. Details of SST2

E-1. SST2 programme

SLOT		DAY 1 - 28th March	SPEAKER
Today's venue is at Royal Palace Hotel			
Part 1 – Objectives: Participants presentation, elicitation of expectations, networking			
17h	19h	17:00 - Icebreaker at Royal Palace Hotel, NESOI/SST Introduction PAM General Secretary Introduction (role and responsibilities, vision of sustainability) Roundtable Introduction Networking	R2M PAM CNR-ITAE ENEA URC
19h - Welcome aperitif at Royal Palace Hotel			
SLOT		DAY 2 - 29th March	SPEAKER
Today's venue is at Messina, CNR-ITAE			
Part 2 – Objective: Understand Strait Situation, Sicily energy landscape, ports special needs, learn from Sicily energy planning			
08:30	9:00	Transfer Royal Palace Hotel – CNR-ITAE	
09:00	11:00	<i>Introduction to Sicily energy landscape</i> <i>Port Authority of the Strait of Messina and its green strategies</i> (Mario Mega, President) (30') <i>Energy activities and projects of CNR ITAE</i> (Antonino Aricò, Director) (30') Q&A	Port Authority of the Strait of Messina CNR ENEA
11:00	11:40	<i>Sicily Strait Energy Planning</i> <i>The D.O.C.K.S. project: the drafting of the energy and environmental planning document (DEASP)</i> (Daniele Enea, ENEA) (30') Video DEASP of the Port Authority	ENEA Daniele ENEA
11:40	12: 10	Coffee break	
12:10	12:30	<i>The case study of Salina: sustainable projects</i> (Daniel Enea, ENEA) (30')	Daniele ENEA
Part 3 – Objectives: Introduce energy planning methodology, knowledge sharing / learn from other's experiences, mature participants' energy planning practises			
12:30	12:45	<i>NAVTEC: the Sicilian cluster of maritime transport</i> (Simone Panfiglio) (30') Q&A	
13:00	14:00	<i>Energy planning talks - WS</i> <i>Petros Markopoulos, DAFNI, Clean energy planning for greek islands</i> (15') <i>Emmanouil Giannaros, Municipality of Astypalea, The Implementation of a sustainable development policy on Astypalea Island</i> (15') <i>Gabriele Freilin von Hundelshausen, Concello de A Illa de Arousa, Arousa in Transition</i> (15') Q&A	Chair RINA Giorgio Bonvicini
14:00	15:00	Lunch break	
Part 4 – Objective: overview on energy strategy, hydrogen and biofuel in several applications			
15:00	16:15	<i>Site visits - 5 CNR Labs</i> Each lab responsible explains the activities/projects having the following topics: Fuel Cells, Hydrogen (production and storage), Biomass, Heat pumps and thermal storage, Energy storage, Biofuels, Energy systems.	Chair CNR Laura Andaloro
16:00	16:15	Short break (auditorium - if time is available)	
16:15	16:45	<i>Site visits - 3 CNR Labs (Testing centre)</i>	Chair CNR Laura Andaloro



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16:45	18:00	<p>Decarbonisation of the maritime transport WS</p> <p>ZHENIT: Zero waste Heat vessel towards relevant ENERGY savings also thanks to IT technologies (Andrea Frazzica) (10')</p> <p>ENGIMMONIA: Sustainable technologies for future long-distance shipping towards complete decarbonisation (Valeria Palomba) (10')</p> <p>Fanis Christakopoulos, AEGEA, Promoting port and vessel decarbonisation in Greek islands (15')</p> <p>Bárbara Vieira, APRAM, S.A., Green Ports Madeira (15')</p> <p>Q&A</p>	Chair CNR Laura Andaloro
20:00	22:00	Social dinner at "Quattro Calici" – 10/12, Via Camiciotti - Messina (nearby the Hotel)	
SLOT		DAY 3 - 30th March	
Today's venue is at University Reggio Calabria			
Part 5 – Objective: Get familiar with marine renewable technologies			
8:15	8:30	Be at 8h30 at the port - Tickets will be bought by NESOI	
09:00	10:00	Departure from port of Messina (arrival at 09:30) + transfer from port of Reggio Calabria to University of Reggio Calabria	
10:00	13:00	<p>Marine Renewable Technologies</p> <p>SITE VISIT - Uni. Reggio Cal. Labs Visit of the laboratories, marine renewable technologies for port and port cities decarbonization Presentation from URC projects</p> <p>Klaudia T. Tolstow, Dalane Energi AS, ROBINSON (Smart integration of renewable energy on Industrialised islands) and hydrogen. (15')</p> <p>Riinu Hõrmas, Green deal in the Estonian islands - opportunities and obstacles (15')</p> <p>Grete Väli, Saarte Liinid, Renewable energy projects in Estonian regional ports (15').</p> <p>Demetrio Marino, WSP E&IS GmbH is a business unit within WSP Group, Small Scale Geothermal technologies for port island and boats decarbonization (15')</p>	Chair Uni. Reggio Cal. Fabio Filianoti
13:00	14:30	Lunch break in Reggio Cal.	
Part 6 – Objective: Explore pathways to clean boats, executed projects and research			
14:45	17:00	<p>Clean Boats Forum at the Uni. Reggio Cal. (Room for 50 pers.) - Hybrid session</p> <p>Partners presentations: industrial & research projects</p> <p>Speaker 1: Blufferies, Green ships in the Strait of Messina. (Giuseppe Sciumè, Vincenzo Veca)</p> <p>Speaker 2: Messina Energy Boat team competing in Monaco Energy Boat Challenge (MEBC) 2023 - (Vittorio Geraci, Antonio Di Nezza)</p> <p>Speaker 3: Stefano Barberis - H2Boat (Online)</p> <p>Speaker 4: Zeus hydrogen boat (Massimo Rivarolo , Uni.Gen. (Online))</p> <p>Exchanges with stakeholders, roundtable, Q&A</p>	Chair Giorgio Bonvicini
17:00	17:15	Transfer to "Cremeria Sottozero" – 83, Corso Vittorio Emanuele – Reggio Calabria	
17:15	-	Refreshments/cocktail with stakeholders/participants at "Cremeria Sottozero" – 83, Corso Vittorio Emanuele – Reggio Calabria	
Free time / Participants organise dinner on their own. List of open restaurants will be shared.			
Note that the last speed boat departure to Messina is at 20:55, more/later routes available here (not starting from the port where we arrived in the morning)			



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SLOT		DAY 4 - 31st March	SPEAKER
Today's venue is at Royal Palace Hotel			
Part 7 – Objectives: financial support offered by the NESOI consortium			
9:00	9:30	NESOI platform (Hybrid session) Luigi Laterza, SINLOC, NESOI Financial support (15')	SINLOC
Part 8 – Objectives: Wrap-up and farewell			
9:30	11:00	Final debate – Slido based workshop	R2M
11:00	11:30	Farewell coffee at Royal Palace Hotel	
Free time & departure			

E-2. SST2 presentations

SST2 presentations available as e-learning material on the NESOI platform	
<p>Gabriele v. Hundelshausen Arousa Island Energy Planning</p> <p><u>NESOI Platform e-learning module category:</u> Energy Efficiency</p>	 <p>New Energy Solutions Optimised for Islands NESOI EUROPEAN ISLANDS FACILITY</p> <p>Arousa Island Energy Planning</p> <p>Gabriele v. Hundelshausen Concello de A Illa de Arousa</p> <p>Erasmus Short Study Tour Sicily, 29/03/23</p> <p>This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 864266.</p>
<p>Daniela, ENEA The case study of Salina: sustainable projects</p> <p><u>NESOI Platform e-learning module category:</u> Building Retrofitting Approaches</p>	 <p>New Energy Solutions Optimised for Islands NESOI EUROPEAN ISLANDS FACILITY</p> <p>The case study of Salina: sustainable projects</p> <p>Daniele Enea ENEA</p> <p>Erasmus Short Study Tour Sicily, 29/03/23</p> <p>This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 864266.</p>
<p>Daniela, ENEA DOCKS Project: Energy Planning for Port Authority</p> <p><u>NESOI Platform e-learning module category:</u> Energy Transition Plans</p>	 <p>New Energy Solutions Optimised for Islands NESOI EUROPEAN ISLANDS FACILITY</p> <p>The DOCKS project: the drafting of the energy and environmental planning document of the Port System Authority of the Strait (DEASP)</p> <p>Daniela Enea ENEA</p> <p>Erasmus Short Study Tour Sicily, 29/03/23</p> <p>This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 864266.</p>



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SST2 presentations available as e-learning material on the NESOI platform	
<p>Giorgio Bonvicini, Messina Energy Planning Methodologies</p> <p><u>NESOI Platform e-learning module category:</u> Energy Transition Plans</p>	 <p>New Energy Solutions Optimised for Islands NESOI EUROPEAN ISLANDS FACILITY</p> <p>Energy Planning Methodologies</p> <p>Giorgio Bonvicini (RINA) Messina, March 29th 2023</p> <p><small>This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 864266</small></p>
<p>Fanis Christakopoulos, AEGEA/DAFNI Decarbonizing Greek Islands: Port & Vessel Focus</p> <p><u>NESOI Platform e-learning module category:</u> Renewable Energy Sources</p>	 <p>New Energy Solutions Optimised for Islands NESOI EUROPEAN ISLANDS FACILITY</p> <p>Promoting port and vessel decarbonisation in Greek Islands</p> <p>Fanis Christakopoulos AEGEA/DAFNI</p> <p>Erasmus Short Study Tour Sicily, 29/03/23</p> <p><small>This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 864266</small></p>
<p>Giorgio Bonvicini, RINA Energy Planning Methodologies</p> <p><u>NESOI Platform e-learning module category:</u> Energy Efficiency</p>	 <p>New Energy Solutions Optimised for Islands NESOI EUROPEAN ISLANDS FACILITY</p> <p>Energy Planning Methodologies</p> <p>Giorgio Bonvicini (RINA) Messina, March 29th 2023</p> <p><small>This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 864266</small></p>
<p>Mario Mega, Strait of Messina Port Authority of the Strait of Messina and its green strategies</p> <p><u>NESOI Platform e-learning module category:</u> Energy Efficiency</p>	 <p>Autorità di Sistema Portuale dello Stretto Port of Messina, Reggio Calabria, Tropea, Villa San Giovanni, Reggio Calabria e Soverato</p> <p>New Energy Solutions Optimised for Islands NESOI EUROPEAN ISLANDS FACILITY</p> <p>ERASMUS SHORT STUDY TOUR #2 28st March to 31th March 2023 Messina Harbor - Sicily - Italy Host: Port Authority of the Strait of Messina</p> <p>Port Authority of the Strait of Messina and its green strategies</p> <p> Eng. Mario Mega President</p>



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SST2 presentations available as e-learning material on the NESOI platform	
<p>Giannaros Emmanouil, Municipality of Astypalea The Implementation of a Sustainable Policy on Astypalea Island</p> <p><u>NESOI Platform e-learning module category:</u> Renewable Energy Sources</p>	
<p>Petros Markopoulos, DAFNI Planning the energy transition of Greek Islands</p> <p><u>NESOI Platform e-learning module category:</u> Energy Transition Plans</p>	
<p>Simone Panfiglio, NAVTEC Development of the marine transport sector for a sustainable future</p> <p><u>NESOI Platform e-learning module category:</u> e-mobility</p>	
<p>Dr. Andrea Frazzica, ZHENIT Zhenit Project Overview</p> <p><u>NESOI Platform e-learning module category:</u> Renewable Energy Sources</p>	



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SST2 presentations available as e-learning material on the NESOI platform	
<p>Bárbara Vieira, APRAM Green Ports Madeira Project</p> <p><u>NESOI Platform e-learning module category:</u> Energy Transition Plans</p>	
<p>SIKANIA, Blufferries Green ships in the Strait of Messina</p> <p><u>NESOI Platform e-learning module category:</u> Energy Transition Plans</p>	
<p>Demetro Marino, WSP Small Scale Geothermal technologies for port island and boats decarbonization</p> <p><u>NESOI Platform e-learning module category:</u> Renewable Energy Sources</p>	
<p>Grete Väli Renewable Energy Projects in Estonian Regional Ports</p> <p><u>NESOI Platform e-learning module category:</u> Renewable Energy Sources</p>	
<p>Stefano Barberis, H2BOAT Hydrogen to Boat</p> <p><u>NESOI Platform e-learning module category:</u> e-mobility</p>	



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SST2 presentations available as e-learning material on the NESOI platform	
<p style="text-align: center;">Klaudia Teresa Tolstow, ROBINSON (Smart integration of renewable energy on industrial islands) and hydrogen</p> <p><u>NESOI Platform e-learning module category:</u> Renewable Energy Sources</p>	
<p style="text-align: center;">Riinu Härmas, University of Tartu Green deal in the Estonian Islands - opportunities and obstacles</p> <p><u>NESOI Platform e-learning module category:</u> Energy Transition Plans</p>	
<p style="text-align: center;">University of Messina MESSINA: Green Strategies & Port Authority</p> <p><u>NESOI Platform e-learning module category:</u> e-mobility</p>	
<p style="text-align: center;">Valeria Palomba, ENGIMMONIA Sustainable technologies for future long distance shipping towards complete decarbonisation</p> <p><u>NESOI Platform e-learning module category:</u> Hydrogen</p>	



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SST2 presentations available as e-learning material on the NESOI platform	
<p>Massimo Rivarolo, UNIVERSITY OF GENOA Il progetto di ricerca TecBia e l'imbarcazione ZEUS</p> <p><u>NESOI Platform e-learning module category:</u> e-mobility</p>	
<p>Luigi Laterza, SINLOC Financial and technical support from the EU</p> <p><u>NESOI Platform e-learning module category:</u> Investment Plan</p>	



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E-3. SST2 pictures

First meeting with the group, welcoming from the host and the NESOI consortium partners.



Icebreaking session with round table short introduction of the guests.



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*Day at CNR ITAE
Energy planning and decarbonisation of harbors
knowledge sharing session, group picture*



*Visiting CNR / ITAE laboratories
Electrolyser and fuel cell technologie
green fuels*



*Clean Boat
workshop
at CNR ITAE*



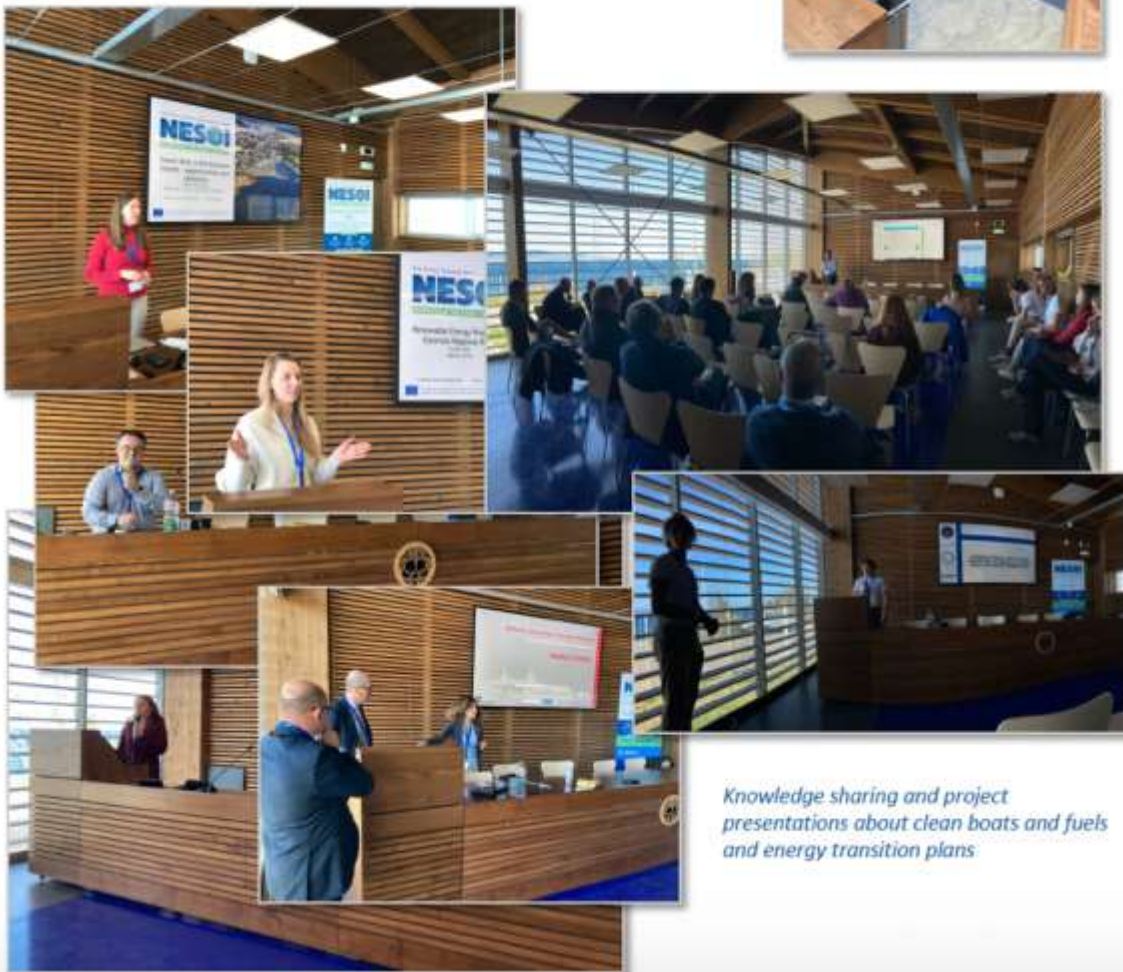
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D7.6: Report from islands staff coaching (first part)



Guided tour of University Reggio Calabria Renewable Energy research center



Knowledge sharing and project presentations about clean boats and fuels and energy transition plans



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E-4. SST2 communication

The collage features several social media posts from NESOI (The European Island Facility) and related partners. Key posts include:

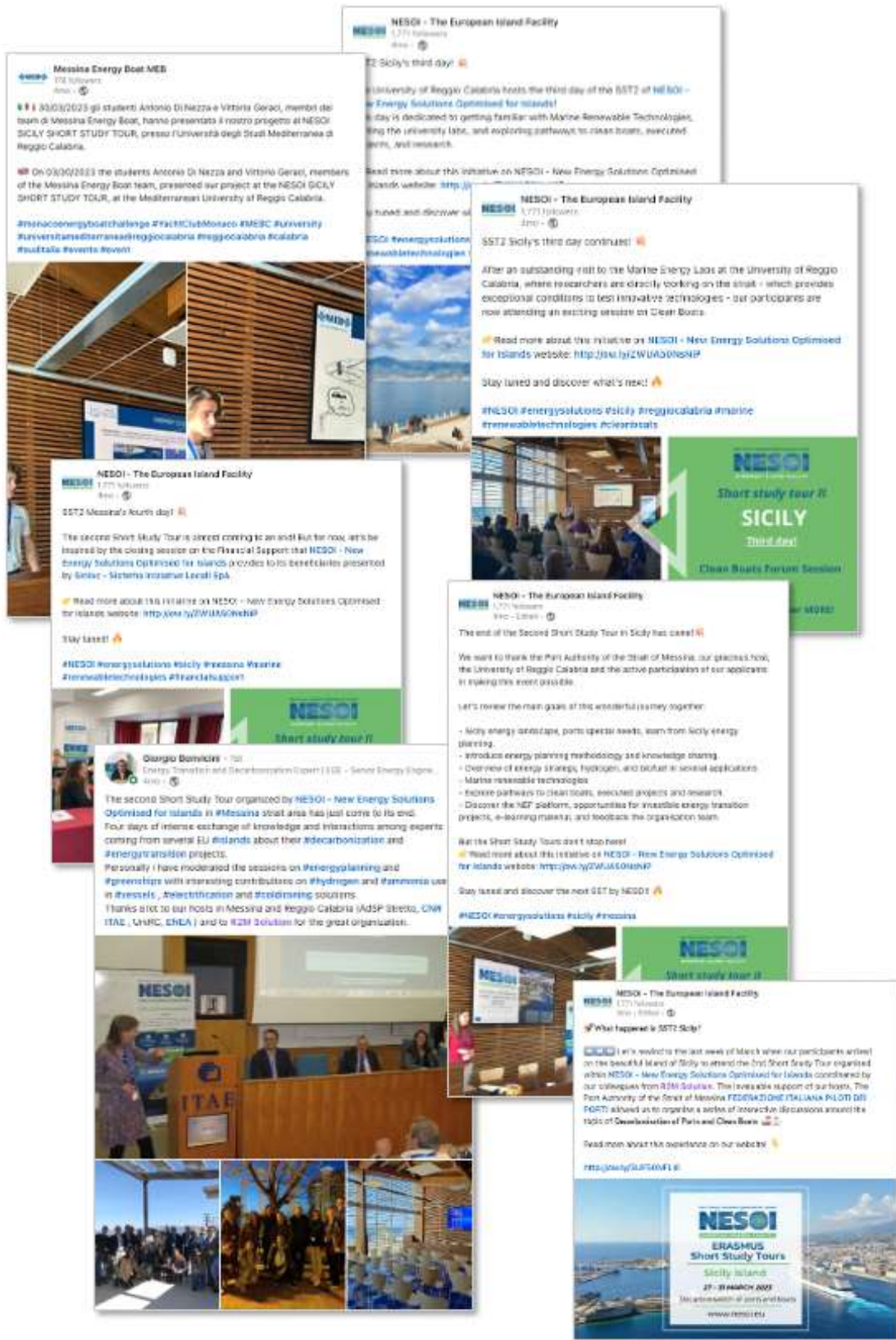
- Top Left:** Announcement of the NESOI second Short Study Tour in Sicily, March 28-31, 2023, at the Port Authority of Messina. It lists partners like CNR IREA, ENEA, and University of Reggio Calabria.
- Top Right:** A post by Sophie Bourles-Guaranta mentioning a meeting with Carlo Barone PhD and R2M Solutions.
- Middle Left:** A post by Ceclie Barone PhD announcing the start of the second Short Study Tour #23 in Sicily, highlighting the local partners and the program's focus on energy planning, transport, and marine-technology.
- Middle Right:** A post by Maria Mege mentioning the DEASP (Decreto di Pianificazione Energetica) and the role of the Port Authority of Messina.
- Bottom Left:** A post announcing the start of the second Short Study Tour, listing the program's objectives and the list of participants including experts from various countries.
- Bottom Center:** A green graphic titled 'Short study tour #2 SICILY Kick-off meeting' with the slogan 'Follow us to discover the first session!'.
- Bottom Right:** Photos showing the kick-off meeting and a presentation slide.



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D7.6: Report from islands staff coaching (first part)

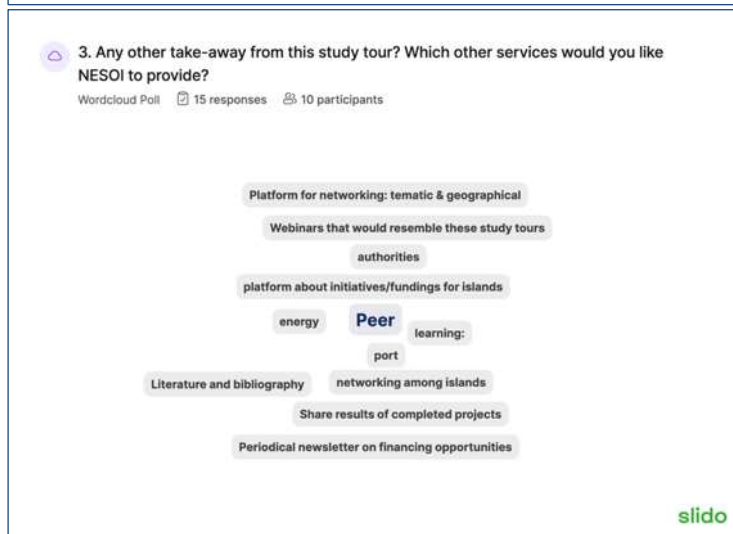
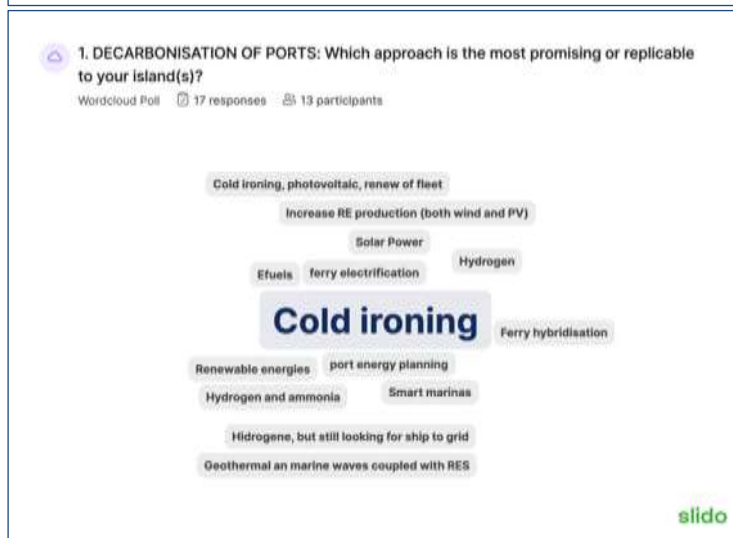
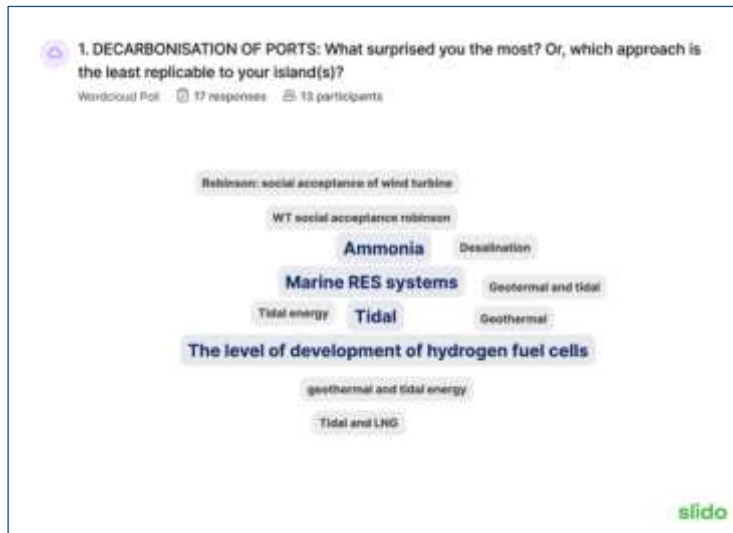


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E-5. SST2 workshop outcomes



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E-6. SST2 takeaways and participant feedback

*What are your main takeaways from the study tour?
(e.g. main learning points, main surprises...)*

I was impressed by the energy transition work at Port Authority of the Strait of Messina and CNR. Simone Panfiglio's presentation on alternative energy in maritime transport was valuable. The CNR laboratories' hydrogen and biofuel production process was promising. Professor Fabio Filianoti's presentation on tidal energy research at the University of Reggio Calabria was particularly interesting.

Main learning points: some technological solutions and business solutions. Many very interesting and inspiring ideas! we are all working towards a common goal, and that eventually we will be able to achieve some of the targets that are being established.

Main surprises: Throughout Europe there are still some doubts about how the decarbonisation of ships and ports will be achieved.

R&D excellence of ITAE CNR Messina Institute (e.g. Engimmonia project, domestic heat storage technologies)

I discovered contrasting challenges between northern and southern European islands, but also identified common issues. CNR ITAE's integration of materials science and engineering was impressive, and the acceptance of hydrogen in boats was notable.

Amongst the different aspects discussed, which one is the most likely to have an impact on your future activities and why?

I think the DAFNI organization from Greece was the most inspiring. We need this kind of an organization for the islands in Estonia. I also liked how the locals are included in the green transition in the island of Arousa.

Wave energy could be used for the island's energy needs in addition to wind and solar energy. Since the island of Astypalaia is relatively isolated, it can start cooperating with organizations. interventions in energy transition and refueling ships with alternative fuels could be planned.

Possibilities to involve the partners in R&D UE Projects. the development of hydrogen as the fuel of the clean energy transition of the EU islands

Geothermal due to excess heat and demand on electricity in some of the projects. Some business ideas (citizen associations and lease of PV) relevant to other projects and a good idea for the future



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What concrete impact could have the new contacts made possible during the SST2?

having a network to share common experiences, and common solutions..

Possibility of cooperation on some solutions to our issues (technical, such as geothermal, tidal or Wells turbine) on future projects.

A possible impact could be the establishment of an Energy agency like DAFNI on the islands of Estonia. I really liked the presentation on the Energy boat challenge. I will try to spread the idea of students doing a similar project in Estonia to kickstart more research and development.

The study tour created a network of contacts from which we can draw information, practical advice and experiences about actions implemented in islands similar to ours. Therefore, we can derive knowledge and information from this procedure.

Additional comments you would like to share with us:

In general the educational trip was very well and properly organized. The speakers had interesting things to share with us and were willing to answer our questions and concerns. I hope that we will be given a similar opportunity in the future.

We have seen the main problems of each island of the participants at the SST2. It will be interesting to know the find solutions and share them.

I would like to once again thank the entire organisation for the event and the opportunity to participate. It was certainly an enriching experience both professionally and personally.

It was a fantastic experience i didn't expect I would get so inspired. Many topics/solutions mentioned/observed there can be adapted to several of the projects I am involved in. I will present these ideas to my bosses and hopefully we will use several of these solutions. I was also approached by other participants who were interested in our solutions. it was a very well organised, interesting and fruitful experience. i also loved the organisers and participants - I think we had a great group. maybe we could be a consortium that could cooperate with others working on similar issues/projects (?) - it can be only online.

Thank you very much for this great opportunity! I feel my worldview broadened a lot and I am very grateful.

Everything was just perfect! Thank you very much NESOI!

Average level of satisfaction regarding the organisation of the SST2

Average level of satisfaction regarding the technical programme of the SST2

5/5

4.7/5





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