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Thematic Cluster on  
Blue Growth and related Smart  
Growth 

# ADRION THEMATIC CLUSTER ON BLUE GROWTH AND RELATED SMART GROWTH

**PoWER AND SEADRION PROJECTS**  
**INTERREG ADRION**



**NEWSLETTER #5**

**October 2020**

## **Message from Thematic Cluster Coordinator Prof. Nikitas Nikitakos, University of the Aegean (Greece)**

Welcome to the ADRION Thematic Cluster (TC) on Blue Growth and related Smart Growth. The 1st TC consists of 10 relevant projects funded under Ionian Adrion framework with the ultimate goal to promote cooperation, and to identify common synergies and new ideas for the next EU programming period. One newsletter will be available for downloading each month in the **TC section** prepared by two projects each time of the TC, with informative articles about Cluster's objectives, as well as updates on programs, contests, conferences, activities, and other-related news.

This is our fifth Newsletter and we are very excited to share with you the latest news of PoWER and SEADRION projects. In this issue you can get to know the two projects, their main outputs, find out about their upcoming and recent events and workshops and explore their contribution to Blue Growth in the macro-region.

Any suggestion from all of you could be send in my personale-mail or through the projects participating in Cluster. Let's work towards valuable outputs!

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## PoWER at a glance

The PoWER project aims at developing a Methodology and a Strategy to support the evolution of Adriatic-Ionian ports into so-called **Innovation Hubs**. According to the project concept, the state of Innovation Hub is basically an attitude of a port towards change implying its commitment to a **three-steps methodology** to address topic-specific needs, i.e. needs mapping, ideas and solutions scouting, scenarios foresight. These steps are thought for involving all the stakeholders of the “**innovation supply chain**” (i.e. education/research institutions, enterprise and Public Administration) in turning the ports’ challenges into an opportunity to bring together the community around them and exploit their untapped potential.



The PoWER project has been testing this methodology in **6 pilot ports** (Bari, Brčko, Durres, Igoumenitsa, Ravenna and Rijeka) in relation to the energy efficiency topic, but – once validated – it will be possible, with due adjustments, to apply it to any topic.

Final objective is to have local stakeholders cooperate with each other on topics of common interest, thus creating the **PoWER Innovation Hubs Network (IHN)** and to provide them with a clear view of actions to carry out in the short-mid-term at the local level, as well as with a more structured **Strategy** to be implemented at the transnational level.

## The PoWER Strategy: a steering instrument for evolving ports into Innovation Hubs

One of the main outputs of the Project is the PoWER Strategy, the reference framework for the future activities of the Innovation Hubs Network to provide continuity to the evolution process activated during the project implementation period.

The Strategy is the result of a joint action aimed at capitalizing the results of the process carried out by the PoWER Consortium at local level and at identifying the common strategic challenges, mostly related to Blue and Green growth, to be tackled after the project finalization, by fostering the rise of a holistic and integrated co-evolution process.

In particular, the PoWER Strategy is composed by four Evolution Pathways, constituting the axes along which the evolution of ports into Innovation Hubs will be actuated. Every Evolution Pathway is articulated through priorities and timelines taken from its constituting topics, which, together, allow the development of a set of dynamics deeply integrated and intertwined among each other. As a result, each Evolution Pathway can be considered, in some way, “transversal” to the others.

EVOLUTION PATHWAYS	SHARED STRATEGIC TOPICS
Port as Logistic Hub	<ul style="list-style-type: none"> <li>• Integration with infrastructures</li> <li>• Expansion or optimization of operational spaces</li> <li>• Enhanced Logistics and multi-modality</li> </ul>
Port as Digital Hub	<ul style="list-style-type: none"> <li>• Digital transition</li> </ul>
Port as Sustainability Hub	<ul style="list-style-type: none"> <li>• Environmental protection and circular economy</li> <li>• Energy</li> </ul>
Port as Economic Hub	<ul style="list-style-type: none"> <li>• Tourism</li> <li>• Promotion of local economy</li> </ul>

### Overall Strategy time framework

<u>Transition Pathways</u>	<u>Time range</u>		
	<u>Short</u>	<u>Medium</u>	<u>Long</u>
<u>A.Port as Logistic Hub</u>			
<u>B.Port as Digital Hub</u>			
<u>C.Port as Sustainability Hub</u>			
<u>D.Port as Economic Hub</u>			

In order to formally establish a strong and virtuous Innovation Hubs Network, Ports and other higher institutional levels have been called upon to sign a dedicated Memorandum of Understanding: The PoWER Protocol.

In this document, they state their commitment to support the ports evolution process into Innovation Hubs with reference to the pathways developed thanks to the implementation of the PoWER Methodology and described in this Strategy, thus guaranteeing a well-founded institutional cooperation among the Hubs of the Network.

### **Towards the PoWER final event, core milestone of a wider process**

On **November, 27th 2020 from 9 a.m. to 1 p.m.** the PoWER Consortium will host their final event. Selected experts from Albania, Bosnia-Herzegovina, Croatia, Greece, Italy and Serbia will meet in virtual round-tables to discuss two relevant topics:

- The evolution of ports after the Covid-19 outbreak: Issues, challenges new opportunities;
- Ports as logistic, digital, sustainability and economic hubs: Strengths and challenges of the four PoWER transition pathways for the evolution of ADRION Ports.

At the end of each round-table, dedicated Q&A sessions will be carried out and the audience will have the chance make specific questions to the panelists.

The event will be opened by Ms Adela Franja, representative of the ADRION Programme Joint Secretariat and Mr Marco Padula, senior researcher at the Institute for Construction Technologies of the National Research Council of Italy and Coordinator of the PoWER Project.

The event will be preceded by a closed-doors meeting among the PoWER Consortium members and the representatives of the Innovation Hubs Network members in order to set common Strategy-related follow-up actions and to detect new topics to be investigated by means of the PoWER Methodology.

The updated agenda and the **link for connecting to the event will be available in the Events section of the PoWER Platform.**

**More information on PoWER at:** <https://power.adrioninterreg.eu/>

**Visit the PoWER Platform:** <http://www.powerports.eu/>

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## SEADRION at a glance

Following the EU Green Deal initiative, and in order to achieve the decarbonisation of Europe's industry, heat pumps will play a key part in making Europe climate-neutral in the future.

In this context, heating and cooling of buildings can be significantly reduced with technologies, which use renewable energy sources and have high efficiency.

Taking this into consideration, the SEADRION project aims to support the development of a regional innovation system for the Adriatic-Ionian area with the installation of **3 renewable energy facilities in public buildings located in Greece (Alexandroupolis) and the western and south part of Adriatic Croatia (Crikvenica and Dubrovnik)**. These facilities are seawater heat pumps, an innovative system that uses the thermal energy contained in a reservoir (sea) to achieve the cooling and thermal energy in the buildings which are close to the sea.

The main objective of the SEADRION project is to identify **benefits and barriers** associated with the use of this technology and to find a system solution designed to improve the use of the seawater heat pump technology and to make the buildings energy self-sufficient and independent of fossil fuels.

### The first step: Pilot plant installation

Commissioning of the pilot plant in Greece by CERTH involving the installation of a seawater heat pump to meet the thermal and cooling needs in the Municipal Stadium of Alexandroupolis.



### The policy roadmap: how to enhance the heating and cooling sector

The main outputs of the SEADRION project are a **transnational seawater heat pump network** to support sustainable development in the ADRIION region, a science and technology cooperation between research institutions and enterprises to enhance the innovation capacity of the heat pump sector and a **common strategy to enhance the use of the seawater heat pump based heating and cooling**.

Special attention was given on **the policy roadmap**, a reference framework **for the promotion of the heating and cooling sector by the utilization of seawater heat pumps (SWHP)**. According to that, the SWHP is a technology that is still not widely used except in the hotel sector or public buildings on the coast or some islands, and this applies to all partner countries of the project (Croatia, Slovenia, Italy, Greece and Albania).

Many **barriers** that hinder the increase in the implementation of (seawater) heat pumps are encountered in all partner countries and are mostly similar:

- lack of knowledge and experience in designing as installing and running such systems, lack of awareness from the policymakers, excessive bureaucratic obstacles, lack of public awareness and incentive subsidies.

On the other hand, some **measures and activities** proposed that could facilitate the implementation of such systems are inter alia:

- standardization of the seawater intake system installation, the involvement of heat pumps in energy strategies, application of district heating and cooling systems, new corrosion and maintenance-friendly materials, engagement of policymakers around structuring the process of implementation of heat pumps.

Many **stakeholder target groups** could be involved in implementing the suggested methodology activities, from the national public authority to enterprises.

**Opportunities** can be sought in other countries of the Mediterranean, such as Italy and France, where multipurpose complexes or district heating and cooling networks are considered in order to reduce heating and cooling costs along with:

- Training programmes for RES-installers, such as the EHPA EUCERT, a European training and certification program for heat pump installers, tax deductions offered by the Government for energy-saving measures and investment grants for renewable heating installations

### **Building bridges and networks of collaboration**

UNIZAG FSB and the Croatian Heat Pump Association organising a workshop called “Thematic Heat Pump Day” with a focus on the “Potential of seawater exploitation in heat pump systems“. Similar events are organised in all participating counties targeting various stakeholders, from students to professionals, public authorities as well as enterprises.



More information on SEADRION at: <https://seadrion.adrioninterreg.eu/>

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## NEXT STEPS of THEMATIC CLUSTER

Stay tuned for even more reading content, exploring the next and last monthly newsletter by FUTURE 4.0 and Eco-Nautinet projects, the joint policy paper with scientific recommendations and the report on new areas/fields of intervention/project ideas developed by the TC in order to be financed in the next programming period.

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