

SO 1.1 RESEARCH AND INNOVATION INFRASTRUCTURES

Enhancing market uptake of innovation based on improved capacity of research and innovation infrastructures and their users

14 REGULAR PROJECTS	0 PROJECT PLATFORMS 2 EXTENSION PROJECTS	191 BENEFICIARIES	10 COUNTRIES	36 mill. EUR TOTAL BUDGET	28.4 mill. EUR PROGRAMME CO-FINANCING
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AVERAGE INCREASE IN INSTITUTIONAL CAPACITY IN 2014-2022 WAS 78%:*



*Based on the experts' survey

- Knowledge transfer happens inside already build up networks. Difficult for newcomers to become a part of them.
- Overall situation in governance structures and organisational set-up has improved due to successful and long-term collaboration.
- Important to encourage and intensify collaboration between researchers, investors and entrepreneurs to improve utilisation of new knowledge.
- Clusters have become important in attracting private investments.
- Transnational contacts high in central government level, lower among small companies and local governments.



- Projects within this objective addressed various issues and opportunities, such as inadequate capacity of incubators and SMEs to improve their performance and services provided, lack of a coordination framework for better asset management in infrastructures, unequally distributed and poorly interconnected R&I infrastructure.
- BalticTRAM effectively integrated enterprises from the Baltic Sea area with universities, research institutions, and large-scale research infrastructures and assisted 15 SMEs in solving particular product development difficulties, such as for sustainable cement, better medical test kits, more durable electronics, and longer lasting batteries.



TYPES OF ACTIVITIES WHICH WERE MOST USEFUL FOR INCREASING INSTITUTIONAL CAPACITY:*

- Pilot activities, e.g., activities related to testing new solutions **70%**
- Activities related to jointly developing outputs in the project **59%**
- Networking activities **57%**

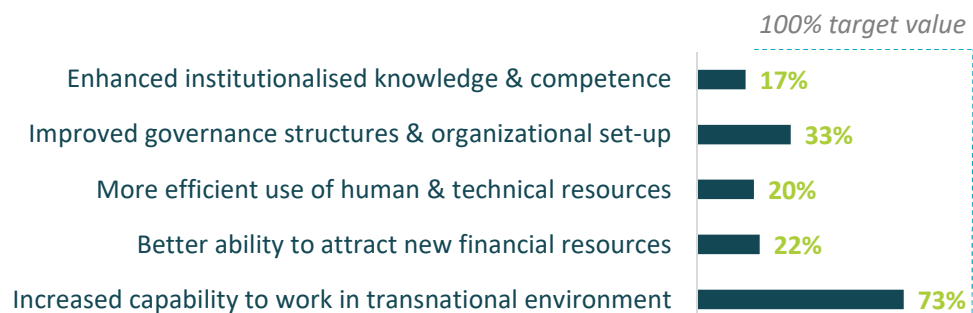
* According to % of SO 1.1 project partners, who participated in the survey

SO 1.2 SMART SPECIALISATION

Enhancing growth opportunities based on increased capacity of innovation actors to apply smart specialisation approach

8 REGULAR PROJECTS	1 PROJECT PLATFORM 4 EXTENSION PROJECTS	137 BENEFICIARIES	10 COUNTRIES	22.6 mill. EUR TOTAL BUDGET	17.4 mill. EUR PROGRAMME CO-FINANCING
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AVERAGE INCREASE IN INSTITUTIONAL CAPACITY IN 2014-2022 WAS 33%:*



*Based on the experts' survey

- Knowledge transfer between institutional levels, e.g., state and municipality levels, not always strong.
- Capacity to use new knowledge generated during projects differs across regions.
- Attracting external public funding hindered by lack of knowledge about international programmes.
- Public servants and researcher highly experienced in international work.
- Unused potential in involving rural areas, but language barrier can be an issue in these areas.



- Untapped potential in the bioeconomy and circular economy, including digital transformation; improving policy tools to implement smart specialisation strategies and innovation, were addressed by smart specialisation objective projects.
- Smart-Up BSR organized 10 innovation camps to foster interaction between industry, academia, civil service organizations, and other non-governmental organizations. The camps fostered bottom-up and needs-driven innovation, allowing for co-creation, experimentation, and the formation of trans-regional networks for more effective RIS3 implementation in the Baltic Sea area.



TYPES OF ACTIVITIES WHICH WERE MOST USEFUL FOR INCREASING INSTITUTIONAL CAPACITY:*

- Networking activities **79%**
- Activities related to jointly developing outputs in the project **57%**
- Pilot activities, e.g., activities related to testing new solutions **39%**

* According to % of SO 1.2 project partners, who participated in the survey

SO 1.3 NON-TECHNOLOGICAL INNOVATION

Advancing the Baltic Sea region performance in non-technological innovation based on increased capacity of innovation actors

23
REGULAR PROJECTS

0 PROJECT PLATFORMS
6 EXTENSION PROJECTS

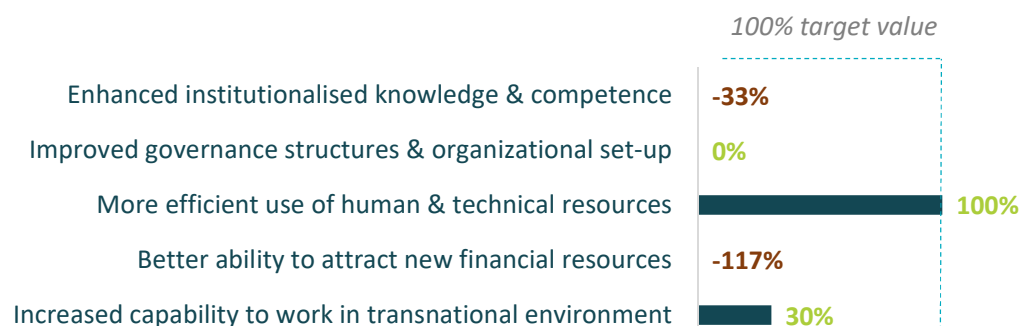
354
BENEFICIARIES

11
COUNTRIES

62.8 mill. EUR
TOTAL BUDGET

49.3 mill. EUR
PROGRAMME CO-FINANCING

AVERAGE INCREASE IN INSTITUTIONAL CAPACITY IN 2014-2022 WAS 0%:*



*Based on the experts' survey

- Difficulty in finding adequate information. More user-friendly tools are necessary.
- Little structural support to exchange project outputs on regional level.
- High level of ICT usage in the field, many technologies are available in the region.
- Availability of venture capital low, funding through national schemes available and utilised.
- Transnational collaboration limited to duration of projects, irregular communication outside projects.



- The success factor for non-technological innovation projects has been the ability to "hit the right needs" for target groups that increased their involvement and input.
- The Baltic Sea Food project established e-platforms for food distribution in the Baltic Sea area, first based on the Swedish example and then expanded to Estonia, Latvia, Lithuania, Sweden, Germany, Russia (Pskov oblast), Denmark, and Norway. They increased SMEs' access to food networks/distributors for ordering, communication, accounting, and offering diversity.



TYPES OF ACTIVITIES WHICH WERE MOST USEFUL FOR INCREASING INSTITUTIONAL CAPACITY:*

- Networking activities
- Training activities
- Pilot activities, e.g., activities related to testing new solutions

69%

46%

42%

* According to % of SO 1.3 project partners, who participated in the survey

SO 2.1 CLEAR WATERS

To increase efficiency of water management for reduced nutrient inflows and decreased discharges of hazardous substances to the BS and the regional waters based on enhanced capacity of public and private actors dealing with water quality issues

16
PROJECTS

2 PROJECT PLATFORMS
4 EXTENSION PROJECTS

283
BENEFICIARIES

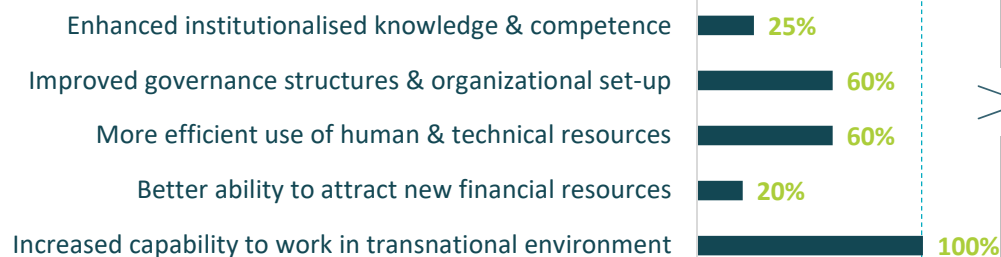
11
COUNTRIES

56.7 mill. EUR
TOTAL BUDGET

44.8 mill. EUR
PROGRAMME CO-FINANCING

AVERAGE INCREASE IN INSTITUTIONAL CAPACITY IN 2014-2022 WAS 67%:*

100% target value



*Based on the experts' survey

- Lack of centralisation makes new knowledge hardly detectable.
- Elaborated organisational structures are available. Stakeholders participating in Interreg BSR interactions maintain a regular organisational structure also outside the BSR projects.
- Participation of private companies in projects is low, because public authorities, practitioners and researchers are unable to identify areas of common interest.
- Public authorities, practitioners and researchers are able to communicate in a common language, are geographically mobile and have a profound knowledge of the institutional landscape and cultural characteristics of other countries.



- Widely discussed topics were synthesised successfully within the project platforms. Regular projects covered topics, which needed deeper investigation.
- BSR WATER managed to contribute to legislation already during the implementation period of the project
- Complex issues, such as hazardous chemicals or pharmaceuticals, are better understood, when they are expressed through direct communication means (face-to-face, field visits etc.). NonHazCity proved that if people relate to the problem, they are willing to change their behaviour.



TYPES OF ACTIVITIES WHICH WERE MOST USEFUL FOR INCREASING INSTITUTIONAL CAPACITY:*

- Pilot activities, e.g., activities related to testing new solutions **69%**
- Networking activities **46%**
- Activities related to jointly developing outputs in the project **42%**

* According to % of SO 2.1 project partners, who participated in the survey

SO 2.2 RENEWABLE ENERGY

Increasing production of sustainable renewable energy based on enhanced capacity of public and private actors involved in energy planning and supply

5
PROJECTS

1
EXTENSION PROJECT

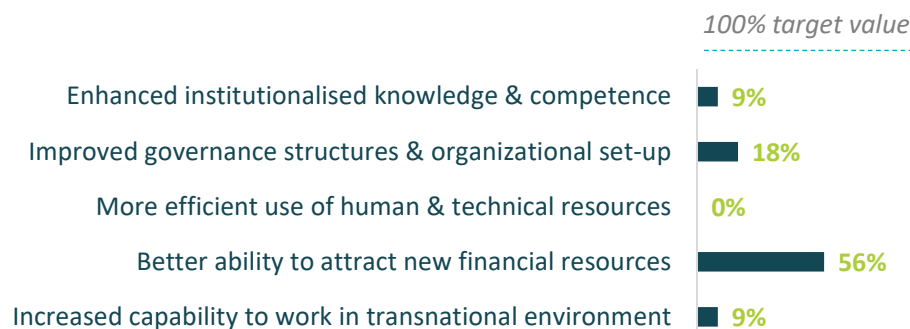
80
BENEFICIARIES

11
COUNTRIES

15.4 mill. EUR
TOTAL BUDGET

12 mill. EUR
PROGRAMME CO-FINANCING

AVERAGE INCREASE IN INSTITUTIONAL CAPACITY IN 2014-2022 WAS 18%:*



*Based on the experts' survey

- Knowledge and latest improvements are not utilised enough. Mechanisms for knowledge transfer are not sufficiently effective.
- Technical resources are difficult to find or costly.
- Public financing is more common in the field of energy efficiency in BSR. The capability to attract private sector funding is increasing.
- Advanced competences to work with transnational partners among researchers, practitioners and regional public authorities; lower in smaller municipal public authorities.



- Baltic Integrid and Balticbiomass4value projects developed necessary guidelines that help to better plan the use of renewable energy technologies in the future.
- Energize Co2mmunity looked for solutions that would help eliminate obstacles related to community energy projects. Therefore, the extension stage was a necessity to gain a deeper knowledge of how to implement the RENCOP model and improve renewable CE in the region.



TYPES OF ACTIVITIES WHICH WERE MOST USEFUL FOR INCREASING INSTITUTIONAL CAPACITY:*

- Networking activities
- Communication activities
- Pilot activities/ Training activities

92%

50%

42%

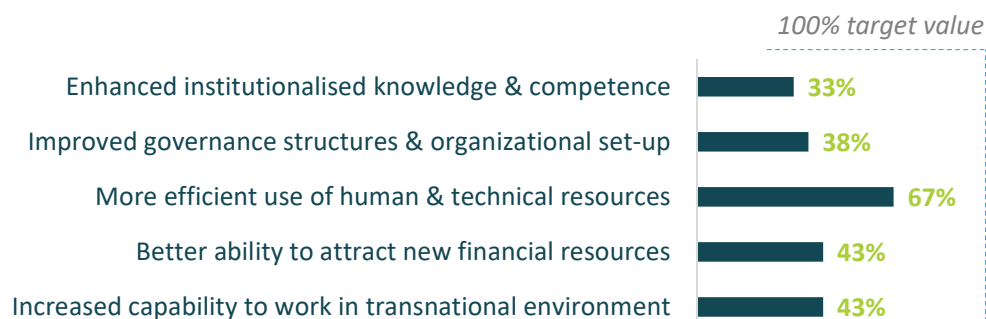
* According to % of SO 2.2 project partners, who participated in the survey

SO 2.3 ENERGY EFFICIENCY

Increasing energy efficiency based on enhanced capacity of public and private actors involved in energy planning

6 REGULAR PROJECTS	1 PROJECT PLATFORM 2 EXTENSION PROJECTS	112 BENEFICIARIES	11 COUNTRIES	21 mill. EUR TOTAL BUDGET	16.5 mill. EUR PROGRAMME CO-FINANCING
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AVERAGE INCREASE IN INSTITUTIONAL CAPACITY IN 2014-2022 WAS 44%:*



*Based on the experts' survey



- Act Now project developed a learning platform on energy efficiency in the building stock, which provided municipalities with the needed tools in enhancing capacity building.
- LowTEMP concluded that investments in the installation of low temperature grids or their integration into existing district heating systems require high upfront costs. Construction works on the pipeline system require coordination of experts and public authorities.
- Public authorities play a crucial role in renovating existing public buildings. Lack of tools to support decision-making for implementing energy efficiency measures.

- Good level of knowledge and competence available. Knowledge transfer between research and development infrastructure and SMEs still weak.
- Existing organisational structures not efficiently used by authorities, practitioners, and scientists. A platform to support knowledge exchange between different stakeholders needed.
- New tools and methods have been developed to save time, creating new ways of communication and collaboration.
- Use of private financial instruments is low. Public funding is commonly used. Public-private partnerships shadowed by issues related to corruption and transparency.



TYPES OF ACTIVITIES WHICH WERE MOST USEFUL FOR INCREASING INSTITUTIONAL CAPACITY:*

- Pilot activities, e.g., activities related to testing new solutions **63%**
- Networking activities/ Training activities **50%**
- Communication activities/ Activities related to jointly developing various outputs in the project **38%**

* According to % of SO 2.3 project partners, who participated in the survey

SO 2.4 RESOURCE EFFICIENT BLUE GROWTH

Advancing sustainable and resource-efficient blue growth based on increased capacity of public authorities and practitioners within the blue economy sectors

7
REGULAR PROJECTS

2 PROJECT PLATFORMS
1 EXTENSION PROJECT

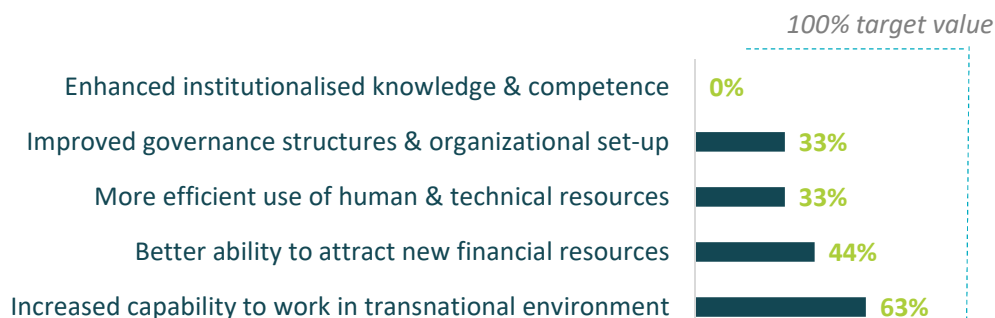
134
BENEFICIARIES

11
COUNTRIES

22.9 mill. EUR
TOTAL BUDGET

18.1 mill. EUR
PROGRAMME CO-FINANCING

AVERAGE INCREASE IN INSTITUTIONAL CAPACITY IN 2014-2022 WAS 38%:*



**Based on the experts' survey*



- Baltic LINes project partners established BASEMAPS to help countries make better planning decisions and improve transnational coherence of shipping routes and energy corridors. This is the first online database that provides regional up-to-date transnational Maritime Spatial Planning data.
- Harmonising all the aspects related to blue growth in existing frameworks as well as increasing awareness of involved parties remains a challenge.

- Utilisation of knowledge among organisations hindered by public procedures such as licensing. Coherent social networks for knowledge transfer needed.
- Limited use of existing organisational structures as some networks are closed for wider involvement (e.g., HELCOM, CBCC).
- Technical resources financed by EU are often restricted for commercial use.
- Support for the use of national languages and resources for translation work needed.
- Level of public administration cooperation in the international arena is good. To work internationally has become a standard.



TYPES OF ACTIVITIES WHICH WERE MOST USEFUL FOR INCREASING INSTITUTIONAL CAPACITY:*

- Activities related to jointly developing various outputs in the project
- Networking activities/ Pilot activities
- Promoting the new/improved products, services, processes, tools etc./ Communication activities

73%

64%

36%

** According to % of SO 2.4 project partners, who participated in the survey*

SO 3.1 INTEROPERABILITY OF TRANSPORT MODES

Increasing interoperability in transporting goods and persons in north-south and east-west connections, based on increased capacity of transport actors

11
REGULAR PROJECTS

1 PROJECT PLATFORM
4 EXTENSION PROJECTS

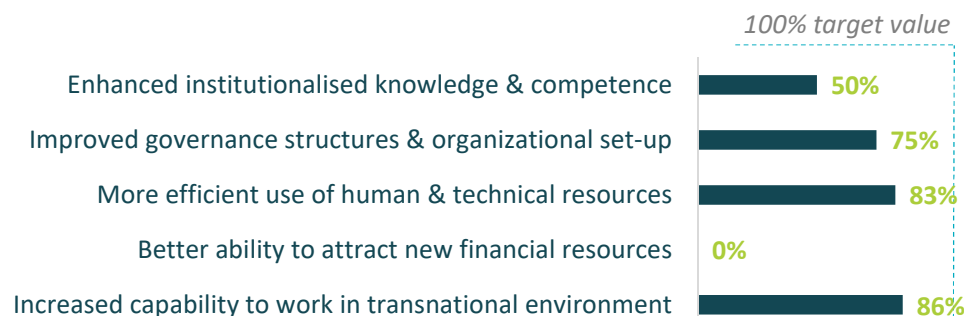
144
BENEFICIARIES

10
COUNTRIES

27.1 mill. EUR
TOTAL BUDGET

20.9 mill. EUR
PROGRAMME CO-FINANCING

AVERAGE INCREASE IN INSTITUTIONAL CAPACITY IN 2014-2022 WAS 67%*



**Based on the experts' survey*

- The availability of governance structures was good. However, efficiency of the structures could be increased by more frequent utilisation.
- Despite high staff rotation in some countries, as well as shortage of experienced professionals, there has been increased efficiency of using both human and technical resources.
- Ability to attract external private resources is hindered by too little communication between stakeholders and limited budget.
- Transnational cooperations are positive and valuable. Countries and in the BSR have wide experience and increased capability to work in transnational environment.



- The projects, such as TENTACLE or NSB-CoRe contributed to improving the alignment in spatial vision on regional development, logistics and mobility, provided solutions for clean fuels, multimodal transport, cross-border infrastructure and digitalization.
- The evaluation found that ensuring the support of the relevant stakeholders and having a diverse partnership are major factors for achieving durable and meaningful changes in transport practices.



TYPES OF ACTIVITIES WHICH WERE MOST USEFUL FOR INCREASING INSTITUTIONAL CAPACITY:*

- Networking activities **90%**
- Activities related to jointly developing various outputs in the project **70%**
- Pilot activities, e.g., activities related to testing new solutions **60%**

** According to % of SO 3.1 project partners, who participated in the survey*

SO 3.2 ACCESSIBILITY OF REMOTE AREAS AND AREAS AFFECTED BY DEMOGRAPHIC CHANGE

Improving the accessibility of the most remote areas and regions whose accessibility is affected by demographic change, based on increased capacity of transport actors

5
REGULAR PROJECTS

0 PROJECT PLATFORMS
0 EXTENSION PROJECTS

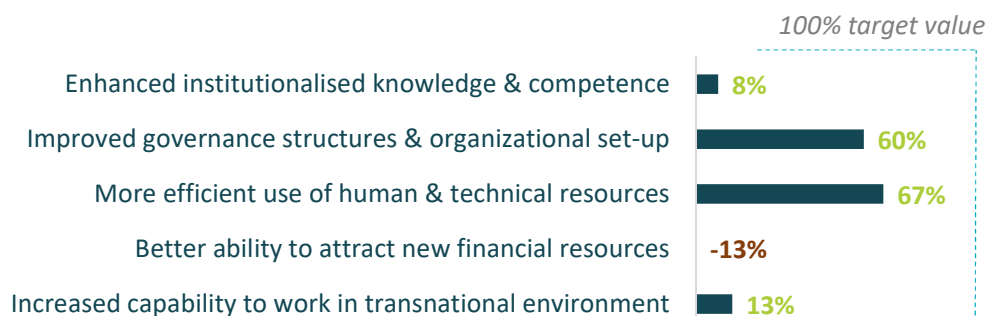
37
BENEFICIARIES

10
COUNTRIES

22.9 mill. EUR
TOTAL BUDGET

18.1 mill. EUR
PROGRAMME CO-FINANCING

AVERAGE INCREASE IN INSTITUTIONAL CAPACITY IN 2014-2022 WAS 40%*



**Based on the experts' survey*



- Projects, such as MAMBA and MARA, sought to develop new mobility options (such as on demand transport, rural carpooling, fleet sharing or mobility as a service) and to integrate existing one into more efficient and effective transport systems.
- Better transport solutions were made available for the end-users living in remote areas or areas affected by demographic change. Maintaining these solutions is challenging due to lack of resources.

- Well-established relations in the field support knowledge transfer.
- Organisational structures are mostly constructive, cost-efficient, problem-oriented.
- Good use of technical resources, such as e-governance, web-based real-time co-creation platforms and software, as well as citizen inclusion solutions.
- No common practice to attract private financial resources. Lack of regulation for the use of public-private partnerships.
- Many organisations have long experience in working transnationally.



TYPES OF ACTIVITIES WHICH WERE MOST USEFUL FOR INCREASING INSTITUTIONAL CAPACITY:*

- Networking activities **60%**
- Pilot activities, e.g., activities related to testing new solutions **60%**
- Communication activities **40%**

** According to % of SO 3.2 project partners, who participated in the survey*

SO 3.3 MARITIME SAFETY

Increasing maritime safety and security based on advanced capacity of maritime actors, to reduce risks associated with maritime transportation

5
REGULAR PROJECTS

1 PROJECT PLATFORM
1 EXTENSION PROJECT

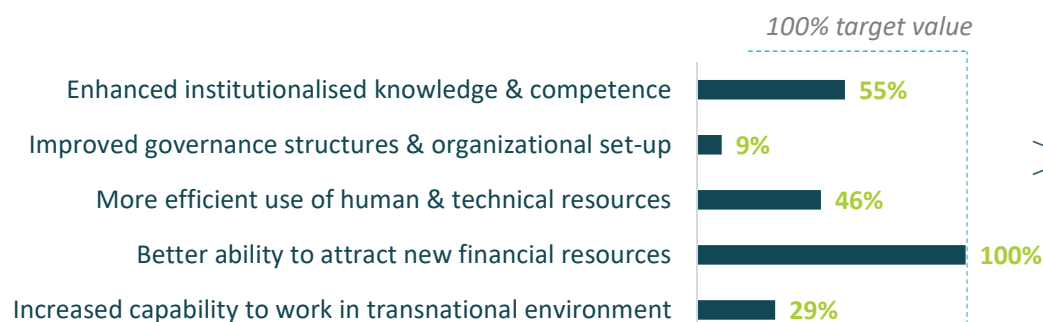
68
BENEFICIARIES

10
COUNTRIES

22.9 mill. EUR
TOTAL BUDGET

18.1 mill. EUR
PROGRAMME CO-FINANCING

AVERAGE INCREASE IN INSTITUTIONAL CAPACITY IN 2014-2022 WAS 40%:*



**Based on the experts' survey*

- Maritime safety is important subject for all BSR countries, but there are no working mechanisms on how to spread the knowledge.
- Basic organisational structures in the BSR are working well and are occasionally used, but existing amount of bureaucracy in maritime safety field is hampering the overall development.
- Utilisation of human resources is significantly improved during the years, but the challenge is the financing to maintain specialists.
- Availability of public funding is slightly better than private funding. There is a growing interest from the public as well as private sector to enable safe exploitation of the sea, which has increased the ability to attract new financial resources.



- Projects have effectively contributed to providing new state-of-the-art digital and technological solutions for navigation and for improving response capacity in case of accidents.
- The project platform ResQU2 particularly aimed at enhancing awareness and use of the existing guidelines and procedures, thus improving the preparedness of rescue authorities, services, seaports and other authorities for large-scale incidents in the Baltic Sea.
- Maritime safety and security have significantly improved over time in the Baltic Sea due to regulatory measures and technological developments, but it depends to a large extent on the competencies and capacities of the seafarers.



TYPES OF ACTIVITIES WHICH WERE MOST USEFUL FOR INCREASING INSTITUTIONAL CAPACITY:*

- Activities related to jointly developing various outputs in the project **62%**
- Networking activities **54%**
- Pilot activities, e.g., activities related to testing new solutions/ Communication activities **46%**

** According to % of SO 3.3 project partners, who participated in the survey*

SO 3.4 ENVIRONMENTALLY FRIENDLY SHIPPING

Enhancing clean shipping based on increased capacity of maritime actors

5 REGULAR PROJECTS / **1 PROJECT PLATFORM** / **2 EXTENSION PROJECTS** / **112** BENEFICIARIES / **10** COUNTRIES / **22.9 mill. EUR** TOTAL BUDGET / **18.1 mill. EUR** PROGRAMME CO-FINANCING

AVERAGE INCREASE IN INSTITUTIONAL CAPACITY IN 2014-2022 WAS 44%:*



*Based on the experts' survey

- Information on environmentally friendly shipping is well available on many internet platforms providing good knowledge to the relevant interest groups.
- Knowledge transfer from research institutions and universities towards the entire industry sector is still lacking behind.
- The public sector has good programs for funding. Public authorities, practitioners and researchers are aware of available funding sources.
- Public authorities, practitioners and researchers possess the knowledge and competences to work together with transnational partners. Interreg projects support to keep track on the contacts, which change regularly.



- Projects, such as GO LNG and the project platform CSHIPP, aimed at bridging the gap between the need for environmental protection and the pursuit of business performance. They supported cooperation and communication between regulators and the shipping industry. Projects also contributed to introducing new tools and explored new green solutions for shipping in the Baltic Sea region and other international markets.
- Challenges remain in relation to the target groups' capacity to internalize the results produced, as whole value chains and business process in the shipping industry are facing significant competition and cost pressure.



TYPES OF ACTIVITIES WHICH WERE MOST USEFUL FOR INCREASING INSTITUTIONAL CAPACITY:*

- Networking activities **78%**
- Pilot activities, e.g., activities related to testing new solutions **54%**
- Activities related to jointly developing various outputs in the project/ Communication activities **46%**

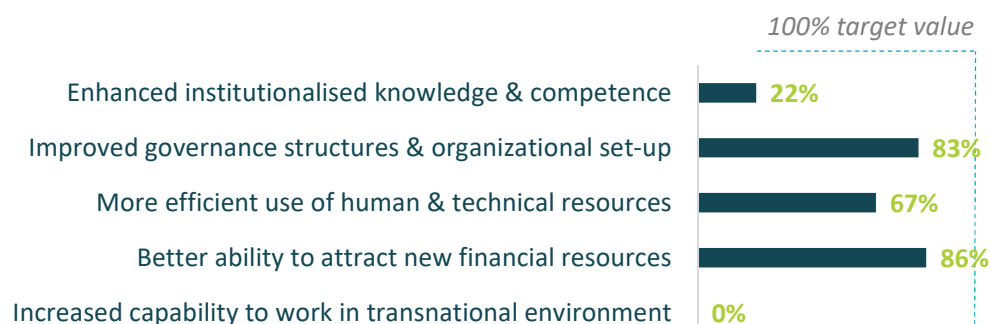
* According to % of SO 3.4 project partners, who participated in the survey

SO 3.5 ENVIRONMENTALLY FRIENDLY URBAN MOBILITY

Enhancing environmentally friendly transport systems in urban areas, based on increased capacity of urban transport actors

6 REGULAR PROJECTS	0 PROJECT PLATFORMS 2 EXTENSION PROJECT	89 BENEFICIARIES	10 COUNTRIES	22.9 mill. EUR TOTAL BUDGET	18.1 mill. EUR PROGRAMME CO-FINANCING
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AVERAGE INCREASE IN INSTITUTIONAL CAPACITY IN 2014-2022 WAS 50%:*



*Based on the experts' survey



- Projects such as SUMBA and SOHJOA LAST MILE succeeded to demonstrate how to effectively change suburb-city commuting towards more sustainable and inter-modal patterns in several pilot regions.
- Private car usage is an important challenge in the region and project targeted urban areas particularly affected by traffic congestion. It managed to prove that successfully implemented pilot can lead to further continuous activity and earmarking of the municipal budget for replication purposes.

- The idea of sustainable urban mobility is well established among larger cities. Lack of mechanisms for knowledge transfer among smaller towns and rural communes, especially when they do not belong to big urban functional areas.
- Sufficient availability of organisational structures with relevant capacity to develop, introduce and integrate different strategies and programmes related to sustainable urban mobility.
- Larger cities present high ability to attract public financial resources.
- Capability to work in transnational environment has not made any progress. Lack of human resources and their overuse is a limiting factor.



TYPES OF ACTIVITIES WHICH WERE MOST USEFUL FOR INCREASING INSTITUTIONAL CAPACITY:*

- Pilot activities, e.g., activities related to testing new solutions **91%**
- Activities related to jointly developing various outputs in the project **55%**
- Promoting the new/improved products, services, processes, tools etc. **45%**

* According to % of SO 3.5 project partners, who participated in the survey