

## EXECUTIVE SUMMARY

This document covers the impact evaluation of the Interreg NWE 2014-2020 Programme. The objective was to analyse and evaluate the contribution of the Programme and its projects to changes in the area. Many projects were still running and this report analyses the situation as of July/August 2023 through a sample of 36 (closed) projects.

A total of 102 projects have been supported by the Interreg NWE Programme 2014-2020, with 1 168 partners involved. Many of the projects (43%) belong to Priority Axis 1 on Innovation, 35% to Priority Axis 2 (Low Carbon) and the remaining 22% to Priority Axis 3 (Resource and materials efficiency). The financial absorption of the Programme is very positive. Based on data from the Joint Secretariat (JS) in September 2023, EUR 396 607 536 from the European Regional Development Fund (ERDF) was allocated to projects. This is 106.5% of the Programme's ERDF budget, though spending is expected to be 96% to 98% at programme closure.

### Programme outputs and target achievement

The projects have generated remarkable outputs. Specific Objective (SO) 1 projects, for example, developed and tested 506 technologies, products, services and processes in real life conditions and implemented 73 social innovation pilot actions. SO2 project outputs include 7 444 households with improved energy classification and an annual decrease of more than 95 900 tonnes of CO<sub>2</sub> equivalent - Greenhouse gas (GHG) emissions. SO3 projects adopted or applied 72 new low-carbon technologies. SO4 projects implemented 31 low-carbon transport solutions, while SO5 projects implemented and tested 104 innovative waste material products/services.

In addition to substantial SO-specific outputs, the projects have generated a notable aggregated output, including more than EUR 456 million of additional funding leveraged by projects, over 1 140 new jobs and more than 1 640 jobs maintained. In addition, 3 957 enterprises have received support, 1 184 enterprises have co-operated with research institutions and 1 115 enterprises have introduced new to the market products as a result of NWE projects.

Achievement of the output indicator target is very high for all SOs, widely exceeding expectations, especially SOs 1 and 2. The targets for most output indicators have already been vastly exceeded. Only SO4 falls short of several output indicator targets, due to a low number of projects.

### Results, benefits and impact

SO 1 projects increased innovative capacity by connecting regions, territories, networks and clusters. Projects have developed and tested new technologies, processes and products under real life conditions. Projects to improve the competitiveness of SMEs brought together automotive and consumer goods production, metal and machine construction, as well as agri-food and medical products with new technologies and innovative processes such as digitalisation, advanced materials, sensor techniques, robotics and digital administration. Most of the analysed projects have cross-cutting elements that link different technologies (e.g. digitalisation, sensors, robotics) with innovation stages (e.g. SME growth, demonstration, proof-of-concept) in sectors such as healthcare, energy, agri-food, metal and machine

construction and retail. They have contributed to new tools and products, for example by investing in a pre-pilot facility for new technology and pilot testing. Voucher schemes have supported multiple SMEs and entrepreneurs with advice and guidance. The six social innovation projects brought interesting results especially in addressing vulnerable or excluded groups. Important unintended and secondary benefits include transnational networks for the bioeconomy, life sciences and ocean energy. These projects created concrete benefits including company growth, employment and rural/peripheral region attractiveness for jobs and workers. SO2 projects facilitated low-carbon energy strategies to reduce GHG emissions. These focus on renewables and energy efficiency, with addressing climate change as an indirect effect. One project increased the supply of renewable energy and low carbon heat, including waste heat, to residential and commercial buildings. Two projects addressed bottom-up energy communities and decentralised energy production. These increased the number of local energy community co-operatives and their effectiveness. Two projects introduced industrialised, efficient energy solutions in refurbishments. SO2 projects addressed 'soft' aspects of renewable energy development such as feasibility studies, increasing public acceptance and speeding up infrastructure deployment. SO3 projects contributed to the uptake of low carbon technology, products, processes and services. The projects have improved the match of technology supply and service provision in innovative low-carbon fields for the private and public sectors. The projects matched the need for renewable and efficient energy technology with possibilities for businesses to use new technology. Other projects helped to establish more efficient and smart energy management and public lighting. SO4 projects facilitated transnational low-carbon transport solutions to reduce GHG emissions in NWE. Long-term contributions might decrease emissions through smart and low emission mobility, improved CO<sub>2</sub> transformation, facilitate hydrogen powered heavy-duty transport as well as develop and promote cycle highways. Projects focused on research and innovation, supporting the development and implementation of new technologies, products and services. SO5 projects contributed to the (re)use of material and natural resources in NWE and were targeted at resource-intensive sectors. The projects started at different points in the value chain to make them more circular. Four projects valorised by-products or waste material, one project contributed to reusing (waste) products, one aimed at reducing waste and losses during production and one project contributed by developing alternative, less harmful products.

All the projects addressed transnational development needs, as defined in the Cooperation Programme. Understanding different conditions while developing joint and valid solutions for stakeholders in different countries is an important added value of transnational projects. Results are usually more transferable if they have been tested and applied in different countries and territories. Specific emerging and innovative sectors are often too small in individual NWE Member States to receive funding or test under real-world conditions. Thus, cooperation across borders is necessary for the expertise available and for a critical mass of demand.

The impact has increased with the involvement of sector-specific and European associations who can widen and extend dissemination and even build new products and services on top of NWE project results, as well as demonstration sites for visitors and for explaining impact mechanisms.

Capitalisation extends the uptake of project results and has brought an important added value to the Programme. A review of intended outputs and results shows important contributions from the capitalisation activities. In most cases, these add to existing outputs and results. In some cases, qualitative advances are also foreseen, such as new or extended innovation networks or clusters, new

focus on products or markets, new pilots or improved technology. Capitalisation also considerably extends partnerships and transnational cooperation within the Programme.

## Contribution to territorial development, cohesion and competitiveness

Projects across all SOs have increased the **enabling conditions for cohesion**: governance, cooperation and coordination of policies and stakeholders. Important examples from projects show the Programme has enhanced capacity and supported cooperation and coordination.

- The Programme has **contributed significantly to better aligned national and transnational priorities and to better coordination of agendas**. This especially concerns business and technological innovation in emerging fields such as health digitalisation, life sciences, bioeconomy, agri-food innovation, low carbon district heating, energy efficient buildings and retrofitting building stock, energy communities, construction, ocean energy, urban mobility, hydrogen-powered freight transport, the circular economy for agri-food, textiles and waste reduction.
- The Programme has contributed to **better conditions for social, organisational and technological innovation** in many policy fields and economic sectors.
- The Programme has **increased capacity of decision makers to solve challenges**, especially through guidance, training, advice and pilot demonstrations.
- The Programme has contributed to **more efficient and effective processes and workflows** in public and private sectors. New tools, guidance material, libraries, methodologies and blueprints created in projects have helped to improve the efficiency of processes.
- The Programme has **raised topics up the political agenda**, especially in local and regional administrations in NWE, but also national and EU policy agendas.
- The Programme has helped **make regions more attractive** with economic, ecological, social and structural improvements. The effects have been mostly indirect, for example addressing disadvantaged groups or territories such as peripheral or less populated areas, creating opportunities for business and employment and improving access to services.

The Programme contributed significantly **to competitiveness and balanced territorial development and cohesion** in many categories. The highest contribution across all SOs is under 'More competitive companies and SMEs'. There are major contributions also for 'More and better technologies, products and services' and 'Increased attractiveness and quality of life'. These contributions are meaningful and systematic across at least three SOs with diverse themes and geographical areas.

Several projects under different SOs also contributed to 'Increased capacity level of the public authorities in NWE in implementing low carbon measures', 'Enhancing public acceptance and removing barriers to the adoption of low carbon technology deployment' and 'Generation and/or maintenance of jobs'.

## Territorial impact

Almost all NUTS2 regions in North-West Europe have benefitted from the Programme. Those without lead, project or associate partners are Bourgogne in France, Oberfranken in Germany and Cumbria in

the UK. Rural and intermediate regions benefited slightly less than urban ones. Exceptions are Highlands and Islands in the UK and Southern Ireland. Urban regions tend to have more Programme participation in line with their population, knowledge-based organisations, researchers and innovative SMEs.

The analysis per SO shows that many projects have a territorial focus, actively addressing disparities between types of territories, or implicitly focusing on a challenge for an urban, rural or coastal region. Many projects tested tools and methodologies in specific types of territory. Sometimes the central topic addressed a specific type of territory or territorial development challenge, for example islands and coastal regions, or opportunities for farmers and agri-food SMEs. Many projects considered transferring knowledge to similar or different regions, adopting a territorial perspective. Stimulating a territorial focus for projects during application and selection helps to make the results and effects of projects easier to transfer to different territories.

The analysis has identified diverse territorial effects from projects. Many that dealt with new technology and innovation in fields such as health, housing and circular approaches produced social and environmental benefits. For example, phosphorus recovery benefits rural areas where it is used as a fertiliser or feed additive, however there are also positive effects on urban areas where it is recovered from municipal sewage, including better water quality. Some projects addressing territorial challenges in rural areas or coastal regions with less business diversification and few employment opportunities paved the way for new business opportunities, increasing the competitiveness of companies in certain sectors (e.g. agri-food, textile) or creating new job and business profiles within existing or emerging value chains. Some projects especially under SO5 have unintended ecological long-term benefits by increasing resource efficiency and using by-products previously considered as waste. This reduces the amount of municipal, industrial, food or farm waste and pollution of natural resources. Other projects improve the attractiveness of territories, for example by reducing limitations and everyday challenges in peripheral and remote areas. Some projects contribute to testing and implementing better access to healthcare and medical services in remote areas.

## **Contribution to Europe 2020**

The smart and sustainable growth contributions to Europe 2020 are significant, though less so for inclusive growth. There are consistently high and medium thematic contributions for smart growth (SO1). These are reinforced by cross-thematic contributions from SOs 3, 4 and 5. For sustainable growth, the biggest contribution is to reducing greenhouse gas emissions (SOs 2, 3 and 4) and a big contribution to improving energy efficiency (SO2). There are medium contributions to inclusive growth, increasing the employment rate of people aged 20-64 (SO1, SO3) and high contributions for promoting social innovation and improving access to affordable, sustainable and quality services in NWE (SO1).

## **Lessons learnt**

The following lessons on implementation of the NWE Programme are relevant:

- The leader-follower approach in many projects, especially under SO1 and SO2, actively brought together stronger and weaker regions to stimulate knowledge transfer and learning. This approach was actively accepted and integrated by projects under all SOs. This added to the learning effect for follower regions and reduced disparities between regions in NWE. This approach is recommended.

- Capitalisation calls helped to multiply impact in many ways and for several projects. Capitalisation strengthened impacts, extended them beyond the initial partnership and approaches, and helped to widen the outreach of projects. Projects successful within the normal project lifespan (36 months) tend to be highly effective and efficient during capitalisation, with more results in less time and less felt burden from project management.
- Capitalisation increased the geographical extension and territorial impact of the Programme. New partners, regions and countries as well as the requirement to develop a more detailed or extended territorial focus were especially useful for projects and led to more differentiated territorial impact.
- Another good practice within capitalisation is the positive synergy from increased cooperation (a) with other Interreg NWE projects, or (b) with projects and partners outside NWE working on the same topic. This is expected to lead to positive synergies between pilot actions and new solutions as well as better knowledge transfer between NWE and other European regions.
- A positive aspect was the NWE Programme's contribution to Europe 2020 smart growth with cross-thematic contributions from SOs focussing on sustainable growth (SOs 3, 4 and 5). This was foreseen by the NWE Programme from the outset. Future programming processes should foresee cross-thematic contributions, for example between SOs of different priority axes and / or between SOs of the same priority axis. This not only strengthens the internal coherence of a Programme strategy, but also increases the potential for outputs.
- Output indicators have been a valuable tool for monitoring project implementation and effectiveness. Despite using a methodology to define them, not all output indicators had adequate and realistic targets. This hampered analysis of the effectiveness. However, there is no easy solution as not all projects and outputs can be predicted from the outset and there will always be uncertainties for project implementation and output estimates.
- Result indicators in line with European Commission requirements for the 2014-2020 funding period (for context indicators) have not been useful to measure and analyse programme results. They could only be used for a general idea of socio-economic conditions in the area, but not to define the programme contribution to certain impacts or categories relevant for transnational projects.
- The early reflection (in the 2014 ex-ante evaluation) and 2016-2017 definition of impact pathways, intermediate impact dimensions, indicators and baselines for impact categories as well as storylines for impact have proven to be highly valuable to the impact evaluation at the end of the Programme. This reflection about expectations for projects and Programme impact should be carried out at the beginning of a funding period. This enables tools for monitoring and reporting to be developed and adjusted (e.g. project reports, final appraisal reports, indicators, baseline values, realistic target values, etc.).
- 'Final Appraisal' reports have been extremely useful for reflections within the project and the JS, for monitoring results, benefits and short-term effects, as well as realistic estimates of long-term contributions. The reports provide valuable information on projects especially territorial relevance, contributions to Programme results, indicators per SO and cohesion indicators.
- Discussion and knowledge about Programme impacts in current and future funding periods can be stimulated by the impact evaluation and by the publication 'NWE making an impact - Cooperation in action', the 'NWE Making-an-impact' website and success stories. This helps increase understanding of short- and long-term benefits and contributions to change of a territorial cooperation programme.