IMPLEMENTATION REPORT FOR THE EUROPEAN TERRITORIAL COOPERATION GOAL

PART A

IDENTIFICATION OF THE ANNUAL IMPLEMENTATION REPORT

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IDENTIFICATION OF THE ANNUAL IMPLEMENTATION REPORT **1**

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Key information on the implementation of the cooperation programme for the year concerned, including on financial instruments, with relation to the financial and indicator data.

The year 2018 was a milestone year for the Programme implementation. Even though the NWE delivery accelerated in 2017, significant efforts had to be made by the Programme authorities to increase the speed of funding allocation and simultaneously monitor the projects already being implemented. In 2018, the Monitoring Committee met five times (MC9 31 January-1 February, MC10 7 March, MC11 29 May, MC12 26-27 June and MC13 25-26 October 2018) in order to process the project selection for both step 1 and step 2 submissions of the application process, including a one-step targeted call on renewable energy. The efforts resulted in 30 projects approved across all five Programme Specific Objectives, for which more specific information is provided in sections 3.1 and 9.1 of this report. In general, the approved step 2 projects represented a good strategic fit to the Programme, were most promising in terms of envisaged results and long-term effect potential and entailed a high level of transnational cooperation.

It should be noted that the Programme is very result oriented in the project selection. The application process is divided into two steps (step 1 and 2). The first step ensures that the projects have a clear objective and result, that they have a clear potential to deliver outputs fitting into the Programme indicator framework and group partners relevant to the target groups of the individual Specific Objective. Step 2 focuses on the development of the project investment and activity plan, detailed deliverables and output contributions as well as budgetary aspects. Such an approach has enabled the Programme to implement thematic concentration on the ground, however it has taken substantial resources and imposed an intense workplan for all the involved authorities, confirming their dedication to NWE.

Last but not least, the three workshops organised in April, June and September 2018 for successful step 1 applicants and targeted call applicants provided a full picture of the Programme requirements and elements to consider when developing a fully-fledged step 2 application. It was also an occasion for the Lead Partners to meet project officers individually and discuss operational aspects and details.

The year 2018 also led to the closure of 2 additional calls and the receipt of 68 step 1 (call 8) and 20 step 2 (call 7) applications for the Programme funding. These calls will be elaborated on in the AIR 2019 due to greater time relevance (decisions being taken by the MCs in January and February 2019).

Apart from the project development selection, the 2018 Monitoring Committees discussed a variety of topics related to the thematic Programme context and progress. This included the thematic and financial monitoring (incorporating risk management and proposed Programme modifications), gap analysis and capitalisation strategy and evaluation, audit, Brexit and preparations for the post 2020 period.

Finally, the Programme has been actively involved in the Core Group of the electronic Monitoring System group (eMS) set up by INTERACT. The system enables the monitoring of projects and Programme implementation as well as electronic exchange of data between programmes and beneficiaries. NWE, together with representatives of the Central Europe, Central Baltic and Austria - Hungary transnational and cross-border programmes constitutes the “core group” of the system now used by 34 ETC programmes. In this reporting period, the core group met twice (in May and October 2018) to discuss issues such as the new functionalities from the latest beta test release, GDPR requirements, the tables included in the monitoring report template for projects as well as data generation for the Programme Annual Implementation Report.

It should also be noted that the Programme was actively involved in inter-programme events and the

preparations for the new regional policy post 2020. As a few of numerous examples, the meetings with DG Regio and active participation in DG Regio events should be mentioned, such as the “Good Governance for Cohesion” held in Brussels on 24th May 2018, “BlueInvest” co-organised by DG MARE and DG Regio on 23rd October 2018 in Vigo, Spain (match-making event bringing together innovators and investors to boost the economic potential of the ocean while protecting its marine resources) or the “Migration flows and integration policies” conference held in Athens, Greece on 22 November 2018 (co-organised by ESPON and INTERACT). NWE was also part of the ESPON Territorial Evidence Support project, Central Europe Group, which focused on the territorial characterization and reference analysis for preselected transnational and cross-border programmes (meetings in Vienna, June 2018 and Lille, France in October 2018).

3. IMPLEMENTATION OF THE PRIORITY AXIS

3.1 Overview of the implementation

ID	Priority axis	Key information on the implementation of the priority axis with reference to key developments, significant problems and steps taken to address these problems
1	INNOVATION	1. The year 2018 led to 19 submissions under Priority 1, Specific Objective 1. The Programme Monitoring Committees that took place in 2018 led to the approval of 15, covering the three Types of Actions of the Priority 1: a) Building capacity of regions and territories to improve their innovation performance, for instance: • Provision of testing facilities and research know-how to allow SMEs develop and test new products • Enabling SMEs to adopt new solutions in a balanced efficient way (costs, labour, flexibility) through training b) Improving the competitiveness of enterprises, e.g.: • Health and medicine (application of advanced materials and regenerative medicine/medical devices, e-health products) • Agriculture and food production (value chains for new bio-based products, use of smart data solutions increasing product quality) • Material processing (machine processing - transformation of production processes, increase in the combined technical- and commercial maturity level for SME technologies) • Metal (optimisation of productivity of production lines) • Life science and biotechnology (international growth and innovation capacity of SMEs) • Electronics and computing (photonic products) • Water treatment (new products for the water and wastewater sector). • Energy (development of new or improvement of existing products and services). c) Delivering societal benefits through innovation • Inclusion of people not in education, employment or training • Innovative approaches to business support in geographically excluded areas 2. The NWE implementation evaluation carried out in 2018 confirmed that the Programme would achieve the results envisaged for Priority 1 (SO1).
2	LOW CARBON	1. NWE continued the efforts to reinforce the existing project pipeline and allocate the remaining funding. As calls 4,5 and 6 resulted in only 5 approved projects in 2018, the Programme authorities needed to strengthen the focus on Priority 2. Consequently, MC8 decided, in September 2017, to open a targeted call on renewable energy, which resulted in 9 project applications (2 in SO2, 6 in SO3 and 1 in SO4), 4 of them being approved by the Programme Monitoring Committee. In total, the year 2018 resulted in 9 projects approved (2 under SO2, 6 under SO3 and 1 under SO4). Together with the projects

ID	Priority axis	Key information on the implementation of the priority axis with reference to key developments, significant problems and steps taken to address these problems
		approved in previous years, the total of 27 projects was approved by end 2018 under Priority 2 (8 under SO2, 14 under SO3 and 5 under SO4), solidifying the pipeline for all three SOs (from 18 projects approved over the previous years of Programme implementation to 27, which is a 50% increase in 2018). 2. The number of approved projects is aligned with the initial expectations, as in the programming process NWE authorities envisaged 10 projects approved under SO2, 15 under SO3 and 10 under SO4. The number of approved projects grew respectively in 2019 (which is beyond the reporting period for this AIR, however, needs to be mentioned to put the values in the global perspective) up to 11, 15 and 8 projects for SO2, 3 and 4 respectively. This means that the Programme's expectations for the number of incoming projects were correct in the programming phase, with the total number of projects achieved and (slightly) exceeded. 3. The implementation evaluation carried out in 2018 and additional developments in the second half of 2018 confirmed that the Programme achievements led to the delivery of expected results for all three SOs.
3	RESOURCE AND MATERIALS EFFICIENCY	1. The year 2018 resulted in 13 submissions under Priority 3, Specific Objective 5 (Call 3 and 4: 4 submissions, call 6: 9 submissions). The Programme Monitoring Committees that took place in 2018 led to the selection of 6 of them. The approved projects covered the following thematic areas: a) Resource productivity and establishment of new value chains: • WOW! - recovery and reuse of carbon material from wastewater at wastewater treatment plants • Di-Plast - uptake of recycled plastic material through improved quality control and processing in the packaging • CEDACI - development of a robust, secure and economically viable critical raw material (CRM) supply chain, by increasing its recovery and reuse b) Circular renovation and construction • FCRBE - increase in the volume of building components being circulated for reuse by the construction industry • CHARM - development of transferable strategies for circular construction and renovation of social rented housing, aimed at prevention of downcycling • URBCON -application of mineral by-products as main resource for the production of concrete 2. These projects completed the existing pipeline, with the total number of projects approved under Priority 3 by the end of 2018 equal to16 projects. All projects are of high thematic relevance to the Type of Action 9 of the Cooperation Programme (Implementing new technologies, services, products and processes to improve resource efficiency). 3. The NWE implementation evaluation carried out in 2018 confirmed that the Programme would achieve the results envisaged for Priority 3 (SO5).
4	TECHNICAL	1. Both the Contact Points and the Joint Secretariat were mainly involved in the Programme promotion, project

ID	Priority axis	Key information on the implementation of the priority axis with reference to key developments, significant problems and steps taken to address these problems
	ASSISTANCE	development activities, project monitoring and the overall Programme management. 2. The Contact Point network was particularly involved in the step 1 project development activities (individual meetings, regional & national events, transnational PI Lab event). It provided also input for the update of the gap analysis. 3. With five rounds of assessment (one in step 1, three in step 2 and one specific targeted call), the Project Unit performs nearly on-going evaluations of project's applications while still ensuring assistance to applicants (in particular in step 2). At the same time, it had to monitor the first progress reports submitted by the already approved projects. Additional human resources were recruited to be able to cope with the workload. 4. The Programme & Support Unit, besides its daily tasks related to the Programme management and the support to the main programme stakeholders, had 2 specific tasks to monitor in 2018: the first round of audits of operation and the implementation evaluation; both were successfully carried out. 5. The Communication Unit organised in 2018 two transnational events and ensured the visibility of the NWE Programme in several external events, while updating the programme website and providing guidance to projects on the communication activities. It contributed also to the development and the implementation of the capitalisation strategy.

3.2 Common and programme specific indicators (Article 50(2) of Regulation (EU) No 1303/2013)

Priority axes other than technical assistance

Priority axis	1 - INNOVATION
Investment priority	1b - Promoting business investment in R&I, developing links and synergies between enterprises, research and development centres and the higher education sector, in particular promoting investment in product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through smart specialisation, and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in key enabling technologies and diffusion of general purpose technologies

Table 2: Common and programme specific output indicators - 1.1b

(1)	ID	Indicator	Measurement unit	Target value	2018	Observations
F	CO01	Productive investment: Number of enterprises receiving support	Enterprises	540.00	472.00	Total output indicator contributions for ongoing (not completed) operations: 472 (partially achieved output values). The high value for this indicator is due to several projects focusing on generic business support and hence involving many companies through generic type of support provided than initially anticipated (nevertheless aligned with the definition for CO01 provided by the European Commission and applied by the Programme). The Programme initially estimated 20 companies supported per project approved, some projects however provide support to more than 20 enterprises, which leads to high output values and an overachievement.
S	CO01	Productive investment: Number of enterprises receiving support	Enterprises	540.00	1,432.00	Total project pipeline value: 2081.The high value for this indicator is due to several projects focusing on generic business support and involving many companies through more generic type of support than initially anticipated (still aligned with the definition for CO01 provided by the European Commission and applied by the Programme). The Programme initially estimated 20 companies supported per project approved, some projects however provide support to more, which leads to high output values. 2018 projects: 1432 (COTEMACO:60, EYES:25, HappyMoo: 503, Machining 4.0:50, MATMED:90, MiteControl:16, NWE MEA: 40, NWE-Chance:3, OIP4NWE:13, OPIN:123, PASSION-HF:4, SuNSE:200, UNEET:175, Water Test Network:120, AGRIWASTEVALUE: 10). 2017 projects: 245 (BONE:9, SHICC:33, UV-ROBOT:3, Codex4SMEs:200). 2016 projects:404 (B4H:330, BE-GOOD:10, BioBase4SME:46, QCAP:3, eMEN:15).
F	CO26	Research, Innovation: Number of enterprises cooperating with research institutions	Enterprises	540.00	295.00	Total output indicator contributions for ongoing (not completed) operations: 295 (partially achieved output values). VR4REHAB contributed 262 - the project develops rehabilitation protocols for patients with musculosceletal system and neurodisability, requiring high involvement of and co-creation between SMEs, rehabilitation clinics and universities.
S	CO26	Research, Innovation: Number of enterprises cooperating with research institutions	Enterprises	540.00	105.00	Total project pipeline value : 546 2018 project pipeline : 105. HappyMoo :3, Mite Control 15, NWE MEA: 40, NWE Chance:3, OIP4NWE:6, OPIN:24, PASSION-HF:4, Water Test Network:10 2017 project pipeline: 430, BONE:3, IDEA:32, Codex4SMEs: 20, VR4REHAB:375 2016 project pipeline : 11 ASPECT:8, QCAP:3 2017 values are lower than 2018 values due to the fact that, in 2017, the Programme approved the VR4REHAB project, having a high contribution to this indicator. The project develops rehabilitation protocols for patients with musculosceletal system and neurodisability, requiring high involvement of and co-creation between SMEs, rehabilitation clinics and universities. In the programming phase the NWE authorities counted 20 companies per project (x27 projects=540). The value for the selected projects is higher than the target due to the high value of VR4REHAB explained above.
F	CO28	Research, Innovation: Number of enterprises supported to introduce new to the market products	Enterprises	340.00	367.00	Total output indicator contributions for ongoing (not completed) operations: 367 (partially achieved output values). B4H contributed 360, due to delivered generic business support. The high value for this indicator is due to several projects focusing on generic business support and hence involve many companies through generic type of support provided than initially anticipated (nevertheless aligned with the definition for CO01 provided by the European Commission and applied by the Programme). The Programme initially estimated 20 companies supported per project approved, some projects however provide support to more than 20 enterprises, which lead s to high output values and an overachievement.
S	CO28	Research, Innovation: Number of enterprises supported to introduce new to the market products	Enterprises	340.00	134.00	Total project pipeline value :518 2018 project pipeline: 134. MATMED:40, NWE MEA:40, NWE-Chance: 3, OIP4NWE:7, OPIN:10, PASSION-HF:4, Water Test Network: 20, AGRIWASTEVALUE: 10 2017 project pipeline: 28 : UV-ROBOT:3, VR4REHAB:25 2016 project pipeline 356: B4H:330, BE-GOOD:10, BioBase4SME:13, QCAP:3 Changes to 2017 project values were due to additional technical requirements concerning project outputs. Adjustments to 2016 project values were due to project modification requests. The high value for this indicator is due to several projects focusing on generic business support projects, which involve many companies through more generic type of support provided.
F	CO29	Research, Innovation: Number of enterprises supported to introduce new to the firm products	Enterprises	200.00	33.00	The values will be reported only for fully implemented operations. Total output indicator contributions for ongoing (not completed) operations: 33
S	CO29	Research, Innovation: Number of enterprises supported to introduce new to the firm products	Enterprises	200.00	462.00	Total project pipeline value: 677 2018project pipeline value: 462. COTEMACO:50, HappyMoo:150, OIP4NWE:7, SuNSE:70, UNEET:175, Water Test Network:10 2017 project pipleline value:206. IDEA:10, Codex4SMEs:46, VR4REHAB:150 2016 project pipeline value 9: BioBase4SME:9 Changes to 2017 project values were due to additional technical requirements concerning project outputs. The high value for this indicator is due to several projects focusing on generic business support.
F	1.01	Number of new or enhanced transnational clusters or innovation networks	No. of clusters and innovation networks	27.00	3.00	Total output indicator contributions for ongoing (not completed) operations: 3 (partially achieved output values).
S	1.01	Number of new or enhanced transnational clusters or innovation networks	No. of clusters and innovation networks	27.00	28.00	Total project pipeline value: 41 In the programming phase, the Programme authorities did not realise that SO1 projects could contribute to this indicator and CO01 simultaneously (indicator related to the enterprises receiving support). When setting the Programme targets, the projects creating networks only (soft projects) were counted under 1.01 and not the projects contributing to CO01 as a principle, also setting up business support networks.

(1)	ID	Indicator	Measurement unit	Target value	2018	Observations
						This is why the initial target has been exceeded by the Programme. 2018 project pipeline value: 28. COTEMACO:4, EYES: 1, HappyMoo:2, Machining 4.0:1, MATMED:1, MiteControl:2, NWE MEA:1, NWE Chance:1, OIP4NWE:1, OPIN:1, PASSION-HF:1, SunSE:1, Water Test Network:10, AGRIWASTEVALUE:1 2017 project pipeline value 11: IDEA:6, SHICC:1, UV-ROBOT:2, Codex4SMEs:1, VR4REHAB:1 2016 project pipeline value 2: B4H:1; BioBaseSME:1
F	1.02	Number of technologies, products, services and processes developed and tested in real life conditions	No. of solutions tested	68.00	33.00	Total output indicator contributions for ongoing (not completed) operations: 33.
S	1.02	Number of technologies, products, services and processes developed and tested in real life conditions	No. of solutions tested	68.00	159.00	Total project pipeline value 223. 2018 project pipeline value: 159. EYES:3, HappyMoo:5, Machining 4.0:12, Mite Control:3, NWE-Chance:3, OIP4NWE:1, OPIN:30, PASSION-HF:1, UNEET:1, Water Test Network:90, AGRIWASTEVALUE:10. 2017 project pipeline value: 24. BONE: 2, IDEA:13, SHICC:1, UV-ROBOT:3, VR4REHAB:5. 2016 project pipeline value:40. ASPECT:7, BE-GOOD:10, BioBase4SME:15, QCAP: 1, eMEN: 7. In the programming period, the NWE authorities counted 17 projects x 4 technologies/products/services/processes per project =68. However, some of the approved projects exceeded the value of 3. Those are projects focusing on value chain development or waste stream valorization and/or development and testing of several processes and/or products simultaneously.
F	1.03	Number of pilot actions implemented, focusing on social innovation	No. of actions	30.00	0.00	Total output indicator contributions for ongoing (not completed) operations:0 (partially achieved output values). At the end of 2018 the social innovation projects were early in their implementation phase, which is reflected in the low level of outputs delivered in 2018 (as expected).
S	1.03	Number of pilot actions implemented, focusing on social innovation	No. of actions	30.00	139.00	Total project pipeline: 143 2018 project pipeline: 139. EYES: 5, UNEET: 126 (high due to the fact that support sessions for companies and individuals needed to be counted separately, each constituting a "micro-initiative", SuNSE:8 2017 project pipeline: 4. SHICC:4. 2016 project pipeline: 0. No social innovation projects were approved by the end of 2016. Changes to 2017 project values were due to additional technical requirements concerning project outputs. In the programming phase, the NWE authorities counted 10 projects leading to 3 pilot actions each (=30). All approved projects exceeded this value. In particular UNEET has a high value, due to 126 micro-initiatives benefiting 750 individual end-users – people not in training, education or employment.
F	1.04	Number of jobs created in all economic sectors	No. of jobs	860.00	133.00	Total output indicator contributions for ongoing (not completed) operations: 133 (partially achieved output values).
S	1.04	Number of jobs created in all economic sectors	No. of jobs	860.00	158.00	Total project pipeline :273. 2018 project pipeline value: 158. COTEMACO: 125, OIP4NWE:23, PASSION-HF:5. AGRIWASTEVALUE: 5 2017 project pipeline value: 0 2016 project pipeline value: 115. BE-GOOD:15, B4H:100 The project contribution to job creation and maintenance will not be as significant as initially anticipated. It is not a primary goal of the projects or the Programme.
F	1.05	Number of jobs maintained in all economic sectors	No. of jobs	860.00	1.00	Total output indicator contributions for ongoing (not completed) operations: 1.
S	1.05	Number of jobs maintained in all economic sectors	No. of jobs	860.00	1,280.00	Total project pipeline value:1280 2018 project pipeline value: 1280. COTEMACO:1250, Machining 4.0: 25, PASSION-HF:5. The value is higher than originally anticipated. In the programming phase the NWE authorities counted 43 projects x 20 jobs (=860). Only 4 social innovation projects have been approved to date, two of three representing values that are lower than expected. However the project COTEMACO (leading to 1280 jobs maintained) is working with 50 SMEs to avoid relocation and subsequent loss of jobs as well as an increase of turnover and revenues due to flexible and more efficient production processes being delivered (assessed in at least 10% increase of an average of €10M turnover/SME, equal to €1M/SME).
F	1.06	Amount of funding leveraged by the project (in €)	EUR	222,000,000.00	0.00	Total output indicator contributions for ongoing (not completed) operations: 0 (partially achieved output values). The amount of funding leveraged by the projects will not be as significant as initially anticipated.
S	1.06	Amount of funding leveraged by the project (in €)	EUR	222,000,000.00	13,000,000.00	Total project pipeline value: 13,000,000 2018 project pipeline value: MATMED:5,000,000, NWE MEA: 8,000,000, 2017 project pipeline value: 0 2016 project pipeline value:0 The amount of funding leveraged by the projects will not be as significant as initially anticipated.
F	1.07	Number of end-users benefitting from social innovation	No. of end-users	600.00	31.00	Total output indicator contributions for ongoing (not completed) operations: 31 (partially achieved output values). At the end of 2018 the social innovation projects were early in their implementation phase, which is reflected in the low level of outputs delivered in 2018 (as expected).
S	1.07	Number of end-users benefitting from social innovation	No. of end-users	600.00	2,050.00	Total project pipeline value: 2780. 2018 project pipeline value: 2050. EYES:1,000, SuNSE:300, UNEET: 750 2017 project pipeline: 730. SHICC: 730, In the programming phase, the NWE authorities counted 10 projects leading to 3 pilot actions each, having an impact on 20 end-users each. All approved projects exceeded this value. UNEET has a high value, due to 126 micro-initiatives benefiting 750 individual end-users – people not in training, education or employment. EYES will reach 1,000 end-users – 400 of them using regular support schemes, 25 becoming early-stage entrepreneurs. SuNSE allows 300 people access a business support programme, leading to the development of 200 SMEs. SHICC addresses the issue of housing affordability (develops and manages homes affordable to people with low and medium incomes) through 4 big scale pilots.

(1)	ID	Indicator	2017	2016	2015	2014
F	CO01	Productive investment: Number of enterprises receiving support	0.00	0.00	0.00	0.00
S	CO01	Productive investment: Number of enterprises receiving support	245.00	404.00	0.00	0.00
F	CO26	Research, Innovation: Number of enterprises cooperating with research institutions	0.00	0.00	0.00	0.00
S	CO26	Research, Innovation: Number of enterprises cooperating with research institutions	430.00	11.00	0.00	0.00
F	CO28	Research, Innovation: Number of enterprises supported to introduce new to the market products	0.00	0.00	0.00	0.00
S	CO28	Research, Innovation: Number of enterprises supported to introduce new to the market products	28.00	356.00	0.00	0.00
F	CO29	Research, Innovation: Number of enterprises supported to introduce new to the firm products	0.00	0.00	0.00	0.00
S	CO29	Research, Innovation: Number of enterprises supported to introduce new to the firm products	206.00	9.00	0.00	0.00
F	1.01	Number of new or enhanced transnational clusters or innovation networks	0.00	0.00	0.00	0.00
S	1.01	Number of new or enhanced transnational clusters or innovation networks	11.00	2.00	0.00	0.00
F	1.02	Number of technologies, products, services and processes developed and tested in real life conditions	0.00	0.00	0.00	0.00
S	1.02	Number of technologies, products, services and processes developed and tested in real life conditions	24.00	40.00	0.00	0.00
F	1.03	Number of pilot actions implemented, focusing on social innovation	0.00	0.00	0.00	0.00
S	1.03	Number of pilot actions implemented, focusing on social innovation	4.00	0.00	0.00	0.00

(1)	ID	Indicator	2017	2016	2015	2014
F	1.04	Number of jobs created in all economic sectors	0.00	0.00	0.00	0.00
S	1.04	Number of jobs created in all economic sectors	0.00	115.00	0.00	0.00
F	1.05	Number of jobs maintained in all economic sectors	0.00	0.00	0.00	0.00
S	1.05	Number of jobs maintained in all economic sectors	0.00	0.00	0.00	0.00
F	1.06	Amount of funding leveraged by the project (in €)	0.00	0.00	0.00	0.00
S	1.06	Amount of funding leveraged by the project (in €)	0.00	0.00	0.00	0.00
F	1.07	Number of end-users benefitting from social innovation	0.00	0.00	0.00	0.00
S	1.07	Number of end-users benefitting from social innovation	730.00	0.00	0.00	0.00

(1) S=Cumulative value - outputs to be delivered by selected operations [forecast provided by beneficiaries], F=Cumulative value - outputs delivered by operations [actual achievement]

Priority axis	1 - INNOVATION
Investment priority	1b - Promoting business investment in R&I, developing links and synergies between enterprises, research and development centres and the higher education sector, in particular promoting investment in product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through smart specialisation, and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in key enabling technologies and diffusion of general purpose technologies
Specific objective	SO1 - To enhance innovation performance of enterprises throughout NWE regions

Table 1: Result indicators - 1.1b.SO1

ID	Indicator	Measurement unit	Baseline value	Baseline year	Target value (2023) Total	2018 Total	2018 Qualitative	Observations
R1	Degree of SME involvement in collaboration with other institutions (including R&D)	Percentage	15.00	2014	20.00	15.00		The implementation evaluation carried out by the Programme in 2018 did not include progress of the result indicators. It will however be part of the impact evaluation planned for 2022.

ID	Indicator	2017 Total	2017 Qualitative	2016 Total	2016 Qualitative	2015 Total	2015 Qualitative	2014 Total	2014 Qualitative
R1	Degree of SME involvement in collaboration with other institutions (including R&D)	15.00		15.00		15.00		15.00	

Priority axis	2 - LOW CARBON
Investment priority	4e - Promoting low-carbon strategies for all types of territories, in particular for urban areas, including the promotion of sustainable multimodal urban mobility and mitigation-relevant adaptation measures

Table 2: Common and programme specific output indicators - 2.4e

(1)	ID	Indicator	Measurement unit	Target value	2018	Observations
F	CO31	Energy efficiency: Number of households with improved energy consumption classification	Households	450.00	5,191.00	Total output indicator contributions for ongoing (not completed) operations: 5,191 (partially achieved output values, ACE-Retrofitting:3830, CAN:1339, E=0:22 – all 2016 approved projects). Values for projects ACE-Retrofitting and CAN are particularly high due to large investments and large-scale retrofits of condominiums and social housing and private homes. Their output contributions to the Programme indicator CO31 are therefore much more substantial than anticipated by the Programme. They are however aligned with the European Commission's definition for CO31.
S	CO31	Energy efficiency: Number of households with improved energy consumption classification	Households	450.00	0.00	Total project pipeline value:7,272 2018 project pipeline: 0 2017 project pipeline:0 2016 project pipeline 7272: ACE-Retrofitting:6,000, CAN:1180, E=0:92 No projects contributing to this indicator were approved in 2018. Values for projects ACE-Retrofitting and CAN are particularly high due to large investments and large-scale retrofits of condominiums and social housing and private homes. Their output contributions to the Programme indicator CO31 are therefore much more substantial than anticipated by the Programme. They are however aligned with the European Commission's definition for CO31. Selected project value is higher than the target value due to the high contribution of ACE-Retrofitting project, explained above.
F	CO32	Energy efficiency: Decrease of annual primary energy consumption of public buildings	kWh/year	300,000.00	312.20	Total output indicator contributions for ongoing (not completed) operations: 312.2 (partially achieved output values). Only one project contributes to this indicator (E=0). The programme initially anticipated 10 projects.
S	CO32	Energy efficiency: Decrease of annual primary energy consumption of public buildings	kWh/year	300,000.00	0.00	Total project pipeline value: 596 Only one project contributes to this indicator (E=0). The programme initially anticipated 10 projects. 2018 project pipeline:0 2017 project pipeline value:0 2016 project pipeline 596, E=0:596 Adjustments to 2016 project values were due to project modification requests.
F	CO34	GHG reduction: Estimated annual decrease of GHG	Tonnes of CO2eq	450.00	6,946.70	The values will be reported only for fully implemented operations (partially achieved output valu es). Total output indicator contributions for ongoing (not completed) operations: 6946.7 The main contributors are ACE-Retrofitting (6374 – substantial large-scale retrofits) and CAN 526.5 - energy saving measures on neighborhood level- 2016 approved projects).
S	CO34	GHG reduction: Estimated annual decrease of GHG	Tonnes of CO2eq	450.00	44,200.00	Total value:76,790.15. 2018 value: 44,200 (RegEnergy 44,200). 2017 value: 7,501.9 (ECCO:7,500, cVPP:1.9). 2016 value 25,088.25 (ACE-Retrofitting:8,500, CAN:1,500, E=0:88.25, Heatnet NWE:15,000). Values for ACE-Retrofitting and CAN are high due to large investments and retrofits, RegEnergy due to large scale energy investments (e.g. off-grid supply-demand chain). The Programme targets were set on the basis of the IVB NWE portfolio. The type of VB incoming projects could not be defined with a top-down approach, one common NWE method for a calculation of a project target value could not be defined and then used for a correction. NWE projects work with various energy sources generating varied input to this indicator and also apply different scales of piloting, with an effect on contributions. This is the reason for a high selected value when compared to target.
F	2.01	Number of solutions facilitating the delivery of existing or emerging low-carbon, energy or climate-protection strategies	No. of solutions	18.00	4.00	Total output indicator contributions for ongoing (not completed) operations:4 (partially achieved output values).
S	2.01	Number of solutions facilitating the delivery of existing or emerging low-carbon, energy or climate-protection strategies	No. of solutions	18.00	24.00	Total project pipeline value : 58 2018 project pipeline value:24.CConnects:10, RegEnergy:14 2017 project pipeline value:17: cVPP:15, ECCO:2 2016 project pipeline value: 17. ACE-Retrofitting:3, CAN:7, E=0:5, HeatNetNWE:2 Adjustments to 2016 project values were due to project modification requests. Higher than expected values are due to projects delivering many solutions, not as initially anticipated 3 solutions per project.
F	2.02	Number of combined mitigation-relevant adaptation solutions implemented	No. of solutions	15.00	0.00	Total output indicator contributions for ongoing (not completed) operations: 0.
S	2.02	Number of combined mitigation-relevant adaptation solutions implemented	No. of solutions	15.00	8.00	Total project pipeline value : 8 2018 project pipeline value:8. CConnects:8 2017 project pipeline value:0 2016 project pipeline value: 0
F	2.03	Number of jobs created in all economic sectors	No. of jobs	200.00	10.00	Total output indicator contributions for ongoing (not completed) operations:10
S	2.03	Number of jobs created in all economic sectors	No. of jobs	200.00	35.00	Total project pipeline :48. 2018 project pipeline value:35. CConnects:35. 2017 project pipeline value:0. 2016 project pipeline value:13, E=0:13. The project contribution to job creation and maintenance will not be as significant as initially anticipated. It is not a primary goal of the projects or the Programme.
F	2.04	Number of jobs maintained in all economic sectorsNumber of jobs maintained in all economic	No. of jobs	200.00	10.00	Total output indicator contributions for ongoing (not completed) operations: 10.

(1)	ID	Indicator	Measurement unit	Target value	2018	Observations
		sectors				
S	2.04	Number of jobs maintained in all economic sectorsNumber of jobs maintained in all economic sectors	No. of jobs	200.00	35.00	Total project pipeline value :55 2018 project pipeline value:35. CConnects:35 2017 project pipeline value:0 2016 project pipeline value:20. E=0:20 The project contribution to job creation and maintenance will not be as significant as initially anticipated. It is not a primary goal of the projects or the Programme.
F	2.05	Amount of funding leveraged by the project	EUR	80,811,405.00	5,652,999.00	Total output indicator contributions for ongoing (not completed) operations: 5,652,999
S	2.05	Amount of funding leveraged by the project	EUR	80,811,405.00	26,500,000.00	Total project pipeline value: 46,000,000 2018 project pipeline value: 26,500,000. RegEnergy 26,500,000 2017 project pipeline value: 5,500,000. ECCO 5,500,000 2016 project pipeline value:14,000,000. CAN:14,000,000 The amount of funding leveraged by the projects will not be as significant as initially anticipated.

(1)	ID	Indicator	2017	2016	2015	2014
F	CO31	Energy efficiency: Number of households with improved energy consumption classification	0.00	0.00	0.00	0.00
S	CO31	Energy efficiency: Number of households with improved energy consumption classification	0.00	7,272.00	0.00	0.00
F	CO32	Energy efficiency: Decrease of annual primary energy consumption of public buildings	0.00	0.00	0.00	0.00
S	CO32	Energy efficiency: Decrease of annual primary energy consumption of public buildings	0.00	596.00	0.00	0.00
F	CO34	GHG reduction: Estimated annual decrease of GHG	0.00	0.00	0.00	0.00
S	CO34	GHG reduction: Estimated annual decrease of GHG	7,501.90	25,088.25	0.00	0.00
F	2.01	Number of solutions facilitating the delivery of existing or emerging low-carbon, energy or climate-protection strategies	0.00	0.00	0.00	0.00
S	2.01	Number of solutions facilitating the delivery of existing or emerging low-carbon, energy or climate-protection strategies	17.00	17.00	0.00	0.00
F	2.02	Number of combined mitigation-relevant adaptation solutions implemented	0.00	0.00	0.00	0.00
S	2.02	Number of combined mitigation-relevant adaptation solutions implemented	0.00	0.00	0.00	0.00
F	2.03	Number of jobs created in all economic sectors	0.00	0.00	0.00	0.00
S	2.03	Number of jobs created in all economic sectors	0.00	13.00	0.00	0.00
F	2.04	Number of jobs maintained in all economic sectorsNumber of jobs maintained in all economic sectors	0.00	0.00	0.00	0.00
S	2.04	Number of jobs maintained in all economic sectorsNumber of jobs maintained in all economic sectors	0.00	20.00	0.00	0.00
F	2.05	Amount of funding leveraged by the project	0.00	0.00	0.00	0.00
S	2.05	Amount of funding leveraged by the project	5,500,000.00	14,000,000.00	0.00	0.00

(1) S=Cumulative value - outputs to be delivered by selected operations [forecast provided by beneficiaries], F=Cumulative value - outputs delivered by operations [actual achievement]

Priority axis	2 - LOW CARBON
Investment priority	4e - Promoting low-carbon strategies for all types of territories, in particular for urban areas, including the promotion of sustainable multimodal urban mobility and mitigation-relevant adaptation measures
Specific objective	SO2 - To facilitate the implementation of low-carbon, energy and climate protection strategies to reduce GHG emissions in NWE

Table 1: Result indicators - 2.4e.SO2

ID	Indicator	Measurement unit	Baseline value	Baseline year	Target value (2023) Total	2018 Total	2018 Qualitative	Observations
R2	Effectiveness of the NWE public sector organisations in the implementation of low carbon strategies	Percentage	31.00	2014	18.00	31.00		Given the negative annual growth rate of -15% and the estimate of 9% for 2022, the Programme target value will double the 2022 estimate. The implementation evaluation carried out by the Programme in 2018 did not include progress of the result indicators. It will however be part of the impact evaluation planned for 2022.

ID	Indicator	2017 Total	2017 Qualitative	2016 Total	2016 Qualitative	2015 Total	2015 Qualitative	2014 Total	2014 Qualitative
R2	Effectiveness of the NWE public sector organisations in the implementation of low carbon strategies	31.00		0.00		31.00		31.00	

Priority axis	2 - LOW CARBON
Investment priority	4f - Promoting research and innovation in, and adoption of, low-carbon technologies

Table 2: Common and programme specific output indicators - 2.4f

(1)	ID	Indicator	Measurement unit	Target value	2018	Observations
F	CO26	Research, Innovation: Number of enterprises cooperating with research institutions	Enterprises	220.00	19.00	Total output indicator contributions for ongoing (not completed) operations: 19 (partially achieved output values).
S	CO26	Research, Innovation: Number of enterprises cooperating with research institutions	Enterprises	220.00	86.00	Total project pipeline value: 241 2018 project pipeline value: 86. SMART-SPACE:4, H4.0E:15, Green WIN:36, DGE-ROLLOUT:7, D2Grids:9, AFLOWT:15, 2017 project pipeline value: 129. CleanMobilEnergy:24, GROOF:30, GenComm:10, LOGiC:3, Up-Straw:20, ITEG:15, PowerVIBES:27 2016 project pipeline value 26, FORESEA:26 Changes to 2017 project values were due to additional technical requirements concerning project outputs. In the programming process the NWE authorities counted 20 enterprises per SO3 project. Some of the 2017 and 2018 projects were above and below this value, leading to unequal spread over the years.
F	CO28	Research, Innovation: Number of enterprises supported to introduce new to the market products	Enterprises	220.00	13.00	Total output indicator contributions for ongoing (not completed) operations: 13 (partially achieved output values), project CHIPS (10, target 40) and ST4W (3 out of 30).
S	CO28	Research, Innovation: Number of enterprises supported to introduce new to the market products	Enterprises	220.00	4.00	Total project pipeline value 136. In the programming phase, the Programme envisaged 20 enterprises per funded project. The approved projects however either represent either high or low output contribution. The goal of the Specific Objective 3 is not to drive the market directly. 2018 project pipeline value: 4. DGE-ROLLOUT:4 2017 project pipeline value 80, GenComm:10, UP STRAW:70 2016 project pipeline value 52, FORESEA:52 Only one project was approved in 2018 contributing to this indicator of the SO3, with a low value due to only 4 companies involved in the project.
F	CO29	Research, Innovation: Number of enterprises supported to introduce new to the firm products	Enterprises	220.00	0.00	The values will be reported only for fully implemented operations (partially achieved output values).
S	CO29	Research, Innovation: Number of enterprises supported to introduce new to the firm products	Enterprises	220.00	0.00	Total project pipeline value: 10 2018 project pipeline value:0 2017 project pipeline 10, GenComm:10 2016 project pipeline value:0 No projects contributing to this indicator were approved in 2018.
F	CO30	Renewables: Additional capacity of renewable energy production	MW	120.00	0.25	Total output indicator contributions for ongoing (not completed) operations: 0.25 (GenComm approved in 2017).
S	CO30	Renewables: Additional capacity of renewable energy production	MW	120.00	15.70	Total project pipeline value 45.46 2018 project pipeline value 15,7: AFLOWT: 2, D2GRIDS:13,7 2017 project pipeline value 29.76. CleanMobilEnergy:14.4, GROOF:11.72, GenComm:0.76, LOGiC:1.23, ITEG:2, DGE-Rollout:0.5 The Programe initially calculated the target for this indicator as for 10 projects and 5 renewable energy investments =50 investments and counted half(25)with PVs and 25 with biomass boilers (expected pipeline) (25x1,2MW +25x3,5MW = circa 120MW target). NWE projects work with various energy sources generating varied input to this indicator and also apply different scales of piloting with an effect on contributions. Only 2 projects contributing to this indicator were approved in 2018.
F	CO31	Energy efficiency: Number of households with improved energy consumption classification	Households	660.00	0.00	The values will be reported only for fully implemented operations (partially achieved output values). Achieved values will be reported on the basis of completed project pilots, which are still underway (UP STRAW)
S	CO31	Energy efficiency: Number of households with improved energy consumption classification	Households	660.00	0.00	Total project pile pile value 5,000 2018 project pipeline value:0 2017 project pipeline value 5,000, UP STRAW:5,000 2016 project pipeline value:0 2018 projects have a lower value than previous years due to a high value of 2017 UP STRAW (high nr. of housing units built/refurbished and CO2eq reduction).
F	CO34	GHG reduction: Estimated annual decrease of GHG	Tonnes of CO2eq	500.00	25.00	The values will be reported only for fully implemented operations (partially achieved output values). Total output indicator contributions for ongoing (not completed) operations:25
S	CO34	GHG reduction: Estimated annual decrease of GHG	Tonnes of CO2eq	500.00	4,849.61	Total pipeline value 109,193. 2018 pipeline value:4,849.61. SMART-SPACE:452, H4.0E:1.37, Green WIN:195, DGE-ROLLOUT:2448, D2Grids:1753.24. 2017 pipeline value 103,193: CleanMobilEnergy:2,400, LOGiC:793, UP-Straw:100,000, ITEG:3,000. 2016 pipeline value:0. The Programme targets were set based on the IVB NWE portfolio. The type of VB incoming projects could not be defined with a top-down approach, one common NWE method for a calculation of a project target value/used for a correction. NWE projects work with various energy sources generating varied input to this indicator and also apply different scales of piloting with an effect on contributions. 2018 projects have a lower value than the contributions from previous years since the 2017 pipeline was affected by the high value of UP STRAW project (high nr. of housing units built/refurbished and CO2 reduction).
F	3.01	Number of adopted or applied low carbon technologies	Number of adopted or applied low carbon technologies	44.00	14.00	Total output indicator contributions for ongoing (not completed) operations:14 (partially achieved output values).
S	3.01	Number of adopted or applied low carbon	Number of adopted or applied	44.00	26.00	Total project pipeline value: 80

(1)	ID	Indicator	Measurement unit	Target value	2018	Observations
		technologies	low carbon technologies			2018 project pipeline value: 26. AFLOWT:3, D2Grids:15, DGE-Rollout:1, Green WIN:5, H4.0E:1, SMART-SPACE:1. 2017 project pipeline value: 28. CleanMobilEnergy:3, GROOF:4, GenComm:3, LOGiC:4, UP-STraw::4, ITEG:3, PowerVIBES:7 2016 project pipeline value: 26. FORESEA: 26 Changes to 2017 project values were due to additional technical requirements concerning project outputs. The values for years 2016, 2017 and 2018 are similar.
F	3.02	Number of jobs created in all economic sectors	No. of jobs	220.00	0.00	The values will be reported only for fully implemented operations (partially achieved output values). Total output indicator contributions for ongoing (not completed) operations: 0 Job creation is more likely to be a final project effect (reported in the final project reports rather than interim ones). All projects are ongoing.
S	3.02	Number of jobs created in all economic sectors	No. of jobs	220.00	20.00	Total project pipeline value 229 2018 project pipeline value:20. H4.0E:20 2017 project pipeline vague: 209. GROOF:9, UP-Straw:200 The 2017 are particularly high due to the UP STRAW project values (high due to high number of professional trainings carried out by the project).
F	3.03	Number of jobs maintained in all economic sectors	No. of jobs	220.00	1,027.00	Total output indicator contributions for ongoing (not completed) operations: 1027 (UP STRAW – 2017 approved). The high value is due to the UP STRAW outreach - high number of professional trainings carried out by the project, enabling job maintenance.
S	3.03	Number of jobs maintained in all economic sectors	No. of jobs	220.00	0.00	Total project pipeline value :620 2018 project pipeline value :0 2017 project pipeline value 560, UP-Straw:500, ITEG:60 2016 project pipeline value:0 Changes to 2017 project values were due to additional technical requirements concerning project outputs. The 2017 are particularly high due to the UP STRAW project values (high due to high number of professional trainings carried out by the project). Job creation is more likely to be a final project effect (reported in the final project reports rather than interim ones). All projects are ongoing.
F	3.04	Amount of funding leveraged by the project	EUR	87,545,688.00	1,500.00	The values will be reported only for fully implemented operations (partially achieved output values). Total output indicator contributions for ongoing (not completed) operations: 1,500,000 Funding leveraged is more likely to be a final project effect (reported in the final project reports rather than interim ones). All projects are ongoing.
S	3.04	Amount of funding leveraged by the project	EUR	87,545,688.00	35,000,000.00	Total project pipeline value: 81,000,000 2018 project pipeline value:35,000,000. D2Grids:35,000,000 2017 project pipeline value 16,000,000, GROOF:3,000,000, LOGiC:13,000,000 2016 project pipeline value 30,000,000, FORESEA:30,000,000 The amount of funding leveraged by the projects will not be as significant as initially anticipated.

(1)	ID	Indicator	2017	2016	2015	2014
F	CO26	Research, Innovation: Number of enterprises cooperating with research institutions	0.00	0.00	0.00	0.00
S	CO26	Research, Innovation: Number of enterprises cooperating with research institutions	129.00	26.00	0.00	0.00
F	CO28	Research, Innovation: Number of enterprises supported to introduce new to the market products	0.00	0.00	0.00	0.00
S	CO28	Research, Innovation: Number of enterprises supported to introduce new to the market products	80.00	52.00	0.00	0.00
F	CO29	Research, Innovation: Number of enterprises supported to introduce new to the firm products	0.00	0.00	0.00	0.00
S	CO29	Research, Innovation: Number of enterprises supported to introduce new to the firm products	10.00	0.00	0.00	0.00
F	CO30	Renewables: Additional capacity of renewable energy production	0.00	0.00	0.00	0.00
S	CO30	Renewables: Additional capacity of renewable energy production	29.60	0.00	0.00	0.00
F	CO31	Energy efficiency: Number of households with improved energy consumption classification	0.00	0.00	0.00	0.00
S	CO31	Energy efficiency: Number of households with improved energy consumption classification	5,000.00	0.00	0.00	0.00
F	CO34	GHG reduction: Estimated annual decrease of GHG	0.00	0.00	0.00	0.00
S	CO34	GHG reduction: Estimated annual decrease of GHG	103,193.00	0.00	0.00	0.00
F	3.01	Number of adopted or applied low carbon technologies	0.00	0.00	0.00	0.00
S	3.01	Number of adopted or applied low carbon technologies	28.00	26.00	0.00	0.00
F	3.02	Number of jobs created in all economic sectors	0.00	0.00	0.00	0.00
S	3.02	Number of jobs created in all economic sectors	209.00	0.00	0.00	0.00
F	3.03	Number of jobs maintained in all economic sectors	0.00	0.00	0.00	0.00
S	3.03	Number of jobs maintained in all economic sectors	620.00	0.00	0.00	0.00
F	3.04	Amount of funding leveraged by the project	0.00	0.00	0.00	0.00
S	3.04	Amount of funding leveraged by the project	16,000,000.00	30,000,000.00	0.00	0.00

(1) S=Cumulative value - outputs to be delivered by selected operations [forecast provided by beneficiaries], F=Cumulative value - outputs delivered by operations [actual achievement]

Priority axis	2 - LOW CARBON
Investment priority	4f - Promoting research and innovation in, and adoption of, low-carbon technologies
Specific objective	SO3 - To facilitate the uptake of low carbon technologies, products, processes and services in sectors with high energy saving potential, to reduce GHG emissions in NWE

Table 1: Result indicators - 2.4f.SO3

ID	Indicator	Measurement unit	Baseline value	Baseline year	Target value (2023) Total	2018 Total	2018 Qualitative	Observations
R3	Status of conditions for low carbon technology deployment in NWE	Percentage	60.00	2014	70.00	60.00		The implementation evaluation carried out by the Programme in 2018 did not include progress of the result indicators. It will however be part of the impact evaluation planned for 2022.

ID	Indicator	2017 Total	2017 Qualitative	2016 Total	2016 Qualitative	2015 Total	2015 Qualitative	2014 Total	2014 Qualitative
R3	Status of conditions for low carbon technology deployment in NWE	60.00		60.00		60.00		60.00	

Priority axis	2 - LOW CARBON
Investment priority	7c - Developing and improving environmentally-friendly (including low noise) and low-carbon transport systems, including inland waterways and maritime transport, ports, multimodal links and airport infrastructure, in order to promote sustainable regional and local mobility

Table 2: Common and programme specific output indicators - 2.7c

(1)	ID	Indicator	Measurement unit	Target value	2018	Observations
F	CO26	Research, Innovation: Number of enterprises cooperating with research institutions	Enterprises	200.00	28.00	Total output indicator contributions for ongoing (not completed) operations:28 (partially achieved output values). This reflects the limited involvement of the transport sector companies and the fact that the low carbon solutions and transport management systems are, to a large extent, applied by projects up to demonstration level only (the Programme does not support commercialisation). Despite interest in the Programme, transport operators find the Programme rules too complex to get involved in projects. The achieved output values were reported by CHIPS (15) and ST4W(13), projects approved in 2016 and 2017 (projects approved in 2018 have not delivered yet – early stage of implementation).
S	CO26	Research, Innovation: Number of enterprises cooperating with research institutions	Enterprises	200.00	5.00	Total project pipeline value:97 2018 project pipeline value:5. FCCP:5 2017 project pipeline value 52, H2Share:2, ST4W:30, river:20 2016 project pipeline value 40: CHIPS:40 Adjustments to 2016 project values were due to project modification requests. Despite interest in the Programme, transport operators (enterprises) find the Programme rules difficult to get involved in projects. In 2018 only one SO4 project FCCP was approved, hence the low 2018 contribution.
F	CO28	Research, Innovation: Number of enterprises supported to introduce new to the market products	Enterprises	200.00	2.00	Total output indicator contributions for ongoing (not completed) operations:2 (partially achieved output values). This reflects the limited involvement of the transport sector companies and the fact that the low carbon solutions and transport management systems are, to a large extent, applied by projects up to demonstration level only (the Programme does not support commercialisation). Despite interest in the Programme, transport operators find the Programme rules too complex to get involved in projects.
S	CO28	Research, Innovation: Number of enterprises supported to introduce new to the market products	Enterprises	200.00	2.00	Total project pipeline value: 6 This reflects the limited involvement of the transport sector companies and the fact that the low carbon solutions and transport management systems are, to a large extent, applied by projects up to demonstration level only (the Programme does not support commercialisation). Despite interest in the Programme, transport operators find the Programme rules too complex to get involved in projects. 2018 project pipeline value:2. FCCP:2 2017 project pipeline value: 4, H2Share:4 2016 project pipeline value:0 In 2018 only one SO4 project FCCP was approved, hence the low 2018 contribution.
F	CO29	Research, Innovation: Number of enterprises supported to introduce new to the firm products	Enterprises	200.00	0.00	The values will be reported only for fully implemented operations (partially achieved output values). This reflects the limited involvement of the transport sector companies and the fact that the low carbon solutions and transport management systems are, to a large extent, applied by projects up to demonstration level only (the Programme does not support commercialisation). Despite interest in the Programme, transport operators find the Programme rules too complex to get involved in projects.
S	CO29	Research, Innovation: Number of enterprises supported to introduce new to the firm products	Enterprises	200.00	0.00	Total project pipeline value:0 This reflects the limited involvement of the transport sector companies and the fact that the low carbon solutions and transport management systems are, to a large extent, applied by projects up to demonstration level only (the Programme does not support commercialisation). Despite interest in the Programme, transport operators find the Programme rules too complex to get involved in projects.
F	CO34	GHG reduction: Estimated annual decrease of GHG	Tonnes of CO2eq	500.00	3.00	Total output indicator contributions for ongoing (not completed) operations: 3 ST4W project (as the main contributor) is the biggest contributor to this indicator (2017 approved). It's values are based on a pilot completion, which is underway, but not completed.
S	CO34	GHG reduction: Estimated annual decrease of GHG	Tonnes of CO2eq	500.00	0.00	Total project pipeline value: 142.6, 2018 :0, 2017 value 133: ST4W:133, 2016 project pipeline value:9.6. CHIPS:9.6 ST4W project focuses on shippers posting palletized freight. Given the scale of the project pilots, the estimated GHG emission is substantial due to the switch from road transport to waterway transport. The Programme targets were set on the basis of the IVB NWE portfolio. The type of VB incoming projects could not be defined with a top-down approach, one common NWE method for a calculation of a project target value could not be defined and then used for a correction. NWE projects work with various energy sources generating varied input to this indicator and also apply different scales of piloting with an effect on contributions. 2018 project FCCP does not lead to GHG emission reduction, leading to 0 value for 2018.
F	4.01	Number of implemented low carbon solutions in transport	No. of solutions	20.00	6.00	Total output indicator contributions for ongoing (not completed) operations: 6 (partially achieved output values, CHIPS approved in 2016). This reflects the limited involvement of the transport sector companies and the fact that the low carbon solutions and transport management systems are, to a large extent, applied by projects up to demonstration level only (the Programme does not support commercialisation). Despite interest in the Programme, transport operators find the Programme rules too complex to get involved in projects.
S	4.01	Number of implemented low carbon solutions in transport	No. of solutions	20.00	1.00	Total project pipeline value: 20 This reflects the limited involvement of the transport sector companies and the fact that the low carbon solutions and transport management systems are, to a large extent, applied by projects up to demonstration level only (the Programme does not support commercialisation). Despite interest in the Programme, transport operators find the Programme rules too complex to get involved in projects. 2018 project pipeline value:1. FCCP:1 2017 project pipeline value 8, H2Share:2, ST4W:4, river:2 2016 project pipeline value 11, CHIPS:11 In 2018 only one SO4 project FCCP was approved, hence the low 2018 contribution.
F	4.02	Number of new or improved transport management systems leading to GHG reduction	No. of systems	10.00	0.00	Total output indicator contributions for ongoing (not completed) operations: 0 (partially achieved output values). This reflects the limited involvement of the transport sector companies and the fact that the low carbon solutions and transport management systems are, to a large extent, applied by projects up to demonstration level only (the Programme does not support commercialisation). Despite interest in the Programme, transport operators find the Programme rules too complex to get involved in projects.
S	4.02	Number of new or improved transport	No. of systems	10.00	1.00	Total project pipeline value: 6

(1)	ID	Indicator	Measurement unit	Target value	2018	Observations
		management systems leading to GHG reduction				2018 project pipeline value: 1. FCCP:1 2017 project pipeline value 5, ST4W:5 2016 project pipeline value :0 In 2018 only one SO4 project FCCP was approved, hence the low 2018 contribution.
F	4.03	Number of transport operators supported implementing low carbon solutions	No. of transport operators	200.00	2.00	Total output indicator contributions for ongoing (not completed) operations:2 (partially achieved output values). This reflects the limited involvement of the transport sector companies and the fact that the low carbon solutions and transport management systems are, to a large extent, applied by projects up to demonstration level only (the Programme does not support commercialisation). Despite interest in the Programme, transport operators find the Programme rules too complex to get involved in projects.
S	4.03	Number of transport operators supported implementing low carbon solutions	No. of transport operators	200.00	2.00	Total project pipeline value: 6 This reflects the limited involvement of the transport sector companies and the fact that the low carbon solutions and transport management systems are, to a large extent, applied by projects up to demonstration level only (the Programme does not support commercialisation). 2018 project pipeline value: FCCP:2 2017 project pipeline value: H2Share:4 2016 project pipeline value :0 Despite interest in the Programme, transport operators find the Programme rules too complex to get involved in projects. In 2018 only one SO4 project FCCP was approved, hence the low 2018 contribution.
F	4.04	Number of jobs created in all economic sectors	No. of jobs	200.00	0.00	Total output indicator contributions for ongoing (not completed) operations : 0 (partially achieved output values). The project contribution to job creation and maintenance will not be as significant as initially anticipated. It is not a primary goal of the projects or the Programme.
S	4.04	Number of jobs created in all economic sectors	No. of jobs	200.00	0.00	Total project pipeline value:0 The project contribution to job creation and maintenance will not be as significant as initially anticipated. It is not a primary goal of the projects or the Programme.
F	4.05	Number of jobs maintained in all economic sectors	No. of jobs	200.00	0.00	The project contribution to job creation and maintenance will not be as significant as initially anticipated. It is not a primary goal of the projects or the Programme.
S	4.05	Number of jobs maintained in all economic sectors	No. of jobs	200.00	0.00	Total project pipeline value:0 The project contribution to job creation and maintenance will not be as significant as initially anticipated. It is not a primary goal of the projects or the Programme.
F	4.06	Amount of funding leveraged by the project	EUR	80,811,405.00	55,000,000.00	Total output indicator contributions for ongoing (not completed) operations:55,000,000 (CHIPS – which is slightly higher than the originally anticipated target for this project).
S	4.06	Amount of funding leveraged by the project	EUR	80,811,405.00	0.00	Total output indicator contributions for ongoing (not completed) operations:55,000,000 (CHIPS – which is slightly higher than the originally anticipated target for this project).

(1)	ID	Indicator	2017	2016	2015	2014
F	CO26	Research, Innovation: Number of enterprises cooperating with research institutions	0.00	0.00	0.00	0.00
S	CO26	Research, Innovation: Number of enterprises cooperating with research institutions	52.00	40.00	0.00	0.00
F	CO28	Research, Innovation: Number of enterprises supported to introduce new to the market products	0.00	0.00	0.00	0.00
S	CO28	Research, Innovation: Number of enterprises supported to introduce new to the market products	4.00	0.00	0.00	0.00
F	CO29	Research, Innovation: Number of enterprises supported to introduce new to the firm products	0.00	0.00	0.00	0.00
S	CO29	Research, Innovation: Number of enterprises supported to introduce new to the firm products	0.00	0.00	0.00	0.00
F	CO34	GHG reduction: Estimated annual decrease of GHG	0.00	0.00	0.00	0.00
S	CO34	GHG reduction: Estimated annual decrease of GHG	133.00	9.60	0.00	0.00
F	4.01	Number of implemented low carbon solutions in transport	0.00	0.00	0.00	0.00
S	4.01	Number of implemented low carbon solutions in transport	8.00	11.00	0.00	0.00
F	4.02	Number of new or improved transport management systems leading to GHG reduction	0.00	0.00	0.00	0.00
S	4.02	Number of new or improved transport management systems leading to GHG reduction	5.00	0.00	0.00	0.00
F	4.03	Number of transport operators supported implementing low carbon solutions	0.00	0.00	0.00	0.00
S	4.03	Number of transport operators supported implementing low carbon solutions	4.00	0.00	0.00	0.00
F	4.04	Number of jobs created in all economic sectors	0.00	0.00	0.00	0.00
S	4.04	Number of jobs created in all economic sectors	0.00	0.00	0.00	0.00
F	4.05	Number of jobs maintained in all economic sectors	0.00	0.00	0.00	0.00
S	4.05	Number of jobs maintained in all economic sectors	0.00	0.00	0.00	0.00
F	4.06	Amount of funding leveraged by the project	0.00	0.00	0.00	0.00
S	4.06	Amount of funding leveraged by the project	0.00	54,700,000.00	0.00	0.00

(1) S=Cumulative value - outputs to be delivered by selected operations [forecast provided by beneficiaries], F=Cumulative value - outputs delivered by operations [actual achievement]

Priority axis	2 - LOW CARBON
Investment priority	7c - Developing and improving environmentally-friendly (including low noise) and low-carbon transport systems, including inland waterways and maritime transport, ports, multimodal links and airport infrastructure, in order to promote sustainable regional and local mobility
Specific objective	SO4 - To facilitate the implementation of transnational low-carbon solutions in transport systems to reduce GHG emissions in NWE

Table 1: Result indicators - 2.7c.SO4

ID	Indicator	Measurement unit	Baseline value	Baseline year	Target value (2023) Total	2018 Total	2018 Qualitative	Observations
R4	Status of competences of the transport sector in the use of low carbon solutions in the transport systems	Percentage	6.00	2014	15.00	6.00		The implementation evaluation carried out by the Programme in 2018 did not include progress of the result indicators. It will however be part of the impact evaluation planned for 2022.

ID	Indicator	2017 Total	2017 Qualitative	2016 Total	2016 Qualitative	2015 Total	2015 Qualitative	2014 Total	2014 Qualitative
R4	Status of competences of the transport sector in the use of low carbon solutions in the transport systems	6.00		6.00		6.00		6.00	

Priority axis	3 - RESOURCE AND MATERIALS EFFICIENCY
Investment priority	6f - Promoting innovative technologies to improve environmental protection and resource efficiency in the waste sector, water sector and with regard to soil, or to reduce air pollution

Table 2: Common and programme specific output indicators - 3.6f

(1)	ID	Indicator	Measurement unit	Target value	2018	Observations
F	CO01	Productive investment: Number of enterprises receiving support	Enterprises	200.00	262.00	Total contributions for ongoing (not completed) operations: 262 (partially achieved output values for Food Heroes 203, Phos4You 43, Fibersort 10, ALG-AD 6). In the programming phase, NWE envisaged 20 enterprises per project, exceeded by a few projects. RAWFILL involves enterprises in studies and provides them with a tool applied by them (high outreach and effective application). ReNu2Farm provides expert guidance in product categorisation, enterprises receive training in demonstrations, recycling-fertilizer producers benefits from market strategies developed. Phos4You involves enterprises in the development and operation of phosphorus recovery from wastewater. SeRaMCo helps companies develop innovative concrete and cement mixes, involving them at various stages of the production process. Food Heroes allows proof of concept and has a high outreach as well.
S	CO01	Productive investment: Number of enterprises receiving support	Enterprises	200.00	223.00	Total project pipeline value: 720. In the programming phase, NWE envisaged 20 enterprises per funded project. A few projects however exceeded this number, some are under this value, which explains the difference between the 2017 and 2018 values as well as well as the high achieved values for this indicator. 2018 project pipeline 223: WOW!:9, FCRBE: 36, CHARM: 9, CEDACI: 61, URBCON: 18, Di-Plast: 90. 2017 project pipeline value 347: ALG-AD:15, Phos4You:44, RAWFILL:205, ReNu2Farm:48, SeRaMCo:31, SURICATES:4 2016 project pipeline value 150. AFTB:10, Fibersort:5, Food Heroes:135 Changes to 2017 project values were due to additional technical requirements concerning project outputs. Adjustments to 2016 project values were due to project modification requests.
F	CO26	Research, Innovation: Number of enterprises cooperating with research institutions	Enterprises	200.00	79.00	Total output indicator contributions for ongoing (not completed) operations:79 (partially achieved output values - Food Heroes high values - project approved in 2016). In the programming phase, the Programme envisaged 20 enterprises per funded project, which was an overestimate.
S	CO26	Research, Innovation: Number of enterprises cooperating with research institutions	Enterprises	200.00	22.00	Total project pipeline value: 123 In the programming phase, the Programme envisaged 20 enterprises per funded project, which was an overestimate.The difference between 2017 and 2018 values is due to 2 projects approved in 2018 contributing to this indicator. 2018 project pipeline value:22. CEDACI:11, URBCON:11 2017 project pipeline value: 55. Phos4You: 5 (project approved in 2016 but contracted in 2017), SeRaMCo:4, SURICATES:4, ALG-AD:14, ReNu2Farm:28 2016 project pipeline value: 46. AFTB:6, Food Heroes:40 Changes to 2017 project values were due to additional technical requirements concerning project outputs. SO5 of the Programme does not focus on the research element of projects as SO1, this is why the structure of project partnerships rarely requires an R&D institution.
F	CO28	Research, Innovation: Number of enterprises supported to introduce new to the market products	Enterprises	200.00	2.00	Total output indicator contributions for ongoing (not completed) operations: 2 (partially achieved output values). In the programming phase, the Programme envisaged 20 enterprises per funded project, which was an overestimate.
S	CO28	Research, Innovation: Number of enterprises supported to introduce new to the market products	Enterprises	200.00	10.00	Total project pipeline value: 98 In the programming phase, the Programme envisaged 20 enterprises per funded project, which was an overestimate. Only 2 projects were approved in 2018 that contribute to this indicator, which explains the difference between 2017 and 2018. The Programme experience shows that the path to eco-innovation diffusion is long and the testing of new approaches and technologies does not automaticaly result in the direct introduction of eco-innovation in companies or market. The goal of the Specific Objective 5 is to increase the competences in the resource intensive sector, not to drive the market. 2018 project pipeline value: 10. URBCON:4, WOW!:6 2017 project pipeline value: 60. Phos4You:10 (project approved in 2016 but contracted in 2017), SeRaMCo:20, ALG-AD:10, ReNu2Farm:20 2016 pipeline value: 28. AFTB:10, Food Heroes:3, RE-DIRECT:15
F	CO29	Research, Innovation: Number of enterprises supported to introduce new to the firm products	Enterprises	200.00	6.00	Total output indicator contributions for ongoing (not completed) operations: 6 (partially achieved output values). In the programming phase, the Programme envisaged 20 enterprises per funded project, which was an overestimate.
S	CO29	Research, Innovation: Number of enterprises supported to introduce new to the firm products	Enterprises	200.00	16.00	Total project pipeline value: 39 In the programming phase, the Programme envisaged 20 enterprises per funded project, which was an overestimate. The Programme experience shows that thepath to eco-innovation diffusion is long and the testing of new approaches and technologies facilitated by the Programme does not automaticaly result in the direct introduction of eco-innovation in companies or market. Also, the goal of the Specific Objective 5 is to increase the competences in the resource intensive sector, not to drive the market directly. 2018 project pipeline value: 16. DI-PLAST:12, URBCON:4. 2017 project pipeline value: 0 2016 project pipeline value 23. Fibertsort:4, Food Heroes:12, RE-DIRECT:7 Adjustments to 2016 project values were due to project modification requests.
F	5.01	Number of efficient natural and material resources solutions implemented and tested	No. of solutions implemented	42.00	1.00	Total output indicator contributions for ongoing (not completed) operations:1 (partially achieved output values). The solutions are only reported when fully applied in all the required scenarios, which explains why the achieved-to-date-value is low.
S	5.01	Number of efficient natural and material resources solutions implemented and tested	No. of solutions implemented	42.00	12.00	Total project pipeline value :85 2018 project pipeline value:12. CHARM:2, Di-Plast:1, FCRBE:7, URBCON:1, WOW!:1 2017 project pipeline value 47: Phos4You:6 (project approved in 2016 but contracted in 2017), RAWFILL:1, SURICATES:6, ALG-AD:1, ReNu2Farm:33 2016 project pipeline value 26, AFTB:3, Fibersort:1, Food Heroes:15, RE-DIRECT:7 Changes to 2017 project values were due to additional technical requirements concerning project outputs. Several projects focus on multiple solutions, even though the Programme estimated that each funded project would result in one only per project. Therefore, the aggregated value for the selected projects is higher than the original Programme target. This also results in different project contributions and consequently different 2018 and 2017 values.
F	5.02	Number of innovative uses of waste	No. of solutions	18.00	12.00	Total output indicator contributions for ongoing (not completed) operations:12 (partially achieved output values).

(1)	ID	Indicator	Measurement unit	Target value	2018	Observations
		processes/products/services from waste materials	designed			Projects often apply more than 1 solution/technology.product/service, which results in high output achievement figures. In the programming phase, the Programme counted 1 solution per project only. This explains the fairly high level of achievement of outputs to date.
S	5.02	Number of innovative uses of waste processes/products/services from waste materials	No. of solutions designed	18.00	17.00	Total project pipeline value:83 Projects often apply more than 1 solution/technology.product/service, which results in high output achievement figures. In the programming phase, the Programme counted 1 solution per project only. This explains the overachievement as well as the different values for years 2017 and 2018. 2018 project pipeline value:17. CEDACI:2, URBCON:5, WOW!:10 2017 project pipeline value 55. Phos4You:20 (project approved in 2016 but contracted in 2017), ALG-AD:2, ReNu2Farm:16, SeRaMCo:17. 2016 project pipeline value 11. RE-DIRECT: 11 Changes to 2017 project values were due to additional technical requirements concerning project outputs.
F	5.03	Amount of funding leveraged by the project	EUR	161,622,811.00	2,000,000.00	Total output indicator contributions for ongoing (not completed) operations:2,000,000 (partially achieved output values). The amount of funding leveraged by the projects will not be as significant as initially anticipated, as this is the next step in the industrial process application. NWE does not fund commercialisation of products/ processes, which would result in a more direct leverage. The achieved value has been reported by the project RE-DIRECT approved in 2016.
S	5.03	Amount of funding leveraged by the project	EUR	161,622,811.00	0.00	Total project pipeline value:2,000,000 2018 project pipeline value: 0 2017 project pipeline value: 0 2016 project pipeline value :2,000,000. RE:DIRECT: 2,000,000 The amount of funding leveraged by the projects will not be as significant as initially anticipated, as this is the next step in the industrial process application. NWE does not fund commercialisation of products/ processes, which would result in a more direct leverage.
F	5.04	Amount of decreased raw material use	Tonnes	1,000,000.00	250.00	Total output indicator contributions for ongoing (not completed) operations:250 (partially achieved output values). The industrial validation and verification processes that are the goal of the funded project, focusing on piloting and demonstration of innovative processes and products do not immediately result in the tonnage of decreased raw material use and increased material recovery, re-use and recycling. Resource savings and waste recycling rates are likely to be the long-term effects of measures applied by projects rather than a direct outcome of their implementation. The value for this indicator is expected to be lower than initially anticipated.
S	5.04	Amount of decreased raw material use	Tonnes	1,000,000.00	6,029.00	Total project pipeline value : 256,029 2018 project pipeline value : 6,029. CHARM : 5,975, URBCON:54 2017 project pipeline value : 220,000, SURICATES:220,000 2016 project pipeline value : 30,000, Fibersort:10,000, RE-DIRECT:20,000 The industrial validation and verification processes (goal of the funded projects focusing on piloting and demonstration of innovative processes and products) do not immediately result in the tonnage of decreased raw material use and increased material recovery, re-use and recycling. Resource savings and waste recycling rates are likely to be the long-term effects of measures applied by projects rather than a direct outcome of their implementation.The value for this indicator is expected to be lower than initial anticipated. The difference between the 2017 and 2018 values is due to a very high value of SURICATES (2017).
F	5.05	Amount of increased material recovery, re-use and recycling	Tonnes	1,000,000.00	3,500.00	Total output indicator contributions for ongoing (not completed) operations:3,500 (partially achieved output values). The industrial validation and verification processes that are the goal of the funded project, focusing on piloting and demonstration of innovative processes and products do not immediately result in the tonnage of decreased raw material use and increased material recovery, re-use and recycling. Resource savings and waste recycling rates are likely to be the long-term effects of projects.
S	5.05	Amount of increased material recovery, re-use and recycling	Tonnes	1,000,000.00	28,295.00	Total project pipeline value: 319,470 2018 project pipeline value: 28,295. CHARM:5,935, FCRBE:360, Di-Plast:22,000 2017 project pipeline value: 277,175. Phos4You:4,000 (project approved in 2016 but contracted in 2017), RAWFILL:175, SeRaMCo: 51,500, SURICATES:220,000 ALG-AD:1,500 2016 project pipeline value : 14,000. Fibersort:13,000, RE-DIRECT:1,000 The industrial validation and verification processes that are the goal of the funded project, focusing on piloting and demonstration of innovative processes and products do not immediately result in the tonnage of decreased raw material use and increased material recovery, re-use and recycling. Resource savings and waste recycling rates are likely to be the long-term effects of projects. The difference between 2017 and 2018 is due to high values of SURICATES approved in 2017.
F	5.06	Number of jobs created in all economic sectors	No. of jobs	400.00	12.00	Total output indicator contributions for ongoing (not completed) operations:12 (partially achieved output values). The project contribution to job creation and maintenance will not be as significant as initially anticipated. It is not a primary goal of the projects or the Programme. The achieved value was reported by the ALG-AD (6) and Fibersort (6) projects approved in 2016 and 2017.
S	5.06	Number of jobs created in all economic sectors	No. of jobs	400.00	5.00	Total project pipeline value: 73 2018 project pipeline value: 5. DI-Plast:5 2017 project pipeline value: 8, ALG-AD:8 2016 project pipeline value : 65, Fibersort:40, RE-DIRECT:25 The project contribution to job creation and maintenance will not be as significant as initially anticipated. It is not a primary goal of the projects or the Programme. The differences between 2017 and 2018 values are minimal. Initially the Programme counted 20 jobs per project, however the approved pipeline shows different values, depending on the project.
F	5.07	Number of jobs maintained in all economic sectors	No. of jobs	400.00	4.00	Total output indicator contributions for ongoing (not completed) operations:4 (partially achieved output values). The project contribution to job creation and maintenance will not be as significant as initially anticipated. It is not a primary goal of the projects or the Programme. The achieved value was reported by the ALG-AD project approved in 2017.
S	5.07	Number of jobs maintained in all economic sectors	No. of jobs	400.00	0.00	Total project pipeline value: 32 2018 project pipeline value:0 2017 project pipeline value: 7. ALG-AD:7 2016 project pipeline value : 25. RE-DIRECT:25 The project contribution to job creation and maintenance will not be as significant as initially anticipated. It is not a primary goal of the projects or the Programme.

(1)	ID	Indicator	2017	2016	2015	2014
F	CO01	Productive investment: Number of enterprises receiving support	0.00	0.00	0.00	0.00
S	CO01	Productive investment: Number of enterprises receiving support	347.00	150.00	0.00	0.00
F	CO26	Research, Innovation: Number of enterprises cooperating with research institutions	0.00	0.00	0.00	0.00
S	CO26	Research, Innovation: Number of enterprises cooperating with research institutions	55.00	46.00	0.00	0.00
F	CO28	Research, Innovation: Number of enterprises supported to introduce new to the market products	0.00	0.00	0.00	0.00
S	CO28	Research, Innovation: Number of enterprises supported to introduce new to the market products	60.00	28.00	0.00	0.00
F	CO29	Research, Innovation: Number of enterprises supported to introduce new to the firm products	0.00	0.00	0.00	0.00

(1)	ID	Indicator	2017	2016	2015	2014
S	CO29	Research, Innovation: Number of enterprises supported to introduce new to the firm products	0.00	23.00	0.00	0.00
F	5.01	Number of efficient natural and material resources solutions implemented and tested	0.00	0.00	0.00	0.00
S	5.01	Number of efficient natural and material resources solutions implemented and tested	47.00	26.00	0.00	0.00
F	5.02	Number of innovative uses of waste processes/products/services from waste materials	0.00	0.00	0.00	0.00
S	5.02	Number of innovative uses of waste processes/products/services from waste materials	55.00	11.00	0.00	0.00
F	5.03	Amount of funding leveraged by the project	0.00	0.00	0.00	0.00
S	5.03	Amount of funding leveraged by the project	0.00	2,000,000.00	0.00	0.00
F	5.04	Amount of decreased raw material use	0.00	0.00	0.00	0.00
S	5.04	Amount of decreased raw material use	220,000.00	30,000.00	0.00	0.00
F	5.05	Amount of increased material recovery, re-use and recycling	0.00	0.00	0.00	0.00
S	5.05	Amount of increased material recovery, re-use and recycling	277,175.00	14,000.00	0.00	0.00
F	5.06	Number of jobs created in all economic sectors	0.00	0.00	0.00	0.00
S	5.06	Number of jobs created in all economic sectors	8.00	65.00	0.00	0.00
F	5.07	Number of jobs maintained in all economic sectors	0.00	0.00	0.00	0.00
S	5.07	Number of jobs maintained in all economic sectors	7.00	25.00	0.00	0.00

(1) S=Cumulative value - outputs to be delivered by selected operations [forecast provided by beneficiaries], F=Cumulative value - outputs delivered by operations [actual achievement]

Priority axis	3 - RESOURCE AND MATERIALS EFFICIENCY
Investment priority	6f - Promoting innovative technologies to improve environmental protection and resource efficiency in the waste sector, water sector and with regard to soil, or to reduce air pollution
Specific objective	SO5 - To optimise (re)use of material and natural resources in NWE

Table 1: Result indicators - 3.6f.SO5

ID	Indicator	Measurement unit	Baseline value	Baseline year	Target value (2023) Total	2018 Total	2018 Qualitative	Observations
R5	Status of competences in the resource intensive sectors in NWE for eco-innovation diffusion	Percentage	110.00	2014	112.00	110.00		The baseline and target values represent 110% and 112% of the EU average respectively. The implementation evaluation carried out by the Programme in 2018 did not include progress of the result indicators. It will however be part of the impact evaluation planned for 2022.

ID	Indicator	2017 Total	2017 Qualitative	2016 Total	2016 Qualitative	2015 Total	2015 Qualitative	2014 Total	2014 Qualitative
R5	Status of competences in the resource intensive sectors in NWE for eco-innovation diffusion	110.00		110.00		110.00		110.00	

Priority axes for technical assistance

Priority axis	4 - TECHNICAL ASSISTANCE

Table 2: Common and programme specific output indicators - 4.TECHNICAL ASSISTANCE

(1)	ID	Indicator	Measurement unit	Target value	2018	Observations
F	6.01	Number of Transnational Cooperation projects approved	Number		24.00	24 projects approved by the Programme MCs in 2018, 23 projects approved by the Programme MCs in 2017, 17 projects approved by the Programme MCs in 2016
S	6.01	Number of Transnational Cooperation projects approved	Number		24.00	24 projects approved by the Programme MCs in 2018, 23 projects approved by the Programme MCs in 2017, 17 projects approved by the Programme MCs in 2016
F	6.02	Number of on the spot verifications (site visits) done by JS staff	Number		0.00	On-the-spot verifications are done by First Level Controllers (appointed by Member States), not by JS staff members.
S	6.02	Number of on the spot verifications (site visits) done by JS staff	Number		0.00	On-the-spot verifications are done by First Level Controllers (appointed by Member States), not by JS staff members.
F	6.03	Average number of visits to the Programme website	Number/month		12,196.00	12,196 visits in average per month of the year 2018, 9,037 visits in average per month of the year 2017 and 6590 in 2016
S	6.03	Average number of visits to the Programme website	Number/month		12,196.00	12,196 visits in average per month of the year 2018, 9,037 visits in average per month of the year 2017 and 6,590 in 2016
F	6.04	Number of Monitoring Committee meetings	Number		5.00	2018 4 MCs: 31 January-1 February 2018, 7 March 2018, 29 May 2018 and 26-27 June 2018; 2017 3 MCs: 14-15 March 2017, 11 May and 19-20 September 2017; 2016 3 MCs: 23-25 February 2016; 25 May 2016; 13-15 September 2016
S	6.04	Number of Monitoring Committee meetings	Number		5.00	2018 4 MCs: 31 January-1 February 2018, 7 March 2018, 29 May 2018 and 26-27 June 2018; 2017 3 MCs: 14-15 March 2017, 11 May and 19-20 September 2017; 2016 3 MCs: 23-25 February 2016; 25 May 2016; 13-15 September 2016
F	6.05	Duration of reimbursement of expenditure to final beneficiaries	Weeks		7.70	2018 : 7,7 weeks; 2017: 8,7 weeks ; 2016: 8.1 weeks
S	6.05	Duration of reimbursement of expenditure to final beneficiaries	Weeks		7.70	2018 : 7,7 weeks; 2017: 8,7 weeks ; 2016: 8.1 weeks
F	6.06	Number of appeals to calls for proposals	Number		1.00	2018 value 1: Homes4All (21/06/2018); 2017 value 1: Urban Farming Now (23/10/2017); 2016 value 2: Greening Brownfields (14/01/2016), H2SME (07/10/2016)
S	6.06	Number of appeals to calls for proposals	Number		1.00	2018 value 1: Homes4All (21/06/2018); 2017 value 1: Urban Farming Now (23/10/2017); 2016 value 2: Greening Brownfields (14/01/2016), H2SME (07/10/2016)
F	6.07	Number of evaluations, studies, surveys, experts, reports	Number		1.00	2018: Implementation evaluation; 2017: Territorial cohesion indicators (report); 2016: Evaluation of the two-step approach (report) ;
S	6.07	Number of evaluations, studies, surveys, experts, reports	Number		1.00	2018: Implementation evaluation; 2017: Territorial cohesion indicators (report); 2016: Evaluation of the two-step approach (report) ;
F	6.08	Number of employees whose salaries are co-financed by Technical Assistance	Number		34.00	34 Employees of the JS and Contact Points - 22 JS officers and 12 Contact Point staff members (not all working full-time); 35 in 2017 and 35 in 2016
S	6.08	Number of employees whose salaries are co-financed by Technical Assistance	Number		34.00	34 Employees of the JS and Contact Points - 22 JS officers and 12 Contact Point staff members (not all working full-time); 35 in 2017 and 35 in 2016
F	6.09	Staff turn-over	Percentage		25.00	Staff turn-over for the JS and Contact Points
S	6.09	Staff turn-over	Percentage		25.00	Staff turn-over for the JS and Contact Points

(1)	ID	Indicator	2017	2016	2015	2014
F	6.01	Number of Transnational Cooperation projects approved	23.00	17.00	0.00	0.00
S	6.01	Number of Transnational Cooperation projects approved	23.00	17.00	0.00	0.00
F	6.02	Number of on the spot verifications (site visits) done by JS staff	0.00	0.00	0.00	0.00
S	6.02	Number of on the spot verifications (site visits) done by JS staff	0.00	0.00	0.00	0.00
F	6.03	Average number of visits to the Programme website	9,037.00	6,590.00	0.00	0.00
S	6.03	Average number of visits to the Programme website	9,037.00	6,590.00	0.00	0.00
F	6.04	Number of Monitoring Committee meetings	3.00	3.00	2.00	0.00
S	6.04	Number of Monitoring Committee meetings	3.00	3.00	2.00	0.00
F	6.05	Duration of reimbursement of expenditure to final beneficiaries	8.70	8.10	0.00	0.00
S	6.05	Duration of reimbursement of expenditure to final beneficiaries	8.70	8.10	0.00	0.00
F	6.06	Number of appeals to calls for proposals	1.00	2.00	1.00	0.00
S	6.06	Number of appeals to calls for proposals	1.00	2.00	1.00	0.00
F	6.07	Number of evaluations, studies, surveys, experts, reports	1.00	1.00	0.00	0.00

(1)	ID	Indicator	2017	2016	2015	2014
S	6.07	Number of evaluations, studies, surveys, experts, reports	1.00	1.00	0.00	0.00
F	6.08	Number of employees whose salaries are co-financed by Technical Assistance	35.00	35.00	22.88	20.08
S	6.08	Number of employees whose salaries are co-financed by Technical Assistance	35.00	35.00	22.88	20.08
F	6.09	Staff turn-over	18.00	20.00	13.90	0.00
S	6.09	Staff turn-over	18.00	20.00	13.90	0.00

(1) S=Cumulative value - outputs to be delivered by selected operations [forecast provided by beneficiaries], F=Cumulative value - outputs delivered by operations [actual achievement]

Priority axis	4 - TECHNICAL ASSISTANCE
Specific objective	SO6 - To maximise the effectiveness and efficiency of the management and implementation of the INTERREG NWE Programme

Table 1: Result indicators - 4.SO6

ID	Indicator	Measurement unit	Baseline value	Baseline year	Target value (2023) Total	2018 Total	2018 Qualitative	Observations
TA1	Share (%) of all supported operations that are implemented successfully, demonstrated by the achievement of planned objectives	Percentage	0.00	2013	90.00	0.00		First projects will close in 2019
TA2	Percentage of satisfaction of supporting beneficiaries in the implementation and communication of their projects	Percentage	66.00	2014	76.00	66.00		To be updated with the communication evaluation planned in 2020
TA3	Amount of regular expenditure in sample for audit of operation	Percentage	0.00	2013	98.00	99.95		

ID	Indicator	2017 Total	2017 Qualitative	2016 Total	2016 Qualitative	2015 Total	2015 Qualitative	2014 Total	2014 Qualitative
TA1	Share (%) of all supported operations that are implemented successfully, demonstrated by the achievement of planned objectives	0.00		0.00		0.00		0.00	
TA2	Percentage of satisfaction of supporting beneficiaries in the implementation and communication of their projects	66.00		66.00		66.00		66.00	
TA3	Amount of regular expenditure in sample for audit of operation	0.00		0.00		0.00		0.00	

3.3 Table 3: Information on the milestones and targets defined in the performance framework

Priority axis	Ind type	ID	Indicator	Measurement unit	Milestone for 2018 total	Final target (2023) total	2018	Observations
1	F	1.E	Total amount of eligible expenditure certified to EC for Priority Axis 1	EUR	27,778,878.00	217,873,890.00	20,844,689.69	This amount includes 2018 expenditure incurred by beneficiaries and certified in the interim payment claim submitted to the European Commission on 26 June 2019. 75,04% of the 2018 milestone was achieved.
1	I	1.A	Number of approved projects under Priority 1, focusing on the new or enhanced transnational clusters and innovation networks	Number of projects	5	9.00	21.00	Total project value: 21. 2018 project value: 14 (COTEMACO, EYES, HappyMoo, Machining 4.0, MATMED, MiteControl, NWE MEA, NWE Chance, OIP4NWE, OPIN, PASSION-HF, SunSE, Water Test Network, AGRIWASTEVALUE). 2017 project value 5 (IDEA, SHICC, UV-ROBOT, Codex4SMEs, VR4REHAB). 2016 project value 2 (B4H; BioBaseSME). The total project pipeline value exceeds the original target. This is due to the fact that, in the programming phase, the Programme authorities did not realize that SO1 projects could contribute to this indicator and CO01 simultaneously. When the Programme was set up, only the projects creating networks (soft projects) were counted under indicator 1.01 and not the projects contributing to CO01 in principle, also setting up business support networks.
1	I	1.B	Number of approved projects under Priority 1, focusing on enterprises receiving support	Number of projects	14	27.00	15.00	Total project value: 24. 2018 projects: 15 (COTEMACO, EYES, HappyMoo, Machining 4.0, MATMED, MiteControl, NWE MEA, NWE-Chance, OIP4NWE, OPIN:, PASSION-HF, SuNSE, UNEET, Water Test Network, AGRIWASTEVALUE). 2017 projects: 4 (BONE, SHICC, UV-ROBOT, Codex4SMEs). 2016 projects: 5 (B4H, BE-GOOD, BioBase4SME, QCAP, eMEN).
1	O	1.C	Number of new or enhanced transnational clusters or innovation networks	Number of networks/clusters	0	27.00	28.00	Total project pipeline value: 41. 2018 project pipeline value: 28 (COTEMACO:4, EYES: 1, HappyMoo:2, Machining 4.0:1, MATMED:1, MiteControl:2, NWE MEA:1, NWE Chance:1, OIP4NWE:1, OPIN:1, PASSION-HF:1, SunSE:1, Water Test Network:10, AGRIWASTEVALUE:1). 2017 project pipeline value 11(IDEA:6, SHICC:1, UV-ROBOT:2, Codex4SMEs:1, VR4REHAB:1). 2016 project pipeline value 2 (B4H:1; BioBaseSME:1). The total project pipeline value exceeds the original target. This is due to the fact that, in the programming phase, the Programme authorities did not realize that SO1 projects could contribute to this indicator and CO01 simultaneously. When the Programme was set up, only the projects creating networks (soft projects) were counted under indicator 1.01 and not the projects contributing to CO01 in principle, also setting up business support networks.
1	O	1.D	Number of enterprises receiving support	Number of enterprises	0	540.00	1,432.00	Total pipeline value: 2,081. 2018 project pipeline : 1432 (COTEMACO:60, EYES:25, HappyMoo: 503, Machining 4.0:50, MATMED:90, MiteControl:16, NWE MEA: 40, NWE-Chance:3, OIP4NWE:13, OPIN:123, PASSION-HF:4, SuNSE:200, UNEET:175, Water Test Network:120, AGRIWASTEVALUE: 10). 2017 project pipeline : 245 (BONE:9, SHICC:33, UV-ROBOT:3, Codex4SMEs:200). 2016 project pipeline :404 (B4H:330, BE-GOOD:10, BioBase4SME:46, QCAP:3, eMEN:15). The high value for this indicator is due to several projects focusing on generic business support and hence involving many companies through more generic type of support provided than initially anticipated (nevertheless aligned with the definition for CO01 provided by the European Commission and applied by the Programme). The Programme estimated 20 companies supported per project approved, some projects however provide support to more.
2	F	2.E	Total amount of eligible expenditure certified to EC for Priority Axis 2	EUR	31,146,063.00	244,282,844.00	27,235,690.00	This amount includes 2018 expenditure incurred by beneficiaries and certified in the interim payment claim submitted to the European Commission on 26 June 2019. 87,45% of the 2018 milestone was achieved.
2	I	2.A	Number of approved projects under Priority 2, leading to solutions facilitating the delivery of existing or emerging low carbon, energy or climate	Number of projects	3	6.00	8.00	Total project value : 8. 2018 project value:2 (CConnects, RegEnergy). 2017 project value:2: (cVPP, ECCO). 2016 project value: 4. (ACE-Retrofitting, CAN, E=0, HeatNetNWE).

Priority axis	Ind type	ID	Indicator	Measurement unit	Milestone for 2018 total	Final target (2023) total	2018	Observations
			protection strategies					
2	I	2.B	Number of approved projects under Priority 2, leading to enterprises co-operating with research institutions	Number of projects	11	21.00	19.00	Total project value: 19. 2018 project value 7 (SMART-SPACE, H4.0E, Green WIN, DGE-ROLLOUT, D2Grids, AFLOWT, FCCP). 2017 project value 10 (CleanMobilEnergy, GROOF, GenComm, LOGiC, Up-Straw, ITEG, PowerVIBES, H2Share, ST4W, river). 2016 project value 2 (FORESEA, CHIPS). A modification of the Programme was submitted to the European Commission to address the value of this indicator.
2	O	2.C	Number of solutions facilitating the delivery of existing or emerging low carbon, energy or climate protection strategies	Number of solutions	0	18.00	24.00	Total project pipeline value : 58. 2018 project pipeline value:24 (CConnects:10, RegEnergy:14). 2017 project pipeline value:17 (cVPP:15, ECCO:2). 2016 project pipeline value: 17 (ACE-Retrofitting:3, CAN:7, E=0:5, HeatNetNWE:2). Adjustments to 2016 project values were due to project modification requests. Higher than expected values are due to projects delivering many solutions, not as initially anticipated maximum of 3 solutions per project.
2	O	2.D	No. of enterprises co-operating with research institutions	Number of enterprises	0	420.00	91.00	Total project pipeline value: 338. 2018 project pipeline value: 91 (SMART-SPACE:4, H4.0E:15, Green WIN:36, DGE-ROLLOUT:7, D2Grids:9, AFLOWT:15, FCCP:5). 2017 project pipeline value: 181 (CleanMobilEnergy:24, GROOF:30, GenComm:10, LOGiC:3, Up-Straw:20, ITEG:15, PowerVIBES:27, H2Share:2, ST4W:30, river:20). 2016 project pipeline value 66 (FORESEA:26, CHIPS:40). Changes to 2017 project values were due to additional technical requirements concerning project outputs. Adjustments to 2016 project values were due to project modification requests. A modification of the Programme was submitted to the European Commission to address the value of this indicator.
3	F	3.C	Total amount of eligible expenditure certified to EC for Priority Axis 3	EUR	20,202,852.00	158,453,737.00	17,372,085.50	This amount includes 2018 expenditure incurred by beneficiaries and certified in the interim payment claim submitted to the European Commission on 26 June 2019. 85,99% of the 2018 milestone was achieved.
3	I	3.A	Number of projects approved under Priority 3	Number of projects	10	20.00	15.00	Total project value: 15. 2018 project value 6 (WOW!, FCRBE, CHARM, CEDACI, URBCON, Di-Plast). 2017 project value 6 (ALG-AD, Phos4You, RAWFILL, ReNu2Farm, SeRaMCo, SURICATES). 2016 project value 3 (AFTB, Fibersort, Food Heroes).
3	O	3.B	Number of enterprises receiving support	No. of enterprises	0	400.00	223.00	Total project pipeline value: 600. 2018 project pipeline value 223 (WOW!:9, FCRBE: 36, CHARM: 9, CEDACI: 61, URBCON: 18, Di-Plast: 90). 2017 project pipeline value 347 (ALG-AD:15, Phos4You:44, RAWFILL:205, ReNu2Farm:48, SeRaMCo:31, SURICATES:4). 2016 project pipeline value 30 (AFTB:10, Fibersort:5, Food Heroes:15). Changes to 2017 project values were due to additional technical requirements concerning project outputs. Adjustments to 2016 project values were due to project modification requests. In the programming phase, the Programme envisaged 20 enterprises per funded project only. A few projects however exceeded this number, which led to a more solid pipeline for this indicator than initially anticipated.

Priority axis	Ind type	ID	Indicator	Measurement unit	2017	2016	2015	2014
1	F	1.E	Total amount of eligible expenditure certified to EC for Priority Axis 1	EUR	2,971,794.72	0.00	0.00	0.00
1	I	1.A	Number of approved projects under Priority 1, focusing on the new or enhanced transnational clusters and innovation networks	Number of projects	7.00	2.00	0.00	0.00
1	I	1.B	Number of approved projects under Priority 1, focusing on enterprises receiving support	Number of projects	4.00	5.00	0.00	0.00
1	O	1.C	Number of new or enhanced transnational clusters or innovation networks	Number of networks/clusters	11.00	2.00	0.00	0.00
1	O	1.D	Number of enterprises receiving support	Number of enterprises	245.00	404.00	0.00	0.00
2	F	2.E	Total amount of eligible expenditure certified to EC for Priority Axis 2	EUR	4,309,713.47	0.00	0.00	0.00
2	I	2.A	Number of approved projects under Priority 2, leading to solutions facilitating the delivery of existing or emerging low carbon, energy or climate protection strategies	Number of projects	6.00	4.00	0.00	0.00
2	I	2.B	Number of approved projects under Priority 2, leading to enterprises co-operating with research institutions	Number of projects	12.00	2.00	0.00	0.00
2	O	2.C	Number of solutions facilitating the delivery of existing or emerging low carbon, energy or climate protection strategies	Number of solutions	17.00	17.00	0.00	0.00
2	O	2.D	No. of enterprises co-operating with research institutions	Number of enterprises	181.00	66.00	0.00	0.00
3	F	3.C	Total amount of eligible expenditure certified to EC for Priority Axis 3	EUR	553,152.37	0.00	0.00	0.00
3	I	3.A	Number of projects approved under Priority 3	Number of projects	9.00	3.00	0.00	0.00
3	O	3.B	Number of enterprises receiving support	No. of enterprises	347.00	30.00	0.00	0.00

3.4. Financial data

Table 4: Financial information at priority axis and programme level

As set out in Table 1 of Annex II to Commission Implementing Regulation (EU) No 1011/2014 (Model for transmission of financial data) and table 16 of model for cooperation programmes under the European territorial cooperation goal

Priority axis	Fund	Calculation basis	Total funding	Co-financing rate	Total eligible cost of operations selected for support	Proportion of the total allocation covered with selected operations	Public eligible cost of operations selected for support	Total eligible expenditure declared by beneficiaries to the managing authority	Proportion of the total allocation covered by eligible expenditure declared by beneficiaries	Number of operations selected	Total eligible expenditure incurred by beneficiaries and paid by 31/12/2018 and certified to the Commission
1	ERDF	Total	217,873,890.00	60.00	122,046,568.96	56.02%	100,692,062.15	15,064,212.87	6.91%	26	20,844,689.69
2	ERDF	Total	244,282,844.00	60.00	223,320,742.20	91.42%	171,151,136.83	35,750,297.29	14.63%	27	27,235,690.00
3	ERDF	Total	158,453,737.00	60.00	90,060,475.34	56.84%	78,638,048.85	11,484,263.54	7.25%	17	17,372,085.50
4	ERDF	Total	27,962,424.00	85.00	27,962,423.98	100.00%	27,962,423.98	9,133,968.44	32.67%	10	
Total	**ERDF**		**648,572,895.00**	**61.08**	**463,390,210.48**	**71.45%**	**378,443,671.81**	**71,432,742.14**	**11.01%**	**80**	**65,452,465.19**
Grand total			**648,572,895.00**	**61.08**	**463,390,210.48**	**71.45%**	**378,443,671.81**	**71,432,742.14**	**11.01%**	**80**	**65,452,465.19**

Where applicable, the use of any contribution from third countries participating in the cooperation programme should be provided (for example IPA and ENI, Norway, Switzerland)

Swiss organisations may participate in the NWE projects but are not entitled to ERDF funding. They may receive funding from the Swiss federal government to co-finance their share in the project budget and, in some cases, may need to provide their own funding to cover their entire share of the project budget.

The Swiss contribution to Technical Assistance equals 24,000 EUR for the course of the Programme duration. The entire amount was invoiced by the Programme and paid by Switzerland in December 2015. Since then, no additional funding has been received.

Table 5: Breakdown of the cumulative financial data by category of intervention

As set out in Table 2 of Annex II to Commission Implementing Regulation (EU) No 1011/2014 (Model for transmission of financial data) and tables 6-9 of Model for cooperation programmes

Priority axis	Fund	Intervention field	Form of finance	Territorial dimension	Territorial delivery mechanism	Thematic objective dimension	ESF secondary theme	Economic dimension	Location dimension	Total eligible cost of operations selected for support	Public eligible cost of operations selected for support	The total eligible expenditure declared by eneficiaries to the managing authority	Number of operations selected
1	ERDF	063	01	07	07	01		11	UKM22	6,069,503.96	5,205,494.61	50,000.00	1
1	ERDF	063	01	07	07	01		20	NL412	9,760,201.27	8,007,825.00	5,259,941.26	2
1	ERDF	063	01	07	07	01		22	IE021	2,569,158.06	2,339,193.06	0.00	1
1	ERDF	064	01	07	07	01		01	BE351	6,385,835.62	4,809,988.62	50,000.00	2
1	ERDF	064	01	07	07	01		03	BE222	7,107,737.61	6,516,184.61	984,028.79	2
1	ERDF	064	01	07	07	01		06	NL414	13,874,961.48	9,979,479.48	0.00	1
1	ERDF	064	01	07	07	01		07	BE242	9,748,206.88	6,849,181.12	2,564,947.95	2
1	ERDF	064	01	07	07	01		20	NL226	13,629,226.45	12,064,338.68	471,832.37	4
1	ERDF	064	01	07	07	01		21	FR301	2,953,651.59	2,233,041.59	547,918.63	1
1	ERDF	064	01	07	07	01		22	BE213	4,981,632.00	4,230,528.00	50,000.00	1
1	ERDF	064	01	07	07	01		24	BE234	11,875,526.19	9,709,772.00	3,662,263.96	2
1	ERDF	112	01	07	07	01		01	BE213	2,668,550.70	2,423,629.70	0.00	1
1	ERDF	112	01	07	07	01		20	NL423	10,691,516.80	8,740,245.51	100,000.00	2
1	ERDF	112	01	07	07	01		21	FR106	13,280,692.71	11,132,992.53	150,000.00	3
1	ERDF	112	01	07	07	01		24	NL332	6,450,167.64	6,450,167.64	1,173,279.91	1
2	ERDF	012	01	07	07	04		09	DEA14	18,697,123.00	16,139,013.00	0.00	1
2	ERDF	012	01	07	07	04		10	DE712	16,466,234.44	13,415,318.79	628,727.73	2
2	ERDF	012	01	07	07	04		12	UKN01	9,386,249.87	7,089,624.98	1,734,297.80	1
2	ERDF	012	01	07	07	04		22	UKM65	55,776,534.25	31,038,509.51	8,669,177.36	4
2	ERDF	012	01	07	07	04		24	NL322	4,209,961.35	3,399,339.35	710,056.51	1
2	ERDF	013	01	07	07	04		10	NL423	20,830,915.52	15,518,015.52	0.00	1
2	ERDF	013	01	07	07	04		11	UKG13	2,454,783.00	2,454,783.00	50,000.00	1
2	ERDF	013	01	07	07	04		22	FR246	21,340,036.35	19,155,653.70	1,065,332.66	4
2	ERDF	013	01	07	07	04		22	NL332	13,244,740.00	10,075,317.00	5,901,144.97	2
2	ERDF	015	01	07	07	04		22	NL414	6,105,342.53	5,078,906.53	100,000.00	1
2	ERDF	023	01	07	07	04		01	NL226	4,503,431.00	4,503,431.00	50,000.00	1
2	ERDF	023	01	07	07	04		10	IE021	11,573,185.00	10,378,806.00	3,634,587.00	1
2	ERDF	023	01	07	07	04		22	DE712	7,884,001.00	7,884,001.00	5,751,307.00	1
2	ERDF	023	01	07	07	04		22	NL226	7,207,666.52	6,380,043.58	2,791,321.94	1
2	ERDF	043	01	07	07	07		05	BE213	3,517,561.40	1,911,361.40	252,165.12	1
2	ERDF	043	01	07	07	07		12	BE242	7,731,150.15	6,533,246.15	3,817,469.89	2
2	ERDF	043	01	07	07	07		24	DEA23	8,539,003.50	7,188,275.00	50,000.00	1
2	ERDF	044	01	07	07	07		12	BE323	3,852,823.32	3,007,491.32	544,709.31	1
3	ERDF	019	01	07	07	06		06	UKI11	3,190,366.83	2,482,750.83	0.00	1
3	ERDF	019	01	07	07	06		08	BE100	4,325,434.12	3,579,726.12	0.00	1
3	ERDF	019	01	07	07	06		09	BE332	3,865,958.54	3,727,677.00	788,609.84	1
3	ERDF	019	01	07	07	06		11	NL221	20,160,958.27	17,247,601.45	605,871.00	4
3	ERDF	069	01	07	07	06		03	NL413	5,700,497.85	4,102,328.85	3,654,224.98	1
3	ERDF	069	01	07	07	06		04	NL326	3,529,826.43	2,038,354.43	990,667.27	1
3	ERDF	069	01	07	07	06		08	DEB32	24,126,213.98	21,508,801.67	3,146,217.08	4
3	ERDF	069	01	07	07	06		11	DEA52	19,786,519.32	19,225,168.50	814,315.04	3
3	ERDF	069	01	07	07	06		22	DE731	5,374,700.00	4,725,640.00	1,484,358.33	1
4	ERDF	121	01	07	07			24	FR301	27,962,423.98	27,962,423.98	9,133,968.44	10

Table 6: Cumulative cost of all or part of an operation implemented outside the Union part of the programme area

1. Operation (2)	2. The amount of ERDF support(1) envisaged to be used for all or part of an operation implemented outside the Union part of the programme area based on selected operations	3. Share of the total financial allocation to all or part of an operation located outside the Union part of the programme area (%) (column 2/total amount allocated to the support from the ERDF at programme level *100)	4. Eligible expenditure of ERDF support incurred in all or part of an operation implemented outside the Union part of the programme area declared by the beneficiary to the managing authority	5. Share of the total financial allocation to all or part of an operation located outside the Union part of the programme area (%) (column 4/total amount allocated to the support from the ERDF at programme level *100)
AFTB	595,663.69	0.15%	200,578.32	0.05%
ASPECT	177,207.37	0.04%	71,732.82	0.02%
B4H	418,725.14	0.11%	134,159.68	0.03%
CODEX4SMES	314,278.05	0.08%	38,489.74	0.01%
FCCP	203,697.96	0.05%	19,914.69	0.01%
GROOF	95,293.06	0.02%	37,631.32	0.01%
Mite Control	427,548.34	0.11%	0.00	
QCAP	151,949.53	0.04%	92,257.20	0.02%
Smart-Space	109,840.95	0.03%	0.00	
Water Test Network	210,638.83	0.05%	30,480.20	0.01%
eMEN	345,250.00	0.09%	130,674.97	0.03%

(1) ERDF support is the Commission decision on the respective cooperation programme.
(2) In accordance with and subject to ceilings set out Article 20 of Regulation (EU) No 1299/2013.

4. SYNTHESIS OF THE EVALUATIONS

In line with the NWE evaluation plan, the Programme performed an implementation evaluation in 2018. The evaluation analysed the Programme effectiveness and efficiency in the middle of its implementation, as well as assesses expected contribution to socio-economic changes in the NWE territory at the end of the programming period. Similarly to the previous evaluations, the implementation evaluation was carried out by an independent consortium. It focused on four aspects of Programme implementation: project results and Programme effectiveness, process efficiency, contribution to Europe 2020 goals as well as the territorial cohesion on the NWE territory (ref: Annex 1 "Implementation of an integrated evaluation approach within the framework of a robust North-West Europe evaluation system (Reference 16B007), Task 2: The implementation evaluation").

1. Evaluation of project results and programme effectiveness. This part of the evaluation focused on the overall relevance and suitability of projects and partnerships for the Programme, project output contributions to the Programme indicators and Performance Framework as well as project results and their contribution to the Programme objectives and results. The main conclusions and findings included the following:

- The selected and implemented projects are relevant and suitable to Programme Objectives and challenges identified in the Cooperation Programme**.** They are evenly spread between the Programme Priorities and Specific Objectives (SOs).
- Project partnerships are generally relevant and suitable for their project purpose**.** Partnerships are particularly relevant to delivering the Programme Specific Objectives. Involvement of target group representatives ensures that the project results go beyond the project partnership. Outreach to target groups corresponds largely to the target groups defined per Specific Objective of the Cooperation Programme. The project partnerships are generally well balanced and contribute to the Programme SOs and results, with only minor imbalances noted for SO2 and SO3 projects. Inclusion of partners from different types of organisations and territories facilitates the delivery of concrete project outputs and results.
- The Programme output indicator delivery levels are considered satisfactory, even though the allocation and spending of funds remain behind schedule. The Programme indicator achievements will exceed the target values. In particular, contributions to energy and CO2 emission indicators are considerable, in addition the targets for these indicators were greatly underestimated and require a recalculation. The solid project contribution to the Programme output indicators is also reflected in the Performance Framework values achieved to date except for the financial indicators (which were low when the evaluation was carried out). In comparison to the previous programming period, the allocation rate remains low even though implementation increased considerably with the most recent calls.
- Funded projects contribute, with their concrete results, to the results and result indicators of the individual Specific Objectives. The changed focus of the NWE Programme to encourage concrete project results can be observed in all SOs. In particular, projects funded under SO1, SO2, SO3 and SO5 contribute to Programme SOs and their results. Contributions to SO4 and its intended results are less visible, particularly due to fewer cross-thematic contributions. Project partners emphasise the added value of focus on concrete results, which facilitates the establishment of strong and targeted partnerships and enables learning and exchange, increases institutional capacity and brings demonstration projects into the future.

- The Programme was recommended to adjust its intervention logic and result indicators in the next programming period to better capture qualitative project contributions to cohesion enabling factors such as cooperation, coordination and governance.

2. Evaluation of process efficiencies. This part of the evaluation covered the Programme organisation and management, including analysis and evaluation of support structures, tools and activities to ensure efficient and effective Programme delivery. It followed up the 2016 evaluation of the two-step approach introduced to facilitate result orientation.

- The two-step approach improved the application process but did not significantly improve the quality of applications. Between Call 1 and Call 5 there has been a clear increase in the approval rate but is still considered low. The average approval rate was 26% in Step 1 and 65% in Step 2. For Call 5 these rates were 31% and 64% respectively. The increased approval rates may also be due to improved internal Programme processes.
- The main recommendations of the 2016 two-step evaluation have been taken on board. The timeframes for application form (AF) submission in Step 2 are clearer and applicants are explicitly encouraged to contact the Joint Secretariat (JS) at any stage during the process. Contact Point (CP) and JS support in Steps 1 and 2 is generally appreciated, but not always used by projects for project development in Step 2. Project partners need most assistance with the quantification of baselines for project results, definition of the project long-term effects and value for money.
- Result-orientation and focus on concrete project outputs and results are appreciated by the applicants to NWE. The enhanced result-orientation facilitates a more effective and efficient cooperation. Project reporting and monitoring are not perceived as an administrative burden, particularly since there is a learning effect from both progress and payment reporting.
- The eMS (NWE IT system used for application, project reporting and monitoring) captures predominantly quantitative project achievements. Surveyed and interviewed project partners were of the view that the system largely captures their contribution to Programme objectives. Programme bodies however highlighted the need to collect more qualitative information, in particular to assess the unintended or additional benefits brought to the territory by the Programme. This additional qualitative information is collected via project quality appraisals. More attention should be given to qualitative project aspects in addition to the quantitative data. A complementary final quality appraisal of projects will be carried out measure the actual contribution to Specific Objectives (SOs) of the Programme.
- Synergies with national strategies or funding schemes are more prominent in certain countries, in particular the Netherlands, where a concrete effort is made to match NWE projects with other funding initiatives.

3. Evaluation of the contribution to Europe 2020.

- Substantial contributions to smart and sustainable growth can be expected from the NWE Programme. The Programme contributes to smart growth directly via Specific Objective 1 projects

as well as cross-thematic contributions from SO3, SO4 and SO5. The Programme contributes to sustainable growth considerably via SO2, SO3 and SO4 projects.
Moreover, SO5 projects make a moderate contribution to the sustainable growth axis. Inclusive growth is addressed to a lesser extent as it was not identified by the Programme Monitoring Committee as a priority axis for intervention. Nevertheless, the Programme promotes and encourages social innovation projects under SO1.

4. Evaluation of the contribution to territorial cohesion.

- Support from the NWE programme is well-distributed between poor and well-performing NUTS regions, which is confirmed by the correlation of the NWE Programme investments per capita with the 'Social Progress Index' (SPI). At the end of 2017, the NWE funding support was predominantly provided to urban and intermediate regions, and less to rural regions. The vast majority of the SO1 (innovation) projects (11 out of 12) applied the leader-follower approach with at least 33% following regions represented in the project partnership.
- The individual project storylines show that cooperation was key to the success of all NWE projects. Interviews carried out with stakeholders in the case studies helped the evaluators understand why cooperation contributed to new ideas, learning, pilot actions and demonstration projects for policy-makers and other public actors that provide services or participate in policy formulation. Governance was a particularly useful cohesion enabler in projects under SO1, SO2 and SO5. Coordination was another useful enabler, as it helped to align stakeholders with different expectations, capacity and experience in diverse thematic fields, either along a value chain or within an innovative ecosystem.
- The Programme has facilitated a reduction of disparities, but mostly in regions where NWE projects are active and have a direct influence. Despite its small size and therefore reduced impact on competitiveness and territorial development on the territory, the NWE Programme fills a critical gap between the cross-border and international cooperation. Interviewed stakeholders confirmed that problems or issues are best solved through co-operation across borders, as domestic funding programmes fail to provide support beyond administrative boundaries.

There is a general balance of contributions to the two territorial cohesion goals - competitiveness and growth as well as balanced development and cohesion. Projects contribute to both goals of territorial cohesion, individually or simultaneously to both. However, a tendency to value projects contributing to competitiveness and growth as more effective and successful has been noted, as their contributions to the Programme are easier to quantify. A lack of available quantitative data and indicators at local and regional levels for social inclusion, cohesion, environmental and efficiency-related performance hamper the development and approval of projects targeting balanced development.

Name	Fund	From month	From year	To month	To year	Type of evaluation	Thematic objective	Topic	Findings
"Implementation of an integrated evaluation approach within the framework of a robust North-West Europe evaluation system (Reference 16B007), Task 2: The implementation evaluation"	ERDF	1	2014	11	2018	Mixed	01 04 06 07	Implementation evaluation.	The findings are described in section 6 of the AIR 2018.

5. ISSUES AFFECTING THE PERFORMANCE OF THE PROGRAMME AND MEASURES TAKEN

(a) Issues which affect the performance of the programme and the measures taken

1. The main issue that was tackled in 2018 related to the **allocation of Programme funds and the increase of number of approved projects**. In order to accelerate the selection process, the Programme organized and completed calls 3,4,5 and 6 as well as a targeted call for renewable energy. Consequently, the number of MC meetings in 2018 was high, with 5 meetings taking place in 2018, all of them tackling project approval at either step 1 or 2 of the project development process. As a total, in 2018 the MC approved 30 projects, significantly increasing the existing pipeline under all three thematic priorities.

In addition, in order to accelerate the financial implementation of the Programme, the eligibility period for project expenditure was extended from December 2022 till December 2023. Last but not least, discussions began on the topic of budget shift at the Programme level from Priority 1 and 3 to Priority 2 (finalized only in February 2019).

2. Programme monitoring was regularly discussed by the Monitoring Committee and is further elaborated on in chapter 14 of this report. The discussions revolved mainly around the Programme Perfomance Framework and the complete indicator framework, as well as addressed the budget monitoring.

3. Project implementation is also a default item on the MC agenda. It can be noted that in 2018 the projects were progressing but slightly slower than foreseen. Projects from calls 1 to 3 were in the implementation phase, call 4 projects only started their activities in 2018, while call 5 projects were contracted (with a workshop for all partners organised on 4-5th October 2018 in Lille). The projects from call 6 and the targeted call were approved by the MC only on 25-26th October, which was followed by the technical requirements phase until end 2018.

- Although the programme had invested a lot of resources in the project development phase, the reality showed that projects needed more time to effectively kick-start their activities. The technical requirements phase is often more complex or more time consuming that initially planned and hence most projects experience a delay of approximately 3 to 6 months at the outset. This has a direct consequence on project spending. Substantial support is given to beneficiaries to speed up the implementation phase.
- The first outcomes of project activities were reported, mostly deliverables (for instance feasibility studies, first phase of demonstration pilots, implementation of voucher schemes) and ongoing outputs.
- In addition to regular project monitoring (6-monthly progress reports, project meetings, etc), the JS performs project quality appraisals. The first quality appraisals are done approximately 18 months after the start of the project (mid-term review) with the last one done at the end of the project. Based on the quality criteria and standards for an effective and well-managed project, this appraisal serves both the project (feedback to partners on performance and quality) and the programme (global performance). The Joint Secretariat also monitors project performance and quality based on the indicators set for the project's main outputs and results (see 2.3). Ongoing relevance to the Programme objectives and target groups is checked (strategic fit) as well as technical and operational feasibility (project approach).
- As a particular type of project modifications, ERDF extensions were discussed by the MC in Waterford, Ireland on 25-26 June 2018. The MC agreed that the aim of supporting project budget's extensions was to increase and accelerate the impact of the projects in their final stage of implementation, that have a solid ground for complementary project activities, expanding the challenges tackled by the project to reinforce its impact. That MC also decided that, as such, extensions could play an important role as an

incentive for the Programme capitalisation.

4.The NWE project scorecard provides a picture of the overall risk level that the implemented projects represent. It is based on the methodology approved by Monitoring Committee in the first year of Programme implementation. Information included in the scorecard is based on the project application forms (partnership and its structure, financial elements, State Aid and approach taken to it) as well as project monitoring - progress reports and quality appraisals (strategic and operational aspects, implementation performance and spending levels against targets). On the basis of a methodology approved by MC8 as well as the project monitoring practice, one project was identified as risk high (LOGiC) and three risk medium (UP-STRAW, E=0 and Boost4Health). This was due to the delayed action plan delivery and low spending levels as well as match funding and cash flow issues. The MC agreed that the JS would follow the projects closely and work on the mitigation measures with the beneficiaries, to address the delays.

5.Brexit has been addressed in several MC meetings. Since MC12 in Waterford, it has become a default item of the agenda. As NWE territory includes the entire UK, its contribution to both content and budget of the NWE Programme is substantial. Therefore, the rejection of the 'deal' by UK parliament and then the 'no deal' scenarios have been closely followed by the NWE authorities. As hard Brexit was a possibility until end March 2019, the JS prepared scenarios for the worst-case scenarios for NWE.

- If the UK decided to not respect its obligations and stopped contributing to the EU budget after 29 March 2019 (according to the media this accounts for about EUR 39 billion), UK partners would still be guaranteed by the declaration of the Exchequers (2016), which was extended to projects approved until the end of 2020 (UK Government decision 24 July 2018).

In that case and assuming no further guidance of Commission is available and from UK side, uncertainty remained about the distribution of responsibilities and cash-flows within the Programme. For that reason, the MA informed the Committee that it would suspend all payments to UK Lead Partners and Project Partners as of the Brexit date. The MC then discussed several options to mitigate the risks, amongst them a possibility for the UK to pay UK partners and Lead Partners from a special bank account entrusted to the JS or direct payment by the UK from their 'contingency fund'. Issues were also raised about the legal recognition of the NWE Subsidy Contracts in the UK and application of rules included within as well as the need to reconsider the Programme Lead Partner rule (possible not possible for the UK to provide Lead Partners). In addition, the need not to allocate 100% of Programme funding was also underlined, as well as approval of projects with a high financial UK share. Despite the discussions, no decision could be taken by the Monitoring Committee due to the overall political situation and the suspense till end March 2019.

(b) OPTIONAL FOR LIGHT REPORTS, otherwise it will be included in point 9.1. An assessment of whether progress made towards targets is sufficient to ensure their fulfilment, indicating any remedial actions taken or planned, where appropriate.

N/A

6. CITIZEN'S SUMMARY (ARTICLE 50(9) OF REGULATION (EU) NO 1303/2013)

A citizen's summary of the contents of the annual and the final implementation reports shall be made public and uploaded as a separate file in the form of annex to the annual and the final implementation report

You can upload/find the Citizen's summary under General > Documents

7. REPORT ON THE IMPLEMENTATION OF FINANCIAL INSTRUMENTS (ARTICLE 46 OF REGULATION (EU) NO 1303/2013)

8. PROGRESS IN PREPARATION AND IMPLEMENTATION OF MAJOR PROJECTS AND JOINT ACTION PLANS (ARTICLE 101(H) AND ARTICLE 111(3) OF REGULATION (EU) NO 1303/2013 AND ARTICLE 14(3)(B) OF REGULATION (EU) NO 1299/2013)

8.1. Major projects

Table 7: Major projects

Project	CCI	Status of MP	Total investments	Total eligible costs	Planned notification/submission date	Date of tacit agreement/ approval by Commission	Planned start of implementation	Planned completion date	Priority Axis/ Investment priorities	Current state of realisation — financial progress (% of expenditure certified to Commission compared to total eligible cost)	Current state of realisation — physical progress Main implementation stage of the project	Main outputs	Date of signature of first works contract (1)	Observations

(1) In the case of operations implemented under PPP structures the signing of the PPP contract between the public body and the private sector body (Article 102(3) of Regulation (EU) No 1303/2013).

Significant problems encountered in implementing major projects and measures taken to overcome them

N/A

Any change planned in the list of major projects in the cooperation programme

N/A

8.2. Joint action plans

Progress in the implementation of different stages of joint action plans

N/A

Table 8: Joint action plans (JAP)

Title of the JAP	CCI	Stage of implementation of JAP	Total eligible costs	Total public support	OP contribution to JAP	Priority axis	Type of JAP	[Planned] submission to the Commission	[Planned] start of implementation	[Planned] completion	Main outputs and results	Total eligible expenditure certified to the Commission	Observations

Significant problems encountered and measures taken to overcome them

N/A

9. ASSESSMENT OF THE IMPLEMENTATION OF THE COOPERATION PROGRAMME (ARTICLE 50(4) OF REGULATION (EU) NO 1303/2013 AND ARTICLE 14(4) OF REGULATION (EU) NO 1299/2013)

9.1 Information in Part A and achieving the objectives of the programme (Article 50(4) of Regulation (EU) No 1303/2013)

Priority axis	1 - INNOVATION

The objective of the SO1 is to enhance innovation performance in NWE through international cooperation. This objective addresses three of the Programme challenges (boosting knowledge flows, SME innovation capabilities and social inclusion). The first two challenges are directly linked to the SO result (increased SME innovation levels) and the relevant result indicator (degree of SME involvement in collaboration with other institutions). The private sector is therefore the main target group of the SO. The intervention logic of the SO therefore revolves around SMEs, including social enterprises; Effective outreach to them and involvement in funded projects are hence the key to the SO1 success.

The implementation evaluation findings summarised in section 10.1 confirm the significant SME involvement (both direct and indirect, addressing their competitiveness and innovation), with roughly 17% of the project partners actually being SMEs and driving implementation and further 10% sectoral agencies and 8% business support organisations (e.g. BioBase4SMEs), stimulating their growth. Additional 10% of partners are enterprises excluding SMEs, which guarantees the technology development and testing and rollout on a potentially broader scale as well as B2B benefits for cooperating SMEs.

It should be noted that all projects funded under SO1 Type of Action 1 or 2 must contribute to the obligatory indicator CO01 (number of enterprises receiving support) or 1.01 (number of networks created or enhanced), hence demonstrating a direct contribution to the two challenges as well as the result and result indicator of the SO.

In 2018, the Programme authorities approved 15 projects out of 19 applications submitted under Specific Objective 1 that year. Together with the projects approved in previous years, this makes the total of 27 projects approved by end 2018, proving a solid pipeline for this SO.

The SO1 projects provide a variety of business support mechanisms:

- Technology development, monitoring and increase in Technology Readiness Level
- Supply and demand matchmaking
- Establishment of value chains, including cross-sectoral value ones
- Micro-financing (vouchers)
- Access to testing, demonstration and validation sites
- End-user validation
- Creation of downstream markets
- Development of business models, provision of training and coaching
- Establishment of innovation networks and management structures
- Improvement of enterprise environment/ecosystem

The funded projects cover a variety of sectors, including:

1. Health and medicine:

- Acceleration of the valorisation of cost-effective 3D smart implants fabricated by electrospinning technology, by collaboration between SMEs, bigger enterprises, research institutions, business support organisations, end-users, health care professionals and regulatory experts. This approach ensures that 3D smart implants produced with electrospinning technology are available and taken up faster by the health care sector as a new medical treatment for bone fractures and regeneration in NWE (BONE).
- Promotion of more affordable, accessible, effective and empowering mental health by operationalising a cooperation platform for e-mental health product innovation, development, testing, implementation and exchange of implementation expertise (process and product innovation) – eMEN
- Improvement the innovation performance of SMEs in the areas of advanced materials and regenerative medicine/medical devices by creating a fully online-enabled ecosystem. Matchmaking between advanced materials and regenerative medicine actors boost solutions closer to the market (MATMED).
- Support for businesses applying virtual reality (VR) technologies and addressing the demand from rehabilitation clinics' specialists and patients. All in order to make widely used VR driven rehabilitation solutions available as part of modern rehabilitation protocols for the musculoskeletal system and neurodisability (VR4REHAB).
- Change in the care process applied in the heart failure treatment. An eHealth product "Abby" enables self-care of chronic heart failure including self-prescription of medication (PASSION-HF).
- Support the industry (mainly SMEs) in the NWE region to develop, improve & validate new e-Health based technologies for the transition of 24/7 hospital care for heart failure (HF) patients a home environment (NWE-CHANCE).

2. Agriculture and food production:

- Development of value chain for new bio-based products from agriwaste. Specifically, viticulture and arboriculture by-products and residues are processed using a synergy of efficient extraction and conversion techniques, creating therefore a new economic value in the cosmetic, nutraceutical, chemical, energy and agricultural sectors (AGRIWASTEVALUE).
- Stimulation of technology and knowledge exchange to develop, test and implement integrated pest management programmes to control poultry red mite. The approach allows to convince the poultry farmers that no single means treatment is able to control PRM infestation and that implementation of real IPM programmes is necessary to avoid future crises and production losses and to improve food safety, animal health and welfare (MiteControl).
- Development of laser-based interactive storage system for potatoes/apples/pears/blueberries from Technology Readiness Level 4 to 6 by collaboration between research institutes, industry, SMEs, end-users (farmer's cooperatives and storage facilitators) - QCAP.
- Development of innovative autonomous UVC-vehicles and crop specific strategies for mildew control in horticulture, to reduce the number of chemical treatments against mildew and consequently lower the residues on fruit, vegetables and herbs (UV-ROBOT).
- Enabling farmers and veterinarians in the dairy sector to boost competitiveness through access to and use of smart data solutions increasing animal health, product quality and economic prosperity of farmers, veterinarians and extension workers in the dairy sector (HappyMoo).
- Implementation of economically viable algae-based value chains in the rural NWE, supporting algae farms through training and creation of downstream market and the biomass processing sector with new business opportunities (IDEA).
- Enabling SMEs in the manufacturing sub-sector of the automotive and food industries to adopt cobots in a balanced efficient way (costs, labour, flexibility) through tailored training (COTEMACO).

3. Material processing (machining):

- Increase in the innovation level of machining SMEs and transforming them into more competitive enterprises by demonstrating the applicability for machining, stimulating trials of innovative technologies and support machining SMEs with the transformation process of their production system (Machining 4.0)
- Progress in the combined technical- and commercial maturity level (from TRL3 to TRL5) for machining SME technologies and 20% risk reduction in their demonstration phase (NWE MEA).
- Demonstration of the applicability for machining and support machining SMEs with their transformation process. A parallel objective of this project is the implementation of home hospitalisation of patients is adopted by hospitals (NWE-Chance).

4. Metal:

- Optimisation of productivity of metal forming production lines, by model-based prediction and control of the temperature increase on friction. The increase in productivity enables lifecycle costs reductions of up to 40%, making it economically viable for the participating companies to keep production technology in Europe and invest in highly-skilled job creation (ASPECT).

5. Life science and biotechnology:

- Stimulation of international growth and innovation capacity of life science SMEs, bringing their products closer to the market. The support provided to SMEs accelerates the market introduction of new life science innovations and stimulates creation of new jobs through coaching, matchmaking and micro financing. (B4H).
- Improvement of SME competitiveness in the bio-based economy. Entrepreneurs are defined as SMEs and academia spinouts (almost SMEs with a promising technology and a concrete spin-out plan). Additional focus is on entrepreneurs that are innovating using the KET Industrial Biotechnology or are finding innovative ways to valorize waste streams (BioBase4SME).

6. Electronics and computing:

- Enabling the innovative enterprises to develop and deliver commercially viable and scalable solutions based on re-use of local, regional and national level public sector information in the field of infrastructure and the environment, leading to novel data-driven operational public services. Public bodies will also gain good practice in open data and relationship management with (commercial) data processing companies (BE-GOOD).
- Support for Codex developing SMEs, increasing the Technology Readiness Levels of their products up to level 7-8 through knowledge transfer/sample access and biomarker validation (Codex4SMEs).
- Development and application of innovative photonic products, similar to micro-electronics in the 1980s. Open innovation collaboration between research, SMEs, enterprises, and a TransNational Network enables progress in cost and time to market reduction as well as an increase in reliability (OIP4NWE).

7. Water treatment:

- Provision of testing facilities and research know-how to SMEs to allow them to develop and test new products for the water and wastewater sector, moving products closer to market and reducing the time taken to bring them to market (Water Test Network).

8. Energy:

- Acceleration of growth of the ocean energy sector and its supply chains, through development of new or improvement of existing products and services as well as establishment of new cross-sectoral value chains (OPIN and NWE MEA).

One type of action of SO1 concentrates on social innovation. Three out of four projects funded under this ToA focus on social entrepreneurship. Consequently, they also contribute to the SO1 result. Their thematic scope covers:

- Employability of NEETs (young people Not in Employment, Education and Training – UNEET and EYES)
- Development of a transnational network of replicable social innovation hubs, which will be used to establish innovative approaches to business support in geographically excluded areas (SuNSE)

Support for the establishment of more and successful Community Land Trusts in cities developing and managing homes that are affordable to low- and medium-income households and remain permanently affordable (SHICC).

Priority axis	2 - LOW CARBON

Priority 2 addresses two Programme challenges (energy security and supply and vulnerability to climate change developments), which are reflected in three Specific Objectives of the Programme:

- Specific Objective 2, aiming to reduce GHG emissions in NWE through international cooperation on implementing low carbon, energy or climate protection strategies. The result attributed to this SO is 'increased capacity of public authorities in NWE to implement low carbon measures effectively', measured by the indicator 'Effectiveness of NWE public organisations to implement low-carbon strategies'. Public organisations are the main target group of the SO.
- Specific Objective 3, whose goal is to reduce GHG emissions in NWE through international

cooperation on the uptake of low carbon technologies, products, processes and services. This SO's goal is to lead to the removal of barriers to adoption of and improved conditions for low carbon technology deployment, measured by the status of conditions for low-carbon technology deployment in NWE. The main target group for the SO is enterprises (including SMEs).

- Specific Objective 4, aiming to reduce GHG emissions in NWE through international cooperation on transnational low carbon solutions in transport systems. The SO is expected to lead to 'improved conception and coordination of low carbon transport and mobility solutions', measured with the 'Status of competence of the transport sector in using low-carbon transport solutions', with the main target group being enterprises in the transport sector (such as service companies, logistic operators).

Involvement of the key target groups per SO is crucial to the success of this Priority. The intervention logics of the three specific objectives revolve around their target groups. Their involvement both directly as project partners and indirectly as project end-users (via implementation and roll-out) was the main goal of the Programme.

Relevance of approved projects and target group involvement

1. The approved SO2 projects are highly relevant to the SO and address its main target group. They focus on:

- Large scale retrofitting, benefitting not only households (including deprived areas), but also local authorities also building professionals (including SMEs from the retrofitting sector (ACE-Retrofitting, CAN, E=0, RegEnergy) and the environment (high GHG emission reduction levels due to large investments). Creation of sustainable markets for net zero energy retrofits is also expected from these projects, not only via the direct delivery of investments and demonstration of a potential they represent, but also by:
- Educating consumers (demand side) and challenging industry (supply side) to transform the residential refurbishment market. A high roll-out rate is expected after the projects' end thanks to coaching tools and methods applied that can be easily replicated in other NWE regions and beyond.
- Demand–supply partnerships between urbanised and surrounding rural territories. This leads to a win-win benefit for local and regional authorities of urban areas, meeting their regional energy demand from reliable regional supplies, for rural local authorities and renewable energy producers to access energy consumers.
- Increasing the installed heating capacity of district heating networks and the provision of affordable warmth by accelerating transition from conventional heat (e.g. individual boilers) by demonstrating pilot investments and introduction of transition roadmaps (HeatNet NWE).
- Accelerating the development of local Renewable Energy Community Co-Operatives (ECCOs) in rural areas, as a decisive (f)actor in the NWE renewable energy policy transition from a centralized capital-based to a de-centralized community-based approach. By making ECCOs operate more effectively, make them more numerous, and sustaining them in the long term, ECCOs will become an essential part of regional energy policies, by becoming officially endorsed.
- Changing traditional high GHG emitting land management practice to sustainable low carbon

alternative practice in the main peatland containing regions of NWE: NL, DE, FR, UK, BE, and IE. Peatlands are high CO2 emitters, which will be prevented on pilot sites via storage of carbon in biomass (through crops), creation of value chains across NWE and validation of credit schemes (carbon, blue). Such an approach allows farmers to earn credits for CO2 storage and sell them to businesses wanting to offset emissions (C-CONNECTS)

2. SO3 projects are equally relevant to the Specific Objective and focus on its target group. Thematically, the concentrate on:

2.1. Energy sources and generation:

- Off-shore energy, testing floating wind energy infrastructure, ocean energy technology, application of vertical axis tidal turbines (projects AFLOWT, FORESEA and ITEG). These projects allow the demonstration of ocean capacity for energy generation and address poorly connected and remote areas, strongly dependent on non-renewable energy sources. Simultaneously, they engage technology developers and investors, allow technology testing in real-life conditions and hence prove their concept, cost-effectiveness and investability of ocean energy technologies.
- Deep geothermal energy for high temperature heat supply of industrial and agricultural enterprises and heat plants for district heating networks. The piloted sites produce heat and energy and involve energy as well as heat suppliers, industrial and agricultural enterprises (DGE-ROLLOUT).
- Hydrogen, for the hydrogen-based, energy matrix model and adaptation for communities in transition to sustainable, autonomous and competitive energy ones. Local utilities, local and regional authorities and private companied are the key players in implementing the developed energy matrix and progressively engage communities throughout NWE.
- Decentralised hybrid energy systems, also addressing ‘energy remoteness’ (areas not connected to the main energy infrastructure). LOGiC addresses this problem with decentral hybrid energy systems combining different types of renewables, such as tidal, wind and solar PV with each other as well as with battery storage.

2.2 Energy management systems:

- A combination of technologies, systems or processes for water pumping demonstrating how they can significantly reduce energy consumption. This approach allows a significant reduction in CO2 emissions from such operations and can be multiplied in other regions (Green WIN).
- Energy storage and EV charging innovative energy management systems, demonstrating that renewable energies can be used more efficiently using a web-based interoperable platform to balance supply and demand peaks, thus creating better business cases to make large scale role out economically feasible. Target groups are cities and investors in renewable energy (CleanMobilEnergy).
- Smart grids for the heating and cooling sector. By promoting 5th generation district and cooling standards towards the industry and attracting investors, public authorities and project developers are being empowered to implement their investments and to modernize existing distrct heating

networks (D2Grids)

2.3 Other projects, demonstrating new technologies

- Smart public lighting with high energy saving potential in mid- and small size municipalities to make the move towards energy-efficient, sustainable and demand-oriented municipalities accompanied by the development of a transition roadmap to ensure large-scale roll-out (SMARTSPACE).
- Application of digitization techniques, the use of low carbon materials and zero energy techniques adapted to smaller housing units, creating essential changes across the entire construction supply chain for social housing, in urban and rural areas (H4.0E).
- Combination of skills of construction and agricultural sector to create a European market for integrated rooftop greenhouses (technology testing and establishment of business models by implementing pilot rooftop greenhouses – GROOF).
- Up-scaling the use of straw for new buildings and retrofits of existing ones, with a particular focus on urban and public buildings. Thanks to this approach, students, architects, engineers and builders will be trained to using straw in their projects.
- Replacing diesel generators in local festivals by units that only use renewable resources to provide safe, highly reliable, and cost-effective energy (prime renewable sources being wind and sun to charge batteries - PowerVIBES).
- Developing a renewably-powered, hydrogen-based, energy matrix model, allowing NWE communities to transition to a sustainable, autonomous and competitive energy matrix and sustainably and autonomously meet the energetic demand of their inhabitants (GenComm).

3. Similarly, the SO4 projects are highly relevant to the SO and address the main SO target groups. They focus on:

- Demonstrating combustion engines in vehicles in urban freight transport by emission-free Fuel Cell Cargo Pedelecs and application of technology based in oxyfuel CSS combustion in the inland waterway vessels. This approach brings benefits the transport sector companies that can provide green delivery to their customers including SMEs constructing engines and inland water vessels (FCCP, river).
- Facilitating the development of a market for hydrogen heavy duty vehicles for logistic applications and a basis for the development of a zero-emission heavy duty vehicle industry in NWE area. Hydrogen rigid truck demonstrations and a mobile refuelling station allow the transport operators reduce GHG emissions in a 2-year demonstration period and engage operators interested in hydrogen application by showcasing it as an economically viable solution (H2Share).
- Facilitating modal shift from road to waterway in NWE, with a particular focus on palletised freight and small volumes requiring bundling to use waterways. An effective synchronization between shippers, skippers, customs and inland ports in project pilots proves the relevance and feasibility of the approach, validating a seamless cooperation along the supply chain and supporting SMEs posting palletised goods (ST4W).
- Developing existing and planned bicycle highways into a high quality, transnational mobility product that is used as their best commuter transport option. This project brings benefits for the cycle industry (innovation and more jobs) and society (significant CO2 emission reductions due to a switch from cars to bicycles – CHIPS).

Priority axis	3 - RESOURCE AND MATERIALS EFFICIENCY

The objective of SO5 is to optimise (re)use of material and natural resources in NWE through international cooperation. It addresses one of the Programme challenges (resource and materials efficiency) and will result in the accelerated transition to a circular economy by enabling spill-over effects of eco-innovation in the resource intensive industry. The result indicator applied measures the status of competences in NWE resource intensive sectors for eco-innovation diffusion (eco-innovation activities as described in the Eco-Innovation Scoreboard). The main target group is therefore the resource intensive industrial sectors, their involvement being the key target group is crucial to the success of this Priority. Their involvement both directly as project partners and indirectly as project end-users (via implementation and roll-out) is the main goal of the Programme. It is also highlighted by the obligatory output indicator for all SO5 projects, which is the "number of enterprises receiving support".

Until end 2018, the Programme authorities have approved 16 projects, all highly relevant to the Specific Objective. They relate to the following axes of eco-innovation:

- Environmental technology
- Eco-efficiency (resource productivity)
- Waste prevention and decrease
- Eco-design
- Sustainable innovation

Type of support provided by the SO5 projects encompasses, in general:

- Technology testing, demonstration/showcasing and piloting
- Proof of concept, technical feasibility and sustainability
- B2B matchmaking
- Product/process quality control
- Supply chain establishment or improvement
- Value chain establishment/management

Thematic coverage per economic sector can be described as follows:

1. Construction/renovation:

- Creation of conditions required for increased uptake of adhesive free Engineered Wood Products (EWPs) by the construction industry, allowing manufacturers, construction companies, architectural design companies and structural design firms to the move towards more production of adhesive free EWPs, saving over 1,2 tonnes of adhesive (AFTB).
- Increased use of construction and demolition waste (concrete, bricks, tiles, ceramics) as recycled raw materials for cement and concrete production in NWE. The approach brings benefits to enterprises in the construction, recycling and concrete product sectors, using new to the market products from recycled material and reduces the use of primary raw materials (SeRaMCo).
- Enhanced fine sediment reuse in coastal and erosion protection markets. The new solutions and methods implemented increase large volume sediment applications in projects operated by territories, ports and waterways managers lead to global cost and benefits optimisation for all involved parties (SURICATES).
- Development of transferable strategies for circular construction and renovation of social rented housing, aimed at prevention of downcycling in new construction and renovation projects carried out by social housing organisations (CHARM).
- Increase in the volume of building components being circulated for reuse by the construction industry. The project will benefit building professionals (reuse operators, commissioners, architects, contractors, experts) – FCRBE.
- Application of mineral by-products as main resource for the production of concrete, reducing raw materials consumption. The project introduces urban cements, aggregates and concretes as new products, and a web-based market platform invoking circularity amongst by-product providers and the construction sector (URBCON).

2. Agriculture/food production:

- Clean nutrient rich digestate produced from the anaerobic digestion (AD) of food/farm waste to prevent pollution risk in nitrate vulnerable zones and use of recovered nutrients in sustainable animal feed products. The project supports AD industry, farmers, processors of waste, animal feed industry, technology developers and policy regulators and leads to a substantial nutrient removal and recovery (ALG-AD).
- Reduction of food waste in the first parts of the food chain thus enhancing a more efficient use of resources. With focus on development, testing and implementation of new solutions for waste reduction and higher value uses, the project targets high number of food producers and industry, creative industries and technology providers (Food Heroes).
- Phosphorus (P) recovery from municipal wastewater to guarantee food security by reducing EU's dependence from imported P-rock. The project introduces the use of secondary raw phosphorus in new products (bio-based fertilizers) and innovative processes (recovery technologies) – Phos4You.
- Increased use and production of recycled Nitrogen, Potassium and Phosphorus, reduced mineral fertilizer use and increased use of recycling-derived fertilizers. Not only fertiliser producers, traders and farmers but the entire society will profit from increased sustainability of food production (ReNu2Farm).

3. Textiles:

- Implementation of a fiber sorting technology as the new industry standard and value adding step to enable development and growth of the market for high value recycling of low-grade recyclable post-consumer textiles. The project focuses on a high number of fabric and clothing collection/sorting companies, textile recyclers and manufacturers/retailers, decreasing virgin materials used (Fibersort).

4. More general waste and waste treatment:

- Screening landfills and demonstrating, under real conditions the evidence-based, standardised methodology to select profitable landfill mining projects, recovering significant amounts of dormant raw materials, energy carriers and land resources. Main beneficiaries are private landfill owners and managers willing to implement profitable resource-recovery driven solutions. The project also engages investors, civil engineering companies, consultants and geophysics operators (RAWFILL).
- Increased use of residual low value and waste biomasses and their conversion into carbon products for use in filtration treatment and environmental management. In a highly transferrable approach, new biomass-to-product value chains are being established; creating employability in and around conversion plants of different sizes for waste/wastewater treatment and with new income generating opportunities for local SMEs (RE-DIRECT).
- Development of a robust, secure and economically viable critical raw material (CRM) supply chain, by increasing CRM recovery and reuse, reducing demand for virgin materials and the environmental impact associated with the growth of redundant data centre equipment (CEDaCI).
- Uptake of recycled plastic material (rPM) through improved quality control and processing in the packaging and building B2B-supply chains by applying sensor technology, data analytics, and Value Stream Management. The project enables companies to improve quality, supply and information of rPm from production waste, creating a more stable supply of cost-efficient rPM equal to virgin material quality. Additional benefits include improvement in the economies and sustainability of the plastics supply chain (Di-Plast).
- Recovery and reuse of carbon material from wastewater at waste water treatment plants, piloting innovative extraction techniques for PHA (polyhydroxyalknaotes), lipids and cellulose, while tailoring the material specifications to the market needs. The project demonstrates the technical, economic and legal viability of new value chains, accelerating the market uptake of carbon-based products from wastewater (WOW!).

Given the solid project pipeline and its result orientation, it can be concluded that the Programme is well advanced in the implementation of SO5 and will achieve the initially envisaged Programme result for this

SO.

Priority axis	4 - TECHNICAL ASSISTANCE

The objective of SO6 is to maximise the effectiveness and efficiency of the management and implementation of the Interreg NWE Programme.

The technical assistance budget finances the Programme's Joint Secretariat, the network of Contact Points as well as certain activities undertaken by the Managing Authority and the Certifying Authority.

Thanks to the decision taken by the participating Member States to keep the same Managing Authority (the Hauts-de-France Region; former Nord-Pas-de-Calais Region), the same Joint Secretariat (GEIE GECOTTI, based in Lille), the same network of Contact Points and the same Audit Authority (the French CICC) as in the previous Interreg IVB Programme, most of the structures, procedures and human resources were in place when the current Interreg NWE Programme (2014-2020) was approved in June 2015.

The only main change was the appointment of a new Certifying Authority, the Province of East-Flanders. However, the Province was already acting as Certifying Authority in the previous programming period for two other Interreg programmes (namely, France-Wallonia-Flanders and Flanders-Netherlands) and was able to bring its own experience and expertise.

The main activities financed by the technical assistance budget are the following:

1. Project generation and selection

The NWE Programme uses as much as possible the documents and the tools developed by Interact in the framework of the HIT (Harmonised Implementation Tools); this was the case for the application form, the eligibility and selection criteria checklist.

Numerous individual, regional and national events have been organised by the different contact points within their own country to promote the NWE Programme and to foster project development. For each call for proposals, the Joint Secretariat organises a major transnational event (called "Project Ideas Lab") to support applicants in their last stage before submission.

The NWE Programme's application process is in two steps. Once applicants succeed at step 1, they will get an individual support from a dedicated Project Officer of the Secretariat, on top of a dedicated

workshop for approved step 1 projects.

2. Support to the actors involved in Transnational Cooperation Projects

A Programme Manual has been drafted as of March 2015 for both applicants and (later on) for approved projects. It is regularly updated, at least before the launch of each call for proposals. In addition, specific guidelines on State aid and on First Level Control were further developed.

Once approved, project partners are invited to attend a specific seminar where the programme requirements are explained in more details and where individual support is provided by the Joint Secretariat team. During the implementation phase, Project Officers have regular meetings with the project in their portfolio, either in Lille or at the partners' premises (for kick-off events, partners steering committee meetings or ad hoc meetings).

In terms of control activities, the Member States organise specific workshop for the First Level Controllers. The Joint Secretariat's Audit and Control Officer is actively involved in those workshops as well.

3. Monitoring, evaluation, control and reporting

The NWE Programme is using the eMS, the monitoring systems co-developed by several Interreg programmes under the coordination of Interact. The system covers the whole project and programme life cycle.

Progress reports are submitted twice per year by approved projects and are assessed by the Project Officers.

At least twice per year, the Joint Secretariat is presenting to the Monitoring Committee the project's progress and an evaluation of outputs and results.

The audit activity is coordinated by the Audit Authority, with the support of the Group of Auditors which is formally meeting once per year; but some decisions can be taken by written procedure as well, in case it is needed.

The reports to the European Commission are submitted in due time via the SFC-2014 system: the transmission of financial data; the annual implementation report; the accounts of the previous accounting year. Interim payment applications are submitted on regular basis, based on the cash flow need and at least

4 times per year.

4. Communication, dissemination and capitalisation

The Programme website is permanently updated with new information regarding organised events, support documents (manual, videos, …), contact details, list of beneficiaries. Each project has a specific page on the Programme website.

A specific transnational event is planned in 2019 to showcase and disseminate results of the projects and the NWE Programme as a whole.

5. Programme management and steering

Until the end of 2018, 13 Monitoring Committee meetings took place. The agenda usually covers strategic issues (such as budget and performance monitoring, evaluations, communication strategy, etc.) and project selection (both at step 1 and step 2).

Two evaluations took already place: evaluation of the two-step approach (February 2017) and the implementation evaluation (November 2018), as well as an additional task relating to the formulation of the territorial cohesion indicators.

9.2. Specific actions taken to promote equality between men and women and to promote non-discrimination, in particular accessibility for persons with disabilities, and the arrangements implemented to ensure the integration of the gender perspective in the cooperation programme and operations (Article 50(4) of Regulation (EU) No 1303/2013 and Article 14(4), subparagraph 2, (d) of Regulation (EU) No 1299/2013)

An assessment of the implementation of specific actions to take into account the principles set out in Article 7 of Regulation (EU) No 1303/2013 on promotion of equality between men and women and non-discrimination, including, where relevant, depending on the content and objectives of the cooperation programme, an overview of specific actions taken to promote equality between men and women and to promote non-discrimination, including accessibility for persons with disabilities, and the arrangements implemented to ensure the integration of the gender perspective in the cooperation programme and operations

The equality and non-discrimination principles are integrated into the template of the Programme application form (section B "Horizontal principles"). All partnerships bidding for funding must explain to which extent their project contributes to these principles. Based on the explanation provided in the Programme Manual (section 4.2.3 Project description), the partnerships must select the option "neutral" or "positive" (with regards to equal opportunities and non-discrimination and equality between men and women) to be approved. This information is part of the eligibility check at step 2 (eligibility criterion 15), before the Programme quality selection criteria are applied. In case the information provided in the horizontal principles is not positive or neutral, the projects are found ineligible. Last but not least, the Programme promotes gender equality within the Monitoring Committee structure, with the statistics of each committee being monitored.

To promote non-discrimination on the NWE territory, the Programme has undertaken the refugee challenge. At the end of 2015, a working group combining Joint Secretariat and Contact Points was established and the first proposals made for the Monitoring Committee discussed at their meeting February 2016 in Dusseldorf, Germany. That MC meeting led to a decision to consider refugee related projects within the existing Programme priorities (in particular Priority 1 – Specific Objective 1- Type of Action 3 - social innovation), and to focus on "the integration of recognised refugees in the mid- and long-term (...) in the domain of entrepreneurship, employment and access to the labour market." Since then (starting with call 3 of the Programme in 2016). The MC also approved the opening of our communication towards relevant stakeholders, through the extension of existing CP and JS contact databases. As a result, until end 2018 the Programme received three applications fully focusing on the migration topic and one project mentioning the topic, however none of them were approved by the Monitoring Committee due to poor quality. The Programme continues to include the refugee stakeholders in its contact databases and inviting them to our events in hope that they potentially intervene on the migration challenge, simultaneously maintaining a bottom-up approach. No specific call or budget allocation has been envisaged by the Programme to date though.

It is also worth noting that the Programme approved a project focusing on e-mental health innovation (eMEN). The project's objective is to promote more affordable, accessible, effective and empowering mental health by operationalizing a platform for e-mental health process and product innovation, development, testing and implementation. People with mental health difficulties and mental health professionals will be the direct project end-users.

Two projects (EYES and UNEET) focus on young people aged 15-34 years "not in employment, education or training" (NEETs), directly addressing discrimination on labour market. NEETs bear the risk

of long-term labour market exclusion as they are disconnected from existing employment support schemes, particularly present in the deprived NWE metropolitan areas. The co-designed EYES approach combines entrepreneurial education with personal coaching; UNEET fosters the professional integration of NEETs by raising their skills and matching the recruitment needs of the hotel, restaurant and catering (HORECA) sector.

9.3.Sustainable development (Article 50(4) of Regulation (EU) No 1303/2013 and Article 14(4), subparagraph 2, (e) of Regulation (EU) No 1299/2013)

An assessment of the implementation of actions to take into account the principles set out in Article 8 of Regulation (EU) No 1303/2013 on sustainable development, including, where relevant, depending on the content and objectives of the cooperation programme, an overview of the actions taken to promote sustainable development in accordance with that Article

Sustainable development concept is based on three pillars - environmental, economic, social. The Programme contributes substantially to all three axes, through the projects implemented under all five thematic specific objectives. The contribution of the NWE flagship projects is presented below.

1. Social, through inclusive growth and improvement of quality of life:

a) Good health and well-being, to the benefit of end-users (population) and health-care professionals:

- Promotion of more affordable, accessible, effective and empowering mental health by e-product innovation (eMEN),
- Improvement in the care process of heart failure treatment (PASSION-HF) and musculoskeletal system/neurodisability (VR4REHAB)
- Development and valorisation of 3D smart implants for bone fractures (BONE)

b) Food security and sustainable agriculture practice:

- Boosting the competitiveness of dairy farms, increasing product quality and economic prosperity of farmers (Happy Moo)
- Control of red poultry mites (reducing production losses - MiteControl), mildew control (decreasing its residues in fruit, vegetables and herbs -UV-ROBOT) and improvements to food storage systems (for fruit and vegetables -QCAP), all increasing food safety
- Creation new products from agriculture waste and algae (AGRIWASTE and IDEA)
- Improved animal feed products (ALG-AD)
- Increased fertiliser quality (ReNu2Farm, Phos4You)

c) Reduction of inequalities:

- Entrepreneurial education and personalised coaching for people not in education, employment or training (UNEET, EYES)
- Establishment of social entrepreneurship hubs (SuNSE)

d) Access to more affordable energy and housing:

- Large scale retrofitting projects for households (ACE-Retrofitting, CAN, E=0)
- Provision of affordable warmth (HeatNetNWE)
- Development of renewable energy community cooperatives (ECCO)

2. Environmental: attractiveness:

a) Improved air quality

- Zero emission heavy duty vehicles (hydrogen trucks – H2Share), combustion engines in urban freight transport (FCCP, river)
- Facilitating modal shift from road to waterways (ST4W)
- Introduction of healthy mobility infrastructures (bicycle highways – CHIPS)
- Cross-cutting GHG emission reduction across all SO2, SO3 and SO4 projects

b) Clean energy, sustainable energy use and management, amongst others:

- Demonstration of ocean capacity for energy generation, addressing poorly connected and remote areas, strongly dependent on non-renewable energy sources (AFLOWT, FORESEA, ITEG)
- Use of deep geothermal energy for district heating networks (DGE-ROLLOUT)
- Replacement of diesel generators (PowerVIBES)
- Hydrogen-based energy models (GenComm)
- Hybrid energy systems addressing energy remoteness (areas not connected to the main energy infrastructure – LOGiC).

c) Sustainable production patterns

- Circular construction and renovation (CHARM, FCRBE, URBCON, SeRaMCo, SURICATES,

AFTB),

- Resource productivity (RE-DIRECT, CeDaCI, Di-Plast, WOW!)
- Waste prevention and decrease (Fibersort, RAWFILL)
- Environmental technology application (all SO5 projects)

3. Economic growth and attractiveness:

- Job creation and maintenance (SO1, SO2, SO3 and SO4 projects, due to the fact that the Programme has common indicators dedicated to both)
- Enhanced economic competitiveness of SMEs (SO1, SO3, SO4 and SO5 projects in particular)
- Improvement of enterprise environment/eco-system (SO1, SO3, SO4 and SO5 projects)

9.4. Reporting on support used for climate change objectives (Article 50(4) of Regulation (EU) No 1303/2013)

Calculated amount of support to be used for climate change objectives based on the cumulative financial data by category of intervention in Table 7

Priority axis	Amount of support to be used for climate change objectives (EUR)	Proportion of total allocation to the operational programme (%)
2	125,481,851.16	85.61%
3	14,044,261.79	14.77%
Total	**139,526,112.95**	**35.22%**

9.5 Role of partners in the implementation of the cooperation programme (Article 50(4) of Regulation (EU) No 1303/2013 and Article 14(4), subparagraph 1, (c) of Regulation (EU) No 1299/2013)

Assessment of the implementation of actions to take into account the role of partners referred to in Article 5 of Regulation (EU) No 1303/2013, including involvement of the partners in the implementation, monitoring and evaluation of the cooperation programme

The year 2018 led to five Monitoring Committee meetings which covered a broad variety of topics that can be summarised as follows:

- Closure of the IVB NWE Programme
- Project development
- Project assessment and selection, for both Step 1 and 2 of the application process, tricky technical requirements not met by the MC approved projects
- Project modifications (ERDF extensions in particular) and implementation issues (Programme scorecard, projects at risk)
- Planning of future calls and related meetings
- Thematic and financial Programme monitoring (output indicators, contracting and spending levels), risk management, proposed Programme modifications
- Audit
- Brexit
- Gap analysis and capitalisation strategy
- Evaluation
- Preparations for the post 2020 period

In order to fulfil the requirements of the articles 5 and 50 of the Regulation (EU) No 1303/2013, the Programme Monitoring Committee reviews the Programme performance on a regular basis, several time per year, prior to the formulation, discussion and submission of the Annual Implementation Report to the European Commission. This allows the MC to identify and address any potential issues highlighted by the Joint Secretariat.

In order to apply the art. 5.3 of the CPR regulation, the Programme introduced a code of conduct applied to the Monitoring Committee. It sets the framework for the MC meetings, while fully respecting the principles of subsidiarity and proportionality and follows the principle of transparency and good practice, simultaneously preventing conflict of interest. In the Monitoring Committee discussions concerning project selection, if a Member State representative may potentially represent a conflict of interest, they do not participate in the decision making (leaving the MC room for the time dedicated to a specific project). This applies, in particular, to the national delegations that include representatives of regions and cities.

In May 2016 the Programme established the Evaluation Task Force, consisting of the MA, JS, three Member State representatives as well as a representative of the Contact Points. Since then, the Task Force has been following the whole evaluation process from the formulation of the Terms of Reference (ToR) for the evaluation framework contract, through the implementation evaluations to the follow-up of the

evaluation conclusions and action plans. The Task Force has successfully implemented 2 evaluations (of the two-step approach and the implementation evaluation) as well as an additional task to the framework contract related to the development of territorial cohesion indicators for NWE.

10. OBLIGATORY INFORMATION AND ASSESSMENT ACCORDING TO ARTICLE 14(4), SUBPARAGRAPH 1 (A) AND (B), OF REGULATION (EU) NO 1299/2013

10.1 Progress in implementation of the evaluation plan and the follow-up given to the findings of evaluations

The NWE evaluation plan was approved by the Programme Monitoring Committee (MC) in May 2016. The Evaluation Plan refers to the whole programming period and lays foundations for the programme approach to evaluation as well as its governance. The Programme also established the Evaluation Task Force (ETF) composing of 4 Member State representatives (UK, BE, DE and LU), the MA, a representative of the Contact Point network as well as several JS staff members. The Task Force acts on behalf of the Monitoring Committee in the evaluation field, meets on a regular basis and presents the outcome of its work (evaluation reports and the proposed actions) to the MC for approval.

In line with the evaluation plan and until May 2019 when this report was written, the Programme had carried out 2 evaluations as well as an additional task relating to the formulation of the territorial cohesion indicators completing the existing NWE indicator framework.

1. The first evaluation, of the two-step approach in the application process, came at an important moment in programme implementation in 2016. The approach had a two-fold aim, to simplify the application procedure and alleviate the administrative burden for applicants as well as to facilitate the implementation of result-orientation in funded projects. The main findings included the following:

- Applicants generally appreciated the two-step approach and preferred this procedure to the single step. However, benefits in terms of simplification (reduction of time and workload) could be seen for rejected project proposals in Step 1, but not for funded projects.
- The two-step approach was considered as more adapted for submission of result-based applications than the single step approach. The direct support of the Programme bodies was particularly important in order to overcome the difficulties related to the elaboration of result-based proposals.
- By filtering a large number of low-quality proposals in Step 1, the two-step approach allowed the programme bodies to concentrate large resources to the most promising project proposals and ensured a more efficient use of the Programme and applicant resources.

2. Second evaluation study undertaken in 2017 aimed to create a link between the North-West Europe policy demand, territorial challenges and the selection of indicators used in the Programme framework. The specific objective of this task was to establish **a measurement framework for territorial cohesion** in North-West Europe that could be used to generate additional information to the data obtained via the Programme indicator framework and improve consistency between the policy challenges of North-West Europe and the areas monitored by the Programme.

- The study resulted in a set of context indicators including baselines (figures, trends etc.) presented in the form of maps and a definition of ETC variables/cohesion enablers (strategic areas of importance/interest for the Programme).
- Evaluators developed storylines for the balanced development and competitiveness axes of territorial cohesion, highlighting its different facets. These storylines not only synthesised the main objectives of the funded projects and Programme Specific Objectives, but also intended to analyse the causal processes that these projects and NWE Specific Objectives initiate. The storylines are presented visually, to demonstrate the connection and links between individual projects and territorial cohesion, helping understand the causal relationships and contribution pathways. The storyline framework will facilitate the application of the Contribution to Impact Model, which will be used in the final impact evaluation.

3. The third **implementation evaluation** was carried out in 2018. Its main findings and recommendations are included in section 4 of this report. In order to follow up on the evaluation findings, the Evaluation Task Force met on 5th February 2019 to discuss a draft of the action plan addressing all the conclusions and recommendations. The recommendations were based on the evaluation questions and referred to process efficiency (the two-step approach, project development and selection, project monitoring and payment, eMS), project results and Programme effectiveness (project relevance, partner relevance and suitability, outputs, Programme indicators and Performance Framework, project results and contribution to the Programme) as well as the NWE contribution to Europe 2020 and territorial cohesion. Actions were proposed for the fully and partially relevant recommendations (both thematic content and process oriented) for the current NWE and the post 2020 Programme.

As for the process recommendations for the current NWE Programme, these revolved around:

- Continuation of the work undertaken by the second evaluation study in 2017, focusing on the territorial indicators for NWE. As the study highlighted the limited balanced development indicators and the need to define them within the scope of the TerrEvi ESPON project that the Programme is part of or a separate initiative, also in partnership with ESPON.
- Enhanced project monitoring, in particular with reference to the project closure phase and the need to gather additional qualitative information to complement the data gathered via the indicator framework (e.g. additional benefits for the project partners or results on the NWE territory not grasped by the expected project results, extra questions about contribution to competitiveness and balanced development axes of territorial cohesion).
- Programme capitalisation process, with a particular focus on the main target groups of the NWE Specific Objectives and a potential targeted call with a possibility of additional ERDF funding dedicated for the capitalisation purpose.

As far as the thematic Programme content for the post 2020 period is concerned, the proposed actions concern mainly:

- Focus on the targeted regions, involvement of rural and peripheral regions, rural-urban connection and the leader-follower approach, territorial justification of projects as well as inclusive growth as a more horizontal subject.
- Careful selection of themes, also from the territorial perspective and potential overlap with other ETC programmes.
- Adequacy of the Programme result indicators and their target values to the funded projects, suitability of the output indicator framework and target values for the intangible indicators for both hard infrastructure and softer networking projects.
- Process related questions (frequency of calls and possibility of targeted calls, quality selection criteria, level of support required by beneficiaries and coordination, required project type/size/duration and budget and guidance for baseline setting).

All recommendations made for the post 2020 period as well as the actions proposed by the Task Force will be discussed at the Monitoring Committee meeting in Bern in June 2019, launching the official preparations for the post 2020 Programme.

Status	Name	Fund	Year of finalizing evaluation	Type of evaluation	Thematic objective	Topic	Findings (in case of execution)	Follow up (in case of execution)
Executed	"Framework Contract: Implementation of an integrated evaluation approach within the framework of a robust North-West Europe evaluation system. Task 2: Implementation evaluation"	ERDF	2018	Mixed	01 04 06 07	Please see the description referenced in the section 10.1 as well as individual chapters dedicated to the delivery of the Programme Specific Objectives in section 9.1.	The main findings are presented in sections 10.1, 9.1, 9.3, 11.1 and 11.2.	The NWE Evaluation Task Force delivered a follow-up action plan for this evaluation, implementing the main recommendations for the current 2014-2020 and post 2020 period.

10.2 The results of the information and publicity measures of the Funds carried out under the communication strategy

The NWE Programme Communication strategy considers that *"everything done in communication must be aligned with the Programme's vision and mission and must substantially contribute to achieving the Programme's objectives"*. Its four main objectives are therefore closely connected to the objectives of the Programme as a whole:

- To get high quality applications from relevant institutions in step 1
- To get high quality applications from relevant institutions in step 2
- To achieve a smooth and successful project implementation and communication
- To gain the support of decision makers

In order to support these objectives, a communication plan was developed for the year 2018 with three main objectives closely linked to our programme's activity:

- Information and awareness raising about the NWE objectives and calls to relevant target audiences
- Stimulation and support for the generation of project ideas for calls 7 and 8, as well as the targeted call
- Identification of project results and contribution to capitalisation activities

The implemented activities revolved around the 3 calls organized in 2018 (call 7, 8 and the targeted call on renewable energy). The year 2018 was also marked by a shift in priorities from promoting calls to promoting approved projects and their first outcomes.

On that basis the main activities developed in 2018 were:

a) Identification of relevant target audiences. Updates and improvements to the CP/JS contact databases for call 8 was slightly more challenging than usual as it need to comply with GDPR. In some countries/regions this resulted in CP contact databases slightly decreasing in contents, even if overall the reach out remained substantial (approximately 5,000 to 6,000 people). The databases were supplemented by the contact details of those signing up for NEW website alerts (2,711 contacts end 2018).

b) Development of online, digital and social media tools to enhance the dissemination of information. In 2018 the number of visitors to the NWE website increased to approximately 7,000 per month, with peaks over 10,000. Social media tools were used intensely, the number of NWE followers strongly increased in 2018 (Twitter increase from 3,750 end 2017 to 4,249 in end 2018 - +12%, LinkedIn from 1,543 in end 2017 to 2,179 in end 2018 - +29%).

c) Support for the organisation of national and regional events. 8 specific NWE info days were organized in 2018 in the cities of: Belfast (UK), Tours (FR), Namur, Brussels (BE) and The Hague (NL), Louvain-la-Neuve (BE), Rennes (FR), Manchester (UK). The NWE programme was presented at over 12 other major external events organized at national level.

d) Organisation and coordination of 2 transnational events. 2 "Project idea laboratory" events were organized in 2018 in London and Paris. The main objective of these events is to support applicants in the development of their project ideas and facilitating networking and partner search. The PI lab in London prepared call 7 as well as the targeted call (222 participants and 49 project idea posters), whereas the PI lab in Paris prepared call 8 (183 participants and 48 project idea posters presented). For both events, approximately

30% of the project ideas presented were then submitted in the following call.

1. Support for approved projects in their communication in the project development and implementation phases and included actions such as:

- Organisation of 2 workshops for step 1 and step 2 applicants
- Provision of guidance to projects and follow-up of their communication activities
- Assistance to beneficiaries in communicating achievements and developing relevant tools and activities

2. Development and implementation of the capitalisation strategy. A capitalisation strategy was developed defining the programme's approach, in order to increase the project results visibility (organisation of internal workshops to summarise project outcomes to date, assurance of project visibility at external events, support for EU awards).

Results in relation to the communication strategy indicators:

1. **Average number of eligible applications per call.** The number of eligible applications remained very high in 2018. In call 7 step 1, 59 projects applications out of 61 were eligible. In call 8 step 1, 68 out of 69 projects were eligible. This represents an eligibility rate of over 97% in step 1. In step 2, the eligibility rate was of 100% for both calls closing in 2018.
2. **Average number of successful applications per call.** In step 1 the success rate was higher than usual in 2018, with 34 % and 33% of approved applications in the two calls closing in 2018. The overall average since the launch of the programme is of 26%. In step 2, the success rate was of 65 % in both calls closing in 2018, which also corresponds to the average success rate since the beginning of the programming period. The success rate of the targeted call was of 44% in a one-step procedure, which makes it the programme's most successful call up to now.
3. **Level of satisfaction about accessibility and quality of information.** The programme has not proceeded to an overall survey measuring the level of satisfaction about the quality and accessibility of information. However, a few figures and event evaluation collected give some indications. For instance:
    - The number of applications received in step 1 progressed since call 5 and is at a similar level as the first calls launched in 2015.
    - The number of participants at our PI lab events remains at a very high level with over 400 participants at the two events in 2018.
    - The feedback of participant from PI labs indicated more than 90% of participants judging the events "good" or "excellent".
4. **Types of beneficiaries represented in applications.** In step 1, our programme attracts the right mix of applicants (mainly public authorities 32%, higher education and research 23% and SMEs 10%). Within approved projects, the balance between public and private partners remains good in all priorities (54% public partners / 46% private partners). Within approved projects, research and higher education organisations are the most represented type of partners. Their amount seems to increase in the step 2 phase.
5. **Programme regions represented in applications.** The NWE gap analysis updated in 2018 showed a high concentration of applicants and approved projects in a few NWE regions (the "core" region of NWE (Lille/Amsterdam/Dortmund triangle, the Atlantic area as well as big cities and urban areas in

general). The objective to reach out to peripheral and weaker regions is not yet fully achieved in step 1, but some rural areas are well represented among approved projects (Brittany, Scotland, Ireland).

Number of newcomers represented in applications. The last estimates date from March 2017 and showed that close to 80% of applicants in step 1 were newcomers. In approved projects, newcomers represent 60% of all partners.

11. ADDITIONAL INFORMATION WHICH MAY BE ADDED DEPENDING ON THE CONTENT AND OBJECTIVES OF THE COOPERATION PROGRAMME (ARTICLE 14(4), SUBPARAGRAPH 2 (A), (B), (C) AND (F), OF REGULATION (EU) NO 1299/2013)

11.1. Progress in the implementation of the integrated approach to territorial development, including integrated territorial investments, sustainable urban development, and community led local development under the cooperation programme

The NWE Programme applies an integrated approach to territorial development by building on North West Europe's territorial assets. This means that the projects approved by the programme address territorial challenges, link with relevant territorial development policies (e.g. smart specialisation strategies, regional ERDF programmes) or follow a cross-sectoral approach.

At step 1 of the application process, all bidding partnerships are requested to describe the challenge or issue they are aiming to tackle and how relevant the issue/challenge is to the North West European territory. The partnerships also need to give an overview of the current situation and trends in the sector/field of activity which their project is addressing. This requires a description of the existing disparities within the NWE territory in the particular field/sector.

The most important quality selection criterion of step 1 (55% of the final score) assesses whether the need for the project is justified, if the approach chosen is relevant to NWE and whether the project contributes to reducing disparities on the programme territory.

Similarly, at step 2 of the application, the project relevance is also addressed. The applicants are requested to refine the initial description provided at step 1 to ensure information provided is consistent with the work plan and partnership. The territorial relevance is also incorporated into the quality selection criteria of step 2 assessment, with a lower percentage of final score attributed (15%). This is because the relevance is more important at the step 1, where the best and most suitable projects for the Programme are chosen.

The specific approach on integrated actions for sustainable urban development or the community-led local development instruments, as defined in Article 8(3) of the ETC Regulation, are not applied in the NWE Programme. However, following the decision of the MC taken In Brussels in May 2016, social innovation projects (SO1) that promote local community -based approaches with a transnational potential are accepted, as long as they can bring systemic and scalable changes to the territory.

11.2 Progress in implementation of actions to reinforce the capacity of authorities and beneficiaries to administer and to use the ERDF

Since its beginning, the NWE Programme has been implementing the simplification measures adopted by the Monitoring Committee and detailed in the Programme Manual. In particular, the programme makes use of the following simplified costs options which were automatically applied to facilitate the reporting of costs for all beneficiaries:

- A lump sum for preparation costs (EUR 30,000) for all projects approved in step 2

- Staff costs calculated as a 20 % flat rate of direct costs (all costs other than staff costs and office & administration costs)

- A flat rate for the budget line 'office and administration' (15% of staff costs)

To ensure a thorough understanding of Programme rules and smooth project implementation and reporting, the Joint Secretariat and the Member States organised numerous seminars for project lead partners (January, June and October 2018) and First Level Controllers (July 2018, Utrecht, NL). These events aimed to explain the programme rules and requirements concerning project implementation, reporting and fraud prevention. It should be noted that, as a rule of prevention, the seminars for approved projects were obligatory to all lead partners and strongly recommended to the remaining project partners.

As far as the Programme tools are concerned, NWE was actively involved in the redevelopment and maintenance of the electronic Monitoring System (eMS) set up by INTERACT. The system enables the monitoring of projects and programme implementation as well as electronic exchange of data between programmes and beneficiaries. NWE, together with 36 other programmes involved in the eMS, worked closely in the core group meeting (May 2018, Vienna, Austria) where the new functionalities from the beta test release as well as the GDPR requirement application and AIR requirements were discussed. Several issues concerning the post 2020 period were also addressed (the need for a common monitoring system, development process, legal entity in charge, development piloting, etc). The group expressed their wish to have a common monitoring system in the future and to build on the experience gained in this programming period, hopefully under the supervision of INTERACT.

It should be noted that the Joint Secretariat is actively involved in the Interact activities and meetings organised for all ETC programmes, in particular on topics of evaluation and indicators as well as audit. In 2018, one particular meetings should be mentioned for evaluation, held in February 2018 in Brussels, where the NWE territorial cohesion indicators were presented as a precursory piece of evaluation work.

11.3 Contribution to macro-regional and sea basin strategies (where appropriate)

As stipulated by the Regulation (EU) No 1299/2013, recital 19, article 8(3)(d) on the "Content, adoption and amendment of cooperation programmes" and article 14(4) 2nd subparagraph (c) "Implementation reports", this programme contributes to MRS(s) and/or SBS:

The NWE eligible area covers one macro-regional strategy and one sea-basin strategy:

- Atlantic Sea-Basin Strategy (France, Ireland, UK)
- Danube Macro-Region Strategy (Germany: Baden-Wurttemberg and parts of Bavaria)

The NWE's Programme's Managing Authority and partners are aware of the macro-regional cooperation initiatives, however they do not find it relevant to implement formal coordination mechanisms. For the Atlantic sea-basin strategy, the potential overlap was discussed in the Programme Preparatory Group for NWE 2014-2020, but due to the focus on land rather than maritime issues, there was no real need to align the programme with the Atlantic Area Programme (AAP). Three specific objectives of NWE (SO1, SO3 and SO4) can be considered as a contribution to the SO 1.1, SO 2.4 and SO 3.1 of the AAP. Nevertheless, none of the NWE SOs is specifically dedicated to the AAP Programme. From the portfolio of projects approved to date, only ocean energy projects have a potential of contributing to AAP, the FORESEA, iteg and AFLOWT projects approved under Priority 2.

As far as the Danube Macro-Region Strategy is concerned, there is only a small geographical overlap with the eligible NWE area. NWE can only marginally contribute to the achievement of the Danube Macro-Region Strategy in the regions of Baden-Wurttemberg and Bavaria. Potential complementarity can be found in Priority 1 and 2, on topics such as innovation, renewable energy development as well as mobility and multimodality (SO1, SO3 and SO4). From the projects approved to date, several can potentially contribute to the Danube strategy in both German regions (ASPECT, ALG-AD, B4H, CHIPS, CleanMobilEnergy, Codex4SMEs, FCCP, H4.0E, H2Share, Machining 4.0, PASSION-HF and Water Test Network). Nevertheless, their tangible contribution to the strategy can only be monitored with time.

☐ EU Strategy for the Baltic Sea Region (EUSBSR)
☑ EU Strategy for the Danube Region (EUSDR)
☐ EU Strategy for the Adriatic and Ionian Region (EUSAIR)
☐ EU Strategy for the Alpine Region (EUSALP)
☑ Atlantic Sea Basin Strategy (ATLSBS)

EUSDR

The pillar(s) and priority area(s) that the programme is relevant to:

	Pillar	**Priority area**
☑	1 - Connecting the Danube region	1.1 - Mobility - waterways
☑	1 - Connecting the Danube region	1.2 - Mobility - rail, road & air
☑	1 - Connecting the Danube region	1.3 - Energy
☐	1 - Connecting the Danube region	1.4 - Culture and tourism
☑	2 - Protecting the environment in the Danube region	2.1 - Water quality
☑	2 - Protecting the environment in the Danube region	2.2 - Environmental risks
☐	2 - Protecting the environment in the Danube region	2.3 - Biodiversity, landscapes, air and soil quality
☑	3 - Building prosperity in the Danube region	3.1 - Knowledge society
☑	3 - Building prosperity in the Danube region	3.2 - Competitiveness
☐	3 - Building prosperity in the Danube region	3.3 - People & skills
☐	4 - Strengthening the Danube region	4.1 - Institutional capacity & cooperation
☐	4 - Strengthening the Danube region	4.2 - Security

Actions or mechanisms used to better link the programme with the EUSDR

A. Are macro-regional coordinators (mainly National Coordinators, Priority Area Coordinators or Steering Group members) participating in the Monitoring Committee of the programme?

Yes ☐ No ☑

B. In selection criteria, have extra points been attributed to specific measures supporting the EUSDR?

Yes ☐ No ☑

C. Has the programme invested EU funds in the EUSDR?

Yes ☐ No ☑

Does your programme plan to invest in the EUSDR in the future? Please elaborate (1 specific sentence)

Since the Danube region covers only a very limited area of the NWE Programme (NUTS1 regions Bavaria and Baden-Wuerttemberg), NWE will only marginally contribute to the achievement of the Danube Region Strategy in those regions.

D. Obtained results in relation to the EUSDR (n.a. for 2016)

Since the Danube region covers only a very limited area of the NWE Programme (NUTS1 regions Bavaria and Baden-Wuerttemberg), NWE may only marginally contribute to the achievement of the Danube Region Strategy via projects operating in those regions. The results of those projects cannot be reported as they have not been completed.

E. Does the programme contribute to the targets as validated by the national coordinators and priority area coordinators in 2016 (uploaded on the EUSDR website)? (Please specify the target(s))

NWE potentially contributes to Priority Areas 1A, 1B, 2, 5,7,8 and 9.

ATLSBS

Priority(s) and objective(s) that the programme is relevant to:

	Priority	Objective
☑	1 - Promote entrepreneurship and innovation	1.1 - Sharing knowledge between higher education organisations, companies and research centers
☐	1 - Promote entrepreneurship and innovation	1.2 - Enhancement of competitiveness and innovation capacities in the maritime economy of the Atlantic area
☐	1 - Promote entrepreneurship and innovation	1.3 - Fostering adaptation and diversification of economic activities by promoting the potential of the Atlantic area
☐	2 - Protect, secure and develop the potential of the Atlantic marine and coastal environment	2.1 - Improving maritime safety and security
☐	2 - Protect, secure and develop the potential of the Atlantic marine and coastal environment	2.2 - Exploring and protecting marine waters and coastal zones
☐	2 - Protect, secure and develop the potential of the Atlantic marine and coastal environment	2.3 - Sustainable management of marine resources
☑	2 - Protect, secure and develop the potential of the Atlantic marine and coastal environment	2.4 - Exploitation of the renewable energy potential of the Atlantic area's marine and coastal environment
☑	3 - Improve accessibility and connectivity	3.1 - Promoting cooperation between ports
☐	4 - Create a socially inclusive and sustainable model of regional development	4.1 - Fostering better knowledge of social challenges in the Atlantic area
☐	4 - Create a socially inclusive and sustainable model of regional development	4.2 - Preserving and promoting the Atlantic's cultural heritage

Actions or mechanisms used to better link the programme with the Atlantic SBS

A. Are the Sea Basin Strategic coordinators (mainly National Coordinators, Priority Area Coordinators or members, and/or Objective coordinators or members) participating in the Monitoring Committee of the programme?

Yes ☐ No ☑

B. In selection criteria, have extra points been attributed to specific measures supporting the ATLSBS?

Yes ☐ No ☑

C. Has the programme invested EU funds in the ATLSBS?

Yes ☐ No ☑

Does your programme plan to invest in the EUSAIR in the future? Please elaborate (1 specific sentence)

The NWE Programme does not find it relevant to implement formal coordination mechanisms for the implementation of the strategy, mainly due to a lack of thematic relevance (the Programme does not focus on maritime issues).

D. Obtained results in relation to the ATLSBS (n.a. for 2016)

As none of the NWE projects potentially referring to the ATLSBS has been completed, no results can be reported to date.

11.4 Progress in the implementation of actions in the field of social innovation

Social innovation is addressed by the NWE Programme via Priority 1, Specific Objective 1 (SO1), which aims "to enhance the innovation performance of enterprises throughout NWE regions" (including social enterprises). Social innovation is a type of action (ToA3) within the SO1 and encourages:

· Innovative projects for excluded population or population at risk for exclusion and communities under pressure

· Support for development, testing and implementation of innovative solutions for social needs and problems ('social innovation')

The exclusion is defined as health related (disability, illness), linked to economic circumstances (youth or long-term unemployment, poverty), geographical exclusion (populations in isolated rural areas, suburban peripheral areas, urban areas far from transport hubs) and exclusion linked to prejudice (gender, sexual orientation, race, age, etc). Projects dealing with migration issues focusing on the integration of recognised refugees in the mid and long term are also encouraged, particularly in the domain of entrepreneurship, employment and access to the labour market.

Until the end of 2018, 4 social innovation projects (EYES, UNEET, SuNSE and SHICC) were being implemented:

· Two projects (EYES and UNEET) focus on young people aged 15-34 years "not in employment, education or training" (NEETs). Since NEETs are rather irresponsive to classic top-down approaches and hardly connect to existing support schemes, they bear the risk of long-term labour market exclusion. The situation is particularly alarming in deprived NWE metropolitan areas where multiple risks of becoming or remaining NEETs are far above national averages. The co-designed EYES approach combines entrepreneurial education with personal coaching and a digital platform to help NEETs access regular support schemes they otherwise would refuse. Of the 100,000 NEETS in five NWE metropolitan areas, EYES will reach 1,000 during the project lifetime, 400 of them will use regular support schemes while 25 will become early-stage entrepreneurs. UNEET proposes an innovative approach to foster the professional integration of NEETs by raising their skills and matching the recruitment needs of the hotel, restaurant and catering (HORECA) sector with the existing labour supply of young adults in 7 NWE regions.

· SuNSE is developing a network of social entrepreneurship (SE) hubs around NWE, to act as local points for stimulating activity in disadvantaged regions of NWE. The partner regions are non-metropolitan, peripheral areas experiencing market failure, outmigration of skilled workers and a loss of talent to metropolitan areas. The project supports the creation of new or growth of local social businesses, with 300 people accessing a programme of business support, leading to the development of 200 new enterprises, of which 70 will bring new products and services to the market.

SHICC addresses the growing problem of housing affordability, by supporting the establishment of more and successful Community Land Trusts (CLTs). CLTs are democratic community-based organisations that develop and manage homes that are affordable to people with low and medium incomes. They create cohesive

neighbourhoods through ongoing affordability and extensive community and resident involvement. The project allows the 'niche' UK CLT model to become a mainstream option for housing supply and urban renewal in NWE.

13. SMART, SUSTAINABLE AND INCLUSIVE GROWTH

Information and assessment of the programme contribution to achieving the Union strategy for smart, sustainable and inclusive growth.

The NWE implementation evaluation carried out in 2018 provides a detailed insight into the actual NWE contribution to Europe 2020, both within each Specific Objective and across all Programme SOs. The data collected from projects, thanks to the targeted selection of output indicators and quantification of results, allowed the evaluators to assess the data derived from both the Programme and projects.

1. The expected contribution of SO1 projects to **smart growth** in NWE is substantial**.** The implemented projects contribute to:

1. The headline target of 3% of EU GDP invested in R&D
2. The thematic actions:

- ‘Unleashing Europe’s innovative capabilities and re-focusing R&D and innovation policy on the challenges facing our society’
- ‘Promoting innovation and knowledge transfer throughout the EU, by making full use of ICT’s and ensuring innovative ideas can be turned into new products and services’

In order to measure the individual project contributions to these goals, the Programme introduced the following output indicators:

- Number of enterprises receiving support
- Number of enterprises supported to introduce new to the market and new to the firm products (name projects)
- Number enterprises co-operating with research institutions (name projects)
- Number of technologies, products, services and processes developed and tested in real life conditions (name projects)
- The amount of funding leveraged by the projects (name projects)
- Number of transnational clusters and innovation networks created or reinforced by the projects

As the Programme introduced an obligation for all SO1 projects to contribute to either the first or the last indicator from the list mentioned above, all projects of the SO1 provide effective input to both thematic actions of the smart growth axis. The remaining indicators from the SO1 framework support the project contributions as well. All of the targets for those output indicators have already been exceeded. The funded projects facilitate enterprise cooperation with research institutions (CO26 – value 546), 2081 companies are receiving support (CO01), with 518 of them to introduce new to the market (CO28) and 677 new to the firm products (CO29).

Furthermore, projects under SO3, SO4 and SO5 also contribute to the two thematic actions closely related to the smart growth headline target on R&D investment. The projects help re-focus R&D and innovation policy on major societal challenges (climate change, energy and resource efficiency) and also promote innovation and knowledge transfer throughout NWE so innovative ideas in these fields can be turned into new products and services. In particular, all SO3 and SO4 projects facilitate enterprise collaboration with R&D institutions, as they contribute to the obligatory (for SO3 and SO4) indicator CO26 (value 123 enterprises). As far as SO5 is concerned, all funded projects are required to provide their input for the indicator CO01. Substantial contribution to the smart growth axis is also facilitated by the funding leveraged by the ERDF invested in NWE projects, in particular in SO2 and SO3. The SO3 projects clearly have the biggest leverage effect, with the 81 million EUR expected from the pipeline to date.

2. **Sustainable growth** in NWE is promoted by the primary direct contribution of the projects funded under SO2, SO3, SO4 and SO5. The funded projects contribute to:

a) Headline targets:

- 20% reduction in greenhouse gas emissions
- 20% of energy from renewable resources
- 20% increase in energy efficiency

b) Thematic actions:

- Strengthening the EU economy's resilience to climate risks and the capacity for disaster prevention and response (SO2 projects)
- Achieving climate goals through fully exploiting the potential of new technologies and spreading innovative technological solutions, including the development of new green technologies (SO3, SO4 and SO5 projects)
- Helping SMEs and all sectors in adjusting their production processes and products to a low-carbon economy (SO3, SO4)
- Maintaining the EU's lead in the market for green technologies for ensuring resource efficiency throughout the economy and bosting industrial competitiveness (SO5 projects)
- Modernising and decarbonising the transport sector, thereby contributing to increase competitiveness (SO4 projects)
- Becoming a more resource efficient economy, giving Europe a competitive advantage and reducing its dependency on foreign sources of raw materials and commodities (SO5 projects)
- Assisting consumers to value resource efficiency (SO5 projects)

Projects funded under SO2, SO3 and SO4 contribute most substantially to the 20-20-20 headline targets, whereas SO3, SO4 and SO5 provide meaningful input for the thematic actions.

- Thematic focus on headline targets is represented by the selection of output indicators used by the Programme in its Priority 2 framework, for SO2, SO3 and SO4 (estimated annual decrease of GHG emissions – CO34, additional capacity of renewable energy production – C030, number of households with improved energy consumption class – CO31, decrease of annual primary energy consumption of public buildings - CO32). For most of these 'headline output indicators', the Programme will exceed the initially anticipated targets, due to a low number of projects focusing on public buildings in general (private households prevail in the SO2 pipeline in particular).
- In particular, the Programme contributes to the expansion and roll-out of new green technologies. The SO3 projects provide a significant input (80 adopted or applied technologies), similarly to SO4 (20 low carbon solutions implemented). SO5 does not have a specific technology related indicator but provides a significant level of enterprise support for testing and application of new green technologies (123 enterprises cooperating with R&D, 600 companies receiving support, including 98 introducing new to the market and 39 new to the firm products). Through the enterprise support, SO5 projects provide a valuable contribution to the thematic action "Maintaining the EU's lead in the market for green technologies for ensuring resource efficiency throughout the economy and bosting industrial competitiveness" as well.
- Helping SMEs and all sectors in adjusting their production processes and products to a low-carbon economy. Under the SO3 and SO4, 181 companies are cooperating with R&D organisations (which is key to the production adjustments), 142 companies receiving support to introduce new to the markets and 10 new o the firm products.
- Becoming a more resource efficient economy, giving Europe a competitive advantage and reducing its dependency on foreign sources of raw materials and commodities and h) Assisting consumers to value resource efficiency (SO5). Despite the fact that the SO5 projects provide significant contributions to the three main indicators of the SO (enterprises receiving support, the efficient natural and material solutions implemented and tested and innovative uses of waste processes/products/services from waste materials), the tonnage of decreased raw material use and increased material recovery, re-use and recycling is lower than initially anticipated by the Programme. It may be concluded that the resource savings and waste recycling rates are likely to be the long-term effects of the measures applied by projects rather than a direct outcome of their implementation.
- Modernising and decarbonising the transport sector, thereby contributing to increase competitiveness The SO4 projects are most meaningful under this thematic action, due to the clear thematic relevance (low carbon transport systems and optimised traffic management as well as direct involvement of transport operators).

3.**Inclusive growth** is promoted by a dedicated Type of Action (ToA) 3 of the Specific Objective 1 ('Delivering societal benefits through innovation'). Projects funded under this ToA specifically target excluded population or population at risk of exclusion as well as communities under pressure and aim at supporting development, testing and implementation of innovative solutions for social needs and problems ('social innovation)'. The Programme encourages actions:

- Designing and demonstrating new public service delivery mechanisms or products for excluded population or population at risk for exclusion
- Joint services and financial tools that address societal challenges such as unemployment, deprivation, health inequalities, rural peripherality/isolation, social integration (communities under pressure and vulnerable groups)
- Support for and development of social enterprises, such as establishment of social incubators and train-

the-trainer programmes for social entrepreneurship.

Through this ToA, the Programme contributes to the promotion of social innovation for the most vulnerable, reducing health inequalities in society and promoting a healthy/active aging population to allow for social cohesion and higher productivity action of the Europe 2020 strategy. Through projects such as UNEET, EYES, SuNSE or SHICC and the 140 pilot actions focusing on social innovation they are implementing, over 2050 end-users on the NWE territory will benefit directly.

It should be noted that cross-thematic contributions from projects implemented under the remaining four Specific Objectives of the NWE programme also provide meaningful input to the inclusive growth and specifically the thematic action 'Building a cohesive society, by spreading the economic growth to all parts of the EU for strengthening territorial cohesion'. This is because the output indicator framework for all Programme SOs includes two indicators dedicated to fighting unemployment (number of jobs created in all economic sectors and number of jobs maintained in all economic sectors), hence providing social benefits to the society at large. Based on the project contributions to the indicator 'number of jobs created in all economic sectors" to date, we can conclude that projects under SO1 will make the strongest direct contribution to inclusive growth (273 new jobs created and 1280 maintained), followed by SO3 (229 jobs created and 560 maintained). SO2 and SO5 projects are characterised by a significantly lower direct contribution. This demonstrates that even though job creation is not the NWE primary goal, the Programme has a clear social and economic added value on its territory.

14. ISSUES AFFECTING THE PERFORMANCE OF THE PROGRAMME AND MEASURES TAKEN — PERFORMANCE FRAMEWORK (ARTICLE 50(2) OF REGULATION (EU) NO 1303/2013)

Where the assessment of progress made with regard to the milestones and targets set out in the performance framework demonstrates that certain milestones and targets have not been achieved, Member States should outline the underlying reasons for failure to achieve these milestones in the report of 2019 (for milestones) and in the final implementation report (for targets).

The NWE Performance Framework contains, per Priority:

- Key implementation steps - the number of projects approved under a given SO and Priority
- Output indicators (one or two per Priority, depending on the priority, specific to the Specific Objectives covered)
- Financial indicators (% of ERDF expenditure certified by the CA for a given priority).

The output indicators only have the target value attributed for 2022 (2018 milestone being '0'), since the outputs contributing to them can only be counted based on closed projects. Nevertheless, there is a direct link between the number of projects expected under each priority and what they are meant to deliver in terms of output indicators.

As far as the Programme performance is concerned, several observations can be made for the 2018 AIR.

- The key implementation steps for all three Programme Priorities, represented by the number of approved projects per Priority, are all above the 2018 milestone values.
- The 2018 milestones for the output indicators were set at '0' value in the Cooperation Programme as, given the NWE experience (the type of projects previously funded, level of investment required to produce outputs as well as the average duration of the projects), the Programme authorities were aware that in 2018 outputs would not have been completed by any projects. Nevertheless, the target output indicator values of the implemented projects exceed the targets for the Programme end, which is aligned with the expectations of the NWE authorities.
- The financial indicators are respectively at 75.04% of Priority 1, 87.45% of Priority 2 and 85.99% of Priority 3 milestone values for 2018.

The Programme performance is regularly monitored by the JS and presented to the Monitoring Committee at their meetings. In the course of 2018, the Performance Framework was discussed three times by the MC, in January, June and October 2018 respectively. The discussions were related to the values of the output indicator framework, but also the project pipeline and the achievement levels of the financial indicators. Consequently, in order to adjust the 2018 milestones for those indicators (15% decrease per milestone), an official Programme modification was submitted to the Commission on 28th September 2018.

The main reasons for the modification were the following:

- The establishment of Programme financial indicators for the three thematic priorities was based on the

level of expenditure certified to the European Commission.

- The information from the previous Interreg IVB – NWE Programme was used to set the values of the financial indicators in line with the spending profile of the VB – NWE Programme.
- After 5 years (2007 – 2011), 15% of the Programme budget (excluding Technical Assistance) had been certified to the Commission for the IVB – NWE Programme.
- The assumption was made that a similar percentage will be certified after 5 years (2014 – 2018) for the current NWE Programme; i.e. EUR 93,091,521.
- This amount was then split according to the percentage of each thematic priority of the approved Cooperation Programme
- The CPR and ETC regulations were only published in December 2013
- The Cooperation Programme for the NWE Programme was officially submitted on 29 October 2014
- The NWE Programme was approved by the European Commission on 18 June 2015
- The delay due to unforeseen circumstances could be estimated as 9 months
- The proposed revised 2018 milestones for the financial indicators took into account this 9-month delay and represented 51/60 of the initial milestones.

The modification was approved by the Commission's implementing regulation (ref: CCI2014TC16RFTN006) on 28 November 2018. The milestones set in the modification are reported against in this AIR.

DOCUMENTS

Document title	Document type	Document date	Local reference	Commission reference	Files	Sent date	Sent By

LATEST VALIDATION RESULTS

Severity	Code	Message
Info		Implementation report version has been validated
Warning	2.49.1	Annual value entered in table 1 exceeds the target value for priority axis: 4, investment priority: -, specific objective: SO6, indicator: TA3, year: 2018 (99.95 > 98.00). Please check.
Warning	2.51.1	Annual value entered in table 1 is below the target value for priority axis: 2, investment priority: 4e, specific objective: SO2, indicator: R2, year: 2016 (0.00 < 18.00). Please check.
Warning	2.52.1	In table 2, the annual total value entered is 1,616.00% of the total target value for "S", priority axis: 2, investment priority: 4e, indicator: CO31, year: 2016. Please check.
Warning	2.52.1	In table 2, the annual total value entered is 1,667.09% of the total target value for "S", priority axis: 2, investment priority: 4e, indicator: CO34, year: 2017. Please check.
Warning	2.52.1	In table 2, the annual total value entered is 103.00% of the total target value for "S", priority axis: 1, investment priority: 1b, indicator: CO29, year: 2017. Please check.
Warning	2.52.1	In table 2, the annual total value entered is 103.70% of the total target value for "S", priority axis: 1, investment priority: 1b, indicator: 1.01, year: 2018. Please check.
Warning	2.52.1	In table 2, the annual total value entered is 104.71% of the total target value for "S", priority axis: 1, investment priority: 1b, indicator: CO28, year: 2016. Please check.
Warning	2.52.1	In table 2, the annual total value entered is 111.50% of the total target value for "S", priority axis: 3, investment priority: 6f, indicator: CO01, year: 2018. Please check.
Warning	2.52.1	In table 2, the annual total value entered is 111.90% of the total target value for "S", priority axis: 3, investment priority: 6f, indicator: 5.01, year: 2017. Please check.
Warning	2.52.1	In table 2, the annual total value entered is 121.67% of the total target value for "S", priority axis: 1, investment priority: 1b, indicator: 1.07, year: 2017. Please check.
Warning	2.52.1	In table 2, the annual total value entered is 133.33% of the total target value for "S", priority axis: 2, investment priority: 4e, indicator: 2.01, year: 2018. Please check.
Warning	2.52.1	In table 2, the annual total value entered is 148.84% of the total target value for "S", priority axis: 1, investment priority: 1b, indicator: 1.05, year: 2018. Please check.
Warning	2.52.1	In table 2, the annual total value entered is 173.50% of the total target value for "S", priority axis: 3, investment priority: 6f, indicator: CO01, year: 2017. Please check.
Warning	2.52.1	In table 2, the annual total value entered is 20,638.60% of the total target value for "S", priority axis: 2, investment priority: 4f, indicator: CO34, year: 2017. Please check.
Warning	2.52.1	In table 2, the annual total value entered is 231.00% of the total target value for "S", priority axis: 1, investment priority: 1b, indicator: CO29, year: 2018. Please check.
Warning	2.52.1	In table 2, the annual total value entered is 233.82% of the total target value for "S", priority axis: 1, investment priority: 1b, indicator: 1.02, year: 2018. Please check.
Warning	2.52.1	In table 2, the annual total value entered is 265.19% of the total target value for "S", priority axis: 1, investment priority: 1b, indicator: CO01, year: 2018. Please check.
Warning	2.52.1	In table 2, the annual total value entered is 281.82% of the total target value for "S", priority axis: 2, investment priority: 4f, indicator: 3.03, year: 2017. Please check.
Warning	2.52.1	In table 2, the annual total value entered is 305.56% of the total target value for "S", priority axis: 3, investment priority: 6f, indicator: 5.02, year: 2017. Please check.
Warning	2.52.1	In table 2, the annual total value entered is 341.67% of the total target value for "S", priority axis: 1, investment priority: 1b, indicator: 1.07, year: 2018. Please check.
Warning	2.52.1	In table 2, the annual total value entered is 463.33% of the total target value for "S", priority axis: 1, investment priority: 1b, indicator: 1.03, year: 2018. Please check.
Warning	2.52.1	In table 2, the annual total value entered is 5,575.17% of the total target value for "S", priority axis: 2, investment priority: 4e, indicator: CO34, year: 2016. Please check.
Warning	2.52.1	In table 2, the annual total value entered is 757.58% of the total target value for "S", priority axis: 2, investment priority: 4f, indicator: CO31, year: 2017. Please check.
Warning	2.52.1	In table 2, the annual total value entered is 9,822.22% of the total target value for "S", priority axis: 2, investment priority: 4e, indicator: CO34, year: 2018. Please check.
Warning	2.52.1	In table 2, the annual total value entered is 969.92% of the total target value for "S", priority axis: 2, investment priority: 4f, indicator: CO34, year: 2018. Please check.
Warning	2.53.1	In table 2, the annual total value entered is 1,153.56% of the total target value for "F", priority axis: 2, investment priority: 4e, indicator: CO31, year: 2018. Please check.
Warning	2.53.1	In table 2, the annual total value entered is 1,543.71% of the total target value for "F", priority axis: 2, investment priority: 4e, indicator: CO34, year: 2018. Please check.
Warning	2.53.1	In table 2, the annual total value entered is 107.94% of the total target value for "F", priority axis: 1, investment priority: 1b, indicator: CO28, year: 2018. Please check.
Warning	2.53.1	In table 2, the annual total value entered is 131.00% of the total target value for "F", priority axis: 3, investment priority: 6f, indicator: CO01, year: 2018. Please check.
Warning	2.53.1	In table 2, the annual total value entered is 466.82% of the total target value for "F", priority axis: 2, investment priority: 4f, indicator: 3.03, year: 2018. Please check.
Warning	2.54.1	In table 2, the annual total value entered for "F" (implemented) is % of the annual total value entered for "S" (forecast from selected) for priority axis: 2, investment priority: 4e, indicator: CO31, year: 2018. Please check.
Warning	2.54.1	In table 2, the annual total value entered for "F" (implemented) is % of the annual total value entered for "S" (forecast from selected) for priority axis: 2, investment priority: 4e, indicator: CO32, year: 2018. Please check.
Warning	2.54.1	In table 2, the annual total value entered for "F" (implemented) is % of the annual total value entered for "S" (forecast from selected) for priority axis: 2, investment priority: 4f, indicator: 3.03, year: 2018. Please check.

Severity	Code	Message
Warning	2.54.1	In table 2, the annual total value entered for "F" (implemented) is % of the annual total value entered for "S" (forecast from selected) for priority axis: 2, investment priority: 7c, indicator: 4.06, year: 2018. Please check.
Warning	2.54.1	In table 2, the annual total value entered for "F" (implemented) is % of the annual total value entered for "S" (forecast from selected) for priority axis: 2, investment priority: 7c, indicator: CO34, year: 2018. Please check.
Warning	2.54.1	In table 2, the annual total value entered for "F" (implemented) is % of the annual total value entered for "S" (forecast from selected) for priority axis: 3, investment priority: 6f, indicator: 5.03, year: 2018. Please check.
Warning	2.54.1	In table 2, the annual total value entered for "F" (implemented) is % of the annual total value entered for "S" (forecast from selected) for priority axis: 3, investment priority: 6f, indicator: 5.07, year: 2018. Please check.
Warning	2.54.1	In table 2, the annual total value entered for "F" (implemented) is 117.49% of the annual total value entered for "S" (forecast from selected) for priority axis: 3, investment priority: 6f, indicator: CO01, year: 2018. Please check.
Warning	2.54.1	In table 2, the annual total value entered for "F" (implemented) is 240.00% of the annual total value entered for "S" (forecast from selected) for priority axis: 3, investment priority: 6f, indicator: 5.06, year: 2018. Please check.
Warning	2.54.1	In table 2, the annual total value entered for "F" (implemented) is 273.88% of the annual total value entered for "S" (forecast from selected) for priority axis: 1, investment priority: 1b, indicator: CO28, year: 2018. Please check.
Warning	2.54.1	In table 2, the annual total value entered for "F" (implemented) is 280.95% of the annual total value entered for "S" (forecast from selected) for priority axis: 1, investment priority: 1b, indicator: CO26, year: 2018. Please check.
Warning	2.54.1	In table 2, the annual total value entered for "F" (implemented) is 325.00% of the annual total value entered for "S" (forecast from selected) for priority axis: 2, investment priority: 4f, indicator: CO28, year: 2018. Please check.
Warning	2.54.1	In table 2, the annual total value entered for "F" (implemented) is 359.09% of the annual total value entered for "S" (forecast from selected) for priority axis: 3, investment priority: 6f, indicator: CO26, year: 2018. Please check.
Warning	2.54.1	In table 2, the annual total value entered for "F" (implemented) is 560.00% of the annual total value entered for "S" (forecast from selected) for priority axis: 2, investment priority: 7c, indicator: CO26, year: 2018. Please check.
Warning	2.54.1	In table 2, the annual total value entered for "F" (implemented) is 600.00% of the annual total value entered for "S" (forecast from selected) for priority axis: 2, investment priority: 7c, indicator: 4.01, year: 2018. Please check.