Iceland Liechtenstein Norway grants

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FINAL PROGRAMME REPORT FM14-21

Poland

Applied Research

Programme short name	PL-Applied Research
Programme Operator	The National Centre for Research and Development (PL)
Host Programme Area	PA02 Research
Financial Mechanisms	EEA Grants,Norway Grants
Programme grant in EUR	€ 69,183,666.00
Programme co-financing in EUR	€ 12,208,882.23
Final incurred amount in EUR	€ 76,965,607.80
Final incurred rate %	94.56 %

PROGRAMME RESULTS

Programme Objective: Enhanced research-based knowledge development

Eligible expenditure: € 81,392,548.23 Amount incurred: € 76,965,607.80

Issues the programme aimed to address

Sufficient investment in research and innovation is crucial for economic growth, social development and competitiveness. In Poland the targets set for investment in research and development (R&D) were challenging to reach due to limited expenditure on R&D in relation to GDP, including business R&D expenditure. European Innovation Scoreboard (2018) indicated that Poland ranked below the EU average on the indicator, 'Attractive research system'. Lack of internationalisation was a key obstacle hindering the development of Polish research.

To decrease a disparity in research and innovation performance across Europe, the PL-Applied Research Programme aimed to increase scientific excellence; improve technology transfer processes and application of research results; and support female researchers and young researchers consolidating their research careers.

Moreover, the Programme aimed to strengthen Polish research capacity through support for excellent collaborative projects between researchers from the Donor States and Poland. All in all, stronger uptake of research results by businesses and society at large was expected to contribute to a more competitive economy, smart innovation and better public services.

Programme contribution to overall objectives

Programme contribution to overall objectives

The PL-Applied Research Programme supported 50 Polish-Norwegian applied research projects in areas of: health, digital and industry, food and natural resources, energy, transport and climate, unmanned vehicles; Carbon Capture and Storage (CCS); and cities for the future. In addition, female researchers in applied technical sciences applied under Small Grant Scheme (SGS) Call for individual grants to lead research projects thus developing their scientific career prospects – 31 SGS projects were eventually funded under the Programme. Supported projects included technology transfer between 37 R&D-based SMEs and research organisations, the development of new technologies, incl. 81 registered applications for Intellectual Property Protection and feasibility study/pre-commercial phase in 2 CCS projects. The Programme achieved submission of 710 peer-reviewed scientific publications. The Programme supported in total 715 female researchers in applied research projects, incl. 75 going abroad for research; and 30 young researchers leading projects as Principal Investigators. The careers of young scientists were also supported by 237 mentor-mentee relations.

The PL-Applied Research Programme contributed to strengthening bilateral relations between Poland and the Donor States. 50 research teams from Norway and Poland conducted jointly applied research

projects of which over 95% achieved shared results, improved knowledge and mutual understanding. Additionally, more than 60% of joint consortia stated that bilateral collaboration had wider effects beyond the project, generated broader interest and led to increased visibility. The donor project partners had various levels of involvement in the projects, mainly attending and contributing to events, working together to find common solutions as well as providing capacity building in projects. As a result of bilateral collaboration 189 joint peer reviewed scientific publications were submitted. Moreover, the bilateral cooperation between the Research Council of Norway, the Donor Programme Partner and the National Centre for Research and Development, the Programme Operator (PO) continued from the very beginning of the Programme design throughout all phases of the Programme implementation thus contributing to the PO capacity building. In matters concerning the scientific quality and projects' relevance the Programme was supported by the bilateral Programme Committee consisting of five members, representing Norway and Poland by, inter alia, overseeing the selection of projects, recommending projects to be funded, as well as monitoring the overall implementation of the projects and the Programme.

Sustainability

Funded projects resulted in, among others, development of demonstrative products, software, prototypes and modules, as well as databases, available guidelines and plans to propose law regulations. To ensure the sustainability of the results funded projects established plans to continue the research and utilize the developed products and technologies. Project results were integrated into existing business activities or shared with other institutions. The latter was the case for some IdeaLab projects that were aiming at establishing cooperation with the local authorities. Altogether, 63 joint applications for further funding were submitted. Projects developed strategies aiming at IPR transfer, licensing, and spin-off creation. Moreover, continuation of dissemination activities of research findings was planned (publications, articles). External experts assessed that 92% of projects showed the sustainable positive effects that were likely to continue / would continue beyond the funding period. About 60 % of all funded projects were assessed as best practice meaning that they contributed to significant changes for the end beneficiaries/end users, used innovative methods or won an award.

Outcome 1: Enhanced performance of Polish applied research

Amount incurred: € 73,282,629.65

Results

Programme outcome aimed to enhance performance of Polish applied research. This outcome addressed the challenges including insufficient collaborative links between the private sector and academia as well as weaknesses of the scientific outputs, knowledge flow and capacity to innovate. Addressing these challenges was important for enhancement of stronger links between research and industry, scientific excellence, opportunities for young researchers, as well as gender equality in research and innovation. The target group were primarily researchers, and society at large, users of specific products and services.

To address these challenges, the Programme launched 4 calls for proposals. The focus areas for bilateral calls varied from: health, digital and industry, food and natural resources, energy, transport and climate, unmanned vehicles in POLNOR 2019 Call; Carbon Capture and Storage (CCS) in POLNOR CCS 2019 Call; to 'Cities for the future: services and solutions' in IdeaLab Call. Moreover, there was a Small Grants Scheme (SGS) 2020 Call launched for applied research projects led by female scientists in technical sciences. The calls attracted more applicants than expected, showing the high relevance of these focus areas. Overall, 81 projects were contracted, with grants totalling over 77 million EUR. 50 projects were implemented jointly by Polish-Norwegian consortia and 31 SGS projects by Polish female scientists.

Under this outcome, there were 5 outputs which referred to support to: researchers conducting applied research, incl. female and young researchers, CCS research, and technology transfer for applied research to R&D based SMEs.

Under 81 contracted projects, 1318 Polish researchers (574 female) and 331 Donor states researchers (141 female) received support. These numbers exceeded the programme's target almost

three times. Overachievement was due to, i.e. staff rotation, extension of scope of work, additional staff to make up for delays.

In 17 bilateral projects and in all 31 SGS projects, women acted as Principal Investigators (PI). NOR/IdeaLab/CoMobility/0001/2020 (PL-Applied Research-0044) was an example of successful Polish-Norwegian project, where women were given prominent roles both as the PI and leaders of 3 work packages, and additional support for young female researchers was offered. The experience gained by women in project management and their scientific progress have resulted in further projects and initiatives. The female PIs of NOR/SGS/BANANO/0164/2020 (PL-Applied Research-0051) and NOR/SGS/BioAbsMat/0096/2020 (PL-Applied Research-0059) projects both received another research grants. NOR/SGS/DMOPV/0190/2020 (PL-Applied Research-0068) project led by a female researcher achieved success results - the publication in a high-impact journal ‘ACS Applied Materials & Interfaces’, and a further project proposal submitted with international partners.

Additionally, under the funded projects, 75 female researchers received support to conduct research abroad for at least 1 month. In NOR/IdeaLab/CoAdapt/0002/2020 (PL-Applied Research-0075) project out of 49 scientists in the Polish-Norwegian team, 39 were women and as many as 13 went abroad for research, expanding their academic perspectives and advancing careers.

Projects funded under the Programme provided significant support to young researchers: participation in training courses, conferences, seminars, mentoring programmes, co-authorship of scientific articles and assignment of individual tasks. Participation of young scientists in research contributed to their doctoral dissertations, completion of the master's thesis, access to advanced laboratory technologies, permanent contracts. The great importance of participation in the Programme for young scientists was demonstrated by the NOR/POLNOR/CoBotAGV/0027/2019 (PL-Applied Research-0007) project: 3 doctoral students developed their PhD theses; 5 doctoral students performed key research, and 12 students completed master's studies based on the results of research within this project. In 30 projects (20 SGS) the PI was a young researcher. This significantly exceeded the target value of 6 and demonstrated the high level of projects led by young researchers.

During the programme, 237 mentor-mentee relationships were established, significantly exceeding the Programme's target of 53. 98% of projects achieved at least the assumed mentor-mentee relationship rate; many projects supported more than 10 early-stage scientists, e.g. NOR/POLNORCCS/NEGATIVE-CO2-PP/0009/2019 (PL-Applied Research-0022) recorded 18 mentor-mentee relationships (360% of its target). An interesting case is NOR/POLNOR/CellMat4ever/0063/2019 project (PL-Applied Research-0008) having 1 mentor-mentee relationship but with outstanding results - thanks to a comprehensive mentoring plan and newly acquired knowledge and skills the mentee obtained funding for a new project as a project leader.

6 CCS projects involved 175 scientists (136 Polish and 39 Norwegian) against a target of 70 scientists. There was 1 CCS project – NOR/POLNORCCS/MOLCAR/0017/2020, (PL-Applied Research-0039)- with support for pre-commercialisation phase against a target of 2 projects. This was due to the low interest among applicants in applying for pre-commercialisation funding which was then reflected in result of peer-review assessment - only 1 such project was recommended for funding. All in all, the pre-commercialisation phase in MOLCAR project was evaluated positively. The successful demonstration of technology developed in this project has paved the way for its further development and commercialization, and the project may contribute to the global effort to mitigate climate change through cleaner energy solutions.

The Programme contributed to strengthening links between research and industry. There were 139 unique partners involved in bilateral projects, of which 37 SMEs (incl. 7 from Norway) versus target of 50. 1 Polish SME, Pure Biologics S.A. participated in 2 POLNOR projects: NOR/POLNOR/ALTERCAR/0056/2019 (PL-Applied Research-0021) and NOR/POLNOR/DUALDRUG/0058/2019 (PL-Applied Research-0013). The underachievement of a target value confirmed the need for development of dedicated methods to support SMEs to support their participation in research and innovation projects and enhance cooperation between private sector actors and public research institutions. Under the Programme there were also 12 large enterprises supported, playing the role of industry partners in bilateral projects.

In terms of outcome-level results there were 188 new innovative products and technologies developed against 53 target value. In many cases overachievement was due to new concepts and ideas arising during the project implementation, extended length of project duration (due to initial COVID-19 delays) and additional funds allocated to projects. A good example of environmental innovation was the use of production waste to create new, biodegradable products in the NOR/POLNOR/CellMat4ever/0063/2019 project (PL-Applied Research-0008), where a mold for creating bricks from wood chips was developed, or the NOR/POLNOR/WOOLUME/0007/2019 (PL-Applied Research-0037) project, in which wool pellets were used to fertilize the soil.

As a result of the project grant, there were 81 registered applications for Intellectual Property Protection (IPR), against target value of 53. This overachievement was partially due to high number achieved in previous indicator. However, in some projects planned target values were not achieved – for example in cases of algorithmic and software products developed, which could not obtain the IP rights. Out of the registered applications, 9 were registered jointly. A good example is project NOR/POLNOR/i-CLARE/0038/2019 (PL-Applied Research-0025) that registered joint IPR application for ceramic-carbon foam electrodes to purify environmental water from organic compounds in it, especially the removal of pharmaceuticals, herbicides and pesticides used in agricultural production and fish farming.

Supported projects have submitted 710 peer-reviewed scientific publications in national and international journals and magazines, including 189 joint publications. Out of all of the submitted publications, 184 were submitted to journals with Impact Factor above 5 confirming the quality of these publications. Most of the articles have already been published. This is the most overachieved outcome-level indicator against target value of 315 and 105 (joint publications). Such high achievement of this indicator is particularly important for young researchers, as peer reviewed publications greatly affect continuation of their academic careers. The reason for high numbers were e.g. great interest in project which resulted in special sessions organized at international conferences, which in turn resulted in publication opportunities (case of project NOR/POLNOR/CoBotAGV/0027/2019 (PL-Applied Research-0007)), and other related to more data produced or experiments conducted. For 17 projects that did not achieve planned target value for peer reviewed scientific publications submitted, it was mostly due to delays in project implementation and lengthy publication processes, however, the missing articles were in preparation.

Among all projects, the number of signed cooperation agreements between research organizations and companies involved in the Programme was 40. As for the Programme rules, participation of companies in consortia was obligatory in POLNOR Call and non-obligatory in POLNOR CCS and IdeaLab calls. Industry and academia had mutually benefited from access to infrastructure, technological resources and industry knowledge to test initial technological solutions and prototypes. There were 2 interesting examples of enterprises leading the POLNOR projects: redoxme AB sp. z o.o. in NOR/POLNOR/UPTURN/0060/2019 (PL-Applied Research-0029) and Port of Gdynia Authority S.A. in NOR/POLNOR/MPSS/0037/2019 (PL-Applied Research-0045).

Overall, Outcome 1 ‘Enhanced performance of Polish applied research’ was successfully achieved. This is evidenced by the high quality of completed projects, which together achieved most

of the outcome's indicator targets. Most of the supported projects contributed to strengthening scientific and industrial cooperation, innovation development and knowledge transfer, raising research quality, support for research careers, especially for young researchers and women. This was also the conclusion of the independent ex-post Programme evaluation.

Challenges and Lessons Learned

The challenge was the disruption caused by COVID-19 pandemic. Due to restrictions and limitations to in person meetings, some procedures had to be modified (e.g. coordination of remote work of the Programme Committee, experts, Programme Operator's employees, transfer of documentation or use of electronic signatures). As for beneficiaries, main challenge was to perform research (in field and also in research facilities), conduct meetings, attend conferences, perform surveys or obtain various permissions. In consequence, project promoters had to modify the projects with e.g. changes to research process, substitute research materials, or postpone some of the activities. As for cooperation aspects, meetings with project partners had to be moved online and study visits had to be cancelled or postponed. In response to above challenges, Programme Operator allowed for modifications in projects relating to work schedule, extension of project duration and in some cases changes in scope of works planned. Programme Operator introduced a system of online monitoring meetings for easier information exchange and faster decision making and coordination.

Another challenge was macroeconomic situation and inflation, with rising prices of energy, materials, travels and salaries affecting the projects' budgets. In reply to the exceptional price increases and the unprecedented economic situation the Programme Operator allowed for increasing funding for already approved POLNOR, POLNOR CCS and IdeaLab projects. Beneficiaries were able to request increase by maximum 7% of the total granted funding. In result, thanks to savings and exchange rate fluctuation, 41 projects were granted over 4 million euro of additional funding however they did not manage to spend the whole amount. The lesson learned was that exchange rate fluctuation was beyond the Programme Operator's control and needed to be taken into account by allowing some flexibility. Moreover, the more time there was to implement a programme and project, the greater the chances of introducing countermeasures. So, the preparation of the programme and the launch of calls for proposals should be as early as possible.

Very high interest in the SGS Call (334 submitted proposals) was a challenge because of Programme management capacity. The Programme Operator carried out eligibility check and then peer-review. As a result, 31 projects were successfully funded. Female PIs declared that the recognition and visibility gained through the projects opened doors for future opportunities, collaborations, and advancements in their scientific careers. For female researchers, the projects acted as a platform to showcase their expertise, build professional networks, and gain credibility in a male-dominated field. Many excellent reviews of the final reports of the SGS projects and very positive feedback from female PIs, showed that this type of call was very much needed. The lessons learned for the future was to plan an adequate mechanism to continue supporting women in domains of technical science where they are significantly underrepresented by giving them prominent roles in the projects.

As it came to projects' results another challenge was to maximise the social and economic value of research. Many projects funded under the Programme had achieved promising results however some of them lacked knowledge and experience to reach higher Technology Readiness Levels, commercialise the results, exploit them by other beneficiaries or transfer to decision-makers. The lessons learned for the future was to plan suitable actions supporting e.g. Technology Transfer Offices and, in a broader context provide incentive to knowledge sharing and improving uptake of research and innovation results to benefit the society as a whole.

Bilateral Outcome: Enhanced collaboration between beneficiary and donor state entities involved in the programme

Results

The Bilateral Outcome aimed to enhance collaboration between beneficiary and donor state entities involved in the Programme. This outcome addressed the challenge of low level of internationalisation in Poland, below the EU average number of international scientific co-publications and low level of participation of Poland in multilateral initiatives and EU Framework Programmes. Addressing the challenge was important for enhancing international visibility, scientific excellence and translating it into innovations and technological progress. The challenge particularly affected researchers employed in research institutions, R&D performing companies and other eligible entities.

To address this challenge, the Programme launched 3 calls for joint proposals for partners from Poland and Donor states: POLNOR 2019 Call with various thematic areas; POLNOR CCS 2019 Call, and IdeaLab Call with topic of „Cities for the future: services and solutions". These calls totalled over 70 million euro, from which bilateral projects were contracted: 38 projects in POLNOR 2019 Call, 6 projects in POLNOR CCS Call, and 6 projects in the IdeaLab Call. Project promoters were mostly universities, research institutes and one micro- and one large enterprise. Important to note was the IdeaLab Call which was an innovative way of generating research projects combined with real-time peer-review. The crucial element was an interactive and intensive 5-day workshop with participants from a range of disciplines and backgrounds, and a team of external experts and stakeholders, that was organised to generate project ideas. Most of project partners were located in Warsaw region (in Poland) and Oslo region (in Norway).

Bilateral Output 1: "Cooperation between the beneficiaries and donor state entities supported" aimed to enhanced collaboration between Polish and Norwegian research teams. As a result of the calls, cumulatively 50 projects involving the cooperation of a donor project partner (Norway) had been finished. The target value of the indicator (53) is not achieved: using the allocation and the allocated reserve, based on the opinion of external experts and the decision of the Programme Committee, 50 projects with the participation of partners from donor countries were selected for funding.

The project NOR/POLNOR/EnerGizerS/0036/2019 (PL-Applied Research-0003) described results of the bilateral cooperation in the following words: "Bilateral partnership made it possible to fully achieve the goals of the project and provided an excellent opportunity for the exchange of experience and knowledge. 4 study visits were realized, providing a great opportunity to visit partner institutions and have substantive discussions. The project created a favourable circumstance for young scientist (AGH PhD student) who completed a 6-month internship working with a Norwegian team to conduct an experimental campaign in WP3. Polish-Norwegian teams worked together on solving research problems which resulted in joint publications".

Out of submitted 189 joint research publications, 125 articles have been already published. The result was nearly twice overreached (target value 105) and 22 articles were still in preparation, therefore the number was expected to increase.

In terms of outcome-level results, 63 joint applications for further funding were submitted. The outcome is over 10-times overreached (target value 6). Among those applications, 19 new projects have been already funded. It means that these research teams would continue their cooperation and joint effort on research results developed within the Programme. 10 projects were funded within international /EU programmes, which is a very positive result as regards support of Polish participation in the EU Framework Programmes. Among them an interesting example was the project NOR/POLNOR/BioCoke4FAI/0070/2019 (PL-Applied Research-0024), of which the project consortium received over 9 M EUR for another project -"CO2 Free Production of Critical Raw Materials Using Hydrogen" funded under Horizon Europe call HORIZON-CL4-2024-TWIN-TRANSITION-01-34. The project included in the international consortium, apart from Polish and Norwegian partners, entities from France, Italy, Netherlands, Germany, Great Britain and Luxemburg. The diverse consortium of countries participating in the project contributed to the internationalisation of Polish science, which was one of the intended results of the programme.

Another example of project that would be continued within a Horizont Europe grant was NOR/POLNOR/EnerGizerS/0036/2019 (PL-Applied Research-0003). The entire international consortium was granted almost 4 M EUR for the project “Integrated oxy-combustion solutions for flexible, bio-based combined heat and power: A Negative Emissions Technology for a net-zero Europe – BioNETzero” submitted within the call HORIZON-CL5-2023-D3-02. The new project would be implemented in the international consortium including Norway, Poland, Italy, Spain and Germany. Similarly to BioCoke4FAI, Polish-Norwegian cooperation of the EnerGizerS project grew into a wider international consortium.

Overall, the Bilateral Outcome ‘Enhanced collaboration between beneficiary and donor state entities involved in the programme’ was successfully achieved. This is evidenced by the high quality of completed projects, and the high overachievement of target indicators relating to joint publications and joint applications for further funding. Over half of project promoters are planning further cooperation with donor countries partner, and an overwhelming majority of project promoters stated that projects achieved shared results, improved knowledge and mutual understanding. Furthermore, the bilateral cooperation led to increased visibility.

Challenges and Lessons Learned

One of the challenges faced in relation to bilateral outcome was the relatively limited administrative capacities of project partners to establish partnerships and then to implement the projects. Universities and research institutes often lacked appropriate personnel and bilateral agreements. Therefore, partnerships were often established through informal contact and networking performed by researchers. In consequence, the process to establish formal cooperation could be lengthy and required more work from researchers. The lesson learned was to provide support from Programme Operator in form of networking meetings, good practice guides for cooperation, information days, IPR training, separate cost categories for operational costs, and study visits, in order to successfully facilitate bilateral cooperation.

Another challenge in Programme implementation was the Russian aggression in Ukraine. After the outbreak of the war, the Programme Operator used funds from the Fund for Bilateral Relations to launch the Scheme: 'Support for Ukrainian researchers' providing immediate and effective support to Ukrainian researchers affected by war. As a result, 14 Ukrainian scientists carried out research activities complementary to joint POLNOR, POLNOR CCS and IdeaLab projects. This additional research contributed to new knowledge, scientific and technical ideas. The collaboration of Ukrainian researchers within bilateral projects resulted in 18 joint publications and presentations at 26 international meetings (seminars and conferences) as well as new projects. For example, the contractor of FWD/V/22/IceMan_UA2/2023 (PL-Applied Research-BI014) was a consortium member of the U_CAN (Ukraine Towards Carbon Neutrality) project under a Horizon Europe Mission Call, and Ukrainian researchers were involved in it. The lessons learned showed the great need of proactive approach and flexibility under the fast-changing external circumstances while implementing a complex grant programme such as the PL-Applied Research Programme. This has been assured by the attitude of all Programme stakeholders.

The IdeaLab Call, based on the sandpit methodology, was organised within the Programme for the first time by the Programme Operator and for the second time in Poland. One of the important results of the call, was involvement of NGOs and cities in the international consortia. Some of the project ideas developed during the IdeaLab workshop, were driven by the representatives of civil society organisations. Based on the positive experience in the call, the Programme Operator decided to open the possibility for NGOs and municipalities to apply for funding in the Horizon Europe Partnership Driving Urban Transitions and prepared a legal framework for involvement of such entities in other Horizon Europe partnerships. As regards the IdeaLab/sandpit methodology, it had many positive aspects, such us: financing transdisciplinary projects, involvement of stakeholders, including other entities other than research institutions and enterprises in the project consortia and

opportunity for carrier development for young researchers (including women). However, it was extremely costly and time-consuming method of financing the projects. It also needed to be tailored to the circumstances of the post-COVID world. The IdeaLab workshop was organised in the first week of COVID pandemic and last week before the strict lock-down in Poland, therefore the risk of the cancellation of the scheduled event needed to be taken into account.

Other challenges were posed by the preparation of the Final conference of the Programme: 'Reflecting on results and looking into the future', both organisational and in terms of ensuring the international character of the event. These included choosing the suitable date and form of the event. The Programme Operator decided to organise the conference after the projects' completion to have the results ready to be presented, and mostly in a format of panel sessions. Content wise, important lesson learned from the conference was to involve bilateral partners and stakeholders into conversations happening during the event. The Programme Committee members from Poland and Norway, representatives of the Programme Operator and the Research Council of Norway, as well as Polish and Norwegian beneficiaries took active part as moderators and panellists sharing their thoughts and insights on the role of collaboration between the Polish and Norwegian partners, benefits and challenges of this cooperation, the biggest achievements, and lessons learned from the EEA and Norway Grants in terms of further use of projects' results.

IRREGULARITIES

Case Id	Reporting level	Nature of irregularity	Case opened	Status	Estimated final input to the FMO for cases not closed	Decision	Amount of financial correction
IR 172	PL-Applied Research-0041	Deviation from project contract	18/11/2022	Closed	-	Project grant amount reduced. Amount linked to irregularity paid back/deducted from payment.	€ 6,139.58
IR 188	PL-Applied Research-0043	Deviation from project contract	09/02/2023	Closed	-	Project grant amount reduced. Amount linked to irregularity paid back/deducted from payment.	€ 6,891.18

SUMMARY OF PROJECTS

		Number of projects contracted	Number of projects completed	Project grant contracted (EEA/Norway Grant + national co-financing)	Project grant incurred (EEA/Norway Grant + national co-financing)	Project Eligible Expenditure contracted (Includes project co-financing)	Project Eligible Expenditure incurred (Includes project co-financing)
Outcome 1: Enhanced performance of Polish applied research	Pre-defined	0	0	€ 0.00	€ 0.00	€ 0.00	€ 0.00
	Contracted through open calls	50	50	€ 71,872,149.14	€ 67,963,778.76	€ 70,756,244.17	€ 70,806,730.19
	Contracted through small grants scheme	31	31	€ 5,735,225.12	€ 5,318,850.89	€ 5,318,850.09	€ 5,318,850.89
	Total Outcome 1	**81**	**81**	**€ 77,607,374.26**	**€ 73,282,629.65**	**€ 76,075,094.26**	**€ 76,125,581.08**
Total programme costs (Excluding programme management costs)		**81**	**81**	**€ 77,607,374.26**	**€ 73,282,629.65**	**€ 76,075,094.26**	**€ 76,125,581.08**

FINAL BALANCE

Overview of programme expenditure

Programme area (PA)	Budget Heading	EEA Grants	Norway Grants	Total grant	Programme eligible expenditure	EEA Grants contribution incurred	Norway Grants contribution incurred	Total grant contribution incurred	Programme co-financing incurred	Total eligible expenditure incurred
PA02	Programme management	€ 286,522.00	€ 2,865,153.00	€ 3,151,675.00	€ 3,707,852.94	€ 284,599.82	€ 2,845,931.61	€ 3,130,531.43	€ 552,446.72	€ 3,682,978.15
PA02	Outcome 1: Enhanced performance of Polish applied research (EEA Grants)	€ 5,713,478.00	-	€ 5,713,478.00	€ 6,721,738.82	€ 5,050,292.74	-	€ 5,050,292.74	€ 891,228.13	€ 5,941,520.87
PA02	Outcome 1: Enhanced performance of Polish applied research (Norway Grants)	-	€ 60,318,513.00	€ 60,318,513.00	€ 70,962,956.47	-	€ 57,239,942.46	€ 57,239,942.46	€ 10,101,166.32	€ 67,341,108.78
	Total	**€ 6,000,000.00**	**€ 63,183,666.00**	**€ 69,183,666.00**	**€ 81,392,548.23**	**€ 5,334,892.56**	**€ 60,085,874.07**	**€ 65,420,766.63**	**€ 11,544,841.17**	**€ 76,965,607.80**

Description of budget spending

Programme management

Total costs of programme management budget spent was EUR 3,682,978.15, with planned expenditure of EUR 3,707,852.94, amounting to 99,33% of budget utilisation rate. During the whole duration of the Programme (from 21.12.2017 until 30.04.2025) PO was implementing Programme activities according to the plan. To achieve the objectives of the Programme the PO incurred following expenditures: - staff costs, covering the following tasks: preparation of documentation related to Call for Proposals; assessment of project reports and amendment requests; operational maintenance of the PO's electronic monitoring system; coordination of financial and scientific controls of selected projects, involvement in audit of selected projects; day to day contacts with beneficiaries; analysing exchange rate differences and level of spending; communication and information activities, including publication of information on the PO website and social media; involvement in mid-term and ex-post evaluation of the Programme conducted by external company; preparation and conducting Programme events (info-days, workshops, webinars, meetings, conferences, PC meetings, site visits); participation of the POs representatives in meetings relating to Programme implementation (with National Focal Point, Donor Programme Partner (RCN) and FMO); participation of the POs representatives in other meetings and events (e.g. workshops, conferences, thematic events); preparation of general Programme documentation (e.g. reports); general management and administration of the Programme. - costs of organization and implementation of conferences and events (info-days, workshops, webinars, meetings, conferences, PC meetings, site visits); - costs of financial and scientific controls; - remuneration for external contractors (evaluation, translations); -

remuneration for external experts (assessment of project proposals, reports, requests for amendments in projects); - remuneration for PC members; - costs of business trips; - communications and promotional costs (advertisements, promotional materials); - indirect costs.

Outcome 1: Enhanced performance of Polish applied research (EEA Grants)

Payments to IdeaLab projects and return of unspent funds from IdeaLab projects.

Outcome 1: Enhanced performance of Polish applied research (Norway Grants)

Payments to and return of unspent funds concerning POLNOR, POLNOR CCS, SGS and IdeaLab projects.

Calculation of the final balance

	EEA Grants	Norway Grants	Total
Total reported eligible expenditure of the programme			
Total eligible expenditure incurred	€ 6,276,344.19	€ 70,689,263.61	€ 76,965,607.80
(-) Total (national) programme co-financing incurred (15.00 % rate)	€ 941,451.63	€ 10,603,389.54	€ 11,544,841.17
(=) Total grant contribution incurred (85.00 % grant rate)	€ 5,334,892.56	€ 60,085,874.07	€ 65,420,766.63
Amounts to be deducted from the total grant contribution[1]			
(-) Total advance and interim payments to the programme from the Donors	€ 5,429,653.50	€ 61,969,707.05	€ 67,399,360.55
(-) Any co-financing from sources other than the Donors/national[2]	€ 0.00	€ 0.00	€ 0.00
(-) Total interest earned reported	€ 0.00	€ 0.00	€ 0.00
Final balance			
(=) Final balance payable to the Programme Operator	€ 0.00	€ 0.00	€ 0.00
(=) Final balance payable to the Donors	€ 94,760.94	€ 1,883,832.98	€ 1,978,593.92

[1] Any funds reimbursed from Project Promoters to the Programme Operator, not paid to other projects or reimbursed to the FMO (ref. Article 9.4.1(b)(iv) of the Regulation should be reported as negative adjustments in the Financial report for the last reporting period (Annex 1). In this case, such funds will be subtracted from the "Total eligible expenditure incurred" of the programme.

[2] For example, financing from EU structural funds or other EU sources, from the Swiss contribution, etc. This row includes only the financing incurred during the programme eligibility period.