KEY HIGHLIGHTS

Decisions on participation in Horizon Europe partnerships are made on the basis of Poland's broad participation in Horizon 2020. Poland, through a number of institutions, was a member of almost threequarters of all Horizon 2020 partnerships. Compatibility between national and EU framework programmes is enshrined in the Strategy for Responsible Development (SRD) up to 2020 (including the perspective up to 2030). The SRD also defines the goals of Poland's participation in the framework programmes. There is a National Science Policy and Productivity Strategy up to 2031 under development, both with a relationship to EU programmes. Polish coordination of ERA-Net co-funded initiatives contributed to spreading excellence across the European Research Area.

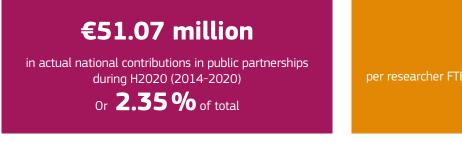
72 H2020 public partnerships (*)

of total (99 partnerships) **75** H2O2O public partnerships (*) participations Or **3.48 %** of total **3** H2020 public partnerships (*) coordinations

Or **3.03 %** of total

Source: ERA-LEARN database (cut-off date June 2021), H2020 period (2014-2020) Excluding EIT-KICs, EuroHPC and ECSEL

(*) Horizon 2020 public-public partnerships include ERA-NET Cofund, EJPs, Art 185 initiatives and JPIs. Partnership participations: number of partnerships a specific country takes part as participant – for certain countries more than one national organisation may take part. Thus the participations may be more than the number of partnerships a country is part of. Total partnership participations: number of partners from a specific country participating with any role (i.e. coordinator, participant, observer, other) in partnerships. Partnership coordinations: number of partnerships a specific country coordinates.



per researcher FTE (average between 2014-2019 based on EUROSTAT data)

€487.4

Source: ERA-LEARN database (cut-off date June 2021), H2020 period (2014-2020)

Actual national contributions is the funding given by each country to cover the participation of national science and technology groups in the funded projects of the joint transnational calls launched by the public partnerships. Actual contributions for each researcher are the total actual contributions by a country divided by the number of researchers in the country estimated in full-time equivalents (FTE) average between 2014-2019 based on EUROSTAT data.

KEY INTENTIONS FOR THE FUTURE

Poland will participate in all HE pillars and intends to promote inclusiveness in research and the ERA. The largest resources will be allocated to areas related to a healthy society, green economy and innovative technologies and industrial processes. The priority areas are in line with the Strategy for Responsible Development and RIS3 as well as in the proposal for the Productivity Strategy. Poland recognises the importance of digital technologies and technologies that can ensure Europe's security and technological sovereignty: computing, microelectronic, quantum, photonics, digitalisation in manufacturing industry. Social sciences and the humanities are also important.

TABLE 1: Distribution of funding under the different H2O2O instruments (P2Ps, JUs, cPPPs and other H2O2O projects, i.e. CSAs, RIAs, IAs, etc.) across thematic priorities

THEMATIC PRIORITIES	P2Ps PROJECTS	JUs PROJECTS	CPPPs PROJECTS	OTHER H2O2O PROJECTS
Nanotechnologies, Advanced Materials, Advanced Manufacturing and Processing, Biotechnology	17.62%	1.45%	9.33%	12.21%
Climate action, environment, resource efficiency and raw materials	9.82%	0.00%	3.38%	7.13%
Europe in a changing world - inclusive, innovative and reflective Societies	3.17%		2.12%	10.30%
Food security, sustainable agriculture and forestry, marine and maritime and inland water research	24.14%	17.31 %		6.29%
Future and Emerging Technologies	4.89%		2.98%	4.82 %
Health, demographic change and wellbeing	32.72%	4.40 %		7.69%
Information and Communication Technologies		18.00%	80.01%	29.30%
Secure, clean and efficient energy	2.98%	2.31%	2.19%	11.91%
Smart, green and integrated transport	4.65 %	56.54%		10.35%
	100,00%	100,00%	100,00%	100,00%

Source: ERA-LEARN database (cut-off date June 2021) based on actual national contributions for P2Ps; eCORDA based on net EU contribution; values are calculated as the share of investments of the specific instrument in the specific theme in the total investments under the specific instrument

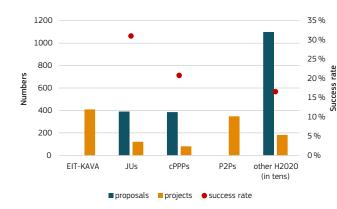
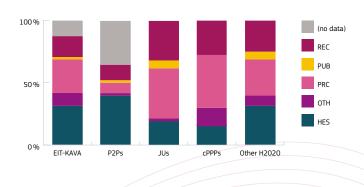


FIGURE 1: Eligible proposals, projects and success rates FIGURE 2: Type



Source: ERA-LEARN database for P2Ps (cut-off date June 2021); eCORDA for EIT-KAVA, JUs, cPPPs, other H2020 projects (RIAs, CSAs, etc.) No proposal data for P2Ps, EIT-KICs (Figure 1). EIT-KAVA: KIC Added Value Activities; HES: higher education; OTH: other, PRC: private for-profit companies; PUB: public bodies; REC: research organisations (Figure 2)

For many Polish applicants, participation in Horizon 2020 partnerships was a valuable experience, which allowed them to develop international cooperation links and apply this experience to other parts of the programme. For the funding agencies it was a steppingstone to the development of international cooperation programmes: building trust, increasing visibility, new chances, and better internal management.

192

FIGURE 2: Types of project beneficiaries (%)



ADDITIONAL INVESTMENTS TRIGGERED

There was a steady increase in the number of entities interested in cooperation in Horizon 2020 partnerships. Thanks to the obligatory participation of enterprises in some of the initiatives, it was also possible to attract the private sector to Horizon 2020.

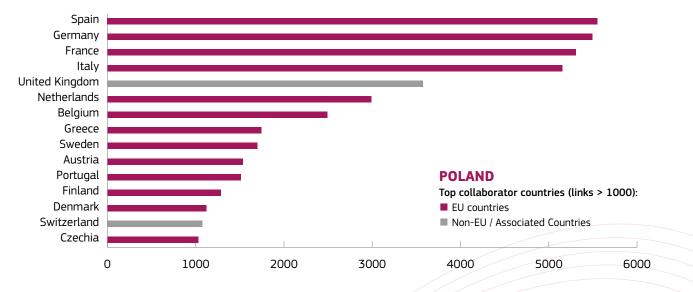
There is an ambition to take advantage of the synergy between national and European instruments. For this reason, Poland has changed the structure of its NCPs and incorporated NCPs into the main funding agency NCBR (National Centre for Research and Development).

Moreover sectoral ministries are involved in the relevant partnerships.

COMPLEMENTARY AND CUMULATIVE FUNDING

The main complementary funding is provided by two main R&I funding agencies: the National Science Centre (national funding) and the National Centre for Research and Development (both national funding and ERDF and EDF funding). This should be understood not as cumulative funding, but rather as parallel to other programmes. Poland is interested in introducing actual synergies in funding between ERDF and Horizon Europe provided adequate guidelines are developed by the European Commission. ERA-NET Cofund was an important tool for achieving a higher success rate in calls for proposals additional funding from the EU helped fund more collaborative research projects and thus enhance impact of partnerships.

FIGURE 3: Top collaborators of Polish researchers under Horizon 2020 projects (including JUs, cPPPs, P2Ps and other H2020 projects)



Source: eCorda (showing countries of >1000 links)





SUCCESS STORIES

- The success rate of Polish partners in applying to ERA-NETs was higher than that for regular Horizon 2020 calls. This led to a positive impact due to previous experiences on the decision to join European Partnerships in Horizon Europe.
- A coordination group consisting of representatives of the R&I funding agencies, NCPs and Ministry of Education and Science was established for monitoring the preparation and implementation of partnerships.
- A working group on the alignment of national and ERDF programmes with Horizon Europe was established at the National Centre for Research and Development (main funding agency).
- Sectoral ministries were involved in the partnerships planning phase.
- Inspired by the dialogue with the scientific community, the National Science Centre initiated and has been implementing QuantERA, QuantERA II and CHANSE, and the first ERA-NET Cofund programmes coordinated by an EU 13 country.
- The National Science Centre coordinated programmes that successfully engaged funding organisations from various regions of Europe, and introduced measures supporting the participation of researchers from less-performing countries in funded projects.
- The National Science Centre's participation in ERA-NET Cofund programmes was a stepping stone for building bilateral and multilateral initiatives with international partners, as well as the successful application for EU funds, such as MSCA co-fund programmes: Polonez and Polonez Bis.
- The Polish research community was mobilised to become involved in international consortia within Horizon 2020's ERA-NET Cofund programmes and perform research focused on significant societal challenges and enhance impact of the research results in collaboration with academic and non-academic stakeholders.