

Appendix 1

EU Funding 2014-2020

EUR 500B in opportunities

In addition to national grants funded by the governments of the EU member states, the EU itself provides funding for R&D and other policy initiatives to achieve the Europe 2020 Growth Strategy by the Horizon 2020 program. The Multiannual Financial Framework (MFF) plays an important role in the implementation of this strategy. More than EUR 500B is available to support inclusive, smart, and sustainable growth in the EU. A substantial increase in the funding for research, innovation, and education compared to the previous framework program reflects the EU's current policies.

Funding instruments—Several programs have been designed under the new MFF to promote growth and create jobs. In addition to the EUR 333.6B budget to be allocated to Structural and Cohesion Funds (de-centrally managed by the EU member states and granted as if they were national funding), there is a wide range of instruments centrally managed by the European Commission. The most representative instruments in terms of budget are identified below.

Horizon 2020—Horizon 2020 is the EU's program for research and innovation, which supports the development of key enabling technologies, including:

- Information and communication technologies (ICT);
- Nanotechnologies;
- · Advanced materials;
- · Advanced manufacturing and processing;
- Biotechnology; and
- Space.

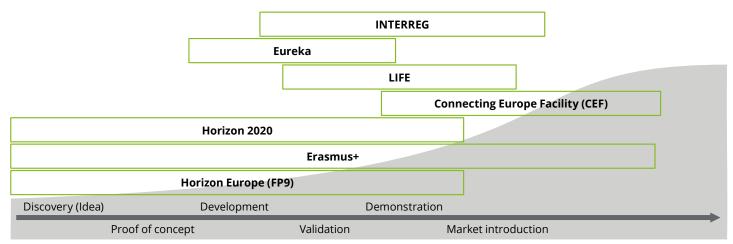
Horizon 2020 funded projects also focus on the following EU societal challenges:

- Health, demographic change, and wellbeing;
- Food security, sustainable agriculture, marine and maritime research, and the bio-economy;
- · Secure, clean, and efficient energy;
- Smart, green, and integrated transport;
- · Inclusive, innovative, and secure societies; and
- Climate action, resource efficiency, and raw materials.

Excellent science also is supported under Horizon 2020.

LIFE—The LIFE program is the EU's funding instrument for the environment and climate action. The program provides funding support to business and government projects related to climate change, resource efficiency, conservation, and biodiversity. Collaboration between SMEs and local or regional governments— where many potential LIFE projects are conceived—is encouraged, but not essential. The EU mainly assesses LIFE grant applications based on the size of the European environmental problem that will be addressed. Proposals must have an excellent score with regard to technical and financial cohesion, and the European dimension of the project is essential. As a result, projects that are eligible for LIFE tend to be large, and once approved, the grant can fund to up to 60% of eligible costs.

Overview of European grant opportunities during a project/product life cycle



Connecting Europe—The Connecting Europe Facility (CEF) is a key EU funding instrument to promote growth, jobs, and competitiveness through targeted infrastructure investment at the European level. It supports the development of high performing, sustainable, and efficiently interconnected trans-European networks in the fields of transport, energy, and digital services. CEF investments fill the missing links in Europe's energy, transport, and digital backbone.

The CEF benefits persons across all member states, as it makes travel easier and more sustainable, enhances Europe's energy security, while enabling broader use of renewables, and facilitates cross-border interaction between public administrations, businesses, and citizens.

In addition to grants, the CEF offers financial support to projects through innovative financial instruments, such as guarantees and project bonds. These instruments create significant leverage in their use of the EU budget and act as a catalyst to attract further funding from the private sector and other public sector players.

Erasmus+—Erasmus+ is the EU program for education, training, youth, and sport that aims to modernize these areas across Europe. It is open to education, training, youth, and sport organizations across all sectors of lifelong learning, including school education, higher education, adult education, and the youth sector.

Eureka—Eureka supports initiatives dedicated to applied and market-oriented R&D. The aim of this program is for companies (mainly SMEs), research institutes and universities to work together on transnational projects in order to bring innovative products, processes and services to market. Relevant subprograms within Eureka include:

- Eurostars: Focused on innovative projects in all types of areas
- Penta: Focused on innovative projects in the area of areas of micro and nanoelectronics enabled systems and materials
- ITEA3: Focused on innovative software projects

General rules

Rules for participation—Since the rules for participation are different from program to program, only the rules for the Horizon 2020 are listed below, as Horizon 2020 is most accessible for non-Europeans.

Eligible countries—Horizon 2020 is open worldwide, but participants from non-EU countries are not always eligible for funding.

Countries automatically eligible for funding:

- EU member states: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and the UK.
- Overseas countries and territories (OCT) linked to the member states:
 Anguilla, Aruba, Bermuda, Bonaire, British Virgin Islands, Cayman Islands, Curaçao, Falkland Islands, French Polynesia, Greenland, Montserrat, New Caledonia, Pitcairn Islands, Saba, Saint Barthélémy, Saint Helena, Saint Pierre and Miquelon, Sint Eustatius, Sint Maarten, Turks and Caicos Islands, and Wallis and Futuna.
- Associated countries: Legal entities from associated countries can
 participate under the same conditions as legal entities from the EU
 member states. Association to Horizon 2020 takes place through the
 conclusion of an international agreement. As from 1 January 2017,
 the following countries are associated with Horizon 2020: Albania,
 Armenia, Bosnia and Herzegovina, Faroe Islands, Georgia, Iceland,
 Israel, Macedonia (former Yugoslav Republic), Moldova, Montenegro,
 Norway, Serbia, Switzerland, Tunisia, Turkey, and Ukraine.
- Developing countries: Unless they are explicitly excluded in the relevant call: Afghanistan, Algeria, American Samoa, Angola, Argentina, Azerbaijan, Bangladesh, Belarus, Belize, Benin, Bhutan, Bolivia, Botswana, Burkina Faso, Burundi, Cambodia, Cameroon, Cape Verde, Central African Republic, Chad, Chile, Colombia, Comoros, Congo (Democratic People's Republic), Congo (Republic), Costa Rica, Cuba, Djibouti, Dominica, Dominican Republic, Ecuador, Egypt, El Salvador, Eritrea, Ethiopia, Fiji, Gabon, Gambia, Georgia, Ghana, Grenada, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Indonesia, Iran, Iraq, Ivory Coast, Jamaica, Jordan, Kazakhstan, Kenya, Kiribati, Korea (Democratic Republic), Kosovo, Kyrgyz Republic, Laos, Lebanon, Lesotho, Liberia, Libya, Madagascar, Malawi, Malaysia, Maldives, Mali, Marshall Islands, Mauritania, Mauritius, Micronesia, Mongolia, Morocco, Mozambique, Myanmar, Namibia, Nepal, Nicaragua, Niger, Nigeria, Pakistan, Palau, Palestine, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Rwanda, Samoa, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, Solomon Islands, Somalia, South Africa, South Sudan, Sri Lanka, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Sudan, Suriname, Swaziland, Syria, Tajikistan, Tanzania, Thailand, Timor-Leste, Togo, Tonga, Turkmenistan, Tuvalu, Uganda, Uzbekistan, Vanuatu, Uruguay, Venezuela, Vietnam, Yemen, Zambia, and Zimbabwe.

Countries that are not automatically eligible for funding

Legal entities established in industrialized countries and emerging economies not listed above will be eligible for funding if so provided in the relevant call.

General criteria for participation

To be eligible for funding, an applicant consortium must comprise at least one entity established in one EU member state or associated country for coordination and support projects, and at least three entities established in at least three different EU member states or associated countries for research and innovation or innovation projects.

Application process—The application process can be represented as follows:



Only costs (i.e. for research, development, and innovation) that are incurred after the grant agreement is signed with the European Commission are eligible. Reimbursement of previously incurred costs are not eligible.

In general, calls for proposals are announced once every two years through work programs. More information on Horizon 2020 and specific calls for proposals is available on the EC Participant Portal: https://ec.europa.eu/research/participants/portal/desktop/en/home.html

Key differences over national grant programs—The main differences are:

- EU funding rates generally are higher than national funding rates (up to 100%);
- The EU funding amount per project is significantly higher;
- Collaboration of at least three partners from three different EU member states generally is required, whereas national funding only requires national or no collaboration;
- The time required from the date an application is submitted to the time a grant agreement is signed with the European Commission is longer than for national grants (it usually takes nine to twelve months to finalize a grant agreement);
- The success rate in obtaining an EU grant generally is lower than for national grants due to:
- More competition in the calls for proposals;
- Fewer projects being granted; and
- Very high required level of performance of the project, the partners, and the European impact.

EU grants: Think first and plan ahead—European grants procurement is complex, competitive, but lucrative when successful. Lucrative not only financially, but also considering knowledge, networks, and exposure. To benefit most from EU grants, a "topdown" approach is essential, following the applicant organization's R&D roadmaps. This will help to maintain focus, be aware of relevant calls and grant opportunities, provide sufficient time to organize with partners, and draft successful applications. A top-down approach will

Brexit—The UK's decision to leave the EU creates uncertainty about the continuing ability of UK companies to claim EU funding. However, until the exit actually occurs, the UK will continue to have all of the rights, obligations, and benefits of membership, including receiving European funding.

provide scope for lobbying for new topics within the EU frameworks.

The nature of the continuing relationship with the EU will be clarified in the negotiations during 2017 and 2018, but the UK government has confirmed that structural and investment funds projects signed before the 2016 Autumn Statement (23 November 2016) and Horizon research funding granted before the UK leaves the EU will be guaranteed by the Treasury after that date.

EUR 100B in opportunities

A new program of the European Commission will come into force in 2020. This new program—Horizon Europe—will build on the achievements and success of the previous research and innovation program (Horizon 2020) and aims to keep the EU at the forefront of global research and innovation. Horizon Europe will become the most ambitious research and innovation program ever.

While Horizon Europe will continue to drive scientific excellence through the programs that are also currently part of Horizon 2020, such as European Research Council (ERC) and the Marie Skłodowska-Curie fellowships and exchanges, Horizon Europe will introduce the following main new features:

A European Innovation Council (EIC) to help the EU become a
frontrunner in market-creating innovation: The Commission's
proposal will establish a one-stop shop to bring the most
promising high potential and breakthrough technologies from
lab to market application, and help the most innovative start-ups
and companies scale up their ideas. The new EIC will help identify
and fund fast-moving, high-risk innovations with strong potential
to create entirely new markets. It will provide direct support to
innovators through two main funding instruments, one for early
stages and the other for development and market deployment.
It will complement the European Institute of Innovation and
Technology (EIT).

- New EU-wide research and innovation missions focusing on societal challenges and industrial competitiveness: Under Horizon Europe, the Commission will launch new missions with bold, ambitious goals and strong European added value to tackle issues that affect daily lives of the population. Examples could range from the fight against cancer, to clean transport or plastic-free oceans. These missions will be co-designed with citizens, stakeholders, the European Parliament and the member states.
- Maximizing the innovation potential across the EU: Support will be doubled for member states lagging behind in their efforts to make the most of their national research and innovation potential. Moreover, new synergies with Structural and Cohesion Funds will make it easy to coordinate and combine funding and help regions embrace innovation.
- The proposed budget allocation of EU 100B for 2021-2027 includes EUR 97.6B under Horizon Europe (EUR 3.5B, which will be allocated under the InvestEU Fund) and EUR 2.4B for the Euratom Research and Training Program. The Euratom program, which funds research and training on nuclear safety, security and radiation protection, will have an increased focus on non-power applications such as healthcare and medical equipment, and will also support the mobility of nuclear researchers under the Marie Skłodowska-Curie Actions.