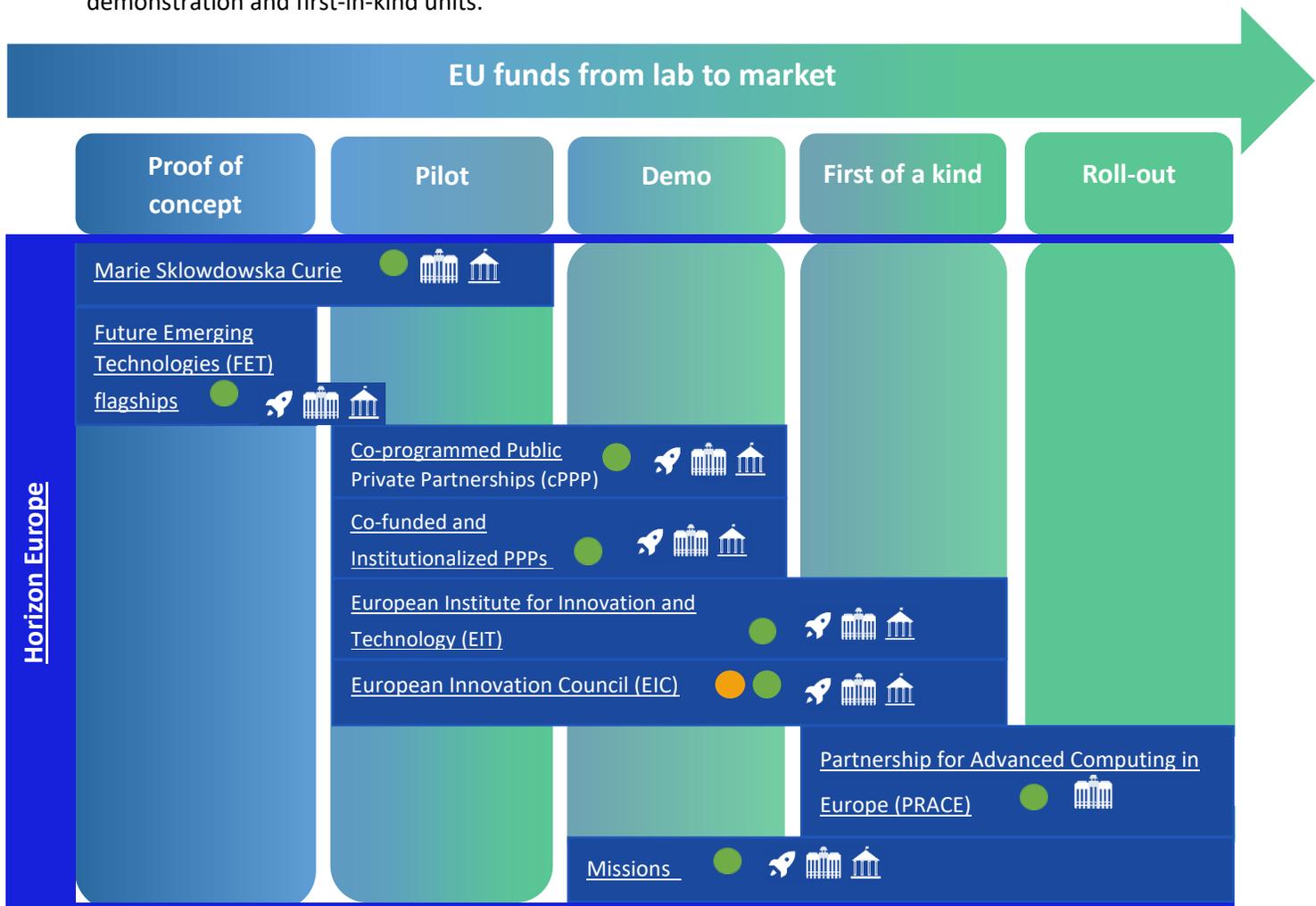


EU Funding Instruments for Research and Innovation

INTRODUCTION

This document presents an overview of the research and innovation funding instruments in the EU. Several research and innovation programmes and instruments in Europe can provide funds for the development of projects within the chemical industry.

These programmes cover all Technology Readiness Levels (TRLs), from emerging technologies to demonstration and first-in-kind units.



Type of funding:

● Loan ● Grant

Target Beneficiary:



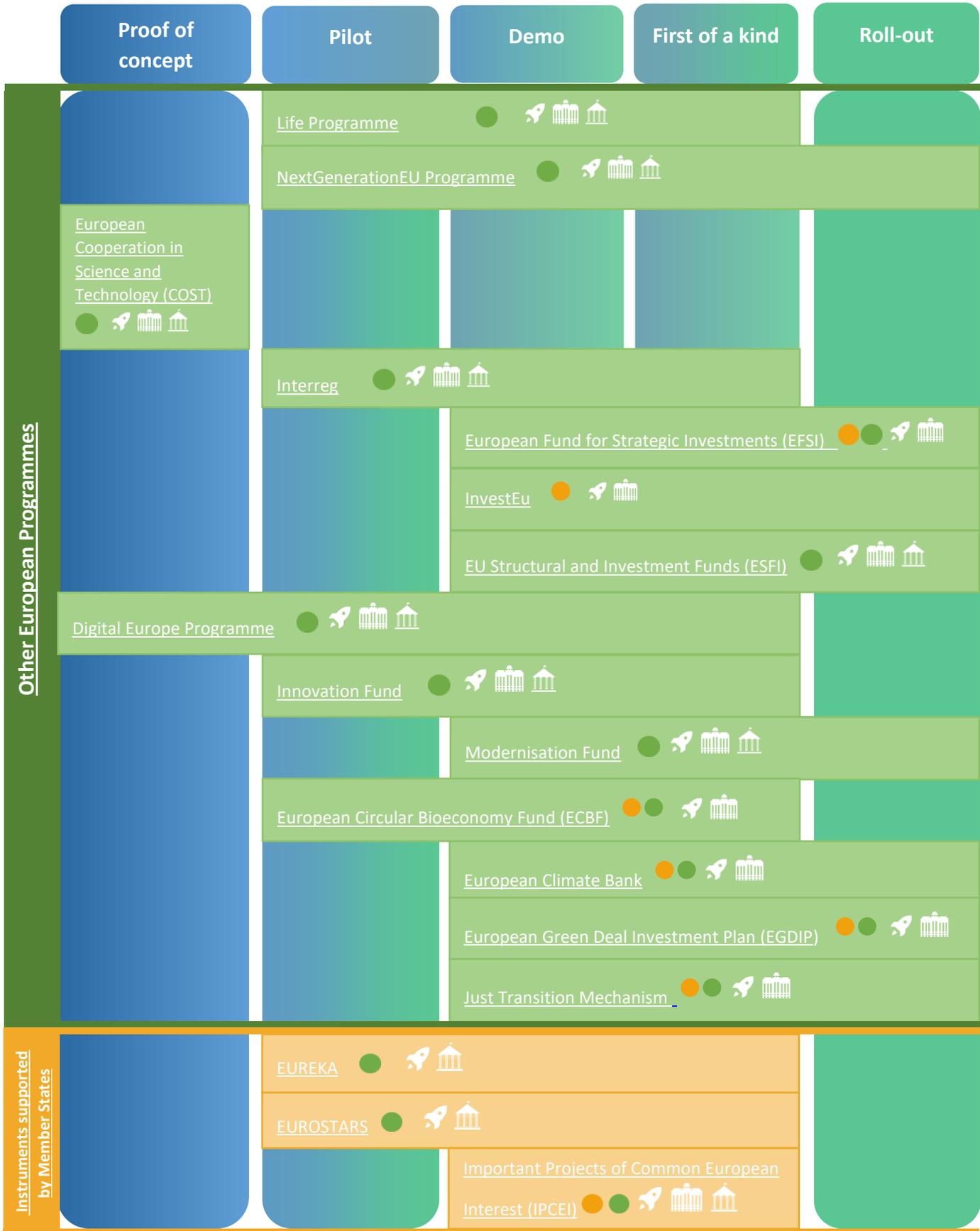
Start-ups and SMEs



Large companies



RTOs/Public bodies



Type of funding:

● Loan ● Grant

Target Beneficiary:



Start-ups and SMEs



Large companies



RTOs/Public bodies

The information contained in this document has been updated in January 2021. Changes due to the deployment of the existing and new European funding programmes are further expected in 2021.

Specific details on the conditions for the described programmes and instruments are outlined in the **ANNEX “Funding conditions of EU PROGRAMMES and INSTRUMENTS”**

DESCRIPTION OF FUNDING PROGRAMMES AND INSTRUMENTS

The Horizon Europe programme (HEU), the successor of Horizon 2020 (H2020) is the main source for funding Research and Innovation (R&I) at European level. Horizon Europe programming is closely followed by PC innovation.

Besides Horizon Europe, other programmes and instruments can also provide funding for chemical industry projects in specific areas at European and National/regional level. These comprise of **instruments mainly supported by EU funds** such as the LIFE programme, the COST programme, INTERREG, the European Fund for Strategic Investments (EFSI), InvestEU, the EU Structural and Investment Funds (ESIF), Digital Europe, the Innovation Fund, the Modernisation Fund, the European Circular Bioeconomy Fund (ECBF), European Climate Bank funding, the European Green Deal Investment Plan (EGDIP) and the Just Transition Mechanism or **instruments supported by Member States in the EU or beyond**, such as EUREKA, EUROSTARS and the Important Projects of Common European Interest (IPCEI).

These funding instruments are presented in the following sections:

1. **HORIZON EUROPE PROGRAMME**
2. **OTHER EUROPEAN PROGRAMMES AND INSTRUMENTS**
3. **PROGRAMMES AND INSTRUMENTS SUPPORTED BY MEMBER STATES**

1. HORIZON EUROPE PROGRAMME

The structure of the Horizon Europe programme is outlined in **Figure 1**:

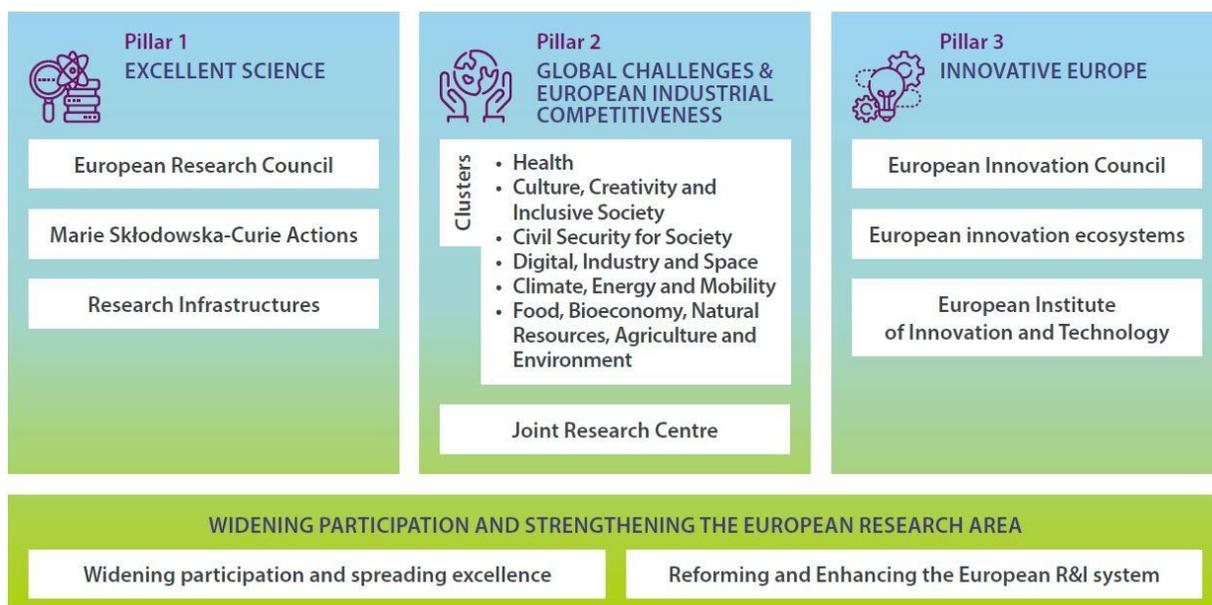


Figure 1: [Horizon Europe structure](#)

Global challenges and industrial competitiveness areas (“clusters”), defined in Horizon Europe Pillar 2, which are highly relevant to the chemical industry are:

- Health
- Digital, Industry and Space
- Climate, Energy and Mobility
- Food, Bioeconomy, Natural Resources, Agriculture and Environment

The work programme for each cluster is developed every two years by a programming committee, following a strategic plan. Horizon Europe programming is continuously monitored by PC innovation. The first calls for proposals are expected to be launched by April 2021.

Some specific funding instruments in the HEU work programme, such as Marie Skłodowska Curie, Contractual public-private partnerships (cPPP), Co-funded and Institutional PPPs, the Partnership for Advanced Computing in Europe (PRACE), the European Institute for Innovation and Technology (EIT), the European Innovation Council (EIC) and the forthcoming Missions are described in the following sections.

INSTRUMENT: Marie Skłodowska Curie international training network

This specific instrument provides companies with support for hosting and/or sending research or technical staff to work on own research projects. [The International Training Network \(ITN\)](#) under the Marie Skłodowska Curie instrument supports:

- (1) recruiting early-stage researchers or hosting them during secondments.
- (2) jointly delivering a PhD with a university under the **European Industrial Doctorates (EID)**.
- (3) co-funding a doctoral programme or hosting secondments of doctoral candidates in the **COFUND Doctoral Programme (DP)**.
- (4) recruiting/hosting experienced researchers with **European or Global Fellowships** to advance and diversify their competences and boost R&I potential.
- (5) co-funding a post-doctoral programme or hosting secondments of experienced researchers in the **COFUND Fellowship Programme (FP)**.
- (6) sending and/or hosting staff at all career levels (early stage & experienced researchers, managerial, administrative and technical staff) on short secondments (1-12 months) to acquire new skills possibly in another sector (academia or beyond) in [RISE](#), the Research and Innovation Staff Exchange Programme.

For 2021-2027 the budget for the whole Marie Skłodowska Curie Actions amounts to **€6.2 billion**, an increase compared to the H2020 envelope. The first call for proposals should open in **Q2 2021**.

INSTRUMENT: Future Emerging Technologies (FET) flagships extended from past Horizon 2020

The FET instrument aimed to cover scientific and industrial large-scale research driven by a long term (> 10 years) ambitious vision. The existing Horizon 2020 [Graphene Flagship](#) involving sensors for the Internet of Things (IOT), composites, technology for data communication and solutions for energy applications is relevant for the chemical industry. The Commission assigned **€150M** to continue funding the Graphene Flagship up to 31 March 2023. With this, the EC continues its support to this Flagship project which began in 2013. Under Horizon Europe the FET instrument is discontinued.

Contractual Public-Private partnerships (cPPP) leverage funding with private investments for boosting EU industrial leadership. Industry can participate in shaping the programmes of the cPPPs via the participation in an association gathering industry and research centres (private and public) facilitating the respective programme. This allows a bottom-up approach in the building up of the cPPP research priorities. Participation in a partnership is set up based on memoranda of understanding and/or contractual arrangements between the Commission and the partners. These specify the objectives of the partnership, related commitments for financial and/or in-kind contributions, key performance and impact indicators, and outputs to be delivered via the establishment of a roadmap.

The **Partnerships** take the form of contractual arrangements between the European Commission (EC) and representative industrial associations for key sectors of Europe's economy. This way, the EU and industry support research and innovation activities in sectors which are essential to Europe's industrial leadership.

Industry contributes to the work of the Industrial Research and Innovation Advisory Group (IRIAG) shaping the work programme (depending on the partnership) through the respective Strategic Innovation and Research agenda (SIRA) and roadmap, but it is not a direct member of the programming committee. The EC has the final programming decision with a strong voice of Research and Technology Organisations and highly depending on EC running policy priorities. As for the eligibility as project partner in the cPPP-funded projects, no direct benefit is given to the members of the specific industry association. However, a notable advantage of the membership is the active involvement in shaping the roadmap and work programmes through dedicated working groups, as well as the facilitation on the creation of consortia and collaborations.

Most relevant partnerships for the chemical industry are (*):

- (1) Processes4Planet (former Sustainable Process Industry through Resource and Energy Efficiency SPIRE under Horizon2020) involving the chemical industry and other industrial sectors (cement, ceramics, engineering, non-ferrous metals, minerals, steel, water and refining) of the A.Spire association aiming at transforming the European Process Industry for a sustainable society. its calls will be mostly located in HEU Cluster 4 (Digital, Industry and Space)
- (2) European partnership for an industrial battery value chain with the industrial drive of the Batteries European Partnership Association (BEPA) and the research and innovation ecosystem on batteries aiming at the European industrial leadership in the design and production of batteries for the next generation of both stationary and mobile applications. As well as the long-term goal to develop battery technology beyond 2030. Its calls will be mostly located in HEU Cluster 4 (Digital, Industry and Space)
- (3) Clean Hydrogen to accelerate development and deployment of clean hydrogen technologies, contributing to a sustainable, decarbonised and fully integrated energy system to supply hard to decarbonise sectors such as heavy industries and heavy-duty transport applications involving the members of Hydrogen Europe
- (4) Made in Europe (former Factories of the Future FoF under Horizon2020) for adapting manufacturing to a smart, green and inclusive economy with less waste and a better use of resources. Made in Europe embraces the “twin-transition” meaning both the green and the digital transition and its calls will be mostly located in HEU Cluster 4 (Digital, Industry and Space).
- (5) Built4people aims at achieving high quality, low carbon, energy and resource efficient built environments to drive the transition towards sustainability. The partnership will develop innovation clusters for sustainability, economic revitalisation of the sector via sustainable operations and societal behavioural change. Its objectives are driven by the European

Construction Built environment and energy efficient building Technology Platform ([ECTP](#)) and the World Green Buildings Council ([WGBC](#)).

- (6) [Towards Zero emission road transport “2Zero”](#) involving the [European Green Vehicles Initiative Association](#) to accelerate the development of zero tailpipe emission transport in Europe for a climate neutral and clean road transport system, affordable user-centric solutions, and CO₂ emission reduction. A major challenge will be to achieve zero-emission and competitive long-distance heavy-duty vehicles.
- (7) New partnerships of interest for the chemical industry are under development within Horizon Europe, for instance: [Chemicals Risk Assessment](#); [European partnership for accelerating farming system transitions](#); [Personalised medicine](#); [Safe and Sustainable Food system for people, planet and climate](#); [Water security for the planet \(Water4All\)](#); [Clean Energy Transition \(CETP\)](#). These partnerships are at a preliminary status of deployment and they might only become materialised after 2022.

Other currently running cPPPs are: [Photonics](#) (involving the [Photonics21](#) association), [Artificial Intelligence, Data and Robotics](#) (involving [euRobotics](#)), [Partnership for smart networks and services](#) (involving the [5G Infrastructure Association](#)).

(*) Some of the existing partnerships that continue from Horizon2020 have changed names.

INSTRUMENT: Co-funded and Institutional PPPs

Co-funded and Institutionalised PPPs are managed by a dedicated legal structure in the EC to implement their defined objectives. They allow funding from the Framework Programme to be combined with other public funding instruments. This, in turn, can bring a significant leverage effect on private investment and related economic activity. These Partnerships are designed to enhance downstream competitiveness in key technologies by addressing market failure arising from the high costs and risks of long-term, pre-competitive, multidisciplinary research. They are interesting instruments for the industry as they allow multi-sector and value chain collaborations.

The partnerships organise their own research agendas and award funding for projects based on open calls included in the relevant work programme. Industry is the lead for programming, the EU Commission needs to agree, and the state representatives and academia play an advisory function. In general, participation in a project proposal is open to all eligible beneficiaries, but some topics have the additional eligibility criterion that at least one project partner must be a constituent entity of the industry association.

In a co-funded partnership, the participation and financial contribution to a programme of research and innovation activities is based on the commitment of the partners for financial and in-kind contributions and integration of their relevant activities when using a programme co-fund action. In an Institutionalised partnership, the participation and financial contribution to research and innovation programmes is undertaken by bodies such as the Joint Undertakings.

The Initiatives of strategic importance include:

- (1) [Circular bio-based Europe](#) (former Bio-based Industries [BBI](#)) to use renewable natural resources and innovative technologies for greener everyday products. This partnership involves industrial stakeholders forming part of [the Bio-based Industries Consortium \(BIC\)](#).
- (2) [Innovative Health Initiative](#) (former Innovative Medicines 2 [IMI2](#)) to develop next generation vaccines, medicines and treatments.
- (3) [Key Digital Technologies \(KDT\)](#) (former Electronic Components and Systems for European Leadership [ECSEL](#)) to boost Europe’s electronics manufacturing capabilities.

- (4) [High Performance Computing \(HPC\)](#) involving the [European Technology Platform for High-Performance Computing](#))
- (5) [Transforming Europe rail system](#) (former [Shift2Rail](#)) to develop better trains and railway infrastructure that will drastically reduce costs and improve capacity, reliability and punctuality.
- (6) [Clean Aviation](#) (former Clean Sky 2 [CS2](#)) to develop cleaner, quieter aircrafts with significantly less CO₂ emissions.

INSTRUMENT: Partnership for advanced computing in Europe (PRACE)

The [Partnership for Advanced Computing in Europe \(PRACE\)](#) provides free access to [7 leading-edge high performance computing \(HPC\)](#) systems (supercomputers) located in Spain, Italy, Switzerland, Germany and France, to researchers from academia and industry through a peer review process. Additionally, the PRACE Implementation Projects support users and communities in scaling and optimising their applications to fully exploit the capabilities of the PRACE systems. The 7 HPC systems are funded and operated by the five hosting countries, all 26 members of PRACE (EU Member States and Associated countries) have an annual fee and many of them provide national HPC resources as additional in-kind contributions. PRACE receives funding from the EU Horizon Programme for its implementation. The projects are meant solely for open R&D research covering all domains: Physical Sciences and Engineering, Life Sciences, and Social Sciences and Humanities.

There are 2 types of access:

- (1) **Preparatory Access.** The objective is to allow PRACE users to optimise, scale and test codes on PRACE Tier-0 systems before applying to PRACE calls for Project Access. Production runs are not allowed as part of PRACE Preparatory Access. The Preparatory Access allows for submission of proposals any time via the [Peer Review Tool](#), which are evaluated in batches by certain cut-off dates.
- (2) **Project Access** (including Single-Year Access and Multi-Year Access). It allows the access to Tier-0 HPC resources for projects, which use codes that have been previously tested and have demonstrated high scalability and optimisation. The call for proposals is open to academia and industry. Applicants to Project Access need to complete two main documents: the [online application form](#) and the Project Scope and Plan. The call is open bi-annually.

INSTRUMENT: European Institute for Innovation and Technology. Pillar 3 in Horizon Europe

The [European Institute for Innovation and Technology \(EIT\) Knowledge and Innovation Communities \(KICs\)](#) are pan-European public-private partnerships that bring together businesses, research centres and universities. They allow (1) innovative products and services to be developed in all areas, including climate change, healthy living and active ageing; (2) new companies to be started and; (3) a new generation of entrepreneurs to be trained.

EIT KICs harness European innovation and entrepreneurship to find solutions to major societal challenges in areas with high innovation potential and to create quality jobs and growth. KICs are usually organized as an association. The EIT-funding can either be used for their own activities or passed on to their partners through calls. The activities of KICs address innovation (especially products and services), entrepreneurship and education.

The EIT financial contribution to KICs is provided as funding of up to 100% of the total eligible costs of the KICs added-value activities (KAVA). These activities include the administrative and coordination activities of the KIC. Besides these, KICs can undertake complementary activities (KCA), which must be linked with at least one KAVA, however, these are not funded by the EIT. KICs should attract funding

beyond their partners' own revenues and resources, such as private and/or public funding at national, regional and EU level, particularly from the European Structural and Investment Funds and the Horizon Europe programme. Under the EIT some funds cover [awards](#) and [regional innovation](#).

Each of the currently running eight Innovation Communities focus on a different societal challenge:

- (1) [EIT Climate-KIC](#) is working to accelerate the transition to a zero-carbon economy focusing on systemic innovation and on sustainable production systems.
- (2) [EIT Digital](#) is leading European digital innovation and entrepreneurial education driving Europe's digital transformation.
- (3) [EIT Food](#) is working to make the food system more sustainable, healthy and trusted.
- (4) [EIT Health](#) is aiming to bring innovative, real-world health solutions to market and enhance the health of citizens.
- (5) [EIT InnoEnergy](#) targets to accelerate sustainable energy innovations.
- (6) [EIT Manufacturing](#) is connecting the leading manufacturing actors in Europe fuelled by a strong interdisciplinarity.
- (7) [EIT Raw Materials](#) has the mission to enable sustainable competitiveness of the European minerals, metals and materials sector along the value chain.
- (8) [EIT Urban Mobility](#) aims to enable changes in the way people move around cities to make them more liveable places and transforming urban mobility.

INSTRUMENT: European Innovation Council (EIC). Pillar 3 in Horizon Europe

[EIC](#) brings under one umbrella several opportunities for funding innovators and for helping innovative companies to scale up and expand beyond European borders.

The programme consists of four schemes:

- (1) **EIC Pathfinder** is comprised of FET-Open and FET-Proactive and offers grants to promote collaborative, inter-disciplinary research and innovation on radically new future technologies. The scheme includes 'targeted calls' based on topics identified in the Work Programme along with open bottom-up proposals. It requires a consortium of at least 3 entities from 3 different Member States and associated countries. The topics include: (A) Artificial Intelligence, (B) implantable autonomous devices and (C) materials and breakthrough zero-emissions energy generation for full decarbonisation.
- (2) **EIC Accelerator** is built upon the former SME Instrument Phase II and provides grant-only support as well as support in the form of blended finance (combining grant and equity). The scheme supports high-risk, high-potential small and medium-sized innovative enterprises willing to develop and commercialise new products, services and business models that could drive economic growth and shape new markets or disrupt existing ones in Europe and worldwide.
- (3) **Fast Track to Innovation (FTI)** for relatively mature ground-breaking technologies, concepts and business models which are close to market. The consortium is formed by 3 to 5 legal entities who want to see quick market uptake of new technologies.
- (4) **EIC Horizon Prizes**. The awards are provided to meet a defined challenge without prescribing how that challenge should be solved. They will boost breakthrough innovation across sectors by fostering cutting-edge solutions with major benefits to citizens and society. Individual prizes amount to **€5 or 10 million**.

INSTRUMENT: Missions

The EU Commission aims to deploy tools for transformational responses going beyond a purely technological, regulatory or financial approach. EU Missions are a new policy instrument catalysing ambitious, cross-disciplinary and bottom-up ideas reaching far beyond research and innovation, in order to tackle set objectives within a certain timeframe and budget. They also have the potential to be taken-up by other EU policies and programmes, to ensure support by the policy and legislative environment.

Among the missions to be launched as a part of Horizon Europe, the relevant ones are:

- (1) [Mission Starfish 2030: Restore our Ocean and Waters](#) aiming at cleaning marine and fresh waters, restoring degraded ecosystems and habitats, decarbonising the blue economy to sustainably harness the essential goods and services they provide and proposing new and efficient governance models. The Mission has five mutually supporting objectives for 2030 to enable the restoration and regeneration of the water cycle as a whole: Filling the knowledge and emotional gap; Regenerating marine and water ecosystems; Zero pollution; Decarbonising our ocean, seas and waters and Revamping governance. The Mission has defined a set of ambitious and measurable targets (17 in total) to achieve these objectives.
- (2) [Conquering Cancer: Mission Possible](#) targeting more than 3 million lives saved, living longer and better, achieve a thorough understanding of cancer, prevent what is preventable, optimise diagnosis and treatment, support the quality of life of all people exposed to cancer, and ensure equitable access to the above across Europe by 2030.
- (3) [A Climate Resilient Europe - Prepare Europe for climate disruptions and accelerate the transformation to a climate resilient and just Europe by 2030](#) has the goal to prepare Europe to deal with climate disruptions, accelerate the transition to a healthy and prosperous future within safe planetary boundaries and scale up solutions for resilience that will trigger transformations in society.
- (4) [100 Climate-Neutral Cities by 2030 - by and for the citizens](#) to support, promote and showcase 100 European cities in their systemic transformation towards climate neutrality by 2030 and turn these cities into innovation hubs for all cities, benefiting quality of life and sustainability in Europe.
- (5) [Caring for Soil is Caring for Life](#) to achieve that at least 75% of all soils in the EU are healthy for food, people, nature and climate. The mission combines research and innovation, education and training, investments and the demonstration of good practices using “Living labs” (experiments and innovation in a laboratory on the ground) and “Lighthouses” (places to showcase good practices).

2. OTHER EUROPEAN PROGRAMMES AND INSTRUMENTS

LIFE PROGRAMME

The [LIFE programme](#) is the EU’s specific funding instrument for environment and climate action, designed to contribute to implementing, updating and developing EU environmental and climate policy.

The LIFE programme is divided into two sub-programmes suitable to fund technologies related to chemicals and close-to-market projects (TRL>6):

- (1) Environment (75% of the overall budget envelope) embraces three areas including Environment & Resource Efficiency as the most relevant.
- (2) Climate Action (25% of the envelope) embraces three areas including Climate Action Adaptation and Climate Change Mitigation as the most relevant.

LIFE also has a mechanism for bringing to market R&I funded by H2020 and previous FP programmes, the so-called integrated projects with joint funding from private or public (preferably EU source) funded projects. Furthermore, those projects with an impact on larger scale are suitable for two financial instruments managed by the European Investment Bank (EIB):

- (1) the Private Finance for Energy Efficiency (PFEE)
- (2) the Natural Capital Financing Facility (NCFF) supporting climate adaptation.

For 2021-2027 the foreseen budget for the whole LIFE programme amounts to **€5.4 billion**.

NextGenerationEU PROGRAMME

The [EU4health programme](#) aims to fill gaps revealed by the COVID pandemic. Member states are primarily competent for health policy, but the EU shall complement and support national measures and adopt legislation in specific sectors. Besides better management of crises by strengthening member states' health systems and delivering better care, the EU4Health programme also aims to improve health and foster innovation and investment in mid to long term. EU4Health is part of the [Next Generation EU recovery plan](#) of the European Commission for a new stand-alone European health programme.

Several programmes addressing health-related research involve a complex decision-making process among Member States with national and regional interests and needs. Instruments are to be put in place for a constructive development of effective synergies and complementarities between funds to make EU4Health dynamic, flexible and adapted to the EU's challenges and the priorities of the Member States.

The role of the new EU4Health is supporting health policy activities by means of an equally complex dialogue with the Member States involving these in a decision-making process with the Steering Group on Health Promotion, Disease Prevention and Management of Non-Communicable Diseases (SGPP)

Some relevant priorities of EU4Health where funds will be allocated are:

- (1) Studies, analytical activities and expert advice particularly on Consumer Safety and on Health, Environmental and Emerging Risks
- (2) Structural stockpile and crisis preparation with mechanisms to develop and manage crisis relevant products, the procurement of goods and services necessary for the prevention and management of health crises, and the actions to secure access to those essential goods and services.
- (3) Preparedness, prevention and response to cross-border health threats with support to emergency production of medical countermeasures, including essential chemicals and active substances.

EU4Health aims to invest **€10.4 billion** from the EU 2021-2027 long-term budget. The total budget allocated to the EU4Health Programme for the 2021-2027 period is: a) **€1.95 billion** derived from the "Resilience, Security and Defence" heading of the MFF 2021-2027 and b) **€8.45 billion** from the European Union Recovery Instrument.

European Cooperation in Science and Technology (COST)

[COST](#) (European Cooperation in Science and Technology) is a programme for research and innovation networks to connect research initiatives across Europe and beyond any science and technology field. COST actions are networks with a duration of four years that boost research, innovation and careers.

COST funding is open to all scientific and technological fields and to researchers and stakeholders from academia, industry, NGOs, SMEs and policymakers. COST is interdisciplinary and focused on excellence with a bottom-up approach that gives researchers freedom to freely propose any topic (actively engaging the whole research community across countries, generations and gender).

COST provides funds for meetings, training schools, short-term scientific missions or other networking activities. An average COST Action support is €130,000 per annum for participation by typically 25 Members across Europe. Besides setting up own actions, researchers can join an existing network. COST also grants networking funds to researchers from Near Neighbour Countries (Algeria, Armenia, Azerbaijan, Belarus, Egypt, Georgia, Jordan, Kosovo**, Lebanon, Libya, Morocco, Palestine***, Russia, Syria, Tunisia, and Ukraine) and International Partner Countries beyond Europe.

COST has a simple user-friendly submission and transparent application process with an independent peer review. A proposal can be submitted at any time of the year with two slots per year for evaluation. The decision for funding by the COST Committee of Senior Officials is delivered within eight months from the collection date and successful proposals are expected to kick-off within three months. A Memorandum of Understanding (MoU) provides the formal basis for a COST action. A COST action is launched when at least seven COST members have signed the MoU.

(**) This designation is without prejudice to positions on status and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo declaration of independence.

(***) This designation shall not be construed as recognition of a State of Palestine and is without prejudice to the individual positions of the Member States on this issue.

INTERREG

[Interreg](#) (European Territorial Cooperation ETC) is a series of programmes to stimulate cooperation between neighbouring regions in the European Union. It is funded by the European Regional Development Fund (ERDF) that covers all EU Member States, 3 participating EFTA countries, 6 accession countries and 18 neighbouring countries.

Interreg is based on 11 investment priorities defined as thematic objectives: research and innovation, information and communication technologies, competitiveness of SMEs, low carbon economy, combating climate change, environment and resource efficiency, sustainable transport, employment and mobility, social inclusion, better education and training, and better public administration.

Interreg embraces 3 types of programmes:

- (1) **Interreg A** (cross-border cooperation with 60 programmes)
- (2) **Interreg B** (transnational cooperation with 15 programmes)
- (3) **Interreg C** (interregional cooperation with 4 programmes)

The Interreg programme continuation is envisaged for 2021-2027. It will continue to support interregional cooperation among regions from across Europe. A programming committee set with delegates from 29 Partner States, the European Commission and the programme managing authority is drafting the new programme.

Interreg has a budget of **€10.1 billion**, which represents 2.8% of the total of the European Cohesion Policy budget. Non-EU countries contribute directly to Interreg and not through ERDF.

European Fund for Strategic Investments (EFSI)

[European Fund for Strategic Investments \(EFSI\)](#) aims to revive investment in strategic projects for the EU and ensure that money reaches the real economy based on the Investment Plan for Europe (Juncker Plan). The fund is a guarantee from the EU budget and EIB capital. Large businesses and medium-sized companies with up to 3000 employees (midcaps) can benefit from project loans or loans to finance R&I. The focus is on strategic projects implementing EU priorities with no geographic or sector quotas.

The Investment Plan also includes tools as:

- (1) The **European Investment Advisory Hub** for technical assistance and tailored advice to project promoters.
- (2) The **European Investment Project Portal**, an online platform that brings together potential projects and investors.

In the period 2014-2020 EFSI represented the EU main investment policy tool with altogether **€454 billion** were allocated from the EU budget to be invested in more than 500 programmes. Together with national co-financing of **€183 billion**, the total investment amounted to **€637 billion**. The 2021-2027 budget figures [are not yet available](#)

InvestEU

The [InvestEU Programme](#) brings together under one roof the multitude of EU financial (not grants) instruments currently available and expands the successful model of the Investment Plan for Europe (Juncker Plan). InvestEU will further boost investment, innovation and job creation, triggering at least **€650 billion** in additional investment.

The programme consists of:

- (1) **InvestEU FUND** mobilising public and private investment using guarantees from the EU budget.
- (2) **InvestEU ADVISORY HUB** providing technical advice to investment projects seeking financing.
- (3) **InvestEU PORTAL**, an easily accessible database bringing together projects and investors.

InvestEU supports four different policy areas by providing a budget guarantee to attract private investment:

- (A) **Sustainable infrastructure** (sustainable energy, digital connectivity, transport, circular economy, water, waste and other environment infrastructures).
- (B) **Research, innovation and digitisation** (taking research results to the market, digitisation of industry, scaling up larger innovative companies, artificial intelligence).
- (C) **Small businesses** (facilitating access to finance for small and medium-sized companies (SMEs), small mid-caps).
- (D) **Social investments and skills** (financing projects in skills, education, training, social housing, schools, universities, hospitals, social innovation, healthcare, long-term care and accessibility, microfinance, social enterprise, integration of migrants, refugees and vulnerable people).

EU Structural and Investment Funds ESIF (ERDF, ESF, CF, EAFRD and EMFF)

[EU Structural and Investment Funds](#) (ESIF). Research and innovation supporting the low-carbon economy and digital technologies are among the five focus areas of the ESIFs. Half of the EU funding is channelled through ESIF to reduce regional disparities in the EU by investing in job creation and green economic growth. All five structural and investment funds (ERDF, ESF, CF, EAFRD and EMFF) can finance R&I and support SMEs.

The ESIFs are managed by national authorities in partnership agreements with the European Commission. To use ESIFs, Member States must develop national and/or regional R&I strategies for smart specialisation which should include:

- (1) 'Upstream actions' to prepare regional R&I participants.
- (2) 'Downstream actions' to exploit R&I results from H2020 and preceding programmes, with particular emphasis on creating an innovation-friendly environment for business and industry, including SMEs.

DIGITAL EUROPE PROGRAMME

[EU's DIGITAL EUROPE programme](#) is focused on building the strategic digital capacities of the EU and facilitating the wide deployment of digital technologies to be used by Europe's citizens and businesses. The planned overall budget of **€9.2 billion** will support the digital transformation of Europe's society and economy. The programme will boost investments to ensure a wide use of digital technologies across the economy and society. Its goal is to improve Europe's competitiveness in the global digital economy and increase its technological autonomy.

The programme dedicates:

- (1) **€2.7 billion** to supercomputing to build up and strengthen EU's supercomputing and data processing capacities with exascale supercomputers by 2022/2023 (capable of at least a billion calculations per second) and post exascale facilities by 2026/2027.
- (2) **€2.5 billion** to artificial intelligence (AI) to open the use of AI by businesses and public administrations, facilitate safe access and storage of large sets of data and algorithms and support existing AI testing facilities in areas such as health and mobility.
- (3) **€2 billion** to cybersecurity.
- (4) **€1.3 billion** for ensuring the wide use of digital technologies across the economy and society.
- (5) **€700 million** for advanced digital skills.

Innovation Fund

The [Innovation Fund](#) is a large programme for demonstration of innovative low-carbon technologies with significant potential to reduce greenhouse gas emissions. It is a key instrument for delivering the EU's economy-wide commitments under the [Paris Agreement](#) and for supporting the European Commission's strategic vision of a [climate neutral Europe by 2050](#). The Innovation Fund is specifically designed to support first of its kind demonstration projects. With a budget of at least 450 million ETS allowances for the period 2021-2030, it is a relevant funding opportunity for the chemical industry. The [Innovation and Networks Executive Agency \(INEA\)](#) is the managing agency for the projects, the EIB is in charge of the project development assistance.

The Innovation Fund aims to (a) create the right financial incentives for projects to invest in the next generation of technologies needed for the EU's low-carbon transition; (b) boost growth and

competitiveness by empowering EU companies with a first-mover advantage to become global technology leaders and; (c) support innovative low-carbon technologies in all Member States in taking off and reaching the market. The Fund aims to finance a varied project pipeline achieving an optimal balance of innovative technologies in all eligible sectors (energy intensive industries, renewable energy, energy storage, CCS and CCU). The Fund will also support cross-cutting projects on innovative low-carbon solutions that lead to emission reductions in multiple sectors, for example through industrial symbiosis or business model innovation.

The eligible sectors are:

- (1) Innovative low-carbon technologies and processes in energy intensive industries, including products substituting carbon intensive ones.
- (2) Carbon capture and utilisation (CCU).
- (3) Construction and operation of carbon capture and storage (CCS).
- (4) Innovative renewable energy generation.
- (5) Energy storage.

Projects will be selected based on:

- (1) Effectiveness of greenhouse gas emissions avoidance
- (2) Degree of innovation
- (3) Project viability and maturity
- (4) Scalability
- (5) Cost efficiency (cost per unit of performance)

The fund can support two type of projects aiming at demonstration and first of a kind commercial plants:

- (A) **large scale projects** (defined as projects with a **CAPEX above €7.5 million**). Eligible costs are defined as **additional costs** vs conventional production. A two-stage selection process is applied, and
- (B) **small scale** (i.e. **projects** with a **CAPEX not exceeding €7.5 million**). Eligible costs include CAPEX, and A **single stage selection** procedure is applied.

The Innovation Fund supports up to **60% of eligible costs** to both types of projects.

Up to 40% of the grants can be given based on pre-defined milestones before the whole project is fully up and running. The remaining 60% of the grant depends on verified GHG emissions avoidance. The grants will be disbursed in a flexible way based on project needs, considering the milestones achieved during the project lifetime. [Combination of Innovation Fund support with other public support](#) is possible.

The first Innovation Fund call was launched in the form of a grant addressing large projects (with capital expenditure above **€7.5 million**) in all the five eligible sectors for beneficiaries that could be single applicants or consortia.

The application process has two phases:

- (1) Expression of interest, with a first assessment on the project effectiveness, innovation and maturity level. Projects that meet only the first two criteria may qualify for project development assistance.
- (2) Full application where projects are assessed on all criteria, including scalability and cost efficiency.

- (3) Apart from the application document, the applicant will need to apply a [methodology for the calculation of GHG emission avoidance](#) and [the methodology for relevant cost calculation](#).

The 1st call for small projects (projects below **€7.5 million**) was launched in October 2020, it is open for submissions until 10 March 2021. The evaluation results are expected by August 2021 and it will be followed by regular calls until 2030. The call has a total budget of €100 million with a maximum limit of €4.5 million and a minimum of €1.5 million in the form of grant. The 2nd call for large-scale projects is expected to be published in September 2021.

Modernisation Fund

The [Modernisation Fund](#) is a dedicated funding programme to support 10 lower-income EU Member States in their transition to climate neutrality by helping to modernise their energy systems and improve energy efficiency. The beneficiary Member States are Bulgaria, Croatia, Czechia, Estonia, Hungary, Latvia, Lithuania, Poland, Romania and Slovakia.

The Modernisation Fund operates under the responsibility of the beneficiary Member States in close cooperation with the European Investment Bank (EIB), the Investment Committee (10 representatives, one per beneficiary Member State, 3 representatives from non-beneficiary Member States, 1 representative from the EIB, 1 representative from the Commission as chair) and the European Commission.

The Modernisation Fund is recognised in the [European Green Deal Investment Plan](#) as one of the key funding instruments contributing to the objectives of the [European Green Deal](#). The Modernisation Fund will: (a) Help the beneficiary Member States meet the 2030 climate and energy targets and play an active role in EU transition to climate neutrality; (b) Increase energy security in the beneficiary Member States by supporting increased interconnections and modernisation of energy networks; (c) Enhance the financing of renewable energy sources; (d) Help make the economies and the energy sectors of the beneficiary Member States greener and cleaner and (e) Promote exchange of best practices among the beneficiary Member States.

The Modernisation Fund supports investments in:

- (1) Generation and use of energy from renewable sources
- (2) Energy efficiency
- (3) Energy storage
- (4) Modernisation of energy networks, including district heating, pipelines and grids
- (5) Just transition in carbon-dependent regions: redeployment, re-skilling and upskilling of workers, education, job-seeking initiatives and start-ups

The Key steps in the financing process are:

- (1) Member States select the investments for the Modernisation Fund support. (No direct applications by project proponents can be sent to the EIB or the Commission).
- (2) Member States submit the proposed investments to the EIB, the Investment Committee and the Commission.
- (3) The EIB confirms if the investment is a priority investment as defined by the ETS Directive.
- (4) For non-priority investments, the EIB conducts a technical and financial assessment and the Investment Committee assesses the proposal and makes a recommendation on its financing.

- (5) The Commission takes a disbursement decision once an investment is confirmed as priority by the EIB or recommended for financing by the Investment Committee as non-priority. The share allocated to priority investments must be >70% of the total amount used by the beneficiary Member State. The Commission will check this before issuing each disbursement decision.
- (6) The EIB transfers the resources to the beneficiary Member State within 30 days of the disbursement decision.

The Modernisation Fund is funded from revenues from the auctioning of 2% of the total allowances for 2021-30 under the EU Emissions Trading System (ETS) and from [additional allowances transferred](#) to the Modernisation Fund by beneficiary Member States – 5 opted to do so (Croatia, Czechia, Lithuania, Romania and Slovakia). The total revenues of the Modernisation Fund may amount to **€14 billion** in 2021-30, depending on the carbon price.

The Modernisation Fund leaves beneficiary Member States the freedom to decide the form of support: **grants, premium, guarantee instruments, loans or capital injections**. **Co-financing** from private and public entities is possible as long as State aid rules are respected, and the costs are not already funded by another EU or national instrument.

European Circular Bioeconomy Fund (ECBF)

The [European Circular Bioeconomy Fund \(ECBF\)](#) is an initiative of the European Investment Bank (EIB) and the European Commission (EC) which is set up based upon the framework of former InnovFin. ECBF provides access to finance - in the form of equity, debt or quasi-equity - to innovative circular bioeconomy companies and projects of various sizes, especially for growth and late stage projects. ECBF is an important instrument contributing to the European Green Deal and the objectives of making Europe climate neutral by 2050. ECBF aims also to foster environmental, social and governance (ESG) investment in the Sustainable Development Goals (SDG), demonstrating that impact generation and favourable Internal Rate of Returns (IRRs) are not contradictory.

The fund focusses on the scaling up of innovative bio-based companies in a late stage of demonstration or commercialisation phase (TRL 6-9). The target investment sectors include new technologies and business models in agricultural technologies, blue economy, bio-based chemicals, specialties and materials mainly for applications on nutrition, packaging, personal care, construction and textiles. The investment opportunities in circularity topics such as conversion of biological resources and waste streams into value-added products have a high priority.

ECBF has presently committed **€175 million**, where EIB is committed to contribute up to **€100 million** and is also backed by nine investors from five different European countries.

European Climate Bank funding

This instrument is in a conceptual phase as part of the Green Deal implementation. The specific content and conditions are not defined at this stage. The European Investment Bank Board of Directors approved a [new strategy](#) for climate action and environmental sustainability with three key elements:

- (1) The EIB Group will aim to support **€1 trillion** of investments in climate action and environmental sustainability from 2021 to 2030.
- (2) The EIB will gradually increase the share of its financing dedicated to climate action and environmental sustainability to reach 50% of its operations in 2025.

- (3) The EIB Group will align its financing activities with the principles and goals of the Paris agreement by the end of 2020. This will be complemented by measures to ensure EIB financing contributes to a just transition for those regions or countries more affected so that no one is left behind.

European Green Deal Investment Plan (EGDIP) / Sustainable Europe Investment Plan (SEIP)

The European Green Deal Investment Plan (EGDIP) will mobilise > **€1 trillion** in sustainable investments over the next decade to achieve the goals set by the European Green Deal. The funding source will combine EU budget for Climate and Environment, EU emission trading system (ETS) funds, national co-financing and private and public mobilised investments.

The EGDIP has three main objectives:

- (1) It will increase funding for the transition to support sustainable investments over the next decade through the EU budget and associated instruments, in particular InvestEU.
- (2) It will create an enabling framework for private investors and the public sector to facilitate sustainable investments.
- (3) It will provide support to public administrations and project promoters in identifying, structuring and executing sustainable projects.

Just Transition Mechanism

While the European Green Deal Investment Plan supports the Green Deal as a whole, the Just Transition Mechanism is specifically targeted at the regions that will be most affected by the transition. It will mobilise at least **€100 billion** in investments over the period 2021-2027 to support workers and citizens of these regions. The Mechanism consists of three pillars.

- (1) Just Transition Fund (**€7.5 billion**) to be further leveraged by €1.5-3 from EU regional or social funds plus national co-financing. Regions with a strong coal, lignite, oil shale and peat production or greenhouse gas-intensive industries will be in the focus. Upskilling workers, SMEs and job creating investments as well as investments in clean energy transition are to be covered by the fund.
- (2) Dedicated just transition scheme under InvestEU: **€1.8 billion** of InvestEU budget attracting private investment in the eligible regions and generating up to **€45 billion** in total. Projects on decarbonisation, economic diversification of the regions, energy, transport and social infrastructure are eligible.
- (3) European Investment Bank loan backed by the EU budget. It will mobilise **€25-30 billion** in loans to the public sector (e.g. for investments in energy and transport infrastructure, district heating networks, and renovation or insulation of buildings).

3. PROGRAMMES AND INSTRUMENTS SUPPORTED BY MEMBER STATES

EUREKA

[EUREKA](#) is an intergovernmental network established in 1985 as a platform for international Research, Development and Innovation (RD&I) cooperation. It currently counts 41 full members including the EU, one partner country (South Korea) and four associated countries (Argentina, Canada, Chile and South Africa). EUREKA promotes and supports market-oriented international RD&I project generation, facilitating access to finance for companies involved in its projects.

EUREKA's main funding instrument is in the form of [Network Projects](#), market-driven innovative R&D projects run by an international consortium. The requisite for a Network Project is the envisioned outcome of a product, process or service having a civilian/non-military purpose with participants from at least two independent legal entities established in two different Eureka countries. EUREKA labels these projects and the participants find funding and support through the national innovation agencies and the public administrations forming the EUREKA network. The flexible 'bottom-up' nature of Network Projects allows the participants to define the technology to be developed. The consortium also agrees on the intellectual property rights, how the partnership is built and how the expertise is shared. The consortium can be composed of small, medium or large companies; universities or research centres.

EUROSTARS

[EUROSTARS](#) funds international innovative projects led by research and development- performing small- and medium-sized enterprises with a bottom-up approach. EUROSTARS is a joint programme between EUREKA and the EC, co-funded from the national budgets of the 36 participating and partner countries and by the EU. It supports the development of rapidly marketable innovative products, processes and services.

Already under Eurostars-2, 30% of the participants consisted of high-tech start-ups on an innovation growth path and 41% were labelled as high-tech scale-ups. Future expectation is that companies involved in EUROSTARS projects can feed into the Invest Horizon Acceleration programme soon before or after project completion. The programme can act as the ultimate plug-in into the EIC Business Accelerating Services and facilitate additional growth paths for start-ups by teaming up with larger industrial players in the innovation landscape, through open innovation and capital venture schemes.

EUROSTARS-3 will align with Horizon Europe to leverage the national support of the SMEs through a cooperative cross border funding across Europe and beyond. The strong added value derives from the additional private and public RD&I investments on EU priorities, the alignment of these investments towards common objectives and the international character of impacts that cannot be created by national actions alone. EUROSTARS-3 will establish stronger ties between the European Commission and the National Funding Bodies (NFBs), connecting national policies and budgets to an international funding scheme, thereby contributing to the objectives of the European Research and Innovation Area (ERA) and providing European added value. The core activity of EUROSTARS-3 remains the funding of bottom up RD&I projects encouraging more applications from currently less-active countries and ensuring that the highest innovation level and collaboration of mutual benefit for partners will be funded.

The Key enhancements of EUROSTARS-3 are:

- (1) Higher impact: Supporting projects of higher quality with dedicated budget from participating countries and direct contribution from the European Commission. Greater emphasis will be placed on robust evaluation, actively guiding and monitoring the project outcomes and their economic, societal and environmental impacts.
- (2) Better services to beneficiaries: A streamlined administration, faster time to contract, and simplified eligibility criteria for an easily accessible international collaboration.
- (3) Broader target group: The aim is to support all innovative SMEs. However, the projects will remain focused on applied RD&I (~TRL 4-6). Specific emphasis on the participation of SMEs from all EUREKA countries, with targeted actions at countries with lower RD&I intensity while ensuring national commitment of resources. SMEs increasingly work on a global scale and therefore a key value for innovative SMEs is to establish a value chain i.e. with the EUREKA countries in line with the Global Strategy of EUREKA.

- (4) Synergy and Alignment: Complementing Horizon Europe and the European Innovation Council to meet the needs of innovative businesses to grow and scale-up. Identifying strategic alliances, aligning and working with NFBs to create synergies with other support instruments available at the national level.
- (5) Accompanying measures: Measures supporting the innovation journey e.g. coaching, mentoring, investor readiness embedded in a scheme of support tools, through EUREKA, the EU and national schemes for companies.

The budget for EUROSTARS-3 is expected to be **€1.2 billion** for the period 2021-2027.

Important Projects of Common European Interest (IPCEI)

[Important Projects of Common European Interest \(IPCEIs\)](#) comprise innovative projects that often entail significant risks and require well-coordinated joint efforts and transnational investments by public authorities and industries. Under the **conditions** (such as more than one Member State involved, contribution to Union objective(s), positive spill-over effects) defined in the related communication, IPCEI can allow Member States to provide funding to initiatives over and beyond what can be done under the current state-aid rules. Both CAPEX and OPEX can be eligible and support can be provided up to first industrial deployment if it follows on from an RD&I activity and itself contains a very important RD&I component.

Illustrative relevant examples of implementation of IPCEI are the following:

The Commission approved the first **€1.75 billion** of public investment under the IPCEI framework, which will unlock an additional **€6 billion** of private investment for research and innovation in [microelectronics](#). Four countries (France, Germany, Italy and the UK) and around 30 companies and research institutions joined forces to enable research and innovation in this key technology.

An IPCEI approved in December 2019 to support the [battery](#) value chain involving seven Member States (Belgium, Finland, France, Germany, Italy, Poland and Sweden) provides up to **€3.2 billion** in funding, expected to unlock an additional **€5 billion** in private investments. This IPCEI focusses on four areas: Raw and advanced materials, Cells and modules, Battery systems, Repurposing, recycling and refining. The completion of the overall project is planned for 2031.

The Commission has approved a second IPCEI, the pan-European research and innovation project called "European Battery Innovation" in January 2021. The twelve Member States involved (Austria, Belgium, Croatia, Finland, France, Germany, Greece, Italy, Poland, Slovakia, Spain and Sweden) will provide up to **€2.9 billion** in funding in the coming years. The public funding is expected to unlock an additional €9 billion in private investments, i.e. more than three times the public support. The project complements the first IPCEI in the battery value chain that the Commission launched in 2019.

An IPCEI on [Hydrogen technologies and systems](#) is at an advanced level of development to be approved by the EU commission and foreseen to be launched in 2021

Other strategic and future-oriented industrial sectors foreseen to be funded under IPCEI include: Connected, clean and autonomous vehicles, Smart health, Industrial Internet of Things, Low-carbon industry and Cybersecurity.

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About Cefic

Cefic, the European Chemical Industry Council, founded in 1972, is the voice of large, medium and small chemical companies across Europe, which provide 1.2 million jobs and account for 16% of world chemicals production.

ANNEX: Funding conditions of EU PROGRAMMES and INSTRUMENTS

Specific details on the funding conditions for the **above described programmes and instruments** are outlined in the following tables.

Table 1: HORIZON EUROPE PROGRAMME

<u>INSTRUMENT</u>	<u>FUNDING ORGANISM</u>	<u>TYPE OF FUNDING (GRANT/LOAN) and TYPE OF ACTION COVERED</u>	<u>PARTICIPANTS ELIGIBLE FOR FUNDING</u>	<u>FREQUENCY OF CALLS</u>	<u>COUNTRIES & MINIMUM PARTNERSHIP</u>	<u>COORDINATED BY</u>	<u>SUITABLE FOR TECHNOLOGY READINESS LEVEL (TRL)</u>	<u>PROJECT AVERAGE BUDGET and FUNDING RATIO OF ELIGIBLE COSTS (indicative)</u>
Bi-year work programme	various DGs	GRANT Research and Innovation Action (RIA), Innovation (IA) Coordination and Support Action (CSA)	Large industry, Research organisation, Association, SME	Several calls/year	Min 3 partners in 3 different Member States	Any of: Large Industry, Research organisation, Association, SME	TRL 2-7	€2-8 million RIA, €5-25 million IA, €1 million CSA. 100% for Research activities. 60-70% for Innovation activities
Marie Skłodowska Curie	DG RTD	GRANT Research and Innovation Action (RIA)	Large industry, Research organisation, Association, SME	Several calls/year	Min 3 partners in 3 different Member States	Any of: Large Industry, Research organisation, Association, SME	TRL 2-4	To be defined
Contractual public-private partnerships (cPPP)	various DGs	GRANT Research and Innovation Action (RIA), Innovation (IA) Coordination and Support Action (CSA)	Large industry, Research organisation, Association, SME	Several calls/year	Min 3 partners in 3 different Member States	Any of: Large Industry, Research organisation, Association, SME	TRL 2-8	€2-8 million RIA, €5-25 million IA, €1 million CSA. 100% for Research activities. 60-70% for Innovation activities
Co-funded and Institutional PPPs	various DGs	GRANT Research and Innovation Action (RIA), Innovation (IA) Coordination and Support Action (CSA)	Large industry, Research organisation, Association, SME	Several calls/year	Min 3 partners in 3 different Member States	Any of: Large Industry, Research organisation, Association, SME	TRL 2-8	€2-8 million RIA, €5-25 million IA, €1 million CSA. 100% for Research activities. 60-70% for Innovation activities
PRACE	DG RESEARCH & 26 Member States	GRANT	Large industry, Research organisation, SME	To be defined	To be defined	To be defined	To be defined	To be defined
European Innovation Council (EIC)	various DGs	To be defined	Large industry, Research organisation, Association, SME	To be defined	To be defined	To be defined	To be defined	To be defined

Table 2: OTHER EUROPEAN PROGRAMMES AND INSTRUMENTS

<u>PROGRAMME</u>	<u>FUNDING ORGANISM</u>	<u>TYPE OF FUNDING (GRANT/LOAN) and TYPE OF ACTION COVERED</u>	<u>PARTICIPANTS ELIGIBLE FOR FUNDING</u>	<u>FREQUENCY OF CALLS</u>	<u>COUNTRIES & MINIMUM PARTNERSHIP</u>	<u>COORDINATED BY</u>	<u>SUITABLE FOR TECHNOLOGY READINESS LEVEL (TRL)</u>	<u>PROJECT AVERAGE BUDGET and FUNDING RATIO OF ELIGIBLE COSTS (indicative)</u>
LIFE Programme	DG ENVIRONMENT & DG CLIMA	GRANT Research and Innovation Action (RIA), Innovation Action (IA)	Large industry, Research organisation, Association, SME	2 calls/year	No consortium needed	Large Industry, Research organisation, Association, SME	TRL>6	€5 million standard project, €17 million integrated projects. Up to 55% total eligible costs (nature and biodiversity environment sub-programme up to 60%-75%)
EU4Health	various DGs	GRANT	Large industry, Research organisation, Association, SME	To be defined	To be defined	Large Industry, Research organisation, Association, SME	To be defined	To be defined
European Cooperation in Science and Technology (COST)	COST	GRANT Coordination and Network Actions	Large industry, Research organisation, Association, SME	Continuously open	Min 7 member EU countries.	Research organisation, Association, SME	To be defined	Average €130000 /year for 4 years. 100% of total eligible costs
Interreg	EU via National/Regional funding entity	GRANT	Large industry, Research organisation, SME	To be defined	Min 2 partners in different Member States	Large Industry, Research organisation, Association, SME	To be defined	To be defined
EFSI	DG GROW + European Investment Bank (EIB)	GRANT & LOAN Industrial strategic projects	Large industry	Continuously open	No consortium needed	Large Industry	TRL>7	> €5 million project
InvestEU	EU via National/Regional funding entity	GRANT & LOAN or other type of funding Industrial strategic projects	Large industry, SME	Continuously open	No consortium needed	To be defined	To be defined	To be defined
ESIF (ERDF, ESF, CF, EAFRD and EMFF)	EU via National/Regional funding entity	GRANT Industrial strategic projects	Large industry, SME	Continuously open	No consortium needed	Large industry, SME	TRL>7	To be defined
DIGITAL EUROPE	DG CONNECT	GRANT	Large industry, Research organisation, Association, SME	To be defined	No consortium needed	To be defined	To be defined	To be defined

Table 2. OTHER EUROPEAN PROGRAMMES AND INSTRUMENTS (continuation)

PROGRAMME	FUNDING ORGANISM	TYPE OF FUNDING (GRANT/LOAN) and TYPE OF ACTION COVERED	PARTICIPANTS ELIGIBLE FOR FUNDING	FREQUENCY OF CALLS	COUNTRIES & MINIMUM PARTNERSHIP	COORDINATED BY	SUITABLE FOR TECHNOLOGY READINESS LEVEL (TRL)	PROJECT AVERAGE BUDGET and FUNDING RATIO OF ELIGIBLE COSTS (indicative)
Innovation Fund	DG CLIMA INEA as managing agency for projects EIB for Project development assistance	GRANT Large scale projects, Small-scale projects and Project development assistance	Industry and others (industry driven)	Annual call for large projects. Annual call for small projects.	No consortium needed	Industry	TRL >6	> €7.5 million large project (Up to 60% of total eligible costs defined as additional costs) < €7.5 million small project. (60% of total eligible costs defined as CAPEX)
Modernisation Fund	DG CLIMA	GRANT Industrial strategic projects	Industry and others (industry driven)	Continuously open	No consortium needed	Industry	TRL>7	To be defined
European Circular Bioeconomy Fund (ECBF)	EIB/EC	GRANT & LOAN Mid-large scale projects	Industry and others (industry driven)	To be defined	To be defined	Industry	TRL 6-9	€2.5-10 million
European Climate Bank funding	EIB	GRANT & LOAN	Industry and others (industry driven)	To be defined	To be defined	To be defined	To be defined	To be defined
European Green Deal Investment Plan (EGDIP) / Sustainable Europe Investment Plan (SEIP)	EC	GRANT & LOAN	Industry and others (industry driven)	To be defined	To be defined	To be defined	To be defined	To be defined
Just Transition Mechanism	EC	GRANT & LOAN	Industry and others (industry driven)	To be defined	To be defined	To be defined	To be defined	To be defined

Table 3: PROGRAMMES AND INSTRUMENTS SUPPORTED BY MEMBER STATES

<u>PROGRAMME</u>	<u>FUNDING ORGANISM</u>	<u>TYPE OF FUNDING (GRANT/LOAN) and TYPE OF ACTION COVERED</u>	<u>PARTICIPANTS ELIGIBLE FOR FUNDING</u>	<u>FREQUENCY OF CALLS</u>	<u>COUNTRIES & MINIMUM PARTNERSHIP</u>	<u>COORDINATED BY</u>	<u>SUITABLE FOR TECHNOLOGY READINESS LEVEL (TRL)</u>	<u>PROJECT AVERAGE BUDGET and FUNDING RATIO OF ELIGIBLE COSTS (indicative)</u>
Eureka	EUREKA + National funding entity	GRANT Innovation (IA)	Large industry, Research organisation, Association, SME	Continuously open	Min 2 partners in a EUREKA member country	SME	TRL 5-7	To be defined
Eurostars	EUREKA + National funding entity	GRANT Innovation (IA)	Large industry, Research organisation, Association, SME	2 calls/year	Min 3 partners in 3 different Member States	SME	TRL 5-7	Average €1 million . 75% for Research activities, 50% for Innovation activities
Important Projects of common European Interest (IPCEI)	Member States	GRANT, LOAN or other type of funding determined by each Member State	Industry and others (industry driven projects)	Defined by Member States	Minimum 2 Member States	Industry & Member States	In principle for all TRLs. In practice, particularly attractive for high TRL (>7)	To be defined