



EU Catalyst Partnership



European
Commission



Breakthrough
Energy



European
Investment
Bank



MEMORANDUM OF UNDERSTANDING

between

**the European Commission,
the European Investment Bank and
Energy Catalyst Europe S.à.r.l.**

November 2021

Memorandum of Understanding on a partnership between the European Commission, the European Investment Bank and Breakthrough Energy Catalyst Europe S.à.r.l

1. INTRODUCTION

The European Commission (the Commission), the European Investment Bank (EIB) and Breakthrough Energy Catalyst Europe S.à.r.l.¹ ('Catalyst') (hereinafter referred to as "the Sides"), recognise the importance of accelerating the reduction of the green premium – the cost difference between a clean technology and the corresponding fossil-fuel based technology – to increase the market attractiveness of high-impact, low carbon technologies with the aim of decarbonising the economy as foreseen under the Paris Agreement, European Union's 2050 net-zero strategy² and the Climate Law³. To this end, the Sides intend to establish a new partnership to help fight the global climate crisis.

2. BACKGROUND

The Sides recognise that significant international efforts to combat climate change have taken place in recent years, including the following:

- At COP21, Paris, in December 2015, a landmark agreement to combat climate change and to accelerate actions and investments needed for a sustainable low carbon future was reached, charting a new course in the global climate effort.
- Through the Mission Innovation initiative, launched at COP21 and aiming to accelerate clean energy innovation, twenty governments, representing more than 80% of global clean energy investments, have pledged to double their clean energy research and development funding over five years to around USD 30 billion per year by 2021. The Commission joined Mission Innovation on the occasion of the first Mission Innovation Ministerial in San Francisco in June 2016.
- Breakthrough Energy (BE) was set up at COP 21, alongside Mission Innovation⁴, to help scale the technologies the world needs to reach net-zero emissions by 2050.
- In 2018, the Commission and BE concluded a first Memorandum of Understanding to initiate a new model of public-private cooperation. The main aim was to stimulate more private investment into European low-carbon technology companies and innovators, providing solutions to climate challenges. This led to the establishment of a joint investment vehicle, Breakthrough Energy Ventures Europe.
- In December 2019, the Commission presented the European Green Deal⁵, a flagship initiative to address the climate emergency and that seeks to make the European Union

¹ Catalyst is a Luxembourg based S.à.r.l, 100% controlled by Breakthrough Energy Catalyst Foundation (US), set up to act as one stop-shop to engage both the Breakthrough Energy Catalyst Foundation and the Catalyst Fund Europe and to implement BE Catalyst's European operations.

² Long-term low greenhouse gas emission development strategy of the European Union and its Member State Zagreb, 6 March 2020, <https://unfccc.int/sites/default/files/resource/HR-03-06-2020%20EU%20Submission%20on%20Long%20term%20strategy.pdf>

³ Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 (OJ L 243, 9.7.2021, p. 1)

⁴ <http://mission-innovation.net>

the global leader on climate change and achieve climate neutrality by 2050. It sets policy objectives in support of decarbonising the EU's energy system and industries.

- In November 2019, the EIB Board approved very ambitious new climate action and environmental sustainability objectives for the EIB Group, which included clear targets for investment in climate action and environmental sustainability, in support of the European Green Deal, and a commitment to align all EIB Group financing activities with the principle and goals of the Paris Agreement.
- Over the following year, the EIB Group developed a Climate Bank Roadmap⁶ to put this commitment into practice, which provides a detailed operational framework for the EIB Group activities on climate action and environmental sustainability over the first five years of its commitment, from 2021 to 2025.
- In June 2021, at the sixth Mission Innovation Ministerial meeting, President von der Leyen and Bill Gates announced a new pioneering partnership between the Commission and Catalyst to boost investments in critical climate technologies that will enable the future net-zero economy⁷.
- The EU new Multiannual Financial Framework for 2021-2027⁸ and the post-COVID recovery package for 2021-2023, Next Generation EU, establish a 30% climate mainstreaming target. This means that at least 30% of that expenditure will be dedicated to fighting climate change.
- Horizon Europe⁹, the EU research and innovation framework programme, seeks through research and innovation actions to help bring about a sustainable, fair and prosperous future for people and planet based on European values. Tackling climate change (with 35% of the Horizon Europe budget allocated to this), helping to achieve Sustainable Development Goals and boosting the European Union's competitiveness and growth are key elements to achieve this. Horizon Europe funds research and innovation projects up to Technology Readiness Level 8 mainly in EU Member States and countries associated to the programme ('Associated Countries')¹⁰.
- InvestEU¹¹, the EU programme to support investments and growth, provides an EU guarantee to support financing and investment operations of the EIB Group and other implementing partners with the aim of combining substantial private and public funds in support of a sustainable recovery. InvestEU will contribute to competitiveness, growth and employment, sustainable and inclusive recovery crucial for European companies, especially in view of the ongoing crisis. It will also help mobilizing private investments in support of the European Green Deal and the digital transition objectives.

⁵ Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions the European Green Deal (COM/2019/640 final)

⁶ <https://www.eib.org/en/publications/the-eib-group-climate-bank-roadmap>

⁷ https://ec.europa.eu/commission/presscorner/detail/en/IP_21_2746

⁸ https://ec.europa.eu/info/strategy/eu-budget/long-term-eu-budget/2021-2027_en

⁹ Regulation (EU) 2021/695 of the European Parliament and of the Council of 28 April 2021 establishing Horizon Europe – the Framework Programme for Research and Innovation, laying down its rules for participation and dissemination (OJ L 170, 12.5.2021, p. 1–68)

¹⁰ https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/common/guidance/list-3rd-country-participation_horizon- Euratom_en.pdf

¹¹ Regulation (EU) 2021/523 of the European Parliament and of the Council of 24 March 2021 establishing the InvestEU Programme and amending Regulation (EU) 2015/1017 (OJ L 107, 26.3.2021, p. 30)

- The Innovation Fund¹² supports the demonstration of innovative low-carbon technologies. Financed by the revenues of the EU Emission Trading System¹³, it will provide around EUR 20 billion of support over 2020-2030 (depending on the carbon price) for the commercial demonstration of innovative low-carbon technologies, aiming to bring to the market industrial solutions to decarbonise Europe and support its transition to climate neutrality. The Innovation Fund supports projects (taking place in EU Member States, Norway and Iceland) on low-carbon technologies, processes and products in energy intensive industries, renewable energy, energy storage and Carbon Capture Utilisation and Storage.
- Catalyst is a subsidiary of Breakthrough Energy Catalyst Foundation, a US non-profit, non-stock corporation (“Catalyst Foundation”). Catalyst Foundation will directly make available funding resources (non-reimbursable contributions) and, through its subsidiary Breakthrough Energy Catalyst Europe Fund, will fund quasi equity / equity investments, pursuant to project-specific definitive project financing documentation amongst the Sides or any two of them.

3. SHARED PRINCIPLES

The Sides share the following principles and common understanding:

- The EU priority is to see a substantially accelerated uptake of low-carbon innovative solutions and as such, where there is market failure¹⁴, the Commission is committed to develop support mechanisms for market-creating energy and industrial innovations whilst ensuring comprehensive support for project companies to deploy green technologies within the EU and in the global market.
- The EIB Group as the main implementing partner of the InvestEU Programme, supports sustainable investments in all sectors of the economy and contributes to the dissemination of sustainable practices among private and public investors.
- The Catalyst programme is a ground-breaking initiative that aims to demonstrate how to finance, produce, and buy the new solutions that will underpin a low-carbon economy, Catalyst seeks to bring together the public and private sectors to fund commercial-scale demonstration projects for critical decarbonisation technologies. Catalyst will address the early deployment funding gap for these technologies and provide a structure to accelerate their commercialisation.
- The Catalyst will follow a transparent and independent process when identifying and reviewing projects. This will include disclosing conflicts of interest¹⁵, setting out rules

¹² Commission delegated Regulation (EU) of 26.2.2019 supplementing Directive 2003/87/EC of the European Parliament and of the Council with regard to the operation of the Innovation Fund, C(2019)1492 final available at: [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=PI_COM:C\(2019\)1492&from=EN](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=PI_COM:C(2019)1492&from=EN)

¹³ Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC (OJ L 275, 25.10.2003, p. 32)

¹⁴ Regulation (EU) 2021/523 of the European Parliament and of the Council of 24 March 2021 establishing the InvestEU Programme and amending Regulation (EU) 2015/1017, Annex V (OJ L 107, 26.3.2021)

¹⁵ Commission Notice Guidance on the avoidance and management of conflicts of interest under the Financial Regulation 2021/C 121/01C/2021/2119 (OJ C 121, 9.4.2021, p. 1–43) [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021XC0409\(01\)&from=EN](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021XC0409(01)&from=EN)

and modalities, and adhering to established ethical principles¹⁶ (including those established by applicable EU, national and international laws)¹⁷.

- The Sides have, as a common interest, the objective to accelerate the deployment of low-carbon breakthrough technology, in particular in the EU and in those entities eligible for funding under Horizon Europe, the Innovation Fund and InvestEU, including those established in Associated Countries.
- The Sides intend to initiate a new form of public-private partnership to catalyse more direct private investment into innovative European and Associated Countries low-carbon technology project companies, to scale up key climate-smart technologies and speed up the transition towards sustainable industries in Europe and Associated Countries.

4. PARTNERSHIP TO LEAD THE DECARBONISATION OF THE GLOBAL ECONOMY

The Sides intend to establish an efficient-partnership to identify project companies deploying innovative technologies, business models and approaches to reduce the green premium and achieve significant emissions reductions in Member States and Associated Countries. By accelerating the reduction of the green premium, the Sides will aim at increasing the market attractiveness of green products and low carbon technologies in selected areas, of high economic, environmental and social impact.

The partnership will be based on the following key principles:

4.1. AREAS OF COOPERATION

Noting that the Commission and EIB are supporting all technological pathways for decarbonisation in line with their policies, the Sides intend to focus their partnership on promising projects, in particular, in the following priority sectors

- clean hydrogen;
- sustainable aviation fuels;
- long duration energy storage; and
- direct air capture.

The Sides will seek to achieve geographical and priority sector balance in the portfolio in compliance with the policy objectives of the EU and the scope and rules of its funding programmes and instruments, notably the ones mentioned in section 2 above.

¹⁶ See Article 19(1) of Regulation (EU) 2021/695 of the European Parliament and of the Council of 28 April 2021 establishing Horizon Europe – the Framework Programme for Research and Innovation, laying down its rules for participation and dissemination (OJ L 170, 12.5.2021, p. 1–68)

¹⁷ Whilst this list is not exhaustive, it helps to define the ethical issues a proposal might raise. The most important ethical issues concern human embryonic stem cells (hESCs) and human embryos (hEs); humans; human cells or tissues; personal data; animals; environment, health and safety; research carried out in and resources from non-EU countries in particular low income and lower-middle income countries; artificial intelligence. More information can be found in Horizon Europe Programme Guide, Chapter 12 ‘Ethics and integrity’ available at https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/programme-guide_horizon_en.pdf.

4.2. FINANCING SOLUTION / BLENDING OPERATIONS

The ratio of privately-sourced capital mobilised by Catalyst to EIB funding covered by an EU guarantee is intended to achieve ‘equivalence.’ Catalyst will be responsible for crowding in sufficient private capital to finance the selected projects.

The Commission through EIB may provide financing in the form of non-reimbursable contributions and/or quasi-equity, and Catalyst is able to provide financing in the form of non-reimbursable contributions, quasi-equity and/or equity, and/or mobilise contract project revenue support through the sale and purchase of project output (the “Contract Offtakes”) from Catalyst participants.

Non-reimbursable contributions by Catalyst and by the Commission through EIB, if any, are to be made directly to projects on a 1 to 1 ratio, in cash.

In order to maintain parity of the interventions mentioned in the first paragraph of clause 4.2, and in light of different contributions in a jointly funded project, notably Catalyst’s contribution to projects through Contract Offtakes, the Sides understand that such asymmetric contribution will be recognised through the equivalency principles to be applicable on a case by-case basis and in function of the project needs.

The overall cooperation between Catalyst and the Commission is to mobilise direct support of up to \$1bn/€ 840 million over the period 2022-2026/7 and to leverage significant additional public and private funding for green technologies in the EU/Associated Countries.

To achieve the objectives of this partnership, the Commission intends to make available up to EUR 420 million for financing of blending operations under InvestEU, of which:

- a contribution to blending operations of up to EUR 200 million for a top-up of the Green Transition product (“GTP”) in the form of financial instruments and non-reimbursable contribution to be provided by Horizon Europe, and,
- a contribution to blending operations of a similar amount for a top-up of GTP in the form of financial instruments to be provided by the Innovation Fund.

Subject to the Framework Conditions (as defined in Section 4.5), the EIB under the cover of an EU guarantee intends to deploy the resources made available to the GTP, through blending operations with repayable and non-reimbursable contributions, in order to co-finance projects in the area covered by but not exclusively originating from the partnership.

The Catalyst intends to make available up to EUR 420 million of repayable and non-reimbursable contributions, matching repayable and non-reimbursable contributions (including in equivalent terms) of the EU financial support.

The combined support of the Sides to a project is destined to close an identified residual funding gap not covered by other funders and is not aiming at obtaining a controlling majority interest in projects.

4.3. CLOSE PARTNERSHIP

The Sides intend to carry out the following roles within their partnership to finance the projects:

- Catalyst, will screen and analyse large scale¹⁸ pre-commercial projects based on geographical diversity and technological potential.

¹⁸ Under the Innovation Fund large scale projects are > 7.5 M€.

- Catalyst will propose to the EIB, for a parallel screening, those projects with the highest impact according to its own green premium reduction and greenhouse gas [GHG] emissions avoidance calculations, amongst other factors understood by the Sides.
- EIB will appraise the projects based on EIB’s applicable policies and methodologies, taking into account inter alia the requirements deriving from the EU Emissions Trading Directive¹⁹, the Innovation Fund Regulation, the Horizon Europe Regulation and GTP blending operation specific requirements.
- The Commission and the EIB will implement this cooperation partnership in line with the InvestEU Regulation, InvestEU Investment guidelines and the guarantee agreement between the EU and the EIB.
- Each of EIB and Catalyst will follow their own independent processes to decide if they consider to finance a particular project.
- The Sides, in conducting the processes needed to achieve financial closure, will cooperate with a view to facilitate a streamlined appraisal in line with each Side’s policies and procedures.
- The Sides will issue public disclosure of solicitations for project proposals that will be launched by Catalyst.

With a view to decrease administrative efforts for project promoters, the Sides intend to exchange information on their respective methodologies, on calculations on green premium reduction and of GHG emissions reductions and additional costs related to innovative technologies, developed for the Innovation Fund.

The Sides intend to promote and stimulate the visibility of their partnership in a coordinated manner with a view to supporting and enhancing common and specific communication activities towards the respective audiences and stakeholders. The Sides will engage in outreach efforts and communication actions (including publications), which will present the Sides as equal partners.

The communication strategy should be mainly addressed to entities established in EU Member States and other countries whose entities are eligible for funding under the relevant EU programmes.

The Sides intend to set up a non-executive, non-binding, advisory mechanism to discuss priorities and technological advances, expected goals, impacts and key performance indicators and to exchange best practices. The mechanism may consist of two senior representatives from each Side and may include Catalyst co-investors. The mechanism is meant to ensure the rapid start and functioning of the partnership and ensure mutual trust in its implementation.

Based on information, including business intelligence provided by the Sides, this advisory mechanism will analyse investment priorities, partnering, and the nature, preparation, adequacy and structure of financial products. Improvement and potential modifications of the cooperation under this Memorandum of Understanding may also be discussed. This advisory mechanism will not have a decision-making role.

¹⁹ Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC (OJ L 275, 25.10.2003)

4.4. SYNERGIES WITH OTHER PROGRAMMES

Decarbonised energy systems and industry-relevant innovation are key policy priorities of the Commission and supported under different EU programmes. EU and EIB-funded programmes, products or mechanisms in support of these twin goals are not limited to the cooperation set up under this Memorandum of Understanding. Consequently, the Sides acknowledge that this Memorandum of Understanding does not prevent them from continuing to seek for other partners in achieving their common goals.

Projects supported by the Sides may benefit from funding sources from third parties so they can become viable and reach their financial closure.

5. **TERMS OF UNDERSTANDING**

This Memorandum of Understanding reflects the Sides' intention to cooperate, expressed in good faith. It constitutes a non-binding statement of the Sides' intentions. It is not intended to create any rights, obligations or liabilities under international or European or domestic laws and has no financial implications. It does not represent any legal commitment with regard to funding or any form of preferential treatment on the part of any Side. Any detailed commitments for the establishment and operation of this cooperation between Commission-EIB and EIB-Catalyst may be laid down in separate agreements that may be entered into by the Sides or any two of them. Additional activities for Commission-EIB-Catalyst cooperation could be jointly identified based on envisaged mutual benefits in pursuit of common interests.

Nothing in this Memorandum of Understanding shall constitute a waiver, or be construed as constituting a waiver of the immunities, privileges and exemptions enjoyed by the Sides, their respective directors, alternates, officers, members, employees and experts.

It is further understood that nothing in this Memorandum of Understanding shall be construed as allowing or compelling any of the Sides to exceed in any way the boundaries of their respective constituent instruments, mandates, procedures and policies, and resources.

The Sides acknowledge and understand that any form of cooperation envisaged in this Memorandum of Understanding is subject to:

- (1) the policies and procedures of the Sides and to such further agreements and approvals as may be required for the specific proposed activities,
- (2) the relevant funds being made available under GTP, Horizon Europe and the Innovation Fund (as specified in 4.2 above), and
- (3) the EU and EIB entering into the relevant guarantee agreement, top-up agreements and any other ancillary agreements or documents as may be required under the InvestEU in order for the blending operations under GTP to be able to combine repayable and non-reimbursable contributions from InvestEU, Horizon Europe and the Innovation Fund (together, the "Framework Conditions").

Subject to the Framework Conditions, the EU support provided to the blended operation under GTP for supporting eligible operations, would be based on the rules of the InvestEU programme, the InvestEU Investment Guidelines, the relevant sectoral legal bases, the InvestEU guarantee agreement, and any top up agreements and ancillary agreement or documents.

The Sides do not intend to deduct costs for project selection, contracting and implementing

their cooperation from the amounts identified in point 4.2. Each Sides bears its own costs and liabilities, deriving from, their respective operations under this Memorandum of Understanding including in relation to projects pursued but not concluded. The EIB and the Catalyst may agree, from time to time, in writing to share costs of certain project related studies and material provided terms of references, work scope and budget are agreed upon prior to such work being commissioned.

This Memorandum of Understanding may be made publicly available by the Sides in accordance with their respective rules and procedures on data protection and disclosure²⁰.

Unless required by law and subject to the Sides' respective rules and procedures on data protection and disclosure, the Sides agree that information and documents exchanged between the Sides pursuant to this Memorandum of Understanding is confidential and should not be disclosed to third parties without the concerned Side's written agreement.

Either Side may request changes to this Memorandum of Understanding. Any amendments to this Memorandum of Understanding that are mutually agreed upon by and among the Sides will be incorporated by written instrument and effective when signed by the Sides.

²⁰ In particular, Regulation (EU) 2018/1725 of the European Parliament and of the Council of 23 October 2018 on the protection of natural persons with regard to the processing of personal data by the Union institutions, bodies, offices and agencies and on the free movement of such data, and repealing Regulation (EC) No 45/2001 and Decision No 1247/2002/EC, and EIB Group Transparency Policy as published in www.eib.org.

This Memorandum of Understanding will be effective from the date below to 3 November 2029. Such term might be extended by written agreement between the Sides. If at any time a Side considers, at its sole discretion, that the continuation of this Memorandum of Understanding is no longer appropriate, that Side may terminate this Memorandum of Understanding by giving written notice to the other Sides. In this case, the Sides shall cooperate to ensure that such termination will not be prejudicial to ongoing projects funded within the scope of the partnership envisaged in this Memorandum of Understanding.

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