



SET4BIO

RENEWABLE FUELS AND BIOENERGY FOR A LOW-CARBON EUROPE - ACCELERATING THE IMPLEMENTATION OF THE SET-PLAN ACTION 8

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EXECUTIVE SUMMARY

Deliverable 1.3 summarises information related to existing private financing mechanisms that can be of interest to support the development of the projects defined in the Implementation Plan of IP8 dedicated to bio and other renewable fuels. It aims at being a guide for project developers who are looking for private funds to finance their project. Several updates of this report are planned until February 2023.

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Introduction

Renewable energy can be financed using a variety of instruments, from grants to concessional debt and equity to purely commercial debt and equity. Typically, more mature markets and technologies are financed with private finance on commercial terms, whereas grants and concessional finance are often used to stimulate investments in previously untested technologies and/or countries.

Several instruments and/or facilities have been launched in the EU in the past years to support investments in the field of energy (mainly in the form of loans, equity, and guarantees). An analysis of the existing European financial instruments related to energy investments and their applicability for First-Of-A-Kind SET Plan demonstration projects was carried out by the JRC in their “Report on Innovative Financial Instruments for the Implementation of the SET Plan, First-Of-A-Kind projects”¹, and updated in the report on “Innovative Financial Instruments for First-of-a-Kind, commercial-scale demonstration projects in the field of Energy”².

Since then, other instruments have been created, or are in the process of being launched, which might be interesting to support private investments into renewable based fuels and other technologies covered by IWG8.

For instance, the *Green Deal Investment Plan* is the investment pillar of the Green Deal. To achieve the goals set by the European Green Deal, the Plan will mobilise at least €1 trillion in sustainable investments over the next decade. The European Green Deal Investment Plan has three main objectives:

- First, it will increase funding for the transition, and mobilise at least €1 trillion to support sustainable investments over the next decade through the EU budget and associated instruments, in particular InvestEU;
- Second, it will create an enabling framework for private investors and the public sector to facilitate sustainable investments;
- Third, it will provide support to public administrations and project promoters in identifying, structuring and executing sustainable projects.

On the other side, other financial instruments, which were linked to the current Multi-Annual Financial Framework 2014-2020 and HORIZON2020 (e.g. EFSI, InnovFin Energy Demo Projects) are in the last phases of their existence and are not presented in this report, given that they will soon be substituted for new and/or updated instruments which will be covered in the upcoming Multi-Annual Financial Framework 2021-2027. These new instruments are presented in this report. However, there are still some uncertainties related to their implementation. For this reason, newly available information will be added, as soon as available, in the regular updates of Deliverable 1.3.

¹ JRC, 2013. <https://setis.ec.europa.eu/sites/default/files/reports/Set-Plan-Financial-Instruments.pdf>

² European Commission, September 2016

http://ec.europa.eu/research/energy/pdf/innovative_financial_instruments_for_FOAK_in_the_field_of_Energy.pdf

In other cases, such as for the European Innovation Council and its instruments, approval on the MFF 2021-2027 and Horizon Europe is awaited before including interesting instruments (e.g. the follow up to the EIC Accelerator 2019-2020) in the report.

Several portals have also been launched in order to support companies that are looking for funds to invest in their growth. One of particular interest is the [European Investment Project Portal \(EIPP\)](#), which allows project promoters in the EU to give visibility to their projects to a large network of international investors.

One of the main issues for small players is how to promote their projects towards private equity investment funds. Advisory Hubs and Accelerators can provide this role. A couple of online tools are also available to look for suitable investors:

- A list of investors in the clean technologies, energy and environment sector is accessible on the website www.euroquity.com. On this web platform, a previous project co-financed by the European Union which aims at bringing together companies and investors, is possible to select the type of investors we are looking for according to:
 - Category of investors (e.g. individual, business angel, business angels network, crowdfunding platform, investment fund, corporate venture, and bank)
 - Type of sector (e.g. in our case, the interesting sector is the one related to clean technologies, energy and environment).
 - Country
 - Label (e.g. Seal of Excellence; EUREKA Accelerated, InvestHorizon Accelerated...)
- A list of investors can also be retrieved from the website www.investeurope.eu, where relevant investors can be searched according to the country, the sector (e.g. energy and environment; transportation), and the stage of financing.

The following chapters analyse more in details private funding instruments that can be relevant to the development of projects in the area of renewable fuels and bioenergy. Conclusions are drawn in the final chapter on when to specifically use each of the presented instruments.

When looking for funds, the following considerations should be taken into account:

- How much money do you need?
- How will it be repaid or returned to investors?
- What project / company development stage is involved?
- What is an acceptable cost of money (interest rate, dividends, etc.)?
- What are the main risks - and mitigations for these?
- How quickly are funds required?
- At what stage in the project do you require funds (different stages carry risk levels which will affect the return profile)?
- Are tranche payments acceptable to you?
- What costs/interest rates can your project bear?
- This document aims at being a guide for project promoters who are developing projects in the area of renewable fuels and bioenergy.

1. Private equity investments

Short description	Private equity makes long-term investments into small, medium and large companies with the aim of making them bigger, stronger and more profitable ³ . Private equity is a form of professional investment that involves taking an ownership interest (equity) in a company and holding it private hands - as opposed to a public stock exchange. Private equity investments are primarily made by: private equity firms, venture capital firms, angel investors each with its own set of goals, preferences, and investment strategies. For instance, venture capital is private equity investment that is focused on start-up companies. VCs back entrepreneurs who have bright ideas but need finance and expertise to get their companies off the ground and grow.
Covered topics (focus)	Private equity investments in the energy and environment sector amounted to 3,3% of the overall private equity investments in 2019, according to InvestEurope ⁴ .
Typology of funded projects	Different types of private capital investments exist according to the project's stage of development: <ul style="list-style-type: none"> • <u>Venture capital</u>: <ul style="list-style-type: none"> ○ <u>Early stage</u> (TRL 8-9): Funds focused on investing in companies in the early stages of their life (e.g. start-ups). ○ <u>Later stage</u> (TRL >9)- Funds providing capital for an operating company which may or may not be profitable. • <u>Buyout</u>. Funds acquiring companies by purchasing majority or controlling stakes, financing the transaction through a mix of equity and debt. • <u>Growth</u> (TRL >9). Funds that make private equity investments in relatively mature companies that are looking for primary capital to expand and improve operations or enter new markets to accelerate the growth of the business.
Funding range	Venture capital: 2.000.000-2.500.000€ (average investment per company) Buyout: 15.000.000- 150.000.000€ Growth: 8.000.000-10.000.000€
Timing/availability	Around one year
Duration of the investment	Around 10 years
Conditions/requirements	Ownership interest (equity) in a company.
Contacts	www.euroquity.com www.investeurope.eu

³ Invest Europe is the world's largest association of private capital providers, representing Europe's private equity, venture capital and infrastructure investment firms, as well as their investors, including some of Europe's largest pension funds and insurers. <https://www.investeurope.eu/>

⁴ All data refer to the study by Investing in Europe "Private equity activity 2019".

<https://www.investeurope.eu/research/data-and-insight/?keyword=Investing%20in%20Europe:%20Private%20Equity%20activity%202019#search-filter-container>

<p><i>Example (s)</i></p>	<p><i>CYREM BIOCITY-Biomass treatment plant in Cyprus⁵</i> The project involves the development of CYREM BIOCITY, a biomass treatment plant in Cyprus producing liquid and solid 2nd generation biofuels, by M.E.K.P. Energy Ltd. CYREM BIOCITY will be a biomass treatment plant with warehouses, a laboratory, a conference room, multiple office spaces, changing rooms and a restaurant/cafe. It will be located on a 13,379 sqm plot in the Potami area, near Astromeritis in Cyprus. Using mainly biomass (i.e. municipal solid waste, agricultural and forestry crops and residues) as feedstock, the plant will produce three biofuel products: Biogas (Syngas); Solid biofuel (Biochar / activated carbon) and Liquid Biofuel (Bio-oil). Project financing secured: EUR 3.24 million (20 %) Financing source: Private The total project cost is 16.2m Euro. 20% of financing has already been secured (3.2m Euro) and the company is seeking to finance the remaining 80% (13m) via a 50:50 debt to equity ratio.</p> <hr/> <p><i>Fonroche</i> was established in France in 2008 to make solar panels and develop and set up photovoltaic plants to produce energy. Today, thanks to investment from Eurazeo, the company is present in 15 countries outside its home market, and has operations across Europe, India and the Americas. Its expertise now extends from solar power to biogas and deep geothermal energy, an area in which Fonroche has been awarded several exclusive research permits. Eurazeo has brought its strong expertise in project financing to help strengthen Fonroche’s structure and processes. The company is committed to the European Commission’s objective that 20% of energy produced in Europe comes from renewable sources by 2020.</p>
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This type of private funding seems to be more interesting for cases when a company (new or already established) wants to enter a (new) market, to expand or to develop a new line of products, as well as to develop on the global market. It is suitable when a medium to long-term strategy is in place and the possibility for commercial exploitation is clearly indicated. In general, there is a lack of interest from private financial market participants, mainly related to the specificities and associated lack of understanding of the bio-based industries⁶.

⁵ <https://ec.europa.eu/eipp/desktop/en/projects/project-12090.html>

⁶ Access-to-finance conditions for Investments in Bio-Based Industries and the Blue Economy. June 2017. https://www.eib.org/attachments/pj/access_to_finance_study_on_bioeconomy_en.pdf

a. The 2020 European Fund for Energy, Climate Change & Infrastructure (Marguerite II)

Short description	Marguerite II is a pan-European equity fund, built on Marguerite I, which was launched in 2010. It aims to act as a catalyst for greenfield and brownfield infrastructure investments in renewables, energy, transport and digital infrastructure, implementing key EU policies in the areas of climate change, energy security, digital agenda and trans-European networks.
Covered topics (focus)	Biomass, clean energy infrastructure, energy distribution and systems for hybrid transport are amongst the fund's targeted sectors.
Typology of funded projects	<ul style="list-style-type: none"> • Greenfield: new projects and facilities, with typical development risks largely mitigated (minimum of 65% of the Fund) • Brownfield: replacement, modernisation and capacity enhancement of existing assets (maximum of 35% of the Fund)
Funding range	For Marguerite I: € 30m to € 75m -can go beyond on ad-hoc basis
Timing/availability	Depending on duration of due diligence process.
Duration of the investment	Marguerite II has a capacity to invest in projects across the EU and in the pre-accession countries, and has a 10-year fund life (with up to 2 one year extensions).
Conditions/ requirements	Usually the fund invests only in "bankable" project companies that generate robust revenue streams, usually secured by long-term contracts. Furthermore, it is managed on a commercial basis and is required to deliver a certain level of return to its investors. Therefore it cannot invest in projects that are exposed to technology risk (unproven technology).
Contacts	<p>Valérie Verdet (Executive Assistant and Senior Office Manager. Office in Luxembourg) vverdet@marguerite.com</p> <p>Sandrine Sallandre (Executive Assistant and Office Manager. Office in Paris) ssallandre@marguerite.com</p>
Example (s)	Curtis-Teixeiro biomass plant (Spain). The Curtis-Teixeiro biomass plant will have a capacity of approximately 50MW, to be built on a plot of 103,000m ² , and will generate 324GWh per year from forest waste collected within a radius of one hundred kilometres around the new installation. To produce this energy, the plant will use about 500,000 tonnes of forest biomass a year. The project will therefore contribute both to forest maintenance in the area and fire prevention, by encouraging the collection, for industrial use, of small-sized wood waste that is normally discarded. Once it becomes operational (planned for 2020), the Curtis-Teixeiro plant will increase energy generation from renewable sources and thus help to meet the targets of reducing carbon dioxide emissions set

	<p>out in the National Action Plan of Renewable Energies (PANER) 2011-2020.</p> <p>Centrais de Biomassa do Norte (Portugal). It consists of two biomass plants of 15 MWe, which will incinerate waste wood (pine and eucalyptus chips) each in a biomass boiler to produce superheated steam, which drives a steam turbine to produce electricity that is sold to the grid. The plants are located in rural areas of the municipalities of Viseu and Fundão, in northern Portugal and will be approximately 100km apart. The construction phase will last 24 months, with COD expected in June 2019.</p>
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b. European Circular Bioeconomy Fund (ECBF)

Short description	<p>The ECBF funds and partners with ambitious and visionary entrepreneurs and investors to accelerate late-stage companies with first recurring revenues and strong market traction in the European circular bioeconomy.</p> <p>Being an initiative of the European Investment Bank (EIB) and the European Commission (EC), ECBF relies on considerable expertise and robust networks to catalyse sustainable innovations and fuel business growth. It aims to fill a funding gap in the European Bioeconomy landscape, bringing Europe's circular technologies to market, identifying the most promising investment targets, and syndicating with private and public investors to join the financial rounds. With a target fund volume of €250 million, where EIB is committed to contributing up to €100 million, ECBF aims to foster meaningful ESG investment in the Sustainable Development Goals, demonstrating that impact generation and favourable IRRs are not contradictory.</p>
Covered topics (focus)	<p>The topics of interest include:</p> <ul style="list-style-type: none"> • Biomass/feedstock production, i.e. increase of output and/or decrease footprint of agriculture, farming, forestry and blue economy • Technologies to enable biomass/feedstock processing, e.g. biorefineries and conversion technologies.
Typology of funded projects	<p>Only late stage companies are eligible for investment: the underlying technology has at least been demonstrated in a relevant environment (Technology Readiness Level from 6 to 9).</p>
Funding range	<p>Average 5.000.000€ at first growth stage (scaling up from pilot to demonstration stage)</p> <p>Average 12.500.000€ at second growth stage (transition from demonstration to industrialization)</p> <p>Around 10.000.000€ for projects focusing on growth for global expansion.</p>
Duration of the investment	<p>5 years investment period</p> <p>5 years disinvestment period</p>
Conditions/requirements	<p>Investments realized by the Fund will be in line with the EIB Environmental and Social Handbook and the Guide to Procurement of the EIB. Investment targets need to meet a set of pre-defined Environmental, Social and Governance (ESG) criteria including</p> <ul style="list-style-type: none"> • Global sustainability contribution • Environmental impact

	<ul style="list-style-type: none"> • Resource efficiency & circular economy • Economic & social impact and governance
Contacts	ECBF Management GmbH Godesberger Hof 2 53173 Bonn info@ecbf.vc Tel. +49 170 220 9067 https://www.ecbf.vc/contact
Example (s)	Not available yet.

c. Breakthrough Energy Ventures Europe

Short description	<p>Breakthrough Energy Ventures-Europe (BEV-E) is a first-of-a-kind €100 million pilot fund that invests in groundbreaking technologies to decarbonize every part of the economy. It was created in May 2019 as a partnership between Breakthrough Energy Ventures (BEV) and the European Commission (EC), a worldwide leader in establishing climate targets and supporting clean energy research and development. Half of the equity comes from BEV and the other half from InnovFin, the EC's financing tool for pioneering research and innovation.</p> <p>The goal is to generate a financial return on investments, each of which will have the potential of significantly reducing greenhouse gas emissions.</p> <p>The first investing principle is to leverage innovation as broadly as possible. We don't limit ourselves to early- or late-stage companies; to small, medium, or large enterprises; or to particular geographies or technologies.</p> <p>One of the biggest challenges to investing in solutions to climate change is scale: things like agriculture, housing, and transportation that emit greenhouse gases operate at scales vastly larger than other human activities. As a result, fully deploying new technologies will take decades, not years. Given this timeline, it is critical not just to respond to today's circumstances but also to anticipate tomorrow's urgent needs.</p>
How to apply	<p>Prepare a professional business plan that will convince investors that you understand the business environment. It should contain detailed market analysis, an overview of the competitive dynamics of the market, including the strengths and weaknesses of the main competitors, realistic financial projections and basic human-resource planning. The business plan should also highlight risks so that an investor has the complete picture.</p> <p>Know the private equity fund's investment criteria. The most important criterion is usually the management team's background and experience. A professional business plan is not worth much unless the people behind it have a track record. Try to convince prestigious, influential and knowledgeable people (e.g., successful</p>

	<p>businessmen, academics) to join your board of directors or sign on as consultants.</p> <p>Convince potential investors that you have the competence and perseverance to succeed. You must build confidence that you are up to the challenge of managing and growing a new business venture. Investors also look for sound internal business processes, including financial reporting and management control. Prepare an appendix to your business plan or a separate presentation summarizing these internal processes.</p>
Covered topics (focus)	Covered technologies: Low-GHG Liquid-Fuels Production–Non-Biomass; Low-GHG Gaseous Fuels Production–H ₂ , CH ₄ ; Low-GHG Liquid Fuels Production–Biomass.
Typology of funded projects	BEV invests in companies that turn game-changing technologies into scalable and transformative solutions
Funding range	Not known
Timing/availability	After due diligence
Duration of the investment	Long-term (10- 15 years)
Conditions/ requirements	<ul style="list-style-type: none"> • <u>Climate Impact</u>. Due to the massive scale of human energy consumption, progress in small increments isn't enough. We will only invest in technologies with the potential to reduce at least half a gigaton of greenhouse gases every year, about 1 percent of projected 2050 global emissions. • <u>Other Investors</u>. We do not have the resources to solve the entire global energy challenge on our own. We will only invest in companies that we believe can ultimately attract additional investment from investors. • <u>Scientific Possibility</u>. Because the time to market in clean tech is so long, it is important to vet projects carefully at an early stage. We will only invest in projects that our technologists deem scientifically feasible at scale. • <u>Filling the gaps</u>. Clean tech is a somewhat neglected space, but certain aspects of it have attracted significant interest already. We will focus on areas and on enterprises to which we can add value through our patience, flexibility, and global network.
Contacts	https://www.b-t.energy/team/
Example (s)	Quidnet Energy , a startup developing a long-duration energy storage technology, just closed on a \$10 million series B financing round. Additionally, the firm announced a contract with the New York State Energy Development Authority (NYSERDA) for a 2 MW/20 MWh demonstration project of its geomechanical pumped storage (GPS) technology.

2. InvestEU Fund

Short description	<p>InvestEU will provide an EU budget guarantee of 38 billion € to allow the EIB Group and other implementing partners to invest in more and higher-risk projects, crowding in private investors. The InvestEU Fund will be implemented through financial partners who will invest in projects using the EU guarantee. The main partner will be the EIB Group, which has successfully implemented and managed EFSI since its launch in 2015.</p> <p>The InvestEU Programme builds on the success of EFSI, and will continue to create and support jobs across the EU by following the same model based on an EU budget guarantee. However, many practical details still need to be defined, since the budgetary aspects of InvestEU are subject to the overall agreement on the EU's next long-term budget (MFF 2021-2027).</p>
How to apply	<p>Project promoters should apply directly to the EIB, to national and regional promotional banks, or to the national offices of International Financial Institutions. At that stage, the financial partners submit a proposal to the Commission to apply for the EU guarantee. SMEs should continue to apply to their local commercial or public banks whose financial products are covered by the EU guarantee in their country or region.</p>
Covered topics (focus)	<p>Investments will come under four policy areas, which represent important policy priorities for the Union and bring high EU added value:</p> <ul style="list-style-type: none"> • Sustainable infrastructure; • Research, innovation and digitisation; • Small and medium-sized enterprises (SMEs) and small mid-caps; • Social investment and skills. <p>At least 30% of the mobilised investments will be dedicated to climate- and environment-related projects.</p>
Typology of funded projects	<p>The InvestEU Fund will target economically viable projects in areas where there are market failures or investment gaps. The InvestEU Fund instruments will only support projects where financing could not be obtained at all or not at the required terms without InvestEU Fund support. It will also target higher risk projects in specific areas.</p>
Funding range	<p>Depending on the conditions of the financial partners.</p>
Timing/availability	<p>The projects need to undergo the standard EIB due diligence process, or other types of due diligence processes in place in the other financial partners implementing the Programme.</p>
Duration of the investment	<p>Depending on the conditions of the financial partners.</p>
Conditions/requirements	<ul style="list-style-type: none"> • Address market failures or investment gaps and be economically-viable • Need EU backing in order to get off the ground

	<ul style="list-style-type: none"> • Achieve a multiplier effect and where possible crowd-in private investment • Help meet EU policy objectives.
Contacts	Not available yet
Example (s) from EFSI	<p>PORI ENERGIA BIOMASS POWER PLANT⁷</p> <p>The project concerns deployment of a Combined Heat and Power (CHP) biomass-fired plant of capacity 15 MWe (electric) and 80 MWth (heat and steam) in Finland. The aim is to replace an existing solid fuel (peat and biomass) plant in order to meet the requirements of the Industrial Emissions Directive. The old fuel oil based unit is not up to modern emission standards of the Industrial Emissions Directive 2010/75/EU and needs to be replaced. Proposed finance by EIB: 30 million € (out of a total of 64 million€)</p>

3. European Investment Bank (EIB)

The European Investment Bank is the lending arm of the European Union, and the biggest multilateral financial institution in the world and one of the largest providers of climate finance. The EIB provides several types of support to investors in the area of clean energy:

- **Loans.** Loans to private sector entities to finance projects or investment programmes aligned with one or more priorities of the EIB. These products include debt and hybrid debt financing to project finance.
- **Equity.** Primarily investing or co-investing along with funds focused on infrastructure, the environment, or small- and medium-sized enterprises and mid-size corporations. In some cases, the Bank also provides direct quasi-equity financing to support innovative companies in seek of financing to grow.
- **Guarantees.** The EIB offers a variety of guarantee instruments, covering risks of a single or several projects. These guarantees unlock additional financing for small- and medium-sized enterprises or mid-caps by covering a portion of possible losses from a portfolio of loans. In some cases, the Bank also guarantees possible losses from a project to unlock additional investments.
- **Advisory services.** The EIB offers a large range of advisory services that embrace all stages of the project cycle and beyond, to make investment projects happen inside and outside the European Union.
- **Blending.** EIB loans and instruments can be blended with grants so that critical projects get the financing they need. Grants typically come from public bodies and philanthropic organisations through blending facilities. These facilities target specific sectors, regions and initiatives. Their goal is to reduce the overall riskiness of projects and mobilise additional capital.

The EIB energy lending policy⁸ focuses on four themes:

- Unlocking energy efficiency
- **Decarbonising energy supply**
- **Supporting innovative technologies and new types of energy infrastructure**

⁷ <https://www.eib.org/en/projects/pipelines/all/20170777>

⁸EIB Energy Lending Policy. November 2019.

https://www.eib.org/attachments/strategies/eib_energy_lending_policy_en.pdf

- Securing the enabling infrastructure

In the following paragraphs, we present the main types of EIB's instrument which can be useful for the renewable fuels and bioenergy sector.

a. Decarbonising energy supply

Short description	<p>The EIB can in principle support a variety of energy investment projects, ranging from energy efficiency investments, power plants and energy grids to new business models and innovation. As a public bank, the EIB is invited to consider areas of investment in which markets may fail to invest (either at all, quickly enough or to the same extent) in infrastructure needed to meet the requirements of society.</p> <p>Firstly, the Bank can contribute to the closing of persistent investment gaps. There are areas in which, despite policy support and the availability of finance, there is substantial evidence that investment remains too low. Secondly, as a long-term investor, the Bank supports investment decisions taken to meet long-term goals. The Bank can help focus its support on innovations that will be used for decades to come, when energy systems will need to be low-carbon. Finally, the Bank can support new market-based investment in the energy sector.</p>
How to apply	<p>It depends on the type of requested support. More information is available here: https://www.eib.org/en/projects/cycle/applying_loan/index.htm</p>
Covered topics (focus) Typology of funded projects	<ul style="list-style-type: none"> • Power and CHP resulting in GHG below an emission standard set out below; • Heat production from renewable sources; • Efficient gas-fired small boilers applicable for buildings or SMEs; • Production and storage of gaseous, liquid and solid energy carriers from low-carbon energy sources; • Supply of Critical Raw Material (CRM) needed for low-carbon technologies in the EU.
Funding range	<p>The EIB typically covers up to 50% of a project's total cost. Normally, this covers investment costs (typically over a period of up to three years, but can be longer), such as for research and development expenditures on facilities or activities. These loans typically start at €25 million and in certain cases the EIB will consider lower amounts. For renewable projects with a high policy value and where the EIB involvement accelerates the implementation of projects, the Bank will extend its support to up to 75% of the project cost.</p>
Timing/availability	<p>A project financed by EIB typically goes through seven major stages: proposal, appraisal, approval, signature, disbursement, monitoring and repayment.</p>
Duration of the investment	<p>Normally, up to three years. For long financing terms that match the economic life of each project - typically up to 10 years for</p>

	bullet loans, or the equivalent for amortising loans. For project finance, EIB can also manage maturities in excess of 30 years.
Conditions/ requirements	<ul style="list-style-type: none"> • <u>For power generation</u>: the Bank’s standard assessment compares the net present value of the social costs associated with the project to the benefits of the power generated, estimated through the long-run marginal social cost to the system, with adjustment where appropriate for profiling and system adequacy. The costs estimate includes the external costs associated with greenhouse gas emissions and local air pollutants. • <u>In the case of cogeneration</u>, the Bank will compare the project against the separate generation of power and heat. • Projects involving the <u>production of biofuels</u> will be assessed according to the methodology set for biofuels in the “Economic Appraisal of Investment Projects at the EIB”. New carriers in general will be subject to similar economic tests. If the scope of a project also entails environmental services these will also be taken into account. • For <u>technologies that are still at an early stage of deployment</u>, the Bank will assume that the long-term economic case can justify higher initial costs under certain conditions on a case-by-case basis. The Bank will also treat synthetic gas from non-biogenic sources (e.g. renewable hydrogen) as such. • The emission standard is set at a level that enables the Bank to finance <u>efficient flexible cogeneration of heat and power projects</u>. Based on recent projects appraised by the Bank, the emission standard is set at 250 gCO₂/kWh_e. This level is above a proposed EU benchmark for sustainable investment but it enables the bank to focus on projects needed over the long term by encouraging innovation, focusing on the development of new sources of flexibility and accelerating the development of low-carbon gases. <p>For projects based on biomass feedstock, additional criteria may be required by the Bank on sustainability and security of biomass supply and independent resource assessments by qualified specialists will be required.</p>
Contacts	https://www.eib.org/en/infocentre/contact-form.htm
Example (s)	<p>OULUN ENERGIA CHP PLANT</p> <p>The project consists of the financing of a Combined Heat and Power (CHP) biomass-fired plant in Finland of a capacity of 70 MWe (electric) and 175 MW_{th} (heat and steam) to replace an existing solid fuel (peat and biomass) plant. EIB finance amounts to around 100.000.000€ (out of a total cost of around 200.000.000€).</p>

b. Innovation and new types of energy infrastructure

Short description	<p>The EIB can in principle support a variety of energy investment projects, ranging from energy efficiency investments, power plants and energy grids to new business models and innovation. As a public bank, the EIB is invited to consider areas of investment in which markets may fail to invest (either at all, quickly enough or to the same extent) in infrastructure needed to meet the requirements of society.</p> <p>Firstly, the Bank can contribute to the closing of persistent investment gaps. There are areas in which, despite policy support and the availability of finance, there is substantial evidence that investment remains too low. Secondly, as a long-term investor, the Bank supports investment decisions taken to meet long-term goals. The Bank can help focus its support on innovations that will be used for decades to come, when energy systems will need to be low-carbon. Finally, the Bank can support new market-based investment in the energy sector.</p>
How to apply	<p>It depends on the type of requested support. More information is available here: https://www.eib.org/en/projects/cycle/applying_loan/index.htm</p>
Covered topics (focus)	<ul style="list-style-type: none"> • Corporate or national RDI programmes; • Commercial demonstration of innovative technologies, including both demonstration projects and innovative manufacturing processes; • All technologies are eligible for innovation financing including renewables, carbon capture and storage, nuclear fission and fusion; • New types of energy infrastructure including batteries, demand response, market participants engaged in aggregation, electrification of transport, heating, digitalisation projects in the energy sector. More generally, all projects that contribute towards sector coupling and increased flexibility of energy systems can be considered.
Typology of funded projects	<p>When appraising projects, the Bank will deem the following types of projects to have a high alignment with EIB lending policy:</p> <ul style="list-style-type: none"> • Innovation and industrialisation of key energy transformation technologies in Europe: pilot and demonstration plants, or initial full-scale commercial production lines related to breakthrough technologies supported under the SET Plan / Horizon Europe, such as promising innovative renewable energy and storage technologies; • Deployment of innovative technologies or technologies at an early stage of deployment or business models that can be scaled-up;

	<ul style="list-style-type: none"> • New business models associated with decentralised and small-scale technologies for the decarbonisation of energy by end-users; • Projects consisting in aggregating small renewable and flexibility sources; • Outside the EU, projects increasing access to energy with mini-grids and off-grid solutions.
Funding range	The EIB typically covers up to 50% of a project's total cost. Normally, this covers investment costs (typically over a period of up to three years, but can be longer), such as for research and development expenditures on facilities or activities. These loans typically start at €25 million and in certain cases the EIB will consider lower amounts. For renewable projects with a high policy value and where the EIB involvement accelerates the implementation of projects, the Bank will extend its support to up to 75% of the project cost.
Timing/availability	A project financed by EIB typically goes through seven major stages: proposal, appraisal, approval, signature, disbursement, monitoring and repayment.
Duration of investment	Normally, up to three years. For long financing terms that match the economic life of each project - typically up to 10 years for bullet loans, or the equivalent for amortising loans. For project finance, EIB can also manage maturities in excess of 30 years
Conditions/requirements	<ul style="list-style-type: none"> • <u>For innovation-related projects:</u> The Bank will seek to support technologies which demonstrate significant innovation compared to the state of the art. The promoter should demonstrate the ability to <ol style="list-style-type: none"> Reach financial close with the required equity contribution (as applicable), Deliver a sound project on budget and on time and Commercialise and replicate the technology further in order to achieve meaningful GHG emission reduction. • <u>Commercial demonstration of innovative technologies and manufacturing processes.</u> Technologies should have been demonstrated at scale and be about to enter into commercialisation (TRL 7-8). In the case of initial full-scale commercial production lines, projects should be related to breakthrough technologies supported under the SET Plan and Horizon Europe, such as promising innovative energy efficiency or renewable energy and storage technologies (e.g. Power-toX).
Contacts	https://www.eib.org/en/infocentre/contact-form.htm
Example (s)	SENER RENEWABLE ENERGY AND ICT RDI The project concerns the promoter's research, development and innovation (RDI) investments in Spain for the development of innovative engineering solutions in the renewable energy, space and railway sectors, as well as an information technology (IT) platform for the design and construction of ships. More information is available on: https://www.eib.org/en/projects/pipelines/all/20160803

4. EU Innovation Fund

Short description	The Innovation and Modernisation funds, which are not part of the EU budget, but are financed by a part of the revenues from a key policy tool - the auctioning of carbon allowances under the EU Emissions Trading System, will provide some €25 billion for the EU transition to climate neutrality, with a special focus on lower-income Member States in the case of the Modernisation Fund. As the successor of the NER300 programme, the Innovation Fund improves the risk-sharing for projects by giving more funding in a more flexible way through a simpler selection process and is also open to projects from energy-intensive industries. The Innovation Fund will focus on highly innovative technologies and big flagship projects with European value added that can bring on significant emission reductions. It is about sharing the risk with project promoters to help with the demonstration of first-of-a-kind highly innovative projects. It aims to finance a varied project pipeline achieving an optimal balance of a wide range of innovative technologies in all eligible sectors (energy intensive industries, renewable energy, energy storage, CCS and CCU) and Member States. At the same time, the projects need to be sufficiently mature in terms of planning, business model and financial and legal structure.
How to apply	First call launched in July 2020: https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/innovfund-lsc-2020-two-stage Regular calls are planned until 2027.
Covered topics (focus)	Innovative low-carbon technologies and processes in energy-intensive industries, including products substituting carbon intensive ones Carbon capture and utilisation (CCU) Construction and operation of carbon capture and storage (CCS) Innovative renewable energy generation Energy storage
Typology of funded projects	First-of-A-Kind demonstrations.
Funding range	The Innovation Fund may finance up to 60% of the relevant cost. The relevant costs are defined as the additional costs borne (considering both CAPEX and OPEX) by the applicant as a result of the application of the innovative technology related to the reduction or avoidance of the GHG emissions, compared to a reference scenario. Their calculation is considered for a maximum period of 10 years and they are not limited to any specific type of expenditure.
Timing/availability	Time to grant is around 18 months (for two-stage process).
Duration of the investment	Financial close should be within 4 years after the signature of the grant agreement.

	The time to enter the operation is agreed on the GA but must be shortly after the financial close (e.g. 2-3 years).
Conditions/ requirements	<p>Projects with a CAPEX of > 7.5 million € for the current call (another call for projects whose total cost is less than 7.5 million € is expected to be published by the end of 2020).</p> <p>The project must be implemented in one of the EU Member States (or Norway or Iceland).</p> <p>Selection criteria:</p> <ul style="list-style-type: none"> • GHG emissions avoidance • Degree of innovation • Project maturity • Scalability • Cost efficiency
Contacts	CLIMA-IF-EXPERTGROUP@ec.europa.eu
Example (s)	Not available yet.

5. Modernisation Fund

Short description	<p>The Innovation and Modernisation funds, which are not part of the EU budget, but are financed by a part of the revenues from a key policy tool - the auctioning of carbon allowances under the EU Emissions Trading System, will provide some €25 billion for the EU transition to climate neutrality, with a special focus on lower-income Member States in the case of the 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.</p>
How to apply	<p>Key steps in the financing process:</p> <ul style="list-style-type: none"> • Member States select the investments they wish to submit for Modernisation Fund support. No direct applications by project proponents can be sent to the EIB or the Commission. • Member States submit the proposed investments to the EIB, the Investment Committee and the Commission. Submissions can be made on a rolling basis, but the Investment Committee will meet twice a year, as of 2021. • The EIB confirms if the investment is a priority investment as defined by the ETS Directive. For non-priority investments, the EIB conducts a technical and financial due diligence assessment and the Investment Committee assesses the proposal and makes its recommendation on its financing. • 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. There will be two disbursement decisions per year, covering investments in all beneficiary Member States.

	<ul style="list-style-type: none"> The EIB transfers the resources to the beneficiary Member States in accordance with the disbursement decision within 30 days.
<p>Covered topics (focus)</p> <p>Typology of funded projects</p>	<p>The Modernisation Fund will support investments in:</p> <ul style="list-style-type: none"> Generation and use of energy from renewable sources Energy efficiency Energy storage Modernisation of energy networks, including district heating, pipelines and grids Just transition in carbon-dependent regions: redeployment, re-skilling and upskilling of workers, education, job-seeking initiatives and start-ups
<p>Funding range</p>	<p>Under the Energy Transition Package, and as an exception to its general rule, the EIB will consider financing up to 75% of the eligible cost of all energy projects eligible under this energy lending policy situated within those Member States benefitting under the Modernisation Fund.</p> <p>The Modernisation Fund leaves the beneficiary Member States the freedom to decide on the form of support: they can use grants, premium, guarantee instruments, loans or capital injections. The support granted by Member States using Modernisation Fund resources needs to be compliant with the State aid rules. Co-financing from private and public entities is possible, as long as State aid rules are respected and the same costs are not already funded by another Union or national instrument (no double funding).</p> <p>Member States could draw on existing national funds and/or European instruments, such as:</p> <ul style="list-style-type: none"> InvestEU programme. Connecting Europe Facility, including its energy projects (Projects of Common Interest). European Structural and Investment Funds, including the Cohesion Fund and the European Regional Development Fund. Just Transition Fund.
<p>Timing/availability</p>	<p>The timeline for the assessment depends on the type of the investment (priority or non-priority), complexity of the proposal, and completeness of the submitted file.</p>
<p>Duration of the investment</p>	<p>Investments financed by the Modernisation Fund need to meet the following deadlines:</p> <ul style="list-style-type: none"> The investment has to be financed at least once every two consecutive years - e.g. the project proponent or the scheme managing authority have to provide proof of financial activity (e.g. paid invoices) on the project or within the scheme; and The total amount received by an individual investment needs to be spent within five years from the disbursement decision; this deadline does not apply to multiannual

	schemes, which can last longer than five years, provided that there is a proof of payment at least every two years.
Conditions/ requirements	<p>Member States implement the Modernisation Fund on their territory.</p> <p>To obtain financing, the beneficiary Member State has to:</p> <ul style="list-style-type: none"> • Demonstrate that the investment complies with the ETS Directive requirements • Have sufficient funds available on its Modernisation Fund account • Provide evidence that the investment proposal is in line with the State aid rules • Confirm that the investment complies with any other applicable requirements of Union and national law • Confirm that there is no double funding of the same costs with another Union or national instrument. <p>Priority investments have to fall into a priority area as defined by the ETS Directive, with the EIB confirming this. EIB confirms whether an investment is a priority or a non-priority one, and conducts financial and technical due diligence of non-priority investments, including an assessment of the expected emission reductions.</p>
Contacts	The Modernisation Fund will operate under the responsibility of the beneficiary Member States, who will work in close cooperation with the European Investment Bank (EIB), the Investment Committee set up for the fund and the European Commission.
Example (s)	Not available yet.

6. EIC Fund

Short description	<p>The EIC Fund allows the European Commission to make direct equity investments in companies, with ownership stakes expected to be in general from 10% to 25% in start-up companies. The European Investment Bank, as advisors of the EIC Fund on behalf of the European Commission, will manage the ownership stakes of the European Commission.</p> <p>The EIC Fund fills the funding gap at the start-up stage where the EU venture capital market underperforms compared to the global venture capital market.</p>
How to apply	According to the EIC rules in Horizon Europe.
Covered topics (focus)	Breakthrough innovation companies selected for EIC Accelerator blended finance support (grant and equity).
Typology of funded projects	
Funding range	Equity from €0.5m to €15m.
Timing/availability	According to the duration of the due diligence process.
Duration of the investment	To be defined in the EIC part of Horizon Europe.
Conditions/requirements	To be defined in the EIC part of Horizon Europe.
Contacts	https://ec.europa.eu/info/research-and-innovation/contact/research-enquiry-service-and-participant-validation_en
Example (s)	Not available yet.

7. European Bank for Reconstruction and Development

Short description	<p>The EBRD offers financial products tailored to each client. EBRD works in several countries located in five main geographical areas, as well as Turkey and Russia: South-eastern Europe; Central Europe and Baltic States; Eastern Europe and the Caucasus; Central Asia; Southern and Eastern Mediterranean. More information on the countries covered by the EBRD can be found here: https://www.ebrd.com/where-we-are.html.</p>
How to apply	https://www.ebrd.com/work-with-us/project-finance/funding-process.html
Covered topics (focus)	<ul style="list-style-type: none"> Loans for larger projects (€3 million - €250 million). EBRD loans to the private sector projects usually start from a minimum of €3 million up to €250 million. The average amount is €25 million. The EBRD's loans are structured with a high degree of flexibility to provide loan profiles that match client and project needs. This approach determines each loan currency and interest rate formula. The basis for a loan is the expected cash flow of the project and the ability of the client to repay the loan over the agreed period. The credit risk can be taken entirely by the Bank or may be partly syndicated to the market. A loan may be
Typology of funded projects	

	<p>secured by a borrower's assets and/or it may be converted into shares or be equity-linked. Full details are negotiated with the client on a case-by-case basis.</p> <ul style="list-style-type: none"> • <u>Loans for smaller projects</u>. Projects that are too small to be financed directly by the EBRD can still benefit from our investments. The EBRD supports local commercial banks, which in turn provide loans to SMEs and municipalities. Tools that may be available include credit lines, bank-to-bank loans, standby credit facilities and equity investments in the local banks. MSMEs should contact local banks directly to access finance and check local requirements and investment limits. Loans to micro, small and medium businesses are available from these banks across the EBRD region • <u>Equity and quasi-equity instruments</u>. Equity funds are focused on a specific region, country or industry sector, have local presences and are run by professional venture capitalists. Their main investment criteria are consistent with the EBRD's overall investment policy. The terms and conditions of EBRD investment depend on risks and prospective returns associated with each project. They are also affected by the financial/ownership structure of the project company. As the Bank has limited capital resources, it does not take long-term equity investments or controlling interests. Nor does it assume direct responsibility for managing the project company. • <u>Equity financing</u>. Equity finance is available from EBRD-supported private equity funds, donor-supported equity funds and directly from the EBRD. Equity funds support all kinds of investments including business start-ups, expansion and acquisitions. Some funds specialise in financing companies in need of restructuring, in distressed situations or mezzanine capital for a later stage. Fund investments generally have a higher prospective return and require longer-term risk capital than standard EBRD projects. Investment criteria are consistent with EBRD policy, but investment decisions are made by fund managers. • <u>Equity participation Fund</u>. The EBRD's Equity Participation Fund (EPF) mobilises funds from global institutional investors to take part in our own direct equity investments with the goal of attracting long-term institutional capital into the private sector in the countries where we work.
Funding range	EBRD financing for private sector projects generally ranges from \$5 million to \$250 million, in the form of loans or equity. The average EBRD investment is \$25 million. Smaller projects may be financed through financial intermediaries or through special programmes for smaller direct investments in the less advanced countries.
Timing/availability	According to the duration of the client's due diligence: https://www.ebrd.com/what-we-do/client-due-diligence.html
Duration of the investment	Up to 15 years

<p>Conditions/ requirements</p>	<p>Projects may be considered for EBRD assistance if they:</p> <ul style="list-style-type: none"> • Are located in an economy where the EBRD works • Have good prospects of being profitable • Have significant equity contributions in cash or in kind from the project sponsor • Would benefit the local economy • Satisfy the EBRD's environmental standards as well as those of the host country <p>Prospective clients have to demonstrate that their proposed project or business meets the minimum requirements to be eligible to be considered for EBRD involvement.</p> <p>The Green Economy Transition (GET) approach is the Bank's strategy for helping countries where the EBRD works build low carbon and resilient economies.</p>
<p>Contacts</p>	<p>Energy Europe Middle East and Africa: https://www.ebrd.com/contacts.html Energy Eurasia Director: Aida Sitdikova Enquiries: Tel. +44 20 7338 7500</p>
<p>Example (s)</p>	<p>Graanul Invest Phase III (EE) The EBRD is considering a senior secured corporate loan of up to EUR 42m with a maturity of 10 years to AS Graanul Invest (Graanul or the Company) to finance part of Graanul's two year (2015-2016) investment programme. The proceeds will be used in financing part of the construction cost of two new biomass combined-heat-and-power plants (CHP) located in Imavere and Osula, Estonia (the Project). The new CHPs will have an installed capacity of 10 MWe, 28 MW heat each and will be located adjacent to the existing Imavere and Osula pellet production plants in Imavere and Voru Parish respectively. The CHPs will be based on grate type biomass boiler and will be able to burn efficiently significant proportion of forest wood wastes, thus reducing significantly related environmental and safety risks.</p> <p>Saturn Biomass (PL) The project covers the construction of the biomass facility and the modernisation of the existing combined heat and power plant (the "CHP") owned by Saturn Management, a project company set up to supply heat and energy to Mondi Swiecie, one of the largest European paper producers. In 2009 the Bank co-financed Saturn Management realising two projects in order to extend the operation of CHP: conversion of the existing coal boiler into a biomass boiler with 80MWt capacity, and large repairs, modernizations and new investments in the existing installations, together the "Project". Currently the Bank is considering an extension of the financing, project dedicated to finance additional investments at the CHP facility which include a new turbine and additional modernisation</p>

	<p>This extension will further improve the efficiency of the CHP and ensure it meets the best international practices. The Project will support the first large scale biomass fired power plant in Poland owned by a local investor with a strategy for expanding biomass operations. As such, the Project has the potential to lead to important demonstration effects of large scale biomass energy which could attract new developers and investors in the renewable energy sector.</p>
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8. Crowdfunding Platforms

More recently, crowdfunding is being explored as an additional investment source for the development of renewable energy projects. Crowdfunding raises funds through dedicated web platforms.

A recent project co-financed by HORIZON2020, CrowdfundRES (www.crowdfundres.eu) has explored the role and potential of crowdfunding to support the development of renewable energy projects. Three interesting reports have been prepared to this extent:

[Guidelines for Investors in Clean Energy Projects via Crowdfunding](#)

[Guidelines for RES project developers interested in financing their projects through crowdfunding](#)

[Guidelines for crowdfunding platforms interested in hosting RES projects](#)

The European Crowdfunding Network (ECN) provides a directory of its members, where it is possible to look for several crowdfunding platforms, according to the investors' needs.

9. Advisory Hubs and Accelerators

a. InvestEU Advisory Hub⁹

The InvestEU programme provides technical assistance and advisory support through the InvestEU Advisory Hub. It helps public and private project promoters identify, develop and implement green investment projects. At the same time, the InvestEU Portal will continue to offer a free, online, user-friendly tool, providing EU businesses and project promoters in search of financing with the visibility and networking with investors worldwide.

b. InvestHorizon¹⁰

It is a EUREKA accelerator programme that selects, via regular competitive calls, some companies, focusing on deeptech (including cleantech) companies that have already received series A funding, and are looking for further support over 2,5 million €. Its role of accelerator is to help companies raising funds, by organising pitching events, coaching academy, boot camp.

c. Get.Invest Finance Catalyst¹¹

The GET.invest Finance Catalyst links renewable energy projects and companies with finance opportunities and vice versa, targeting small- and medium-scale renewable energy opportunities, currently in sub-Saharan Africa and the Caribbean.

⁹ https://ec.europa.eu/commission/priorities/jobs-growth-and-investment/investment-plan-europe-juncker-plan/whats-next-investeu-programme-2021-2027_en#relatedlinks

¹⁰ www.investhorizon.eu

¹¹ <https://www.get-invest.eu/>

It provides advisory support on investment strategy, business case structuring, as well as accessing finance through a team of dedicated experts with extensive experience in renewable energy project development and finance.

Projects and businesses with strong underlying fundamentals can be supported to access debt and equity, possibly combined with grants, aiming to reach financial close. Our support covers the entire spectrum of renewable energy technologies. The team has dealt with wind, solar, hybrid, hydro, biomass and biogas projects in a variety of business models.

Our services are fully complementary to other support and financing instruments in so far as they assist market participants in accessing them, and help these instruments towards stronger traction and results.

10. Energy Communities

Energy community refers to a wide range of collective energy actions that involve citizens' participation in the energy system. The Clean Energy Package recognises certain categories of community energy initiatives as 'energy communities' in European legislation. Energy communities can be understood as a way to 'organise' collective energy actions around open, democratic participation and governance and the provision of benefits for the members or the local community. The revision of the Renewable Energy Directive (REDII) provides a stable framework for energy communities to empower citizens to invest directly in sustainable energy projects of interest to the community. An example is provided by cooperatives.

For instance, the Green Energy Cooperative (ZEZ), located in Croatia, is a cooperative that deals with planning, development, management and financing of renewable energy sources and energy efficiency projects. The cooperative was founded with the aim of dealing with the local community with special emphasis on sustainable tourism development, agriculture, commercial and public institutions. The vision is to put energy production in the hands of the citizens of Croatia and Europe. They also provide support in financing projects in direct contact with financial institutions through alternative financial mechanisms such as crowdfunding, ESCO service, co-financing through funds.

A list of energy communities in Europe is available on: <http://enercommunities.eu/case-studies>.

11. Best cases from Member States

Best cases referred to Member States which are involved in IWG8 will be developed for the next update due at the end of February 2021.

In general, commercial banks provide loans and risk guarantees charging a specific interest rate. However, in general, technology developers experience difficulties in raising finance from banks. The reasons are manifold:

- First-Of-A-Kind demonstrators are considered high-risk projects, which in addition are difficult to evaluate.
- Commercial banks are more risk-averse under difficult market conditions.
- Balance sheets of banks are constrained by tightened credit standards reducing their funds available for the medium to long-term market segment.

12. Conclusions and Outlook

Conclusions are reported in the form of a Summary Table of the main instruments presented in the chapters above, and their applicability to IWG8 projects. This Table will be regularly updated to take into account new and updated information with special reference to the instruments included in the Multi-Annual Financial Framework 2021-2027, as well as to include feedback from interested stakeholders such as the IWG8, and the selected projects for the Innovation Challenge.

<i>Instrument name (organisation)</i>	<i>Type of instrument</i>	<i>Project Funding Level</i>	<i>TRL</i>	<i>Suitability to bioenergy and alternative fuels projects</i>
Private equity investments	Equity	Venture capital: 2.000.000-2.500.000€ (average investment per company) Buyout: 15.000.000-150.000.000€ Growth: 8.000.000-10.000.000€	>8	In general, there is a lack of interest from private financial market participants, mainly related to the specificities and associated lack of understanding of the bio-based industries. Several Funds have been recently launched. An interesting one for the purpose of IWG8 projects seems to be the <i>European Circular Bioeconomy Fund (ECBF)</i> .
InvestEU	Guarantee	Depending on conditions of financial partners	>9	The InvestEU Fund will target economically viable projects in areas where there are market failures or investment gaps. It will also target higher risk projects in specific areas.
European Central Bank	Loans Equity Guarantee Blending	It varies depending on the type of instrument	>7	Several possibilities are available. The line <i>Innovation and new types of energy infrastructure</i> specifically covers SET-Plan related projects.
EU Innovation Fund	Grants	It may finance up to 60% of the relevant cost (additional costs borne (considering both CAPEX and OPEX) by the applicant as a result of the application of the innovative	>7	This fund replaces NER300 and has especially been created to fund First-of-A-Kind demonstration with a focus on the SET-Plan.

		technology related to the reduction or avoidance of the GHG emissions, compared to a reference scenario).		
Modernisation Fund	Member States are free to decide on the form of support: grants, premium, guarantee instruments, loans or capital injections.	The EIB will consider financing up to 75% of the eligible cost of all energy projects eligible under this energy lending policy situated within those Member States benefitting under the Modernisation Fund.	>7	Priority investments have to fall into a priority area as defined by the ETS Directive, with the EIB confirming this. Only projects located in these Member States are eligible: Croatia, Czechia, Estonia, Hungary, Latvia, Lithuania, Poland, Romania and Slovakia.
European Bank for Reconstruction and Development	Loans Equity	EBRD financing for private sector projects generally ranges from \$5 million to \$250 million. The average EBRD investment is \$25 million.	>9	Projects may be considered for EBRD assistance if they: <ul style="list-style-type: none"> • Are located in an economy where the EBRD works • Have good prospects of being profitable • Have significant equity contributions in cash or in kind from the project sponsor • Would benefit the local economy • Satisfy the EBRD's environmental standards as well as those of the host country

This is the first draft of Deliverable 1.3. Regular updates, every six months, are foreseen until the end of the project. This first draft will be presented and discussed with IWG8 in a virtual meeting to be organised in the second half of September/ beginning of October in order to obtain its members' feedback and orientation with respect to the type of information, which would still be needed by the project managers.



Moreover, a virtual workshop with selected financial entities is also planned to be organised before the end of 2020 in order to get additional feedback on the availability and use of the selected financial instruments.

The next update, expected by the end of February 2021, will include best cases from Member States involved in IWG8 on private funds applicable to the development of renewable fuels and bioenergy related projects.

This updated Deliverable, together with Deliverable 1.2 on competitive public funds, will be presented at the kick-off meeting of the Innovation Challenge foreseen in March/April 2021.

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