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Working Paper

Institutional Description of the European Green Deal Investment Plan Framework

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Abstract

This paper provides a descriptive analysis of financing the European Green Deal. It is focused on the institutional framework of the European Green Deal, such as the European Investment Plan, which identifies allocations of funds in the EU Member States. The paper covers individual parts of European Just Transition Mechanism and briefly introduces an EU Taxonomy designed to help determine whether an economic activity can be classified as environmentally sustainable and contributing to the environmental objectives.

Key Words: Climate change, green bonds, environment, environmental and sustainable activities, the European Investment Bank .

JEL codes: G28, Q28, Q38, Q58

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1 Introduction

The European Investment Plan, also known as the Sustainable Europe Investment Plan, is the main component for financing the Green Deal. It was presented on 14 January 2020 with the aim to provide proper financial support to the goals of the European Green Deal, particularly the one of achieving carbon neutrality by 2050. The Plan aims to mobilise a minimum of €1 trillion of investments over 2021-2027. The primary financial sources are the EU budget and the Emission Trading System (ETS). Over half of the budget, €528 billion, will come directly from the EU budget and the EU Emissions Trading System. The remainder will be sourced through the InvestEU Programme, which aims to combine €279 billion of public and private investments by 2030, and €114 billion of national co-financing. By the proposal of the Commission, 25% of all EU programmes will contribute to climate objectives. Furthermore, the Commission came up with two new resource streams to fund the EU budget: one based on the non-recycled plastic-packaging waste and one involving the ETS and its revenue allocation of 20%. (EU Commission, 2020)

For a successful change, all EU Member States, regions, and sectors will undergo a certain degree of transformation. As some areas are more affected than others, the Just Transition Mechanism provides custom-made financial help to generate necessary investments in these areas. Moreover, 30% of the InvestEU Programme is supposed to be used for investments in line with the Green Deal. The InvestEU Programme will provide an EU budget guarantee to allow the EIB Group and others to invest in higher-risk projects, enabling private investment. As mentioned earlier, the European Investment Bank plays another critical role, setting a climate target of up to 50% and thus becoming the European Climate Bank.

The European Innovation Council has also set aside a €300 million budget to invest in market-creating innovations that contribute to the goals of the EU Green Deal.

Reaching the desired outcome, investments in projects are designed for clean energy, circular economy industries, and new employment opportunities in the European Union territory. The European Commission and Parliament organised programmes and funds to carry out the project investments.

To ensure appropriate management of environmental risks and mitigation opportunities, and to reduce related transaction costs, the Commission will also support businesses and other stakeholders in developing standardised natural capital accounting practices within the EU and internationally.

Increased opportunities will be provided for investors and companies by making it easier for them to identify sustainable investments and ensuring that they are credible. This could be done via clear labels for retail investment products and by developing an EU green bond standard that facilitates sustainable investment in the most convenient way.

To ensure efficiency, certain programmes are grouped into the European Climate Infrastructure and Environment Executive Agency (CINEA), a surpassing programme of the Connecting Europe Facility. It plays a crucial role in supporting the EU Green Deal through the efficient and effective implementation of its delegated programmes. Its budget is around €56 billion over the period of 2021-2027. It is responsible for implementing the LIFE Programme, the Innovation Fund, infrastructure activities under CEF Transport and CEF Energy, the Horizon Europe, and the public sector loan facility under the Just Transition Mechanism.

2 Just Transition Mechanism

The Just Transition Mechanism is an essential component of the Investment Plan, designed for a clean and sustainable transition. As the European Union consists of 27 Member States, not all of them are at the same starting point when it comes to being ready for a carbon-neutral economy. Furthermore, many regions must undergo a complete transformation as regions depend on fossil fuels like coal, lignite, peat or oil shale and carbon-intensive industrial processes emitting greenhouse gasses. Although a total depletion of carbon is anticipated, the EU pays special attention to workers employed in carbon-dependent industries. According to data, the coal industry currently presents almost 237,000 jobs, where peat extraction presents approximately 10,000 jobs and 6,000 oil shale industry. In the words of Frans Timmermans, the Vice-President for the European Green Deal: 'The necessary transition towards climate-neutrality will improve people's well-being and make Europe more competitive. But it will require more efforts from citizens, sectors, and regions that rely more on fossil fuels than others. The Just Transition Mechanism will help support those most affected by making investments more attractive and proposing a financial and practical support package.' (Timmermans, 2020)

The Just Transition Mechanism (JTM) is to mobilise at least €100 billion in investments over ten years. The Mechanism stands on the first pillar, the Just Transition Fund (JTF). The second pillar is the Just Transition Scheme under the InvestEU Programme. The third pillar is the public sector loan facility with European Investment Bank. The JTF consists of grants dedicated to the requalification of workers as they need a new, improved skillset. JTF is linked with the European Regional Development Fund ('ERDF'), European Social Fund Plus ('ESF+'), and the Cohesion Fund as the Common Provisions Regulation governs them. The second pillar will support private fund investments for energy and transport infrastructures such as gas infrastructure or district heating. The public sector loan facility with the partnership of EIB is designed for contributions to the public sector to support national and regional authorities with better-suited loan conditions including low interest rates.

2.1 Just Transition Fund

As the primary tool of the European Green Deal, the Just Transition Fund supports regions most affected by the green transition. JTF is a new instrument of the Cohesion policy 2021-2027 and the first pillar of JTM. After concerns had been raised by the European Parliament about the socio-economic impact, it suggested expanding the initial proposal of financed activities to include micro-enterprises, universities and public research institutions, digital innovation, areas in education and social inclusion.

The main objectives are to invest in Small and Medium-Sized Enterprises (SMEs), create new firms, support research and innovation, fund environmental rehabilitation, clean energy, up- and reskill affected workers, assist with job-search, and transform the existing carbon-intensive installations.

The Just Transition Fund has an overall budget of €19.2 billion over the period 2021-2027 with €7.5 billion that will be financed under the EU's budget and additional €10.9 billion that will be funded under NextGenerationEU. (REGULATION (EU) 2021/1056)

The green rewarding mechanism proposed by the Parliament is linked to reducing greenhouse gas emissions.

The allocation of the JTF budget consists of various social and economic criteria such as identifying regions with greenhouse gas emissions exceeding the EU average, the level of employment in coal and lignite mining, the level of employment in industrial facilities with greenhouse gas emissions, production of peat, and production of oil shale. Mentioned criteria have the same importance in calculating the appropriate concentration of resources. Gross national income (GNI) per capita is considered as well. The process of national share allocation depends on the nation's GNI per capita and the average EU GNI per capita. To avoid a scenario where a single Member State receives an excessive number of shares, the limit was set to €2 billion. Nonetheless, the minimum amount was set to €6 for each citizen. Member States with a GNI per capita lower than 90% of the EU average will receive up to 2/3 of JTF funding for fair distribution.

'The ten recipients will be Poland, Germany, Romania, Czech Republic, Bulgaria, France, Italy, Spain, Greece, and the Netherlands'. (Banks, 2020)

2.2 Just Transition Scheme Under InvestEU

As the second pillar of the Just Transition Mechanism, implemented under the InvestEU Programme, the Just Transition Scheme is dedicated to bringing private investors to help with the transition. The goal is to mobilise up to €45 billion in investments, including investments in clean energy and transport linked with economic growth of regions impacted by the transition. This pillar is based on the functioning of the InvestEU Programme, whose leading implementing partner is the EIB Group, which is explained later. Part of the InvestEU Programme is the Advisory Hub, which works as a support centre for requested projects under the second and third pillars.

2.3 Public sector loan facility with European Investment Bank by the EU budget

The third pillar of JTM is meant to assemble €1.5 billion in grants from the EU budget and €10 billion in loans from EIB to activate public investments of €25 to €30 billion. Grant component received from the EU Budget amounts to €250 million. This instrument is meant to support public entities in projects with insufficient capital for commercial financing. Targeted sectors include public infrastructures such as district heating networks, renovation of buildings, energy efficiency, and social infrastructure. (REGULATION (EU) 2021/1229)

Although EIB is a leading financing partner for the public-sector loan facility, it also plays a vital role in the second pillar through InvestEU. Furthermore, it supports the JTF through Structural Programme Loans. The EIB Group provides advisory services in support of all pillars of the mechanism.

Figure 1 show for each Member State the current allocations of Just Transition Fund under the NextGenerationEU Programme and under the EU Multiannual Financial Framework 2021-2027 and the total allocation to each Member State as well as the share of the allocated funds.

Figure 1: JTF allocation

	Under NextGenerationEU	Under MFF 2021-2027	Total	Share
Belgium	103	80	**183**	**0.9 %**
Bulgaria	732	569	**1 301**	**6.7 %**
Czechia	927	721	**1 649**	**8.5 %**
Denmark	50	39	**89**	**0.5 %**
Germany	1 400	1 089	**2 489**	**12.9 %**
Estonia	200	156	**355**	**1.8 %**
Ireland	48	37	**85**	**0.4 %**
Greece	469	365	**834**	**4.3 %**
Spain	491	382	**873**	**4.5 %**
France	582	453	**1 034**	**5.4 %**
Croatia	105	82	**187**	**1.0 %**
Italy	582	452	**1 034**	**5.4 %**
Cyprus	57	44	**102**	**0.5 %**
Latvia	108	84	**192**	**1.0 %**
Lithuania	154	120	**274**	**1.4 %**
Luxembourg	5	4	**9**	**0.0 %**
Hungary	147	115	**262**	**1.4 %**
Malta	13	10	**23**	**0.1 %**
Netherlands	352	274	**626**	**3.2 %**
Austria	77	60	**136**	**0.7 %**
Poland	2 174	1 691	**3 864**	**20.0 %**
Portugal	126	98	**225**	**1.2 %**
Romania	1 209	940	**2 149**	**11.1 %**
Slovenia	146	114	**260**	**1.3 %**
Slovakia	259	202	**461**	**2.4 %**
Finland	263	205	**468**	**2.4 %**
Sweden	88	68	**156**	**0.8 %**
EU-27	**10 868**	**8 453**	**19 321**	**100.0 %**

Source: https://ec.europa.eu/info/sites/default/files/about_the_european_commission/

3 EU Emissions Trading System

With the objective of combatting climate change, the European Commission proposed the ‘Fit for 55’ legislative package to achieve a 55% of reduction of emissions by 2030 in comparison to the 1990 levels. To achieve an increased reduction of emissions, the emission allowances shall decline of 4.2% per year in comparison to the ongoing reduction of 2.2% per year. (EU COMMISSION, Investing in a climate-neutral future for the benefit of our people, 2020)

Sectors covered by the trading system include power and heat generation, energy-intensive industrial sectors, and commercial aviation within Europe. On the other hand, sectors yet not included in the emissions trading, e.g., the maritime sector, need to get involved. For emissions from fuels used in road transport and buildings the EU Commission proposed a new, separate trading system which is scheduled to open in 2026. To this end, the Social Climate Fund is proposed to address the social impact.

It was also proposed that all earnings from emissions allowance trading under the EU ETS and the new system by the Member States shall be spent on climate action and energy system transformation, including road transport and buildings decarbonisation. The ETS is working on a ‘cap and trade’ basis. The cap refers to the total amount of particular greenhouse gases that can be emitted by the system installations. The cap is reduced over time so that total emissions fall. Within the cap, installations buy or receive emissions allowances to trade with one another as needed. To assure value, there is a limit to the total number of available allowances. It is required that enough allowances covering the emissions fully are submitted annually; otherwise heavy fines are imposed. If an installation reduces its emissions, it can keep the spare allowances to cover its future needs or sell them to another installation short of allowances.

The EU ETS is focused on measurable, reportable, verifiable emissions with a high level of accuracy consisting of carbon dioxide (CO_2) from electricity and heat generation, energy-intensive industry sectors combined with oil refineries, steelworks, and production of iron, aluminium, metals, cement, lime, glass, pulp, paper, cardboard, acids, and bulk organic chemicals. It also covers commercial aviation of (‘EEA’). Another gas covered is nitrous oxide (N_2O) from nitric production, adipic and glyoxylic acids and glyoxal, and also perfluorocarbons (PFCs) from producing aluminium.

Each allowance gives the holder the right to emit one tonne of carbon dioxide or the equivalent amount of other potent greenhouse gasses, nitrous oxide, and perfluorocarbons. Allowances are either auctioned for the stationary installations or allocated for free, or they are placed in the Market Stability Reserve. According to the Commission, in phase 3 (2013-2020), 57% of all allowances were auctioned, and it is estimated to stay the same for the following phase (2021-2030). This means that revenues in phase 3 exceeded €57 billion. (European Commision, 2021)

The level of free allocation per installation is determined considering benchmark values based on the average performance of the 10% best installation, the risk of carbon leakage of each sector, and the historical activity level of each installation. 3% of the total cap, initially earmarked for auctioning, is reserved as a free allocation buffer to avoid or reduce cross-sectoral correction. If not used, the remaining buffer will be distributed as follows: a maximum of €50 million in allowances to be added to the innovation fund, a maximum of 0.5% of the total cap to be added to the Modernisation Fund, the remaining amount is auctioned. The Innovation Fund and the Modernisation Fund are set to help mentioned sectors with the necessary transition.

The Innovation Fund is focused both on small- and large-scale projects demonstrating low-carbon technologies. 'The funds contributing to the EGDIP will provide tailored financing to a wide range of projects, from smaller ones (such as individual household energy renovation) to larger ones (such as the installation of a network of electric vehicle charging stations)' (Verschuur, 2020). Under the first call for small-scale projects, 30 projects signed their grant agreement. The focus is on energy-intensive industries like iron and steel, biofuels and biorefineries, pulp, paper, non-ferrous metals, glass, ceramics and construction material, hydrogen, and the energy sector, through innovative production and use of renewable energy or storage solutions. Under the first call for large-scale projects, seven projects were pre-selected for grant agreement preparations. These projects are supposed to bring innovative technologies to the market in energy-intensive industries, hydrogen, carbon capture, use and storage, and renewable energy. The second call for large-scale projects was launched on October 26, 2021, and the second call for small-scale projects was launched in March 2022.

The Modernisation Fund is designed to help modernise the following ten low-income Member States: Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, and Slovakia. Recourses will be dedicated to the support of renewable energy sources, efficiency, storage, modernising networks, the just transition in carbon dependent regions. Resources available for the Climate Action Fund consist of revenues of 2% of auctioned allowances out of the entire auctioning from 2021 to 2030 under EU ETS and additional allowances from the Member States (Croatia, Czech Republic, Lithuania, Romania, and Slovakia) for whom the fund is designed. To fund investments, Member States must develop an investment proposal, which is then confirmed or non-confirmed the priority status by the European Investment Bank. After the priority confirmation, a disbursement decision is made, and the funds will be transferred within 30 days. For obtaining financing, Member States must follow specific directives.

4 EU budget

EU budget is based on Multiannual Financial Framework (MFF) Regulation. It is drafted by the EU Commission and then submitted to the Council and Parliament. The MFF is created for seven years, making the current period 2021-2027. The current MFF Regulation was approved in December 2020, setting the maximum level of spending of €1.074 trillion over the period 2021-2027 (in 2018 prices), which makes €1.211 trillion in current prices. Together with the NextGenerationEU, the temporary recovery instrument of €806.9 billion (€750 billion in 2018 prices) represents in current prices €2.018 trillion. This will be allocated as follows: at least 50% is dedicated to modernising the European Union through research and innovation, fair climate and digital transitions, preparedness, recovery, and resilience. 30% is dedicated to fighting climate change, with the package paying particular attention to biodiversity protection and gender-related issues. This may be compared to the 2014-2020 MFF, where €216 billion (20.15%) was spent on climate change. (Council Regulation (EU, Euratom) 2020/2093, 2020)

The EU budget is funded almost entirely by its own resources. The primary three sources of revenue for 2021-2027 are custom duties, Value Added Tax collected by the Member States, the Gross National Income (GNI) contributions from Member States and a new revenue source coming from non-recycled plastic packaging waste. Member States contribute €0.80 per kilogramme of their plastics packaging waste that is not recycled.

The European Commission proposed three new resources to fund the EU budget for the digital green transition. The Commission proposed that 25% of revenues from trading emissions via EU ETS will directly support the EU budget. Furthermore, 75% of collected revenues by the Member States under the carbon border adjustment mechanism (CBAM) will go to the EU budget and a share of the residual profits of the largest and most profitable multinational enterprises that are allocated to EU Member States

Mentioned resources are dedicated to helping repay what the EU borrowed through the NextGenerationEU programme on capital markets for grants but also will be financing the Social Climate Fund.

The Programme for the Environment and Climate Action (LIFE programme) is the EU's funding instrument for the environmental and climate action. The focus investments fields are the management of zones sensitive to drought, flood, coastal surveillance and coastal equipment for severe weather events, investments in agriculture and forestry and the tourism sector. The programme is structured around the following fields: The first field is the Environment, which contains two subprogrammes, 'Nature and Biodiversity' and 'Circular Economy and Quality of Life'. The second field is Climate Action, which includes two subprogrammes: 'Climate Change Mitigation and Adaptation' and 'Clean Energy Transition'. During the MFF 2021-2027, the LIFE programme should allocate a total of €5.432 billion for the mentioned fields. It is apportioning €3.488 billion for the 'Environment' field, with €2.143 billion for the 'Nature and Biodiversity' subprogramme and €1.345 billion for 'Circular Economy and Quality of Life'. €1.944 billion for the Climate Action field, with €947 million for 'Climate Change Mitigation and Adaptation' and €997 million for 'Clean Energy Transition'. (REGULATION (EU) 2021/783, 2021)

The duration of the LIFE programme is aligned with the course of the Multiannual Financial Framework. The funding consists of project grants and two additional instruments. The Private Finance for Energy Efficiency (PF4EE) is based on an agreement between the Commission and EIB to address the issue of insufficient commercial financing of energy efficiency. The essential objectives are to make energy efficiency lending a more sustainable activity within European financial institutions, considering the energy efficiency sector as a distinct market segment, and to increase the availability of debt financing to eligible energy efficiency investments. The PF4EE provides portfolio-based credit risk protection provided by means of cash collateral (Risk-sharing Facility), with long-term funding from the EIB (EIB loan for Energy Efficiency) and expert support services for the Financial Intermediaries (Expert Support Facility).

The second instrument is the Natural Capital Financing Facility (NCFF). The NCFF will contribute to the LIFE Climate Action by providing financial solutions to profitable or cost-effective projects. It is an adaptable mechanism, allowing for the provision of direct or intermediated debt financing and equity investment funds depending on project types and conditions. The NCFF has been extended and lasted at least until 2021, with €125 million available for investments in 9-12 operations. The maximum amount of support per operation is limited to €1 million.

4.1 NextGenerationEU

NextGenerationEU (NGEU) supplied with €806.9 billion will distribute €407.5 billion through grants and €385.8 billion in loans to EU countries.
The most significant part of fund distribution is the Recovery and Resilience Facility (RRF) programme consisting of large-scale financial support for public investments and green and digital projects. €338 billion will be endowed in grants, and €385.8 transmitted in the form of loans. The criteria concerning grant allocation include GDP per capita, unemployment levels, population, with calculations considering the impact on GDP due to the coronavirus crisis. (EU COMMISSION D.-G. f., 2021)

To raise the necessary funds for NGEU, the Commission will borrow on the capital markets on behalf of the EU. To preserve its high credit rating and obtain favourable market conditions for borrowing, the Commission will use the headroom of the EU budget. The headroom is the difference between the maximum amount of funds that the EU can request from the member-states to cover its financial obligations (own resources ceilings) and the maximum amount of funds spent in a given period (long-term budget payment ceilings). The headroom will serve as a guarantee that the EU will be able to make repayments under any circumstances. The timing, volume, and maturity of the bonds issued will depend on the needs of the EU and its Member-States. The funds raised will be repaid from future EU budgets or by the Member States concerned by 2058 at the least.

To finance green projects, the Commission developed the NextGenerationEU Green Bond Framework for issuing the NextGenerationEU green bonds and is pursuing to obtain 30% of the NextGenerationEU funds through this action. Funds under the NextGenerationEU Green Bond Framework will be spent on nine categories, including energy efficiency, clean energy, and climate change adaptation.

The issuance of the first NGEU green bond in October 2021 raised €12 billion for sustainable investments. The bond is a 15- year bond with a 0.40% coupon and a re-offer yield of 0.453%. The Commission raised a further €2.5 billion in January 2022 through the tap of the first green bond. (EU COMMISSION, NextGenerationEU: European Commission successfully issues first green bond, 2021)

The European Agricultural Fund for Rural Development (EAFRD) is also included in Climate Action. The total budget over 2021-2027 is €95.51 billion, out of which €8.07 billion is financed under NGEU. It is set to contribute to climate change with 26% of funds over 2021-2023, then during 2023-2027, 40% of funds. (EU COMMISSION D.-G. f., 2021)

4.2 Cohesion Policy

One of the main investments policies for the EU is the Cohesion Policy. It targets all regions and cities in the EU. During the MFF 2021-2027, €392 billion of the overall EU budget was set aside for the Cohesion Policy. The following instruments are designed for carrying out the Policy's goals: the European Regional Development Fund (ERDF), of which 30% must be dedicated for climate action, the Cohesion Fund (CF), of which 37% will contribute to reaching climate neutrality, the European Social Fund Plus (ESF+), and the Just Transition Fund. Apart from JTF, these instruments are jointly called the European Structural and Investment Funds (ESIF) and managed by the EU Commission and the Member States. These funds focus on investments in job creation and a sustainable and healthy European economy and environment. The funds from ERDF and ESF+ are allocated in regions that are more developed, less developed, and in transition. As Figure 2 shows, ERDF, together with ESF+, has €313,159.2 million allocated funds from the EU budget, the CF of €36,611.9 and JTF of €19,236.9 million. From the ERDF and ESF+ funds, the EU allocated €226,954.7 million towards less developed regions, more developed regions reach an allocation of €30,488.2 million, and in transition regions €53,554 million.

Figure 2: 2021-2027 Investments in Jobs and Growth – Initial EU Allocation

Fund	EU allocation, in million EUR	% of total
ERDF/ESF+	313,159.2	85%
CF	36,611.9	10%
JTF	19,236.9	5%

Source: https://cohesiondata.ec.europa.eu/2021-2027-Finances/

4.3 Horizon Europe

The Horizon Europe programme is one of the EU's vital funding programmes devoted to research and innovation over 2021-2027. This programme helps science and technological improvements, strengthens the European Research Area, supports green and digital transitions and the UN's Sustainable Development Goals, and boosts job creation. The primary beneficiaries in the innovation division, the European Innovation Council focuses on SMEs, which create unwanted liability to private investors. Therefore, there is 70% of the budget appropriated for SMEs. The Research and Innovation Missions (R&I) is a cluster of five mission areas of Adaptation to climate change along with societal transformation, Climate-neutral and smart cities, Healthy oceans, seas, coastal and inland waters, Soil health and food, and Cancer. The programme stands on three pillars contributing to the goals of the programme. The first pillar 'Excellent Science', the second pillar 'Global Challenges and European Industrial competitiveness', with areas concerning 'Climate, Energy and Mobility', 'Food, Bioeconomy, Natural Resources, Agriculture and Environment', 'Digital, Industry, Space'. The third pillar is called 'Innovative Europe' and its three components are the EIC, European Innovation Ecosystems, and the EIIT. (REGULATION (EU) 2021/695)

The total budget of the Horizon Europe instrument is €95.51 billion over 2021-2027, of which €5.4 billion is financed under NGEU. The goal is to contribute at least 35% to climate objectives. The initial allocation for the first pillar is €23.546 billion, for the second pillar the total of €47.428 billion, of which €13.462 for 'Climate, Energy and Mobility' and €8.952 for 'Food, Bioeconomy, Natural Resources, Agriculture and Environment'. The third pillar is worth €11.937 billion. (REGULATION (EU) 2021/695)

4.4 Connecting Europe Facility

The Connecting Europe Facility (CEF) is the primary instrument for growth, jobs, and competitiveness. The CEF is divided into CEF Energy, CEF Transport, CEF Digital concerning sustainable and efficient transport, energy, and digital systems and their synergies throughout the EU. The primary financial instrument used is grants complemented with a budgetary guarantee under the policy windows of the InvestEU Programme or project bonds, a joint initiative by EIB and the Commission to stipulate capital market financing for large-scale projects in the transport (TEN-T) and energy (TEN-E) sector. Through credit enhancements, infrastructure projects will attract private finance from insurance companies and pension funds. (REGULATION (EU) 2021/1153)

The CEFs budget will contribute 60% to climate objectives. The financial envelope for 2021-2027 is €33.710 billion distributed as follows: for the transport sector €25.807 billion, of which €14.521 billion from the MFF and €11.286 billion transferred from the Cohesion Fund, for the energy sector`€5.838 billion, and the digital sector 2.065 billion. (REGULATION (EU) 2021/1153)

The Trans-European Networks for Energy (TEN-E) framework is a crucial element in achieving the objectives for 2030 and 2050. Through the CEF programme, the implementation of Projects of Common Interests is supported in the nine priority corridors set out to address energy infrastructure needs in the EU.

To ensure integrated development of the innovation cycle in the fields of transport, energy and digital infrastructure, the Commission and Parliament established regulation in support of synergies of the Horizon Europe and CEF.

5 InvestEU

The InvestEU Programme consists of the InvestEU Fund, the InvestEU Advisory Hub, and the InvestEU Portal. The Programme supports four central policies: sustainable infrastructure, research, innovation, digitisation, SMEs, social investments, and skills (shown on Figure 3). Eligible recipients are private entities like special-purpose vehicles (SPV) or project companies, large corporates, midcap companies with small midcap companies, and SMEs, public sector entities with public-sector type entities, mixed entities like a public-private partnership (PPPs) and private companies with a public purpose, non-profit organisations.

The main objective of the InvestEU Fund is to, through the EU budget guarantee of €26.2 billion, and backed by the European Investment Bank, mobilise at least €372 billion of public as well as private investments. The intent for the InvestEU Fund development was to avoid unnecessary overlaps and to function more efficiently. Therefore, the European Fund for Strategic Investments was gathered with 13 other EU financial instruments (CEF Debt Instrument, CEF Equity Instrument, Loan Guarantee Facility under COSME, Equity facility for Growth under COSME, Innovfin Equity, Innovfin SME guarantee, Innovfin Loan Services for R&I Facility, Private Finance for Energy Efficiency Instrument, Natural Capital Financing Facility, EaSI Capacity Building Investments, EaSI Microfinance and Social Enterprise Guarantees, Student Loan Guarantee Facility, and Cultural and creative sectors Guarantee Facility) into one instrument. (REGULATION (EU) 2021/523)

The so-called 'implementing partners', the foremost being the EIB Group, will be responsible for implementing the EU guarantee. The EIB Group (composed of EIB and European Investment Fund) is an implementing partner of 75% and national promotional banks for the rest 25%. The implementing 25% is also open for other financial institutions like European Bank for Reconstruction and Development (EBRD), the Council of Europe Development Bank (CEB) or the Nordic Investment Bank (NIB) once becoming an 'entrusted entity'. The guarantee is provisioned at 40%, meaning that €10.5 billion of the EU budget is set aside if calls are made on the guarantee, the rest being a contingent liability. (REGULATION (EU) 2021/523)

The Fund operates through four policy windows in line with EU policy priorities depicted in the following Figure 3, as well as the amount of budget guarantee of each policy window.

Figure 3: Distribution of the budget guarantee

Sustainable infrastructure	€9.9 billion
Research, innovation, digitisation	€6.6 billion
SMEs	€6.9 billion
Social investment and skills	€2.8 billion

Source: https://eur-lex.europa.eu/legal-content/EN/TXT/

The threshold for direct operations is €10 million as well as for intermediated operations.

The InvestEU Advisory Hub serves as a component for bringing together project promoters and intermediaries with advisory partners to help reach the financing stage. It is a supporting tool to the InvestEU Fund to help identify, prepare, and develop investment projects. Managed by the Commission and financed by the EU budget.

The InvestEU Portal is a platform that connects project investors with investors. Announced projects will also be disclosed to implementing partners for further examination and Advisory Hub for advisory support

The NGEU of €6.1 billion also supports InvestEU.

Financing and investment operations should ultimately be decided by the implementing partner in its name, implemented following its internal rules, policies, and procedures, and accounted for in its financial statements or, where applicable, disclosed in the notes to the financial statements. Therefore, the Commission should exclusively account for any financial liability arising from the EU guarantee and must disclose the maximum guarantee amount, including all relevant information concerning the guarantee provided.

Where appropriate, the InvestEU Fund should allow for the smooth, seamless, and efficient blending of grants, financial instruments, or both, funded by the Union budget or by other funds, such as the EU Emissions Trading System (ETS) Innovation

Fund with the EU guarantee in situations where this is necessary to underpin investments best to address particular market failures or sub-optimal investment situations. (REGULATION (EU) 2021/523)

Due to the Covid-19 pandemic, the economic activity in the EU dropped significantly. Therefore, the EU needs to address market failures and reduce the investments gap in targeted sectors. More importantly, the current investment levels and forecasts do not cover the Union's needs for structural investment to restart and sustain long-term growth in the face of technological change and global competitiveness, including for innovation, skills, infrastructure, small and medium-sized enterprises (SMEs) and the need to address critical societal challenges such as sustainability or population ageing.

'The first InvestEU projects are expected to receive an InvestEU Guarantee as soon as April, after being presented to the Investment Committee'. (EU COMMISSION, European Commission and EIB Group sign InvestEU agreements unlocking, 2022)

6 EU Taxonomy

The Taxonomy Regulation was adopted on 12 July, 2020 to help determine whether an economic activity can be classified as environmentally sustainable and contributing to the environmental objectives. These environmental objectives are specified in EU Taxonomy Regulation and are branched as follows: climate change mitigation, climate change adaptation, the sustainable use and protection of water and marine resources, the transition to a circular economy, pollution prevention and control, and the protection and restoration of biodiversity and ecosystems. (REGULATION (EU) 2020/852)

The Taxonomy Regulation applies from 1 January 2022 for the climate change objective and from 1 January 2023 for the rest of the environmental objectives.

Dialogue and close cooperation among a wide range of stakeholders from the public and private sector will be crucial to delivering on the aims of the EU Taxonomy Regulation and ultimately of the European Green Deal and the EU climate targets for 2030 and 2050.

The Platform on Sustainable Finance plays a crucial role in enabling such cooperation by bringing together the expertise on sustainability from the corporate and public sector, from the industry and academia, civil society, and the financial industry join forces. (REGULATION (EU) 2020/852)

7 Conclusion

In this paper, we summarised the financial matter of policies directed toward combating climate change in the EU. To start the process of reaching the 2050 goal, the EU established the Transition Mechanism, which we explain.

We presented the EU Funds directly linked to the EU Green Deal objectives allocations to all Member States. We identified areas supported by these Funds and their allocations from the EU budget, which is the main financial component of the EU Green Deal Investment Plan. We also identified financial sources of the EU budget both perpetual and newly established to increase the budget for reaching the 2050 goals.

Second, we identified additional financing sources such as the EU ETS as one of the main components as well as becoming one of the EU budget financing sources, with the explanation of the trading system and the allocations to the Modernisation and Innovation Fund and specific allocations to the Member States.

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