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1. INTRODUCTION

1.1 THE GRAND DUCHY OF LUXEMBOURG'S SUSTAINABILITY POLICIES AND AMBITION

The Grand Duchy of Luxembourg's Coalition Government published its Coalition Agreement¹ in 2018, setting important targets for the country. At the center of the Coalition Agreement is a narrative of social cohesion and the promotion of an inclusive and welcoming society that supports equity, individual freedom and mutual respect.

The Grand Duchy of Luxembourg pursues the development of a responsible, sustainable and innovative financial sector in order to meet the challenges of a dynamic economic development, which goes hand in hand with the respect for ecological limits and social equity. The Grand Duchy of Luxembourg continuously works on implementing an ambitious social policy aimed at reducing the widening income gap, strengthening the fight against poverty and exclusion and paying particular attention to the structure of wages and a fair fiscal policy.

National Plan for Sustainable Development

In December 2019, the Grand Duchy of Luxembourg launched its "Luxembourg 2030: 3rd National Plan for Sustainable Development"² (the "National Plan for Sustainable Development") as a tool to implement the 17 Sustainable Development Goals (SDGs) of the UN Agenda 2030.

The plan lists ten priority fields of action:

1. Ensure social inclusion and education for all,
2. Ensure conditions for a healthy population,
3. Promote sustainable consumption and production,
4. Diversify and ensure an inclusive and future-oriented economy,
5. Plan and coordinate land use,
6. Ensure sustainable mobility,
7. Stop the degradation of our environment and respect the capacities of natural resources,
8. Protect the climate, adapt to climate change and ensure sustainable energy,
9. Contribute, on a global level, to the eradication of poverty and to the coherence of policies for sustainable development,
10. Guarantee sustainable finances.

¹ <https://gouvernement.lu/en/publications/accord-coalition/2018-2023.html>

² <https://environnement.public.lu/dam-assets/documents/developpement-durable/PNDD.pdf>

This last priority field has been included in the National Plan for Sustainable Development, because sustainable finance is critical to its implementation as well as to achieving the SDGs. The Grand Duchy of Luxembourg's intention as a financial center is to respond to its role in the global transition towards more sustainability as well as climate resilience.

2019 Climate law

At the end of 2019, the Grand Duchy of Luxembourg proposed its new draft Climate law³, based on the principles of climate justice and social equity. Through the draft Climate law, the Grand Duchy of Luxembourg acknowledges that a greater effort is required in order to protect the environment and aims to reduce greenhouse gas emissions by 55% by 2030 as well as to reach net zero emissions by 2050 at the latest.

The draft Climate law includes compulsory sectoral climate change objectives for five sectors, giving them greater responsibility to help reduce emissions. The sectors concerned are:

- ▶ Energy industries and manufacturing, construction,
- ▶ Transport,
- ▶ Residential and tertiary buildings,
- ▶ Agriculture and forestry,
- ▶ Waste and wastewater treatment.

In addition, the draft Climate law constitutes the framework for the implementation of the "Integrated National Energy and Climate Plan"⁴ for the period 2021-2030. It constitutes a roadmap, illustrating the necessary measures and policies in order to achieve the national objectives in the 5 sectors listed in the draft Climate law. It aims to support individuals and businesses in their efforts to implement the ecological and energy transition and will introduce CO₂ pricing, which will be continuously adjusted in line with the objectives of the Paris Agreement.

Furthermore, since the end of February 2020 all public transport in Luxembourg is free. This measure is above all social, but it is also meant to have a positive impact on the environment by attracting new users to public transport while minimizing carbon emissions by reducing the number of cars on the road.

Thus, the Grand Duchy of Luxembourg pursues a clear and robust strategy for the implementation of the Paris Agreement as well as the achievement of the SDGs.

³ *Draft Climate law*: https://www.chd.lu/wps/PA_RoleDesAffaires/FTSByteServingServletIm-pl?path=9697457A45D5DD8245D252D3ADAD33F617E83C90A40591801453DE4AABC6CID3E25A5FDBBIFE0F656363AD-73D79A0A52S387753A51580185864D2E1BF234F8C35

⁴ *Integrated National Energy and Climate Plan*: <https://environnement.public.lu/dam-assets/actualites/2020/02/Projet-du-PNEC-traduction-de-courtoisie-pdf>

1.2 RATIONALE FOR SUSTAINABILITY BONDS ISSUANCE

In order to achieve these ambitions, substantial investments need to be mobilized and a functioning and expanding green, social and sustainability capital market plays a central role in this context.

The Grand Duchy of Luxembourg is the world's second largest investment fund center, after the United States, with currently more than EUR 4 600 billion in assets under management. As such, the Grand Duchy of Luxembourg plays a key role in sustainable finance that goes well beyond its geographical size.

The Grand Duchy of Luxembourg is already a leading center for sustainable finance with multiple innovative and strategic initiatives implemented since as early as 2006:

- ▶ In 2006, LuxFLAG⁵, an independent and international non-profit responsible fund labeling agency was created. As of December 2019, LuxFLAG had awarded labels to 196 investment products domiciled in 7 jurisdictions (Belgium, Germany, France, Ireland, Italy, Luxembourg and the Netherlands) and managed by 84 asset managers located in 16 countries; representing approximately EUR 106.2 billion in assets under management by labelled products.
- ▶ In September 2016, the Luxembourg Stock Exchange launched the Luxembourg Green Exchange (LGX)⁶, the world's first dedicated platform for green, social and sustainable securities. The Luxembourg Green Exchange now lists more than half the world's green bonds.
- ▶ In 2017, the Luxembourg-EIB Climate Finance Platform⁷ was created between the European Investment Bank and the Grand Duchy of Luxembourg. It aims to mobilize investments for investment funds with a strong impact in the fight against climate change by providing a first loss guarantee to mitigate the risk for the private sector when co-investing in funds dedicated to climate change mitigation and adaptation.
- ▶ In 2018, as a strategic partner of the International Finance Corporation (IFC), the Grand Duchy of Luxembourg contributed to the technical assistance programme of the Amundi Planet Emerging Green One Fund, the world's largest targeted green bond fund focused on emerging markets.
- ▶ In 2018, the International Climate Finance Accelerator (ICFA)⁸ was launched, an innovative accelerator supporting first or second time fund managers specializing in climate finance.

⁵ LuxFLAG: <https://www.luxflag.org/>

⁶ LGX: <https://www.bourse.lu/green>

⁷ Lux-EIB Platform: <https://www.eib.org/en/products/blending/donor-partnerships/trust-funds/luxembourg-climate-finance-platform>

⁸ ICFA: <https://www.icfa.lu/>

- ▶ In early 2020, the Luxembourg government entered a strategic partnership with the University of Luxembourg in order to create a Master Track on Sustainable Finance, as well as professional certificates and fundamental and applied research in sustainable finance.
- ▶ In mid-2020, the Luxembourg government, together with civil society, launched the Luxembourg Sustainable Finance Initiative, an entity which shall coordinate the sustainable finance initiatives in Luxembourg while further implementing the Luxembourg Sustainable Finance Roadmap, which was published in 2018.

The Grand Duchy of Luxembourg aims to reinforce its commitment to sustainability and considers green, social and/or sustainability bond(s) as key financing instruments to support its efforts and ambitions while providing national and international investors with the opportunity to diversify their investments with more sustainable assets.

Consequently, the Grand Duchy of Luxembourg aims to lead by example in order to support the development of the green, social and/or sustainability capital market with the issuance of safe (AAA-rated) and liquid sovereign green, social and/or sustainability bond(s).

The proceeds raised from such bond issuance will enable the Grand Duchy of Luxembourg to fund government investments that contribute positively to the Grand Duchy's environmental and social goals and further promote and develop the domestic and international green, social and sustainability bond market.

2. SUSTAINABILITY BOND FRAMEWORK

The Grand Duchy of Luxembourg has prepared this Framework in accordance with the ICMA Green Bond Principles 2018, Social Bond Principles 2020 and Sustainability Bond Guidelines 2018⁹. In line with the ICMA Sustainability Bond Guidelines, the Framework is presented through the following key pillars: use of proceeds, process for project evaluation and selection, management of proceeds, reporting and external review.

The Framework has been designed to comply with the draft EU Green Bond Standard¹⁰ (the “EU GBS”), when relevant and feasible.

2.1 USE OF PROCEEDS

Under this Framework, the Grand Duchy of Luxembourg may issue 3 types of bonds:

- ✓ **Green Bonds** where an amount equal to the net proceeds will be exclusively used to (re)finance eligible expenditures falling within the Eligible Green categories,
- ✓ **Social Bonds** where an amount equal to the net proceeds will be exclusively used to (re)finance eligible expenditures falling within the Eligible Social categories,
- ✓ **Sustainability Bonds** where an amount equal to the net proceeds will be exclusively used to (re)finance eligible expenditures falling within both Eligible Green and Social categories.

Details on the applicable eligibility criteria for each category are provided in Appendix 1.









The eligibility criteria of green categories comply, when applicable, with the recommendation of the Technical Expert Group (TEG) final report on the EU Taxonomy (the “EU Taxonomy”) published in March 2020¹¹ or any updated version, on a best effort basis.

⁹ GBP 2018: <https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/>
SBP 2020: <https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/June-2020/Social-Bond-PrinciplesJune-2020-090620.pdf>
SBG 2018: <https://www.icmagroup.org/green-social-and-sustainability-bonds/sustainability-bond-guidelines-sbg/>





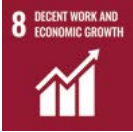

¹⁰ EU GBS: https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/200309-sustainable-finance-teg-green-bond-standard-usability-guide_en.pdf

¹¹ Technical Expert Group (TEG) final report on the EU Taxonomy – March 2020
https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/200309-sustainable-finance-teg-final-report-taxonomy-annexes_en.pdf

2.1.1 ELIGIBLE GREEN CATEGORIES

CATEGORIES	DESCRIPTION	MAIN SDG CONTRIBUTION
Green buildings	<ul style="list-style-type: none"> • Construction and acquisition of energy efficient buildings • Renovation of existing buildings 	
Energy Transition	<ul style="list-style-type: none"> • Renewable energy: Construction and operation of electricity generation facilities supporting a transition to a net-zero emissions economy • Energy efficient appliance and lighting 	 
Low Carbon Transport	<ul style="list-style-type: none"> • Low carbon transportation including: <ul style="list-style-type: none"> › Public transport › Infrastructure for low carbon transport 	
Protection of the environment	<ul style="list-style-type: none"> • Waste management • Protection and restoration of healthy ecosystems and their services 	 
Water and wastewater management	<ul style="list-style-type: none"> • Support the development of water and wastewater management systems allowing to significantly improve energy efficiency and/or water quality 	
Climate Finance and R&D	<ul style="list-style-type: none"> • Mobilise and support investment in international climate finance • Support research, development and innovation focusing on climate change mitigation and adaptation 	

2.1.2 ELIGIBLE SOCIAL CATEGORIES

CATEGORIES	DESCRIPTION	MAIN SDG CONTRIBUTION
Access to Essential Services – Education	<p>Providing access to essential educational infrastructure and services for all by:</p> <ul style="list-style-type: none"> • Extending educational capacities • Improving the quality of the existing educational infrastructure and equipment 	
Access to Essential Services – Healthcare	<p>Provide access to essential healthcare infrastructure and services for all by:</p> <ul style="list-style-type: none"> • Extending healthcare capacities • Improving the quality of the existing healthcare facilities 	
Access to Essential Services – Social Inclusion	<p>Provide access to essential services for population groups at risk of social exclusion by:</p> <ul style="list-style-type: none"> • Providing access to essential infrastructure and services to vulnerable population • Providing financial assistance to vulnerable population 	
Affordable Housing	<p>Provide access to affordable housing to vulnerable population by:</p> <ul style="list-style-type: none"> • Extending the social and affordable housing supply • Improving the quality of the existing social and affordable housing facilities • Providing financial assistance to facilitate access to housing and ownership 	
Employment generation and socio-economic advancement and empowerment	<p>Support employment generation and socio-economic advancement and empowerment, including but not limited to:</p> <ul style="list-style-type: none"> • Employment generation and retention initiatives • Support to Social and Solidarity Economy • Support to the SMEs¹² in the event of extreme events (e.g. natural disaster, extreme weather events, public health disaster...) 	 

¹² Small, medium, and micro-sized enterprises, as defined under EU recommendation 2003/361 : https://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition_en

2.1.3. EXCLUSION CRITERIA

Eligible expenditures exclude:

- ▶ Expenditures from budgets older than three calendar years from the year of issuance of the Bond,
- ▶ Expenditures already financed via a dedicated funding source, in order to avoid any “double counting”¹³,
- ▶ Expenditures that would contravene the law of June 8 1999 on the Budget, Accounting and Treasury¹⁴,
- ▶ Expenditures falling within the sectorial exclusions detailed in Annexe 2.

2.2 PROCESS FOR EVALUATION AND SELECTION

The Process for evaluation and selection will ensure that the proceeds from the Grand Duchy of Luxembourg’s Green, Social and/or Sustainability Bond(s) are allocated to finance or refinance eligible expenditures that meet the criteria and objectives set out above in section 2.1 Use of Proceeds.

The State Treasury, supported by the relevant Ministries, coordinates this process and prepares an initial list of potential eligible expenditures by identifying relevant expenditures in the Budget. The initial list is subsequently evaluated by the Sustainability Bond Committee (see point 2.2.1.), which verifies that the expenditures meet the criteria and objectives set out above in section 2.1 Use of Proceeds and approve the selected expenditures to be included in the Green, Social and/or Sustainability Bond.

2.2.1 GOVERNANCE AND PROCESS FOR THE EVALUATION AND SELECTION OF THE ELIGIBLE EXPENDITURES

To oversee the implementation of the Framework, a dedicated Sustainability Bond Committee has been established, under the coordination of the Luxembourg State Treasury (the “Sustainability Bond Committee”).

¹³ Consequently, only expenditures net of EU grants, loans, or other revenues earmarked for specific purposes are eligible

¹⁴ <http://legilux.public.lu/eli/etat/leg/loi/1999/06/08/n2/i0>

Composition of the Sustainability Bond Committee

The members of the Sustainability Bond Committee are:

- ✓ State Treasury (chair),
- ✓ The Ministry of Finance,
- ✓ The Inspectorate of Finance.

The Sustainable Bond Committee meets at least once a year and on a case by case basis as deemed necessary. All other Luxembourg Ministries, such as the Ministry for the Environment, Climate and Sustainable Development; the Ministry of Health; the Ministry of Housing, etc. will be invited to the Sustainability Bond Committee meetings on a regular basis.

Responsibility of the Sustainability Bond Committee

The responsibilities of Sustainability Bond Committee are:

- ✓ The verification that the expenditures meet the criteria and objectives set out above in section 2.1 Use of Proceeds,
- ✓ The selection of eligible expenditures to be included in the Green, Social and/or Sustainability Bond,
- ✓ The approval of the eligible expenditures to be included in the Green, Social and/or Sustainability Bond,
- ✓ The review of the allocation of the proceeds of the issued Green, Social and/or Sustainability Bond,
- ✓ The validation of the Green, Social and/or Sustainability Bond reports,
- ✓ The maintenance and update of the Framework if necessary.

2.2.2 ENVIRONMENTAL AND SOCIAL REGULATORY FRAMEWORK

The programmes and projects financed by the eligible expenditures under the Grand Duchy of Luxembourg's Green, Social and/or Sustainability Bond(s) are strictly regulated by government policies and procedures.

Environmental Risks Mitigation

The Law of 18 July 2018 on the protection of nature and natural resources¹⁵ states that prior to any project authorization from the competent minister, relevant measures have to be put in place in order to guarantee the protection of nature and natural resources.

The Law of 19 December 2008 on water resources¹⁶ states that prior to any project authorization of the competent minister, relevant measures have to be put in place in order to guarantee national water protection.

¹⁵ <http://legilux.public.lu/eli/etat/leg/loi/2018/07/18/a771/jo>

¹⁶ <http://eli.legilux.public.lu/eli/etat/leg/loi/2008/12/19/n17/jo>

In addition, the modified law of 10 June 1999¹⁷ establishes environmental criteria for projects, including the continuous application of the best available techniques.

Social Risks Mitigation

Under the Grand Duchy of Luxembourg's Labour code¹⁸, the employer is obliged to ensure the safety and health of employees in all aspects related to work, including occupational risk prevention, information and training activities, as well as the establishment of the necessary organization and resources.

The Labour Code also includes a comprehensive set of articles safeguarding every worker's rights and has the aim of promoting the integration of job seekers and the preservation of employment through creating more and better jobs.

In addition, the Grand Duchy of Luxembourg's regulation on the rights and obligations of health care patients¹⁹ specifically mentions the access to health care services for every patient, whether publicly/privately insured or not, thus creating an inclusive health care system. Concerning subsidized housing, all beneficiaries, whether they are buyers or tenants, have to meet specific socio-economic criteria²⁰.

The Grand Duchy of Luxembourg set up a Petitions Commission; a body of the Parliament managing the filing of petitions. Luxembourgish citizens have the right to deposit a petition about any topic they care about. If the petition receives more than 4500 signatures of fellow citizens, the matter has to be discussed in the Parliament. This form of participatory democracy is an important aspect of political life in the Grand Duchy, thus giving the chance to every citizen to actively voice concerns and contribute to the governance of the country.

¹⁷ <http://legilux.public.lu/eli/etat/leg/loi/1999/06/10/n5/1o>

¹⁸ <http://data.legilux.public.lu/file/eli-etat-leg-code-travail-20200313-fr-pdf.pdf>

¹⁹ <http://data.legilux.public.lu/file/eli-etat-leg-memorial-2014-140-fr-pdf.pdf>

²⁰ <https://logement.public.lu/dam-assets/documents/legislation/lois/AIDE-LOI-modifiee-du-25-02-1979.pdf>

2.3 MANAGEMENT OF PROCEEDS

In accordance with the evaluation and selection process described above, an amount at least equivalent to the Green, Social and/or Sustainability Bond's net proceeds will be allocated to eligible expenditures and managed and tracked by the State Treasury.

Pending full allocation, the net proceeds of the Green, Social and/or Sustainability Bond issuances will be managed by the State Treasury in accordance with the Grand Duchy of Luxembourg's regulatory framework and treasury policies.

The Grand Duchy of Luxembourg intends to allocate the proceeds of the Green, Social and/or Sustainability Bond at the earliest convenience and in any case commits on a best effort basis to reach full allocation within two years of the Green, Social and/or Sustainability Bond issuance.

In the event where some expenditures would be withdrawn from the portfolio of eligible expenditures²¹, the Grand Duchy of Luxembourg will reallocate on a best effort basis the proceeds to other eligible expenditures which are compliant with the Eligibility Criteria, as soon as reasonably practicable.

2.4 REPORTING

For all issuances under this Framework, the Grand Duchy of Luxembourg intends to produce an allocation report (the "Allocation Report") as well as an impact report (the "Impact Report") at least annually until full allocation of the Green, Social and/or Sustainability Bond proceeds.

2.4.1 ALLOCATION REPORT

The Grand Duchy of Luxembourg will publish an Allocation Report aiming to provide transparent information on the allocation of proceeds towards eligible expenditures, including:

- ▶ An overview of the allocated proceeds,
- ▶ The breakdown of allocated proceeds by eligible categories,
- ▶ The amount of unallocated proceeds at the reporting end-period (if any).

²¹ In case of budgetary adjustments, delayed disbursements, or in the event where identified expenditure would cease to fulfil the eligibility criteria

2.4.2 IMPACT REPORT

The Grand Duchy of Luxembourg will publish an Impact Report aiming to provide transparent information on the environmental and/or social impacts of the allocated proceeds.

The issuer will endeavor to report on relevant impact metrics, which may include:

GREEN CATEGORIES	EXAMPLE OF IMPACT METRICS
Green buildings	<ul style="list-style-type: none"> • Estimated ex-ante annual energy savings (in MWh) • Annual GHG emissions in tons of CO₂ equivalent saved
Energy Transition	<ul style="list-style-type: none"> • Renewable Energy Capacity (in MW) • Number of efficient street lighting appliances and systems installed • Estimated ex-ante annual energy savings (in MWh) • Estimated annual GHG emissions reduced/avoided (in tons of CO₂ equivalent)
Low Carbon Transport	<ul style="list-style-type: none"> • Number of low carbon vehicles deployed by type of transport (e.g number of trains/trams) • Number of users served • Other relevant indicators depending on the considered projects
Protection of the environment	<ul style="list-style-type: none"> • Volume of waste collected and disposed or treated (tons) • Surface of protected or restored areas • Other relevant indicators depending on the considered projects
Water and wastewater management	<ul style="list-style-type: none"> • Volume of water collected and disposed or treated (m³) • Number of users served • Other relevant indicators depending on the considered projects
Climate Finance and R&D	<ul style="list-style-type: none"> • Number of investment funds that have been launched with the support of Climate Finance expenditures • Total Net Asset Value of the investments funds • Estimated annual CO₂ emissions avoided (in tons of CO₂ equivalent) • Details of eligible R&D projects will be disclosed, where possible and taking into consideration intellectual property protection measures and know-how aspects

SOCIAL CATEGORIES	EXAMPLE OF IMPACT METRICS
<p>Access to Essential Services – Education</p>	<ul style="list-style-type: none"> • Number of education infrastructures benefiting from the eligible expenditures, including a breakdown by type of infrastructures (schools, universities...) • Capacity/additional capacity (in number of students)
<p>Access to Essential Services – Healthcare</p>	<ul style="list-style-type: none"> • Number of healthcare infrastructures benefiting from the eligible expenditures, including a breakdown by location • Capacity/additional capacity (in number of beds and/or patients)
<p>Access to Essential Services – Social Inclusion</p>	<ul style="list-style-type: none"> • Number of social inclusion infrastructures benefiting from the eligible expenditures, including a breakdown by type of infrastructures • Capacity/additional capacity (in number of beneficiaries)
<p>Affordable Housing</p>	<ul style="list-style-type: none"> • Number of dwellings • When available, additional information may be provided regarding the energy performance of eligible buildings
<p>Employment generation and socio-economic advancement and empowerment</p>	<ul style="list-style-type: none"> • Number of people benefitting from the eligible employment generation and retention initiatives, including a breakdown per type of initiatives/schemes considered • When available, additional information may be provided regarding the employment generation and retention initiatives beneficiaries (e.g. age, level of education) • When available, information may be provided regarding the Social and Solidarity Economy beneficiaries (e.g. number, type) • Number of SMEs impacted by the consequences of extreme events benefiting from the eligible expenditures

2.5 EXTERNAL REVIEW

Second-Party Opinion

Prior to issuance, the Grand Duchy of Luxembourg has commissioned Sustainalytics to conduct an external review of this Sustainability Bond Framework and issue a Second Party Opinion on the Framework's environmental and social credentials and its alignment with the Green Bond Principles, Social Bond Principles and Sustainability Bond Guidelines. The Second Party Opinion is also assessing the alignment of the Framework with both the EU GBS and the current version of the EU Taxonomy.

The Second Party Opinion is available on the Sustainalytics website as well as on the Grand Duchy of Luxembourg's website.

External Review

The Grand Duchy of Luxembourg aims to adhere to the highest standards in terms of external reviews of the Green, Social and/or Sustainability Bond. Consequently, an external reviewer will provide an annual report review, until all the proceeds of the Green, Social and/or Sustainability Bond have been allocated, confirming that an amount equal to the net proceeds of the Bond have been allocated in compliance with the criteria and objectives set out above in section 2.1 Use of Proceeds.

3. APPENDIX

3.1 APPENDIX 1: ELIGIBILITY CRITERIA

3.1.1 ELIGIBLE GREEN CATEGORIES

GREEN BUILDINGS		
Eligibility Criteria	EU Environmental Objective	Environmental benefits
<p>The (re)financing of expenditures related to:</p> <p>(i) Construction of new buildings and acquisition of buildings:</p> <ul style="list-style-type: none"> • Buildings built before 31 December 2020: Buildings belonging to the top 15% of the existing local stock in terms of operational Primary Energy Demand, expressed as kWh/m²y²². • Buildings built after 31 December 2020: <ul style="list-style-type: none"> › with a primary energy demand at least 20% lower than the one resulting from the NZEB and, › where efficient building operations is ensured through dedicated energy management²³. <p>(ii) Renovation of existing buildings²⁴ including:</p> <ul style="list-style-type: none"> • Major renovations²⁵: The renovation is compliant with the requirements set in the applicable building regulations for 'major renovation' transposing the Energy Performance of Buildings Directive (EPBD), meeting cost-optimal minimum energy performance requirements in accordance with the EPBD. 	Climate change mitigation	Energy savings

²² Besides the energy performance criteria above, it is to be noted that expenditures related to the construction of green buildings will be considered eligible only when all relevant new water appliances are in the top 2 classes for water consumption of the EU Water Label.

²³ Applicable to non-residential buildings only

²⁴ Besides the energy performance criteria above, it is to be noted that expenditures related to the renovation of existing buildings will be considered eligible only when all relevant new water appliances are in the top 2 classes for water consumption of the EU Water Label.

²⁵ Renovation of a building where: (a) the total cost of the renovation relating to the building envelope or the technical building systems is higher than 25 % of the value of the building, excluding the value of the land upon which the building is situated; or (b) more than 25 % of the surface of the building envelope undergoes renovation.

<ul style="list-style-type: none"> Renovations for relative improvement: Individual or set of renovations delivering within a maximum of 3 years a reduction of Primary Energy Demand of at least 30% in comparison to the energy performance of the building before the renovation(s)²⁶. 		
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ENERGY TRANSITION		
Eligibility Criteria	EU Environmental Objective	Environmental benefits
<p>The (re)financing of expenditures related to:</p> <p>(i) the construction and operation of electricity generation facilities that produce electricity from:</p> <ul style="list-style-type: none"> Solar PV, concentrated solar power, wind power, hydropower²⁷ (including pumped-storage facilities), geothermal when life cycle impacts for producing 1 kWh of electricity are below the declining threshold²⁸: <ul style="list-style-type: none"> Facilities are operating at life cycle emissions²⁹ lower than 100gCO₂e/kWh, declining to net-0gCO₂e/kWh by 2050³⁰, Life cycle emissions will be reduced every 5 years in line with a net-zero CO₂e in 2050 trajectory. 	Climate change mitigation	GHG emissions reduction

²⁶ The initial energy performance and the estimated improvement shall be based on a specialised building survey and validated by an Energy Performance Certificate, an energy audit conducted by an accredited independent expert or any other transparent and proportionate method.

²⁷ Allocated emissions should be calculated according to the operating regime, as per the allocation methodology developed by UNESCO/IHA and embedded in the G-res tool and IEA Hydro Framework.

²⁸ Besides the energy performance criteria above, it is to be noted that :
 -expenditures related to the production of electricity from Solar PV will be considered eligible only when ensuring durability and easy dismantling, reparability through accessibility and exchangeability of the components, refurbishment and recycling , for example through approved sourcing or certifications
 -expenditures related to the production of electricity from wind power will be considered eligible only when ensuring recycling at end of life based on waste management plans, dismantling/decommissioning processes at time of decommissioning, for example through contractual agreements.

²⁹ Measured using an ISO 14067 or a GHG Protocol Product Lifecycle Standard-compliant Product Carbon Footprint (PCF) assessment.

³⁰ For activities which operate beyond 2050, it must be technically feasible to reach net-zero emissions in scope 1 emissions.

<ul style="list-style-type: none"> • Gas combustion when: <ul style="list-style-type: none"> › a Product Carbon Footprint assessment has been undertaken and demonstrated that life cycle impacts, including actual physical measurements for producing 1 kWh of electricity are below the declining threshold of 100gCO₂e/kWh³¹, › the gas source is renewable (e.g marsh gas). • Bioenergy when: <ul style="list-style-type: none"> › Facilities operate above 80% of GHG emissions-reduction in relation to the relative fossil fuel comparator set out in RED II increasing to 100% by 2050³², › Facilities use feedstocks from anaerobic digestion of biowaste or sewage sludge or advanced feedstocks as defined by EU Directive 2018/2001³³. • (ii) Installation of energy efficient appliance and lighting including: replacement of existing street lighting system with new efficient lighting appliances and systems. 	<p>Climate change mitigation</p>	<p>GHG emissions reduction</p>
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³¹ Life cycle emissions will be reduced every 5 years in line with a net-zero CO₂e in 2050 trajectory.

³² For activities which operate beyond 2050, it must be technically feasible to reach net-zero emissions in scope 1 emissions.

³³ Directive (EU) 2018/2001 on the promotion of the use of energy from renewable sources defines, in Part A of Annex IX, a list of advanced bioenergy feedstocks: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2018.328.01.0082.01.ENG

LOW CARBON TRANSPORT		
Eligibility Criteria	EU Environmental Objective	Environmental benefits
<p>The (re)financing of expenditures related to low carbon transportation including:</p> <p>(i) Public transport:</p> <ul style="list-style-type: none"> • Zero direct emissions land transport activities (e.g. light rail transit, metro, tram, trolleybus, bus and rail) are eligible. • Other fleets are eligible if direct emissions are below 50 gCO₂e/pkm³⁴ until 2025. <p>(ii) Infrastructure for low carbon transport³⁵:</p> <ul style="list-style-type: none"> • Infrastructure required for zero direct emissions transport (e.g. electric charging points, electricity grid connection upgrades, hydrogen fueling stations or electric highways). • Infrastructure and equipment (including fleets) for active mobility (walking, cycling, e-bikes and e-scooters). • Infrastructure that is predominantly used for low-carbon transport if the fleet that uses the infrastructure meets the thresholds for direct emissions³⁶ as defined in the relevant activity in the EU Taxonomy, March 2020. • Non-electrified rail infrastructure with an existing plan for electrification or use of alternatively powered trains. 	Climate change mitigation	GHG emissions reduction

³⁴ gCO₂e/pkm: CO₂e emissions per passenger-kilometre

³⁵ Only infrastructure that is fundamental to the operation of the transport service will be considered. No investments will be used to finance or refinance infrastructure dedicated to the transport of fossil fuels or blended fossil fuels.

³⁶ Direct emission measured in: CO₂ emissions per kilometre (gCO₂/km), CO₂e emissions per tonne-kilometre (gCO₂e/tkm), or CO₂e emissions per passenger-kilometre (gCO₂e/pkm).

PROTECTION OF THE ENVIRONMENT		
Eligibility Criteria	EU Environmental Objective	Environmental benefits
<p>The (re)financing of expenditures related to:</p> <p>(i) Waste management projects meeting the following criteria:</p> <ul style="list-style-type: none"> • Collection and transport of non-hazardous waste where: <ul style="list-style-type: none"> Source segregated waste (in single or co-mingled fractions) is separately collected with the aim of preparing for reuse and/or recycling. • Composting of bio-waste when: (cumulative) <ul style="list-style-type: none"> › Bio-waste is source segregated and collected separately, › anaerobic digestion is not a technically and economically viable alternative and, › the compost produced is used as fertiliser/soil improver. • Material recovery from separately collected non-hazardous waste when: <ul style="list-style-type: none"> › it produces secondary raw materials suitable for substitution of virgin materials in production processes and, › at least 50%, in terms of weight, of the processed separately collected non-hazardous waste is converted into secondary raw materials. <p>(ii) Protection and restoration of terrestrial and inland freshwater ecosystems, biodiversity, habitats and soil and their services.</p>	<p>Climate change mitigation</p> <p>Pollution prevention and control</p> <p>Protection of healthy ecosystems</p>	<p>GHG emissions reduction</p> <p>Reduction of air and/or soil pollution</p> <p>Reduction of waste and resource use</p> <p>Reduction in biodiversity loss</p>

WATER AND WASTEWATER MANAGEMENT		
Eligibility Criteria	EU Environmental Objective	Environmental benefits
<p>The (re)financing of expenditures aiming to:</p> <p>(i) support the development of energy efficient water and wastewater management:</p> <ul style="list-style-type: none"> • Water collection, treatment and supply meeting one of the following criteria: • The front-to-end water supply system has a high degree of energy efficiency characterized by an average energy consumption of the system (including abstraction, treatment and distribution) of 0.5 kwh per cubic meter billed/ unbilled authorized water supply or less. • The energy efficiency of the front-to-end water supply system is increased substantially by (1) decreasing the average energy consumption of the system by at least 20% (including abstraction, treatment and distribution) or (2) by closing the gap between the actual leakage of the water supply network and a given target value of low leakage by at least 20%. • Construction or extension of centralized wastewater treatment (including collection and treatment plants) provided that the new wastewater treatment substitutes more GHG emission intensive wastewater treatment systems. <p>(ii) support the development of water and wastewater treatments systems allowing to significantly improve water quality by meeting the criteria in line with the requirements of the Directive on urban waste water treatment³⁷. In addition, the wastewater treatment uses the best available techniques.</p>	<p>Climate change mitigation</p> <p>Sustainable use and protection of water resources</p>	<p>GHG emissions reduction</p> <p>Improve water quality and water recycling</p>

³⁷ <http://legilux.public.lu/eli/etat/leg/rgd/1994/05/13/n1/fo>

CLIMATE FINANCE AND R&D		
Eligibility Criteria	EU Environmental Objective	Environmental benefits
<p>The (re)financing of expenditures aiming to:</p> <p>(i) support the development of Climate Finance: mobilise and support investments in international climate finance through credible partners, such as the European Investment Bank, or other reputable investment managers, which have gone through an extensive due diligence process.</p> <p>(ii) Support research, development and innovation focusing on climate change mitigation and adaptation, including but not limited to:</p> <ul style="list-style-type: none"> • Basic research, applied research, and experimental development dedicated to climate change. 	<p>Climate change mitigation</p> <p>Climate change adaptation</p>	<p>GHG emissions reduction</p> <p>Resilience towards physical climate risks</p>

3.1.2 ELIGIBLE SOCIAL CATEGORIES

ACCESS TO ESSENTIAL SERVICES – EDUCATION			
Eligibility Criteria	Target Population	Objective	Social benefit
<p>The (re)financing of expenditures that provide access to essential educational infrastructure and services for all by:</p> <p>(i) Extending the educational capacities: <i>Eligible expenditures include the construction or extension of early childhood, primary and secondary education school.</i></p> <p>(ii) Improving the quality of the existing educational infrastructure and equipment: <i>Eligible expenditures include the refurbishment of Primary and Secondary Education school.</i></p> <p><i>Eligible schools include Public schools and Private schools with annual tuition fees below EUR 500³⁸.</i></p>	All Luxembourg population	Increase and improve education infrastructure capacity for all	<p>Reduce social education inequalities</p> <p>Foster equal access to essential education services</p>

³⁸ Private schools with tuition fees below EUR 500 have been deemed to contribute to the objective of education for all considering Luxembourg socio economic context. It is to be noted that private schools have key role in providing access to education alongside public schools to meet the overall education demand.

ACCESS TO ESSENTIAL SERVICES – HEALTHCARE			
Eligibility Criteria	Target Population	Objective	Social benefit
<p>The (re)financing of expenditures that provide access to essential healthcare infrastructure and services for all by:</p> <p>(i) Extending the healthcare capacities: <i>Eligible expenditures include the construction or extension of public health facilities and centres.</i></p> <p>(ii) Improving the quality of the existing healthcare facilities: <i>Eligible expenditures include the refurbishment of public health facilities and centres.</i></p>	All Luxembourg population	Increase and improve healthcare infrastructure capacity for all	Reduce social health inequalities Foster equal access to essential healthcare services

ACCESS TO ESSENTIAL SERVICES – SOCIAL INCLUSION			
Eligibility Criteria	Target Population	Objective	Social benefit
<p>The (re)financing of expenditures that provide access to essential services for population groups at risk of social exclusion by:</p> <p>(i) Providing access to essential infrastructure and services to vulnerable population: <i>Eligible expenditures include the construction, extension, refurbishment of public child or elder care facilities; facilities for people with disabilities; refugees reception centres.</i></p> <p>(ii) Providing financial assistance to vulnerable population.</p>	<p>Vulnerable population groups including but not limited to:</p> <ul style="list-style-type: none"> • low-income population • young people • elderly people • people with disabilities • single-parent families • asylum seekers or refugees 	Provide safe and affordable access to essential services for vulnerable population	Reduce social exclusions and inequalities Strengthen social cohesion and solidarity

AFFORDABLE HOUSING			
Eligibility Criteria	Target Population	Objective	Social benefit
<p>The (re)financing of expenditures that provide access to affordable housing to vulnerable population by:</p> <p>(i) Extending the social and affordable housing supply: <i>Eligible expenditures include the construction or extension of social housing units.</i></p> <p>(ii) Improving the quality of the existing social and affordable housing facilities: <i>Eligible expenditures include the refurbishment, maintenance and modernization of social housing units.</i></p> <p>(iii) Providing financial assistance to facilitate access to housing and ownership: <i>Eligible expenditures include financial-aid programs to support tenants.</i></p>	<ul style="list-style-type: none"> • Low income population (eligibility criteria defined according to annual revenue) • people living without adequate housing • household in position of insecurity and exclusion 	Provide safe and affordable housing for vulnerable population	Reduce housing exclusion and inequalities

EMPLOYMENT GENERATION AND SOCIO-ECONOMIC ADVANCEMENT AND EMPOWERMENT			
Eligibility Criteria	Target Population	Objective	Social benefit
<p>The (re)financing of expenditures that support employment generation and socio-economic advancement and empowerment, including but not limited to:</p> <p>(i) Employment generation and retention initiatives: <i>Eligible expenditures include aid measures to support the employment of elderly/ long-term unemployed people; professional transition trainings schemes.</i></p> <p>(ii) Support to Social and Solidarity Economy: <i>Eligible expenditures include measures supporting the development of Social and Solidarity Economy such as social initiatives in favor of employment within the social and solidarity economy³⁹; support to social and solidarity economy entities (e.g. social impact companies as defined under the law of 12 December 2016⁴⁰, non profit organizations, foundations); training programs for Social and Solidarity Economy entrepreneurs, creation of dedicated spaces and structures to promote social entrepreneurship and social innovation.</i></p>	<ul style="list-style-type: none"> • SMEs • Unemployed people • SMEs impacted by the consequences of extreme events 	<p>Support employment generation</p> <p>Promote resilience and resumption of economic activities in the event of extreme events</p>	<p>Foster sustainable economic growth</p>

³⁹ <http://legilux.public.lu/eli/etat/leg/loi/2009/03/03/n1/jo>

⁴⁰ <http://legilux.public.lu/eli/etat/leg/loi/2016/12/12/n1/jo>

<p>(iii) Support to SMEs⁴¹ in the event of extreme events (e.g. natural disaster, extreme weather events, public health disaster...):</p> <p><i>Eligible expenditures include programs supporting SMEs that are impacted by the consequences of extreme events.</i></p>			
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3.2 APPENDIX 2: SECTORIAL EXCLUSIONS

- ▶ Nuclear power generation,
- ▶ Fossil fuel production and fossil fuel power generation,
- ▶ Rail infrastructure dedicated for transportation of fossil fuels,
- ▶ Production or trade in weapons and munitions,
- ▶ Production or trade in alcoholic beverages (excluding beer and wine),
- ▶ Production or trade in tobacco,
- ▶ Gambling, casinos and equivalent enterprises,
- ▶ Production or trade in any product or activity deemed illegal under international conventions and agreements, or subject to international bans.

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⁴¹ Small, medium, and micro-sized enterprises, as defined under EU recommendation 2003/361: https://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition_en

