

Luxembourg Social Climate Plan

27 March 2026



Note on the budgetary implications of the Social Climate Plan:
The measures proposed in this document have not yet been the subject of detailed budgeting. It is understood that the measures contained in the Social Climate Plan that have an impact on public finances must undergo the usual budgetary procedure.



THE GOVERNMENT
OF THE GRAND DUCHY OF LUXEMBOURG
Ministry of the Environment,
Climate and Biodiversity



THE GOVERNMENT
OF THE GRAND DUCHY OF LUXEMBOURG
Ministry of the Economy

Executive Summary

<u>1. SOCIAL CLIMATE PLAN OVERVIEW AND PROCESS FOR ESTABLISHING THE SOCIAL CLIMATE PLAN</u>	<u>3</u>
1.1. SUMMARY	3
1.1.1. CONTEXT OF THE GREEN TRANSITION	3
1.1.2. OBJECTIVES OF THE MEASURES AND INVESTMENTS.....	7
1.2. OVERVIEW OF CURRENT POLICY LANDSCAPE	8
1.3. PUBLIC CONSULTATION PROCESS.....	11
1.4. DEFINITIONS	12
1.5. PROJECTED IMPACT ON VULNERABLE GROUPS	16
<u>2. DESCRIPTION OF MEASURES, INVESTMENTS, INTERMEDIATE VALUES, AND FINAL OBJECTIVES</u>	<u>16</u>
2.1. COMPONENT C1 – BUILDING SECTOR.....	21
2.2. COMPONENT C2 – TRANSPORT SECTOR.....	60
2.3. COMPONENT C3 – DIRECT INCOME SUPPORT	74
2.4. TOTAL COSTS OF THE PLAN	78
<u>3. ANALYSIS AND OVERALL IMPACT.....</u>	<u>79</u>
3.1. PROJECTED IMPACT	79
<u>4. COMPLEMENTARITY, ADDITIONALITY, AND IMPLEMENTATION OF THE PLAN.....</u>	<u>80</u>
4.1. MONITORING AND IMPLEMENTATION OF THE PLAN.....	80
4.2. CONSISTENCY WITH OTHER INITIATIVES.....	81
4.3. COMPLEMENTARY OF FUNDING	84
4.4. GEOGRAPHICAL SPECIFICITIES.....	85
4.6. INFORMATION, COMMUNICATION, AND VISIBILITY.....	93

1. SOCIAL CLIMATE PLAN OVERVIEW AND PROCESS FOR ESTABLISHING THE SOCIAL CLIMATE PLAN

1.1. Summary

1.1.1. Context of the green transition

Context

The European Union has committed, through the European Green Deal, to achieving climate neutrality by 2050. As part of the 'Fit for 55' package, a series of measures has been adopted to reduce greenhouse gas emissions by at least 55% by 2030 compared to 1990 levels. One of the key elements of this strategy is the gradual extension of Directive 2003/87/EC on the [EU Emissions Trading System \(EU ETS\)](#) to new sectors, including buildings and road transport, which account for a significant share of emissions in the EU.

The EU ETS operates on the polluter pays principle, whereby those responsible for greenhouse gas emissions must bear the associated costs. With its extension to the building and road transport sectors, this principle now applies not only to economic actors but also to households, through the pricing of fossil fuels. By introducing a carbon price, the system increases the cost of fossil fuels, thereby encouraging all stakeholders to reduce consumption and shift toward more attractive renewable alternatives. This pricing mechanism is designed to guide behaviour toward more sustainable choices, foster technological innovation, and accelerate the energy transition—while ensuring a fair distribution of climate efforts across all sectors of society.

In 2005, the European Union established a carbon market—EU ETS 1—which covers greenhouse gas (GHG) emissions from large-scale industry, energy production, aviation, and maritime transport. A second system, EU ETS2, is scheduled to enter into force in 2028. This new market will target CO₂ emissions resulting from the combustion of fossil fuels in the road transport, building, construction, and small industry sectors. EU ETS2 is based on a European cap-and-trade mechanism for emissions allowances. Unlike EU ETS 1, which applies directly to large emitters, EU ETS2 adopts an 'upstream' approach: energy suppliers and fuel distributors will be responsible for monitoring and reporting emissions associated with the sale of their products.

EU ETS2 has been designed as a key instrument to help the European Union meet its medium- and long-term climate goals. Its primary objective is to reduce greenhouse gas emissions in sectors not previously covered by the EU emissions trading system and to introduce a carbon price on fossil fuels used in those sectors. Beyond emissions reduction, EU ETS2 enhances the coherence of European climate policy by extending carbon pricing to all emitting sectors, accelerating the energy transition, and fostering technological innovation.

However, since the introduction of a CO₂ price in these sectors will increase the cost of fossil fuel use, the measures may disproportionately affect vulnerable households and micro-enterprises, which spend a significant share of their income on energy and transport. To mitigate these impacts and ensure a just transition, the European Union has adopted Regulation (EU) 2023/955 establishing the Social Climate Fund. Covering the period from 2026 to 2032, the fund aims to support Member States in implementing targeted measures to protect the most vulnerable populations—primarily through investments in energy efficiency, building decarbonization, and sustainable mobility.

In this context, each Member State is required to develop a National Social Climate Plan that reflects the specific challenges of its territory and ensures a fair ecological transition. These plans align with the core principles of European climate policy and aim to mitigate the socio-economic

impacts of the green transition, ensuring that it remains accessible to all segments of the population.

National plans include targeted measures and investments for vulnerable households and micro-enterprises most affected by rising energy costs. These measures encompass a broad range of actions, such as energy-efficient building renovations, the integration of renewable energy sources, and improved access to clean transport.

By combining climate action with social protection, the European Union seeks to ensure that the ecological transition benefits all citizens—enhancing quality of life while reducing social inequalities.

However, a socially just climate policy cannot rely solely on technical or economic interventions. It must be embedded within a broader vision of social justice that considers all dimensions of citizens' living conditions.

Luxembourg's specific Situation

Luxembourg faces a distinctive set of challenges in its ecological transition, shaped by its geographical, demographic, and economic characteristics. As a highly urbanised country undergoing sustained urban sprawl, it has developed a strong dependence on private vehicles, which in turn intensifies pressure on the housing market. Rapid population growth—driven by the country's economic appeal and the daily influx of cross-border workers—has created significant challenges in housing, transport infrastructure, and land-use planning. Between 2009 and 2025, the population increased from 493,500 to 681,973.

Fuel consumption in Luxembourg is disproportionately high compared to neighbouring countries, accounting for approximately two-thirds of total final energy consumption. This anomaly is largely due to Luxembourg's central location in Europe and the price differentials in fuel compared to surrounding nations.

The housing sector has been under sustained pressure for years. High demand coupled with limited supply has led to soaring property prices for over two decades. The continued rise in prices and rents—particularly in the private market—has made housing increasingly inaccessible for a large share of the population. These costs do not affect all residents equally and risk excluding vulnerable groups. The burden falls especially heavily on low-income households renting privately, who often face multiple, compounding housing-related difficulties. In response, successive governments have implemented policies aimed at increasing the supply of affordable housing, offering individual assistance for home ownership, and improving the energy efficiency of buildings.

In this context, the inclusion of greenhouse gas emissions from the building and road transport sectors within the scope of the EU ETS2 represents a significant challenge, particularly for vulnerable households and small businesses. The internalisation of carbon costs through the expansion of the carbon market to these sectors risks generating differentiated socio-economic impacts, placing a heavier burden on certain population groups and categories of economic actors. Among the anticipated effects is a rise in the prices of gas, heating oil, petrol, and diesel, which could disproportionately affect vulnerable households, as they allocate a relatively larger share of their budget to heating and transport expenses. Consequently, the increase in the price of CO₂ will have a regressive effect on these households and microenterprises¹. Energy poverty is likely to worsen, especially for tenants living in older or poorly insulated buildings and for homeowners

¹ Sologon, D. M., O'Donoghue, C., Kyzyma, I., Loughrey, J., & Linden, J. (2025). Distributional Impact of Soaring Prices in Europe: A Cross-National Decomposition of Inflation's Regressivity and Progressivity. *Review of Income and Wealth*.

lacking the financial resources to undertake energy renovation works. At the same time, households located outside major urban centres—particularly in peri-urban and rural areas, where public transport options are more limited—will be more exposed to rising transport costs.

Structurally, the transition to a decarbonised housing stock poses major challenges for low-income owner-occupiers, who may struggle to fund renovations or replace fossil fuel heating systems. Vulnerable tenants are similarly affected, as they often reside in inefficient buildings and depend on landlords to invest in upgrades. Micro-enterprises—such as craftsmen, delivery drivers, and construction professionals—play a vital role in the local economy and typically rely on combustion engine vehicles. The introduction of a carbon price under EU ETS2 could increase their operating costs, particularly fuel expenses. However, this shift may also serve as a catalyst for innovation and equipment modernisation, provided it is supported by targeted assistance measures.

Investments in the PSC can also be understood as a means of preventing certain future social expenditures. By addressing climate vulnerability upstream—for example, by supporting households facing energy-inefficient housing conditions or high energy costs—such investments help mitigate health risks, including respiratory and cardiovascular diseases as well as heat-related stress.

Recognising these challenges, Luxembourg has addressed them in its Social Climate Plan, developed in accordance with Regulation (EU) 2023/955. The plan aims to ensure a fair and inclusive energy transition by mitigating the social impact of the new regulatory framework.

Gender inequalities and social issues

Gender inequality remains a significant concern across various domains, particularly in climate, energy, housing, and mobility policies. A recent project conducted by the Luxembourg Institute for Socio-Economic Research (LISER)—as part of the *INGINCO: Gender Inequality, Inflation and Consumption*² initiative commissioned by the Ministry for Gender Equality and Diversity (MEGA) and building on the earlier study *Price Increases and Gender Inequality* for the Ministry of Environment, Climate and Biodiversity (MECB) —has highlighted several specific vulnerabilities.

The research reveals pronounced gender disparities in the housing sector, notably a disproportionate financial burden borne by women. Family composition plays a critical role: in 2023, 85.3% of single-parent households with children in Luxembourg were headed by women³. These families have historically been among the most vulnerable in the housing market, spending a significantly higher share of their income on housing-related expenses. Moreover, the effort rate—the proportion of income allocated to housing—is rising more rapidly for women than for men across all income quintiles, except the second. This trend underscores a deepening of gender inequalities in access to housing. Women also face slightly greater challenges in securing quality housing, with higher exposure to issues such as dampness, poor insulation, and inadequate thermal comfort. These disparities reflect persistent income gaps, unequal distribution of caregiving responsibilities, and structural barriers to accessing credit. In response, the study recommends that housing support policies be more effectively targeted, considering gender-specific needs and family circumstances. These efforts should be complemented by broader measures to address wage inequality and promote stable, high-quality employment opportunities for women.

² Peluso, E., Islam, N., Leduc, K., Lorentz, N., Menta, G., Sologon, D. M., Van Kerm, P., Verheyden, B., Depireux, A., Genevois, A.-S., Segura, J., & Bouvy, I. (2024). Hausse des prix et inégalités de genre au Luxembourg : Etude du LISER sur le projet INGINCO en collaboration avec le MEGA. (Les rapports du LISER). LISER.

³ Leduc, K., Paccoud, A., & Lorentz, N. (2022). Évolution du taux d'effort des ménages résidant au Luxembourg selon leur composition familiale entre 2016 et 2019. Ministère du Logement - Observatoire de l'Habitat <https://logement.public.lu/fr/observatoire-habitat/publications.html>

Mobility-related disparities are partly rooted in differences in transport usage patterns. Women are more likely to make combined or fragmented journeys, often linked to domestic and caregiving responsibilities. These patterns are compounded by safety concerns, which remain insufficiently addressed in transport systems historically designed around linear commuting. Together, these factors contribute to a greater reliance on private vehicles. The study underscores that the shift toward more sustainable modes of transport requires more than awareness campaigns—it depends on the creation of a supportive and inclusive environment. To be effective, such efforts must be backed by concrete measures: improved accessibility and scheduling, enhanced safety, equitable pricing, and targeted support in underserved areas. Local authorities have a pivotal role to play, particularly through flexible transport solutions such as on-demand services, which are better aligned with local realities and the diverse needs of users.

CO₂ Tax in Luxembourg

Since 2021, Luxembourg has applied a CO₂ tax on fossil fuels to encourage a gradual reduction in their consumption. This tax is embedded in the amended law of 17 December 2010, which governs excise duties and similar levies on energy products. Initially set at €20 per tonne of CO₂ emitted—aligned with average carbon prices in neighbouring countries—the tax has increased annually by €5 per tonne, reaching €45/t in 2026.

In line with the National Integrated Energy and Climate Plan (NECP), revenue from the CO₂ tax is allocated in a balanced manner. Half is earmarked for climate protection and energy transition initiatives, including subsidies for energy-efficient renovations, electromobility, and renewable energy deployment. The remaining half is directed toward social compensation measures—such as the CO₂ tax credit and cost-of-living benefit—to support vulnerable households and ensure a fair and inclusive transition.

To ensure rigorous oversight, the Interministerial Committee for Climate Action closely monitors the implementation of the CO₂ tax, particularly its effectiveness in meeting sectoral climate objectives. The committee submits quarterly reports to the Government Council, drawing on the work of a technical group composed of STATEC, the Customs and Excise Administration, and the relevant ministries (MFIN, MECB, and MECO). This group collects and analyses data to anticipate regional developments and inform potential revisions to the fiscal trajectory.

Should the analysis indicate that fuel price differentials with neighbouring regions are undermining the trajectory of fuel sales aligned with climate and energy goals, additional tax adjustments will be introduced.

The provisions governing the evolution of the CO₂ tax for the period 2027–2030 are scheduled for reassessment in 2026. This review will consider both national climate targets and measures adopted by neighbouring countries, particularly considering the introduction of the EU ETS2. Such measures may influence fuel price disparities between Luxembourg and adjacent regions, with implications for domestic consumption and sales.

As Luxembourg is participating in the EU ETS2 from the moment it is implemented, the government remains committed to protecting vulnerable households and micro-enterprises from potential increases in energy costs. It therefore guarantees that any form of carbon taxation—whether direct (such as a CO₂ tax) or indirect (via market-based mechanisms)—will be accompanied by appropriate social compensation measures.

Governance

This plan is the result of close collaboration between the Ministry of the Environment, Climate and Biodiversity (MECB), the Ministry of the Economy (MECO), and the Ministry of Family Affairs, Solidarity, Living Together and Reception of Refugees (MFSVA), in partnership with Klima-Agence and the Ministry of Finance (MFIN). Under the supervision of the Ministry of the Environment, Climate and Biodiversity, this joint effort has led to the development of a comprehensive set of measures and investments supporting both climate and social transition. Contributions from the ministries represented in the Interministerial Committee for Climate Action have further ensured a coordinated, cross-sectoral approach.

In addition, a dedicated working group supported the analyses conducted by STATEC, particularly in assessing the overall impact of the proposed measures. This methodology is designed to provide a robust understanding of the plan's socio-economic and environmental effects, grounded in empirical data and rigorous analytical frameworks.

The success of the plan also depends on the concerted engagement of all actors on the ground, whether local authorities, associations or professionals working in the relevant fields. Through their expertise and their daily involvement, these actors play a decisive role in ensuring the concrete and lasting implementation of the various measures set out in the plan.

1.1.2. Objectives of the measures and investments

The planned measures and investments are guided by a central objective: to ensure a socially equitable climate transition that is accessible to the entire population. Special attention is given to vulnerable households and micro-enterprises, as they often face greater challenges in participating in transition initiatives.

In many cases, climate policies tend to primarily benefit homeowners who possess investment capital. Without corrective mechanisms, this dynamic can reinforce existing structural inequalities. To address this issue, the plan introduces a series of instruments aimed at expanding access to transition measures. These instruments are designed to reduce financial, administrative, and informational barriers for those most affected by energy and transport insecurity.

The logic behind these interventions is based on three key strategies. First, public support will be adjusted according to the financial resources available to each household and micro-enterprises. Second, innovative financing mechanisms will be developed to match the contributory capacities of different population groups. Third, stronger incentives will be introduced to encourage the rental of renovated buildings within a regulated framework that promotes social inclusion.

To ensure the consistency and effectiveness of these actions, the establishment of a structured and transparent system for monitoring energy poverty is considered essential. Reliable indicators are necessary to evaluate the impact of implemented policies, anticipate potential negative effects, and make timely adjustments when needed.

The importance of such monitoring was strongly emphasized during the consultation process conducted as part of the development of the Social Climate Plan. Many participants highlighted the need for a transparent, accessible, and responsive system to measure the social effects of climate policies. This monitoring system must be fully integrated into the implementation of the Social Climate Plan and serve as a key instrument for policy steering, accountability, and real-time adjustment. Furthermore, the monitoring mechanism will contribute to greater transparency in the design and justification of subsidy programmes. By providing objective and continuous data, it will

enable more accurate targeting of needs, facilitate the evaluation of existing measures, and ensure that public aid is based on verifiable and equitable criteria.

1.2. Overview of current policy landscape

Current policies include measures from the NECP, the government programme, and initiatives under the responsibility of the MFSVA. For clarity and ease of reference, the following measures are presented by sector.

Building Sector

- Just Transition Fund (No.1)
- Update of the long-term building renovation strategy (No.2)
- *Klimabonus Wunnen* Subsidy programm (N°3)
- Pre-Financing under the *Klimabonus Wunnen* subsidy programm (No.4)
- Pre-Financing of photovoltaic solar installations (No.5)
- Pre-Financing of the 'Topup Social' energy efficiency improvement grant (No.6)
- Individual housing assistance for energy efficiency improvements (No.7)
- Overhaul of the Climate Loans (No.8)
- Establishment of a national entity supporting energy renovation, Decarbonization, and photovoltaic installation in residential buildings (No.9)
- Energy renovation of vacant dwellings (No.10)
- State aid for the energy renovation of functional buildings (No.11)
- Facilitation of energy-related work in co-owned buildings (No.12)
- Study on the rental challenges of the energy transition (No.13)
- Financial contributions to the construction of affordable rental and sale housing (*Aides à la pierre*) (No.14)
- Support for the installation of photovoltaic systems on affordable housing (No.15)
- Installation of photovoltaic systems on residential buildings (No.16)
- Social leasing – heat pumps and photovoltaic panels (No.17)
- 'State Energy Community' for sharing renewable electricity with vulnerable households and micro-enterprises (No.18)
- Awareness-raising, information, and advisory services on buildings (No.19)
- Assistance for energy-poor households (No.20)
- Specialised energy advisory service for replacing fossil fuel heating systems with renewable solutions (No.21)
- Strengthening the social dimension of the *Climate Pact 2.0* with municipalities (No.22)
- Climate Pact for Businesses (SMEs) (*Klimapakt fir Betriber*) – Basic advisory services for vulnerable micro-enterprises (No.23)
- General aid for SMEs – Investment support (No.24)
- Subsidy programm for businesses – Environmental and climate protection (No.25)
- SME Packages-Sustainability (No.26)
- State contribution to electricity network usage costs (No.27)
- Administrative simplification for micro-enterprises (No. 28)
- Zero-interest "Competitiveness and Sustainability Loan" (No. 29)

Building policies are designed to accelerate the energy transition of the national building stock while promoting social equity and addressing energy poverty. The central objective is the gradual

decarbonization of the residential sector, primarily through the phased phase-out of fossil fuel heating systems and the widespread promotion of energy-efficient renovation.

Various financial instruments—such as the *Klimabonus Wunnen*, energy efficiency subsidies, interest subsidies, and state guarantees for climate loans—support households in undertaking renovation work. These measures are further reinforced by tax incentives, individual housing assistance, and public investment in the development of affordable housing, both for rental and ownership. It is worth noting that some of these subsidies are currently under review.

Luxembourg also places strong emphasis on citizen engagement and awareness-raising through targeted information campaigns, advisory services, and technical guidance. Specific measures have been introduced to facilitate energy renovations in co-owned properties, while pilot projects—such as the neighbourhood renovation initiative in Differdange—enable integrated approaches to be tested and refined at the local level.

In Luxembourg, people who struggle to cover their domestic energy costs can benefit from structured and supportive social assistance. When a consumer is unable to pay for their drinking-water supply or domestic energy costs, and if they meet the eligibility criteria for social assistance, they may, upon request, be supported by the competent social office to ensure a minimum energy supply. This guarantee provides access to electricity and the energy required for adequate heating, meal preparation, and lighting within the home.

Furthermore, the development of renewable energy production and self-consumption is actively promoted through a range of initiatives supporting the installation of photovoltaic panels. These include financial support for affordable housing equipment and regulatory frameworks for new buildings. Simple and low-cost solutions, such as balcony power stations, complement this strategy by expanding access to decentralized energy generation.

In the medium term, the establishment of a national entity dedicated to assisting citizens with renovation and decarbonization efforts will further strengthen the implementation and coordination of these policies.

Transport sector

- Expansion of publicly accessible charging infrastructure (No.30)
- Right to a charging station (No.31)
- Transport on demand (No.32)
- Awareness-raising, information, and advisory services on mobility (No.33)
- Awareness-raising, information, and advisory for citizens promoting behavioural change and a favourable environment for citizen engagement (No.34)
- *Klimabonus Mobilitéit* – Subsidy programm for zero-emission vehicles (No.35)
- Financial aid for second-hand electric cars (No.36)
- Financial aid for electric bicycles (No.37)
- Financial aid for the installation of private electric vehicle charging station (No.38)
- Free and promoted public transport (No.39)
- Development of car sharing and bike sharing (No.40)
- Social car leasing (No.41)

Current mobility policies pursue multiple objectives, with a focus on ecological transition, social justice, and improved quality of life. Central to these efforts is the reduction of greenhouse gas emissions from the transport sector by promoting sustainable alternatives to private combustion-engine vehicles. Key strategies include the provision of free public transport, the development of

active mobility options such as walking and cycling, and the implementation of on-demand transport services like the *Ruffbus*.

At the same time, electrifying Luxembourg's registered vehicle fleet remains a central pillar of the national mobility strategy. To accelerate this transition, subsidy programmes have been introduced to support the purchase of zero-CO₂ vehicles and bicycles, as well as the installation of private charging stations. These efforts are reinforced by the expansion of the public charging network and the establishment of a right to charging stations in condominiums, aimed at removing structural barriers to electric mobility. In parallel, the electrification of public transport is advancing, with a particular focus on modernizing bus fleets and extending the tram network.

Businesses are also called upon to play an active role by developing mobility plans and accessing public subsidies aligned with their climate and environmental commitments. Together, these measures are designed to foster sustainable structural and behavioural change, bridging the goals of energy transition and social inclusion at the national level.

Direct Income Support

- Social financial compensation for CO₂ tax (No.42)
- CO₂ Tax Credit (crédit d'impôt CO₂ - CI-CO₂) (No.43)
- Consolidation and simplification of support schemes for vulnerable households: creation of the 'cost-of-living supplement' (No.44)
- Creation of a one-stop social service centre (No.45)

In the context of the climate transition, Luxembourg's direct income support policies are designed to mitigate the socio-economic impacts of environmental measures, particularly for the most vulnerable households. These policies form part of a broader climate justice approach, which seeks to ensure that the shift to a low-carbon economy does not come at the expense of low-income populations.

Key measures include the regular adjustment of the cost-of-living benefit and the increase in the energy allowance as well as the automatic support for recipients of the Social Inclusion Income (REVIS). These initiatives aim to support the vulnerable households in the face of rising energy and commodity prices.

Complementary funding has also been allocated to cover increased energy costs in residential care facilities for the elderly, thereby preserving the financial stability of these essential institutions and maintaining the quality of life for their residents.

At the core of this strategy is the CO₂ Tax Credit (CI-CO₂)—a fiscal instrument designed to offset the financial burden of the CO₂ tax. Introduced in the spirit of fairness, this mechanism redistributes a portion of carbon tax revenues to households, considering their socio-economic circumstances. It serves as a lever for climate solidarity, acknowledging that some households have limited capacity to absorb the costs associated with the energy transition. The CI-CO₂ thus reinforces the social acceptability of carbon pricing, while upholding the 'polluter pays' principle in a progressive and equitable manner.

Together, these measures ensure that the energy transition remains socially just, inclusive, and sustainable, by enhancing the economic resilience of those most affected by climate-related policy changes.

1.3. Public consultation process

In accordance with Regulation (EU) 2023/955 and the relevant national legal framework, the preparation of Luxembourg's Social Climate Plan was accompanied by a structured, multi-phase consultation process. This approach was designed to ensure the early and broad involvement of all relevant stakeholders.

An initial informal consultation phase was launched at the end of March 2025 via an online questionnaire, accessible through the participatory platform www.zesumme-vereinfachen.lu, and remained open until the end of April 2025. The primary objective was to engage a diverse range of actors from the outset and to collect a wide spectrum of field-based insights and perspectives. The questionnaire focused on both the evaluation of existing and planned measures and the collection of suggestions for new initiatives and potential avenues for action. A formal call for contributions was extended to representatives from the social sector, civil society, local authorities, housing associations, trade unions, youth organizations, professional chambers, as well as stakeholders from the research, energy, and transport sectors, and organisations promoting gender equality. In total, 27 organisations submitted contributions, reflecting a strong commitment to participatory policy-making and inclusive climate governance.

The results of the consultation can be summarised as follows:

- Broad consensus on the need for increased financial support.
- Concerns regarding financial accessibility and perceived inequities in access to support measures, particularly affecting tenants.
- Criticism of administrative complexity of the schemes, with existing procedures viewed as lengthy and complex.
- Lack of information and awareness about available support schemes, highlighting the need for more proactive, targeted, and locally anchored communication strategies.
- Demand for simplification and proximity, including proposals for the creation of one-stop shops, automated aid allocation, and neutral, personalised support services.
- Calls for increased accountability among rental property owners, with suggestions for incentives or obligations, such as rent caps for poorly insulated housing.
- A general appeal for inclusive climate justice, emphasising the importance of integrating social equity into climate policies to guarantee a fair transition.

Subsequently, a second and more technical phase of consultation was conducted in June 2025 through bilateral exchanges with key stakeholders. These discussions provided an opportunity to examine specific components of the Social Climate Plan in greater detail and to collect targeted feedback on the proposed measures. Participants included trade union representatives, climate-focused NGOs, social sector organizations, and social housing stakeholders. The exchanges offered a framework for open dialogue, enabling stakeholders to articulate their priorities, share field-based expertise, and propose concrete policy recommendations. They also helped to identify more precisely the barriers faced by target groups, as well as the key levers for action to be prioritized.

Following the approval of the draft by the Council of Government in autumn 2025, a third phase of public consultation was organised from 29 October 2025 to 16 January 2026. This phase targeted the general public, thereby allowing the entire population to participate in the process. On the website zesumme-vereinfachen.lu, the draft SCP was presented, and all citizens were able to submit comments, propose suggestions and give their views. Furthermore, a public information session took place on 19 November 2025 on the premises of Klima-Agence, during which the draft plan was presented and discussed with interested citizens, who also put forward suggestions.

In total, thirteen individual contributions were officially submitted by seventeen citizens and organisations, to which were added two official opinions—from the Platform for Climate Action and Energy Transition, and from the Climate Policy Observatory—in accordance with the requirements of the Climate Law of 15 December 2020. These two contributions are also available in the appendix.

All contributions from the various conventional and non-conventional consultations were compiled, analysed and duly considered through an intrinsically collaborative approach between the ministries concerned. The results can be summarised as follows:

General Findings

Stakeholders emphasise that the implementation of the SCP measures requires close cooperation between all relevant actors. Certain definitions—particularly those of ‘energy poverty’ and ‘vulnerable households’—remain insufficiently precise, which may complicate the targeting, implementation and evaluation of measures. Participants also recommend the use of up-to-date indicators, clarity regarding ministerial responsibilities, the establishment of a precise implementation timetable, and transparent participation of all actors.

Secure data access must be ensured between ministries, municipalities and social offices, with STATEC playing a crucial role in this regard. In terms of financing, stakeholders request clarification of budgets, multiannual planning, and rigorous monitoring of the efficient use of FSC funds. Municipalities are considered key partners and require both financial and technical support. Finally, transparency is deemed essential when integrating the platform’s proposals into the SCP, and the platform should be regularly involved in the monitoring and evaluation of the implementation and impacts of the measures.

Buildings

In the buildings sector, it is recommended to prioritise the pre-financing of energy renovation works and to clearly identify the responsible point of contact for their implementation. The central role of property owners is reiterated to ensure the effectiveness of measures, while stakeholders note that tenants remain insufficiently targeted by existing schemes. There is broad agreement on the importance of incentive measures as well as the introduction of new obligations or more stringent measures.

With regard to the energy renovation of vacant dwellings, participants stress the need for an in-depth analysis and further discussion. Several contributions also propose complementing business support schemes with a ‘top-up’ specifically for vulnerable micro-enterprises.

Transport

In the transport sector, stakeholders insist on the importance of developing public charging infrastructure in areas with high demand, while ensuring affordable tariffs for vulnerable households. Among the new measures proposed are the organisation of calls for tenders to support the electrification of production processes—including for small SMEs—as well as the expansion of car-sharing and shared mobility solutions, taking into account the specificities of border regions.

1.4. Definitions

The framework of the Social Climate Fund foresees the development of definitions for three target groups, in accordance with the provisions of European Regulation (EU) 2023/955, identified as being

particularly affected by the costs associated with the new emissions trading system for buildings and road transport. In this context, definitions have been developed to adapt them to the Luxembourgish context. It should be emphasized that these definitions are intended for statistical purposes, aiming to ensure data comparability, without serving as operational targets or setting specific values for every identified measure.

- Vulnerable Households

Regulation (EU) 2023/955 of the European Parliament defines ‘vulnerable households’ as follows: ‘households in energy poverty or households, including low income and lower middle-income ones, that are significantly affected by the price impacts of the inclusion of greenhouse gas emissions from buildings within the scope of Directive 2003/87/EC and lack the means to renovate the building they occupy.’

This definition provides a general framework for identifying vulnerable households across Member States. In Luxembourg, identification is based on a nationally developed methodology for measuring and monitoring energy poverty.

Energy poverty is defined differently depending on the economic context. In developing countries, it typically refers to a lack of access to basic energy services. In industrialised countries, by contrast, it is more commonly associated with an excessive financial burden resulting from energy expenditures relative to household income. Luxembourg has established a national indicator to quantify and monitor energy poverty: the combined TEE & BRDE indicator. This tool enables the exclusion of cases involving energy waste or situations where the energy effort rate is deemed acceptable, while also accounting for the level of household poverty. According to this indicator, households are considered to be in energy poverty when they face high energy bills, have low incomes, and reside in poorly performing housing in terms of energy efficiency.

To quantify energy poverty, STATEC (Di Falco, Thunus, and Zardet, 2021⁴) primarily relies on two indicators:

- High Energy Expenditure Ratio (taux d’effort énergétique - TEE)

$$TEE = \frac{\text{Dépenses énergétiques du ménage}}{\text{Revenu du ménage}} > 2 \times \text{Valeur médiane nationale en 2012}$$

- Low-Income, High-Energy Expenditure (Bas revenu, dépenses élevées - BRDE)

$$BRDE = \begin{cases} \frac{\text{Dépenses énergétiques du ménage}}{\text{par unités de consommation}} > \text{Valeur médiane nationale en 2012} \\ (\text{Revenu net du ménage} - \text{Charges du logement}) < 60\% \times \\ \text{Médian du (Revenu net du ménage} - \text{Charges du logement) en 2012} \end{cases}$$

The TEE indicator is widely used in scientific literature (Legendre & Ricci, 2015⁵) due to its simplicity in calculation and interpretation. However, it does not account for income levels, which means that households with high energy consumption—regardless of their financial capacity—may be classified as energy poor. In contrast, the BRDE indicator applies a more restrictive approach: it identifies only those households whose income falls below 60% of the median net income (after housing costs)

⁴ Di Falco, E., O. Thunus, et G. Zardet (2021). Analyse sur la précarité énergétique au Luxembourg. Working Paper.

⁵ Legendre, B., & O. Ricci. (2015). Measuring fuel poverty in France: Which households are the most fuel vulnerable? Energy Economics 49: 620-628.

and whose energy expenditure exceeds the national median. In addition to these two objective indicators, two subjective measures of energy poverty are also considered. These are based on household self-reporting and include: (i) the inability to adequately heat the home during winter, and (ii) difficulties in paying energy bills.

Following the methodology developed by Di Falco and her colleagues, STATEC selected 2012 as the reference year. In that year, the national median TEE threshold was 7.2%, meaning that any household spending more than this proportion of its income on energy was in energy poverty. For the BRDE indicator, the median energy expenditure per consumption unit was €1,194 per year, while the low-income threshold, defined as 60% of the median net income after housing costs, was €17,263 per year, or approximately €1,438 per month. As of 2024, energy poverty affected approximately 4,1% of households.

Furthermore, some households facing financial constraints may voluntarily limit their energy consumption—not as a result of personal choice or energy-efficiency improvements, but out of economic necessity. This self-restriction can lead to a misleading perception of their situation, insofar as low consumption may incorrectly be interpreted as an absence of vulnerability.

The occupancy status of a household is also an important dimension of energy poverty, as it determines the degree of control households have over their living conditions. Homeowners are generally more independent, while tenants face greater limitations in the choices available to them.

Household vulnerability in Luxembourg is not limited to energy poverty alone and depends on multiple socio-economic factors. Certain population groups—such as children under 18, single-parent families and people with only basic education—are more exposed to social and economic risks, in a context where the at-risk-of-poverty rate stands at 18.1% in 2024. However, these situations are not always fully reflected in the definitions and indicators currently used, highlighting the complexity of the concept of vulnerability and showing that energy poverty represents only one facet of a broader, multidimensional form of social vulnerability.

This integrative approach is further reflected in the National Climate Change Adaptation Strategy, which understands vulnerability as a multidimensional concept, combining social, economic, territorial and environmental factors in relation to the impacts of climate change.

– **Vulnerable transport users**

Regulation (EU) 2023/955 of the European Parliament defines *vulnerable transport users* as: ‘individuals and households in transport poverty, but also individuals and households, including low income and lower middle-income ones, that are significantly affected by the price impacts of the inclusion of greenhouse gas emissions from road transport within the scope of Directive 2003/87/EC and lack the means to purchase zero- and low-emission vehicles or to switch to alternative sustainable modes of transport, including public transport.’

As part of the Social Climate Plan, Luxembourg adopts the definition proposed in the study on the feasibility of introducing a social car-leasing scheme in Luxembourg, according to which transport vulnerability refers to the situation of households that, due to economic, geographical or social constraints, have limited access to reliable and affordable means of transport. This restriction reduces their ability to participate fully in employment, education and essential services. Transport vulnerability may be assessed using socio-economic criteria (income, eligibility for social assistance, household composition), mobility indicators (distance between home and workplace, use of a private vehicle, access to public transport or car-sharing), and the availability of infrastructure

(charging points, car-sharing stations). Vulnerable transport users combine a high need for mobility with limited resources, while others may be affected primarily by financial barriers or inadequate access to sustainable mobility alternatives.

However, this qualitative description raises certain challenges: when mobility patterns are described using average statistics based on commuting and daytime travel, it must be stressed that these aggregates systematically under-represent non-standard user profiles, such as shift workers, employees working split shifts, night workers, or households with care responsibilities. Their journeys take place outside the time windows and service conditions considered in conventional mobility planning, exposing them to structurally higher constraints that remain invisible in aggregated indicators.

– **Vulnerable micro-enterprises**

The Commission Recommendation of 6 May 2003 on the definition of micro, small, and medium-sized enterprises classifies a micro-enterprise as a business that employs fewer than 10 persons and has an annual turnover or balance sheet total not exceeding EUR 2 million.

According to Regulation (EU) 2023/955 establishing the Social Climate Fund, *vulnerable micro-enterprises* are defined as: ‘micro-enterprises that are significantly affected by the price impacts of the inclusion of greenhouse gas emissions from buildings or road transport within the scope of Directive 2003/87/EC and that, for the purpose of their activity, lack the means either to renovate the building they occupy, or to purchase zero- and low-emission vehicles or to switch to alternative sustainable modes of transport, including public transport, as relevant.’ This definition establishes the relevant context, but it does not provide sufficient criteria to clearly distinguish these enterprises from others.

To identify a measurable indicator for reaching vulnerable micro-enterprises—while respecting the definition provided in Regulation (EU) 2023/955—it is appropriate to examine the subsidy programmes implemented in Luxembourg for businesses particularly affected by rising energy prices following Russia’s aggression against Ukraine. These schemes, which remained in effect until mid-2024, established a clear link between energy consumption, incurred costs, and the financial situation of the affected enterprises. A similar logic applies to the anticipated impact of price increases resulting from the extension of the emissions trading scheme to the building and road transport sectors under Directive 2003/87/EC (hereinafter referred to as ETS2). The indicators used to target businesses under previous energy-related subsidy programmes will also serve as relevant vulnerability indicators in this context. Accordingly, a vulnerable micro-enterprise is defined as a *micro-enterprise that is a large energy consumer*—specifically, one whose energy costs account for at least 3% of its annual turnover.

Such enterprises are considered vulnerable due to their high energy consumption relative to their size and their resulting dependence on fossil energy sources, which remains largely unavoidable at present. This analytical approach aligns closely with the principles underpinning the Social Climate Plan, serving the interests of businesses, their employees, and the broader (social) economy in Luxembourg. The measures proposed are designed to shield vulnerable micro-enterprises from the expected price increases under ETS2. They focus on both raising awareness and providing targeted support in the areas of building renovation and transport. For the purposes of eligible costs, only fossil energy carriers – such as natural gas, heating oil, diesel and petrol – will be taken into account.

1.5. Projected impact on vulnerable groups

This report is based on a static analysis comparing the situation observed in 2024— the most recent year for which all required data are available— with a hypothetical scenario incorporating a CO₂ price aligned with the estimated ETS2 price at its introduction in 2028. The analysis does not constitute a time-based forecast; rather, it aims to quantify the direct effects of an increase in the carbon price. In 2024, the national CO₂ tax stood at €35/t, while the ETS2 scenario assumes a price of €45/t, representing an increase of €10/t (+29%).

The following report examines, in turn, the impact of this increase on energy prices, household energy poverty, the compensatory role of the CO₂ tax credit (CI-CO₂), the effect on businesses and the potential effects on greenhouse-gas emissions.

Household expenditure data are taken from the 2024 Household Budget Survey (EBM), data relating to the tax credit come from IGSS, and company-related data derive from the 2024 NAMEA (National Accounting Matrix with Environmental Accounts). Energy-poverty indicators are calculated using merged SILC and EBM survey data.

1.5.1. Prices of fossil energies

The increase in the CO₂ price mechanically results in a rise in fossil-energy prices, since the carbon tax is incorporated into the final prices paid by consumers. The analysis shows that an increase from €35/t to €45/t would have led, in 2024, to price rises of between 2% and 4.5%, depending on the type of energy concerned.

	<i>Gaz</i> ⁶	<i>Heating oil</i>	<i>Diesel</i>	<i>Petrol</i>
Price in 2024	0.949 €/m ³	0.790 €/l	1.485 €/l	1.537 €/l
Hypothetical ETS2 price	0.973 €/m ³	0.825 €/l	1.518 €/l	1.568 €/l
Price increase	2.5%	4.5%	2.3%	2.0%

Table 1: Price of fossil energies Source: STATEC

This increase remains relatively moderate when compared with the high volatility observed on energy markets in recent years. Nevertheless, it directly affects household budgets, particularly for those who rely heavily on fossil fuels for heating and mobility.

However, it is important to highlight a significant uncertainty: in a ‘cap-and-trade’ system such as ETS2, the carbon price is not set in advance and may fluctuate depending on market conditions. Moreover, there is no guarantee that suppliers will fully pass on the CO₂ cost to final prices. The analysis therefore assumes full transmission of the carbon price to consumers, which represents a conservative scenario from the perspective of the impact on households.

Another point to keep in mind is that, if the general level of energy prices is higher (or lower), the relative impact of the increase in the carbon price on overall price levels will be lower (or higher).

1.5.2. Energy poverty

Energy-poverty indicators

Based on the TEE and BRDE indicators, the analysis shows that a €10/t increase in the CO₂ price would have only a marginal impact on energy poverty. Depending on the indicator used, the rise in the

⁶ Average prices (including VAT) for a residential customer in Luxembourg with an annual gas consumption of 2,426 m³.

energy-poverty rate ranges between 0.1 and 0.3 percentage points. This limited change is explained in particular by the fact that CO₂-related expenditure represents only a relatively small share of the total energy bill.

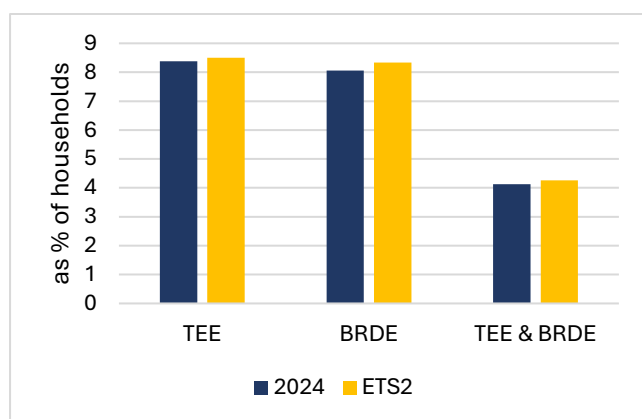


Figure 1: Household energy-poverty rate. Source: STATEC

It is important to note that these indicators do not take fuel expenditure into account, which tends to underestimate the overall impact of the carbon price, particularly for households that depend on private cars.

Differences according to residential occupancy status

The analysis also differentiates households according to their occupancy status. Tenants are generally more exposed to energy poverty than homeowners. In 2024, the energy-poverty rates measured by the TEE and BRDE indicators were significantly higher for tenants than for owners.

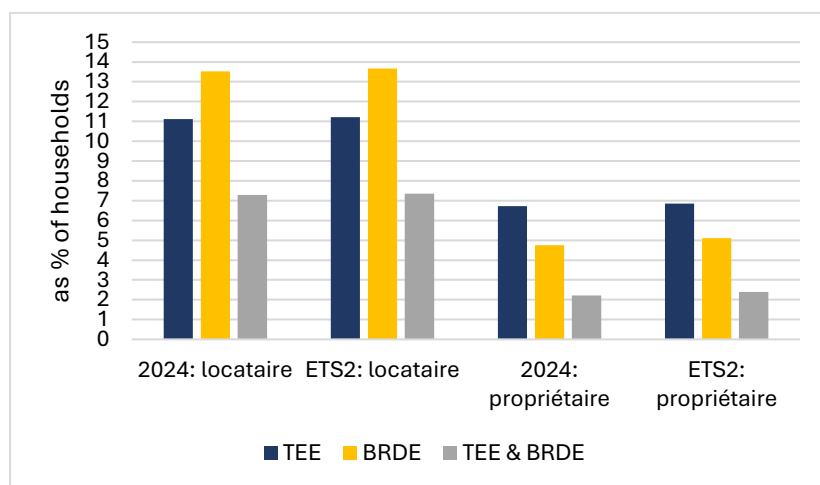


Figure 2: Energy-poverty rate by occupancy status. Source: STATEC

However, the additional impact of ETS2 remains limited, regardless of the household's occupancy status. The increase in energy poverty linked to the rise in the CO₂ price ranges from 0.1 to 0.35 percentage points for both tenants and homeowners. These results suggest that, although energy poverty continues to represent an important social challenge, ETS2 is not, in itself, a major driver of short-term deterioration.

	TEE	BRDE	TEE & BRDE
2024	21865	21032	10776
ETS2	22169	21733	11119
Difference	304	701	343

Table 2: Households in energy poverty by indicator. Source: STATEC

1.5.3. CO₂-related expenditure in households' energy bills

Expenditure directly attributable to CO₂ represents, depending on income quintile, between 5% and 10% of the total energy bill. Their relatively limited weight explains the moderate impact observed on energy-poverty indicators. By comparison, market energy prices, other components of energy bills—such as excise duties and network charges—as well as the quantities of energy consumed can play a more decisive role in the evolution of energy poverty.

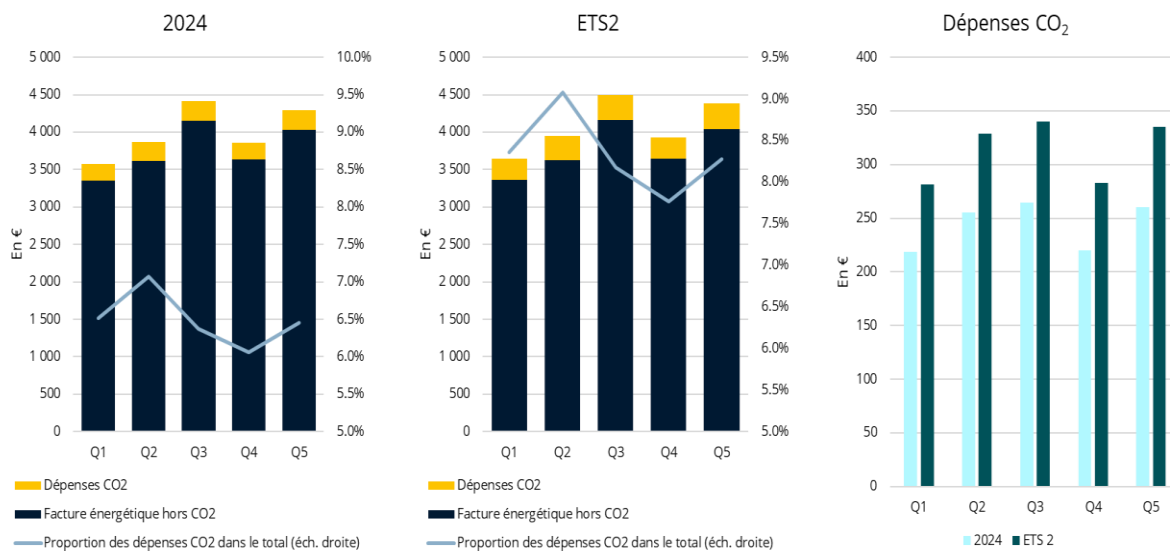


Figure 3: CO₂ expenditure within the household energy bill. Source: STATEC

1.5.4. Impact on micro-enterprises

The introduction of ETS2 concerns not only households but also businesses that are not covered by the existing ETS system. In this respect, the SCP also provides for specific measures in favour of micro-enterprises that are vulnerable to the introduction of ETS2. The analysis shows that, overall, an increase in the CO₂ price would have only a limited impact on businesses: the additional costs would remain below 0.5% of intermediate consumption or gross value added across the various economic sectors. However, the transport sector would record the highest relative increase compared with its intermediate consumption, due to its strong dependence on fuels.

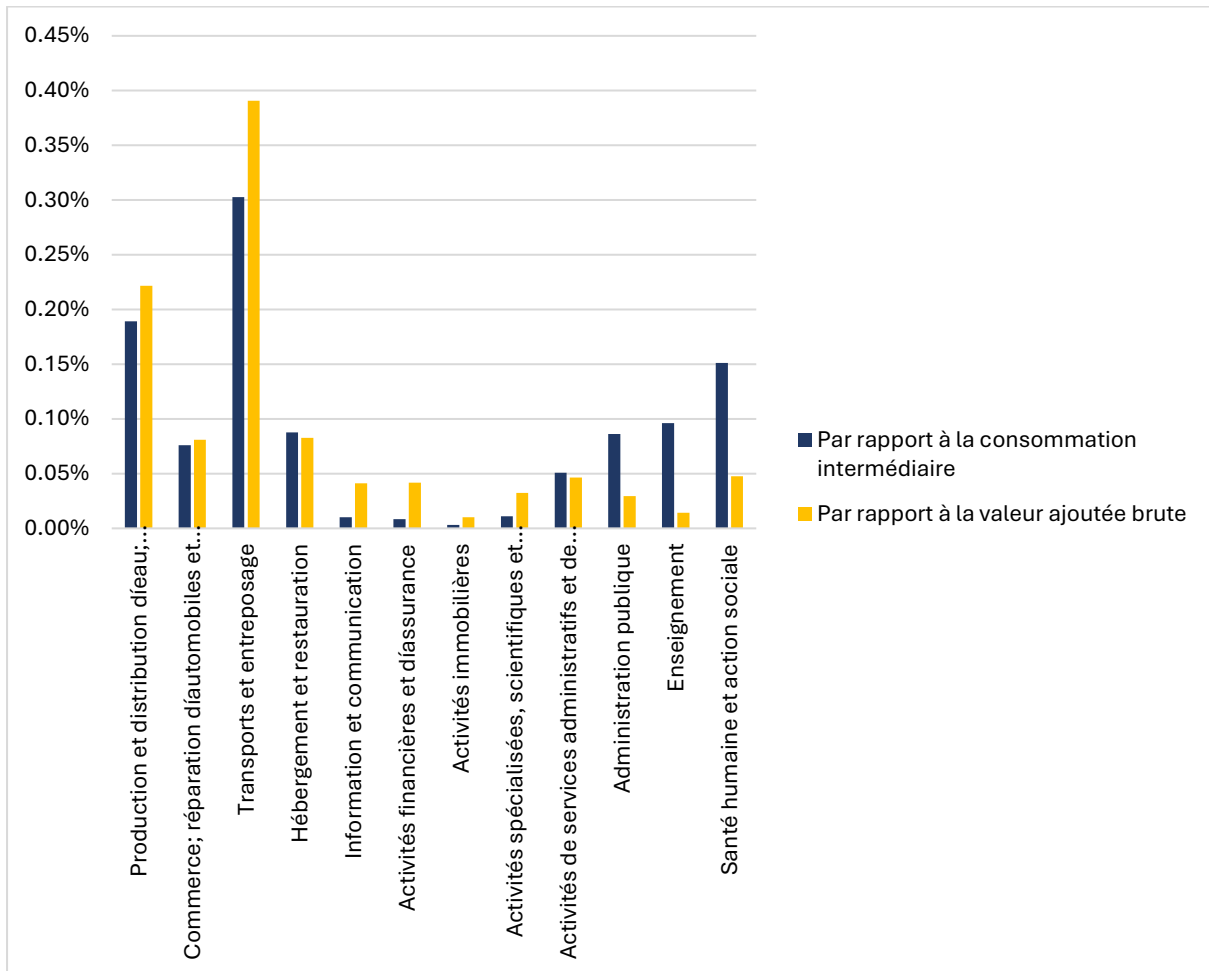


Figure 4: Additional costs linked to the increase in the CO₂ price for businesses. Source: STATEC

1.5.5. Impact on greenhouse-gas emissions

Scenarios

The transport sector is responsible for around 60% of Luxembourg's GHG emissions. These emissions depend heavily on fuel sales to non-residents, which makes the country particularly sensitive to price differences with neighbouring countries.

Two scenarios were analysed:

- Scenario 1: increase in the CO₂ price only in Luxembourg (€45/t), with no change in neighbouring countries;
- Scenario 2: introduction of a carbon price of at least €45/t in neighbouring countries, particularly Belgium.

Scenario	Luxembourg	Neighbouring countries
2024	35 €	No change
ETS2 : Scenario 1	45 €	No change
ETS2 : Scenario 2	45 €	At least 45€

Table 3: Carbon prices in the different scenarios. Source: STATEC

Scenario results

In Scenario 1, an increase of €10/t in the CO₂ price would lead to a reduction in emissions of around 3%, due to a decrease in fuel sales to non-residents.

Conversely, in Scenario 2, the introduction of a similar carbon price in neighbouring countries would make Luxembourg's prices more attractive again. Despite the increase in the CO₂ price in Luxembourg, emissions would then rise by around 2%.

Across all scenarios analysed, total emissions in 2024 would nevertheless remain below the target set by the Climate Law.

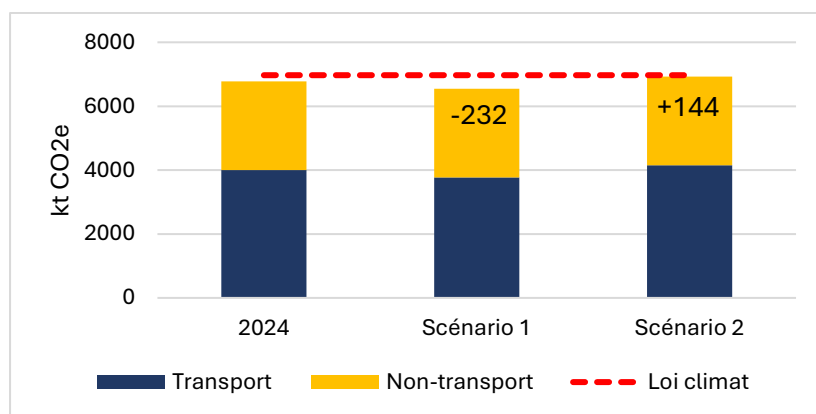


Figure 5: GHG emissions in the different scenarios⁷. Source: STATEC

Conclusion

This analysis shows that the introduction of ETS2, simulated through an increase in the carbon price from €35/t to €45/t, would have overall moderate effects in Luxembourg. The rise in fossil-energy prices would remain limited. Consequently, the direct impact on household energy poverty would be marginal, regardless of occupancy status.

The CO₂ tax credit plays a central role in mitigating the price increases linked to the carbon tax for low-income households. In its current form, it offsets a large part of the impact for households in the lowest income quintiles, although an adjustment of the amounts and, potentially, of the income thresholds would be necessary to ensure full compensation in the event of a sustained rise in the carbon price. In the longer term, technological developments and the wider uptake of low-carbon solutions could, however, reduce the need for compensation.

For businesses, the analysis shows that ETS2 would generate only limited additional costs—below 0.5% of intermediate consumption or gross value added—with the transport sector being the most exposed due to its strong reliance on fossil fuels.

Finally, the effects of ETS2 on greenhouse-gas emissions depend heavily on the international context. As a small open economy, Luxembourg is particularly sensitive to differences in carbon prices with neighbouring countries, especially regarding fuel sales to non-residents. These results highlight the importance of close European coordination to ensure the environmental effectiveness of the mechanism. In all scenarios analysed, emissions nevertheless remain in line with national climate targets.

⁷ The figures shown in the chart indicate the difference in emissions across the various scenarios compared with the level of emissions observed in 2024

2. DESCRIPTION OF MEASURES, INVESTMENTS, INTERMEDIATE VALUES, AND FINAL OBJECTIVES

2.1. Component C1 – building sector

The building sector is a key lever for achieving climate objectives while promoting social justice. According to the provisional greenhouse gas emissions report for 2024, it accounts for 19.7% of total emissions.⁸

Several cross-cutting priority areas must be identified to ensure an integrated, inclusive, and responsive approach to energy and social challenges.

First and foremost, the systematic integration of social impacts into the development of climate policy measures is essential. Energy renovation policies should reflect the socio-economic realities of vulnerable households and micro-enterprises with limited resources, to ensure both fairness and effectiveness. This entails not only the precise targeting of financial aid, but also the adaptation of support mechanisms—particularly for vulnerable groups, including tenants and resource-constrained micro-enterprises.

At the same time, support for infrastructure projects in the building sector—including collective energy renovations, sustainable social housing initiatives, and the installation of renewable energy at the local level—must be reinforced. These initiatives, often driven by local or community dynamics, enable the pooling of resources, reduce costs for households, and optimize environmental impact. They also contribute to improving quality of life, combating energy poverty, and strengthening social cohesion within neighbourhoods.

The immediate urban environment of buildings—streets, squares, and public spaces—plays a central role in fostering a sustainable and socially equitable living environment. These spaces should be upgraded as areas of proximity, social connection, and shared well-being, particularly in disadvantaged neighbourhoods where green spaces are scarce or housing suffers from poor comfort and energy performance. Such areas, marked by overlapping social and environmental vulnerabilities, require targeted attention in transition policies.

Rethinking public spaces through the lens of social and climate justice is therefore a vital lever for driving an inclusive ecological transition.

⁸ Publication du bilan définitif des émissions de gaz à effet de serre de l'année 2024 (AEV) <https://environnement.public.lu/fr/klima-an-energie/changement-climatique/inventaire-ges0/bilan-provisoire-2024.html>

Measure Title	No. 1 Just Transition Fund
Description	<p>The Just Transition Fund (JTF), one of the pillars of the European Union’s Just Transition Mechanism, is a financial instrument under EU cohesion policy. Its primary objective is to co-finance projects—up to 50%—that support territories most severely affected by the adverse impacts of the transition to a climate-neutral EU economy by 2050.</p> <p>In Luxembourg, the JTF is implemented through the ERDF and ESF+ programmes, each of which includes a dedicated priority axis for the fund. The Grand Duchy’s national allocation for the JTF amounts to approximately €9.2 million, with around 80% of resources allocated to the ERDF programme and 20% to the ESF+ programme.</p> <p>While the operational framework of the JTF is governed by the ERDF and ESF+ programmes, its strategic framework is defined by the Territorial Just Transition Plan for Luxembourg (TJTP). This plan outlines the JTF’s intervention area, identifies the sectors undergoing transformation, sets development objectives, and specifies eligible operations. It was developed by the Department of Spatial Planning in close collaboration with the Ministry of the Economy (MECO, ERDF managing authority) and the Ministry of Labour (MT, ESF+ managing authority) and was approved by the European Commission in December 2022.</p> <p>To address the challenges of transition in the 11 municipalities of the southern region, the TJTP aims, first, to mitigate the costs of modernising affected sectors, combat energy poverty, promote sustainable local mobility, and develop renewable energy sources; and second, to support workers impacted by the transition through targeted training initiatives.</p>
Type of instrument	Economic
Target(s)	Vulnerable households
Responsible entity(ies)	MECO, MT
Reference(s)	<p>Measure No. 104 of the NECP</p> <p>Article 175 of the Treaty on the Functioning of the European Union</p> <p>Regulation (EU) 2021/1056 of the European Parliament and of the Council of 24 June 2021 establishing the Just Transition Fund</p>

Measure Title	No. 2 Update of the long-term building renovation strategy
Description	<p>Luxembourg's long-term renovation strategy (LTRS), published in 2020, provides a comprehensive overview of the national building stock, detailing building typologies and their respective energy consumption profiles. Based on this analysis, a series of targeted measures were proposed to accelerate the rate of energy renovations. These measures have since been integrated and updated within the 2024 Integrated National Energy and Climate Plan (NECP).</p> <p>A critical review of municipal planning instruments revealed several barriers to building renovation and the integration of solar energy solutions. In response, a proposal to harmonise municipal regulations concerning renewable energy sources and energy efficiency improvements in buildings has been submitted to local authorities. Additionally, a national regulation governing buildings, public roads, and sites is currently under development.</p> <p>In line with the European legislative framework, the renovation strategy must be updated every five years. Under Directive (EU) 2024/1275 on the energy performance of buildings (EPBD), the LTRS will evolve into the National Building Renovation Plan (NBRP). The final version of the NBRP must be adopted by 31 December 2026.</p>
Type of instrument	Planning
Target(s)	Vulnerable households & micro-enterprises
Responsible entity(ies)	MECO, Klima-Agence
Reference(s)	<p><i>Langfristige Renovierungsstrategie Luxemburg, MEA 2020</i></p> <p>Measure N°316 of the NECP</p>

Measure Title	No. 3 Klimabonus Wunnen subsidy programm
Description	<p>The existing subsidy programmes play a vital role in promoting energy-efficient renovation of housing and advancing the transition toward a more sustainable residential building stock. However, these schemes may encounter certain limitations, particularly regarding accessibility. In the spirit of continuous improvement and social equity, regular evaluations of the aid programme’s effectiveness are essential to ensure that financial support remains pragmatic, impactful, and equitable—while also contributing to national energy performance and emissions reduction targets.</p> <p>Accordingly, subsidies—especially those supporting the construction of sustainable housing, energy-efficient renovations, technical installations that promote renewable energy sources, and energy advisory services—are subject to regular, in-depth reviews. These assessments focus on their practical implementation, environmental impact, and social accessibility.</p> <p>The <i>Klimabonus Wunnen 2026</i> subsidy programm, effective from the 1st of January 2026, builds upon the current framework while introducing adjustments aimed at improving fairness and simplicity. Under the new scheme, flat-rate subsidies will be granted regardless of the power output of renewable energy installations. This revised calculation method enables owners of smaller homes with lower-capacity systems to receive proportionally higher support than before. Conversely, owners of larger homes will receive slightly reduced subsidies compared to the current scheme. In addition, the new scheme introduces the concept of leasing to finance technical installations that utilise renewable energy sources.</p> <p>A pre-financing mechanism for all <i>Klimabonus Wunnen</i> grants will also be introduced gradually, thereby widening access to energy-transition projects.</p>
Type of instrument	Economic
Target(s)	Vulnerable households
Responsible entity(ies)	MECB , MECO, Klima-Agence
Reference(s)	<p>Measure No. 307 of the NECP</p> <p>Law of 23 December 2016: Establishes an subsidy programm to promote sustainability, the rational use of energy, and the integration of renewable energy sources in the housing sector. It also amends the Law of 23 December 2004, which created</p>

	<p>the national greenhouse gas emission allowance trading system.</p> <p>Grand-Ducal Regulation of 7 April 2022: Defines the implementing measures for the amended Law of 23 December 2016. It also revises the Grand-Ducal Regulation of 23 December 2016, which originally set out the implementation details for the subsidy program promoting sustainability, energy efficiency, and renewable energy in housing.</p> <p>Draft bill establishing an aid scheme for the promotion of sustainability, the rational use of energy and renewable energy in the housing sector.</p>
--	--

Measure Title	No. 4 Pre-financing under the <i>Klimabonus Wunnen</i> subsidy programm
Description	<p>For many households, access to financing remains a significant barrier to undertaking energy renovation projects, replacing heating systems for decarbonization purposes, and installing photovoltaic panels. This structural constraint limits the reach and impact of national energy transition efforts.</p> <p>In pursuit of climate justice—and to ensure that participation in such projects is not limited to households or businesses eligible for traditional bank financing or climate loans—the government will gradually introduce mechanisms for the pre-financing of climate subsidies.</p> <p>Practically speaking, this will enable beneficiaries to advance only the portion of costs not covered by subsidies for eligible investments. Simultaneously, participating companies will promptly receive the public aid amounts, ensuring smooth project execution and reinforcing trust among economic stakeholders.</p> <p>Initially, this mechanism was implemented for financial aid relating to the installation of photovoltaic systems, with the possibility of adding a domestic battery (see measure No. 5).</p>
Type of instrument	Economic
Target(s)	Vulnerable households
Responsible entity(ies)	MECB, MECO, Klima-Agence
Reference(s)	Measure No. 309 of the NECP

Measure Title	No. 5 Pre-financing of photovoltaic solar installations
Description	<p>To pave the way for the implementation of the <i>Klimabonus</i> pre-financing mechanism (see Measure No. 4), the government has introduced this scheme to photovoltaic solar installations, with the option of adding a domestic battery. This new measure, which entered into force in January, enables households and co-ownerships to benefit immediately from the ‘Klimabonus Wunnen’ subsidy, which is deducted directly from the final invoice by the installer, without the need to wait for the State to pay out the aid.</p> <p>The two key objectives of this measure are: accelerating deployment and establishing a third-party payment system. This system ensures that homeowners only pay the difference between the total installation cost and the subsidy granted, while ensuring rapid payment of the subsidy to the installer. This measure helps to reduce upfront investment costs, simplify administrative procedures and encourage greater uptake of residential photovoltaics in Luxembourg..</p> <p>At this initial stage, applications for pre-financing are processed by the Ministry of the Economy (MECO), which already has an IT system capable of fast and efficient processing. This guarantees swift reimbursement to businesses. Meanwhile, the Environment Agency (AEV) is developing its own digital tool to take over the processing of applications once finalized.</p> <p>Insights gained from this initial rollout will inform the refinement and gradual expansion of the pre-financing mechanism to other components of the <i>Klimabonus Wunnen</i> scheme, ensuring its effectiveness and accessibility for all target groups.</p>
Type of instrument	Economic
Target(s)	Vulnerable households
Responsible entity(ies)	MECB, MECO, Klima-Agence
Reference(s)	<p>Measure No. 30 of the <i>Einfach – Séier – Erneierbar</i> (ESE) Process</p> <p>Bill No. 8463 Introducing a Pre-Financing Procedure for Solar Photovoltaic Installations</p> <p>Grand Ducal Regulation of 19 December 2025 laying down the procedures for applying for aid under the pre-financing scheme for photovoltaic solar installations and for registration in the register of approved installers.</p>

Measure Title	No. 6 Pre-financing of the ‘Topup Social’ energy efficiency improvement subsidy
Description	<p>The energy efficiency improvement subsidy—also referred to as the ‘Topup Social’ or <i>Klimabonus Wunnen top-up</i>—provides additional financial assistance to individuals undertaking work to make their homes more environmentally friendly and energy efficient. Eligible work must comply with the provisions outlined in Articles 4 or 5 of the amended law of 23 December 2016, which establishes a subsidy program for promoting sustainability, rational energy use, and renewable energy in the housing sector. This subsidy complements the support already granted under the <i>Klimabonus Wunnen</i> programme. The amount awarded through the top-up can reach up to 100% of the <i>Klimabonus</i> aid previously received.</p> <p>To further support vulnerable homeowners, the government is considering the introduction of a voucher system. Beyond its financial role, the voucher would streamline administrative procedures, which are often burdensome and complex for households facing multiple steps in the application process. It would also serve as a pre-financing mechanism, enabling beneficiaries to access the necessary funds upfront without having to advance the costs themselves. One potential avenue under consideration is the integration of this voucher system into the national energy renovation support entity (see Measure No. 9).</p>
Type of instrument	Economic
Target(s)	Vulnerable households
Responsible entity(ies)	MLOGAT
Reference(s)	<p>Measure No. 311 of the NECP</p> <p>Amended Law of 7 August 2023 on Individual Housing Assistance</p>

Measure Title	No. 7 Individual housing assistance for energy efficiency improvements
Description	<p>The amended law of 7 August 2023 on individual housing assistance introduces support measures that are conditional on household income. Its primary objective is to promote housing renovation and mitigate energy poverty caused by rising energy costs, through the following forms of assistance:</p> <ul style="list-style-type: none"> – Improvement grant for energy efficiency (Social Top-Up): This grant applies to renovation work carried out under Articles 4 or 5 of the amended law of 23 December 2016, which established a scheme to promote sustainability, rational energy use, and renewable energy in the housing sector. The ‘social top-up’ is awarded in addition to the financial assistance provided under the <i>Klimabonus Wunnen</i> scheme. It is available to households with an income up to the median standard of living (decile 5). The maximum amount of the bonus corresponds to 100% of the assistance granted under the <i>Klimabonus Wunnen</i> scheme. – Aid for energy efficiency improvements via climate loans: For renovation work financed through climate loans, a State guarantee and an interest subsidy are provided in addition to the financial assistance available under the <i>Klimabonus Wunnen</i> scheme. These measures support energy renovation efforts in residential dwellings. <p>In this context, the government intends to apply the pre-financing mechanism (measures No.4 and 5) to the energy efficiency improvement bonus (Topup Social) outlined in measure No.6, and to implement a comprehensive overhaul of the climate loan system (measure No.8).</p> <p>To enhance the effectiveness of the individual housing assistance scheme, the government will exclude the ‘Social Top-Up’ grant from the capital assistance ceiling—currently set at €35,000 per beneficiary—thereby reinforcing support for energy renovation efforts.</p> <p>As part of the program’s further development, it is also planned to introduce additional specific support for the acquisition of ‘Plug&Play’ balcony photovoltaic systems. This will enable the vulnerable households concerned to reduce their daily electricity expenses and directly benefit from the electricity produced for their domestic needs.</p>
Type of instrument	Economic
Target(s)	Vulnerable households
Responsible entity(ies)	MLOGAT

Reference(s)	Measure No. 311 of the NECP Amended Law of 7 August 2023 on Individual Housing Assistance
---------------------	--

Measure Title	No. 8 Overhaul of climate loans
Description	<p>For many households, access to financing remains a significant barrier to undertaking energy renovation work, replacing heating systems for decarbonization purposes, or installing photovoltaic equipment. This structural obstacle substantially undermines the effectiveness of public policies aimed at advancing the energy transition.</p> <p>In response, the government is considering a reform of the current climate loan scheme to enhance the investment capacity of low-income homeowners. This reform may include, where appropriate, adjusting interest rates based on the income level of the applicant household, as well as reassessing the ceiling on capital aid to better reflect the scale of investment required for meaningful energy renovation. The objective is to reinforce both the equity and social impact of the scheme.</p> <p>Given that certain income levels may be excluded by default from eligibility for the climate loan, as they do not allow compliance with the residual-income criterion after deducting fixed charges and loan repayments, further consideration will be required regarding the complementarity of the different financial-aid schemes, in order to ensure a coherent and accessible approach for the households concerned.</p>
Type of instrument	Economic
Target(s)	Vulnerable households
Responsible entity(ies)	MLOGAT, MECB, MECO
Reference(s)	Measure No. 310 of the NECP

Measure Title	No. 9 Establishment of a national entity supporting energy renovation, decarbonization, and photovoltaic installation in residential buildings
Description	<p>The energy renovation of the least efficient residential buildings represents a key lever for achieving national objectives related to greenhouse gas reduction, improved energy efficiency, and the expansion of renewable energy production. However, the complexity of administrative procedures, high associated costs, and the absence of continuous, structured support significantly hinder progress. In addition, the heterogeneity of the building stock and the lack of standardised approaches limit the feasibility of large-scale renovation efforts.</p> <p>In response, Luxembourg intends to strengthen support for owners of low-energy-performance residential buildings, fostering an ambitious, inclusive, and phased renovation dynamic. This initiative aligns with new European requirements under the Energy Performance of Buildings Directive (EPBD, (EU) 2024/1275), currently in the process of transposition.</p> <p>To structure this effort and provide active stakeholder support, the government plans to establish a national entity dedicated to energy renovation, decarbonization, and the installation of photovoltaic systems in residential buildings. This entity will offer end-to-end assistance—from identifying potential improvements to overseeing implementation—while integrating existing support mechanisms. It will target residential property owners, whether occupants or landlords, who voluntarily commit to energy renovation projects.</p> <p>The entity’s structure will be modelled on existing frameworks, such as the Klima-Agence. It will not replace market actors but will operate in close coordination with them—particularly certified energy advisers, members of the OAI, design offices, and skilled tradespeople—as is already the case under the Climate pact (pacte climat) for municipalities.</p> <p>The main roles of this entity will include:</p> <ul style="list-style-type: none"> - Identifying low-performance buildings based on energy performance certificates (EPCs) and nationally defined criteria. - Developing a national and local typology of targeted buildings to standardise renovation approaches and facilitate the planning of ambitious renovations. - Raising awareness and mobilising homeowners, in collaboration with municipalities, social services, the National Institute for Architectural Heritage (INPA), and other relevant stakeholders. - Managing and providing access to energy renovation advisors, sourced from existing market structures.

	<ul style="list-style-type: none"> - Supporting the planning, financing, and implementation of renovation, decarbonization, and photovoltaic installation measures. - Ensuring quality assurance through the certification of energy advisors. - Promoting existing financial subsidy programmes. - Assisting vulnerable households with subsidy applications, including the introduction of a voucher system (see Measure No. 11). <p>Initial pilot initiatives aimed at developing such an entity are currently being conducted under the <i>Zesumme rénoverieren</i> project, launched and led by the Klima-Agence. This project is testing an integrated approach built around a building typology—further refined using a renovation simulator—and the deployment of neighbourhood managers to support homeowners, engage local stakeholders, and facilitate coordination across the value chain.</p> <p>The planned expansion of this approach, now under development, underscores the relevance of establishing a single public point of contact capable of ensuring coordination, standardisation, and comprehensive support. In this context, the evolution of the Klima-Agence into a public ‘one-stop shop’ designed to provide enhanced assistance to various target groups emerges as a logical and strategic progression. This transformation would help make the challenges of energy and climate transition more tangible and accessible to Luxembourg society, across all issues related to energy efficiency and climate protection.</p>
Type of instrument	Regulatory, Research
Target(s)	Vulnerable households
Responsible entity(ies)	MECO , MECB, Klima-Agence
Reference(s)	Measure No. 327 - NECP

Measure Title	No. 10 Energy renovation of vacant dwellings
Description	<p>The government plans to launch a pilot project aimed at private property owners who have a vacant dwelling in need of energy renovation.</p> <p>The government would cover part of the energy renovation work for a vacant dwelling, on the condition that the owner makes the property available to a social housing provider for a specified period (for example, 10 or 20 years, as deemed appropriate).</p> <p>Government funding for the renovation work could be subject to a maximum amount, and the rate of support could depend on the duration for which the owner makes the dwelling available.</p> <p>The government would issue a call for projects aimed at private property owners meeting certain criteria. The State's financial contribution could be capped at a maximum amount.</p> <p>The results and feedback gathered as part of this pilot project may be capitalised on in future projects or schemes related to energy renovation and the creation of housing for vulnerable households, where appropriate also in the context of research activities.</p>
Type of instrument	Economic, Research
Target(s)	Vulnerable households
Responsible entity(ies)	MLOGAT, MECB, MECO
Reference(s)	

Measure Title	No. 11 State aid for the energy renovation of functional buildings
Description	<p>Bill No. 8597 is part of the implementation of the 2023–2028 coalition agreement, which states that for functional buildings, ‘medium-term objectives will be achieved through short-term incentives.’ The bill introduces a new subsidy program designed to encourage owners of functional buildings to undertake energy efficiency improvements ahead of future legal obligations for non-residential buildings. These forthcoming requirements will be established in accordance with Directive (EU) 2024/1275, which mandates the introduction of minimum energy performance standards to be met from 2030 onwards.</p> <p>The subsidy program supports energy renovation through a range of eligible measures, including improving the thermal insulation of the building envelope, installing controlled mechanical ventilation with heat recovery, and installing a heat pump. It also covers the cost of conducting a feasibility study or energy consultation to identify appropriate renovation strategies and develop a tailored energy renovation concept. This concept must aim to meet, at minimum, the required energy performance level based on the building’s initial classification:</p> <ul style="list-style-type: none"> – Buildings with an energy class below E prior to renovation must achieve class E or better after the work; – Buildings already rated class E or higher must reach at least class D and improve by a minimum of one energy class.
Type of instrument	Economic
Target(s)	Vulnerable micro-enterprises
Responsible entity(ies)	MECO
Reference(s)	Bill No. 8597 concerning an subsidy program for investment in energy renovation works for functional buildings

Measure Title	No. 12 Facilitation of energy-related work in co-owned buildings
Description	<p>The Act of 30 June 2022, which amends the revised Act of 16 May 1975 on the status of co-ownership of buildings, introduces several measures to facilitate energy renovation in jointly owned properties. One of the key changes is the simplification of decision-making procedures for certain types of work. Previously requiring a three-quarters majority, the following works can now be approved by an absolute majority of all co-owners: Energy renovation, insulation, installation of energy production and storage systems using renewable energy sources in common areas. If no decision is reached under this condition, a simple majority of co-owners present or represented at a subsequent general meeting will suffice.</p> <p>The law also establishes a mandatory works fund for co-ownerships. This fund is intended to help co-owners gradually build financial reserves, enabling them to better anticipate and cover the costs of future works. Its existence facilitates—or even makes possible—the execution of maintenance, repair, improvement, conversion, and energy renovation projects, as well as the installation of renewable energy systems.</p> <p>In this context, an analysis will be conducted to assess whether the thresholds for establishing a works fund should be adjusted for buildings with poor energy performance.</p> <p>To further support collective decision-making around energy renovation, Klima-Agence, in collaboration with the Ministry of the Economy and the Groupement des Syndics Professionnels du Grand-Duché de Luxembourg (GSPL), is leading the pilot project ‘Energy renovation of co-owned properties’. The initiative aims to encourage property managers and co-owners’ associations of low-energy-performance buildings to undertake renovation projects based on feasibility studies conducted according to predefined specifications.</p> <p>These studies provide tailored recommendations to improve energy efficiency and assess the financial viability of proposed investments before any renovation begins. Following a call for projects, five co-ownerships were selected to receive co-financing covering up to 90% of the feasibility study costs.</p>
Type of instrument	Regulatory, Research
Target(s)	Vulnerable households
Responsible entity(ies)	Klima-Agence, MECO, MLOGAT
Reference(s)	Measure No. 325 of the NECP

	Law of 30 June 2022 amending the revisited Law of 16 May 1975 concerning the status of co-owned buildings, introducing a mandatory works fund
--	---

Measure Title	No. 13 Study on the rental challenges of the energy transition
Description	<p>With a view to promoting social justice in the context of the energy transition, a study will be launched to identify and analyse concrete measures to better protect tenants—particularly the most vulnerable—from the combined effects of rising energy prices and the lack of energy renovation in the rental housing stock.</p> <p>The study will focus specifically on situations in which insufficient investment in energy renovation results in higher living costs for tenants, without any corresponding improvement in comfort or energy performance. This phenomenon disproportionately affects vulnerable households, especially in a context of volatile and rising fossil fuel prices.</p> <p>The objective of the study is to identify effective levers to stimulate the necessary investments, while ensuring a fair distribution of costs and benefits between landlords and tenants. It also seeks to ensure that the efforts made by landlords are supported by appropriate policy instruments. Particular attention will be paid to the most vulnerable tenants, in order to better target the protection and support measures to be implemented. The work and reflections carried out in this context will involve bringing together the various stakeholders concerned, in particular actors from the housing and social sectors, representatives of tenants and homeowners, as well as the competent public authorities.</p> <p>The study will concentrate on three key areas:</p> <ul style="list-style-type: none"> • compensation or targeted support mechanisms for tenants; • legal, fiscal, regulatory, and advisory tools to encourage and assist landlords in undertaking energy renovation; • analysis of structural barriers and potential solutions to promote a more equitable distribution of responsibilities and benefits related to the energy transition in the rental sector. <p>Among the options under consideration are the linkage of energy performance to rent caps, and the staggering or conditional allocation of <i>Klimabonus Wunnen</i> financial assistance based on landlords’ concrete commitments to improving the energy efficiency of their rental properties.</p> <p>The study will also incorporate findings and discussions from the adoption of the Law of 20 December 2019, which defines criteria for the health, hygiene, safety, and habitability of housing and rooms rented or made available for residential use.</p>
Type of instrument	Research

Target(s)	Vulnerable households
Responsible entity(ies)	Klima-Agence, MLOGAT, MECO, MECB
Reference(s)	

Measure Title	No. 14 Financial contributions to the construction of affordable rental and sale housing (<i>Aides à la pierre</i>)
Description	<p><i>Aides à la pierre</i> are financial contributions granted to social developers to support the construction of affordable or low-cost housing. The amended Law of 7 August 2023 on affordable housing provides these contributions to encourage the development of such housing projects. Eligible costs are covered across five categories:</p> <ul style="list-style-type: none"> – the category relating to undeveloped land and special development; – the category relating to ordinary servicing; – the category relating to serviced land; – the category relating to the construction of affordable housing; – the category relating to the renovation (e.g. energy efficiency) of housing intended for affordable rental. <p>Social developers may receive up to 75% of eligible costs for affordable rental housing, while public developers are eligible for up to 50% for affordable housing intended for sale. These subsidies are conditional on long-term allocation: 40 years for non-profit developers and the full lifetime of the housing for public developers.</p> <p>In order to further encourage deep renovation and energy retrofitting in the affordable rental housing sector, it is proposed to introduce a new 30% ‘top-up’ on the standard capital grants, which can amount to up to 75%. This top-up would be cumulative with the existing increases for climate-resilience measures and for innovative housing, up to a limit of 40%.</p> <p>The ministerial regulation of 5 May 2025, which sets out specifications for the development of affordable housing, consolidates recommendations on urban planning, architectural quality, and cost-effectiveness. To support the evaluation of housing subsidy applications, the Ministry of Housing and Spatial Planning has established an advisory committee—the <i>Commission d’accompagnement des Aides à la pierre</i> (CAAP)—which provides expert guidance to the Minister.</p> <p>In this context, the government also plans to include photovoltaic installations (with power specifications to be defined) among the technical equipment eligible for aid under the amended law of 7 August 2023 on affordable housing (see measure No. 15).</p>
Type of instrument	Economic
Target(s)	Vulnerable households

Responsible entity(ies)	MLOGAT
Reference(s)	Measure No. 312 of the NECP Amended Law of 7 August 2023 on Affordable Housing

Measure Title	No. 15 Support for the installation of photovoltaic systems in affordable housing
Description	<p>The potential for renewable energy production through photovoltaic systems remains largely untapped in the building sector, particularly within affordable housing. When affordable housing is developed by social entities—such as municipalities, the Housing Fund, the National Low-Cost Housing Administration, non-profit organisations, or foundations—photovoltaic installations are currently excluded from financial contributions under the aid provided by the amended Act of 7 August 2023 on affordable housing.</p> <p>It is important to note that installing photovoltaic panels on buildings designated for affordable housing may lead to increased investment costs for social developers. In cases of resale, these installations may also generate additional costs for purchasers, which fall outside the scope of existing housing subsidies. These financial burdens can pose a significant barrier to the widespread adoption of photovoltaic technologies, particularly among vulnerable households. Nevertheless, integrating photovoltaics into affordable housing represents a strategic lever for accelerating the energy transition in the residential sector.</p> <p>To this end, within the framework of the national consultation ‘Einfach – Séier – Erneierbar’, the following measure has already been adopted:</p> <ul style="list-style-type: none"> • Include photovoltaic installations (with power specifications to be defined) among the technical equipment eligible for aid under the Act of 7 August 2023 on affordable housing. This would be conditional on the electricity produced being made directly available to tenants. In this case, the social developer would no longer be eligible for investment aid under the <i>Klimabonus</i> scheme if the photovoltaic installation has already been subsidised through the <i>Aides à la pierre</i> framework. This exclusion from <i>Klimabonus</i> would be addressed in a future amendment to the relevant legislation. <p>Other support measures are also being examined and will be subject to detailed analysis, and may be adopted where appropriate:</p> <ul style="list-style-type: none"> • A legal requirement to install solar panels on all new affordable housing developments; • Removing the 10-year age restriction on buildings to qualify for the ‘social top-up’ when installing solar panels; • Financial support for local authorities offering affordable housing that are unable to benefit from a return on invested capital. It should be noted that amendments to the

	<p>amended Act of 7 August 2023 on affordable housing have been tabled. Once these amendments are adopted, local authorities will be able to benefit from a return on invested capital;</p> <p>Introduction of a separate scheme (for affordable housing) under the Klimabonus support scheme, provided that the electricity generated by the photovoltaic installation on the affordable housing is made directly available to tenants. The government intends to conduct a thorough evaluation of those options to determine which approach will most effectively and equitably support the development of photovoltaic energy in affordable housing.</p>
Type of instrument	Economic
Target(s)	Vulnerable households
Responsible entity(ies)	MLOGAT , MECB, MECO, Municipalities, Klima-Agence
Reference(s)	<p>Measure 36 of the ESE process</p> <p>Law of 7 August 2023 on Affordable Housing</p> <p>Legislation on Klimabonus subsidies</p>

Measure Title	No. 16 Installation of photovoltaic systems on residential buildings
Description	<p>The potential for renewable energy production in the building sector—particularly through photovoltaic systems—remains significantly underutilized, especially in the case of new residential construction. Yet, the integration of these technologies is a critical lever for accelerating the energy transition. High initial installation costs continue to pose a substantial barrier for many households, limiting the widespread adoption of photovoltaic solutions.</p> <p>To address this challenge and ensure equitable and structured implementation, the government will introduce a mandatory standard requiring the installation of photovoltaic systems on new residential buildings, covering a minimum portion of the roof surface. This regulatory measure forms part of a broader strategy to progressively expand the use of renewable energy within the housing sector. The costs will be pre-financed by the state if the individuals concerned are unable to finance the installation.</p> <p>As part of the national consultation <i>Einfach – Séier – Erneierbar</i>, it is proposed to enshrine in legislation a ‘right to photovoltaics,’ aimed at facilitating the installation of photovoltaic systems in condominiums where the necessary majority cannot be achieved at a general meeting. Complementing this initiative, it is also proposed to enhance the advisory and support services provided to property managers by Klima-Agence.</p>
Type of instrument	Regulatory
Target(s)	Vulnerable households
Responsible entity(ies)	MECO , MECB, Klima-Agence
Reference(s)	Measure No. 205 – NECP Measure No. 48 of the ESE Process

Measure Title	No. 17 Social leasing – heat pumps and photovoltaic panels
Description	<p>Despite existing subsidy programmes, the initial investment required to install photovoltaic panels, domestic batteries, or sustainable heating systems—such as heat pumps—remains a significant obstacle for many vulnerable households. This financial barrier perpetuates reliance on fossil fuels, exposing these households to rising energy costs and depriving them of the benefits of the energy transition, particularly in terms of self-consumption and energy autonomy.</p> <p>To address these barriers and provide more effective support, the government will assess the feasibility of introducing a social leasing model for photovoltaic installations, potentially including domestic batteries and heat pumps. Inspired by the mechanism currently under development for social car leasing, this scheme would offer affordable and flexible monthly payment plans that cover maintenance and repair costs, and, where appropriate, include an option to purchase at the end of the contract. These analyses will also help to assess the extent to which such installations could be considered for vulnerable households.</p> <p>The overarching goal is to provide a simple, inclusive solution that enables vulnerable households to benefit directly from the economic and environmental advantages of the energy transition—without the burden of a substantial upfront investment.</p>
Type of instrument	Economic
Target(s)	Vulnerable households
Responsible entity(ies)	MECB, MECO
Reference(s)	

Measure Title	No. 18 ‘State Energy Community’ for sharing renewable electricity with vulnerable households and micro-enterprises
Description	<p>Despite existing subsidy programmes, the initial investment required to install photovoltaic panels remains beyond reach for many low-income households and micro-enterprises. This financial constraint hampers the adoption of decentralised solar technologies, which are essential for achieving an inclusive and sustainable energy transition.</p> <p>While this barrier may be addressed through the social leasing model (see Measure No. 17), its implementation can be hindered by factors such as limited available space, technical constraints, or other contextual limitations. As a result, households and micro-enterprises unable to install their own photovoltaic systems are excluded from the benefits of self-consumption and enhanced energy flexibility. Consequently, they are likely to face higher average electricity costs compared to those able to invest directly in the energy transition.</p> <p>The State possesses suitable areas for the installation of renewable energy infrastructure—including land along motorways and State-owned buildings and properties—particularly for photovoltaic energy and, where appropriate, wind energy. Depending on the location, the State may not be able to consume all, or part of the electricity produced on site. In such cases, it could either redirect this electricity to other State-owned consumption sites or make it available to vulnerable households and/or micro-enterprises under affordable conditions through electricity sharing. When implemented locally, such sharing could also yield positive effects on electricity networks, where applicable.</p> <p>A study will be undertaken to examine the practical modalities of this model, in line with the provisions of the amended Law of 1 August 2007 on the organisation of the electricity market, which incorporates relevant European directives addressing energy poverty. The transposition of Directive (EU) 2024/1711 of 13 June 2024 on improving the organisation of the electricity market provides that energy-sharing projects carried out by public authorities must enable vulnerable households and people experiencing energy poverty to access a share of the electricity produced, with the aim that, on average, at least 10% of the energy shared be allocated to them.</p>
Type of instrument	Regulatory
Target(s)	Vulnerable households and micro-enterprises
Responsible entity(ies)	MECO

Reference(s)	Directive (EU) 2024/1711 of the European Parliament and of the Council of 13 June 2024 amending Directives (EU) 2018/2001 and (EU) 2019/944 as regards improving the organisation of the Union's electricity market.
---------------------	--

Measure Title	No. 19 Awareness-raising, information, and advisory services on buildings
Description	<p>Klima-Agence offers a comprehensive range of services aimed at raising awareness and informing various stakeholders about energy-related issues in buildings.</p> <p>For owners and tenants of residential buildings, Klima-Agence provides a basic advisory service designed to offer an initial overview of energy renovation options and available financial assistance—particularly through its subsidy simulator and energy renovation simulator. During consultations, Klima-Agence advisers also provide guidance on the conditions for obtaining an Energy Performance Certificate (EPC), the mandatory heating system assessment (<i>Heizungsscheck</i>), and measures to optimise and modernise heating systems.</p> <p>Klima-Agence regularly conducts awareness campaigns, typically in collaboration with the relevant ministry or ministries, addressing topical issues such as the launch of new subsidy programmes, the promotion of renewable energy, and other energy transition priorities.</p> <p>At the municipal level, these initiatives fall under the framework of <i>Climate pact (pacte climat) 2.0</i>, which encourages measures including the renovation of municipal buildings. In this context, a dedicated energy renovation adviser supports municipalities at a strategic level (see Measure No. 22).</p> <p>For businesses, the <i>Klimapakt fir Betriber</i> offers targeted measures to improve the energy performance of commercial buildings (see Measure No. 23).</p>
Type of instrument	Information
Target(s)	Vulnerable households and micro-enterprises
Responsible entity(ies)	Klima-Agence , MECO, MECB, MLOGAT
Reference(s)	Measure No. 317 of the NECP

Measure Title	No. 20 Assistance for energy-poor households
Description	<p>The <i>Assistance for fuel-poor households</i> programme is designed to provide targeted support to vulnerable households experiencing fuel poverty—defined as households lacking sufficient financial means to adequately heat their homes and/or having been unable to pay electricity, gas, water, or heating bills within the past 12 months.</p> <p>Eligible households are identified, contacted, and informed about this specific assistance offer by social services.</p> <p>Support includes personalised energy advice provided by Klima-Agence, along with a subsidy for the replacement of one or more energy-intensive household appliances and/or the purchase of new energy-efficient appliances (e.g. refrigerator, freezer, dishwasher, washing machine, and tumble dryer). This service aims not only to inform and raise awareness, but also to improve the living conditions and overall quality of life of the households concerned.</p> <p>To guide the development of the programme, an in-depth analysis was conducted based on field feedback and consultations with relevant social actors. The following key priorities were identified:</p> <ul style="list-style-type: none"> • implementation of a specific procedure for emergency cases; • administrative simplification and digitisation of the process; • expansion of access points beyond social services offices; • strengthening/developing partnerships and diversifying awareness-raising formats. <p>In addition, it is proposed to extend the approach to actors active in the management of social housing, so that they may act as programme partners and support Klima-Agence in implementing the appliance-replacement scheme.</p> <p>In the context of the programme’s development, Klima-Agence will study the modalities of the introduction of an additional specific support measure for the acquisition of “Plug & Play” balcony photovoltaic systems, enabling the vulnerable households concerned to reduce their daily electricity expenses and to directly benefit from the electricity produced for their domestic needs.</p>
Type of instrument	Information, Economic
Target(s)	Vulnerable households
Responsible entity(ies)	Klima-Agence , MECO, MFSVA, MECB

Reference(s)	Measure No. 329 of the NECP
---------------------	-----------------------------

Measure Title	No. 21 Specialised energy advisory service for replacing fossil fuel heating systems with renewable solutions
Description	<p>For many vulnerable homeowners, the cost of replacing fossil fuel-based heating systems presents a significant barrier to transitioning toward renewable energy solutions. Despite the availability of existing schemes and financial assistance, these households often remain excluded from the decarbonization of the residential sector due to insufficient financial resources.</p> <p>As part of the <i>Assistance for fuel-poor households</i> programme (see Measure No. 20), the government plans to strengthen Klima-Agence's specialised energy advisory service, with a focus on supporting the replacement of fossil fuel heating systems with renewable alternatives. Individualised support will be provided by energy advisers, working in close collaboration with social actors such as social services.</p> <p>Key tasks will include:</p> <ul style="list-style-type: none"> • identifying vulnerable homeowners; • conducting an initial, neutral, and free assessment of the property; • assisting in the collection of quotes from qualified companies, as part of Klima-Agence's basic advisory service; • supporting the preparation and submission of grant applications. <p>This targeted approach aims to eliminate the technical, financial, and administrative barriers that hinder energy renovation efforts among the most vulnerable homeowners, thereby promoting a more inclusive energy transition.</p>
Type of instrument	Regulatory, Budgetary
Target(s)	Vulnerable households
Responsible entity(ies)	Klima-Agence, MECO, MECB, MLOGAT
Reference(s)	

Measure Title	No. 22 Strengthening the social dimension of Climate pact (pacte climat) 2.0 with municipalities
Description	<p>As part of <i>Climate pact (pacte climat) 2.0</i>, municipalities will be encouraged to broaden the remit of the <i>Klimaschäffen</i> to include responsibilities related to the just transition.</p> <p>To reinforce the social dimension and ensure consistent implementation, it is proposed to establish structured coordination between <i>Klimaschäffen</i>, municipal social officers (<i>Sozialschäffen</i>), and social services. The development of clear guidelines will provide an operational framework and the necessary tools to effectively address the social components of climate-related initiatives.</p> <p>In this context, targeted support will be offered to <i>Klimaschäffen</i>, particularly through the organisation of dedicated events and participatory workshops in close collaboration with actors from the social sector.</p> <p>These measures aim to equip <i>Klimaschäffen</i> with the knowledge and resources needed to become key drivers of the just transition at the local level, complementing the technical actions already in place.</p> <p>Simultaneously, Klima-Agence will carry out a comparative analysis of international projects to identify concrete opportunities for enriching or adapting the existing measures within the Climate pact (pacte climat) catalogue.</p>
Type of instrument	Voluntary agreement
Target(s)	Vulnerable households and micro-enterprises
Responsible entity(ies)	MECB, Klima-Agence, Municipalities
Reference(s)	<p>Measure No. 106 of the NECP</p> <p>Law of 25 June 2021 Establishing a Climate pact (pacte climat) 2.0 with Municipalities</p>

Measure Title	No. 23 Climate pact (pacte climat) for Businesses (<i>Klimapakt fir Betriber</i>) – Basic advisory services for vulnerable micro-enterprises
Description	<p>The <i>Climate pact (pacte climat) for Businesses</i> (KPB – <i>Klimapakt fir Betriber</i>), primarily targeting small and medium-sized enterprises (SMEs), serves as a strategic guidance platform that facilitates consultation, coordinated implementation of projects and activities among various stakeholders, and the management of new programmes supporting the shared goal of climate protection and energy transition in the business sector. It is based on voluntary commitments by participating businesses, enabling long-term monitoring of their decarbonization and energy transition efforts.</p> <p>The KPB encompasses both existing and emerging support measures, as well as programmes yet to be developed according to identified needs, in compliance with state aid regulations.</p> <p>It offers a comprehensive overview and ensures consistency across all services available to support businesses and the broader economy in their decarbonization and energy transition efforts. These services include expert advice, access to practical toolkits, co-financing opportunities, and networking—both between key stakeholders and businesses, and among businesses themselves.</p> <p>Vulnerable micro-enterprises face distinct challenges in engaging with the energy transition and decarbonising their operations. Success in this area hinges on tailored support and ongoing monitoring. To this end, it is proposed to establish a basic advisory service—delivered by institutional advisers within the KPB—focused on cost control, energy consumption, decarbonization strategies, and presentation of co-financing options for transition projects. This advisory service will serve as the foundation for continued monitoring and guidance, helping micro-enterprises access tools such as the <i>Potenzialcheck</i> with a corresponding action plan, and facilitating connections with implementation partners.</p> <p>The KPB is overseen by a steering committee and jointly managed by Luxinnovation and Klima-Agence. The steering committee comprises representatives from MECO, MECB, Klima-Agence, Luxinnovation, FdA, FEDIL, CdM, CdC, and the Luxembourg Confederation.</p>
Type of instrument	Voluntary agreement
Target(s)	Vulnerable micro-enterprises
Responsible entity(ies)	Klima-Agence , Luxinnovation, MECO, MECB,
Reference(s)	Measure No. 511 of the NECP

Measure Title	No. 24 General aid for SMEs – Investment support
Description	<p>The government is committed to promoting the sustainable development of small and medium-sized enterprises (SMEs) by exploring targeted adjustments to financial support mechanisms and developing assistance models tailored to the specific realities of these businesses. Additionally, an expansion of the SME Packages offering is under consideration to better address the various stages of business development and the diversity of sectors.</p> <p>A new subsidy program for SMEs has been introduced, valid until the 30th of September 2026, covering 50% of eligible costs for the installation of private charging infrastructure by small businesses.</p> <p>Furthermore, an amendment to the framework law on state aid for SMEs has been tabled. This legislative update aims to respond more effectively to current challenges, particularly those related to investment in the initial creation of businesses, in alignment with national climate and economic priorities.</p>
Type of instrument	Economic
Target(s)	Vulnerable micro-enterprises
Responsible entity(ies)	MECO
Reference(s)	<p>Measure No. 515 of the NECP</p> <p>Nill n°8475 amending: the amended Law of 9 August 2018 on an aid scheme in favour of small and medium-sized enterprises; the amended Law of 30 June 2004 establishing a general framework for aid schemes in favour of the middle-class sector.</p> <p>Amended Law of 26 July 2022 on the subsidy program for enterprises investing in charging infrastructure for electric vehicles</p>

Measure Title	No. 25 Subsidy programm for businesses – Environmental and climate protection
Description	<p>To contribute effectively to the decarbonization of the economy, businesses must have access to support instruments tailored to innovative technologies and emerging forms of sustainable investment. The current legal framework, which is largely based on traditional approaches, does not yet fully address the rapidly evolving needs—particularly in the areas of sustainable mobility, energy performance, and the transition to a circular economy.</p> <p>To optimise the environmental impact of public funds and ensure their effective mobilisation by economic actors, a targeted update of existing subsidy programmes was required.</p> <p>In this context, the government has revised of the Law of 15 December 2017 on the subsidy programm for environmental protection, aligned with the General Block Exemption Regulation (GBER). This revision is informed by an in-depth assessment of new opportunities in key areas such as the decarbonization of industrial processes, transport and charging infrastructure, hydrogen production, carbon capture and utilisation (CCU), energy performance contracts, and circular economy initiatives.</p> <p>The new subsidy programmes allow to support investment through a range of financial instruments, including capital grants, repayable advances, and interest subsidies. Certain schemes will be awarded through competitive procedures to maximise environmental impact while ensuring efficient allocation of public funds, in line with the principle of minimum necessary aid.</p>
Type of instrument	Economic
Target(s)	Vulnerable micro-enterprises
Responsible entity(ies)	MECO
Reference(s)	<p>Measure No. 516 of the NECP</p> <p>Law of 8 December 2025 on the renewal of the aid scheme for environmental and climate protection and amending: 1° the amended Law of 20 July 2017 on the establishment of a regional investment subsidy programm 2° the Law of 15 July 2022 establishing an subsidy programm within the framework of the greenhouse gas emission allowance trading system for the period 2021–2030</p>

Measure Title	No. 26 SME Packages-Sustainability
Description	The <i>SME Packages-Sustainability</i> programme targets small and medium-sized enterprises (SMEs) seeking to address the challenges and harness the opportunities of the sustainable transition. Its objective is to initiate tailored support for Luxembourg-based SMEs by facilitating the implementation of concrete solutions that reduce environmental impact and generate cost savings. These solutions may include reductions in energy or water consumption, improved waste management practices, or measures to lower carbon emissions.
Type of instrument	Economic
Target(s)	Vulnerable micro-enterprises
Responsible entity(ies)	MECO
Reference(s)	Measure No. 514 of the NECP Amended Law of 9 August 2018 on a subsidy program for small and medium-sized enterprises Draft Law No. 8475 amending the amended Law of 9 August 2018 on a subsidy program for small and medium-sized enterprises

Measure Title	No. 27 State contribution to electricity network usage costs
Description	<p>Affordable electricity prices are a key lever for ensuring a fair and sustainable energy transition. In Luxembourg, electricity prices remain consistently below the European average—an important social and economic asset that merits preservation. Moderate pricing directly supports electrification, a cornerstone of decarbonization, while freeing up resources for investments in energy efficiency, renewable energy, and the broader energy transition.</p> <p>In this context, the government has committed to contributing to the long-term stabilisation of electricity prices through a contribution of €150 million in 2026 (and for at least three years) towards the costs associated with the use of electricity networks. This measure will substantially relieve all customers—both private households and businesses—and will apply automatically. It will particularly benefit vulnerable households and micro-enterprises, for whom energy costs weigh more heavily, thereby strengthening the social dimension of the energy transition.</p>
Type of instrument	Economic
Target(s)	Vulnerable households and micro-enterprises
Responsible entity(ies)	MECO
Reference(s)	Law of 19 December 2025 on a State contribution to the costs to be passed on in tariffs for the use of electricity networks for the year 2026

Measure Title	No. 28 Administrative simplification for micro-enterprises
Description	<p>The government aims to simplify the administrative procedures faced by businesses, particularly SMEs. In this context, it is planned to streamline state aid and establish simplified procedures for SMEs in order to facilitate access to support.</p> <p>Furthermore, the creation of a visualization tool for the application and decision-making process related to the granting of aid to microenterprises is envisaged. Designed in the form of a decision tree or a similar tool, this instrument will help facilitate applicant support, clarify the various administrative steps, and make the available aid options more transparent depending on each situation.</p> <p>In line with the European Union's 'Small Business Act', the government will also ensure compliance with the principle of <i>Think Small First</i>, meaning that the needs of microenterprises will be given priority consideration when designing policies and legislation.</p> <p>Furthermore, the possibility of introducing a 'middle-class clause' in legislation will be examined, so that the impact of new measures is systematically assessed in light of the realities faced by small structures, and in particular microenterprises.</p> <p>Bill No. 8475 provides for enhanced digitalisation of procedures, with smoother online processes and clearly defined processing deadlines. New aid schemes will be introduced, notably for investments related to digitalisation, the ecological transition, and for first-time investments in the context of newly created enterprises. Finally, the introduction of the 'once-only' principle and a 'silence means consent' mechanism will help to streamline and speed up administrative formalities.</p>
Type of instrument	Economic
Target(s)	Vulnerable micro-enterprises
Responsible entity(ies)	MECO
Reference(s)	Bill No. 8475 amending: 1° the amended Law of 9 August 2018 on an aid scheme in favour of small and medium-sized enterprises; 2° the amended Law of 30 June 2004 establishing a general framework for aid schemes in favour of the middle-class sector

Measure Title	No. 29 Zero-interest 'Competitiveness and Sustainability Loan'
Description	<p>The government has launched a new financial instrument to strengthen the competitiveness and long-term resilience of Luxembourg companies: the Competitiveness/Sustainability Loan (PCP).</p> <p>The PCP is primarily aimed at SMEs for any type of project that contributes to their competitiveness/sustainability. It provides stable and affordable financing, interest-free under the European "<i>de minimis</i>" regime, and complements financing granted by intermediary banks.</p> <p>Structured to work alongside commercial bank loans, the PCP acts as a catalyst to unlock additional resources for businesses, while minimizing administrative formalities for applicants, who do not have to fill out any additional paperwork. SNCI co-finances up to 80% of the eligible investment, capped at €200,000 per project with a loan term of up to 10 years. The partner bank finances at least 20% of the project and supports its client throughout the application process.</p>
Type of instrument	Economic
Target(s)	Vulnerable micro-enterprises
Responsible entity(ies)	SNCI, MECO, MFIN
Reference(s)	

2.2. Component C2 – transport sector

The transport sector is the main source of greenhouse gas emissions in Luxembourg, accounting for 59.1% in 2024. This sector therefore faces a major challenge in the near future to reduce its emissions.⁸

Luxembourg is one of the European countries with the highest car ownership rate per capita (678 per 1,000 inhabitants according to Eurostat in 2021⁹). As in many other Western countries, urbanisation has gone hand in hand with the car and the development of the (motor)way network, creating a snowball effect that reinforces car dependency. In 2021, the car remained the preferred means of transport for commuting to work. However, a decline in car use for commuting between home and work can be observed during the intercensal period from 2011 to 2021. This slight decline is mainly due to soft modes of transport (walking, cycling) and does not seem to benefit public transport, despite the undeniable improvement in services and the introduction of free public transport.¹⁰ Most households without a private vehicle are located in Luxembourg City. These are mainly single-person households aged 18 to 24, followed by those aged over 75.¹¹ However, the Territorial Development Observatory (ODT) has observed that commutes to work are becoming increasingly longer.¹²

The last decade has seen a substantial improvement in public transport services, in particular the introduction of the tramway, the development of P+R park-and-ride facilities, the reorganisation of the RGTR bus network and the introduction of free public transport (Luxembourg has the largest investment programme in trains, trams and buses in Europe in relative terms). Mobility is being monitored increasingly closely, particularly through multiple surveys, the digital mobility observatory, etc., as well as through policy measures aimed at promoting the use of public transport. Alongside the increased promotion of public transport and active mobility, electromobility has also been developed significantly in recent years.

⁹ <https://ec.europa.eu/eurostat/web/products-eurostat-news/w/ddn-20240117-1>

¹⁰ Ferro, Y., Caruso, G., & Gerber, P. (2025). La dépendance automobile persiste pour les déplacements domicile-travail. STATEC. <https://statistiques.public.lu/dam-assets/recensement/publication-18/docs/18-05-02-fr.pdf>

¹¹ Kuttler, T., & Moraglio, M. (2021). Re-thinking mobility poverty: Understanding users' geographies, backgrounds and aptitudes. Routledge. <https://doi.org/10.4324/9780367333317>

¹² Ministère du Logement et de l'Aménagement du territoire. (2025, mai). L'emploi des actifs occupés au Luxembourg. https://amenagement-territoire.public.lu/content/dam/amenagement_territoire/fr/actualites/2025/odt-publication-des-cartes-et-des-chiffres-emploi-des-actifs-employes-au-luxembourg-mai-2025.pdf

Measure Title	No. 30 Expansion of publicly accessible charging infrastructure
Description	<p>The development of electric mobility is a central pillar of Luxembourg’s transport decarbonization strategy. Its large-scale deployment depends heavily on the availability of accessible, reliable, and evenly distributed public charging infrastructure across the country.</p> <p>To anticipate the growing uptake of electric vehicles, the expansion of publicly accessible charging stations must continue.</p> <p>In this context, the government is committed to pursuing a targeted and strategic approach to infrastructure development. Particular attention will be given to under-equipped areas to ensure uniform national coverage.</p> <p>This approach will aim to guarantee consistent access to charging infrastructure, address diverse charging needs—at home, at work, and on the road, enable all residents, regardless of location or socio-economic status, to participate in the transition to zero-emission mobility.</p> <p>At the European level, Regulation (EU) 2023/1804 on the deployment of alternative fuels infrastructure sets minimum targets for publicly accessible charging stations across Member States. It also requires the development of a National Policy Framework outlining specific measures to meet these targets.</p>
Type of instrument	Planning
Target(s)	Vulnerable households and micro-enterprises
Responsible entity(ies)	MECO
Reference(s)	

Measure Title	No. 31 Right to a charging station
Description	<p>Access to private charging is a crucial enabler for the widespread adoption of electric mobility—especially in rental properties and multi-unit residential buildings. Yet, a range of obstacles—technical, legal, and governance-related—continue to hinder the installation of charging stations in these settings.</p> <p>To overcome these barriers and ensure that all residents have a genuine right to charge, the government will continue to actively promote private charging solutions and facilitate their deployment in condominiums. As outlined in the coalition agreement, the decision-making process for installing a charging station—whether by an individual owner or a condominium association—will be simplified through the introduction of a formal right to a charging station.</p> <p>This initiative reflects a broader commitment to accelerating the electrification of the national vehicle fleet while guaranteeing fair and inclusive access to charging infrastructure, regardless of housing type.</p>
Type of instrument	Regulatory
Target(s)	Vulnerable households and micro-enterprises
Responsible entity(ies)	MECO, MLOGAT
Reference(s)	

Measure Title	No. 32 Transport on demand
Description	<p>The demand-responsive transport service (such as 'Ruffbus' or 'Bummelbus'), available upon reservation, offers households an additional local mobility solution, particularly in rural areas. It helps maintain autonomy by facilitating trips for shopping, appointments or social activities, without relying on a private car.</p> <p>The ministries encourage municipalities to decarbonise and further develop demand-responsive transport, prioritising vulnerable households who do not meet the criteria of the specialised demand-responsive service 'Adapto', and ensuring that the RGTR network is complemented by adding connections between the localities within the same municipality.</p>
Type of instrument	Planning
Target(s)	Vulnerable households
Responsible entity(ies)	Municipalities, MMTP
Reference(s)	

Measure Title	No. 33 Awareness-raising, information, and advisory services on mobility
Description	<p>The Ministry of Mobility and Public Works offers corporate mobility plans—tools designed to help companies better organise employee travel and promote sustainable commuting practices. Municipalities can also request technical support and co-financing for local mobility studies. Meanwhile, mobilitéit.lu is continuously being upgraded to improve access to public transport and enhance user experience.</p> <p>The Ministry of the Economy is committed to applying principles of circularity and sustainability through the intelligent management of economic activity zones, supported by high-quality services and infrastructure. A co-creative process is currently being developed to actively involve key stakeholders and ensure broad adoption of these new solutions.</p> <p>In terms of mobility, planning aligned with national objectives and the integration of innovative concepts will improve service quality and encourage behavioural change. This includes the increased use of smart and sustainable mobility solutions, which in turn enhances the attractiveness and accessibility of economic sites.</p>
Type of instrument	Information
Target(s)	Vulnerable micro-enterprises
Responsible entity(ies)	MMTP, MECO
Reference(s)	Measure No. 407 of the NECP

Measure Title	No. 34 Awareness-raising, information, and advisory services for citizens promoting behavioural change and a favourable environment for citizen engagement
Description	<p>As the impacts of climate change intensify, raising public awareness around the concepts of resilience, moderation, and adaptation has become increasingly urgent. Yet, these themes remain underrepresented in communication efforts—whether directed at the general public, local authorities, or economic stakeholders.</p> <p>To foster a shared understanding of climate challenges and encourage broader, more consistent mobilisation, it is essential to embed these concepts more deeply into institutional communication strategies.</p> <p>In this context, Klima-Agence is taking a leading role by actively incorporating resilience, sobriety, and adaptation into its awareness-raising initiatives across diverse target groups. This approach not only underscores the environmental imperatives of the transition, but also highlights opportunities for anticipation, risk reduction, and societal co-benefits.</p> <p>To support this momentum, a dedicated action plan is currently being developed to ensure that these efforts are structured in a coherent, sustainable, and integrated way across all communication activities.</p>
Type of instrument	Support
Target(s)	Vulnerable households
Responsible entity(ies)	Klima-Agence
Reference(s)	

Measure Title	No. 35 Klimabonus Mobilitéit – Subsidy programm for zero-emission vehicles
Description	<p>To accelerate the transition to zero-emission mobility, a bonus for zero-CO₂ vehicles—specifically 100% electric passenger cars (BEVs), hydrogen fuel cell vehicles (FCEVs), and fully electric or hydrogen-powered light utility vehicles—of €6,000 is available, capped at 50% of the vehicle’s pre-tax value.</p> <p>For BEVs, households with five or more members and a car that has seven seats, are eligible for the full €6,000 subsidy without needing to meet the technical criteria. Furthermore, provided that the technical criteria relating to electric-energy consumption are met, it is possible to obtain a premium of €3,000, on the condition that the vehicle’s maximum net power output remains within the prescribed limits.</p> <p>A new second-hand bonus also applies to eligible vehicles that are at least three years old at the time of purchase (see Measure No. 36).</p> <p>The current scheme covers sales, rental, or leasing contracts signed between 1st of October 2024 and 30th of June 2026, including used vehicles that have not been previously registered abroad. All vehicles must be put into service by 30th of June 2027 at the latest.</p>
Type of instrument	Economic
Target(s)	Vulnerable households & vulnerable microenterprises
Responsible entity(ies)	MECB
Reference(s)	<p>Measure No. 423 of the NECP</p> <p>Law of 24 July 2025 amending the amended Law of 15 December 2020 on Climate</p>

Measure Title	No. 36 Financial aid for second-hand electric cars
Description	As part of the <i>Klimabonus Mobilitéit</i> programme, and to encourage the continued use of electric cars in the national vehicle fleet, a new €1,500 financial incentive is being introduced for the purchase of used electric cars that are at least three years old, provided that the beneficiary of the assistance keeps the car for a minimum of two more years and is not part of the same household as the seller of the vehicle.
Type of instrument	Economic
Target(s)	Vulnerable households
Responsible entity(ies)	MECB
Reference(s)	Law of 24 July 2025 amending the amended Law of 15 December 2020 on Climate

Measure Title	No. 37 Financial aid for electric bicycles
Description	<p>As part of the <i>Klimabonus Mobilitéit</i> scheme, financial assistance is granted for pedal-assisted bicycles, conventional bicycles, and under certain conditions, electric pedal-assisted bicycles or bicycles used to transport people or goods. Only persons receiving a cost-of-living benefit or an energy allowance are eligible for a subsidy of up to €600 for the first two types of bicycles, provided that the invoice is dated no later than 30th of June 2026.</p> <p>For electric pedal-assisted bicycles or bicycles designed to transport people or goods ('cargo bikes'), a subsidy of up to €1,000 is granted for purchases made between 1st of October 2024 and 30th of June 2026.</p>
Type of instrument	Economic
Target(s)	Vulnerable households
Responsible entity(ies)	MECB
Reference(s)	Law of 24 July 2025 amending the amended Law of 15 December 2020 on Climate

Measure Title	No. 38 Financial aid for the installation of private electric vehicle charging station
Description	<p>To support the expansion of electromobility and encourage home-based charging, financial aid for installing charging stations in single-family homes and residential buildings was introduced in 2020. The current programme covers: basic charging stations, smart charging stations and smart charging systems in multi-family residences.</p> <p>In July 2025, a new bill was filed in to extend the existing scheme and make the installation of residential charging stations even more accessible. Key measures include streamlining administrative procedures, introducing a top-up subsidy for stations that meet enhanced technical standards, reflecting advances in technology, providing greater financial support for the purchase and installation of shared smart charging management systems, either by the building owner or, where applicable, the co-owners' association, covering the costs of preparatory work required to equip buildings for such installations. This new subsidy complements Measure No. 31 (<i>Right to a charging station</i>) and is designed to significantly ease the deployment of charging infrastructure in residential buildings. The updated subsidy programmes are expected to come into effect no later than 1st of January 2026.</p>
Type of instrument	Economic
Target(s)	Vulnerable households
Responsible entity(ies)	MECB, MECO
Reference(s)	<p>Measure No. 424 of the NECP</p> <p>Bill No. 8577 Financial aid for the installation of private electric vehicle charging station</p>

Measure Title	No. 39 Free and promoted public transport
Description	<p>In March 2020, Luxembourg became the first country in the world to introduce free public transport across its entire territory. Beyond fare-free travel, the initiative aims to make public transport more attractive by continuing to invest in a high-quality, multimodal system that meets the daily mobility needs of the population. Free public transport helps ease the financial burden on households while actively promoting sustainable mobility.</p> <p>This policy is backed by substantial and steadily increasing investment in infrastructure development. Key projects include the extension of the rail network, with €3.9 billion allocated between 2018 and 2027, the expansion of the tramway, the modernisation of road infrastructure</p> <p>Bus services are also being optimised, particularly in rural areas, with increased frequencies on regional lines serving railway stations.</p> <p>To better understand evolving mobility patterns and to shape public policy more effectively, the Ministry of Mobility and Public Works is launching the Luxmobil 2025 survey. This initiative will gather detailed data on the daily travel habits of Luxembourg residents. The findings will inform the development of the 2040 National Mobility Plan, guiding future decisions on infrastructure planning, service optimisation, and sustainable transport development.</p> <p>The overarching goal is to better meet the needs of the population and to advance the transition toward more sustainable mobility.</p>
Type of instrument	Planning & Budgeting
Target(s)	Vulnerable households and micro-enterprises
Responsible entity(ies)	MMTP
Reference(s)	Measure No. 405 of the NECP PNM 2035

Measure Title	No. 40 Development of car sharing and bike sharing
Description	<p>Many households purchase a vehicle for everyday use, even though they only require its full power, load capacity, or seating space in exceptional circumstances. In such cases, car-sharing stations, which offer a variety of vehicle types, present significant advantages. These include lower monthly fixed costs compared to owning a rarely used private vehicle, and the elimination of running expenses such as maintenance, insurance, and registration.</p> <p>Employers can also benefit by replacing underutilized company vehicles with car-sharing options, resulting in cost savings and greater operational flexibility.</p> <p>To improve access to sustainable mobility, a national car-sharing and bike-sharing scheme is essential—particularly for vulnerable households and micro-enterprises.</p> <p>In this context, and to promote car sharing in Luxembourg, bill n°8232 has been tabled to establish a legal framework allowing municipalities to reserve parking spaces on public roads for shared vehicles. These vehicles must be clearly identified as part of a car-sharing fleet operated by a provider approved by the competent authorities and authorized by the municipality, based on defined quality criteria.</p>
Type of instrument	Planning & Information
Target(s)	Vulnerable households and micro-enterprises
Responsible entity(ies)	MMTP
Reference(s)	<p>Measure No. 406 of the NECP</p> <p>Carsharing Strategy for Luxembourg (2022)</p> <p>National Parking Strategy (2023)</p> <p>Bill No. 3232 on car-sharing on public roads and amending the amended Law of 14 February 1955 on traffic regulations for all public roads</p>

Measure Title	No. 41 Social car leasing
Description	<p>Today, 100% electric car are a proven solution for reducing the carbon footprint of individual motorised transport. While the range of available models continues to grow, the initial purchase cost remains higher than that of combustion engine vehicles. Although government subsidies of up to €6,000 help bridge this gap, many vulnerable households remain excluded from the transition due to limited financial capacity.</p> <p>To address this challenge, the government conducted a study on the implementation of a dedicated social leasing scheme, based on long-term contracts with reduced monthly payments, specifically designed for vulnerable households. The objective is to enable these households to replace combustion engine vehicles with electric alternatives, thereby contributing to the decarbonization of the transport sector.</p> <p>This initiative forms part of a fair transition strategy, ensuring that no one is left behind in the shift toward cleaner mobility. It complements the 2035 National Mobility Plan, which promotes a modal shift toward public transport, active mobility, and car sharing, while recognising the continued importance of private vehicles, particularly in rural areas.</p> <p>The methodology for implementing the scheme will be defined by the Ministry of the Environment, Climate and Biodiversity (MECB).</p> <p>Special attention was given to the accessibility of private and public charging infrastructure and to charging costs, especially for vulnerable households. These households—often tenants—frequently lack access to private home charging stations and rely heavily on public charging points, where prices tend to be higher. To overcome this barrier, the study included a detailed analysis of the total cost of ownership of an electric vehicle, considering various charging scenarios (at home, at public stations, and at the workplace). Based on this analysis, targeted measures will be proposed to improve affordability and access. As part of a broader reflection on supportive instruments, several avenues are being explored, including the potential introduction of a social climate card. This card could allow vulnerable households to benefit from preferential charging rates at publicly accessible stations.</p>

	In parallel, the introduction of a 'Right to a charging station' (<i>Measure No. 31</i>) will facilitate home-based charging at a moderate cost, further enhancing equitable access to affordable electric mobility.
Type of instrument	Economic
Target(s)	Vulnerable households
Responsible entity(ies)	MECB, MECO, MMTP, MFIN, MFSVA
Reference(s)	Measure No. 422 of the NECP

2.3. Component C3 – direct income support

Direct income support is designed to partially offset the financial impact of climate policies—particularly the introduction of carbon pricing—on vulnerable households and micro-enterprises. This measure helps preserve purchasing power while advancing a fair transition, ensuring that no one is left behind in the gradual decarbonization of the economy.

Measure Title	No. 42 Social financial compensation for CO₂ Tax
Description	<p>Since 2021, Luxembourg has applied a CO₂ tax on fossil fuels. In line with the Integrated National Energy and Climate Plan (NECP), the revenue generated from this tax is allocated in a balanced manner: 50% is dedicated to financing climate protection and energy transition measures, including subsidies for energy renovation, electromobility, and renewable energy; the remaining 50% is allocated to social compensation measures, such as the CO₂ tax credit and the cost-of-living benefit, aimed at supporting vulnerable households and ensuring a fair transition.</p> <p>The provisions governing the evolution of the CO₂ tax for the period 2027–2030 are scheduled for reassessment in 2026. This review will consider both Luxembourg’s national climate targets and relevant developments in neighbouring countries, particularly in the context of the European Emissions Trading System (EU ETS2).</p> <p>The government is committed to protecting vulnerable households and micro-enterprises from potential increases in energy costs. It therefore guarantees that any form of carbon taxation—whether direct (e.g. CO₂ tax) or indirect (e.g. market-based mechanisms)—will be accompanied by appropriate social compensation measures.</p>
Type of instrument	Fiscal
Target(s)	Vulnerable households
Responsible entity(ies)	MFIN , MECB, MECO
Reference(s)	Measure No. 105 of the NECP

Measure Title	No. 43 CO₂ Tax Credit
Description	<p>The CO₂ Tax credit (CI-CO₂) for self-employed persons, employees, and pensioners was introduced into the Income Tax Act (LIR) as part of the Tripartite Agreement of 3 March 2023. This mechanism is designed to offset the impact of the carbon tax on vulnerable households, promoting social justice.</p> <p>Starting from the 2024 tax year, the CO₂ Tax Credit for employees will be automatically included in monthly payslips and disbursed directly by employers. The government remains committed to maintaining this compensation mechanism to ensure long-term social equity and protect household purchasing power.</p>
Type of instrument	Economic
Target(s)	Vulnerable households
Responsible entity(ies)	MFIN
Reference(s)	

Measure Title	N°44 - Consolidation and simplification of support schemes for vulnerable households: creation of the 'cost-of-living supplement'
Description	<p>The energy transition offers an opportunity to build a more sustainable and resilient society. To ensure that everyone can benefit from it, it is essential to support households – including those with low incomes – throughout this transformation, making sure that the measures introduced are accessible and adapted to social realities. Vulnerable households are most often exposed to increases in energy costs and have fewer means to adapt to the changes linked to climate change.</p> <p>At present, the cost-of-living allowance (allocation de vie chère) and the energy premium (prime énergie) constitute two key instruments for preventing energy poverty and providing targeted support to the most vulnerable households. These benefits have also been regularly increased in recent years to take account of rising energy prices.</p> <p>With a view to strengthening support for vulnerable households, the government will introduce a new benefit called the 'cost-of-living supplement'. This will bring together the current cost-of-living allowance, the energy premium, the new financial support for older people, as well as an additional benefit designed to provide greater assistance to households with school-age children.</p> <p>At the same time, a single application procedure for all these benefits will be introduced, significantly simplifying the administrative process. This new benefit will be paid in several instalments and will be accompanied by a harmonisation of the eligibility conditions as well as a revision of the tapering mechanism. It will also be granted automatically to REVIS beneficiaries. The new scheme thus forms part of an active approach to tackling non-take-up.</p>
Type of instrument	Economic
Target(s)	Vulnerable households
Entité(s) responsable(s)	MFSVA
Reference(s)	National Action Plan for the Prevention and Reduction of Poverty

Measure Title	No. 45 Creation of a one-stop social service centre
Description	<p>To address the under-utilisation of social benefits, the government has decided to establish a new social services centre in the form of an Economic Interest Group (EIG). Its mission is to raise awareness, inform, and advise citizens about the full range of available social support measures.</p> <p>The new centre will feature a digital information platform that enables users to consult available national and local assistance schemes, a social helpline, a physical office, and a mobile outreach team. This mobile unit will operate in the field to actively engage with citizens and promote awareness of the social benefits accessible in Luxembourg.</p>
Type of instrument	Sensibilisation
Target(s)	Vulnerable households
Responsible entity(ies)	MFSVA
Reference(s)	Plan d'action national pour la prévention et la lutte contre la pauvreté

2.4. Total costs of the plan

In accordance with Regulation (EU) 2023/955 establishing a Social Climate Fund and the the Commission's 'Communication – Guidance on the Social Climate Plans' of 5 March 2025, Luxembourg has been allocated an amount of EUR 65 971 873.00, with ETS2 commencing in 2028, after deduction of support expenditure in accordance with Article 10(3) (in euros, at current prices).

The same regulation stipulates that each Member State of the European Union must contribute at least 25% of the total estimated cost of its plans. However, the measures proposed in this document have not yet been the subject of detailed budgeting. It is understood that any measures under the Social Climate Plan that have an impact on public finances will be subject to the ordinary budgetary procedure.

3. ANALYSIS AND OVERALL IMPACT

3.1. Projected impact

3.1.1. CO₂ Tax Credit (CI-CO₂)

Operation of the CI-CO₂

When the CO₂ tax was introduced in Luxembourg in 2021, a tax credit was created to compensate for the impact of the carbon tax on the budgets of low-income households. This is also the instrument through which the Social Climate Plan intends to protect vulnerable households from price increases linked to the introduction of ETS2. Since 2024—when the CI-CO₂ was explicitly defined (whereas previously it formed part of the CIS, CII and CIP tax credits)—the basic amount of the CI-CO₂ has been increased by €24 per year to take account of the successive increases in the CO₂ tax (+€5/t per year).

Year	Base amount
2024	168 €
2025	192 €
2026	216 €
ETS2 (45€ as 2026)	216 €

Table 4: Base amount of the CI-CO₂. Source: STATEC, ACD

The eligibility conditions are set as follows:

- For households with an income below €40,000, the full base amount is granted.
- Between €40,000 and €80,000, the amount is tapered.
- Above €80,000, no tax credit is granted.

In the present analysis, with the ETS price set at €45/t of CO₂, we assume that the base amount of the tax credit will be €216, corresponding to the 2026 level for a national CO₂ tax of €45/t.

CI-CO₂ Tax Credit by Quintile

According to calculations based on the 2024 Household Budget Survey (EBM), the CI-CO₂ tax credit offsets most of the impact of the CO₂ tax in 2024 for households in Q1 and Q2. Since this is a static analysis—i.e. assuming that household behaviour does not change under the ETS2 scenario—the same conclusion applies to the ETS2 scenario.

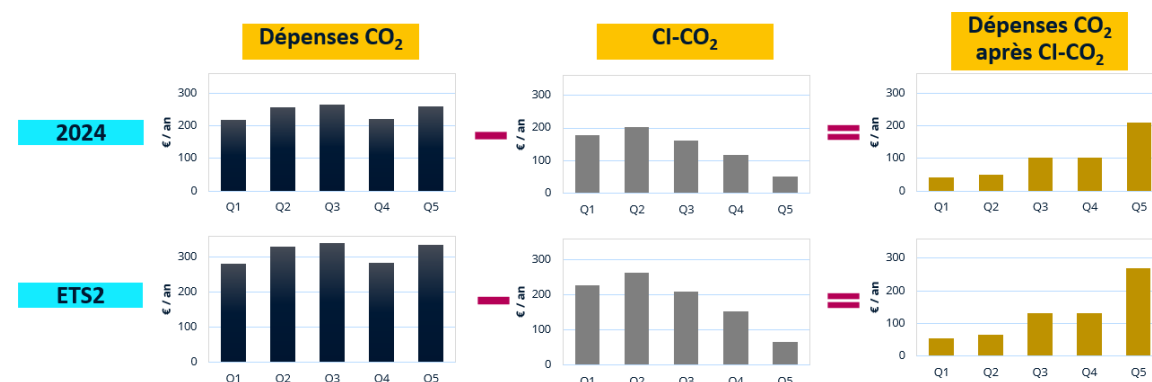


Figure 6: Quintiles Q1 and Q2 predominantly compensated by the CI-CO₂. Source: STATEC, IGSS

To achieve full compensation for a carbon price of €45/t, the base amount would need to be raised to approximately €267 for Q1, and to €271 to cover both Q1 and Q2, based on the 2024 EBM data.

It also emerges that an increase of €1/t in the carbon price would require an increase of around €6 in the base amount of the tax credit in order to maintain full compensation for the lowest-income households. These results raise the question of the future adjustment of the CI-CO₂, both in terms of the amounts and the income thresholds. However, it should be noted that technological progress and the increased uptake of low-carbon solutions in the future (electric vehicles, heat pumps, etc.) could reduce the extent to which the CI-CO₂ needs to rise to compensate Q1 and Q2 overall.

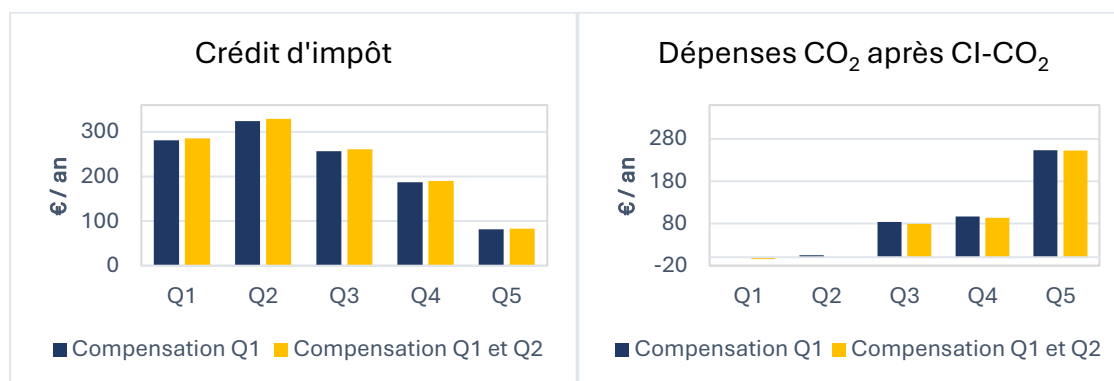


Figure 7: Tax credit required to fully compensate low-income households. Source: STATEC

4. COMPLEMENTARITY, ADDITIONALITY, AND IMPLEMENTATION OF THE PLAN

4.1. Monitoring and implementation of the Plan

The Interministerial Committee for Climate Action will be responsible for monitoring the implementation of the Social Climate Plan. It will be supported by a network of experts tasked with regularly assessing the effectiveness of implemented measures, monitoring energy poverty, supporting the rollout of initiatives, and contributing to the development of both existing and new measures. This network will comprise experts from STATEC and the relevant ministries. In particular, it will draw on STATEC's analyses, published annually in the *Labour and Social Cohesion Report*.¹³

At the same time, it is envisaged to organise regular exchanges dedicated to monitoring the measures of the SCP, bringing together interested members of the Platform for Climate Action and Energy Transition, the Climate Policy Observatory, and representatives of the social sector. These meetings would serve to share progress on the plan and to create a space for dialogue on potential complementary measures or related themes linked to a fair climate and energy transition. The

¹³ <https://statistiques.public.lu/fr/publications/series/analyses/2024/analyses-03-24.html>

General Inspectorate of Finance will oversee auditing responsibilities, while the Ministry of Finance will serve as the coordinating authority for the Social Climate Plan. In accordance with Regulation (EU) 2023/955 establishing the Social Climate Fund, the coordinating authority is responsible for establishing an effective and efficient internal control system to safeguard the financial interests of the European Union. Requests for additional human resources will be submitted and validated within the framework of the standard *numerus clausus* procedure.

Finally, the creation of an institutional and partnership-based network dedicated to monitoring energy poverty and evaluating measures could serve as a strategic lever for the transposition of Article 24(4) of the European Energy Efficiency Directive (EED). Such a network would enhance cross-sectoral coordination capacity while promoting a user- and territory-centred approach.

In accordance with Article 24 of Regulation (EU) 2023/955, Luxembourg is required to submit to the European Commission, every two years, a report on the implementation of its SCP. This progress report must include a set of indicators allowing the measurement of the state of implementation of the planned measures and investments. The evaluation aims in particular to assess the degree of achievement of the objectives of the measures financed by the Social Climate Fund, the effectiveness and efficiency of the use of financial resources, as well as the effectiveness of the measures and investments implemented.

As part of the implementation of the Social Climate Plan, STATEC contributes to the statistical monitoring of the energy and social vulnerability of households and micro-enterprises and ensures its coordination through the dedicated sub-group of the CSP (Committee for Public Statistics).

4.2. Consistency with other initiatives

Action Plan on the European Pillar of Social Rights

The Social Climate Plan is fully aligned with the principles and objectives outlined in the Action Plan on the European Pillar of Social Rights. This EU initiative seeks to reinforce the Union's social dimension by ensuring that the green and digital transitions are both fair and inclusive. Its priorities include equitable access to essential services, the reduction of inequalities, and the fight against energy poverty and social exclusion.

In this context, Luxembourg's plan represents a concrete national-level implementation of the commitments made at the European level. It reflects the country's determination to embed social justice at the heart of the climate transition by developing targeted mechanisms to support the most vulnerable groups and ensuring that decarbonization efforts do not undermine social cohesion.

The two plans are complementary in their approach: while the European Pillar of Social Rights provides the normative framework and overarching objectives, the Social Climate Plan translates these principles into actionable measures—particularly in the areas of sustainable mobility, energy renovation, and equitable access to green technologies. This alignment reflects a shared vision: an ecological transition that leaves no one behind.

Luxembourg's integrated national energy and climate plan for the period 2021–2030 – Update
(Ministry of the Environment, Climate and Biodiversity / Ministry of the Economy)

The Social Climate Plan (SCP) is fully aligned with the updated National Integrated Energy and Climate Plan (NECP), in accordance with Regulation (EU) 2018/1999. By incorporating several measures already outlined in the NECP, the SCP promotes an inclusive and socially equitable energy transition, while contributing to both national and European climate objectives.

Under the NECP, Luxembourg has committed to reducing greenhouse gas emissions by 55% by 2030 compared to 2005 levels, and to achieving carbon neutrality by 2050. To meet these targets, key measures have been defined—particularly in the areas of energy efficiency, renewable energy, and sustainable mobility. The SCP adopts and adapts some of these measures, placing emphasis on their social impact to ensure that the ecological transition does not exacerbate existing inequalities. By integrating climate and social policies in a coherent manner, the SCP serves as a vital instrument for the effective implementation of the NECP, while also fulfilling the requirements of Regulation (EU) 2023/955 concerning social justice in the energy transition.

Action plan for adaptation to the effects of climate change (2025–2035)

(Ministry of the Environment, Climate and Biodiversity)

The negative impacts of climate change on society, public health, and ecosystems have intensified, with its effects being felt more frequently and severely across Luxembourg. The strategy for adapting to climate change identifies key areas where additional measures are needed and proposes concrete actions to mitigate adverse consequences and enhance resilience.

Both the adaptation strategy and the Social Climate Plan (SCP) share a common objective: protecting vulnerable populations. This includes individuals facing transport-related challenges and households experiencing fuel poverty.

Long-term building renovation strategy

(Ministry of the Economy)

Luxembourg's Long-term building renovation strategy (LTRS) and the Social Climate Plan (SCP) are two complementary instruments designed to advance the country's climate and social objectives. The LTRS aims to transform the national building stock into a portfolio of highly energy-efficient and decarbonised buildings by 2050, in line with Directive (EU) 2018/844.

This transformation involves the renovation of residential and non-residential buildings—both public and private—to reduce energy consumption and greenhouse gas emissions. The LTRS provides a detailed overview of Luxembourg's building stock, identifying building types and their energy consumption profiles. Based on this data, a set of targeted measures has been proposed to accelerate the pace of energy renovations. These measures have since been incorporated and updated in the 2024 Integrated National Energy and Climate Plan (NECP).

Both the LTRS and the SCP include financing mechanisms and regulatory incentives to promote building renovation. For example, the LTRS offers financial assistance for major renovations, while the SCP provides targeted subsidies for vulnerable households. This complementarity enhances the effectiveness of public investment and ensures that the energy transition benefits all segments of the population.

In accordance with the European framework, the LTRS must be updated every five years. Under Directive (EU) 2024/1275 on the energy performance of buildings (EPBD), the LTRS will evolve into

the National Building Renovation Plan (NBRP). The final version of this plan must be adopted by 31 December 2026.

National Mobility Plan 2035

(Ministry of Mobility and Public Works)

The Social Climate Plan (SCP) introduces key social dimensions to the National Mobility Plan 2035 (PNM35). It proposes additional measures to ensure that all individuals—particularly those with low incomes or experiencing fuel poverty, whether in rural or urban areas—have access to a multimodal and intermodal transport network.

These measures consider the roles of various mobility stakeholders, including the State, local authorities, and employers, who must collaborate to ensure efficient public transport journey times, safe cycling routes, and a comfortable environment for pedestrians.

In parallel with efforts to expand multimodal transport infrastructure, subsidies are available to support vulnerable households in purchasing electric bicycles or vehicles that meet personal or professional needs not compatible with public transport—such as night-shift work.

Recovery and Resilience Plan

(Ministry of Finance)

Luxembourg's National Recovery and Resilience Plan is built on three fundamental pillars: social cohesion and resilience, ecological transition, and digitalisation and innovation. These strategic priorities aim to foster sustainable and inclusive growth while addressing climate and environmental challenges. With 80.1% of the available financial envelope dedicated to combating climate change, the plan stands as the greenest of its kind in Europe.

The Social Climate Plan (SCP) aligns closely with the objectives of the Recovery and Resilience Plan. It reinforces ongoing efforts toward a green transition while strengthening national solidarity. By advancing the goals of the initial recovery strategy, the SCP focuses on supporting citizens and reducing inequalities in the face of climate-related challenges—affirming a coherent and integrated approach to both social and environmental issues.

National Action Plan for the Prevention and Combating of Poverty (NAP)

(Ministry of Family, Solidarity, Living Together and Welcoming)

The 2023–2028 coalition agreement identifies the fight against poverty as an absolute priority for the government. Dans ce contexte, le gouvernement a adopté, en décembre 2025, son premier plan d'action national de prévention et de lutte contre la pauvreté. The plan comprises a total of 27 objectives and 106 actions, divided into eight thematic chapters (including the chapter on housing and energy), to be implemented in the short, medium and long term. Given the multidimensional and cross-cutting nature of poverty, the national action plan aims to address the issue in all its facets, whereas the SCP specifically targets the ecological transition for vulnerable households, which represents only one aspect of poverty prevention and reduction. The interaction between the two plans would make it possible to reconcile the energy transition with social justice, thereby ensuring that no one is left behind.

Cohesion Policies - European Social Fund Plus (ESF+)

(Ministry of Labour)

The Social Climate Plan (SCP) reinforces the objectives of the European Social Fund Plus (ESF+) by offering an integrated approach to social and environmental challenges. Both instruments share a commitment to combating social inequalities: while the ESF+ focuses on social inclusion and support for vulnerable populations, the SCP targets the ecological transition, particularly for vulnerable households and micro-enterprises. Their interaction enables the alignment of energy transition efforts with social justice, ensuring that no one is left behind.

The ESF+ already supports a range of social initiatives, including training programmes aimed at professional integration and reducing unemployment, as well as efforts to combat poverty and promote social inclusion. By combining the strengths of both funds, it becomes possible to reduce energy costs for vulnerable households while simultaneously offering social support to improve their economic situation.

The transition to a green economy also demands targeted efforts to train and retrain workers—a need addressed by ESF+-funded professional development programmes. This synergy ensures that populations most affected by the transition can adapt with skills suited to emerging challenges: the ESF+ provides the training needed to prepare citizens for green jobs, while the SCP ensures that access to green technologies is equitable and inclusive.

Just Transition Fund (JTF)

(Ministry of the Economy / Ministry of Labour)

The Just Transition Fund (JTF), one of the pillars of the European Union's Just Transition Mechanism, is a new financial instrument under EU cohesion policy. Its primary objective is to co-finance projects—up to 50%—that support territories most affected by the adverse impacts of the transition to a climate-neutral EU economy by 2050.

In Luxembourg, the JTF will be implemented through the ERDF and ESF+ programmes, each of which includes a dedicated priority axis for the fund. Its strategic framework is defined by the Luxembourg Territorial Just Transition Plan (TJTP), which identifies the intervention area, outlines the sectors undergoing transformation, sets development objectives, and specifies eligible operations.

To address the challenges of transition in the 11 municipalities of the southern region, the TJTP aims, first, to mitigate the costs of modernising affected sectors, combat energy poverty, and promote sustainable local mobility; and second, to support workers impacted by the transition through targeted training initiatives.

4.3. Complementary of funding

The Ministry of the Environment, Climate and Biodiversity manages a dedicated financial instrument known as the *Climate and Energy Fund*. This fund is designed to support the financing of:

1. National measures aimed at combating climate change and promoting renewable energy.

2. Initiatives to address climate change in developing countries.
3. Flexibility mechanisms established under the Kyoto Protocol and the Paris Agreement, as well as those outlined in Decision No. 406/2009/EC of the European Parliament and of the Council of 23 April 2009—concerning Member States’ efforts to reduce greenhouse gas emissions to meet the Union’s 2020 targets—and in Regulation (EU) 2018/842.

In addition, local authorities benefit from autonomous budgetary resources, enabling them to implement targeted measures in areas such as climate transition and social inclusion. Examples include demand-responsive transport services tailored to local needs.

4.4. Geographical specificities

Building sector

The eleven municipalities in south-western Luxembourg—Bettembourg, Differdange, Dudelange, Esch-sur-Alzette, Käerjeng, Kayl, Mondercange, Pétange, Rumelange, Sanem, and Schifflange—form a highly integrated urban area, commonly referred to as the ‘southern region.’ These municipalities share a common industrial and urban heritage, along with similar challenges related to the energy transition and socio-economic development.

Given their population density, economic structure, and levels of social vulnerability, they are particularly exposed to the pressures of the climate transition.

According to STATEC data based on the 2011 census, 55.4% of buildings in the municipalities of the Southern Region were constructed between 1946 and 2000, while 32.4% were built before 1945, and only 5.7% during the decade 2001–2011. Notably, the proportion of buildings dating from before 1945 in the Southern Region (32.4%) exceeds the national average of 26.2%.

In the municipalities of Differdange (4,507 buildings), Esch-sur-Alzette (5,521 buildings), Mondercange (1,770 buildings), and Sanem (3,436 buildings), over 90% of the building stock was completed before 2000. Given that only an estimated 10–14% of residential units have undergone building envelope renovations, the Southern Region faces significant challenges in improving insulation and replacing outdated fossil fuel-based heating systems.¹⁴

Transport sector

Data from the *Luxembourg in Figures* report (STATEC, 2024)¹⁵ reveal a correlation between income levels and geographical location. Urban and peri-urban municipalities tend to have higher median monthly salaries, while border municipalities—particularly in the north and south—record the lowest levels of remuneration (see Figure 2). These socio-economic disparities are closely linked to distinct territorial dynamics.

In the southern region, sustainable mobility is a growing concern. According to projections from the PNM 2035, daily journeys within the southern region are expected to increase by approximately

¹⁴ Ministère de l'Économie, Grand-Duché de Luxembourg. (2021). PROGRAMME FEDER LUXEMBOURG – Investir dans une Europe plus intelligente et plus verte 2021-2027

<https://fonds-europeens.public.lu/dam-assets/publications/feder/p/po-feder-2021-2027-version-light-fox2.pdf>

¹⁵ STATEC. (2024). Edition 2024 – Luxembourg in Figures

<https://statistiques.public.lu/en/publications/series/luxembourg-en-chiffres/2024/luxembourg-en-chiffres-2024.html> , pp.28-31

64% by 2035, rising from 537,000 to 797,000. This surge in mobility is also anticipated to drive a significant increase in public transport usage across the region.¹⁶

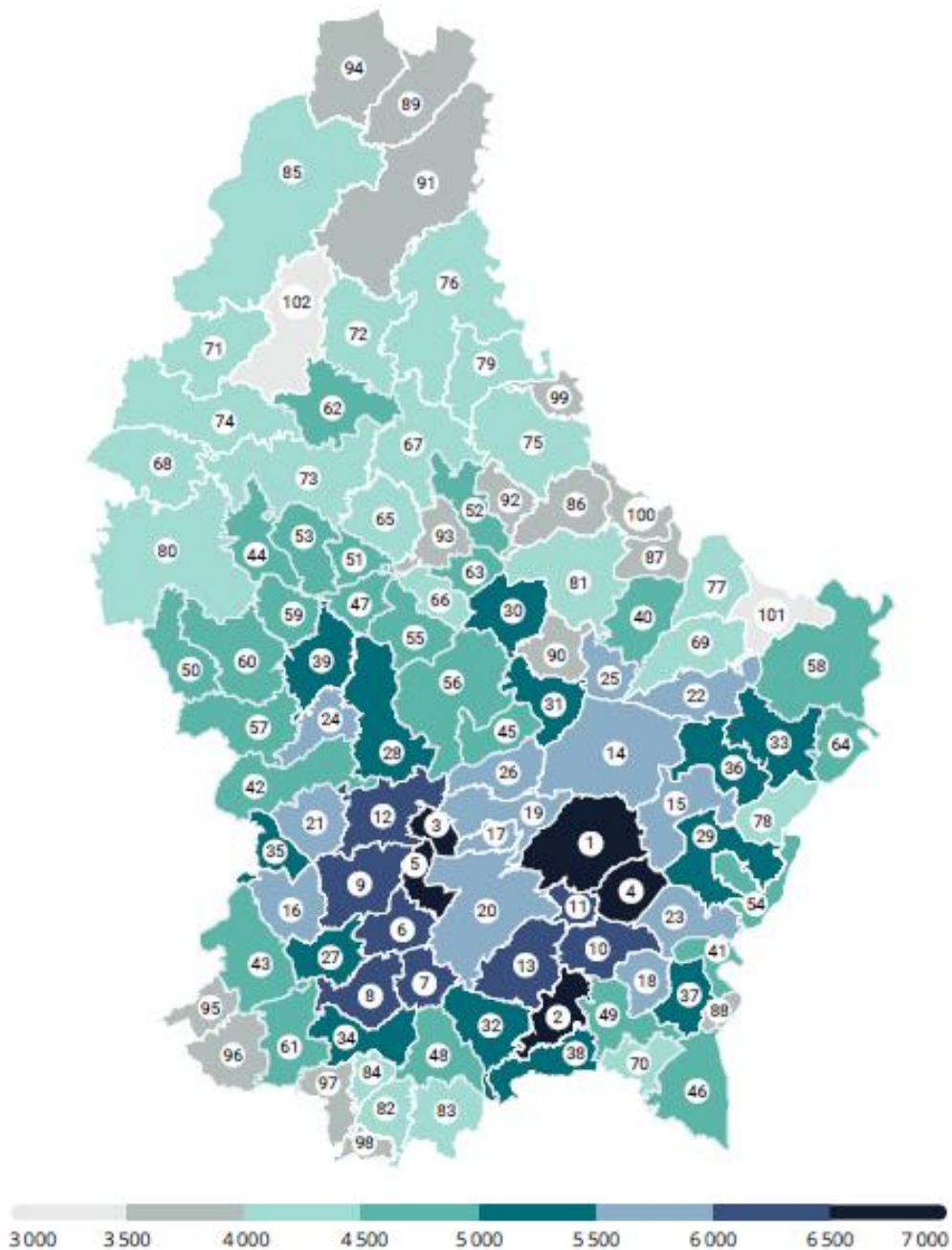


Figure 8: Median Monthly Salary by Municipality in 2023 (Source: STATEC, 2024)

Regional inequalities often lead to long commutes between home and work, particularly for residents of rural and border areas. In many cases, individuals have no choice but to rely on private cars for their daily journeys, due to the lack of accessible alternative transport options. This heavy

¹⁶ Ministère de la Mobilité et des Travaux publics, Grand-Duché de Luxembourg. (2022). PNM 2035 - Plan national de mobilité <https://gouvernement.lu/fr/dossiers/2022/pnm2035.html>

dependence on private vehicles presents a significant challenge in the context of the energy transition, especially in light of the anticipated rise in carbon prices.

A substantial share of transport-vulnerable households consists of cross-border workers. Employment in the service sector—such as retail, hospitality, childcare, and personal services—is largely held by cross-border workers. These individuals, residing in border areas, face difficulties relocating closer to their workplaces due to housing market constraints. While some cross-border routes benefit from good rail connectivity, others—particularly in more rural regions—are poorly served. As a result, disadvantaged areas beyond Luxembourg’s borders remain heavily reliant on private cars to access employment opportunities within the country.

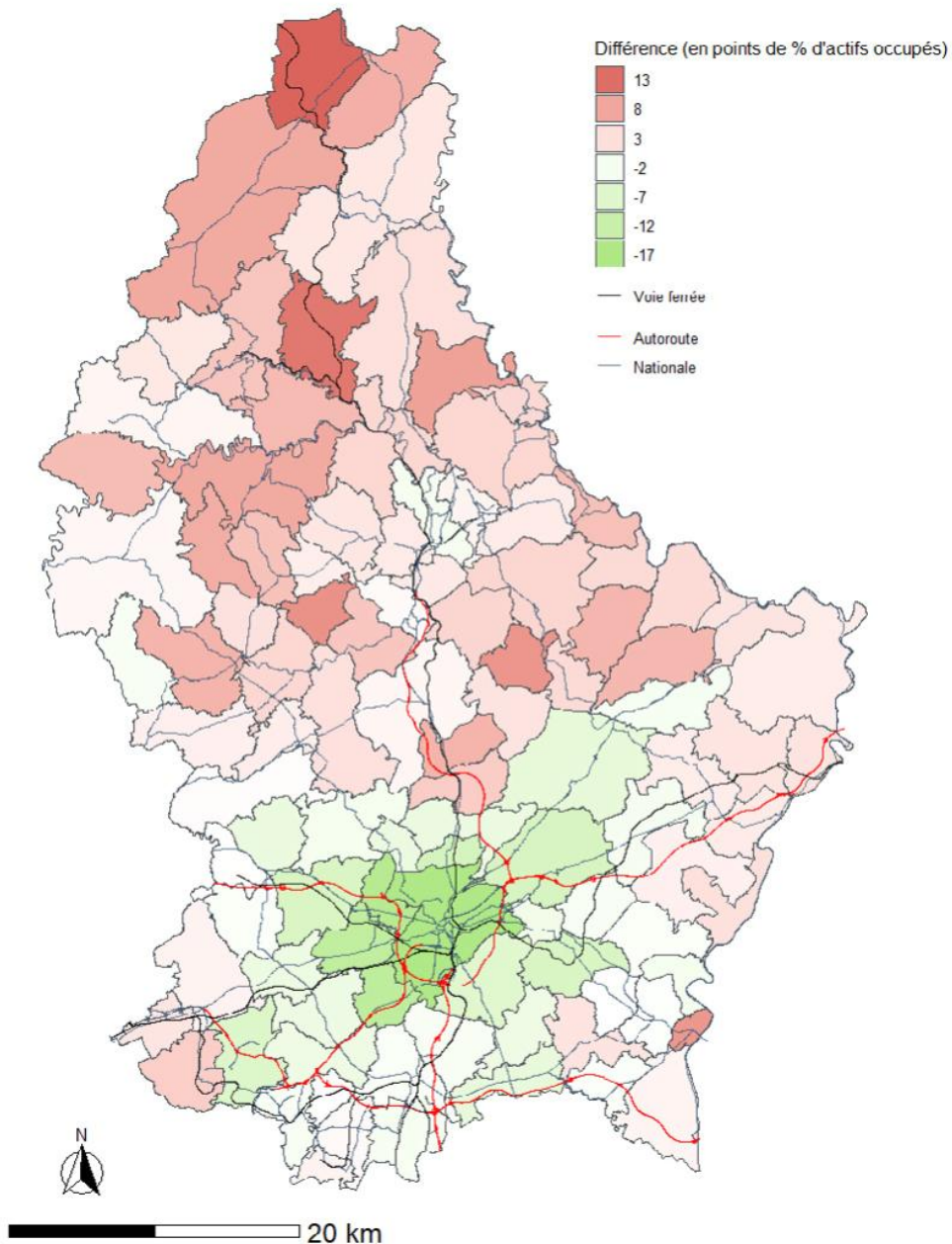


Figure 9: Change in the Proportion of Workers Using a Car as Their Main Mode of Commuting, 2011-2021 (Source: STATEC, 2025, p.6)

Urban and peri-urban centres in Luxembourg benefit from an increasingly attractive and well-developed public transport network, while also welcoming a growing number of new residents who primarily commute on foot, by bicycle, or via public transport. Between 2011 and 2021, Luxembourg City recorded the most significant decline in the proportion of employed individuals using cars as their main mode of transport—a decrease of 17 percentage points. In contrast, several municipalities in the north and along the borders experienced increases in car usage, with Troisvierges and Kiischpelt seeing rises of up to 14 and 12 percentage points, respectively (see Figure 2).

Despite the availability of an extensive and free rail network, car dependency has intensified in these areas, largely in parallel with population growth. This trend may indicate that, as commuting distances increase, achieving a modal shift away from car use becomes more challenging due to time constraints and the need for greater flexibility. Commuting to work is just one aspect of a broader set of daily activities within a limited 24-hour timeframe.

Moreover, this pattern may reflect a shift in the spatial distribution of workplaces within these municipalities, driven by the arrival of residents whose jobs are located farther away and who are more reliant on private vehicles (see Figure 3¹⁷). Finally, the trend could also point to a growing separation between new residential developments and public transport infrastructure, suggesting a recent phenomenon of more diffuse urban sprawl.¹⁸

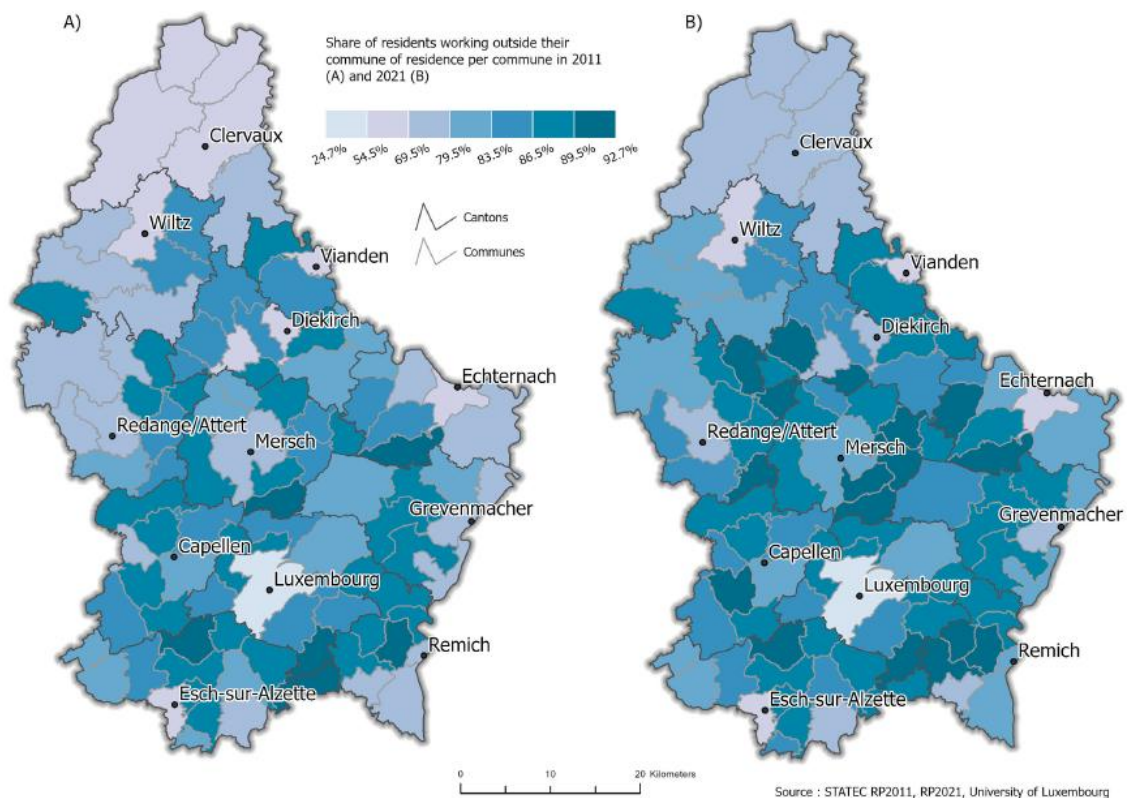


Figure 10: Proportion of Residents Working Outside Their Municipality of Residence, by Municipality in 2011 (A) and 2021 (B), (Source: STATEC, 2024, p.6)

4.5. Prevention of corruption, fraud and conflicts of interest

Control system

¹⁷ Ferro, Y. et. al. (2024). *RP 1er résultats 2021 N°10 « Une polarisation croissante des déplacements domicile-travail au Luxembourg »*. STATEC. <https://statistiques.public.lu/fr/recensement.html>

¹⁸ Ferro, Y., Caruso, G., & Gerber, P. (2025). *La dépendance automobile persiste pour les déplacements domicile-travail*. STATEC. <https://statistiques.public.lu/dam-assets/recensement/publication-18/docs/18-05-02-fr.pdf>

This chapter, dedicated to the internal control and management framework, sets out and clarifies the different functions and actions to be undertaken by the competent authorities in order to protect the financial interests of the EU. It includes, in particular, the detection of fraud, corruption and potential conflicts of interest, as well as the implementation of measures aimed at preventing the risk of double funding.

Separation of functions is ensured through the involvement of several entities, each responsible for implementing specific aspects of the control and audit system.

The Ministry of the Environment, Climate and Biodiversity is the authority responsible for the development and implementation of the Social Climate Plan (SCP).

The Ministry of Finance acts as the managing authority. In this capacity, it bears the primary responsibility for protecting the EU's financial interests and for verifying the achievement of milestones and targets. As it is also responsible for the management and monitoring of the Recovery and Resilience Plan, the ministry benefits from solid experience, proven procedures and operational tools that ensure the control and monitoring of projects co-financed by the Social Climate Fund (SCF). The data-management systems, verification mechanisms and internal processes in place ensure consistent, reliable and fully compliant implementation of EU requirements.

The Inspectorate General of Finance (IGF) performs the audit authority function for several European funds by carrying out annual audit missions. The IGF operates independently and is responsible for verifying the legality and regularity of declared expenditure, the achievement of milestones and targets, and the proper functioning of management and control systems. It contributes to ensuring compliance with the principles of sound financial management and provides an adequate level of assurance regarding the use of EU funds.

Risk analysis

The managing authority has adopted appropriate and proactive measures through an internal control and management system that operates at all stages of the project cycle. The system is based on fraud and corruption prevention, as well as measures designed to manage suspected cases of fraud or corruption. Risk analysis is an integral part of the SCP control and management system and enables the identification of risks associated with the implementation of SCP measures. In this context, a risk score is established for each milestone and target of the measures financed by the SCF. The score takes into account (i) risks linked to double funding and conflicts of interest, (ii) risks related to public procurement and State aid, (iii) risks stemming from predefined project characteristics, (iv) risks linked to the specificities of the milestones and targets, and (v) risks related to fraud and the detection of irregularities.

Risk-mitigation measures and enhanced controls are determined on the basis of this risk analysis.

Measures to address risks related to fraud and corruption

The anti-fraud measures implemented cover public procurement, State aid and, more generally, the eligibility of expenditure and supporting documents examined and documented during the various control stages. The managing authority regularly checks that the funding provided has been used correctly in accordance with all applicable provisions and that all measures have been properly implemented.

The managing authority verifies the completeness and accuracy of supporting documents demonstrating compliance with public-procurement rules and all other applicable procedures. It checks, in particular, that the necessary verifications have been carried out and documented by the DCF controller and the project promoters. It ensures that the services and works co-financed by the Social Climate Fund have been awarded in accordance with EU public-procurement directives

(Directives 2014/24/EU and 2014/25/EU, or any directive replacing them) and the Law of 8 April 2018 on public procurement. The results of the checks are formalised and stored in a dedicated checklist.

The managing authority verifies that project promoters comply with the rules applicable to State aid under Articles 107 and 108 TFEU, including Regulation (EU) No 651/2014 declaring certain categories of aid compatible with the internal market, and Regulation (EU) No 1407/2013 on de minimis aid. It conducts an in-depth compliance analysis of all measures co-financed by the SCF, based on the supporting documents provided. In collaboration with the Ministry of the Economy, which has expertise in State-aid matters, the managing authority verifies the compliance of the measures with the applicable regulations, the qualification of State aid and the conformity of the grant with the relevant regulatory frameworks (EARDI, de minimis, GBER), including any applicable notification requirements. A dedicated checklist formalises these verifications.

Measures to address risks related to conflicts of interest

The managing authority has established a procedure defining the rules and principles to be observed regarding conflicts of interest. Under this procedure, project promoters sign a declaration of absence of conflicts of interest at the start of their involvement in an SCP project. In addition, a list of all persons involved in the design of public-procurement procedures and State-aid measures is transmitted to the managing authority, which verifies that each has signed a duly completed declaration of no conflict of interest. Where a conflict of interest is established, it must be reported in writing to the hierarchical superior and to the managing authority without delay. A conflict-of-interest declaration is signed and stored on the electronic platform. The person concerned must cease all activities related to the file and loses access to the internal IT platform.

Measures for dealing with whistleblower reports

Any person, particularly anyone with a professional link to the Luxembourg SCP, may report potential irregularities to the managing authority in an anonymous and secure manner. The managing authority has set up an anonymous reporting channel for whistleblowers. This takes the form of an anonymised form in which only the message field is mandatory. The message is automatically sent to an email address at the Ministry of Finance accessible only to members of the SCP managing authority. Upon receiving a whistleblower report, the managing authority carries out a preliminary examination and may request additional information from relevant stakeholders. A search is also conducted via the ARACHNE tool to gather complementary information. In cases involving project promoters or final beneficiaries, the appropriate procedure is initiated to limit the impact of potential fraud before the payment request is submitted to the European Commission.

Measures to mitigate double-funding risks

The risk of double funding is mitigated jointly by the managing authority and the project promoters. The system aims to prevent, detect and correct any situation that might lead to double funding of costs under the SCF and other EU programmes, particularly the Recovery and Resilience Plan (RRP). Project promoters must inform the managing authority ex-ante of any potential co-funding by another EU fund. The managing authority verifies the completeness and coherence of the information provided on the platform.

The ARACHNE IT tool—used, among other things, to identify the participation of final beneficiaries in other projects—is then used to check the accuracy of relevant data. The managing authority also uses the ‘Kohesio’ platform to detect potential double-funding risks with other EU funds at national level. This check is formalised in a dedicated double-funding checklist, completed on a six-monthly basis.

The managing authority actively participates in coordination-committee meetings involving all national authorities responsible for EU funds, with the aim of minimising cross-programme

double-funding risks. Where a risk is identified during controls, the managing authority immediately initiates a corrective action and implements an appropriate remediation plan.

Use of the ARACHNE IT tool

Financial-flow information from projects is collected and integrated into the ARACHNE risk-scoring tool provided by the European Commission. This tool is used for both ex-ante and ex-post controls, in particular through the upload of data relating to persons involved in public-procurement and State-aid procedures, signed conflict-of-interest declarations and final beneficiaries. A dashboard displays risk levels for each category of potential risk, allowing the managing authority to identify 'red flags' that it must examine in order to mitigate fraud risks and protect the EU's financial interests.

Monitoring irregularities

Where non-compliance, red flags or irregularities are identified, enhanced monitoring is put in place. The managing authority may also decide to increase the control rate. All discrepancies are documented in an irregularities-tracking file. In cases of suspected or confirmed fraud, the managing authority takes appropriate action and files a report without delay with the competent judicial authority, in coordination with the audit authority (IGF). It also informs the European Commission and OLAF within the same timeframe. Furthermore, it ensures the suspension of EU funding and initiates recovery procedures for disbursed amounts in the event of a conviction of the project promoter or final recipient, in accordance with applicable national criminal provisions.

Verification of milestones and targets

The managing authority ensures, in close cooperation with project promoters, rigorous monitoring of each milestone and target. This monitoring relies on the procedures established under the Recovery and Resilience Facility, guaranteeing reliable verification of the achievement of the milestones and targets defined in the SCP. The review method combines desk-based checks of submitted documents and on-site verifications to confirm the actual situation.

Project promoters submit a report detailing the milestones and targets achieved, the verification methodology and all supporting documents. This report undergoes thorough review and is compared with the data uploaded to the electronic platform. The managing authority then applies the most appropriate control method, based on the volume and nature of the data, to confirm achievement. In the event of a risk of delay or non-achievement, the managing authority immediately contacts the European Commission to remedy the situation.

Audit trail

The managing authority has established a secure IT platform to collect data directly from project promoters. This platform is a central tool for the operational and financial monitoring of projects, as well as for the controls carried out by the managing authority. It ensures the monitoring of milestones and targets and provides safeguards for the protection of the EU's financial interests.

Using the documents submitted by project promoters, the managing authority can identify and mitigate project-management risks, including risks of fraud, corruption, double funding and conflicts of interest. Thanks to the centralisation of information, traceability of operations and availability of structured data, the platform facilitates systematic compliance checks relating to State-aid rules and public procurement and supports the detection of potential anomalies. The collected documents are retained for five years in accordance with Article 75 of Regulation (EU) 2024/2509 on the financial rules applicable to the general budget of the Union.

Access to the platform may be granted to IGF auditors (or any subcontractor) as well as to competent authorities or bodies such as the European Commission, OLAF, the Court of Auditors and, where

applicable, the European Public Prosecutor's Office upon request. The platform is hosted in the GovCloud and managed by the State Information Technology Centre (CTIE).

To mitigate risks associated with this infrastructure, a central CTIE service supports administrations in using cloud services, monitors deployments to identify consolidation opportunities and ensures compliance with best practices, recommended standards and security and risk-management requirements. Security and confidentiality are guaranteed through enhanced measures, including LuxTrust authentication, prior access requests validated by the managing authority, full traceability of actions and strict management of roles and access rights. Each user must acknowledge the GDPR rules and sign a conflict-of-interest declaration before platform access is granted.

System and operational audits

The audit authority establishes an audit strategy under the SCP, providing for the annual performance of system audits to assess the effectiveness of the management and control framework, as well as operational audits based on appropriate sampling.

The audit authority may commission an external service provider to perform audit work. Before the payment request is submitted, the audit authority (or its subcontractor) selects certain milestones and targets (randomly and/or based on risk analysis) from the payment request and conducts audits with the managing authority.

Following the audit, the audit authority draws up a summary of all audits carried out, including an analysis of the results relating to conflicts of interest, fraud-prevention measures, anti-corruption measures and double-funding risks. This summary also includes an analysis of any weaknesses identified and corrective measures taken, as well as the results of the audit of the milestones and targets included in the payment request accompanying the management declaration.

Management declaration

Based on the control framework described above, a management declaration is prepared for each payment request. This declaration details compliance with procedures and certifies that funds have been used for their intended purpose, that the information provided with the payment request is complete, accurate and reliable, and that the control systems in place provide the necessary assurance that the funds have been managed in accordance with all applicable rules.

4.6. Information, communication, and visibility

The Social Climate Plan will be made publicly available via the official website www.emwelt.lu, which is managed by the Ministry of the Environment, Climate and Biodiversity, in accordance with the practice adopted for other strategic plans developed by the Ministry. In addition, the participatory platform www.zesumme-vereinfachen.lu will continue to play a central role in communication related to the public consultation, ensuring transparency regarding its progress, outcomes, and follow-up actions.