de Budgets- a Strukturplang

LE GOUVERNEMENT
DU GRAND-DUCHÉ DE LUXEMBOURG

National medium-term fiscal-structural plan
October 2024

Courtesy translation of the original French document.

In case of a discrepancy between the original version and the translated text, the original version shall prevail.

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I. Overall orientation of the national medium-term fiscal-structural plan

Governance framework

In April 2024, the European Union adopted new legislation reforming the economic and budgetary governance framework of the European Union[1] (hereinafter "EU"). The basic principles revolve around sound and sustainable public finances and sustainable and inclusive growth, which continue to be the cornerstones of the new governance. The overall objective of the governance reform is to reduce debt ratios and deficits in a gradual, realistic, sustained and growth-friendly manner, while enabling reforms and strategic investments, particularly in digital technology, energy and defence.

Against this backdrop, Luxembourg is presenting its first national medium-term fiscal-structural plan (hereafter referred to as the "MTFSP"), set to become the reference budgetary document at European level for the coming years. The MTFSP is to be renewed every five years. Annual progress reports will be presented in April of each year.

The requirements of the Treaty on the Functioning of the EU (TFEU) that government deficits should not exceed 3% of GDP and government debts should not exceed 60% of GDP remain unchanged. However, monitoring will now primarily be conducted through the new multiannual net expenditure path (hereafter the "path"). This plan proposes a path that covers the entire duration of the national legislature (i.e. 5 years) while outlining investments and reforms that respond to the main challenges identified in the context of the European Semester.

A responsible budgetary strategy in what remains a difficult environment…

The context in which the Luxembourg economy was evolving in 2023 proved difficult. Russia's invasion of Ukraine has increased inflationary pressures, and rising tensions in the Middle East could lead to disruptions in the global economy. Against the backdrop of an economy marked by uncertainty, the government has taken a series of measures to support both households' purchasing power and businesses' competitiveness. The government is also continuing to maintain a high level of public investment in order to meet current and future challenges. For 2024, economic activity has shown renewed growth in the first two quarters, indicating that the government's chosen strategy has been appropriate and well-suited to a demanding situation.

With recovery and price stabilisation on the horizon, the government is committed to maintaining a fiscal policy that addresses structural issues while preserving the country's 'AAA' rating. The budgetary strategy aims to redress the deficit and public debt over the entire legislative period, by gradually lowering expenditure growth to below revenue growth. The path presented in the MTFSP reflects this ambition to close the scissors effect. It is therefore consistent with the requirements of the preventive arm of the new European governance, which mandates compliance with the reference criteria for public debt and deficit, while taking into account sustainability risks up to 2038.

…underpinned by strategic reforms and investments

The new European governance framework gives greater emphasis to structural reforms and public investments that strengthen sustainability and growth. Derived from the priorities of the 2023-2028 coalition agreement, the structural section of the MTFSP outlines a set of reforms and investments that the country plans to implement in the coming years.

The reforms and investments listed in the MTFSP address both to the EU's common priorities and to the country-specific recommendations. Accordingly, they support the objective to maintain high competitiveness and optimise productivity by means of an attractive legal and fiscal framework, as well as strengthening ecosystem strategies. At the same time, the government will give greater priority to defence and security in order to comply with its commitments to NATO[2]. In addition, the government intends to implement a series of reforms and initiatives aimed at making the education landscape more inclusive.

1 See Box 1, p.6.

To address the issue of labour shortages and major emerging trends, the government will continue to take targeted measures to enhance skills and facilitate workforce retraining. As for housing, a package of measures has been introduced since the beginning of the year to support the supply of affordable housing and to strengthen the construction and craft sectors by promoting job creation. In terms of climate and environmental policy, the government is pursuing an ambitious, pragmatic and socially equitable policy by promoting the deployment of renewable energies and the decarbonisation of transport. Finally, building on several lines of action, the government aims to continue developing a modern state at the service of its citizens, with a priority given to the digital transition, alongside the simplification of administrative procedures.

As part of the national social dialogue, the government maintains regular exchanges with social partners within the framework of the European Semester to discuss the key structural issues facing the country. The most recent meeting was held on 4 July 2024 and focused on the 2024 Country report for Luxembourg, the Country-specific recommendations for Luxembourg for 2024-2025, as well as the changes related to the new European economic governance framework.

In accordance with Article 12 of Regulation 2024/1263[3], the submission of the MTFSP was preceded by a technical dialogue with the European Commission to ensure compliance with the said regulation.

At national level, the MTFSP was presented to Parliament on 15 October 2024.

2 North Atlantic Treaty Organisation.

3 Regulation (EU) 2024/1263 of the European Parliament and of the Council of 29 April 2024 on effective coordination of economic policies and multilateral surveillance of budgetary positions and repealing Council Regulation (EC) No 1466/97.

Box 1: The European Union's new economic and budgetary governance framework

On 29 April 2024, the Council of the European Union (EU) adopted a legislative package reforming the EU's economic and budgetary governance framework:

- The preventive arm, which aims to monitor and coordinate Member States' budgetary policies in order to ensure budgetary discipline within the EU[4];
- The corrective arm, which underpins the correction of excessive public deficits or debts[5];
- The budgetary rules governing national budgets of EU Member States.[6]

The revised governance framework aims to reduce deficits and debt ratios in a gradual, realistic, sustained and growth-friendly manner, taking into account the reform and investment objectives of the EU.

Member States must present national medium-term fiscal-structural plans that integrate the budgetary stance, and reforms and investments for a period of 4 or 5 years. These plans are the cornerstone of the new economic governance framework and now replace stability/convergence programmes and national reform programmes. In terms of public finances, the Member States commit to adhering to a net expenditure path specific to each country. This multi-annual expenditure path must meet a certain number of criteria based on the deficit and debt levels of the respective country.

Member States that do not comply with the Maastricht criteria, namely a maximum deficit of 3% of GDP and a maximum debt ratio of 60% of GDP receive a reference path for the net expenditure path by the European Commission. This path defines the budgetary adjustment that i. provides a resilience margin relative to the deficit reference value of 3% of GDP and/or ii. ensures that the projected public debt-to-GDP ratio declines or remains at prudent levels below 60% of GDP.

In terms of reforms and investments, Member States must outline in their national plans those responding to the challenges identified in the European Semester, particularly in the country-specific recommendations, as well as the EU priorities of the twin green and digital transition, social and economic resilience and defence capabilities. The implementation of the national medium-term fiscal-structural plans is monitored through the Annual progress reports, to be submitted to the European Commission by 30 April of each year.

4 Regulation (EU) 2024/1263 of the European Parliament and of the Council of 29 April 2024 on effective coordination of economic policies and multilateral surveillance of budgetary positions and repealing Council Regulation (EC) No 1466/97.

5 Council Regulation (EU) 2024/1264 of 29 April 2024 amending Regulation (EC) No 1467/97 on speeding up and clarifying the implementation of the excessive deficit procedure.

6 Council Directive (EU) 2024/1265 of 29 April 2024 amending Directive 2011/85/EU on the requirements applicable to the budgetary frameworks of the Member States.

II. Macroeconomic projections

The macroeconomic forecasts underlying the MTFSP are based on the most recent data and were produced independently by STATEC[7]. They are identical to those underlying the Multiannual Financial Programming Law 2024-2028. The macroeconomic data extending to 2038 are based on the assumptions set out in the DSA methodology.[8]

The overall slowdown in economic activity in the euro area as a result of the energy crisis linked to the war in Ukraine has also been felt in Luxembourg, an economy that is largely dependent on international economic developments. Indeed, real GDP contracted by -1.1% in 2023. Since then, the global economy has been relatively buoyant in the first half of 2024, and the euro area has seen a slight recovery. Against the backdrop of a revised upward economic environment, economic activity in Luxembourg grew by 0.7% in the first quarter, and by 0.6% in the second quarter. For the year as a whole, GDP should - according to STATEC's most recent forecasts - grow by 1.5% in 2024. The year 2025 should see a rebound, with GDP rising by 2.7%, partly supported by the measures taken by the government[9] to bolster the economy. However, this growth rate is lower than the 3.0% forecast made by STATEC in May[10], particularly given the overall deterioration of the outlook for the coming years. For the rest of the period under review, STATEC expects GDP to grow by an average of 2.7%, whereas previous forecasts had predicted an average increase of approximately 3%.

This downward revision reflects the less dynamic direction of potential growth, which is estimated at 1.5% and 1.7% for the years 2024 and 2025, but should converge towards 2% by 2028. The output gap would remain negative throughout the period under review due to the under-utilisation of productive resources. The calculation also takes into account the "closure rule", according to which the output gap closes in five years. However, given that the European Commission extends its time horizon on the occasion of each year's autumn economic forecast, this same time horizon is applied to the calculation of the output gap in the context of national budget programming. By 2038, potential GDP growth is expected to rise by 1.8% on average, in line with the assumptions underlying the work carried out by the Potential Output Working Group and the Ageing Working Group. After closing the output gap, real GDP growth for this period remains in line with that of potential GDP.

The easing of inflationary pressure has continued in Luxembourg in recent months. According to STATEC, the GDP deflator is forecast to rise by 1.7% this year and by 3.1% in 2025. The rebound is partly attributed to the partial lifting of price caps at the beginning of 2025, limiting the rise in electricity prices, while the current measures on gas prices no longer apply. There would be two wage indexations in 2024 and 2025, both occurring at the end of the year. By 2038, the GDP deflator is projected to average 2.5% over the entire period under review, bringing it close to the European Central Bank's targets.

7 National Institute for Statistics and Economic Studies.

8 Methodology used by the European Commission as part of its "Debt sustainability analysis" (DSA): https:// economy-finance.ec.europa.eu/document/download/e3a23fba-1402-4cc9-b571-7473b5e7842a_en?filename=ip271_en.pdf.

9 (Partial) capping of energy prices in 2024 and 2025; reduction in the tax burden on households; measures to support housing; measures to support businesses (i.e. energy subsidies; tax changes).

10 Note de conjoncture NDC, 1-2024.

III. Fiscal projections

The new EU governance framework requires Member States to establish a path that promotes sound and sustainable public finances, sustainable and inclusive growth, and resilience through reforms and investments. The path is expressed in terms of net primary expenditure[11], the single operational indicator of the new governance framework. In accordance with European legislation, the path accounts for the adjustment period (2024-2028), as well as the ten years following the end of the adjustment period[12] (2029-2038), based on a no-policy-change scenario and considering the structural risks facing Luxembourg. It should be emphasised that the exercise is carried out at general government level according to the rules of the European system of accounts (ESA). The ESA balance includes all entities and sectors belonging to the public administration (central government, local government, social security).

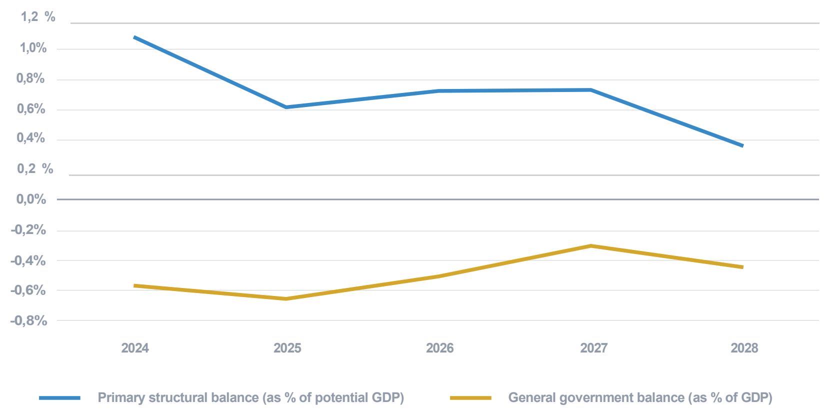
III.1. General orientation of fiscal policy

To ensure consistency, the path set out in the MTFSP is based on the macroeconomic projections and fiscal targets underlying the draft 2025 budget and the draft multi-annual financial programming law for 2024-2028.

Despite a return to growth in economic activity, the last few years of crisis and geopolitical uncertainties continue to weigh on Luxembourg's public finances. The general government deficit is expected to reach 0.6% of GDP in 2024, well below the 3% threshold set out in the European treaties. In order to ensure sustainable public finances in the medium term, and given the major structural challenges linked to the twin sustainable and digital transition, the ageing of the population and the efforts undertaken in the area of defence, prudent management of public finances is essential. This commitment is reflected in the evolution of the balances in this MTFSP.

The nominal general government balance would remain constant in 2025 at -0.6% of GDP. The balance would therefore be halved compared with the figures presented in April 2024, mainly due to a significant upward revision in revenue and a slowdown in expenditure growth. The scissors effect between revenue and expenditure would turn positive again, and the balance would gradually improve until 2027, before deteriorating to reach -0.4% of GDP in 2028. This deterioration is attributed, on the one hand, to the worsening social security balance and, on the other hand, to an increase in investments in 2028. Replicating the European Commission's DSA methodology, the general government balance should - on an unchanged policy basis - reach -2.1% of GDP by 2038. The general government balance would thus be below the reference threshold of -3% of GDP by 2038, thereby complying with the provisions of Article 6(b) of EU Regulation 2024/1263.

Figure 1: General government balance and primary structural balance[13] 2024-2028



Source: Ministry of Finance

11 See Box 2, p.10.

12 According to Article 2 of EU Regulation 2024/1263, the adjustment period is the period over which a Member State's budgetary adjustment takes place. In the case of Luxembourg, it covers a four-year period and is based on the macroeconomic and budgetary figures underlying the draft law on multiannual financial programming for 2025-2028.

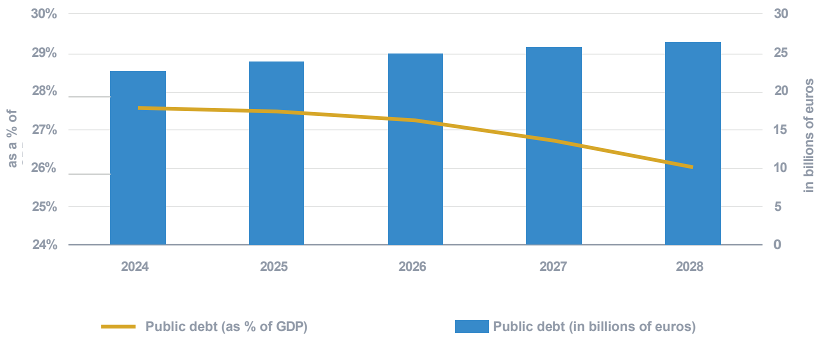
13 Primary structural balance: the cyclically-adjusted general government balance after deducting one-off and other temporary measures and interest expenditure.

In terms of expenditure, the budgetary policy strategy must ensure that the necessary resources are mobilised to safeguard priority investments for inclusive and sustainable growth. The government is therefore giving priority to spending in the areas of competitiveness, intergenerational equity, social cohesion, defence, and the twin sustainable and digital transition. The level of public investment is maintained above 4% of GDP for the duration of the multiannual budget, while significant resources have been devoted to maintaining international commitments in the areas of defence, energy and the climate. The structural reforms and investments are described in more detail in the structural part of the MTFSP and respond to the challenges identified in the country-specific recommendations addressed to Luxembourg as part of the European Semester, as well as to the EU's common priorities.

Revenue growth is expected to continue, reaching 5.2% by the end of the period. The high growth forecast for 2024 is driven by the positive performance of the private sector and the impact of inflation. In 2025, the slowdown in inflation will have an impact on direct taxes, slowing their rise. In subsequent years, growth is expected to rebound and reach around 6% by the end of the adjustment period. As for indirect taxes, they are expected to rise by around 8% on average in 2024 and 2025, before falling back to 5% by the end of the period.

By the end of 2024, Luxembourg's public debt is expected to amount to 22.5 billion Euros, or 27.5% of GDP. It should stabilise in 2025 before gradually falling to 26% of GDP at the end of the period. This goes hand in hand with the government's determination to ensure the sustainability of public finances. By 2038, public debt is expected to remain stable over the projection horizon, with a debt ratio of 26% of GDP, thus complying with the provisions of Article 6(a) of EU Regulation 2024/1263.

Graph 2: Evolution of public debt in 2024-2028



Source: Ministry of Finance

III.2. Net expenditure path

The path highlights net primary expenditure over a five-year period (2024-2029), in line with the ordinary length of a legislature in Luxembourg. In accordance with the information provided by the European Commission, the path is calculated[14] based on structural indicators, including potential growth, the GDP deflator and the changes in the primary structural balance.

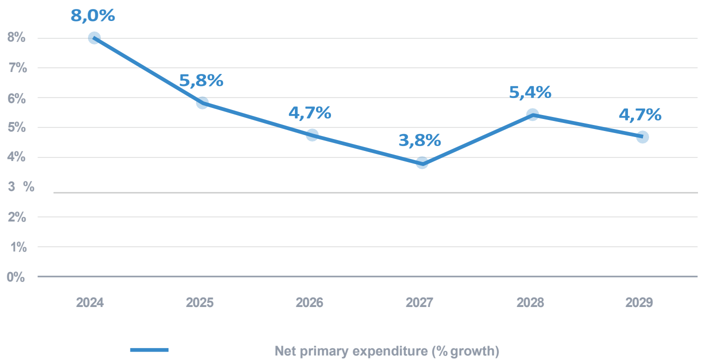
In order to assess the sustainability of public finances by 2038, the structural indicators are mechanically extended by ten years after the end of the MTFSP adjustment period[15]. The data underlying the national path are derived from the national multiannual budget for 2024-2028, while those relating to the year 2029 are based on a scenario of unchanged policies. Growth in net expenditure is assumed to average 5.4%, rising to 5.8% in 2025 and gradually declining to 4.7% in 2029. The slight dip in 2027 is due to a less dynamic GDP deflator. In accordance with Article 6 of Regulation 2024/1263, the path takes into account the risks that Luxembourg will face in the coming years and the country's specific challenges. It ensures that public debt remains at a prudent level below 60% of GDP by 2038. At the end of the period, public debt would amount to 26% of GDP. Taking into account the evolution of ageing-related costs of the "Ageing report 2024[16] " and in the absence of other budgetary measures, the public deficit is expected to reach 2.1% of GDP in 2038.

14 See Box 2, p.10.

15 In application of the guidelines provided by the European Commission for establishing the PBS.

16 Ageing Report 2024: https://economy-finance.ec.europa.eu/publications/2024-ageing-report-economic-and-budgetary-projections-eu-member-states-2022-2070_en.

Graph 3: Net expenditure path



Source: Ministry of Finance

Box 2: Net primary expenditure

The operational indicator based on net primary expenditure has been introduced by the new economic governance framework, and serves as the basis for defining the fiscal path and carrying out the annual budgetary surveillance for each Member State. The purpose of controlling expenditure is to measure the sustainability of public debt and to check compliance with the necessary safeguards set out in European regulations.

To establish the net primary expenditure, the following formula should be applied:

$$\Delta NPE_t = (1 + Pot_t) * (1 + \pi_t) - \frac{\Delta \mathrm{SPB_t}}{\frac{NPE_{2024}}{GDP_{2024}} * 100} - 1$$

where

$$NPE_t = net\ primary\ expenditure\ for\ year\ t$$
$$Pot_t = potential\ growth\ for\ year\ t$$
$$\pi_t = GDP\ deflator\ for\ year\ t$$
$$SPB_t = structural\ primary\ balance\ for\ year\ t$$

For the ex-post budgetary assessment, net primary expenditure is calculated by adjusting government expenditure to exclude interest expenditure, discretionary revenue measures, expenditure on EU programmes fully offset by revenue from EU funds, national expenditure on co-financing EU-funded programmes, and cyclical elements of unemployment benefit expenditure.

IV. Reforms and Investments

After several years of crisis, the government intends to pursue a modern and socially equitable budgetary and economic strategy to prepare the country for the future. This approach relies on an ambitious investment strategy and reform programme, while ensuring responsible and sustainable management of public finances.

The challenges posed by the twin sustainable and digital transition, along with new geopolitical realities, call for decisive economic and budgetary policy decisions. The government is therefore committed to maintaining high levels of public investment throughout the legislative period to adequately address structural challenges. This plan aligns with the priorities of the 2023-2028 coalition agreement. The government will maintain an attractive economic environment, notably through targeted reforms that strengthen the country's competitiveness and foster social cohesion, while upholding international commitments on energy and the climate.

In accordance with Article 13 of Regulation (EU) 2024/1263 of the European Parliament and of the Council of 29 April 2024 on the effective coordination of economic policies coordination and on multilateral budgetary surveillance and repealing Council Regulation (EC) No 1466/97, the MTFSP outlines reforms and investments addressing the main challenges identified in the European Semester, particularly in the country-specific recommendations[17], and the common priorities of the EU. The common priorities of the Union are defined in the regulation as follows:

i. A fair green and digital transition, including the climate objectives set out in Regulation (EU) 2021/1119[18];
ii. Social and economic resilience, including the European Pillar of social rights;
iii. Energy security; and
iv. where necessary, the build-up of defence capabilities.

The purpose of the MTFSP is not to provide a comprehensive overview of all ongoing or planned reforms and investments over the plan's duration, but rather to highlight those deemed relevant in the context of the European Semester and, more specifically, the aforementioned regulation.

At the same time, Luxembourg will continue the swift and effective implementation of its Recovery and Resilience Plan (RRP)[19], including the "*REPowerEU*" chapter, alongside the cohesion policy programmes. Some of the initiatives mentioned in this document support and/or extend efforts already undertaken within the framework of the RRP and cohesion programmes .[20]

For the current legislative period, the MTFSP will focus on the following key areas of reform and investment:

- Competitiveness of the National Economy (pp.12-14)
- Defence (p.14)
- Education, the labour market and social cohesion (pp.14-22)
- Housing (pp.22-23)
- Energy and digital transitions (pp.23-30)

Although the regulation does not provide a common EU-wide methodology for identifying and quantifying investment needs, the efforts outlined in this MTFSP play a crucial role in strengthening the EU's common priorities.

17 European Semester 2024: Council approves country-specific recommendations - Consilium (europa.eu): https://www.consilium.europa.eu/en/press/press-releases/2024/07/16/european-semester-2024-council-agrees-on-country-specific-recommendations/.

18 Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing a framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 ("European Climate Act").

19 Recovery and Resilience Plan - Ministry of Finance - The Luxembourg Government: https://mfin.gouvernement.lu/en/dossiers/2021/planderelance.html.

20 European funds: https://fonds-europeens.public.lu/fr/programmes.html.

Box 3: National Recovery and Resilience Plan

The Recovery and Resilience Plan (RRP), with a budget of €241.1 million covers 10 reforms and 13 investments.

The revised RRP, adopted on 23 September 2024, places great emphasis on the green transition, allocating 80% of the available funds to measures that support climate objectives (compared with 69% in the initial plan). The national RRP is the greenest plan in Europe, thanks in particular to the significant contribution of the "*REPowerEU*" chapter. The digital transition and the strong social dimension are also maintained in the revised version of the RRP.

The RRP consists of 4 pillars:

1st "Social cohesion and resilience" pillar;

2nd "Green transition" pillar;

3rd "Digitalisation, Innovation and Governance" pillar; and

4th "*REPowerEU*" pillar.

The first payment request, submitted on 28 December 2022 and approved on 28 April 2023, amounted to approximately €20.2 million. To date, more than half of the RRP milestones and targets have already been achieved. The next payment request is expected to be submitted in the fourth quarter of 2024.

IV.1. Competitiveness of the national economy

A competitive economic policy to boost Luxembourg's attractiveness

The government will work to maintain a high level of competitiveness and optimise productivity. As a small, open economy, Luxembourg's prosperity depends on the free movement of goods, services, capital and people. To give new impetus to our competitiveness, the government will establish a competitive legal and fiscal framework as along with sector-specific strategies.

Reduction in Corporate income tax

In line with the coalition agreement, the rate of the corporate income tax (CIT) will be lowered by one percentage point, from 17% to 16% for companies with taxable income above €200,000 and from 15% to 14% for entrepreneurs and small businesses with taxable income of up to €175,000. As a result, from 2025, the overall tax rate for businesses will be 23.87% in 2025 instead of 24.94% in 2024. For small businesses, the rate will fall from 22.80% in 2024 to 21.73% in 2025.

Science and Technology Park

The government will support the creation of a science and technology park dedicated to collaborative research activities involving innovative companies, start-ups and public research. In addition, the implementation of the Health and Advanced Lifescience (HE:AL) Campus and "Space campus" will be encouraged.

Renewal of aid schemes for research, development and innovation

A draft law[21] on the renewal of aid schemes for research, development and innovation was tabled to Parliament in September 2023. The proposed legislation introduces a new system of aid for research, development and innovation, replacing the existing one. It will organise calls for projects with a view to granting aid according with the strategic priorities. This approach aims to diversify and transform Luxembourg's economy, in line with the twin green and digital transition. Selected projects eligible for increased amounts of aid.

21 Bill 8314: https://www.chd.lu/fr/dossier/8314.

Support for entrepreneurship

Fit 4 Digital - AI & SME package[22]

Following the example of other programmes in the field of digitalisation and innovation for SMEs ("*Fit 4*" programmes[23]), Luxinnovation, the national innovation agency, has announced the launch of a new programme, "*Fit 4 Digital - AI*", dedicated to artificial intelligence.

The new "*Fit 4 Digital - AI*" programme will enable companies to carry out a diagnostic of their capacities and opportunities for adopting artificial intelligence solutions, and to define a detailed, costed action plan for implementing the solutions identified by the assessment. This diagnosis will be carried out by a specialised consultant approved by Luxinnovation. The "*Fit 4 Digital - AI*" programme will be officially introduced for companies starting in October 2024, with a call for applications already launched to select qualified consultants.

In addition, a standardisation of the "*Fit 4*" programmes has been announced, with the aim of facilitating access to the programmes for all types of company, regardless of size. The procedures and conditions for participation will be standardised, with the introduction of co-financing rate thresholds depending on the size of the company.

At the same time, a new *SME package* focusing on artificial intelligence will also be introduced.

"Start-up nation

The government aims to promote the country as a "*Start-up Nation*" by concluding international partnerships and implementing a roadmap to develop the start-up ecosystem. Efforts will be made to remove regulatory bottlenecks/barriers, to develop the data.public.lu portal, and to invest in venture capital funds such as the *Digital Tech Fund and the Luxembourg Future Fund*. An investment in the ETCI fund (European Technology Champions Initiative) will also be considered.

National Research Fund instruments to support public-private R&I partnerships

The Fonds National de la Recherche (FNR) has set up various funding instruments to support public-private partnerships in research and innovation, e.g. the "*JUMP*" and "*KITS*" programmes, aimed at facilitating technology transfer, or the "*BRIDGES*", "*Industrial Fellowships and Industrial Block Grant*" (IPBG) programmes, aimed at supporting research and innovation collaborations between public research institutions and Luxembourg or international companies.

In the context of the latter programme, the *Interdisciplinary Centre for Security, Reliability and Trust* (SnT) at the University of Luxembourg is conducting a research programme entitled '*Autonomous Systems for Land, Air and Space*' (ATLAS), co-funded by the FNR's IPBG programme and nine industrial and public partners. With interdisciplinary applications of automation, the research projects will promote advances in key areas such as energy optimisation, orchestration of autonomous systems and cybersecurity.

The ambition is to create a centre for innovation, encouraging collaboration and long-term innovation. The results of the projects will be made available as open source to encourage further innovation and entrepreneurship.

Technology Transfer

The government will assess the feasibility of creating a technology transfer agency. To this end, a working group will be set up to develop a coherent approach for transferring intellectual property from research institutions to start-up companies.

22 Press release dated 4 July 2024: https://gouvernement.lu/fr/actualites/toutes_actualites/communiques/2024/07-juillet/04-delles- luxinnovation.html.

23 The "Fit 4" performance programmes enable companies to benefit from specialist expert advice and public subsidies to improve their overall efficiency through innovative, sustainable approaches and digital transformation.

Measures to combat Aggressive Tax Planning

Luxembourg has a long-standing commitment to combating tax evasion and avoidance. Over the years, Luxembourg has been steadily strengthening its tax legislative framework with significant measures aimed in particular at countering Aggressive Tax Planning. These include the implementation in 2023 of EU Directive 2022/2523, known as "Pillar Two", on the minimum effective taxation of large corporates. A draft law has also been tabled in the first half of 2024 to address several recommendations issued by the OECD in the context of the implementation of "Pillar Two". Among the future measures envisaged to combat Aggressive Tax Planning is the implementation of Directive (EU) 2023/2226, known as "DAC 8", which aims to combat tax evasion and avoidance in connection with crypto-assets and electronic money. Luxembourg also intends to implement the "*Subject to tax rule*" agreement, which is part of the work on "Pillar Two", by renegotiating some of its bilateral international treaties. The implementation of this agreement should also help to combat tax planning practices, particularly in the context of outbound payments.

IV.2. Defence measures

Given the geopolitical context and Luxembourg's commitments to its international partners, the government will accelerate the strengthening of defence capabilities. In line with its international commitments in this area, Luxembourg plans to increase its defence spending to 2% of Gross National Income (GNI) by 2030. In addition, according to the government's programme, and depending on the evolving situation, Luxembourg will maintain its substantial support for Ukraine in its fight against the Russian war of aggression.

To this end, the Luxembourg Army will be transformed in order to better respond to current geopolitical challenges. Luxembourg will continue to develop its military and dual-use capabilities, including in the air, cyber and space domains, in line with the needs of its allies. In addition, a bi-national Belgian-Luxembourg reconnaissance combat battalion will be set up and projects in the field of societal resilience, including health, will be carried out in close coordination with all relevant stakeholders. Particular attention will be given to the economic and societal returns on defence investment.

IV.3. Education, the labour market and social cohesion

Promoting equality in the education system

Ensuring that the education system stays align with the societal challenges and needs is a priority for the new government. The government is committed to involving all stakeholders in the reflections to be conducted and the changes to be implemented. These changes will be closely monitored by means of scientific support and evaluation, in order to guarantee a high-quality educational offering that provides equal and individual opportunities for every citizen and strengthens social and cultural cohesion.

In October 2023, a white paper on the new syllabus for fundamental education was presented, aiming to modernise it to meet the skills required in the 21st century. The new syllabus is based on four thematic pillars: student well-being, participation, multilingualism and digital technology. This adaptation of the syllabus prepares students for the challenges and needs of the 21st century and gives them the necessary tools to excel in a competitive world.

Luxembourg will continue to invest in educational research to develop innovative and digitally-oriented learning environments that benefit a diverse and multilingual student population and thus contribute to equal educational opportunities.

Multilingual education

The development of educational programmes will be based on scientific studies and existing knowledge. New projects will be supported and evaluated scientifically. Particular attention will be paid to scientific support and ongoing evaluation of multilingual education. This will be linked to literacy in German and, where appropriate, in French from cycle 2 of fundamental education. These languages will be taught according to the principle of teaching as a foreign/second language.

The pilot project "*Zesumme wuessen! Alphabetiséierung op Franséisch*", launched in September 2022, will be continued and scientifically evaluated. The Project's methodology, evaluation criteria and timeline for drawing initial conclusions will be developed in close collaboration with scientific experts. The earliest possible date for conclusions is the 2025/2026 school year, when the four groups of pupils in the current pilot project will have reached cycle 3.1. Based on the evaluation results, a nationwide parallel literacy program in German/French could be introduced at the earliest in the start of the 2026/2027 school year.

The offer of international schools is being expanded with the creation of two new accredited European schools in the Esch/Alzette and Dudelange. Additionally, a second accredited European school in Luxembourg City is planned for the coming years to meet the high demand. Scientific monitoring and evaluation of this initiative will continue.

Greater flexibility in language teaching in secondary education is envisaged, with more flexible provisions and more choice for pupils. Through structured dialogue with school partners, programmes, methodologies and evaluations will be analysed to identify the areas for improvement as part of a comprehensive language learning strategy for secondary education.

In addition, a new approach to mathematics education in a multilingual context will be introduced. From the start of the 2024/2025 school year, the MATHI method will be introduced in cycle 1 of fundamental education. This new method is part of the cross-curricular objective of making the education system more inclusive and adapting mathematics learning to a choice of literacy in German or French.

Inclusive education

Second instructor in Cycle 1

The concept of a second instructor in Cycle 1 will be developed and implemented to enable better differentiation in the classroom and to give children the best possible start. There will be an opportunity for Education and Childcare Services (ECS) staff who do not have a full-time contract to join and reinforce the Cycle 1 teams. Consequently, the Cycle 1 programme will be revised.

Homework Assistance Programme

A free homework assistance programme is offered in all education and childcare facilities (maisons relais/daycare centers, parental assistants) with the aim of supporting children, alleviating families and connecting partners. The measure primarily targets children who do not have the necessary conditions to enable them to do their homework at home, or where language barriers prevent parents from providing help. These circumstances should not be a disadvantage in their school career. A digital class diary ("e-Bichelchen") allows parents, teachers and educators to more easily communicate about the child's homework.

"One-stop shop" for inclusive education

While new digital solutions have already been put in place to make the transmission of information on students with special educational needs more fluid and efficient, a one-stop shop, both physical and online, will be launched in 2025 to facilitate access to information on inclusive education. Led by the Service national de l'éducation inclusive (SNEI), this service will simplify administrative procedures and provide information on the stakeholders involved in caring for students with special needs. Aimed primarily at parents and students of legal age, it will also provide essential support for education professionals.

Anti-school Dropout Measures[24]

To strengthen efforts against early school leavers, the mandatory school age will be raised from 16 to 18 by 2026. In fact, more than a third of school dropouts are between 16 and 18 years old. Extending mandatory school age by offering additional and alternative programmes tailored to the individual needs of young people at risk of dropping out, helps prevent school dropout and supports future integration into the workforce. The plan is therefore to expand the network of Socio-Professional Integration Centers (CISPs) to accommodate and support young people who are dropping out of school or at risk of doing so. The CISPs will be associated with secondary schools in order to ensure that the young people attend school.

24 Law of 20 July 2023: https://legilux.public.lu/eli/etat/leg/loi/2023/07/20/a460/jo.

Psycho-social support will be provided by accredited managers by the Child and Family Care Network (EFA).

The Orientation Center will strengthen its links with the orientation units in secondary schools and with regional departments of fundamental education.

Personalised assessment and orientation tools will be developed to offer simple and relevant feedback on the key stages of a student's school career. Each student will be able to benefit from an orientation procedure at the end of which a training or employment project will be established ("*Kein Abschluss ohne Anschluss*"). The current work placement system will be analysed, evaluated and adapted, and internships in companies for students in classical secondary education (ESC) will be offered.

A specific educational program for young students with behavioural disorders will be introduced, similar to the socio-therapeutic centers in fundamental education. In line with this, programmes and measures to combat early school leaving in secondary schools will be reinforced and expanded.

New law for newly arrived students[25]

The procedures for welcoming and orienting foreign pupils are being systematised and improved. The School Integration and Welcoming Service (SIA), with its own legal basis, was created in July 2023. The SIA will provide a holistic approach for newly arrived students: all their skills, as well as their aspirations and the family's life plans. This restructuring of the welcoming of newly arrived students will help reduce the impact of social or cultural backgrounds on academic performance and recognize the personal experiences and knowledge that students bring with them.

Inclusive Education and Well-Being

The government is committed to expanding the network of regional skills centres to ensure that all students, regardless of where they live, can access these services. Local teams in schools will be strengthened. The arrangements in schools will be extended by providing additional teachers specialised in EBS support (I-EBS), introducing EBS assistants (A-EBS) and, where appropriate, educational staff depending on the needs of the schools. At least one I-EBS must be present in each school during class hours. Synergies with SEA staff may be found.

In order to support students whose academic difficulties stem from a vulnerable family environment, cooperation between formal education and the Child and Family Care Network will be strengthened, allowing for rapid implementation of specific aid addressing the causes of distress.

The implementation of the law on student well-being and inclusive education will be assessed and adapted where necessary. The introduction of measures against online harassment is high on the list of priorities. Schools will receive the necessary resources. In addition, the services offered by the Centre psycho-social et d'accompagnement scolaires (CePAS) will be extended for this purpose. Targeted training courses will be developed for psycho-social and educational staff, to specialise professionals in the field of digitalisation and *cyber-mobbing*. The same will apply to courses on detecting mental distress (mental health first aid).

School health

To promote a healthy lifestyle among students and ensure that all children have adequate access to preventive medicine and health promotion facilities, the Ministry of Health and Social Security will present a plan to transform "school medicine" into "school health".

25 Law of 14 July 2023: https://legilux.public.lu/eli/etat/leg/loi/2023/07/14/a424/jo.

Countering the general labour shortage

Luxembourg's ambition is to develop research programmes to prepare for the major emerging trends in *upskilling* and *reskilling* in the labour market.

Legal basis for higher vocational training

In this context, the government, in consultation with the professional chambers, will create a legal basis for higher vocational training.

Legal framework for Micro-Credentials

In addition, the government will study the possibility of creating a legal framework for micro-credentials in higher education. To this end, a pilot project with the quality assurance agency NVAO has been launched.

Attracting, retaining and developing talent

The government's ambition is to promote Luxembourg as a "*Talent Hub*" at both sectoral and geographical level in order to attract the talent the country needs. A number of initiatives have been put in place to achieve this objective.

Strategic guidelines for attracting talent will be adapted and complemented by sector-specific strategies.

“Work in Luxembourg" portal

A dedicated portal for attracting and welcoming talent will be developed and launched in Spring of 2025.

Adaptation of Immigration laws

Immigration laws will be adapted, in particular to facilitate and accelerate visa procedures for workers from third countries. Access to the labour market will be simplified and the introduction of a temporary residence permit system known as "*work and travel visas*" will be considered. The aforementioned portal will consolidate all the necessary information for potential candidates and interested companies.

Tax incentives to encourage investment in Start-ups

The government will introduce a tax scheme to encourage individuals to invest in young innovative companies in the field of the twin green and digital transition. The participation of employees in the capital of the companies that employ them will be encouraged.

Tax incentives to enhance Talent Attraction and Retention

On 17 July 2024, the government tabled a draft law containing various measures aimed at strengthening the profit-sharing scheme and simplifying the impatriate tax regime, which will henceforth be based on a flat-rate deduction system.

Promoting key skills for the energy transition

Existing skills in research, development and innovation for the energy transition will be aligned and consolidated among the various Luxembourg stakeholders (i.e. Université du Luxembourg, *Luxembourg Institute of Science and Technology*, *Luxembourg Institute of Socio-economic Research*). In addition, the skills needed for the energy transition will be developed and strengthened through initial and ongoing vocational training programmes.

Multi-annual sector training plan

The Energy Efficiency/Energy Transition Competence Centre, which was founded in 2023, will propose a multi-year sectoral training plan on topics related to environmental protection, energy efficiency and energy transition (decarbonisation and renewable energies). Among other things, the plan will involve analysing companies' training needs, creating activity guidelines and developing training sessions. The Centre de Compétences en Efficience Énergétique/Transition Énergétique plans to train nearly 1,000 people by 2026 in over 20 fields.

"Skills-Plang: investing in skills

A draft law[26] provides for the introduction of a "*Skills-Plang*" programme, a forward-looking employment and skills management system based first on analyzing a companies' specific training needs and, secondly, on the implementation of a training plan tailored to these needs.

The programme will be managed by the Employment Development Agency and aims to facilitate the*re skilling* and *upskilling* of employees. This programme will enable companies that observe a profound transformation in their activities, business lines and skills needs to proactively invest in training for their staff, with a view for re-qualification or career evolution within the company.

HP-Ready Check training

The plan is to develop a methodology and training software ("*HP-ready check*") for a simplified assessment of the suitability of existing buildings for the installation of a heat pump. The project is being carried out by the Chambre des Métiers and will be integrated into its training programs.

Training the public service (i.e. Digital Academy, GovTechLab)

Luxembourg currently ranks 3rd in the *eGovernment* rankings among 35 European countries, thanks to its technological advances and training programmes for public servants, notably via the *Digital Academy* and *GovTechLab* of the ministry for Digitalisation. The government will be expanding and adapting continuous training, managed by the National Institute of Public Administration (INAP).

The aim is to digitise all administrative procedures, making them more accessible, even for people who are less familiar with digital technology. Artificial intelligence, with pilot projects and the use of *chatbots*, will play a key role.

The government will increase investments in infrastructure and technical skills.

Two new Higher Technician Certificates (BTS)[27]

From the start of the 2024/2025 academic year there will be two new BTS (brevet de technicien supérieur) courses on offer in Luxembourg, namely the: BTS '*Applied artificial intelligence*' at the Lycée des Arts et Métiers and the BTS '*Automated industrial production*' at the Lycée Privée Emile Metz.

Healthcare professional Training

The government aims to gradually expand medical training at the University of Luxembourg. To this end, the bachelor's degree in Medicine will be evaluated with a view to a possible extension of the training offers. Additionally, starting in the 2024/2025 academic year, a bachelor's degree in Nursing - general care - will be added, aimed at holders of a secondary school leaving certificate.

Resilience and social cohesion

The measures taken nationwide to promote social resilience and cohesion go hand in hand with the 20 key principles and rights established by the European Pillar of Social Rights (hereinafter the Social Pillar). At the La Hulpe Conference on the Future of Social Europe, Luxembourg subscribed to the inter-institutional declaration signed on that occasion, thereby reaffirming its commitment to continue to strengthening social resilience and cohesion.

The Social Pillar aims to raise social standards across Member States. In response to economic and social change, Luxembourg continuously adapts its social protection system regulations to provide the best possible support for people at the various stages and transitions in their lives, and thus making progress on its commitments to be fairer and more inclusive.

The fight against poverty is one of the government's top priorities. Anti-poverty policies will be pursued to support low-income households, households in precarious situations or living in poverty, and those at risk of social exclusion.

26 Bill n°8234: https://www.chd.lu/fr/dossier/8234.

27 Press release dated 13 June 2024: https://mesr.gouvernement.lu/fr/actualites.gouvernement%2Bfr%2Bactualites%2Btoutes_actualites%2Bcommuniques%2B2024%2B06-juin%2B13-bts-ai-rentree.html.

As part of a cross-cutting policy to strengthen household purchasing power, several policy measures are planned such as adjusting the tax bracket to indexation, exempting the minimum social wage from taxes, increasing the rent subsidy and increasing the single-parent tax credit. In addition, there are specific solidarity measures.

National action plan for the prevention and fight against poverty

Over the next few years, a cross-cutting strategy and a national action plan to prevent and combat poverty will be drawn up in consultation with social partners and field actors. This will include examining the issue of non-take-up of existing social benefits, with the goal of effectively reaching the target groups for whom the existing aid schemes are intended.

Support for Low-income individuals

To ensure social cohesion, the government will continue to provide special support for people on low incomes.

The cost-of-living allowance (AVC) and the energy allowance have been renewed for 2025. In addition, there will be a substantial increase in the amounts of the AVC and the energy allowance, the introduction of a reduced energy allowance and a considerable easing in the eligibility criteria for these benefits.

Certain measures, such as food aid and basic material goods, will be maintained over the coming years thanks to the financial resources of the European Social Fund Plus (ESF+), supplemented by national financial resources, with the aim of supporting the most deprived families.

Universal healthcare coverage

The Universal Health Care Coverage (CUSS) pilot project was set up with various partner associations that actively participate in its execution by monitoring beneficiaries. The initiative aims to offer health care coverage to people living in Luxembourg on an ongoing basis but who would otherwise be excluded from such coverage (excluding medical emergencies). The CUSS is part of the implementation of principle 16 of the "Social Pillar" and thus constitutes a strengthening of existing measures, essentially social assistance, implemented in particular by the social offices, and medical assistance (medical emergencies) for non-affiliated persons.

Based on the experience gained from the pilot project and the conclusions drawn from it, the 2023-2028 coalition agreement provides for the consolidation of this measure through the development of precise criteria that will be enshrined in future legislation. Pending the conclusion of this work, the pilot project will continue.

Social Inclusion Income and transitioning back to the labour market

Among REVIS beneficiaries, the number of beneficiaries actually participating in a "community service work" type measure has been rising steadily since 2019. The partnership with organisations within the remit of the Ministry of Family Affairs, Solidarity, Living Together and Reception of Refugees, particularly in terms of policies for the elderly and people with disabilities, will be strengthened, as will the collaboration with the state entities that organise these measures.

In order to better prepare for the eventual transition to the labour market, training programmes associated with these measures will be introduced. A first initiative in this area, "*Intègr'emploi*", was launched in 2024 with co-financing from the ESF+.

Administrative simplification to facilitate and accelerate access to social benefits

To facilitate and speed up access to various social benefits for recipients, the government plans to simplify procedures and, where possible, automate processes. The automatic payment of Cost-of-Living Allowance (AVC) and the energy allowance to recipients of the inclusion allowance (one of the two components of REVIS) is a first step toward this administrative simplification.

Social service Desk (“Guichet social”)

To address the challenges of lack of take-up of social benefits, the government is committed to explore the creation of a Social service Desk (“Guichet social”), which would enable people to receive information and advice on social benefits in a single place. The Guichet social would comprise a digital information platform, a social *helpline* and a mobile information team that could operate in the field.

Objective of Zero homelessness

As a signatory of the Lisbon Declaration, Luxembourg is committed to ending homelessness by 2030. To achieve this goal, a coordinated, cross-cutting and inclusive strategy to combat homelessness and housing-related social exclusion will be developed and implemented. The strategy will aim to increase, diversify and decentralise existing support offers, shelter and housing provisions.

Policy for people with disabilities

Individual autonomy for people with disabilities

The government is intensifying efforts to enable people with disabilities to live as independently as possible. The policy for people with disabilities is being pursued with due respect for personal autonomy. A study on socio-pedagogical support, hereafter referred to as "ASP", has been commissioned. The results of this study are expected by the end of 2024. In 2023, a survey of the needs of people with disabilities in Luxembourg has also been launched.

The findings from these two studies are anticipated to lead to the creation of a personal assistance budget in the years to come, allowing people with disabilities to finance the support they need to live and work independently.

3rd National Action Plan for the implementation of the United Nations Convention on the Rights of Persons with Disabilities (CRPD)

The government will continue to implement the various measures set out in the 2019-2024 National Action Plan for the implementation of the United Nations Convention on the Rights of Persons with Disabilities (CRPD). In 2025, an external evaluator will conduct a final evaluation of the implementation of the 2019-2024 National Action Plan. To ensure continuity, Luxembourg will consider to develop a 3rd National Action Plan to implement the CRPD, setting concrete objectives and specific measures and actions.

Seniors

Quality of services for the elderly

The amended Law of 23 August 2023 on the quality of services for the elderly took effect on 1st March 2024. The law aims to improve the quality of infrastructure, services and facilities for the elderly by establishing the minimum standards required for the accreditation of care providers, and places particular emphasis on the participation and animation of the elderly, with a particular focus on the key concept of "living together".

Revision of the law and Grand-Ducal regulation on geriatric care

At present, a "geriatric care" allowance is granted under certain conditions to people residing in care facilities but whose personal resources are insufficient to cover the cost of accommodation and personal needs. As part of a review of the scheme, a draft law[28] creating a supplementary allowance for the elderly was submitted to the legislative procedure in December 2022. This draft law is innovative in that, in order to assess the amount of the supplementary allowance to be paid, it takes as a reference the average of all monthly accommodation prices as recorded in the register set up by the amended law of 23 August 2023 on the quality of services for the elderly. In addition, the supplementary allowance is set to include essential products, services and benefits, including the supply and care of laundry and basic hygiene products.

These measures will enable beneficiaries to live with dignity within care facilities and to actively participate in social life.

National action plan "Ageing well"

The Luxembourg government aims to develop a National Action Plan on Ageing Well during the 2023-2028 legislative period. This plan will outline concrete measures to preserve the physical, mental and social well-being of the elderly and promote their participation in social life.

28 Bill n°8114: https://www.chd.lu/fr/dossier/8114.

"Out of hospital"

The government is planning an "*Out of hospital*" project aimed at caring for elderly patients at the end of their hospital stay, while they await their return home or integration into a care facility for the elderly. The objective is to relieve hospitals while offering high-quality care in a safe, and supervised environment. This project will form part of a structured care pathway, developed in collaboration with hospitals, doctors and care facilities. A regulatory framework, which is yet to be developed in consultation with the relevant ministries, will govern the operation and funding of this initiative.

Living together

Entry into force of the law on intercultural living together

The entry into force of the law of 23 August 2023 on intercultural living together and amending the amended law of 8 March 2017 on Luxembourg nationality marks a paradigm shift.

The new text replaces the "integration" approach with a broader concept that better reflects the diversity of our society, that of "intercultural living-together", which brings together the notions of "living" in various forms (social, economic, political or cultural), "together" in the form of mutual commitment and involvement of all, and "intercultural" in the form of cultural diversity and depending on people's origins. The law is therefore aimed at everyone, whether you are a refugee, a newcomer, a long-term foreign resident, a cross-border worker or a Luxembourger.

The concept also encompasses the fight against all forms of discrimination, an essential aspect of harmonious intercultural coexistence. Defined by its underlying values, this concept aligns with the European strategy for integration and inclusion for all.

National action plan for intercultural living together

The National Action Plan for Intercultural Living Together is currently being drawn up. It will define the strategic axes of intercultural living together, the political orientations and objectives, as well as the actions and measures to be put in place.

Measures to combat racism

A National Action Plan against Racism and Racial Discrimination ("PAN Anti-Racism") is currently being drawn up. The main objective of this action plan will be to establish a coordinated national fight against racism and ethno-racial discrimination.

Long-term viability of the social security system

To ensure financial viability, monitoring and predictability mechanisms are in place, reinforced by recent legislative reforms. This particularly applies to pension insurance and long-term care insurance, which, by the very nature of their benefits, require medium- and long-term planning.

Comprehensive consultation on the long-term viability of the old-age pension system

A wide consultation with civil society on the long-term sustainability of the old-age pension system will begin in autumn 2024. This consultation is included in the 2023-2028 coalition programme, and a more detailed timetable will be presented when the consultative work begins. In July 2022, the previous government referred the matter to the Economic and Social Council (CES), following the technical assessment of the pension insurance scheme on 26 April 2022 as required by the Social Security Code[29]. This was done to analyse, discuss and propose possible future avenues for guaranteeing the financial sustainability of the general pension insurance scheme over the long term. The report was published in July 2024[30].

Job retention for people receiving an early retirement pension

The coalition agreement includes plans to align the rules for combining the income from a professional activity (salaried or self-employed) with an early retirement pension (before the age of 65).

29 Bilan technique du régime général d'assurance pension, IGSS, 2022: https://igss.gouvernement.lu/fr/publications/bilans_pension/2022.html

30 CES opinion on the General Pension Insurance Scheme: https://ces.public.lu/content/dam/ces/fr/avis/protection-sociale/regime-general-assurance-pension.pdf.

This future measure targets self-employed activities in addition to the rules for combining income from salaried activities, which had already been revised by the reform of the general pension insurance scheme that came into force on 1st January 2013. This measure will make it easier for people receiving an early retirement pension to remain in employment.

IV.4. Housing measures

To increase the supply of housing and to support individuals in acquiring or renting a home, as well as to strengthen the construction and craft sectors by fostering job creation, the government introduced a package of measures in January 2024[31]. In addition to this package, other structural measures will be introduced progressively. Overcoming the challenges in the housing sector is crucial to maintaining both social cohesion and economic attractiveness.

10-point "Housing" action plan

A 10-point action plan has been established:

- The "silence means consent" principle: this principle will be introduced at both the municipal and State level, in areas where it does not conflict with European law. *De minimis* thresholds for building permits and state authorisations will be introduced this year. In this regard, no authorisation will be required for small-scale works such as the installation of a new window or a small photovoltaic system.
- Merging the General Development Plan (PAG) and the Specific Development Plan (PAP): Currently, the two procedures take an average of 12 months; by merging them into a single procedure, timelines can be reduced to a maximum of 8 months. If a PAP project requires a specific amendment to the PAG, this will also be done as part of a single procedure. For around a quarter of smaller projects, a completely new simplified PAP procedure will be introduced, which will be even shorter. Given that discussions about the infrastructure of a new neighbourhood often take a long time, a legal deadline of 6 months will be introduced.
- A national standard for construction: by 2025, a standard national construction regulation with uniform rules will be introduced. Municipalities will continue to define urban planning details to best reflect the character of their localities.
- Creation of a new commission: to eliminate conflicting imposed by the state on individuals, a new commission will be created, comprising representatives from the Inspection du Travail et des Mines (ITM), the Corps Grand-Ducal d'Incendie et de Secours (CGDIS) and the Ministère de la Famille. This commission will serve as a single point of contact for builders and will also provide joint advice on future construction projects to avoid disagreements. In the same vein, there are plans to integrate the National Public Service Safety Service into the ITM.
- Centralisation of authorisation procedures: all authorisation procedures will be centralised and digitised on a single platform. In line with the "*Once only*" principle[32], individuals will only need to enter your details once. The platform will also provide a personalised list of the necessary steps required for the specific project. This large-scale project will be completed over the next 24 months.
- Land consolidation: the legislative amendments required for land consolidation were tabled in Parliament in the summer of 2024. Today, a single owner can block the construction of an entire neighbourhood and put his own interests above those of the community. With this measure, the Ministry of the Interior will be able to move the land of such an owner so that the project can get under way.
- Management of Construction Waste: more flexibility will be allowed in the management of construction debris to reduce transport distances between landfill and construction sites.

31 Press release dated 31 January 2024: https://gouvernement.lu/fr/actualites/toutes_actualites/communiques/2024/01-janvier/31- mesures-adoptees.html.

32 See the section on the "*Once only"* principle.

- Simplification of environmental procedures: environmental procedures will be simplified without neglecting nature protection. By adopting this holistic approach, the number of environmental studies and compensation measures that an individual builder must carry out will be considerably reduced. In this regard, the introduction of the "*Natur auf Zeit*" principle has been introduced in urban areas in summer 2024. This will allow landowners to let hedges and shrubs to grow without fearing that their project will become unfeasible or more costly. Such biotopes will no longer require compensation in urban areas. In return, 10% of a new residential area must be reserved for green spaces. This will help to make urban areas greener and improve the quality of life.
- The "One-time compensation" principle: this is a simple solution for compensating the hunting grounds of various protected animals in the construction zone in general, without the contractor having to carry out a study. The hunting area will then be compensated on state-owned land with low agricultural potential. Additionally, the use of pesticides will be prohibited on these fields.
- Increased threshold for environmental impact screening: the threshold at which an environmental impact screening must be carried out for a new construction project is raised from 2 to 4 hectares. By removing this preliminary screening requirement, weeks or even months of procedures can be saved.

Land Mobilisation tax

The government continues its work related to property tax and maintains the idea of a tax on the mobilisation of land.

Affordable housing and large-scale neighbourhood development

The government's primary objective is to ensure that decent housing at an affordable price for the largest number of people, whether in terms of affordable housing, rental housing or home ownership. An amendment to the legislation on affordable housing - article 29bis of the Local Planning Law - will be proposed to Parliament by the end of 2024. To boost the supply of available housing, the government has set up ambitious housing acquisition programmes aimed at building a total of 2,876 housing units, including affordable rental, affordable sale and low-cost sale housing units.

The government continues to support the development of new large-scale neighbourhoods with a sustainable development perspective to address the shortage of affordable housing. (i.e. "NeiSchmelz" project in Dudelange, "Wunnen mat der Wooltz" project in Wiltz, "Elmen" project in Kehlen).

IV.5. Energy and digital transitions

A Strategy for sustainable and accelerated energy transition that remains socially equitable and pragmatic

The government is committed to stepping up its efforts in the fight against climate change and to taking all necessary measures to comply with the Paris Agreement in order to achieve national and European climate targets as quickly as possible. The government reaffirms its support for the Integrated National Energy and Climate Plan (PNEC), which was updated on 17 July 2024[33]. The government is committed to an ambitious, pragmatic and socially equitable climate and environmental policy that seeks to provide all citizens with the opportunity to opt for a more sustainable lifestyle, regardless of their financial situation.

Public procurement

Public procurement will be activated in a coordinated and consistent manner, at national and municipal level, prioritising social, circular and decarbonised criteria to guide and support participating companies in their energy transition, circular economy and innovation strategies. The government will carry out an analysis of the effectiveness of the law on public procurement.

33 Press release dated 17 July 2024: https://meco.gouvernement.lu/fr/actualites.gouvernement%2Bfr%2Bactualites%2Btoutes_actualites%2Bcommuniques%2B2024%2B07-juillet%2B17-wilmes-delles-pnec.html.

Development of the circular economy

There are plans to further develop the circular economy, particularly by taking into account the principles of circular product design, sustainability and product life extension, as well as the use of circular data, particularly through the *Product Circularity Data Sheet* (PCDS). To ensure better management of public resources and better support for public contractors, the government will set up a public materials management unit.

Energy infrastructure

The government will continue the efforts of recent years and invest in the development of energy infrastructures, such as the electricity grid, heating networks and hydrogen infrastructures. In particular, the electricity grid will continue to be developed into a high-performance "*Smart Grid*", with smart meters in all buildings and, where necessary, storage facilities to enable better integration of renewable energies. In this context, the possibility will be analysed of using electric vehicle batteries to integrate and enhance them as storage devices in the electricity grid. At the same time, the government is aiming for effective and sustainable funding for the development of the grids, to ensure that consumers are not faced with soaring costs.

Luxembourg fully supports the integration of European energy markets, and will deepen cooperation on energy matters with its European partners.

Strengthening security of supply

Given the crucial importance of energy to the Luxembourg economy and society, the government aims to guarantee security of supply at all times. In the field of electricity, security of supply will take into account and allow for the country's economic and demographic evolution, the significant electrification of various sectors (particularly heat), and the integration of renewable energies. To this end, a new 380 kV interconnection line between Germany and Luxembourg will be commissioned. Other complementary interconnection projects, including in the north of the country, will be analysed. In addition, storage facilities, the "*Smart Grid*" and flexibilization of demand will be developed to support security of supply.

Regarding natural gas supply, the government will develop the necessary regulations to reduce gas consumption without compromising the security of supply of the remaining consumers.

The government will also ensure compliance with regulations concerning oil supply security (strategic stocks).

Development of a hydrogen economy

Among the measures outlined in the hydrogen strategy, published in 2021, is the cooperation with EU Member States and third countries. The European economic interest group "Grande Région Hydrogen"[34] seeks to develop and promote a hydrogen ecosystem in the Greater Region, including Saarland (Germany), Lorraine (Grand Est) and the Grand Duchy of Luxembourg. As part of this, the cross-border "mosaHYc" (Moselle-Saar Hydrogen Conversion) project has been launched, involving the construction of a 100 km hydrogen pipeline network based on a 70 km natural gas transport infrastructure, partly out of service, which will be converted to hydrogen. The distribution network is expected to be operational by 2027.

At the same time, the government is working to ensure a connection to a European hydrogen infrastructure that will enable large quantities of hydrogen to be transported to meet the emerging demand to decarbonise sectors and processes that are difficult to electrify. It is estimated that the first hydrogen pipeline could be commissioned around 2035.

The government will maximise the potential for decentralised national production potential while also investing in large-scale international projects. Concepts for transforming conventional motorway service stations into multi-energy hubs in the medium term will also be developed.

34 Grande Region Hydrogen: https://grande-region-hydrogen.eu/fr/initiative-et-vision/.

Renewable energy

To stimulate the development of renewable energies within the national territory, an increased deployment of the various technologies is planned, with authorisation procedures to be speeded up and simplified. In the electricity sector, photovoltaics and wind energy will play a key role, while the use of heat pumps will increase the share of renewable energies in the heating sector. In the transport sector, decarbonisation will be achieved through electromobility. The updated NECP aims to achieve a 37% share of renewables in final energy consumption by 2030.

At the same time, considering that the potential for energy production is limited within the national territory, and that Luxembourg will continue to depend on energy imports, as well as on cooperation agreements, the government will deepen its energy cooperation with international partners.

Call for tenders - Solar energy

Two call for tenders (one of which is subsidised by REPowerEU) were launched on 19 July 2024 for large-scale photovoltaic installation projects. This includes, for the first time, an innovative package targeting façade-integrated photovoltaic panels and lightweight modules. By 2030, the updated PNEC for the period 2021-2030 anticipates a renewable electricity production based on photovoltaic energy of 1.112 GWh. Standard for photovoltaic installations

The requirement for all new buildings to be PV-ready will be enshrined in national legislation.

Pre-financing - Solar energy

The government will establish a pre-financing mechanism for small-scale photovoltaic installations, allowing households to only pay the remaining balance after subtracting the subsidy, rather than bearing the full installation cost upfront.

New tariff structure for the electricity market

Starting on 1 January 2025, the Institut luxembourgeois de Régulation (ILR) and the network operators will introduce a new tariff structure on the electricity market to respond to the evolving use of the network in the context of the energy transition. A fairer tariff structure which, will encourage consumers to adopt greater flexibility in the use of the networks and to make better use of the existing networks will be proposed.

"Agri-PV"

At the end of 2023, the Ministry of the Economy concluded a pilot call for tenders for the construction and operation of new so-called agrivoltaic power plants that produce electricity from photovoltaic energy. The aim is for these agri-PV systems to offer three advantages, namely the production of renewable electricity, the maintenance of agricultural production, which remains the primary objective, and in the enhancement of biodiversity aimed nature protection.

Based on the very promising results from the pilot project tender, an evaluation is currently underway and is expected to be finalized shortly, with a view to deciding on a future strategy for "agri-PV".

Wind energy

The government also intends to better harmonise and simplify the regulations and procedures relating to the construction of wind farms. This includes identifying barriers to the development of wind power, for example near areas of economic activity and along transport infrastructure (such as motorways). For 2030, the updated PNEC for the period 2021-2030 anticipates renewable electricity production from wind energy to reach 1.043 GWh.

Energy efficiency

The voluntary agreement on improving energy efficiency in Luxembourg's industry for the period 2021-2023 will be updated, while striving for competitive energy prices for industrial companies that make efforts in decarbonisation and energy efficiency. Tax measures and subsidies will be introduced to encourage improvements in energy efficiency, decarbonisation and the production, implementation and self-consumption of renewable energies.

The deployment of the climate pact for businesses[35], which targets SMEs to support them in their decarbonisation and energy transition efforts will continue.

The energy efficiency mechanism, which obliges electricity and natural gas suppliers to support and encourage consumers to make energy savings, will be developed further.

Innovating the construction sector

Measures will be taken to prepare the construction sector for the transposition of the revised energy performance of buildings directive (EPBD). To this end, a low-carbon construction roadmap for Luxembourg[36] has been launched, which will develop and make available the necessary tools and methods for decarbonization to stakeholders in the sector over the coming years. The EPBD stipulates that a building's future energy passport must account for greenhouse gas (GHG) emissions throughout its entire life cycle, and in particular emissions linked to the production of construction materials (grey energy) and emissions from construction sites. Digitalisation and the implementation of circular economy principles for the rational management of construction materials and products are key levers for the sustainable transition and competitiveness of the sector.

The government will also encourage the use of bio-based and natural materials sourced from national and regional value chains, as part of the development of the bio-economy in the construction and renovation sector, and to contribute to efforts to store carbon.

These efforts are documented in the new guide for sustainable construction and renovation, a digital platform that will be gradually expanded and updated .[37]

Energy neutrality of the public sector

As part of the public sector's exemplary role in the fight against climate change, a strategy for decarbonising the public administrations will be drawn up in cooperation with all the players concerned. The strategy will aim to make the public administrations climate neutral by 2040, and will cover in particular the public administrations' building stock, vehicle fleet and public procurement in general. It will address the organisation and resources required for its implementation and will include an indicative timetable. The government will, as far as possible, equip all public buildings with photovoltaic installations by 2030 and further accelerate their energy renovation, with a view to making them climate neutral, while taking into account the requirements of the Energy Efficiency Directive and the Directive on the Energy Performance of Buildings. In this context, the Climate Pact 2.0 will be continually developed and improved. The government will help local authorities to work out and implement a strategy for achieving climate neutrality in the same way as public administrations. The law on joint municipal authorities will be adapted accordingly.

Speed up the administrative process and facilitate access to green subsidies

In order to facilitate access to environmental subsidies and to avoid citizens from hesitating to undertake home energy renovations or to invest in the development of renewable energies because the costs are too high, the government will introduce a pre-financing scheme for climate subsidies so that citizens only have to pay their share. The pre-financing scheme for photovoltaic installations will be introduced next year. The priority is to ensure that this scheme also reaches businesses without delay.

Following the example of local authority procedures for photovoltaic installations, the government will introduce the principle of tacit approval wherever possible. In addition, the government will examine the possibility of abolishing the requirement to be in possession of a planning permission for photovoltaic installations on residential buildings.

35 Climate pact for businesses: https://www.klimapaktfirbetriber.lu/

36 Press release dated 14 June 2023: https://gouvernement.lu/fr/actualites/toutes_actualites/communiques/2023/06-juin/14-turmes- construction-decarbone.h t m l

37 Wissensportal für nachhaltiges Bauen in Luxemburg | noba

Renewal of the environmental and climate protection aid scheme

In May 2024, a bill[38] concerning the reform of the environmental and climate protection aid scheme for businesses was tabled. The draft law relating to this reform is part of the desire to accelerate the ecological and energy transition of the Luxembourg economy and to achieve Luxembourg's climate objectives and in particular those of the PNEC, notably in the field of decarbonisation, energy efficiency, the deployment of renewable energies and the security of energy supply in Luxembourg.

It should be emphasised that this reform is also designed to strengthen the competitiveness of Luxembourg companies by supporting them in their efforts to contribute to the sustainable transition.

Aid for energy renovation

In order to encourage the energy renovation of existing homes and given the current interest rates, the government will analyse the need to revise the aid scheme for energy renovation of homes and buildings, particularly with regard to the definition of criteria, including those related to social aspects.

Support for low-income earners - Energy

With a view to ensuring social cohesion, the government intends to provide special support for people on low incomes through three measures:

- The energy allowance will be progressively tripled for current beneficiaries;
- The energy tax credit for REVIS and RPGH recipients will be increased to 90 euros;
- and the State will continue to cover part of the energy costs of retirement homes throughout 2025, in order to maintain stable prices for residents.

Energy measures

In line with the recommendations made by the Council, energy support measures will be abolished from 1st of January 2025, with the exception of the measure to stabilise electricity prices. This remains temporarily justified, as electricity prices continue to be high compared with pre-crisis levels. The government therefore continues to support households by covering half of the forecasted increase for 2025, i.e. 30%. This gradual approach will ensure a gradual adjustment for households, so that electricity prices will remain comparable to those in neighbouring regions. Furthermore, in the context of decarbonisation through electrification, the success of the measures currently included in the PNEC to achieve climate objectives depends on the price of electricity being sufficiently attractive compared with the price of fossil fuels and non-renewable energy sources.

Sustainable transport and public transport infrastructure

Given its environmental, social and economic impact, mobility remains one of Luxembourg's greatest challenges, and therefore one of the government's priorities. By 2035, travel is expected to increase by 40%. Mobility is therefore one of the pillars of business attraction. Efficient, sustainable mobility is not only essential for Luxembourg's economy, it is also vital to meet the greenhouse gas emissions reduction targets by 2030 and beyond, as well as for the quality of life of all those who live and work in Luxembourg.

The government's policy will focus on the concept of multimodal mobility, aimed at improving public transport capacity (trains, buses and trams) and developing sustainable mobility (bicycles and pedestrians).

Public transport networks and infrastructure

Trains

The government is committed to continue to develop and better interconnect the rail network, and will examine the possibilities for double-tracking all existing railway lines, in particular the section between Sandweiler/Contern and Oetrange on the line from Luxembourg to Wasserbillig, as well as the section between Ettelbruck and Troisvierges-border on the northern line.

38 Bill 8386: https://www.chd.lu/fr/dossier/8386.

Existing railway lines will be better connected, and the construction of new railway lines will be studied. The government will work with the governments and authorities of our neighbouring countries to ensure that Luxembourg is better connected to the international railway network. In particular, the aim will be to improve the Luxembourg-Brussels railway link, increase the frequency of trains between Luxembourg and Thionville and work towards a better connection to the German railway network as a whole. In view of the success of the express bus line linking Luxembourg to Saarbrücken, the discussions initiated with Saarland to carry out a study of the potential for setting up railway links, either via Metz or via Konz, will be continued. The government will also focus on increasing safety on trains and in stations by reinforcing the presence of staff.

Trams

On 1st February 2024, the Chamber of Deputies approved the draft law on the construction of extensions to the Luxembourg tramway line between the "Rout Bréck-Pafendall" and "Laangfur" stations in Kirchberg and between the "Gare centrale" and "Hollerich" stations[39].

These extensions reflect the National Mobility Plan 2035, which defines the organisation and development of infrastructure in order to increase transport capacity by 40% in comparison to 2017. The long-term vision for Luxembourg's tram network proposes a structure focused on intermodality, in collaboration with the country's other mobility players. It is a carefully thought-out network designed to expand the number of transfer points and optimise journeys.

The government is committed to further developing the tramway in addition to the lines currently planned (i.e. high-speed tramway between Luxembourg City and Esch-sur-Alzette).

Bus

The Régime Général des Transports Routiers (RGTR) network will be subject of an in-depth analysis in order to completely overhaul public transport timetables and improve coordination between train and bus timetables. High service level corridors (CHNS) will be developed for buses.

In rural areas, transport offers will be optimised and the frequency of regional lines serving train stations will be increased.

Bike

The network of national cycle paths as defined by law will be completed as quickly as possible. Priority will be given to developing cycle links between municipal, regional and national cycle paths, in order to rapidly create a coherent national network of cycle paths.

When new roads are built, the possibility of building parallel cycle lanes must be analysed. High-speed cycle lanes will be introduced to a greater extent.

Decarbonising transport

By 2030, the aim is for the entire national RGTR bus network to be operated with zero-emission buses.

At the same time, in order to give all citizens the opportunity to switch to zero-emission mobility, the "Klimabonus Mobilitéit" will be adjusted from 1st of October 2024 in order to:

- maintain the subsidy for the purchase of a 100% electric or hydrogen car at a maximum of €6,000;
- link the amount granted on the basis of ecological criteria[40];
- to expand the car ownership period, required to qualify for a subsidy, from one to three years;
- A bonus of €1,500 for used 100% electric cars over three years old will also be introduced.

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39 Press release dated 1st February 2024: https://gouvernement.lu/fr/actualites/toutes_actualites/communiques/2024/02-fevrier/01- extension-tramway.html.

40 For cars consuming up to 16 kilowatt hours per 100 kilometres, the bonus will be a maximum of €6,000.
Between 16 and 18 kilowatts, at 3,000 euros. And for very large engines, there will be no government subsidy. There is an exception for electric cars for families with three or more children.

Digital transition to support modernisation and administrative simplification

The government intends to pursue the development of a modern State at the service of its citizens, at the heart of which lies the digital transition with the digitisation and modernisation of the State's administrative procedures and support for the development of a data-based economy. A number of areas have been identified and will be pursued during the current legislature.

The government will work on the objectives it has set itself for 2030 as part of the digital decade and will continue to support European initiatives to promote the digital transition and the digital boom in Luxembourg and Europe.

Digital portfolio ("eWallet")

The government intends to give citizens and businesses the option of using digital credentials, applying modern data protection requirements. The implementation of the European Digital Identity Wallet (EUDI Wallet), required by Regulation 2024/1183 (eIDAS2), will provide a secure and interoperable European framework for the storage and presentation of these digital credentials, such as identity documents, social security documents and travel tickets.

***"Once only*" principle**

The "*Once only*" principle consists of providing data only once. To this end, a bill[41] was tabled in June 2024, introducing the *"Once only*" principle between state administrations and local authorities. This bill also aims to implement the *Data Governance Act* into national law and proposes a major administrative simplification between the State, local authorities and citizens in all areas. When a citizen initiates a digital administrative demand, it will be possible for administrations to exchange the data required to process the demand, while respecting the principle of data minimisation.

The "*Once only*" principle will significantly reduce the administrative burden for businesses and citizens. To achieve this objective, data will have to be used in a secure and trusted environment.

Digital infrastructure

Investment in accessible and affordable digital connectivity infrastructure, including 5G and fibre, will be maintained at a high level to achieve complete coverage of the territory.

Artificial intelligence

The government is working on the elaboration of a national strategy for artificial intelligence (AI). Responsible, human-centred AI will be the central approach. In addition, there are plans to invest into research and AI application, addressing ethical issues to prevent abuse and discrimination while supporting innovation to leverage the capabilities of AI to increase the efficiency and performance of public administrations in delivering its services. The government will support the implementation of the European AI Regulation to ensure the safety and competitiveness of the digital market.

Digital mandate

Given the obstacles to digital access for individuals, it is essential to put in place a solution that will enable relatives to carry out administrative procedures online in the name of the concerned citizen. This project is currently being developed by the *Centre des technologies de l'information de l'État* (CTIE) and the Ministry for Digitalisation.

Securing Information and Communication Technology infrastructures

The government will continue to invest in securing the state's information and communication technology (ICT) infrastructure to effectively combat cyber-attacks, and will create a centralised emergency contact point to support businesses.

41 Bill 8395: https://wdocs-pub.chd.lu/docs/exped/0148/046/296468.pdf.

Cybersecurity

In the area of cyber security, an *SME Package Cyber Security* programme will be launched to help SMEs improve their IT security. The *Luxembourg House of Cybersecurity* will collect data on threats and publish regular cybersecurity situation reports. A CERT for the space sector will be created, and cybersecurity capabilities in development cooperation will also be strengthened.

Sovereign cloud

The government will support the establishment of a sovereign *cloud* infrastructure in Luxembourg, strengthening the country's position as a leading ICT centre and the EU's digital sovereignty.

The State's digitalisation strategy

The "eGovernment 2021-2025" strategy is part of the State's successful digital transition to ensure high-quality digital services for citizens and a gradual transition to a digital government. A new strategy for digitalisation of the State, "Luxembourg's Digital Government Strategy 2026-2030", will start being elaborated by the end of 2024 and finalised in 2025.

Development of the *Guichet.lu* and *MyGuichet.lu* portals is ongoing and remains a priority in the implementation of a digital government in Luxembourg, the e-government strategy 2021-2025 and key principles such as interoperability, accessibility and "*digital by design"*.

Digital inclusion policy

The government will continue to implement the *National Action Plan for Digital Inclusion 2021-2025* to ensure a more digital society, targeting citizens who are lacking digital skills and promoting initiatives such as "zesummendigital.lu", the funding of pilot projects, training days in digital skills and e-Banking as well as the creation of an interdisciplinary forum.

Co-creative workshops will be organised with ministries and stakeholders to initiate the development of the new *National Action Plan for Digital Inclusion 2025-2030*.

Digital skills for adults

The government will enhance the digital skills of adults through ongoing training initiatives, possibly including the distribution of training vouchers and the provision of a free "*digital skills assessment"* tool, in order to meet the high and evolving standards of the job market.

e-Health

The Dossier de Soins Partagé (DSP) will be optimised to enhance data security and protection and make it easier for professionals and patients to use. The DSP will also be adapted to comply with the future rules of the *European Health Data Space*.

Overall, greater use of digitalisation will be encouraged at several levels, such as the systematic use of digital aids and mobile devices for data capture at the patient's bedside, which will reduce the administrative burden on healthcare professionals. The "Santé.lu" internet portal will be developed to provide more relevant information, including real-time waiting times in emergency services.

The government will gradually introduce electronic prescriptions, recording patient data and doctors' results in a digital file accessible to the entire healthcare sector. Eventually, electronic prescriptions will be able to be exchanged between EU Member States.

A legal framework for telemedicine will be established, defining ethical guidelines and the necessary skills. The introduction of tariffs for telemedicine in the nomenclature will be discussed with stakeholders, and the responsibilities of healthcare professionals will be extended to enable this potential to be fully developed.

V. Annexes

Table 1a. Fiscal commitment

		Year 2024	Year 2025	Year 2026	Year 2027	Year 2028	Year 2029
1. Net primary expenditure	Growth rate	8,0	5,8	4,7	3,8	5,4	4,7
	Cumulative rate	8,0	14,2	19,6	24,1	30,8	36,9

Table 1b. Main variables

	Year 2023	Year 2024	Year 2025	Year 2026	Year 2027	Year 2028
	Growth rate					
1. Potential GDP	1,8	1,5	1,7	1,8	1,9	2,0
2. GDP deflator	3,4	1,7	3,1	3,1	1,9	2,6
	% of GDP					
3. Net lending/borrowing	-0,7	-0,6	-0,6	-0,5	-0,3	-0,4
4. Structural balance	0,6	0,7	0,2	0,3	0,2	-0,2
5. Structural primary balance	0,9	1,1	0,6	0,7	0,7	0,4
6. Gross debt	25,5	27,5	27,5	27,2	26,7	26,0
7. Change in gross debt	0,9	2,0	-0,1	-0,2	-0,5	-0,7

Table 2. Macroeconomic scenario

	ESAcode	Year 2023	Year 2023	Year 2024	Year 2025	Year 2026	Year 2027	Year 2028
GDP		**in EUR bn**	**Growth rate**					
1. Real GDP	B1*g		-1,1	1,5	2,7	2,0	3,2	3,0
2. GDP deflator			3,4	1,7	3,1	3,1	1,9	2,6
3. Nominal GDP	B1*g	79,3	2,3	3,2	5,9	5,2	5,1	5,6
Components of real GDP	**ESA code**	**in EUR bn**	**Growth rate**					
4. Private consumption expenditure	P.3		4,0	2,1	2,7	2,4	2,4	2,5
5. General government consumption expenditure	P.3		2,5	4,4	3,5	2,4	1,9	2,1
6. Gross fixed capital formation	P.51		-1,0	-9,1	12,3	1,2	1,3	2,2
7. Changes in inventories and valuables (% of GDP)	P.52 + P.53		0,0	0,2	0,0	0,1	0,0	-0,3
8. Exports of goods and services	P.6		-1,2	2,1	3,5	3,5	4,4	4,9
9. Imports of goods and services	P.7		0,2	1,7	4,4	4,0	4,0	4,7
Contributions to real GDP growth								
10. Final domestic demand			1,6	0,0	3,4	1,5	1,4	1,6
11. Changes in inventories and valuables	P.52 + P.53		0,2	0,2	-0,3	0,2	-0,1	-0,5
12. External balance of goods and services	B.11		-2,8	1,3	-0,4	0,3	1,9	1,8
Deflators and HICP			**Growth rate**					
13. Private consumption deflator			3,6	2,3	2,9	1,5	1,1	1,7
14a. p.m. HICP			2,9	2,5	2,2	1,5	1,4	1,6
14b. p.m. NICP			3,7	2,3	2,6	1,7	1,5	1,8
15. Government consumption deflator			7,4	3,8	3,1	3,3	2,7	2,9
16. Investment deflator			6,9	0,5	0,8	1,8	2,0	2,2
17. Export price deflator (goods and services)			4,1	1,7	2,3	1,9	0,8	1,2
18. Import price deflator (goods and services)			4,6	1,9	2,0	1,1	0,7	1,0
Job market	**ESA code**	**Level**	**Growth rate**					
19. Employment, individuals (in thousands)		513	2,2	0,9	1,5	1,6	2,2	2,5
20. Average annual number of hours worked per employee		1.462	0,2	-0,5	-0,5	-0,1	-0,1	-0,1
21. Real GDP per person employed			-3,2	0,6	1,2	0,5	1,0	0,4
22. Real GDP per hour worked			-3,5	1,1	1,7	0,6	1,1	0,5
23. Employee compensation (in billions of euros)	D.1	41,9	9,6	3,7	4,7	4,5	3,8	5,0
24. Compensation per employee (in thousands of euros)		81,6	7,4	2,8	3,2	2,9	1,6	2,5
			in %of					
25a. Unemployment rate (harmonised definition, Eurostat)			5,2	5,9	6,0	6,1	5,8	5,5
25b. Unemployment rate (ADEM definition)			5,2	5,9	6,0	6,1	5,8	5,6
Potential GDP and its components			**Growth rate**					
26. Potential GDP			1,8	1,5	1,7	1,8	1,9	2,0
Contributions to potential growth								
27. Work factor			1,3	1,1	1,0	1,1	1,1	1,2
28. Capital factor			0,7	0,6	0,8	0,8	0,7	0,7
29. Total factor productivity			-0,2	-0,1	-0,1	0,0	0,1	0,1
			as % of potential GDP					
30. Output gap			-2,8	-2,8	-1,9	-1,7	-1,1	-0,6

Table 3. External assumptions

	Year 2023	Year 2024	Year 2025	Year 2026	Year 2027	Year 2028
1. Short-term interest rate (annual average)	3,4	3,6	2,2	1,8	1,9	1,9
2. Long-term interest rate (annual average)	3,3	3,1	3,0	3,0	2,9	2,9
3. USD/EUR exchange rate (annual average)	1,08	1,09	1,10	1,11	1,13	1,14
4. Real GDP growth in the euro zone	0,6	0,8	1,7	1,8	1,5	1,3
5. Oil price (Brent, USD/barrel)	82,5	82,9	77,4	77,1	77,3	77,5

Table 4. Budgetary projections

	ESA code	Year 2023	Year 2023	Year 2024	Year 2025	Year 2026	Year 2027	Year 2028
Revenues		**in EUR bn**	**as a % of GDP**					
1. Taxes on production and imports	D.2	9,0	11,3	11,9				
2. Current income and wealth tax	D.5	14,3	18,0	19,4				
3. Social security contributions	D.61	10,2	12,9	12,8				
4. Other[1]		3,7	4,6	4,9				
5. Capital tax	D.91	0,1	0,2	0,2				
6. Other capital revenue	D.92+D.99	0,1	0,1	0,1				
7. Total revenue	TR	37,4	47,2	49,3				
8. of which: Transfers from the EU	*D.7EU +D.9EU*	*0,1*	*0,1*	*0,1*				
9. Total revenue excluding EU transfers		37,3	47,1	49,2				
10. p.m. Discretionary measures (increments)		-0,5	-0,7	-0,5				
11. p.m. *One-off expenditure*		...	...	...				
Expenditure		**in EUR bn**	**as a % of GDP**					
12. Employee compensation	D.1	8,8	11,1	12,0				
13. Intermediate consumption	P.2	3,7	4,7	4,9				
14. Interest expenditure	D.41	0,2	0,3	0,3	0,4	0,5	0,5	0,5
15. Social benefits other than in kind	D.62	13,1	16,6	17,1				
16. Social benefits in kind	D.632	2,5	3,2	3,5				
17. Subsidies	D.3	1,2	1,6	1,5				
18. Other current expenditure[2]		3,3	4,1	4,0				
19. Gross fixed capital formation	P.51	3,7	4,7	4,7				
20. of which: Nationally financed public investment		*3,7*	*4,7*	*4,7*	*4,8*	*4,9*	*4,7*	*5,0*
21. Capital transfers	D.9	1,0	1,3	1,4				
22. Other capital expenditure	P.52+P.53+NP	0,2	0,2	0,3				
23. Total expenditure	TE	38,0	47,9	49,9				
24. of which: Expenditure funded by EU transfers	*D.7EU+D.9EU*	*0,1*	*0,1*	*0,1*				
25. National financed expenditure		37,9	47,7	49,8				
26. p.m. National co-financing of programmes funded by the Union		0,0	0,1	0,1				
27. p.m. Cyclical component of unemployment benefits		-0,1	-0,1	0,0				
28. p.m. *One-off expenditure*		...	...	...				
29. Net national primary expenditure (before MDR)[3]		37,7	47,5	49,3				
Trend in net primary expenditure				**Growth rate**				
30. National net primary expenditure [4]				8,0	5,8	4,7	3,8	5,4
Sales		**in EUR bn**	**as a % of GDP**					
31. Net lending/borrowing	B.9	-0,6	-0,7	-0,6	-0,6	-0,5	-0,3	-0,4
32. Primary balance	B.9-D.41p	-0,3	-0,4	-0,2	-0,3	0,0	0,2	0,1
Cyclic adjustment			**as a % of GDP**					
33. Structural balance			0,6	0,7	0,2	0,3	0,2	-0,2
34. Structural primary balance			0,9	1,1	0,6	0,7	0,7	0,4
Debt		**in EUR bn**	**as a % of GDP**					
35. Gross debt		20,3	25,5	27,5	27,5	27,2	26,7	26,0
36. Change in gross debt		1,2	0,9	2,0	-0,1	-0,2	-0,5	-0,7
37. Contributions to changes in gross debt								
38. Primary balance			0,4	0,2	0,3	0,0	-0,2	-0,1
39. *Snowball effect*			-0,9	-1,1	-1,9	-1,8	-1,8	-2,0
40. Interest expenditure			-0,3	-0,3	-0,4	-0,5	-0,5	-0,5
41. Growth			0,3	-0,4	-0,7	-0,5	-0,8	-0,7
42. Inflation			-0,8	-0,4	-0,8	-0,8	-0,5	-0,7
43. *Stock-flow adjustment*			1,4	2,9	1,6	1,6	1,5	1,4
			in %of					
44. p.m.: Implicit interest rate on debt			1,2	1,4	1,5	1,8	2,0	2,2

[1] P.11+P.12+P.131+D.39+D.4+D.7.

[2] D.29+D4 (other than D.41)+D.5+D.7+D.8.

[3] Discretionary revenue measures (DRM).

[4] For the year 2024, the growth rate of net primary expenditure (NPE) has been calculated using the following formula:

$$\frac{(DPN_t\ /\ PIB_t)\ -\ (MDR_t /\ PIB_t)}{(DPN_{t-1}\ /\ PIB_{t-1})} * (1+g_t) - 1$$

where

$$g_t = nominal\ GDP\ growth\ rate\ for\ year\ \mathrm{t}$$

Table 5. Estimated impact of discretionary revenue measures

	One-off	Dep/Rec	SEC code	**Year 2023**	**Year 2024**
				as a % of GDP	
Temporary cut of one percentage point in VAT rates (standard, intermediate and reduced)	No	Recipe	D.2	-0,4	0,4
Introduction of a business tax credit for the 2023 tax year based on the adjustment of the personal income tax scale by 2 index brackets	No	Recipe	D.5	-0,3	0,3
Increase in the ceiling for the "Bëllegen Akt" from 20.000 to 30.000 per individual	No	Recipe	D.2	-0,1	-0,1
Adjustment of the personal income tax scale by 2.5 index tranches	No	Recipe	D.5	-	-0,4
Increase in interest ceilings for home loans	No	Recipe	D.5	-	-0,1
Compensation for companies for a third index tranche from 2023 to January 2024	No	Recipe	D.61	-	-0,4
Further adjustment of the personal income tax scale by 1.5 index tranches	No	Recipe	D.5	-	-0,2
Other measures with a marginal budgetary impact (<0.1% of GDP)	No	Recipe	Other	0,1	-0,1
Total				**-0,7**	**-0,5**

Table 6. Contingent liabilities

	Year 2023	**Year 2023**
	Maximum amount (as % of GDP)	**Amount in circulation (as % of GDP)**
Public guarantees	16,0	8,6
of which guarantees to the financial sector	*4,8*	*2,2*

Table 7: Debt and headline balance projections and key underlying assumptions

		Year 2023	Year 2024	Year 2025	Year 2026	Year 2027	Year 2028	Year 2029	Year 2030	Year 2031	Year 2032	Year 2033	Year 2034	Year 2035	Year 2036	Year 2037	Year 2038
1. Gross debt	as a % of GDP	25,5	27,5	27,5	27,2	26,7	26,0	25,6	25,5	25,4	25,4	25,4	25,5	25,6	25,7	25,9	26,0
2. General government balance	as a % of GDP	-0,7	-0,6	-0,6	-0,5	-0,3	-0,4	-0,2	-0,4	-0,7	-0,9	-1,1	-1,3	-1,5	-1,7	-1,9	-2,1
3. Structural primary balance	as a % of GDP pot.	0,9	1,1	0,6	0,7	0,7	0,4	0,4	0,4	0,4	0,4	0,4	0,4	0,4	0,4	0,4	0,4
4. Cyclical component	as a % of GDP pot.	-1,3	-1,3	-0,9	-0,8	-0,5	-0,3	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
5. *One-off* measures	as a % of GDP	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6. Interest expenditure	as a % of GDP	0,3	0,3	0,4	0,5	0,5	0,5	0,4	0,5	0,5	0,5	0,5	0,6	0,6	0,6	0,6	0,7
7. Long-term interest rate (annual average)	in %of	3,3	3,1	3,0	3,0	2,9	2,9	3,0	3,0	3,1	3,1	3,2	3,2	3,3	3,3	3,4	3,4
8. Short-term interest rate (annual average)	in %of	3,4	3,6	2,2	1,8	1,9	1,9	2,1	2,2	2,4	2,5	2,7	2,7	2,6	2,6	2,6	2,5
9. Implicit interest rate	in %of	1,2	1,4	1,5	1,8	2,0	2,2	1,8	1,9	2,0	2,1	2,2	2,3	2,4	2,5	2,6	2,7
10. Stock flow adjustment	as a % of GDP	1,4	2,9	1,6	1,6	1,5	1,4	0,7	0,5	0,3	0,2	0,0	-0,2	-0,4	-0,5	-0,7	-0,8
11. Potential GDP (annual var.)	Growth rate	1,8	1,5	1,7	1,8	1,9	2,0	2,1	1,8	1,7	1,7	1,7	1,7	1,7	1,8	1,9	2,0
12. Real GDP[1] (annual var.)	Growth rate	-1,1	1,5	2,7	2,0	2,5	2,6	2,7	1,8	1,7	1,7	1,7	1,7	1,7	1,8	1,9	2,0
13. GDP deflator (annual var.)	Growth rate	3,4	1,7	3,1	3,1	1,9	2,6	2,5	2,5	2,5	2,5	2,6	2,5	2,5	2,5	2,4	2,4
14. Nominal GDP (annual var.)	Growth rate	2,3	3,2	5,9	5,2	5,1	5,6	5,3	4,4	4,3	4,2	4,2	4,3	4,3	4,3	4,4	4,5

[1] Mechanically deducted from potential GDP levels and the output gap to ensure compliance with the "closure rule".

Table 8: Summary table of reforms and investments[42]

	Reform / Investment	Council Recommendation on the economic, social, employment, structural and budgetary policies of Luxembourg	Common priorities	Recovery and Resilience Facility / Agreements for partnership on EU funds for the period 2021-
Competitiveness of the national economy				
1	Reduction in corporate income tax	CSR4		
2	Science and technology park	CSR4	Social and economic resilience Ecological and fair digital transition	
3	Renewal of aid schemes for research, development and innovation	CSR4	Ecological and fair digital transition	
4	Fit 4 Digital - AI & SME package	CSR4	Ecological and fair digital transition	
5	"Start-up nation"	CSR4	Ecological and fair digital transition	
6	National Research Fund instruments to support public-private R&I collaborations	CSR4	Ecological and fair digital transition	
7	Technology transfer	CSR4		
8	Measures to combat aggressive tax planning	CSR1		
Defence				
9	Defence measures		Defence capacity building	

42 The reforms and investments are described in greater detail in chapter IV of the plan. The table presents the measures in the same order as Chapter IV. The plan does not provide an exhaustive overview of all the reforms and investments underway and planned by the government during the legislative period. The table does not include reforms and investments covered by the Recovery and Resilience Facility or the Partnership Agreements on EU funds for the period 2021-2027.

Education, the labour market and social cohesion

10	Promoting equality in the education system	CSR3	Social and economic resilience	
11	Multilingual education	CSR3	Social and economic resilience	
12	Second instructor in cycle 1	CSR3	Social and economic resilience	
13	Homework assistance program	CSR3	Social and economic resilience	
14	"One-stop shop" for inclusive education	CSR3	Social and economic resilience	
15	Anti-school drop-out measures	CSR3	Social and economic resilience	
16	New law on the reception of newly arrived pupils	CSR3	Social and economic resilience	
17	Inclusive education and well-being	CSR3	Social and economic resilience	
18	School health	CSR3	Social and economic resilience	
19	Legal basis for higher vocational training	CSR3	Social and economic resilience	
20	Legal framework for micro-certifications ("microcredentials")	CSR3	Social and economic resilience	
21	Attracting, retaining and developing talent	CSR3	Social and economic resilience	
22	"Work in Luxembourg" portal	CSR3	Social and economic resilience Ecological and fair digital transition	
23	Adaptation of immigration laws	CSR3	Social and economic resilience	
24	Tax incentives to encourage investment in start-ups	CSR3 CSR4	Ecological and fair digital transition	
25	Tax incentives to attract and retain talent	CSR3	Social and economic resilience	

26	Promoting key skills for the energy transition	CSR3	Social and economic resilience	
		CSR4	Ecological and fair digital transition	
27	Multi-year sector training plan	CSR3	Social and economic resilience	
		CSR4	Ecological and fair digital transition	
28	"Skills-Plang": investing in skills	CSR3	Social and economic resilience	
		CSR4	Ecological and fair digital transition	
29	"HP-Ready Check" training	CSR3	Social and economic resilience	
30	Training the public service (i.e. Digital Academy, GovTechLab)	CSR3	Social and economic resilience	
31	Two new Advanced Technician Certificates (BTS)	CSR3	Social and economic resilience	
32	Healthcare professionals training	CSR3	Social and economic resilience	
33	National action plan for the prevention and fight against poverty		Social and economic resilience	
34	Support for low-income individuals		Social and economic resilience	
35	Universal healthcare coverage		Social and economic resilience	
36	Social Inclusion Income and labour market transition		Social and economic resilience	
37	Administrative simplification to facilitate and accelerate access to social benefits		Social and economic resilience	
			Ecological and fair digital transition	
38	Social services desks		Social and economic resilience	
39	Objective Zero homelessness		Social and economic resilience	
40	Individual autonomy for people with disabilities		Social and economic resilience	

41	3rd National Action Plan for the implementation of the United Nations Convention on the Rights of Persons with Disabilities (CRPD)		Social and economic resilience	
42	Quality of services for the elderly		Social and economic resilience	
43	Revision of the Grand Duchy's law and regulations on geriatric care		Social and economic resilience	
44	National action plan "Ageing well"		Social and economic resilience	
45	"Out of hospital"		Social and economic resilience	
46	Entry into force of the law on intercultural living comes		Social and economic resilience	
47	National action plan for intercultural living together		Social and economic resilience	
48	Measures to combat racism		Social and economic resilience	
49	Comprehensive consultation on the long-term viability of the old-age pension system	CSR1	Social and economic resilience	
50	Job retention for people receiving an early retirement pension	CSR1	Social and economic resilience	
Housing				
51	10-point "Housing" action plan	CSR1	Social and economic resilience Ecological and fair digital transition	
52	Land mobilisation tax	CSR1	Social and economic resilience Ecological and fair digital transition	

53	Affordable housing and neighbourhood development on a large scale	CSR1	Social and economic resilience Ecological and fair digital transition	
Energy and digital transition				
54	Public procurement	CSR4	Social and economic resilience Ecological and fair digital transition Energy security	
55	Development of the circular economy		Ecological and fair digital transition	
56	Energy infrastructure	CSR4	Ecological and fair digital transition Energy security	
57	Enhanced safety supply	CSR4	Ecological and fair digital transition Energy security	
58	Development of a hydrogen economy	CSR4	Ecological and fair digital transition Energy security	
59	Renewable energy	CSR4	Ecological and fair digital transition Energy security	
60	Call for tender - Solar energy	CSR4	Ecological and fair digital transition Energy security	
61	Standard for photovoltaic installations	CSR4	Ecological and fair digital transition	
62	Pre-financing - Solar energy	CSR4	Social and economic resilience Ecological and fair digital transition	
63	New tariff structure for the electricity market	CSR4	Social and economic resilience Ecological and fair digital transition	

64	"Agri-PV"	CSR4	Ecological and fair digital transition Energy security	
65	Wind energy	CSR4	Ecological and fair digital transition Energy security	
66	Energy efficiency	CSR4	Ecological and fair digital transition Energy security	
67	Innovating the construction sector	CSR4	Ecological and fair digital transition Energy security	
68	Energy neutrality of the public sector	CSR4	Ecological and fair digital transition Energy security	
69	Speed up the administrative process and facilitate access to green subsidies	CSR4	Social and economic resilience Ecological and fair digital transition	
70	Renewal of the environmental and climate protection aid scheme	CSR4	Ecological and fair digital transition Energy security	
71	Aid for energy renovation	CSR4	Social and economic resilience Ecological and fair digital transition Energy security	
72	Support for low-income earners - Energy		Social and economic resilience Ecological and fair digital transition	
73	Energy measures		Social and economic resilience Ecological and fair digital transition	

74	Public transport networks and infrastructure (Trains, Trams, Buses; Bicycles)	CSR4	Social and economic resilience Ecological and fair digital transition	
75	Decarbonising transport	CSR4	Ecological and fair digital transition	
76	Digital portfolio ("eWallet")		Ecological and fair digital transition	
77	"Once only" principle		Ecological and fair digital transition	
78	Digital infrastructure		Ecological and fair digital transition	
79	Artificial intelligence		Ecological and fair digital transition	
80	Digital mandate		Ecological and fair digital transition	
81	Securing Information and Communication Technology infrastructures		Ecological and fair digital transition	
82	Cybersecurity		Ecological and fair digital transition	
83	Sovereign cloud		Ecological and fair digital transition	
84	The State's digitalisation strategy		Ecological and fair digital transition	
85	Digital inclusion policy	CSR3	Ecological and fair digital transition	
86	Digital skills for adults	CSR3	Social and economic resilience Ecological and fair digital transition	
87	e-Health		Ecological and fair digital transition