# Draft Budgetary Plan

>2018-2019



#### English courtesy translation of the official French version.

#### In case of discrepancies, the original French version shall prevail.

#### I. <u>Introduction</u>

Pursuant to article 6 of Regulation (EU) 473/2013, Luxembourg hereby presents its 2019 Draft Budgetary Plan.

Given legislative elections on 14<sup>th</sup> October 2018, the government has not presented a draft budget for the fiscal year 2019 to Parliament. As a consequence, this task will fall to the next government.

In view of this situation, Luxembourg submits only a partial Draft Budgetary Plan that is limited to a simple update of the budgetary projections of the Stability and Growth Programme from April 2018, assuming a no-policy-change scenario.

The update of budgetary projections for 2018 and 2019 was carried out under the auspices of the Ministry of Finance and takes into account the macroeconomic projections independently produced by STATEC in its *Note de Conjoncture 1-2018*, published in May 2018.

A complete and updated Draft Budgetary Plan will be submitted once the government that will emerge from the legislative elections on 14<sup>th</sup> October 2018 has defined its budgetary strategy and submitted its 2019 draft budget to Parliament<sup>1,2</sup>.

#### II. Macroeconomic forecasts:

The **global economic climate** is currently marked by heightened uncertainty, mainly due to trade tensions, geopolitical uncertainties and volatile financial markets. The conjunction of these elements implies less dynamic global growth rates compared to previous years.

In the **euro area**, confidence and employment indicators similarly point towards more moderate growth figures. At the same time, risks are increasingly tilted to the downside. As a reminder, the forecasts of the *Note de Conjoncture 1-2018* project the Eurozone to grow at 2.2% in 2018,

<sup>&</sup>lt;sup>1</sup> Link: https://statistiques.public.lu/catalogue-publications/note-conjoncture/2018/PDF-NDC-01-18.pdf.

<sup>&</sup>lt;sup>2</sup> Updated macroeconomic forecasts were unavailable at the moment the present draft budgetary plan was drawn up, mainly due to missing national accounts for the second quarter of 2018. The annual national accounts have however provisionally been taken into account, where possible, in calculations involving the GDP level. The definitive annual accounts will be presented by STATEC on 19<sup>th</sup> October 2018.

followed by a slight deceleration to 2.0% in 2019. This growth trend is broadly corroborated by the forecasts of the major international institutions<sup>3</sup>.

In **Luxembourg**, economic growth has regained momentum in the early months of 2018, after having been somewhat disappointing in 2017. During the first quarter of 2018, real GDP grew by 2.0% compared to the previous quarter and by 5.1% year-on-year. According to STATEC, the annual growth forecast for 2018 of 3.9% is thus achievable. For 2019, growth is expected to increase to 4.0%. Nominal growth would reach 4.6% in 2018 and 5.3% in 2019.

**Luxembourg's economy would thus continue its expansion** at a rate that is superior to the euro area, and this in spite of more moderate growth figures at a global level. However, it should be noted that these figures also represent a slight downward revision compared to those of the Stability and Growth Programme from April 2018.

Using the European Commission's calculation method (COM-LUX), Luxembourg's potential growth is estimated to be 2.7% in 2018 and 3.1% in 2019. On the basis of the provisional annual accounts, **the output gap**, which represents the difference between real GDP and potential GDP, would thus lie at -0.3% in 2018 and +0.5% in 2019.

Meanwhile the cyclical upswing leads to a strong evolution of employment and a concomitant reduction of unemployment on the **labour market**. During the second quarter of 2018, total interior employment increased by 3.9% year-on-year and is expected to grow further by 3.4% in 2019. The unemployment rate, following the national definition, is expected to lower to 5.4% in 2019.

**Inflation** in Luxembourg in 2018 is influenced by a number of exceptional effects that should nevertheless dissipate towards the end of the year. Based on the assumptions laid out in the inflation forecast of August 2018, headline inflation would rise to 1.8% in 2019, compared to the 2018 level of 1.4%. With regards to salaries, a new wage indexation is currently projected for the fourth guarter of 2019.

#### III. Budgetary objectives and policy

As stated in the introduction, the present Draft Budgetary Plan is based on a **no-policy-change scenario**, both on the expenditure and revenue sides.

 $<sup>^3</sup>$  IMF (October 2018) - 2018: 2.0% / 2019: 1.9% ; OECD (September 2018) - 2.0% / 1.9% ; European Commission (July 2018) - 2.1% / 2.0%.

This implies that policies already implemented by the outgoing government have been integrated into expenditure forecasts, including their impact on forecasts for 2019. However, no newly proposed measures have been incorporated.

Regarding revenues, forecasts have been updated on the basis of the developments observed over the first 9 months of 2018. Furthermore, the update factors in the projections of the *Note de Conjoncture 1-2018* and other pertinent factors for individual revenue items.

The update of budgetary forecasts, under a no-policy-change scenario, leads to **similar conclusions as those described in the SGP 2018**, with a general government balance in 2018 and 2019 showing strong surpluses at similar levels to those observed over previous years.

The **general government balance** is thus expected to pass from 1.5% of GDP in 2018 to 1.3% of GDP in 2019, which remains close to the average of 1.5% of GDP observed over the years 2014-2017.

Assuming no policy changes, **public expenditure** would rise from 43.4% of GDP in 2018 to 43.5% in 2019, mainly due to an increase in capital transfers that grow from 1.0% in 2018 to 1.2% of GDP in 2019. The level of public investment would stabilize at 4.1% of GDP, while intermediate consumption, mostly reflecting operating costs, would fall from 3.7% of GDP in 2018 to 3.6% of GDP in 2019.

**Public revenues**, on the other hand, are estimated to be 44.8% of GDP in 2019, which represents a level that is slightly lower compared to 2018 (44.9% of GDP). The decrease of revenues from taxes on production and imports of 0.3 points of GDP is only partially compensated for by a rise in social contributions and capital taxes that would each rise by 0.1 points of GDP.

Taking into account the provisionally updated GDP figures for calculating the output gap<sup>4</sup>, the **structural balance** should lessen from +1.7% of GDP in 2018 to +1.1% of GDP in 2019, thus still overachieving the medium-term budgetary objective (MTO) of -0.5% of GDP by a significant margin. It is also important to note that this updated forecast is an upward revision of the figures anticipated in the 2018 SGP.

With regard to the rules<sup>5</sup> of the preventive arm of the Stability and Growth Pact and the estimated structural balance for 2019, Luxembourg should thus continue to respect the MTO set at -0.5% of GDP for the years 2017 to 2019.

<sup>&</sup>lt;sup>4</sup> The calculation of the structural balance is based on the estimation of the output gap using national data and following the methodology applied by the European Commission (method COM-LUX). If complete data is missing at the moment of drawing up the draft budgetary plan, the calculations are based on the data that was available at the beginning of October – namely the updated annual accounts for the recent past and the growth forecasts of STATEC's *Note de Conjoncture 1-2018*.

<sup>&</sup>lt;sup>5</sup> It should be noted that the expenditure benchmark does not apply to the case of Luxembourg as long as the MTO is overachieved.

# IV. <u>Update of tables related to recommendations and targets set by EU strategy</u> <u>for growth and employment</u>

Regarding the country-specific recommendations adopted in the context of the European Semester 2018, as well as the objectives set out in the Union strategy for growth and employment "Europe 2020", many specific policy measures and action plans have been adopted and implemented by the government over the past years.

The update of measures that have been specifically taken to achieve the national 2020 targets, fixed by the Union strategy for growth and employment, has been carried out in detail for the most recent edition of the National Reform Programme (NRP) in April 2018.

Tables 8 and 9 consist of an intermediary update, in view of the next NRP, which is scheduled to be published in April 2019.

# STATISTICAL ANNEX

# 1. Macroeconomic forecasts

Table 0. Basic assumptions

	Year 2017	Year 2018	Year 2019
Short-term interest rate (annual average)	-0.3	-0.3	-0.2
Long-term interest rate (annual average)	0.8	0.7	0.8
USD/€ exchange rate (annual average)	1.13	1.19	1.17
Nominal effective exchange rate	1.05	1.05	1.04
Euro Area GDP growth	2.4	2.2	2.0
World demand	3.5	5.2	4.3
Oil prices (Brent, USD/barrel)	54	72	74

Table 1.a. Macroeconomic prospects

	ESA code	Year 2017	Year 2017	Year 2018	Year 2019
		Level	rate of change	rate of change	rate of change
1. Real GDP (reference year = 2010)	B1*b	47.962	1.5	3.9	4.0
2. Potential GDP		48.746	2.2	2.7	3.1
3. Nominal GDP	B1*b	55.299	3.7	4.6	5.3
Components of real GDP					
4. Private final consumption expenditure	P.3	15.494	2.9	3.6	3.6
5. Government final consumption expenditure	P.3	8.210	3.1	2.3	1.9
6. Gross fixed capital formation	P.51	9.791	4.0	12.3	10.8
7. Changes in inventories and net acquisition of valuables (% of GDP)	P.52 + P.53		0.2	0.2	0.2
8. Exports of goods and services	P.6	98.445	1.9	7.3	7.5
9. Imports of goods and services	P.7	84.061	2.2	8.5	8.5
Contributions to real GDP growth			•	-	-
10. Final domestic demand			2.2	3.6	3.4
11. Changes in inventories and net acquisition of valuables	P.52 + P.53		-0.5	0.0	0.0
12. External balance of goods and services	B.11		-0.1	0.3	0.6

Table 1.b. Price developments

·	ESA code	Year 2017	Year 2018	Year 2019
		rate of change	rate of change	rate of change
1. GDP deflator (2005=1)		2.2	0.7	1.3
2. Private consumption deflator		1.9	1.2	1.6
3. NICP		1.7	1.3	1.7
4. Export price deflator (goods and services)		5.5	1.9	2.7
5. Import price deflator (goods and services)		6.0	2.6	2.8

Table 1.c. Labour market developments

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	ESA code	Year 2017	Year 2017	Year 2018	Year 2019
		Level	rate of change	rate of change	rate of change
1. Employment, persons (in 1000 pers.)1		432.360	3.3	3.5	3.4
2. Unemployment rate (%) <sup>2</sup>			5.9	5.6	5.4
3. Labour productivity, persons <sup>3</sup>			-1.9	-0.1	0.2
4. Compensation of employees (billion EUR)	D.1	27.7	6.3	5.7	6.4
5. Compensation per employee (1,000 EUR/year)		68.2	2.8	1.9	2.7

<sup>&</sup>lt;sup>1</sup> Active employed population, in thousands, national accounts definition

<sup>&</sup>lt;sup>2</sup> Harmonized definition, Eurostat

<sup>&</sup>lt;sup>3</sup> Real GDP per person employed

# 2. Budgetary objectives and policy

Table 2.a. General government budgetary targets broken down by subsector

	ESA code	Year 2018	Year 2019
		% GDP	% GDP
Net lending (+) / net borrowing (-) (B.9) by sub-sector			
1. General government	S.13	1.5	1.3
2. Central government	S.1311	-0.6	-0.7
3. State government	S.1312		
4. Local government	S.1313	0.2	0.4
5. Social security funds	S.1314	1.9	1.7
5. Interest expenditure	D.41	0.3	0.3
7. Primary balance		1.8	1.6
3. One-off and other temporary measures			
9. Output gap (% of potential GDP)		-0.3	0.5
10. Cyclical budgetary component		-0.2	0.2
11. Structural balance		1.7	1.1

Table 2.b. General government debt developments

	ESA code	Year	Year
	ESA Code	2018	2019
		% GDP	% GDP
1. Gross debt		21.8	22.8
2. Change in gross debt ratio		-1.2	1.0
p.m.: implicit interest rate on debt (1)		1.5	1.2

<sup>1</sup> Equal to interest expenditure divided by the debt level of the previous year.

Table 2.c. Contingent liabilities

	Year	Year
	2017	2018
	% GDP	% GDP
Public guarantees	8.9	
Of which: linked to the financial sector <sup>1</sup>	4.6	

<sup>&</sup>lt;sup>1</sup> Including the credit line for the Single Resolution Fund.

# 3. Expenditure and revenue projections under the no-policy change scenario

Table 3. General government expenditure and revenue projections at unchanged policies broken down by main components

		Year	Year	
General government (S.13)	ESA code	2018	2019	
		% GDP	% GDP	
1. Total revenue at unchanged policies	TR	44.9	44.8	
Of which:				
1.1. Taxes on production and imports	D.2	12.1	11.8	
1.2. Current taxes on income, wealth, etc.	D.5	15.9	15.9	
1.3. Capital taxes	D.91	0.2	0.3	
1.4. Social contributions	D.61	12.5	12.6	
1.5. Property income	D.4	1.3	1.3	
1.6. Other <sup>1</sup>		2.9	2.9	
p.m.: Tax burden (D.2+D.5+D.61+D.91-D.995)		40.7	40.6	
2. Total expenditure at unchanged policies	TE	43.4	43.5	
Of which:			•	
2.1. Compensation of employees	D.1	9.1	9.1	
2.2. Intermediate consumption	P.2	3.7	3.6	
2.3. Social payments	D.621	20.2	20.2	
Of which: Unemployment benefits		0.7	0.7	
2.4. Interest expenditure	D.41	0.3	0.3	
2.5. Subsidies	D.3	1.4	1.4	
2.6. Gross fixed capital formation	P.51	4.1	4.1	
2.7. Capital transfers	D.9	1.0	1.2	
2.8. Other		3.5	3.5	
3. Financing capacity / requirements		1.5	1.3	

# 4. Expenditure and revenue targets

Table 4.a. General government expenditure and revenue targets, broken down by main components

	ESA code	Year 2018	Year 2019
General government (S.13)		% GDP	% GDP
1. Total revenue target	TR	44.9	
Of which:			
1.1. Taxes on production and imports	D.2	12.1	
1.2. Current taxes on income, wealth, etc.	D.5	15.9	
1.3. Capital taxes	D.91	0.2	
1.4. Social contributions	D.61	12.5	
1.5. Property income	D.4	1.3	
1.6. Other <sup>1</sup>		2.9	
p.m.: Tax burden (D.2+D.5+D.61+D.91-D.995)		40.7	
2. Total expenditure target	TE <sup>2</sup>	43.4	
Of which			
2.1. Compensation of employees	D.1	9.1	
2.2. Intermediate consumption	P.2	3.7	
2.3. Social payments	D.62 + D.632	20.2	
Of which Unemployment benefits <sup>3</sup>		0.7	
2.4. Interest expenditure	D.41	0.3	
2.5. Subsidies	D.3	1.4	
2.6. Gross fixed capital formation	P.51g	4.1	
2.7. Capital transfers	D.9	1.0	
2.8. Other <sup>4</sup>		3.5	
3. Financing capacity / requirements		1.5	

<sup>&</sup>lt;sup>1</sup> P.11+P.12+P.131+D.39rec+D.7rec+D.9rec (other than D.91rec)

Table 4.b Amounts to be excluded from the expenditure benchmark

	ESA code	Year 2018	Year 2018	Year 2019
		Level	% GDP	% GDP
Expenditure on EU programmes fully matched by EU funds revenue		0.1	0.2	0.2
2. Cyclical unemployment benefit expenditure (millions)		0.4	0.7	0.7
Effect of discretionary revenue measures (millions)		0.1	0.2	0.3
4. Revenue increases mandated by law				

Tableau 4.c General government epxenditure by function

4.c.i) General government expenditure from the expenditure benchmark

	2018		2018 201		119
		% of total		% of total	
	% GDP	expenditur	% GDP	expenditur	
		es		es	
Education	4.7	10.9	4.7	10.9	
Health	4.9	11.3	4.9	11.3	
Employment	1.2	2.8	1.1	2.6	

Table 4.c.ii Classification of the functions of the Government

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Functions of the Government	COFOG code	2018	2019
		% GDP	% GDP
1. General public services	1	5.0	5.0
2. Defense	2	0.5	0.5
3. Public order and safety	3	1.1	1.1
4. Economic affairs	4	5.8	5.8
4. Environmental protection	5	1.0	1.0
6. Housing and community amenities	6	0.6	0.6
7. Health	7	4.9	4.9
8. Recreation, culture and religion	8	1.3	1.3
9. Education	9	4.7	4.7
10. Social protection	10	18.6	18.6
11. Total expenditure	TE	43.4	43.5

<sup>&</sup>lt;sup>2</sup> TR-TE= B.9

<sup>&</sup>lt;sup>3</sup> includes cash benefits (D.621 and D.624) and in kind benefits (D.631, SEC2010: D.632) related to unemployment benefits.

 $<sup>^4</sup>$  D.29pay + D.4pay (other than D.41pay) +D.5pay + D.7pay +P.52+P.53+K.2+D.8.

#### 5. Description of discretionary measures included in the draft budgetary plan

Table 5. Discretionary measures taken by the General government

List of measures		Objective	State of progress of the adoption	Budgetary impact	
	Detailed description	ESA code		2019	
				in mio	% GDP
		•••	 ***		
TOTAL					

# 6. <u>Divergences from latest Stability Programme</u>

Table 6. Divergence from latest Stability Programme

	ESA code	Year 2017	Year 2018	Year 2019
		% GDP	% GDP	% GDP
Target general government net lending / net borrowing	B.9			•
19th update of the Stability Programme		1.5	1.1	1.4
2018-2019 Draft budgetary plan		1.4	1.5	
Difference		-0.2	0.4	
General government net lending projection at unchanged policies	B.9			
19th update of the Stability Programme		1.5	1.1	1.4
2018-2019 Draft budgetary plan		1.4	1.5	1.3
Difference		-0.2	0.4	-0.04

#### 7. Methodological aspects

Table 7. Methodological aspects

Table 1. Wedlodological adjects				
Estimation techniques	Phase of the budgetary procdure for which it has been used	Relevant characteristic(s) of the model/technique(s) utilised	Assumptions	
Macroeconomic forecasts	For the purpose of the elaboration of the draft budgetary plan	ISTATE C'S macroeconometric model	External assumptions admitted for a certain number of variables (f.ex euro area growth, stock market development, etc.).	
		Use of parametric equations and microeconomic information	Macroeconomic forecasts Microeconomic and historical data	

#### Table 8: The "2018-2019 country-specific recommendations" for Luxembourg

Note: This table summarises the main measures taken from the National Reform Program and updates them following the 2018-2019 country-specific recommendations for Luxembourg. For more details, please see 2018 NRP.

#### The 2018-2019 country-specific recommendations for Luxembourg:

- 1. Increase the employment rate of older people by enhancing their employment opportunities and employability while further limiting early retirement, with a view to also improving the long-term sustainability of the pension system.
- 2. Further reduce regulatory restrictions in the business services sector.

Recommendation number	List of the main measures to use	Description of direct contribution
Increase the employment rate of older people by enhancing their employment opportunities and employability while further limiting early retirement, with a view to also improving the long-term sustainability of the pension system.		
	Follow-up of the pension insurance reform that came into effect on January 1, 2013.  Establishment of a "Pensions Group" (April 2016): The Pensions Group submitted its report to the government in June 2018 after an in-depth analysis by the experts in this group and related discussions ( <a href="https://gouvernement.lu/fr/publications/rapport-etude-analyse/igss/rapport-du-groupe-de-travail-pensions/2018/rapport-du-groupe-de-travail-pensions.html">https://gouvernement.lu/fr/publications/rapport-etude-analyse/igss/rapport-du-groupe-de-travail-pensions.html</a> ).	Increase the effective retirement age by considering changes in life expectancy and adjust pensions to the pension plan's position in the national budget.  Check the consistency of the provisions introduced by the reform that came into force on 1 January 2013 on the basis of an actuarial opinion prepared by the IGSS and presented in December 2016, including the readjustment mechanism, and decide on the need for implementing possible modifications of the regime.
	The law dated 20 July 2017 to combat long-term unemployment.	Encourage the return to employment of long-term unemployed persons, in particular older unemployed persons, through job creation assistance.
	Reform of the occupational reclassification system via the law dated 23 July 2015.	Provide additional incentives to delay retirement age by speeding up procedures, better safeguarding the rights of people in outplacement and providing the necessary conditions to prioritize internal redeployment and consequently job retention.
	Professionalization placement programmes for job seekers aged at least 45, those in an external reclassification procedure, or who have the status of disabled employee (in effect since January 1, 2016).	Offer the opportunity to job seekers to highlight their professional abilities within a company by means of an internship of a maximum duration of six weeks.

	Professional reinsertion contracts for job seekers aged at least 45, those in an external reclassification procedure, or who have the status of disabled employee (in effect since 1 January 2016).  Reform the early retirement schemes (Law dated 30 November 2017): better targeting of employees who work hard and better assimilation of the working conditions of employees, while promoting the retention of older people in working life.	Provide the opportunity for job seekers to improve their professional knowledge and skills within a company (maximum duration of 12 months).  Abolish the early retirement-solidarity system and adapt other early retirement schemes.
	The national Strategy for lifelong learning (LLL).  Reform of the long-term care insurance system (Law dated 12 July 2017).	Support and enhance lifelong learning.  Greater individual focus on supplying quality
	Reform of the long-term care insurance system (Law dated 12 July 2017).	services for meeting the daily needs of each person, bolstering quality through clear standards and criteria with adequate controls, a simplification of procedures and consolidation of the system in the light of societal changes and the respect for the fundamental principles of the 1998 Base Law.
2.		
Further reduce regulatory restrictions in the business services sector		
	Draft law n°6795 amending the law dated 13 December 1989 on the	Remove regulatory restrictions in the business services sector.
	organisation of the professions of architect and consulting engineer.  Work started on a draft law on the modernization of the business establishment: work began in the second half of 2017. The Law dated 18 July 2018 amending Paragraph 1 of the amended law dated 29 June 1989 on the reform of the cabaret regime; Paragraph 2 of the amended law dated 2 September 2011 regulating access to the professions of craftsmen, retail trades, industrial operators and certain independent professions; and Paragraph 3 of the law dated 23 December 2016 on promotion sales and sidewalk sales and on misleading and comparative advertising recommends certain simplifications of the procedure.	Adapt the business establishment law to socio- economic realities and technical developments, while maintaining legal requirements in terms of professional qualifications, thus increasing the chances of success for entrepreneurs wishing to set up their own business. The law eliminated the professional qualifications requirement for simple retail activities and services, which made it possible to eliminate other specific procedures such as special authorizations to participate in fairs and markets, general consulting and economic consulting.
		The same law has also made it possible to modernise existing legislation governing major retail operations, by repealing the special authorisation procedure for supermarkets.

		In order to facilitate economic development in the business services sector, this legislation also allowed for the repeal of protected "advisory" and "economic consulting" labels.
cond (LISE	mination of the general opening hours regime: a study has been ducted in 2018 by the Luxembourg Institute of Socio-Economic Research ER), the results of which have been communicated to the Ministry of the nomy and will appear in the next government program.	Carry out a comprehensive review of the issue of opening hours and its implications, including on the social level, for the employees concerned.
Territ -	Publication of the report of the Benelux General Secretariat on the TSC issue in the Benelux retail market supply chain (May 2018) and publication of a national report by the Government Price Formation Observatory, based on the data from the Benelux survey, analysing in more detail the nature and extent of territorial supply constraints in Luxembourg (June 2018).	To analyse territorial supply constraints and to formulate any necessary solutions for improving the conditions of supply (price, offer, etc.) of companies in the Benelux.
-	Further work: Assessment of current political and legal options at national and Benelux level	Seek out solutions for the problems identified in the studies cited above.

# Table 9: "Europe 2020 National Objectives" for Luxembourg

Note: This summary table is an update of the main measures related to the Europe 2020 national objectives derived from the 2018 National Reform Programme. For more details, please see 2018 NRP.

National objectives	List of the principal measures	Description of measures
National employment objective 73% for 2020	Implementation of the Equality Plan for Women and Men (2015-2018).	Increase levels of equality between women and men.
	Law of 15 December 2016 reinforcing the principle of equal pay for men and women.	Increase the employment rate of women by facilitating the integration of women into employment.
	Positive Actions Programme.	Encourage companies to promote gender equality.
	Personalised path as part of the reform of the ADEM (fully rolled out in December 2015).	Qualitatively improve support for job seekers within ADEM by personalising monitoring of job seekers' actions.
	Launch of the interactive "Job Board" platform (March 2016).	Increase chances of meeting between employers and job seekers.
	"Companies as partners for employment" programme bringing together the Union of Luxembourg Enterprises (UEL), the government and ADEM (2018-2020).	Adapt ADEM's offers, including training, to the needs of companies.
	Expansion of the "Guarantee for Youth" programme to young people up to 30 years old.	Offer young people up to the age of 30 high quality service for their integration into professional life, for their return to school, for an apprenticeship, a qualifying formation or support in developing a personal and professional project.
	Draft law 7265 on the regulation of internships.	Introduce a high-quality transparent framework that facilitates the transition between the worlds of education and work while ensuring the quality

		of internships and the legal safety of the various stakeholders.
	Development of ADEM's language training offer, both internally and externally.	
	Multiplication of job seeker training initiatives: partnerships with major training institutes.	Provide targeted training to address the skills gaps in the job market and provide a specific
		employment perspective.
	Pilot project to support and encourage companies to develop the skills of employees to enable them to work in the wake of rapid technological transformation.	Develop the skills of employees in line with technological development.
	Measures and actions favouring the 2014-2020 European Social Fund Operational Programme.	Develop the sustainable professional integration of young people under 30 years old, people far removed from the labour market and job seekers and employees over 45 years of age.
	Introduction of optional individual taxation (2017 tax reform).  (see also the measures implemented by the government	Increase the employment rate, especially the employment rate of women.
	under country-specific recommendation No. 1)	
National R & D objective	For the public research sector	
2.3-2.6% for 2020 (0.7% to 0.9% for the public sector)	Drawing up of the University of Luxembourg development contract for 2018-2021 and the public research centres (CRP) and the FNR multi-year agreements for 2018-2021.	Increase the efficiency of research systems, in particular by ensuring greater consistency amongst contracts of various players, with identical definitions of objectives and indicators.
	Foreign partnerships, such as with ANR, BELSPO, etc., International research networks like the ALL, COST, etc. entities and cross-border initiatives like the University of the Greater Region and others.	Optimise transnational cooperation and transnational actions.
	Development of human resources policies at the University of Luxembourg and the CRPs, including open and transparent merit-based recruitment measures in line with the guidelines	Open up the job market for researchers.

of the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers. Develop an environment conducive to the growth of scientific Develop the job market for researchers. and technological employment: - ATTRACT and PEARL Programmes - INTER Mobility Programme - PRIDE Programme etc. Minimum representation of 40% of the under-represented sex Promote gender equality and integrate gender in the boards of directors of public research institutes and the into research content. FNR, quantified objectives in the performance contracts, etc. Grouping of the participants in higher education, research Optimise the dissemination, accessibility and and innovation at the Belval Science Centre, Cluster transfer of scientific knowledge. Luxembourg initiative to accelerate the application of knowledge and best practices, transition to the "Open Access" concept, etc. Programmes for making bilateral or multilateral arrangements Strengthen the international dimension of the for project tenders in collaboration with other national or European Research Area (ERA). international funding bodies such as INTER and INTER Mobility. 2. For the private research sector Encourage companies of all sizes to cooperate Law on the promotion of RDI (June 2017). with public and private actors in innovating with services and products, as well as in production processes. The High Performance Computing (HPC) and big data Stimulate new HPC uses by industry and ensure enabled applications strategy. access to world-class facilities for public and private research entities. National Composites Centre Luxembourg (opened in 2016). Promote cooperation between public and private

actors in the field of composite materials.

"Additive manufacturing": initiative of the Materials and Identify the needs of industrial operators in the Production Technologies cluster (launched in 2016) sector. inventory of available and desired equipment that manufacturers would like to acquire. "Industry 4.0": Materials and production technologies cluster Identify relevant RDI projects and stimulate activities through workshops. project (2016). Development of the Joint Research Programme. Promote long-term PPP relations between research and technology and industry organizations and increase the attractiveness of Luxembourg as a recognized hub dedicated to technological research. Establishment of the Institute of Intellectual Property Foster the development of intellectual property for the needs of the economy, bringing together Luxembourg (2014, fully operational in early 2016). national and international skills to form a coherent set and make them available to economic and institutional players as a growth driver. Diversify the economy, while focusing on a Luxembourg cluster initiative: Materials and Production technologies, Eco-innovation, Bio Health, ICT, automotive limited number of specific sectors. components, wood and creative industries. Diversify the economy through the development Luxembourg Space Agency. of the space sector, in particular by intensifying R & D activities. Support for start-ups: Support start-ups. implementation of the ICT Digital Tech Fund The Fit4Start programme Extension of the programme to encompass the Biotech sector and increase the number of approved start-ups: from ten start-ups per year to 25 (20 in the ICT sector and 5 in the Biotech sector).

	<ul> <li>The Tomorrow Street Innovation Centre</li> <li>etc.</li> <li>SME support programmes with the help of Luxinnovation:</li> <li>The Fit4Digital programme</li> <li>the Fit4Innovation programme, recently enhanced with the Inno4growth and Inno4Circulairy parts</li> <li>SME Instrument (timeline of 2020)</li> <li>etc.</li> </ul>	Support SMEs and encourage them to innovate.
	Incentive and supervision of the participation of Luxembourg companies in Horizon 2020 European programmes.	Support Luxembourg's participation in European programmes and increase the success rate.
	The Smart Specialisation strategy: publication at end of 2017.	Stimulate certain priority sectors, encourage companies of all sizes to cooperate with public and private actors in innovating with services and products, as well as in production processes.
National goal to reduce greenhouse gas emissions reduction of non-ETS emissions by 20% compared to 2005 (emissions of about 8,117 Mt CO2-equivalent by 2020)	- Draft National Plan for Sustainable Development (PNDD): The priority area of action 8 "Protecting the climate, adapting to climate change and ensuring sustainable energy" provides for a third climate plan (see below) with sectoral guidelines as its main objectives, as listed below: - housing and consumption - mobility and transport - economy and energy - agriculture and food	
	- <u>Non-ETS greenhouse gases</u>	
	Draw up a third Climate Plan that incorporates a longer-term vision (2050) for de-carbonising the economy.	Reduce GHG emissions in the sectors of energy production and combustion (including transportation and buildings) and agriculture.
	First draft of the National Integrated Energy-Climate Plan 2021-2030 (NECP) for the end of 2018 as part of the future Regulation on the Governance of the Energy Union and Action for the Climate.	Strategic guidance provided by the Third Climate Plan for the decarbonisation component of NECP.

#### Public transport and mobility

Promotion of the use of public transport and soft mobility: MoDu strategy initially published in 2012 and introduced in May 2018 of the new Modu 2.0 strategy highlighting the progress made since 2012. The strategic goal for 2025 is to reduce congestion during peak hours while carrying 20% more people than in 2017.

Develop an efficient public transportation infrastructure to reduce GHG emissions by reducing individual transportation.

Implementation of a tram in the City of Luxembourg (first section inaugurated at the end of 2017).

Develop an efficient public transport system that takes into account the economic and demographic development of the capital and the country.

Implementation of the Transport Sector Plan (PST) for the MoDu strategy.

Provide a regulatory framework for the MoDu strategy measures to set aside corridors for rail and road infrastructure.

Residential and administrative buildings

Implementation of the Housing Sector Plan (PSL).

Set aside areas to accommodate housing and prescribing sustainability criteria to be used when implementing priority projects for housing.

Gradual increase in energy performance requirements for new residential buildings (mandatory energy class AA for new construction since 2017). Increase the energy performance requirements for new residential buildings.

Climate Bank and sustainable housing bonus package:

- Climate Bank
- "PRIMe House"
- Sustainability certification system for new housing (LENOZ)

Promote sustainable construction, sustainable energy-efficient renovation of existing residential buildings and the development of renewable energies in the housing sector.

Administrative buildings: completion of an inventory of central state buildings covered by the European Energy Efficiency Directive, and progressive strengthening of energy performance requirements for new administrative buildings.

Gradually strengthen the requirements for energy performance.

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	- <u>Municipalities (local level)</u>	
	Climate pact with the municipalities.	Reduce GHG emissions and energy costs in municipal areas, stimulate local and regional investments, ensure better air quality (introduced in 2017) and integrate the concept of circular economy (introduced in 2018).
	- <u>Energy</u>	
	New integrated climate and energy strategy for Luxembourg: first draft of the National Integrated Energy-Climate Plan 2021-2030 (NECP) for the end of 2018 as part of the future Regulation on the Governance of the Energy Union and Action for the climate.	Establish a National Plan in relation to the future European Energy Union.
	- <u>Industry</u>	
	EU emissions trading scheme (ETS).	Apply the ETS.
	Establishment of an energy audit system in large companies.	Establish an energy inventory of facilities and recommend energy efficient solutions and use of renewable sources.
	Promotion of environmental technologies.	Improve energy efficiency and the implementation of new or renewable energy sources in participating companies of the industrial sector.
National Renewable Energy Objective 5.45% on average for 2015/2016 11% for 2020	National action plan for renewable energies	Achieve the Luxembourg national objective set by Directive 2009/28 / EC.
11,010. 2020	- <u>Development of renewable energies on national territory</u>	
	Develop renewable energies on national territory.  Electric mobility: monitoring the deployment of 800 public charging stations for cars powered by an electric motor as well as for chargeable hybrid electric cars (plug-in hybrid cars). The first terminals, known as "Chargy" terminals, were installed in early 2017 and as of September 2018, 25% of the	Implementation of new financial instruments in the context of developing renewable energies (Grand-Duchy Regulation dated 24 April, 2017 amending the amended Grand-Duchy Regulation of 1 August, 2014 relating to the production of electricity based on the sources of renewable energy). A first call for tenders was

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	kiosks have been rolled out; evaluation of the available strategies for implementing a fast charging infrastructure, as an ultra-fast structure, on motorway service areas and development of a clear and consistent framework for private charging facilities, such as at home or at the workplace.	launched in 2018 in the field of large photovoltaic installations.  Change in compensation for renewable electricity production with a view to increasing its growth.
	- <u>Blend of biofuels in fuels released for sale at the</u> national level	
	Achieve 10% blending by 2020 (2018: 5.7%).	Regulate the blending of biofuels in domestically delivered fuels by gradually increasing the share of biofuels.
	- <u>Use of cooperation mechanisms</u>	
	Conclusion of two cooperation agreements on statistical transfers of energy produced from renewable sources to meet the objectives of Directive 2009/28 / EC: in achieving its objectives, Luxembourg was the first EU Member State to sign two statistical transfer agreements with Lithuania and Estonia in 2017, in addition to its national effort. Both agreements provide for the mandatory transfer of a minimum volume of renewable energy target amounts and an option for transferring maximum quantities in 2018-2020. This is a clear signal for increased European cooperation in the field of renewable energies.	Identify renewable energy quantities to be transferred under the cooperation agreements for the year 2018.
National energy efficiency objective National indicative target for 2020: final energy consumption of 49,292 GWh (4,239.2 ktoe)	Fourth National Energy Efficiency Action Plan (2017).	Improve energy efficiency in accordance with Directive 2012/27 / EU and achieve the EU's goal of achieving a 20% cut in annual energy consumption.
	- Energy performance of buildings	
	(Note: See national goal for reduction of greenhouse gases). Increase the energy performance of new and existing buildings.	Refinement of the rules concerning the energy performance of almost zero-energy residential buildings and reform of calculation rules for administrative buildings.

	Voluntary agreements with industrial companies	
	New voluntary agreements in the industrial sector (2017-2020).	Increase the commitment of member companies to improve energy efficiency and the implementation of new or renewable energy sources.
	<ul> <li>Obligation of energy efficiency mechanisms for energy suppliers</li> </ul>	Monitor and improve the obligation mechanism.
	- Smart electricity and natural gas meters	
	Implement a common and interoperable national smart metering infrastructure and then actively engage the end user in the electricity and natural gas markets.	Monitoring the widespread installation of smart joint metering by gas and electricity network operators since July 2016. Replacement of at least 95% of the old electricity meters will extend until 31 December 2019. As regards natural gas, the replacement of at least 90% will extend until 31 December 2020.
	- Implementation of the "Third Industrial Revolution" study (2016)	
	Follow-up of the implementation of specific projects on the "Energiezukunft Lëtzebuerg" thematic platform.	Thematise all the strategic aspects of energy transition in the medium and long term, as well as the implementation of the "Internet of Energy" in Luxembourg.
	Integration of new concepts, such as individual and collective self-consumption within an energy community, or the national computer platform for energy data: Reform of the amended	Integrate new concepts into the organization of the electricity market.
	Act of 1 August 2007 on the organization of the electricity market introduced in the legislative procedure in early 2018.	Promote the self-consumption of renewable electricity and the exchange of energy.
National school dropout rate goal Sustainably maintain school dropout rates below 10%	Multilingual education program for 1-4-year-olds and improved access to education and reception facilities by offering 20 free hours a week from the age of 1 year (autumn 2017).	Support young children in their language development and prepare them for the multilingual context of society and school.

	Reforms in secondary education defining the contours of a more modern high school, closer to its staff and students and better prepared to face the challenges of modern society	Promote the diversity of academic studies and the autonomy of high schools, with a view to increasing the chances of success for all
	(2017).	students.
	Development of the European and international school offer in public education.	Take into account the needs of pupils from immigrant backgrounds and families who settle in Luxembourg for a fixed period.
	Obligation to thematise the prevention of school dropout as part of school development plans at the level of schools and high schools.	Assimilate the individual needs of students better.
	Preventive measure to address dropping out of school: Professional introduction courses in various trades (IPDM)	Predict dropout by focusing on students who do not qualify for vocational training or who do not have the skills to access the labour market.
	Relay Classes or Mosaic Classes.	Prevent dropping out of school with a temporary individualized care plan of 6-12 weeks.
	Second chance school.	Take charge of 16-30-year olds who have dropped out of school without recognised certification or who do not find an apprenticeship.
	Local Action for Youth activation programmes.	Support young people in their transitions from school to work.
	Implementation of the "upskilling pathways" training course to bolster skill levels in adult education.	Extend and adapt the course offer for the second qualification track.
National objective higher education  Ensure that with the onset of 2020, 66% of the labour force between the ages of 30 and 34 receive university education	Expansion of the offer of public and private higher education programs in Luxembourg.	Increase the level of training of the population in order to better match the peoples' qualifications with requirements on the labour market.
and earn university degrees.	Development of university medical studies.	Contribute to sustainably maintaining the number of doctors in Luxembourg.
	Review of quality assurance procedures for higher education (Law of 23 July 2016).	Develop a quality ethos in the higher education sector.

	Strengthening the financial resources of higher education and research in Luxembourg (increase from €72 million in 2009 to €173.5 million in 2018).	as well as the number of students.
National poverty goal Supporting the European Council's conclusions by increasing measures, including those focusing on the employment rate of women and single-parent families, to achieve an employment rate of 73% in 2020.  Reduce the number of people at risk of poverty or social exclusion by 6,000 by 2020.	Parental leave reform aimed at making periods more flexible and creating real replacement income (effective 1 December 2016).	Promote the reconciliation of family and professional life, in particular with a view to the financial independence of parents.
	Modifications to a series of extraordinary leave processes, including paternity leave (ten working days) and family leave.	Promote the reconciliation between family and professional life.
	Implementation of the social inclusion income (REVIS) by the Law of 28 July, 2018, which will replace the guaranteed minimum income mechanism (RMG) from 1 January, 2019.	The Guaranteed Minimum Income mechanism (RMG) has been revised through four objectives: to implement a social inclusion approach; to establish a consistent system of stabilisation, social activation and professional reintegration policies; act against poverty affecting children and single-parent families; implement administrative simplification measures.
	Encourage employers in the public and private sectors to hire people with disabilities; a draft law to provide assistance for inclusion in employment was submitted in March 2018.	This project aims to facilitate integration and job retention of people qualified as disabled or externally reclassified employees by creating an activity called "assistance for inclusion in working life". It aims to encourage companies to hire more employees with disabilities and / or who have been externally reclassified by offering them the services of an authorized external expert to support the process of professional inclusion in a company of one or more employees with disabilities or employees being reclassified externally.
	Pursuit of the policy of offering socio-educational facilities for children aged 0-12 years.	Increase the employment rate of women and single-parent families; break the cycle of intergenerational transmission of poverty; promote social inclusion and social cohesion in a multicultural society.
	Making beneficiary parents of the RMG (future REVIS) system aware of using welcome centre cheques.	Increase the availability of parents for the job market; to promote social inclusion and social cohesion in the multicultural society.

The REVIS aims to strengthen activation rates of the beneficiaries of this service.

Promote access to employment and social inclusion.

Renewal of the cost of living allowance and adaptation of the eligibility criteria for 2019.

Promote social inclusion.

Promotion of measures to encourage the transition of young people from school to work and to motivate them to return to school, especially young NEETs and dropouts.

Promote the social inclusion of young people.

Social Welfare Act - non-repayable financial relief by the Social Welfare Offices and Third Party Insurance System (€3.4 million euros of non-repayable financial assistance in 2017).

Reduce situations of material deprivation and promote social inclusion.

Continued implementation of the national strategy against homelessness and housing-related social exclusion (2013-2020).

Reduce homelessness and social exclusion related to housing.

Housing assistance: Entry into force of the Law to revise rent subsidies (2018).

Increase the number of potential beneficiaries who can obtain rent subsidies.

European Fund for Aid to the Most Deprived (FEAD): Food aid and / or basic material assistance to the needlest (2015).

Respond to distress situations relating to food and basic materials goods.

Reception of refugees and applicants for international protection: increase in the number of staff of the Luxembourg Office for Reception and Integration (OLAI), increase of the financial endowment of the Luxembourg Centre for Integration and Social Cohesion (LISKO), implementation of a supported integration programme (PIA) for applicants and beneficiaries of international protection.

Ensure a dignified and high-quality welcome for refugees. Prepare and facilitate the social and professional integration of migrants through language courses adapted to skills and needs, vocational training, seminars on daily life in Luxembourg and documented personalized monitoring via a portfolio.

Establishment of a new multi-year National Integration Action Plan. Its objectives are to provide a panoply of measures for the integration of non-Luxembourgers as well as to structure and coordinate efforts at the national, regional, local and civil society levels.

Promote the integration of all non-Luxembourgers.

Note: For more details, consult the National Reform Programme for Luxembourg (April 2018): https://odc.gouvernement.lu/fr/publications.html