DRAFT BUDGETARY PLAN

>2017-2018



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

I. <u>Introduction</u>

In line with article 6 of Regulation 473/2013, Luxembourg hereby presents its **2018** draft budgetary plan (DBP).

The present DBP is based on macroeconomic forecasts independently produced by STATEC and it draws upon the fiscal objectives presented in the **draft 2018 State budget** as **tabled to parliament on 11 October 2017**.

II. <u>Macroeconomic forecasts</u>

Global GDP growth is currently accelerating. According to the IMF (July 2017) as well the OECD (September 2017), global GDP growth is forecast to reach 3.5% in 2017 versus 3% in 2016. Within these forecasts, growth perspectives for the euro area have been significantly revised upwards in comparison to earlier forecasts.

Euro area GDP growth in Q2 is estimated at 0.6% on a quarterly basis and at 2.2% on an annual basis. This result is in line with the previous two quarters and points to a 17th consecutive quarter of growth in the euro area. In spring, STATEC was tabling on an acceleration of GDP growth in the euro area in 2017 (1.9% vs 1.8% in 2016), followed by a slight deceleration in 2018. According to the most recently available forecasts, growth in 2017 could however be even stronger (2.1-2.2%)¹.

In **Luxembourg**, GDP stagnated over the 1st quarter of 2017. Although Q2 figures were unavailable at the time of drafting the present DBP, short-term indicators already available for the same period point given an indication of trends for economic activity for the 2nd quarter, with a probable improvement in financial services, industry and construction and a deterioration in non-financial services.

In line with the improved outlook for the euro area, the **Luxembourg economy should continue to expand**, albeit at slightly lower growth rates than forecast in Spring. The revisions to growth however should not affect the sustained nature of the economic recovery. STATEC assumes real GDP to expand by 2.0-3.4% in 2017 (nominal: 3.0-4.4%) and by 3.0-4.4% in 2018 (nominal: 5.0-6.4%).

¹ STATEC will update its external assumptions in its forthcoming "*Note de Conjoncture* 2-2017", based on the autumn forecasts of the main international organizations.

Compared to last Spring, forecasts have been revised downwards following the publication of updated annual national accounts which see growth in 2016 being corrected to 3.1% (vs. the earlier estimation of 4.2%). This revision has a mechanical impact on GDP forecasts for 2017 and 2018. The range presented here above is based on historically observed revisions to national accounts data (excluding forecasts)².

Inflation has picked up in Luxembourg: after reaching 0.3% in 2016, the inflation rate (NICP) for the first 8 months of 2017 came in at 1.8% on an annual basis. This rebound is mostly explained by a pick-up in energy prices. STATEC projects inflation at 1.8% for the full year 2017 and at 1.6% for 2018, with the next wage indexation trigger projected to occur during the 2nd or 3rd quarter of 2018.

The **job market** remains positive: employment growth remains close to 3% on an annual basis and the unemployment rate is stabilizing around 6%. For 2017, employment growth is forecast at 3.3% and unemployment should fall by 0.5 ppt to 5.8%. For 2018, STATEC foresees employment to continue to grow by around 3% and unemployment to fall, although to a lesser extent than in 2017.

III. Fiscal policy objectives

The Government's fiscal strategy is guided by the following **two fiscal objectives**, as set out in its governmental programme:

- i) compliance with the medium-term objective (MTO)³;
- ii) stabilization of public debt under 30% of GDP.

The **fiscal strategy in 2018** follows the course set out in previous years. The general government remains in surplus, at +0.6% of GDP. Following the entry into force of the tax reform in early 2017, a second reduction of the headline corporate tax rate will occur, as planned, in 2018 – from 19% to 18%. Additional adaptations will also enter into force from 1st January 2018 with the aim to reinforce equity- and competitiveness-related aspects of the Luxembourg tax framework (see chapter 7.1. of the draft State budget 2018 for more details). On the expenditure side, the fiscal strategy is centred on achieving the key policy objectives of the Government, while keeping spending under control. An ambitious public investment strategy continues to form a key policy objective and a total allocation of 4.1% of GDP is thus foreseen in 2018 for productive investments and the extension of key infrastructures. Social

² In particular, by adding and subtracting one standard deviation (0.7%) of revisions to growth estimates for the 2004-2012 GDP figures. This time-period was chosen for data availability reasons.

³ In the 17th update of the Stability Programme (2016-2020), the MTO has was set at -0.5% of GDP, in structural terms, for 2017 to 2019.

spending represents 46.5% of total expenditures, or roughly 20% of GDP, while operating costs of the public sector are stabilized at 3.7% of GDP.

The **medium-term budgetary strategy**, beyond 2018, is defined in the draft multi-annual budgeting law for 2017 to 2021. This draft law was tabled to parliament on 11 October 2017, together with the draft annual budget 2018⁴, and it represents the medium-term fiscal plan of Luxembourg as called for by Chapter V of the directive 2011/85.

Public debt is estimated to decrease from 23.5% of GDP in 2017 to 22.7% of GDP in 2018. This projection is based on the likely financing needs of the central government, which remains in deficit, while taking into account the reimbursement of loans due to take place over the course of 2018⁵. Interest-related costs remain constant in 2018 and slightly fall in absolute terms. Finally, it should be recalled that the general government holds assets worth 44% of GDP, of which 33.5% of GDP can be attributed to the pension reserve fund "Fonds de Compensation" to which social security surpluses are set aside. On a net basis, the financial situation of the Luxembourg public sector therefore remains positive as assets largely exceed public debt.

Regarding the fiscal rules of the preventive arm of the **Stability and Growth Pact**, the following observations can be made⁶:

• the **structural balance**⁷ is expected to drop from +0.6% of GDP in 2017 to +0.1% of GDP in 2018, largely as a result of the cyclical component. The output gap is estimated to increase from 0.1% in 2017 to 1.1% in 2018, based on forecasts by STATEC from spring 2017.

Therefore, Luxembourg continues to meet its medium-term objective (MTO) of -0.5% of GDP in 2018, while preserving a margin vis-à-vis this minimum threshold.

 Given that the MTO is overachieved, the expenditure benchmark does not apply in the case of Luxembourg.

⁶ Without prejudice to the Commission's own assessment.

⁴ For more information, please visit : http://www.budget.public.lu/lu/index.html .

⁵ Bank loans for a total of 700 million euros.

⁷ The computation of the structural balance relies an estimation of the output gap according to the common EU methodology. Given that the full set of updated figures, in particular in relation to national accounts and GDP forecasts, was unavailable at the time of the DBP preparation, the calculations are based on data available at the beginning of September, in particular from the Spring 2017 Forecast of the Commission as well as the "*Note de Conjoncture 1-2017*" of STATEC.

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

Regarding the recommendations adopted in the context of the European semester 2017 as well as the objectives fixed in the context of the Union strategy for growth and jobs, a number of specific policy measures and action plans have been decided upon the Government over the recent years.

The list of measures in the context of the Union strategy for growth and jobs was updated in detail in the recent National Reform Programme (NRP) and the table included in this DBP presents an additional partial update, with a full update to be presented in the 2018 NRP.

STATISTICAL ANNEX

1. Macroeconomic forecasts

N.B. The following updates and replaces the 13 October 2017 version which was incomplete due to the strong revision of past national accounts data and the temporary high uncertainty surrounding macroeconomic forecasts. The present completes the missing data and reflects all the relevant data available as of 3 November 2017.

Table 0. Basic assumptions

	Year	Year	Year
	2016	2017	2018
Short-term interest rate (annual average)	-0,3%	-0,3%	-0,3%
Long-term interest rate (annual average)	0,8%	1,1%	1,3%
USD/€exchange rate (annual average)	1,1	1,13	1,19
EU GDP growth	1,8%	2,2%	2,0%
Growth of relevant foreign markets	5,8	7,5	9,0
Oil prices (Brent, USD/barrel)	43,6	53,0	56,4

Table 1.a. Macroeconomic prospects

	ESA Code	Year 2016	Year 2016	Year 2017	Year 2018
		Level	rate of change	rate of change	rate of change
1. Real GDP (reference year = 2010)	B1*b	47,7	3,1%	3,4%	4,4%
2. Potential GDP			3,6%	3,4%	3,2%
3. Nominal GDP	B1*b	53,0	1,7%	5,2%	6,0%
Components of real GDP					
4. Private final consumption expenditure	P.3	14,9	2,4%	2,7%	3,4%
5. Government final consumption expenditure	P.3	7,9	2,0%	1,1%	1,6%
6. Gross fixed capital formation	P.51	8,3	0,5%	21,2%	4,5%
7. Changes in inventories and net acquisition of valuables (% of GDP)	P.52 + P.53	0,5	1,1%	1,0%	1,1%
8. Exports of goods and services	P.6	98,7	2,7%	5,8%	7,8%
9. Imports of goods and services	P.7	82,7	2,1%	7,6%	8,0%

Table 1 h Price develonments

Table 1.b. Frice developments			
	Year	Year	Year
	2016	2017	2018
	rate of change	rate of change	rate of change
1. GDP deflator (2005=1)	-1,3%	1,7%	1,5%
2. Private consumption deflator	0,1%	1,6%	1,3%
3. NICP	0,3%	1,7%	1,4%
4. Export price deflator (goods and services)	-1,6%	4,1%	2,8%
5. Import price deflator (goods and services)	-1,1%	4,3%	2,9%

Table 1.C. Labour market developments				
	ESA Code	Year	Year	Year
	LSA Code	2016	2017	2018
		rate of change	rate of change	rate of change
1. Employment, persons (in 1000 pers.)1		3,0%	3,2%	3,1%
2. Unemployment rate (%) ²		6,3%	5,7%	5,5%
3. Labour productivity, persons (1,000 EUR) ³				
4. Compensation of employees (billion EUR)	D.1	3,8%	6,6%	5,3%
5. Compensation per employee (1,000 EUR/year)		0,7%	3,2%	2,0%

¹ Active employed population, in thousands, national accounts definition

² Harmonized definition, Eurostat

³ Real GDP per person employed

2. Budgetary Targets

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

	Code SEC	Year 2017	Year 2018
		% GDP	% GDP
Net lending (+) / net borrowing (-) (B.9) by sub-sector			
. General government	S.13	0,6%	0,6%
2. Central government	S.1311	-1,6%	-1,5%
S. State government	S.1312		
. Local government	S.1313	0,3%	0,4%
i. Social security funds	S.1314	1,9%	1,7%
5. Interest expenditure	D.41	0,3%	0,3%
7. Primary balance		0,9%	0,9%
3. One-off and other temporary measures			
). Output gap (% of potential GDP)		0,1%	1,1%
0. Cyclical budgetary component		0,0%	0,5%
11. Structural balance		0,6%	0,1%

Table 2.b. General government debt developments

	0-4-050	Year	Year
	Code SEC	2017	2018
		% GDP	% GDP
1. Gross debt		23,5%	22,7%
2. Change in gross debt ratio		2,7%	-0,8%
p.m.: implicit interest rate on debt (1)		1,4%	1,3%

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	8,7%	
Of which: linked to the financial sector ¹	5,9%	

¹ 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)	Code SEC	2017	2018
		% GDP	% GDP
1. Total revenue at unchanged policies	TR	44,1%	43,7%
Of which:			
1.1. Taxes on production and imports	D.2	12,0%	12,0%
1.2. Current taxes on income and wealth	D.5	15,2%	15,1%
1.3. Capital taxes	D.91	0,3%	0,2%
1.4. Social contributions	D.61	12,5%	12,4%
1.5. Property income	D.4	1,3%	1,3%
1.6. Other ¹		2,9%	2,7%
p.m.: Tax burden (D.2+D.5+D.61+D.91-D.995)		39,9%	39,7%
2. Total expenditure at unchanged policies	TE	43,5%	43,1%
Of which:			
2.1. Compensation of employees	D.1	9,1%	9,1%
2.2. Intermediate consumption	P.2	3,7%	3,7%
2.3. Social benefits	D.621	20,2%	19,9%
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%	1,3%
2.6. Gross fixed capital formation	P.51	4,3%	4,1%
2.7. Capital transfers	D.9	1,1%	1,1%
2.8. Other		3,3%	3,5%
3. Balance		0,6%	0,6%

4. Expenditure and revenue targets

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

	Code SEC	Year 2017	Year 2018
General government (S.13)		% GDP	% GDP
1. Total revenue target	TR	44,1%	43,7%
Of which:			
1.1. Taxes on production and imports	D.2	12,0%	11,9%
1.2. Current taxes on income, wealth, etc.	D.5	15,2%	15,1%
1.3. Capital taxes	D.91	0,1%	0,1%
1.4. Social contributions	D.61	12,5%	12,4%
1.5. Property income	D.4	1,3%	1,3%
1.6. Other ¹		3,1%	2,9%
o.m.: Tax burden (D.2+D.5+D.61+D.91-D.995)		39,8%	39,5%
2. Total expenditure target	TE ²	43,5%	43,1%
Of which			
2.1. Compensation of employees	D.1	9,1%	9,1%
2.2. Intermediate consumption	P.2	3,7%	3,7%
2.3. Social payments	D.62 + D.632	20,2%	20,0%
Of which Unemployment benefits ³		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	4,3%	4,1%
2.7. Capital transfers	D.9	1,1%	1,1%
2.8. Other ⁴		3,3%	3,5%
3. Balance		0,6%	0,6%

¹ 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

	Code SEC	Year	Year	Year	Year
		2016	2016	2017	2018
		Level	% GDP	% GDP	% GDP
1. Expenditure on EU programmes fully matched by EU funds revenue		50,1	0,1%	0,1%	0,1%
2. Cyclical unemployment benefit expenditure (millions)		422,8	0,8%	0,8%	0,7%
3. Effect of discretionary revenue measures (millions)					
4. Revenue increases mandated by law					

Tableau 4.c General government epxenditure by function

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

	2016		2017	
	% GDP	% of total expenditures	% GDP	% of total expenditures
Education	4,8%	11,5%	4,8%	11,0%
Health	4,8%	11,3%	4,9%	11,3%
Employment	1,3%	3,0%	1,2%	2,9%

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

Functions of the Government	Code COFOG	2017	2018
		% GDP	% GDP
General public services	1	4,7%	4,6%
2. Defence	2	0,4%	0,4%
3. Public order and safety	3	1,1%	1,1%
4. Economic affairs	4	6,2%	6,1%
4. Environmental protection	5	1,1%	1,1%
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	4,8%	4,8%
10. Social protection	10	18,5%	18,4%
11. Total expenditure	TE	43,5%	43,1%

² TR-TE= B.9

³ includes cash benefits (D.621 and D.624) and in kind benefits (D.631, SEC2010: D.632) related to unemployment benefits.

⁴ D.29pay + D.4pay (other than D.41pay) +D.5pay + D.7pay +P.52+P.53+K.2+D.8.

5. <u>Description of discretionary measures recorded in the draft budget</u>

Table 5. Discretionary measures taken by the Government

	Detailed description	Accounting Principle	Adoption Status	Budgetary Impact	
List of measures				2018	
				in mIn	% of GDP
Expenditures					
State support for "mutualités de cautionnement du Commerce et de	Draft law reforming state support instruments of SMEs	Cash	Draft law tabled on 18 may 2017	-0,3	
Subsidies to SMEs				1,3	
State support for operating costs of "ateliers protégés"	Modification of current financing arrangement, similar to those applied for social intitatives for emplyoment	Cash	Starting from 2018	5,0	
Fight against long-term unemployment	Modification of "Code du travail"	Cash		6,0	
RMG/REVIS (minimum guaranteed income)		Cash		3,1	
ESA		Cash		24,9	
Sub-total				40,0	0,1%
TOTAL	•			-40,0	0,1%

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

Table 6. Divergence from latest Stability Programme

	Code SEC	Year 2016	Year 2017	Year 2018
		% GDP	% GDP	% GDP
Target nominal balance of the general government	B.9			
18th update of the Stability Programme		1,6%	0,2%	0,3%
2017-2018 Draft budgetary plan		1,6%	0,6%	0,6%
Difference		0,0%	0,4%	0,3%
Nominal balance of the general government at unchanged policies	B.9			
18th update of the Stability Programme		1,6%	0,2%	0,3%
2017-2018 Draft budgetary plan		1,6%	0,6%	0,6%
Difference		0,0%	0,4%	0,3%

7. Methodological aspects

Table 7. Methodological aspects

Estimation technique	Step of the budgetary process		Assumptions
	for which it was used	model/technique used	
Macroeconomic forecasts		Nacroeconometric model developed by STATEC ("Modux")	Use of external assumptions for a number of parameters (e.g. euro area growth, stock market developments, etc.).
Estimates of budgetary revenues	Il lead to prepare the draft hudget		Macroeconomic forecasts Microeconomic and historical data
Impact of discretionary measures	Used to prepare the draft budget	Bottom-up assessments	Various sources and assumptions

Table 8: "Country-specific recommendations 2017-2018" for Luxembourg (October 2017 version)

Note: This summary table highlights the principle measures of the 2017 National Reform Programme. It updates these measures with regard to the 2017-2018 country-specific recommendations for Luxembourg. For more details, please consult the 2017 NRP.

2017-2018 Country-specific recommendations for Luxembourg (July 2017)

- 1) Strengthen the diversification of the economy, including by removing barriers to investment and innovation. Remove regulatory restrictions in the business services sector;
- 2) Ensure the long-term sustainability of the pension system, limit early retirement and increase the employment rate of older people.

No. of country- specific recommendation	List of measures	Description of direct contribution
1.		
Strengthen the diversification of the economy, including by removing barriers to investment and innovation.	A new limited liability company status has been introduced: the "Simplified Limited Liability Company" through the law dated 23 July 2016	Stimulate entrepreneurship by facilitating access to setting up companies through a reduction of establishment costs, a simpler, more rapid and effective start-up process and through a considerable reduction of subscription and payment requirements currently required for company start-ups.
	The "Omnibus" law of 3 March, 2017 (took effect in April 2017)	Regroup legislative changes for implementing the actions for pursuing administrative simplification efforts under a single law: simplify and shorten the procedures pertaining to territorial development at the municipal level, protection of nature, water and national heritage.
	Reform the law on immigration with the aim of establishing a new national residence permit (vote in February 2017.	Attract new, high-quality investors who want to invest in Luxembourg.
	Law relating to the promotion of RDI (took effect on 6 June 2017) (also see the chapter on the national R&D objective of Luxembourg under the Europe 2020 strategy)	Motivation for companies of all sizes to cooperate with public and private entities, to innovate with products and services and to participate in the production process.
	Draft law no. 7140 on the renewal and reform of aid to small and medium sized enterprises (SMEs).	Provide additional possibilities to assist and support SMEs in order to encourage the establishment, development, conversion or re-orientation of craft, trading, industrial or service provider entities that influence the economic development of the country.
	Adaptations to the Luxembourg tax law aimed at increasing investment and innovation:	
	1. Decline in the corporate income tax rate through the law dated 23 December 2016 implementing the tax reform for 2017. The income tax rate was lowered from 21% to 19% for the 2017 tax year, then to 18% beginning with the 2018 tax year, in an effort to improve competitiveness of companies. The gradual reduction of the maximum tax rate goes hand in hand with the lowering of the minimum tax rate, which went from 20% to 15%	Improve the competitiveness of companies and provide particular support for small and young enterprises.

	as from the 2017 tax year, in an effort to directly support small and young companies. At the same time, the threshold for applying the standard tax rate increased from €15,000 to €30,000 beginning with the 2017 tax year. 2. Increase the rates for investment tax credits via the law dated 23 December 2016 implementing the 2017 tax reform. The income tax credit for additional investment was raised from 12% to 13% to provide greater incentive to companies to implement a dynamic investment policy, and the income tax credit for overall capital expenditure was increased from 7% to 8% for the investment bracket up to €150,000.	Encourage companies more to implement to implement a dynamic investment policy.
	3. The draft law no. 7163 on intellectual property is part of an overall strategy of the government tending to bolster a competitive framework to promote innovation, while respecting the new international and European principles in the area of taxes involving exemptions of up to 80% of the amount of adjusted and compensated net eligible income.	Build a competitive framework that promotes innovation and adheres to the new international and European principles in the area of taxes.
Remove regulatory restrictions in the business services sector.	Elimination of the set duties in public tender markets for architects and engineers (2016).	Facilitate economic development in the corporate services sector.
	The law dated 28 October 2016 concerning recognition of professional qualifications.	Align requirements in the area of professional qualifications to EU legislation, particularly for architects.
	The law dated 23 December 2016 on sales, pavement sales and misleading advertising.	Bring legislation in the area of unfair business practices in alignment with European requirements, particularly EC Directive 2005/29/CE and EC Directive 2006/114/CE on misleading and comparative advertising.
	Draft law no. 6795 amending the law dated 13 December 1989 on the organization of architectural and consulting engineers submitted in March 2015: requirement to revise the draft law, with modifications expected by end 2017.	Facilitate economic development in the sector of business services by relaxing share equity requirements and more clearly defining incompatible activities.
	Work begun on a preliminary draft law on the modernisation of the right of establishment: work began in the second half of 2017 and a draft law is expected in the first half of 2018.	Adapt the right of establishment to socio-economic realities and to technical changes, while maintaining legal requirements in terms of professional qualifications to improve the chances of success to company directors who wish to establish companies.

	Modernisation of the legislation on large supermarkets: introduction of a preliminary draft law in the second half of 2017.	Modernise existing legislation on large supermarkets by repealing the special authorisation procedure for large supermarkets.
	Repeal of the protected job titles "consultant in" and "economic consultant".	Facilitate economic development in the corporate services sector.
	Joint survey with the Benelux Secretary General to carry out a clear analysis of the territorial supply constraints (TSC) issue existing in the supply chain of retail markets in the Benelux (survey launched at end of 2016 and results expected by the end of 2017).	Analyse territorial supply constraints and formulate solutions to improve conditions of supply such as price, supply, etc., as needed, for Benelux companies.
2. Ensure the long-term sustainability	Reform of pension insurance, taking effect on 1 January 2013	Increase the age of retirement taking into account changes in life expectancy and adapt pensions to the budgetary situation of the pension scheme.
of the pension system, limit early retirement and increase the employment rate of older people.	Implementation of the "Pensions Working Group" in April 2016.	Debate the financial sustainability of the pension insurance scheme and make a statement on the need to implement any adaptations through a list of recommendations (end 2017).
older people.	Check the consistency between basic assumptions of the reform and the updated financial trajectory of the scheme (every five years). First actuarial report in December 2016 (impact of the reform will amount to a decrease in expenditure of between 2.5 and 3.8 percentage points of GDP in 2060.	Update the long-term budgetary forecasts showing estimates relating to changes in pension scheme expenditures, broken down into specific categories and simulations of set scenarios.
	Reform of the professional reclassification system: Law dated 23 July 2015 entering into force on 1 January 2016	Provide additional incentives for delaying the retirement age by accelerating procedures, a more thorough preservation of individual rights in external reclassification and the creation of conditions required to promote internal reclassification that keeps people on the job.
	The professionalization placement programme intended for job seekers at least 45 years old, those who have been reclassified externally or those with the status of disabled worker, entered in to effect on 1 January 2016.	Work placement lasting a maximum period of six weeks that gives job seekers the opportunity to highlight their professional capabilities within a company.
	Professional re-insertion contract intended for job seekers at least 45 years old, those who have been reclassified externally or those with the status of disabled worker, entered in to effect on 1 January 2016.	Offers job seekers the possibility of improving their knowledge and professional capacities within a company for a maximum period of 12 months.
	Draft law amending the Labour Code concerning early retirement provisions, submitted in August 2015 and to enter into effect during the first half of 2018.	Elimination of early retirement under the solidarity scheme and reform of other forms of early retirement in order to provide additional incentive for delaying retirement.

Draft law introducing a bundle of measures promoting an age policy submitted in April 2014.	Draft an age management plan for employers of over 150 salaried workers: recruitment of older workers, anticipating career changes, improving working conditions, providing access to life-long education and passing on knowledge and skills to less experienced workers.
A national strategy for lifelong learning (LLL).	Support and improve lifelong learning processes.
Reform of nursing care insurance (long-term care) through the law dated 12 July 2017 entering into force on 1 January 2018.	Individualization of the quality services offer that meets the daily requirements of each person, the improvement of quality by clear criteria with adequate checks and balances, the simplification of procedures and the strengthening of the system with regard to societal change and in compliance with the fundamental principles of the basic 1998 law.
Law dated 20 July 2017 concerning long-term unemployment entering into effect in August 2017.	Encourage the return of long-term unemployed persons to work, especially older unemployed persons, via a job creation aid package.

Note: For more details, consult the Luxembourg National Reform Programme (April 2017) at: http://www.gouvernement.lu/6854313/2017-pnr-luxembourg-fr.pdf http://www.gouvernement.lu/6854330/2017-pnr-luxembourg-en.pdf

Table 9 "Europe 2020 National Objectives" for Luxembourg (version of October 2017)

<u>Note:</u> This summary table updates the principle measures relating to national objectives of the Europe 2020 programme, which stem from the 2017 National Reform Programme. For more details, please consult the 2017 NRP.

National target for employment 73% for 2020	Implementation of the national Action Plan for equality between men and women (2015-2018).	Improve equality between men and women.
	Law dated 15 December 2016 reinforcing the principle of equality between men and women.	Increase the job rate of women by facilitating the insertion of women in jobs.
	The "Positive Action" programme	Encourage companies to support gender equality.
	Support of the networks and federations acting in favour of balanced decision making involving men and women within companies and promoting women entrepreneuriship in general. Cross-mentoring programme of the <i>Coaching</i> Centre, mentoring and consulting to promote the involvement of women in the business world, highlighting their skills and assisting them to develop in their professional careers. Through the personal support of a mentor, women with high potential can accede to positions of responsibility. The Female Board Pool of the Coaching, Mentoring and Consulting Centre created with the objective of increasing the percentage of women in Luxembourg boards of directors. The purpose of this effort is to put motivated and experienced women who are prime candidates for a term on a board of directors in contact with companies seeking their skill sets. A forum for reflection and exchange of ideas known as Equilibrium, based on the diversity of men and women as a lever for economic development.	business, world, highlight their skills and assis them to develop in their professional careers.
	Personalised itinerary under the reform of the Employment Development Agency (ADEM), fully rolled out in December 2015.	Achieve qualitative improvement of job seekers within ADEM by personalizing the follow-up carried out with job seekers.
	Launch of the interactive "Job Board" platform. March 2016.	Increase the chances of an encounter between employers and job seekers.

	Agreement between the <i>Union des entreprises luxembourgeoises</i> (UEL), the government and ADEM under the " <i>Entreprises, partenaires pour l'emploi</i> " programme (2015-2017).	Adapt ADEM offers, especially training, to requirements of companies.
	Extension of the "Guarantee for Youth" programme, for young people under the age of 30.	Provide young people under the age of 30 good quality support services to get them into a profession, return to school, get into an apprenticeship or a qualifications training programme, or help them develop a personal/professional project.
	Development of an internal and external language training offer by ADEM	Offer language courses to job seekers with immigrant backgrounds focusing on languages used in Luxembourg.
	Expanded training offers for job seekers: partnerships with the major training institutes.	Offer training targeted to address skill gaps on the labour market that provide specific prospects of employment.
	Measures and actions to sustainably promote the new operational programme for 2014-2020 of the ESF	Develop sustainable professional insertion for young people under 30, people who are very far from the job market and employed persons over 45.
	(see measures implemented under the country-specific recommendation no. 2 in July 2017 for Luxembourg)	
National target for R&D (2.3-2.6% for 2020)	For the public research sector	
(of which, 0.7% to 0.9% in the public sector)	Law dated 27 August 2014 modifying the National Research Fund (NRF)	Updating of NRF tasks, re-determination of the framework of organizations eligible to receive NRF intervention, improvement of governance and introduction of collective subsidies for training-research.
	Introduction of a new financing programme, PRIDE (FNR), to support doctoral programmes on the national level.	Finance a group of subsidies for doctoral candidates with the object of attracting better doctoral candidates to support critical mass within a domain of specific excellence and to offer them a high level supervisory structure.

Multi-annual CORE (FNR) financing programme.

Shared university and public research centre recruitment programme for top-class researchers.

External study of the impact of NRF programmes (in 2016, for presentation in January 2017.

External evaluation of the University of Luxembourg (2016).

Geographic concentration of the activities of teaching and research establishments as well as incubators within the Cité de Sciences in Belval.

Financing through bilateral and multilateral financing with countries in the European Research Area (ERA).

Participation in cross-border initiatives:

- The Horizon 2020 Community Programme
- The INTER programme
- ERA-Net
- The PRIMA initiative
- DARIAH Infrastructure
- SHARE Infrastructure
- ELIXIR Infrastructure
- EATRIS Infrastructure
- etc.

Development of an environment suited to the take-off of science and technology employment:

- Charter and Code under the "Toward a European Framework for Scientific Careers" directives.
- The PRIDE programme
- The ATTRACT and PEARL programmes
- General policy for the Doctoral Education Framework

Concentrating the nation's R & D effort on a limited number of priority domains

Increase joint research, supervised doctoral candidates and events activities.

Evaluate the impact of NRF programmes.

Provide a critical evaluation of all research units by external experts and recommendations for future development, including the preparatory work for the upcoming establishment contract for the 2018-2021 period.

Promote synergies amongst public research actors and facilitate PPPs.

Streamline transnational cooperation and concurrent actions

Stimulate the development and implementation of the joint projects and major research infrastructures on the national, European and international levels.

Open up the labour market for researchers and encourage mobility and career perspectives in research.

- Promotion of gender equality in research
- etc.

Optimisation of circulation and transfer of scientific knowledge:

- The "Proof of concept" programme (POC)
- Support programme for the KITS transfer of knowledge and innovation
- Requirement to publish "Open Access" for projects granted by the NRP after 1 January 2017
- etc.

The law dated 3 December 2014 for setting up public research centres (PRC)..

Performance contracts for 2014-2017 with public research organizations

2. For the private research sector

Law relating to the promotion of RDI (entering into effect on 6 June 2017).

High performance Computing and big Data enabled applications (HPC) strategic project

Measures and actions to sustainably promote the new operational programme for 2014-2020 of FEDER

National Composites Centre Luxembourg (activities launched at end 2016).

The Additive manufacturing project of the Materials and Production Technologies cluster (launched in 2016).

Promote access to knowledge.

Determination of PRC status, PRC missions, administrative and governance bodies of PRC and PRC personnel. Merger of the Henri Tudor and Gabriel Lippmann PRCs in LIST and integration of IBBL and the Health PRC into LIH.

Provide financing for performance-based objectives.

Motivate companies of all sizes to cooperate with public and private entities, to innovate with products and services and to participate in the production process.

Stimulate new HPC uses for industry and ensure access to world scope installations by public and private research entities.

FEDER project intended to facilitate the installation and streamlining of the final HPC on an HPC model and test environment.

Promote cooperation between public and private participants in the area of composite materials.

Identify the industrial requirements of the sector.

The "Industrie 4.0" project of the *Materials and production technologies cluster* (launched in 2016).

Inventory the concerned RDI projects.

Development of the Joint Research Programme.

Promote long-term PPP relations for research and technology and industries, so as to increase the attractiveness of Luxembourg as a recognised hub dedicated to technological research.

Establishment of the Luxembourg Intellectual Property Institute (2014, fully operation at beginning 2016).

Promote the development of intellectual property for the requirements of the economy, federating national and international skills into a coherent whole and placing them at the disposal of economic and institutional entities to constitute a driver for growth.

The "Luxembourg cluster initiative": materials and production technologies, Eco innovation, bio health, ICT, space, automotive components, wood.

Diversify the economy, while concentrating on a limited number of specific sectors.

Support to start-ups:

implementation of the ICT Digital Tech seed fund.

- Fit4Start programme

- "Fab Lab XL" in Technoport.

- etc.

Support start-ups.

SME support programmes with the support of Luxinnovation:

- "Fit 4 Digital" programme (2016).

- The "Fit 4 Innovation" programme, including a component via the "Inno 4 growth" programme.

- SME instrument (Horizon 2020)

etc.

Support SME and motivate them to innovate.

Measures and actions to sustainably promote the new operational programme for 2014-2020 of FEDER

Support Luxinnovation projects intended to underpin SMEs and motivate them to innovate.

Incentive and supervision measures for the participation of Luxembourg companies in European programmes such as Horizon 2020.

Support Luxembourg stakes in European programmes and increase their success rates.

	Smart Specialisation strategy: introduction at end 2017.	Motivate companies of all sizes to cooperate with public and private entities to innovate with products and services and to participate in the production process.
National target for the reduction of greenhouse gas emissions	- Greenhouse gas outside of the ETS	
Reduction of GHG outside of EU ETS20% compared with 2005 (emissions of around 8,145 Mt CO2-equivalent in 2020)	Pursuit of the implementation of synthesized measures in the second Action Plan to reduce CO ₂ emissions.	Reduce GHG emissions in the production and energy combustion sectors (including transportation and buildings).
equivalent in 2020)	Drafting of a third Action Plan to reduce CO ₂ emissions by the end of 2017, also including longer-term visions and objectives (2050) to achieve the de-carbonisation of the economy.	Reduce GHG emissions in the production and energy combustion (including transportation and buildings) agriculture, forest and land management and waste sectors.
	- Public transportation and mobility	
	Promote the use of public transportation and soft mobility, through the MoDu strategy, published in 2012. The 2.0 version of the MoDu strategy is currently in drafting and will be available in 2018.	Develop efficient public transportation infrastructure so as to reduce GHG emissions through less private transport.
	Implementation of a tram in the City of Luxembourg (first section in 2017).	Develop an efficient public transportation system that assimilates the economic and demographic development of the capital and the country.
	Implementation of the Transportation Sector Plan (PST) states overseeing the MoDu strategy.	Provide a regulatory framework for MoDu strategy measures so as to reserve corridors for road and rail infrastructure.
	Introduction of an ecologic mobility plan for companies (mConcept)	Promoting the use of sustainable transport methods and reducing the use of private vehicles.
	2017 tax reform: beginning from 1 January 2017, vehicles with zero emissions will receive a tax rebate and the use of less polluting vehicles is highlighted with regard to company cars.	Reduce GHG emissions of the fleet of company vehicles registered in Luxembourg.

Electric mobility

Installation of a public infrastructure hosting 800 charging stations for electric vehicles in Luxembourg between now and 2020. The functionalities, technical specifications, the number of charging stations to be installed, the schedule and the overall organization of this infrastructure will be recorded in the Grand-ducal regulation dated 3 December 2015.

Implement electric mobility through the installation of 800 charging stations accessible to the public through to 2020, with the first stations commissioned in November 2016.

Overall layout plan of the public infrastructure related to electric mobility (Ministerial Regulation dated 5 February 2016).

Set out relay parking facilities in which public charging stations will be installed as well as the number of charging stations to install in these areas and in each municipality, number of charging stations to install in public car parks and in public parking places.

Commissioning of the central joint system for managing charging station data in 2017. This central system has been operational since June 2017.

Promote electric mobility.

Evaluation of the strategies for implementing and financing a rapid charging infrastructure on motorways and other strategic points in Luxembourg.

Promote electric mobility.

Residential buildings

Implementation of the Sector Housing Plan (SHP).

Reserve areas for housing and set out the sustainability criteria to apply in implementing priority housing projects.

Progressive tightening of requirements in the area of energy performance for new residential buildings -- beginning in 2017, mandatory AA energy class for all new structures.

Increase requirements in the area of energy performance for new residential buildings.

"Climate Bank and Sustainable Housing" package

- (published in 2016, implemented in 2017): Climate bank
 - "PRIMe House
 - Sustainability certification for new housing system (LENOZ)

Promote sustainable construction, sustainable energy improvements in existing residential structures and the enhancement of the value of renewable energy in the area of housing.

Energy

New integrated climate and energy strategy for Luxembourg (2018).

Implementation of an integrated National Plan for energy and the climate for 2021-2030 in connection with the future European Union of energy and its governance.

Industry

Community quota exchange system (ETS).

Implementation of a system of energy audits in major corporations.

Voluntary agreement with the industrial sector (2017-2020).

Promotion of Eco technologies.

- Municipalities (local level)

Climate pact with municipalities

Measures and actions to promote the new operational programmes for 2014-2020 of the Interreg Grande Région Interreg North-West Europe and Interreg Europe

Application of the ETS.

Prepare an energy inventory of installations and recommend energy efficiency solutions and use of renewable energy.

Improve energy efficiency and implementation of new or renewable energy sources in participating companies in the industrial sector.

Streamlined use of public subsidies for promoting and using eco-technologies as well as for supporting companies developing these technologies in the context of the Luxembourg *Cluster EcoInnovation*

Reduce GHG emissions and the energy bill in municipal territories, stimulate local and regional investments, ensure improved air quality (this element was introduced in 2016) and integrate the circular economy concept (this element was introduced in 2017).

Cross-border, cross-national and European approach with specific projects relating to the reduction of greenhouse gases. Transfer of good practices, joint solutions and pilot projects. Examples of projects: "Mobilité douce 3

	Measures and actions supported by the operational programme for 2014-2020 of FEDER	
		accounting system.
National target for renewable energy 5.45% on the average for 2015-2016 (11% for 2020)	National Renewable Energies Action Plan	Accomplish Luxembourg's national objective set by Directive 2009/28/EC
,	New integrated climate and energy strategy for Luxembourg (2018)	Implementation of an integrated National Plan for energy and the climate for 2021-2030 in connection with the future European Union of energy and its governance.
	- Expansion of renewable energies on national territory	
	Update of the study of the potential of renewable energies in order to revise the potential of various technologies for 2030 (2016).	Determine what progress has been achieved and what is achievable in the various branches of renewable energy production.
	Support mechanism for biogas production facilities injecting biogas into the natural gas networks (Draft Grand-ducal regulation introduced at end 2014, entering into effect in 2016).	Ensure the medium-term operations of biogas installations.
	Implement new financial instruments as part of the development of renewable energies (Grand-ducal regulation dated 1 August 2016).	Adapt the operating grants provided to the new electricity production installations powered by renewable energy sources.
	Adaptation of the 2014 Grand-ducal regulation regarding electrical production based on renewable energy sources (Grand-ducal regulation dated 24 April 2017).	Meet the requirements outlined in the new European guidelines in the area of state aid, for example the use of competitive procedures.
	- Mix of biofuels in fuel available for consumption nationally.	
	Achieve a 10% mix by 2020 (2017: 5.50%)	Regulate the mix of biofuels in fuel available for consumption nationally.

	- Mechanisms for cooperation Discussions and negotiations concerning the possibilities of cooperation with a certain number of Member States (final decision expected by end 2017).	Increase renewable energy use by full recourse to national potential for this.
	Measures and actions to promote the new operational programmes for 2014-2020 of the Interreg Grande Région Interreg North-West Europe and Interreg Europe	approach with specific projects relating to the
National target for energy efficiency Indicative national objective for 2020 : Final energy use of 49.292 GWh (4,239.2 ktoe).	New integrated climate and energy strategy for Luxembourg (end 2017)	Implementation of an integrated National Plan for energy and the climate for 2021-2030 in connection with the future European Union of energy and its governance.
	 Residential, administrative and commercial buildings 	
	Progressive tightening of requirements in the area of energy performance for new residential buildings - beginning in 2017, mandatory AA energy class for all new structures. Grand-ducal regulation concerning energy performance of residential buildings (2016).	Increase requirements in the area of energy performance for new residential buildings by modifying certain provisions for residential buildings to include: the introduction of an accurate definition of "residential building with near-zero energy use" and the introduction of photovoltaic technology in calculation methodology in order to increase the share of renewable energy used in the area of residential buildings, etc.
	Grand-ducal regulation concerning energy performance of administrative buildings (2016).	Increase requirements in the area of energy performance in new residential buildings and additions to existing residential buildings.
	Inventory of central government buildings impacted by the European energy efficiency directive.	Prepare an inventory of central government buildings and achieve progressive improvement on all existing construction.

	Long-term strategy for launching investments in the renovation of the nation's residential and retail buildings, both public and private, under EC directive 2012/27/EC.	Increase energy efficiency.
	Laws introducing the legal framework for implementing intelligent measurement systems on the electrical and natural gas markets (June 2015) and the roll-out as from 1 July 2016 of a network of smart meters for all new connections to their grids, as well as the progressive replacement of existing meters.	Determine a framework and schedule for the setting up a nationwide shared and interoperable infrastructure for intelligent metering and encourage active involvement of end users on the gas and electricity markets.
	Introduction of the strategic study entitled "The Third Revolution in Luxembourg" in November 2016 and the implementation of a certain number of specific projects based on existing and new platforms, including the "Energiezukunft Letzebeurg" platform.	Make the existing economic model more durable and interconnected, placing special emphasis on converging ICT, energy and transportation operating within an intelligent network.
	National Action Plan in the area of energy efficiency submitted to the European Commission in June 2017 (NEEAP4), a document that assembles the measures in different sectors favouring energy efficiency as provided by directive 2012/27/EU.	
	Measures and actions to promote the new operational programmes for 2014-2020 of the Interreg Grande Région Interreg North-West Europe and Interreg Europe	Cross-border, cross-national and European approach with specific projects relating to energy efficiency. Transfer of good practices, joint solutions and pilot projects. Examples of projects: Energiewaben, Greeneff, E=0 and Nightlight
	Measures and actions supported by the operational programme for 2014-2020 of FEDER	Support the MyEnergy economic interest grouping (GIE) intended to stimulate energy efficiency in new construction or renovation of existing residential buildings, as well as promoting energy efficiency.
National target for early leavers from education and training Maintain share of early school leavers lower than 10% on a sustainable basis	National strategy for the fight against leaving school early that takes into account the varied mix of the student population and of the multilingual education and training system.	

	Multi-language education program for children aged 1 to 4: introduction of the programme in nursery schools beginning in September 2017.	Support young children in language apprenticeships and prepare them for a multilingual society and educational system.
	Legal texts that redefine a primary school that seeks to modernise itself, one that works closely with the student population, is anchored in its region and has the tools and resources to change (submitted to the Government Council in September 2016).	
	Draft bills and draft Grand Duchy regulations defining the shape of modern secondary schools that work in closer proximity to students and are better prepared to face the challenges of modern society. (approved by the Government Council in mid-2016).	Promote diversity in the academic offering and autonomy in secondary schools.
	In-depth reform of the professional training system (begun in 2017).	Improve the skills and success rate of students.
	Reception and integration classes in primary and secondary education.	
	Opening of the first international public school in September 2016.	
National target for tertiary educational attainment Ensure that 66% of the working population between the ages of 30 and 34 receive university education and earn university degrees between now and 2020.	The law dated 24 July 2014 on State financial aid for higher education that went into effect for the 2014-2015 school year.	Increase in the educational level of the population to obtain better matches between peoples' qualifications and job market offerings, using a modular concept including an element of social selectivity.
	Revision of certain provisions of the law dated 24 July 2014 on State financial aid for higher education (Law dated 23 July 2016).	Improve the law relating to State financial aid for university studies (2014)
	Extend the public and private programme offering of higher education in Luxembourg.	Increase the educational level of the population to obtain better matches between peoples' qualifications and job market offerings.
	Develop university studies in medicine for Luxembourg.	Contribute to a sustained supply of doctors in Luxembourg.

	Increase financial resources for university education and research in Luxembourg (an increase from €72 million in 2009 to €154.1 million in 2016).	Increase R&D capacities in terms of higher education and of number of students.
National target for poverty or social exclusion Upholding of the European Council conclusions through its measures to	Reform of the parental leave system to obtain more flexibility in leave terms and to set up an adequate wage replacement plan (entering into effect on 1 December 2016).	Promote reconciliation between family and professional life so that parents can achieve financial independence.
increase the employment rate of women and of single parent families in order to achieve an employment rate of 73% in 2020. Reduce the number of people at risk of	Draft law on the REVIS social inclusion income plan (submitted in January 2017).	(GMI) mechanism via four objectives: specify a social inclusion approach, establish a coherent system of stabilization, social activation and professional reinsertion policies, act against child and single parent family poverty and simplify
poverty or social exclusion by 6,000 people by 2020.		administrative procedures.
	Continue the policy of providing socio-educational welcoming structures to children aged 0-12.	Increase the rate of employment amongst women and single parent families, break the cycle of inter-generational transmission of poverty, promote social inclusion and social cohesion in a multi-cultural society.
	Making beneficiary parents aware of the Guaranteed Minimum Income (GMI) mechanism for using welcome centre cheques.	
	Increase of the activation rates as part of the guaranteed minimum income (GMI) mechanism: the REVIS draft law aims to bolster activation of the beneficiaries of this service.	Promote access to jobs and social inclusion.
	Promote measures favouring the transition of young people from academic to professional life and those motivating them to return to school. - ANELO platform - the Level Up programme - etc.	Promote social inclusion amongst young people.
	The social aid - non-reimbursable financial help through the Social Offices and the social third party insurance system (2013): €3.3 million in non-reimbursable financial aid in 2016.	Reduce situations of material deprivation and promote social inclusion.

National strategy to counter homelessness and exclusion linked to housing for 2013-2020: mid-course evaluation of the implementation carried out over the second half of 2016.	Reduce homelessness and housing-based exclusion.
The Fund for European Aid to the most deprived (FEAD) providing food aid and/or basic material assistance to the most deprived (August 2015).	Use this to respond to food and basic needs-related distress situations.

Note: For more details, consult the Luxembourg National Reform Programme (April 2017) at: http://www.gouvernement.lu/6854313/2017-pnr-luxembourg-fr.pdf http://www.gouvernement.lu/6854330/2017-pnr-luxembourg-en.pdf



