

**Luxembourg's first annual monitoring report for  
2013  
under Article 24(1)  
of  
'Directive 2012/27/EU of the European Parliament and of the Council of 25 October  
2012 on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and  
repealing Directives 2004/8/EC and 2006/32/EC'**

**Luxembourg, June 2013**

**Contact person for the monitoring report:**

Organisation: Luxembourg Government  
Ministry of Economic Affairs and Foreign Trade  
Directorate-General for Energy

Address: 19-21, Boulevard Royal, L-2449 Luxembourg

Fax: +352 2478 4311

This report was drawn up in collaboration with the Fraunhofer Institute for Systems and Innovation Research in Karlsruhe (Germany) and myenergy in Luxembourg.

## Contents

	Page
1 Introduction	4
2 National energy efficiency target for Luxembourg under Article 3(1)	4
3 List of monitoring indicators in accordance with Part I of Annex XIV	7

## 1 Introduction

Article 24(1) of Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC (the EED) requires monitoring reports to be submitted each year, in the first place by 30 April 2013 (first EED monitoring report).

In accordance with Part 1 of Annex XIV to the EED, the reports are to contain the following information:

- a) a list of certain monitoring indicators in the year X-2, X being the current year (2011 for this report);
- b) in sectors where energy consumption remains stable or is growing, Member States analyse the reasons for such stability or growth and attach their appraisal to the estimates (relevant for subsequent reports);
- c) the first report must also include the national energy efficiency target referred to in Article 3(1);
- d) the second and subsequent reports also include points (b) to (e) (not relevant here).

## 2 National energy efficiency target for Luxembourg under Article 3(1)

Luxembourg's provisional **final energy target** for 2020 under Article 3(1) of the EED is:

**49 292 GWh or 4 239.2 ktoe (final energy)**

Expressed in primary energy, the target is<sup>1</sup>:

52 111 GWh or 4 481.6 ktoe (primary energy)

Luxembourg reserves the right to adjust these targets under the 2014 National Energy Efficiency Action Plan (NEEAP) once the effects of the measures have been calculated more precisely.

### Requirements for the target

Article 3 of the EED requires Member States to set a national energy efficiency target, based on either primary<sup>2</sup> or final energy consumption<sup>3</sup>, primary or final energy savings, or energy intensity. When doing so, they also express those targets in terms of an absolute level of primary energy consumption and final energy consumption in 2020. Under Article 3 of the EED:

*When setting those targets, Member States shall take into account:*

---

<sup>1</sup> A factor of 1.057 was used for the conversion to primary energy.

<sup>2</sup> Article 2(2) defines 'primary energy consumption' as gross inland consumption, excluding non-energy uses. This document uses the term 'primary energy consumption' with this meaning.

<sup>3</sup> Article 2(3) defines 'final energy consumption' as all energy supplied to industry, transport, households, services and agriculture. It excludes deliveries to the energy transformation sector and the energy industries themselves.

*(a) that the Union's 2020 energy consumption has to be no more than 1 474 Mtoe of primary energy or no more than 1 078 Mtoe of final energy;*

*(b) the measures provided for in this Directive;*

*(c) the measures adopted to reach the national energy saving targets adopted pursuant to Article 4(1) of Directive 2006/32/EC; and*

*(d) other measures to promote energy efficiency within Member States and at Union level.*

*When setting those targets, Member States may also take into account national circumstances affecting primary energy consumption, such as:*

*(a) remaining cost-effective energy-saving potential;*

*(b) GDP evolution and forecast;*

*(c) changes of energy imports and exports;*

*(d) development of all sources of renewable energies, nuclear energy, carbon capture and storage; and*

*(e) early action.*

**Article 3(2) and (3) describes the Union's target in the following terms:**

*2. By 30 June 2014, the Commission shall assess progress achieved and whether the Union is likely to achieve energy consumption of no more than 1 474 Mtoe of primary energy and/or no more than 1 078 Mtoe of final energy in 2020.*

*3. In carrying out the review referred to in paragraph 2, the Commission shall:*

*(a) sum the national indicative energy efficiency targets reported by Member States;*

*(b) assess whether the sum of those targets can be considered a reliable guide to whether the Union as a whole is on track, taking into account the evaluation of the first annual report in accordance with Article 24(1) and the evaluation of the National Energy Efficiency Action Plans in accordance with Article 24(2);*

*(c) take into account complementary analysis arising from:*

*(i) an assessment of progress in energy consumption, and in energy consumption in relation to economic activity, at Union level, including progress in the efficiency of energy supply in Member States that have based their national indicative targets on final energy consumption or final energy savings, including progress due to these Member States' compliance with Chapter III of this Directive;*

*(ii) results from modelling exercises in relation to future trends in energy consumption at Union level;*

(d) compare the results under points (a) to (c) with the quantity of energy consumption that would be needed to achieve energy consumption of no more than 1474 Mtoe of primary energy and/or no more than 1078 Mtoe of final energy in 2020.

This text and other EU documents confirm **that the EU target is based on a projection from 2007: the PRIMES 2007 projections (EC, 2008).**

The target proposed for Luxembourg is consistent with the Union's overall final energy target. It is derived from the same source and based on the same driver developments as the EU target.

### 3 List of monitoring indicators in accordance with Part I of Annex XIV

This section summarises the monitoring indicators in the year X-2, X being the current year (2011 for this report - see Table 1).

Table 1: Monitoring indicators in accordance with Annex XIV to the EED (source: Statec)

	Unit	2011
(i) primary energy consumption <sup>1)</sup>	GWh	52 770
(ii) total final energy consumption	GWh	49 522
(iii) final energy consumption by sector		
- industry	GWh	7 745
- transport	GWh	31 791
of which in transit	GWh	22 326
- households	GWh	4 962 <sup>5)</sup>
- services	GWh	4 931 <sup>5)</sup>
- agriculture	GWh	94
(iv) gross value added by sector	EUR million (2005)	
- industry	EUR million (2005)	3 926
- services		26 062
(v) disposable income of households	EUR million	15 859
(vi) gross domestic product (GDP)	EUR million (2005)	33 726
(vii) electricity generation from thermal power plants <sup>2)</sup>	GWh	2 049
(viii) electricity generation from CHP plants <sup>2)</sup>	GWh	447
(ix) heat generation from thermal power plants	GWh	35
(x) heat generation from CHP plants, including industrial waste heat	GWh	267
(xi) fuel input for thermal power generation <sup>3)</sup>	GWh	3 977
(xii) passenger kilometres	Gpkm	8.6
(xiii) tonne kilometres <sup>4)</sup>	Gtkm	9.1
(xv) population	1 000 inhabitants	512

Comments:

- (1) excluding non-energy consumption
- (2) data correspond to gross production
- (3) data do not include fuel input for CHP plants
- (4) excluding river freight
- (5) provisional data

The data have not been temperature-corrected.