



# CWaPE

Commission  
Wallonne  
pour l'Énergie

2016

## DEDICATED ANNUAL REPORT

*Developments in the green  
certificates market*

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## 1. EXECUTIVE SUMMARY

The purpose of this dedicated annual report for 2016 is defined in article 29 of the order of 30 November 2006 on the promotion of electricity generated from renewable energy sources:

*« Art. 29. By 30 April, the CWaPE shall establish a dedicated annual report covering developments in the market for guarantee of origin labels and the market for GCs. This report shall mention, inter alia, the number of GCs granted by technology and energy source over the course of the year under consideration, the GCs transmitted to the CWaPE in accordance with article 25, the average price of a GC as well as the administrative fines imposed on system operators and suppliers for failing to fulfil quotas.*

*The report shall also mention the number of guarantee of origin labels granted by technology and by energy source over the course of the year under consideration, the guarantee of origin labels transmitted to the CWaPE, the average price of guarantee of origin labels, as well as the number of guarantee of origin labels exported to and imported from other regions or countries.*

*This report shall be sent to the Walloon Government".*

The CWaPE would like to specify that it has always been agreed with the different Energy Ministries that this report would be submitted on 30 June of each year, because the data necessary for drafting it is not available until the 2<sup>nd</sup> quarter of the following year.

The first part of the report contains a reminder of the development objectives for green electricity in Wallonia and a detailed description of the mechanisms for the promotion of green electricity. The main legislative changes that occurred during 2016 are also presented.

The second part of the report provides an assessment of 2016. This assessment comprises three components:

- statistics relating to the generation of green electricity in Wallonia;
- statistics relating to the green certificate (GC) market;
- the application of GC quotas to suppliers and distribution system operators (DSO) taking account of the reductions to be applied to electricity-intensive end customers (branch agreements), the cancellation of GCs by suppliers and DSOs for the purpose of fulfilling their GC return obligation in Wallonia and, where applicable, the fines imposed by the CWaPE on suppliers and DSOs for non-compliance with this quota obligation.

Data relating to the guarantee of origin labels (GOL) market is included in Chapter 6.

Chapter 7 focuses on the prospects for development of the GC market for the period 2017-2024.

The whole report is based on the data determined by the CWaPE as at 31 December 2016.

In 2016, green electricity generation facilities increased by 97 MW compared to the situation at the end of 2015, with a total installed capacity at the end of 2016 of 2,169 MW. Wind power became the main driver behind this growth.

Green electricity generation increased by 4 % compared to 2015 and amounted to 5,228 GWh, including 4,054 GWh of renewable electricity. Approximately 23 % of the green electricity generated in 2016 was provided by the biomass and fossil cogeneration sectors (*OPEX-driven technologies*), the rate of return of which remains dependent not only on the support mechanism but also on market fluctuations (prices of the electricity generated and of the fuels used). Wind power accounted for 33 % of the green electricity generated, the photovoltaic solar power sector for 39 % and the hydropower sector for 5 % (*CAPEX-driven technologies*).

The average level of support for green electricity was EUR 110.50/MWh, which is a slight decrease compared to 2015. Over 78 % of the green electricity generated in 2016 benefited from a level of support under EUR 100/MWh. Overall, the support granted to green electricity generation in 2016 is estimated at EUR 570 million, of which 52 % for photovoltaic power, 28.3 % for the biomass sectors, 16.8 % for wind power, 1.1 % for fossil cogeneration and 1.8 % for hydropower.

As regards the GC market, over 8,487,000 GC were granted. In terms of GC sales, the CWaPE recorded a volume of over 9,100,000 GC, with 4,275,000 GC coming from SOLWATT installations. Some 60 % of sales were within the market, with the remainder having been sold to Elia at the guaranteed price of EUR 65/GC. The overall average price (market and guaranteed price) stabilised at around EUR 66/GC in 2016. For SOLWATT producers, approximately 3,167,000 GCs were sold at a price of EUR 65, 57,000 at a price below EUR 65 and 1,051,000 at a price above EUR 65. For installations generating more than 10 kW, in over 4,332,000 cases the selling price was above EUR 65/GC.

As in previous years, the number of GCs available in the market exceeded the number of GCs to be returned to the CWaPE by suppliers and system operators. The required number of GCs was returned and no fines had to be levied. Quota reductions were applied for the supplies of 224 entities with a branch agreement. In total, this represents a reduction in expenses for the companies estimated at EUR 100,964,000 over the year.

As regards the outlook for the GC market, the conclusions remain identical to those in the 2014 and 2015 reports: the analyses carried out by the CWaPE<sup>1</sup> show that the calling of the guarantee for the purchase of Walloon GCs by Elia now no longer serves as a safety net (original objective of the measure) but has become a source of financing that is an integral part of the support mechanism for the development of green electricity in Wallonia in the same way as GC quotas when the volumes involved are considered. This situation therefore resulted in a series of additional measures that the Walloon Government decided to put in place in order to maintain a constant level of Elia surcharge for the electricity consumer in coming years.

The market, initially driven by the simple operation of supply (granting of GC) and demand (GC quota) is distorted and cannot naturally return to balance over the 2017-2024 period. Furthermore, the forecasts relating to the collection base for quotas show a decline between 2016 and 2024. The same applies to the collection base for the Walloon GC surcharge collected by the local transmission system operator, Elia.

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<sup>1</sup> Based on the legislative framework currently in effect, kept constant for the analysis and carried out on the basis of data that may include certain uncertainties and approximations that the CWaPE cannot reasonably be expected to detect. The forecasts are based on the best possible estimates, but they must be considered in light of differences that may potentially be observed regarding the actual data that will ultimately be recorded.

## 2. GREEN ELECTRICITY SUPPORT MECHANISM APPLICABLE IN 2016

Pursuant to European Directives 2009/28/EC (previously 2001/77/EC) and 2012/27/EC, a mechanism to support the generation of electricity from renewable energy sources and high-quality cogeneration has been in place in Wallonia since 1 January 2003.

As in Flanders and Brussels, Wallonia has opted for a GC mechanism, which is managed by the CWaPE.

With regard to the development of electricity generated from renewable energy sources (RES-E), the mechanism established in Wallonia initially proved to be particularly effective insofar as the indicative target of 8% by 2010 had already been achieved by 2008. It then had a period of stabilisation before an unchecked increase in 2011 and 2012 due to a sky-rocketing number of new photovoltaic units with a capacity below or equal to 10 kW. This situation led to a growing imbalance in the GC market. Alternative mechanisms for the promotion of green electricity and the control of the volumes of GC granted were defined by the Walloon Government and launched in 2014. However, a GC financing deficit from the Elia GC surcharge that has remained constant since 2013 was recorded. In response to this issue, during its 20 October 2016 session, the Walloon Government defined the principle for putting in place a deferral operation. These mechanisms are described in the context of this report.

Today, three financing systems make up the green electricity support mechanism, in the form of support for generation:

- The GC quota system applicable to the electricity supply volume;
- The system for the guaranteed purchase of GCs from producers by the local transmission system operator, Elia, which has gained significant momentum since 2012;
- The QUALIWATT system, which consists of an incentive granted by distribution system operators (DSO) to photovoltaic installations with a capacity below or equal to 10 kW.

### 2.1. Development objectives for green electricity in Wallonia

European Directive 2009/28/EC assigns Belgium a binding target of generating 13 % of its final energy consumption by means of renewable energy sources by 2020. The European Commission launched a public stakeholder consultation relating to the assessment of the renewable energy directive with a view to presenting a new directive on renewable energy at the end of 2016 for the 2020-2030 period. This new directive will include the targets debated at the COP21. The foundation of the EU's contribution within the 2030 Climate and Energy Framework, approved in 2014 by the European Council, is structured around the following points:

- GHG emissions:  $\leq 40\%$  (compared to 1990 levels);
- Renewable energy:  $\geq 27\%$ ;
- Energy efficiency:  $\geq 27\%$  (revision by 2020 to achieve 30%).

Note that the targets, defined by the Walloon Government in its decisions of 24 April 2015 and 24 September 2015, can be summarised as follows:

**TABLE 1** *BREAKDOWN OF RENEWABLE ENERGY SOURCES BY 2030*

| RES target (GWh) in Wallonia                           | 2020    | 2030    |
|--|---------|---------|
| Renewable electricity generation                       | 5554    | 9180    |
| Renewable heat production                              | 8701    | 12,226  |
| Share of renewable energy in transport                 | 2100    | 2593    |
| RES total  | 16,355  | 23,999  |
| Final consumption (GWh)                                | 120,000 | 120,000 |
| % of final consumption (excluding offshore wind power) | 13.63%  | 20.00%  |

However, the achievement of these ambitious targets by 2020 remains dependent on the willingness of investors within a legislative framework that is clearer today.

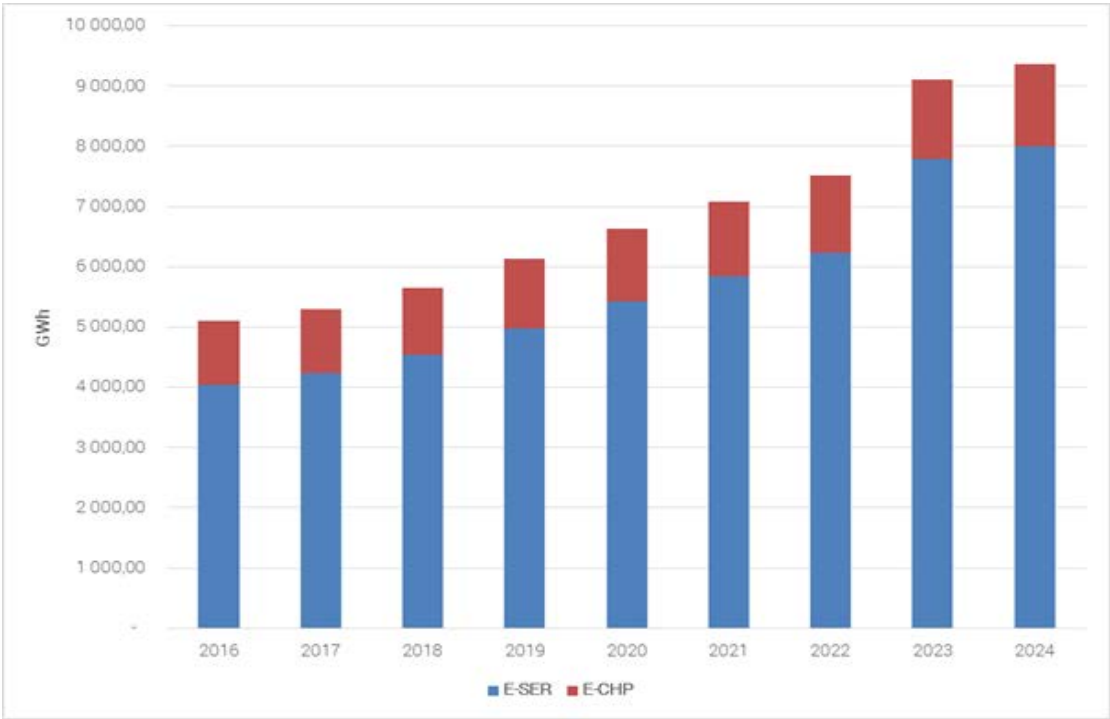
The table below shows additional reserved electricity production per year until 2024 by sector.

**TABLE 2** *RESERVED ADDITIONAL ANNUAL ELECTRICITY GENERATION IN WALLONIA*

| GWh                            | 2016       | 2017       | 2018       | 2019       | 2020       | 2021        | 2022       | 2023       | 2024       |
|--------------------------------|------------|------------|------------|------------|------------|-------------|------------|------------|------------|
| Hydropower                     | 14         | 14         | 14         | 10         | 8          | 8           | 8          | 6          | 6          |
| Wind                           | 310        | 311        | 311        | 311        | 311        | 134         | 134        | 134        | 134        |
| Photovoltaic > 10 kW           | 41         | 26         | 26         | 26         | 26         | 23          | 23         | 23         | 23         |
| Geothermal energy              | 0          | 0          | 0          | 0          | 0          | 5           | 5          | 5          | 5          |
| Biogas                         | 27         | 35         | 35         | 26         | 21         | 12          | 10         | 9          | 9          |
| Biomass                        | 61         | 61         | 61         | 44         | 30         | 30          | 30         | 30         | 30         |
| Biomass (P > 20 MW)            | 0          | 0          | 0          | 0          | 0          | 1344        | 0          | 0          | 0          |
| <b>TOTAL RES ELECTRICITY</b>   | <b>453</b> | <b>447</b> | <b>447</b> | <b>417</b> | <b>396</b> | <b>1556</b> | <b>210</b> | <b>207</b> | <b>207</b> |
| Fossil cogeneration            | 75         | 40         | 40         | 40         | 40         | 40          | 40         | 40         | 40         |
| <b>TOTAL GREEN ELECTRICITY</b> | <b>528</b> | <b>487</b> | <b>487</b> | <b>457</b> | <b>436</b> | <b>1596</b> | <b>250</b> | <b>247</b> | <b>247</b> |

The graph below shows cumulative electricity production per year until 2024 by sector. It is obtained from the actual production measured as at 31 December 2016 and additional reserved electricity production per year until 2024 by sector.

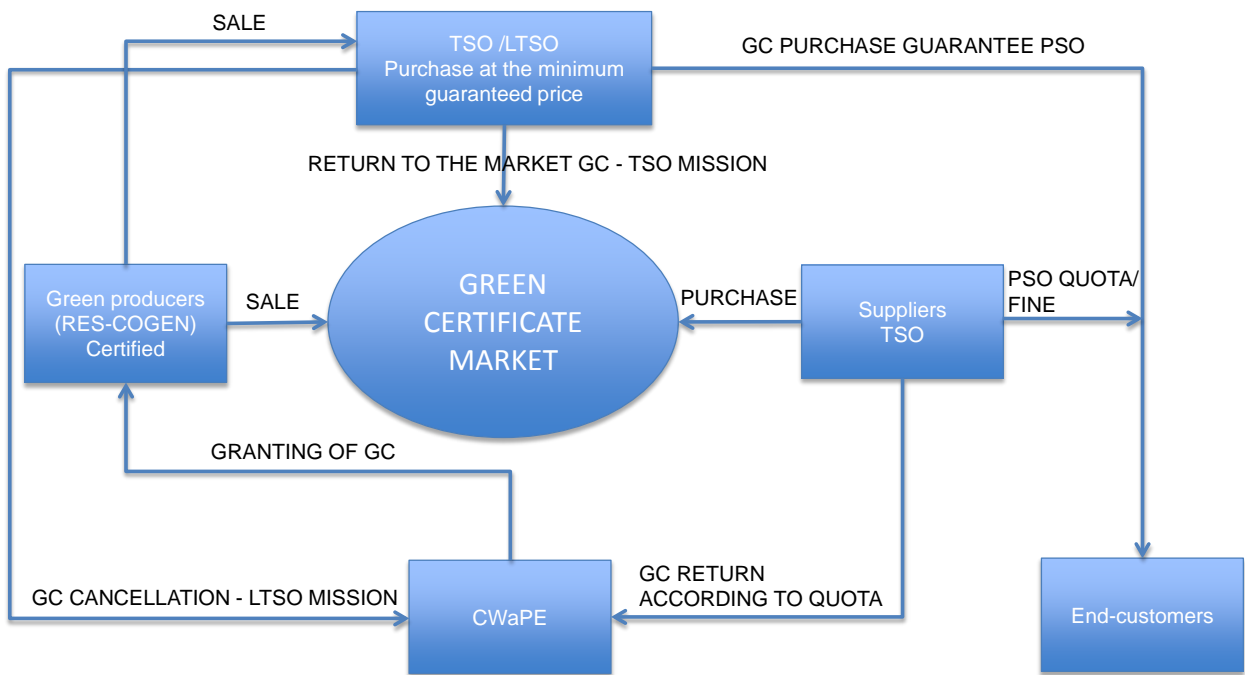
FIGURE 1 PROJECTION OF CUMULATIVE ELECTRICITY GENERATION IN WALLONIA



2.2. Operating principles of the GC mechanism

The diagram below sets out the operating principle of the support for green electricity generation based on GCs. It refers to the first two systems mentioned in section 2, which are then detailed step-by-step.

FIGURE 2 GREEN ELECTRICITY PROMOTION VIA THE GREEN CERTIFICATE MECHANISM



### *Granting of GCs*

GCs are granted by the CWaPE on a quarterly basis to every producer of green-certified electricity in proportion to the net quantity of electricity generated and according to, on the one hand, the estimated extra cost associated with generation in the sector and, on the other hand, the measured environmental performance (amount of CO<sub>2</sub> saved) of the installation in comparison with benchmark standard electricity generation. It should be noted that, since 1 March 2014, new photovoltaic installations with a capacity below or equal to 10 kW are subject to the QUALIWATT scheme and may no longer claim GCs.

### *Sale of GC by producers and purchase by suppliers or by the (local) transmission operator*

The GCs granted to producers may be sold, by the producers, during their period of validity set at 5 years, to suppliers or distribution system operators to enable them to fulfil their GC return obligations. If they are unable to find a buyer, producers may also invoke, subject to certain conditions, the obligation of the local transmission system operator (LTSO), Elia, to purchase at the guaranteed minimum price of EUR 65/GC.

Provisions for a guaranteed price have also been made by the Federal Government<sup>2</sup>. These GCs purchased by the Transmission System Operator (TSO), which is also Elia, may be resold on the GC market.

### *Return of the annual GC quota by suppliers and distribution system operators and evolution*

Every quarter, the volumes of electricity in Wallonia reported by suppliers and distribution system operators are sent to the CWaPE. Based on this information, they are required to return<sup>3</sup> to the CWaPE a quota of GC proportional to the quantity of electricity supplied over the quarter<sup>4</sup> (see point 2.2.3.2.). A fine of EUR 100 per missing green certificate is applied.

The quota applicable to electricity supply is set by the Walloon Government for each year.

In 2016, the quota was fixed at 32.40 % of the volume of electricity supplied in Wallonia. The quotas for the period 2016-2024 were established by the Walloon Government on 26 November 2015<sup>5</sup>. The graph below illustrates the change in quotas over the period 2003-2024.

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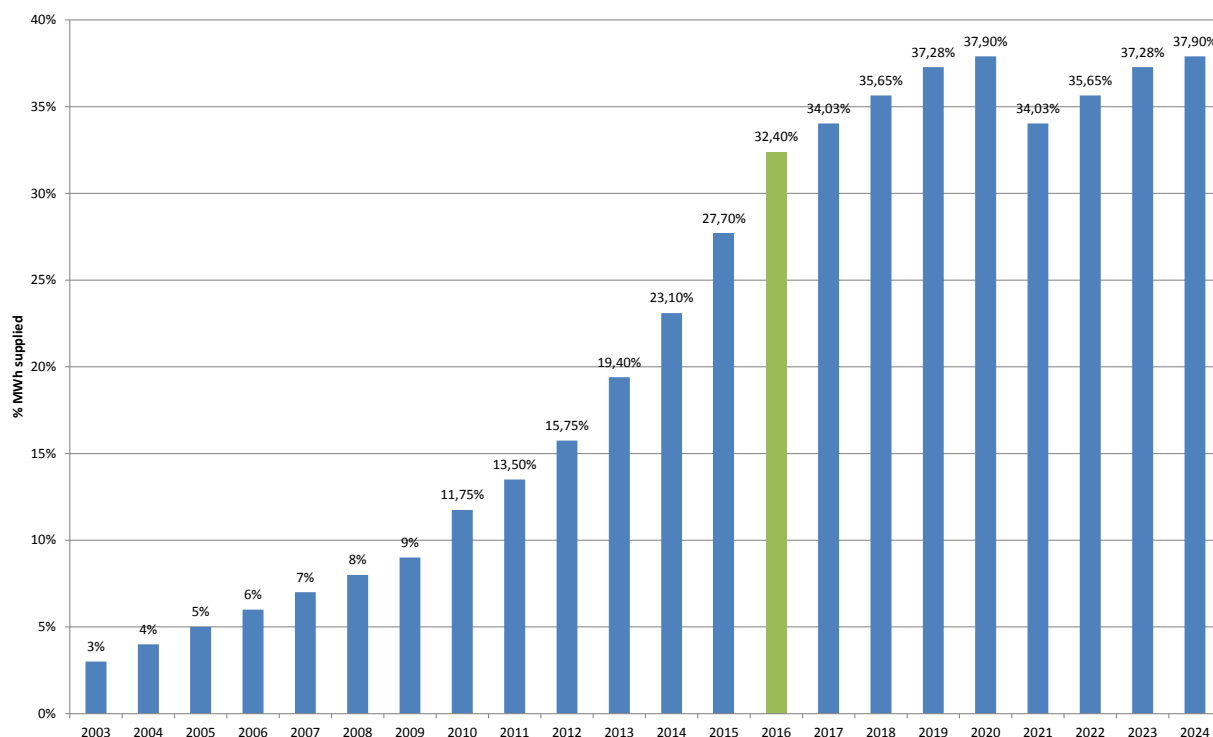
<sup>2</sup> The Royal Decree of 21 December 2012 amending the royal decree dated 16 July 2002 limits this federal GC purchase guarantee to the offshore wind power sector, solar photovoltaic installations commissioned before 1 August 2012 and installations generating electricity from water or tides.

<sup>3</sup> As a result of this operation, the GCs are cancelled and rendered unusable in the database.

<sup>4</sup> A quota reduction may be granted for certain end customers subject to certain conditions (order of the Walloon Government of 30 November 2006, art. 25(5)) – see 2.5.3.

<sup>5</sup> Order of the Walloon Government of 26 November 2015 amending the order of the Walloon Government of 30 November 2006 on the promotion of electricity generated from renewable energy sources or cogeneration.

**FIGURE 3** CHANGES IN NOMINAL QUOTAS FOR GC OVER THE PERIOD 2003-2024



#### *Funding by Walloon consumers*

The funding of this support mechanism is provided by public service obligations applied to end consumers' bills (see point 2.2.3.5.). With respect to quotas, this public service obligation (PSO) is incumbent on electricity suppliers and distribution system operators. The PSO relating to the GC purchase guarantee is incumbent upon the local transmission system operator and transmission system operator, Elia.

Nevertheless, energy-intensive users benefit from partial reductions of the GC quota collected by suppliers, subject to entering into agreements with the Region (branch agreements), in order to improve their energy efficiency over the short, medium and long term.

Since 2013, the cost of the public service obligation relating to the regional GC purchase obligation amounts to EUR 13.82/MWh (estimate calculated using the straight line method on the electricity drawn by end customers connected at a voltage level below or equal to 70 kV). Certain end customers may also benefit from partial reductions under certain conditions defined in the decree of 12 December 2014 amending the decree of 12 April 2001 on the organisation of the regional electricity market with a view to organising the external financing of GCs.

### 2.2.1. Definitions and rules in effect for the generation of green electricity<sup>6</sup>

These definitions are set out in the decree of 12 April 2001 on the organisation of the regional electricity market, mainly articles 2 and 38.

**Renewable energy source:** any source of energy, other than fossil fuels and fissile material, the consumption of which does not limit its future use, in particular hydropower, wind energy, solar energy, geothermal energy and biomass (art. 2, 4°).

**Biomass<sup>7</sup>:** renewable material (in solid, liquid or gaseous form) obtained from the biodegradable fraction of products, waste and residue from agriculture (including plant and animal substances), forestry and related industries, as well as from the biodegradable fraction of industrial and domestic waste (art. 2, 4°bis).

**Cogeneration:** simultaneous generation, in a single process, of thermal and electrical and/or mechanical energy (art. 2, 2°bis).

**High-quality cogeneration and trigeneration:** high-quality cogeneration and trigeneration: combined generation of heat (or cold) and electricity, designed in accordance with the customer's heating or cooling requirements, which saves energy compared to the separate generation of the same quantities of heat, electricity and, where applicable, cold, in modern reference installations, the annual operating efficiency of which is defined and published on an annual basis by the CWaPE (art. 2, 3°).

**Green electricity:** electricity generated by means of renewable energy sources or high-quality cogeneration, the generation sector of which produces a *minimum carbon dioxide savings rate of 10%* compared to the carbon dioxide emissions, defined and published on an annual basis by the CWaPE, from standard generation in modern reference installations (art. 2, 5°).

**Green certificate:** transferable instrument granted by the CWaPE to producers of green electricity for a net quantity of kWh generated corresponding to 1 MWh divided by the carbon dioxide savings rate (art. 38(2) and (7)). By way of derogation, the Walloon Government may, after the CWaPE has issued an opinion, apply a *multiplier coefficient*, where applicable scaled downwards over time, to the number of GCs granted for electricity generated by means of photovoltaic solar panels, in accordance with the procedures it sets out (art. 38(6)). Since 2014, the Walloon Government may, after the CWaPE has issued an opinion, for the installations that it determines, adjust the number of GCs granted upwards or downwards based on the age of the installation generating the green electricity, its rate of return and the generation sector to which it belongs.

The granting rate resulting from this adjustment may not exceed a ceiling of 2.5 GC per MWh.

The Government sets a maximum number of additional GCs per year for new installations (art. 38, (6bis)).

**Carbon dioxide savings rate:** determined by dividing the amount of carbon dioxide saved by the sector in question by the carbon dioxide emissions from standard electricity generation, the emissions of which are defined and published on an annual basis by the CWaPE (art. 38(2)). **Carbon dioxide emissions** are those generated by the entire green electricity generation cycle encompassing the production and transportation of the fuel, the emissions during any combustion and, where appropriate, waste processing. In a hybrid installation, all the installation's emissions are taken into account. The different **carbon dioxide emission coefficients** of each sector in question are approved by the CWaPE (art. 38(4)).

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<sup>6</sup> Articles 2 and 38 of the order of the Walloon Government on the organisation of the regional electricity market.

<sup>7</sup> The order of 3 October 2013 amending the order of the Walloon Government of 30 November 2006 introduces the concept of sustainable biomass. However, the sustainability criteria, established by Directive 2009/28/EC, only apply to bioliquids used in generation units with a capacity exceeding 500 kW.

**Capacity ceilings and thresholds:** the carbon dioxide savings rate is limited to 1 for electricity generated by an installation with a capacity exceeding 5 MW. Below this threshold, a ceiling of 2 is applied (art. 38(2)<sup>8</sup>. As regards hydroelectric generation installations, high-quality cogeneration installations or installations generating electricity from biomass, GCs are granted for the electricity generated by these installations up to an electrical capacity of 20 MW (art. 38(8)).

**Reducing coefficients:** after the CWaPE issues an opinion, the Walloon Government may reduce the number of GCs granted based on the age of the installation generating the green electricity, its rate of return and the generation sector to which it belongs (art. 38(5)).

## 2.2.2. Procedures relating to the GC mechanism

Since 2014, several separate support schemes<sup>9</sup> for green electricity generation have coexisted:

- The system in effect until 30 June 2014 for installations with a capacity above 10 kW as well as for installations, excluding the photovoltaic sector, with a capacity below or equal to 10 kW;
- The new system, or system of GC allocations with reservation, which came into effect on 1 July 2014 for all sectors of all capacities with the exception of the photovoltaic sector with a capacity below or equal to 10 kW. The reservation system was only applied to the photovoltaic sector with a capacity above 10 kW from 1 January 2015 (see section 2.2.2.1);
- With respect to the photovoltaic sector with a capacity above 10 kW, a specific scheme was in effect from 8 August 2014 to 31 December 2014: it was the system granting 2.5 GC/MWh<sup>10</sup> with the possibility of receiving a bonus of 0.5 GC/MWh if the panels were encapsulated and/or assembled within the European Economic Area.
- Photovoltaic installations with a capacity below or equal to 10 kW have benefited from the QUALIWATT system since 1 March 2014.

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<sup>8</sup> Nevertheless, when an installation using mainly biomass, except wood, obtained from industrial activities developed on the site of the generation installation, implements a particularly innovative process and is in line with a sustainable development approach, the Walloon Government may, after the CWaPE issues an opinion on the particularly innovative nature of the process used, decide to limit the carbon dioxide savings rate to 2 for all the output of the installation resulting from the sum of the capacity developed on the same generation site, subject to a limit below 20 MW (decree, art. 38(3)).

<sup>9</sup> The support system applied is determined based on the electrical approval (RGIE) of the installation or a definitive licence.

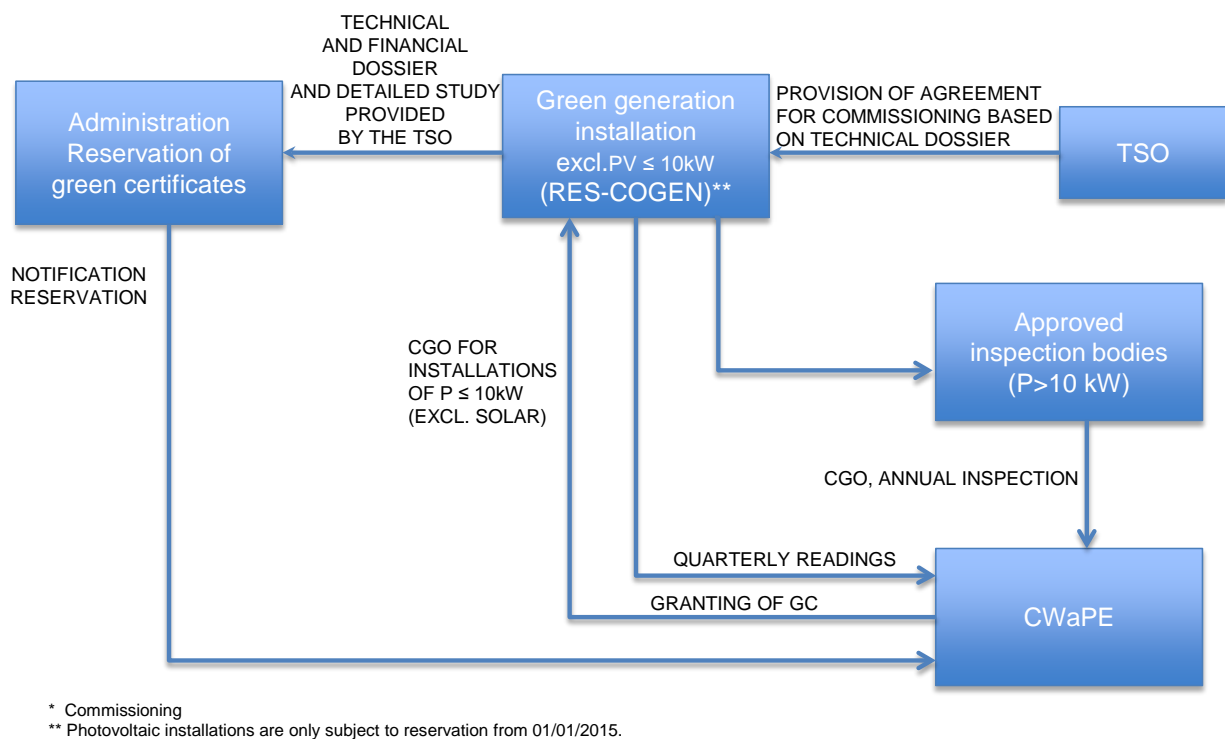
<sup>10</sup> Order of the Walloon Government of 12 February 2015 amending the order of the Walloon Government of 30 November 2006 on the promotion of electricity generated from renewable energy sources or cogeneration.

### 2.2.2.1. GC allocations

By order of 26 November 2015<sup>11</sup>, the Walloon Government established the additional annual generation of green electricity by sector (see section 2.1) and then converted it into additional allocations for each sector.

The new provisions relating to the GC mechanism came into effect on 1 July 2014. They concern all new green electricity generation installations that have not been commissioned<sup>12</sup>, excluding solar installations with a capacity below or equal to 10 kW, that have a definitive licence (i.e. not subject to an appeal) or a compliance inspection (RGIE date) from 1 July 2014. These installations are subject to the green certificate reservation procedure and the new  $k_{ECO}$  coefficient (see section 2.2.2.2).

**FIGURE 4** *APPLICABLE PROCEDURE WITH RESERVATION*



The additional GC allocations were established for 2015 to 2024 by order of the Walloon Government of 26 November 2015.

<sup>11</sup> Annexes 1, 2 and 3 of the order of the Walloon Government of 26 November 2015 amending the order of the Walloon Government of 30 November 2006 on the promotion of electricity generated from renewable energy sources or cogeneration.

<sup>12</sup> Order of the Walloon Government of 23 June 2016 amending the order of the Walloon Government of 30 November 2006 on the promotion of electricity generated from renewable energy sources or cogeneration.

**TABLE 3** GC ALLOCATIONS FROM 2015 TO 2024

| GC                             | 2016           | 2017           | 2018           | 2019           | 2020           | 2021             | 2022           | 2023           | 2024           |
|--------------------------------|----------------|----------------|----------------|----------------|----------------|------------------|----------------|----------------|----------------|
| Hydraulic power                | 20 000         | 16 000         | 16 000         | 11 500         | 9 000          | 9 000            | 9 000          | 6 750          | 6 750          |
| Wind                           | 314 500        | 298 832        | 292 628        | 287 070        | 280 900        | 118 970          | 116 340        | 113 710        | 111 080        |
| Photovoltaic > 10 kW           | 77 000         | 52 000         | 51 000         | 50 000         | 48 000         | 45 000           | 43 000         | 42 000         | 41 000         |
| Geothermal energy              | -              | -              | -              | -              | -              | 5 000            | 5 000          | 5 000          | 5 000          |
| Biogas                         | 67 675         | 87 200         | 88 425         | 65 000         | 51 375         | 29 425           | 23 800         | 22 900         | 21 525         |
| Biomass                        | 122 000        | 140 250        | 140 250        | 92 000         | 62 000         | 62 000           | 62 000         | 62 000         | 62 000         |
| Biomass (P > 20 MW)            | -              | -              | -              | -              | -              | 1 028 160        | -              | -              | -              |
| <b>TOTAL RES ELECTRICITY</b>   | <b>601 175</b> | <b>594 282</b> | <b>588 303</b> | <b>505 570</b> | <b>451 275</b> | <b>1 297 555</b> | <b>259 140</b> | <b>252 360</b> | <b>247 355</b> |
| Fossil cogeneration            | 18 500         | 15 880         | 15 880         | 15 880         | 15 880         | 15 880           | 15 880         | 15 880         | 15 880         |
| <b>TOTAL GREEN ELECTRICITY</b> | <b>619 675</b> | <b>610 162</b> | <b>604 183</b> | <b>521 450</b> | <b>467 155</b> | <b>1 313 435</b> | <b>275 020</b> | <b>268 240</b> | <b>263 235</b> |

On the first day of each quarter, the authority publishes the consumption status of the allocation for the current year. The following table summarises the situation as at 1 January 2017:

**TABLE 4** STATUS OF THE 2016 ALLOCATION

|  | Initial number of GC | Number of dossiers reserved | Number of GC reserved |                                     | Number of GC remaining in the IF allocation |
|--|----------------------|-----------------------------|-----------------------|-------------------------------------|---|
|  |                      |                             | By allocation         | On the inter-sector (IS) allocation |   |
| Photovoltaic solar panels with a capacity over 10 kW | 77,000               | 260                         | 76,563                | 38,928                              | 135,277                                     |
| Wind all capacities                                  | 314,500              | 21                          | 127,087               | 126,578                             |   |
| Hydroelectricity all capacities                      | 20,000               | 14                          | 737                   | 15,032                              |   |
| Biogas all capacities                                | 67,675               | 3                           | 20,205                | 49,780                              |   |
| Solid and liquid biomass all capacities              | 122,000              | 1                           | 0                     | 13,776                              |   |
| Fossil cogeneration all capacities                   | 18,500               | 18                          | 3,732                 | 11,980                              |   |
| Total  | 619,675              | 317                         | 228,324               | 256,074                             |   |

#### 2.2.2.2. Calculation of the granting rate, reference rate of return, metering code

##### *Installations not subject to GC allocations and reservation (old scheme)*

The number of GCs granted is proportional to the net electricity generated by the installation (Eenp, expressed in MWhe):

$$\text{Number of GCs} = \text{gcr} \times \text{Eenp}$$

with gcr: the granting rate, expressed in [GC/MWh]

The net electricity generated is the gross electricity generated minus the electricity required by the operational components, i.e. energy-consuming equipment (primary, electricity, heating, cooling) required for the electricity generation cycle, including fuel production and, where applicable, waste processing (order of the Walloon Government of 30 November 2006 on the promotion of electricity generated from renewable energy sources or cogeneration, art. 2 10°).

GCs are granted both for the electricity consumed by the producer and for the electricity injected into the network or transmitted via direct lines (order of the Walloon Government of 30 November 2006, art. 15(2)). The net electricity produced (Eenp) taken into consideration is measured prior to any transformation during injection into the network (order of the Walloon Government of 30 November 2006, art. 15(3)).

The granting rate (gr) depends on the following elements:

- measured environmental performance of the installation (CO<sub>2</sub> savings rate);
- decentralised nature (power thresholds, limit on CO<sub>2</sub> savings rates); since 1 January 2008, for biomass sectors the granting of GCs has been limited to the first tranche of 20 MW, as for the hydroelectric and high-quality cogeneration sectors (decree, art. 38(8));
- rate of return of the sector ("k" reducing factor after 10 years and "q" reducing factor for legacy installations; multiplier coefficients for photovoltaic installations).

For each green electricity generation sector, the expected rate of return on the capital invested is communicated to investors via the establishment of a reference rate of return by the Minister for Energy based on a proposal from the CWaPE. These rates of return take account of the different risk factors (technological, market prices for fuels, heat recovery, etc).

**TABLE 5** REFERENCE RATE OF RETURN (OLD SCHEME)

| ID  | Generation sectors  | With cogen. | Without cogen. |
|-----|---|-------------|----------------|
| 1.  | Photovoltaic  | -           | 7%             |
| 2.  | Hydraulic power   | -           | 8%             |
| 3.  | Pumped storage hydraulic power  | -           | 8%             |
| 4.  | Wind  | -           | 8%             |
| 5.  | Biogas - EL   | 9%          | 8%             |
| 6.  | Biogas - domestic and similar waste sorting centre (SORTING)                | 9%          | 8%             |
| 7.  | Biogas - wastewater treatment plant (WWTP)                                  | 9%          | 8%             |
| 8.  | Biogas - agricultural products/residue/waste (AGRI)                         | 12%         | 11%            |
| 9.  | Biogas - agricultural and agri-food industry products/residue/waste (MIXED) | 12%         | 11%            |
| 10. | Liquid biofuels 1 (used products/residue or waste)                          | 9%          | 8%             |
| 11. | Liquid biofuels 2 (non-refined products/residue)                            | 12%         | 11%            |
| 12. | Liquid biofuels 3 (refined products/residue)                                | 12%         | 11%            |
| 13. | Solid biofuels 1 (waste)  | 9%          | 8%             |
| 14. | Solid biofuels 2 (industrial residue)                                       | 12%         | 11%            |
| 15. | Solid biofuels 3 (pellets and energy crops)                                 | 12%         | 11%            |
| 16. | Fossil cogeneration (natural gas, fuel oil, recovered gas and heat)         | 11%         | -              |

*Installations subject to the GC allocations scheme and reservation (new scheme)*

Green electricity generation installations subject to the GC reservation procedure are subject to a granting rate determined by the application of an economic coefficient  $k_{ECO}$  and a coefficient  $k_{CO2}$ .

The economic coefficient ( $k_{ECO}$ ) is calculated for each sector so as to guarantee a reference level of return established for this sector by the Walloon Government.

The number of GCs granted to a new installation is provided by the following formulae:

$$GC = r_{GC} \times E_{enp} \quad [GC]$$

$$r_{GC} = \min (2.5; k_{CO_2} \times k_{ECO}) \quad [GC/MWh]$$

with

$E_{enp}$ : the net electricity generated (MWh), limited to the first tranche of 20 MW for the biomass, cogeneration and hydropower sectors;

$k_{CO_2}$ : the CO<sub>2</sub> savings rate, capped at 2 for the tranche below 5 MW and capped (except as otherwise provided for by the decree) at 1 for the tranche above 5 MW, applied from the first to the last grant year based on the actual performance of the installation;

$k_{ECO}$ : the economic coefficient as provided for in article 38(6*bis*) of the decree of 12 April 2001 on the organisation of the regional electricity market, applied from the first to the last grant year for a given sector.

The methodology for the calculation of the economic coefficient ( $k_{ECO}$ ) takes into consideration the technical, economic and financial parameters relating the following variables:

- 1 *Technical parameters*: write-off period, net electrical and/or thermal efficiency, usage time, share of electricity self-consumption;
- 2 *Cost parameters*: eligible investment cost, fuel cost, annual operating and maintenance costs, decommissioning cost, tax charges (average effective corporate income tax);
- 3 *Parameters relating to income*:
  - reference for the electricity price: Endex average annual *forward* price during the first two years, then trend price for the subsequent years based on reference sources;
  - any additional support.

For the hydropower, wind and photovoltaic sectors, an “rho” correcting coefficient is also applied using the formula below in order to be able to adjust (upwards or downwards) the GC granting rate based on the market price level of electricity on Endex:

$$r_{GC} = \min (2.5; \rho \times k_{CO_2} \times k_{ECO}) \quad [GC/MWh]$$

The “p” coefficient is equal to 1 during the first three years.

This coefficient is then revised every three years to offset electricity market price fluctuations and thus maintain a level of support in line with the reference level of support originally established for the sector.

The reference rates of return set by the Walloon Government (see annex 7 of the order of the Walloon Government of 30 November 2006) are as follows:

- 7 % for the photovoltaic, wind and hydropower sectors;
- 8 % for biomethanisation of a capacity below or equal to 1.5 MW;
- 9 % for the other sectors involving fuels.

## Metering code

A *metering code*<sup>13</sup>, established by the Minister pursuant to Article 9 of the order of the Walloon Government of 30 November 2006, sets out the principles and methods applicable in terms of measuring the volume of energy taken into account for calculating the number of green certificates to grant to sites generating green electricity.

For further information on calculating the granting rate, a *software program* available on the CWaPE website offers a more detailed compilation of the calculation methods to be used for most green electricity generation sectors.

### 2.2.2.3. Level of support

In addition to the value derived from the electricity generated, the income that a green producer can expect to earn from the sale of its GC will depend, on the one hand, on the effective granting rate for GCs (GC/MWh) and, on the other, on the selling price of its GCs (EUR/GC):

$$\text{Income from GC} = r_{\text{GC}} \times \text{GC price} \quad (\text{EUR/MWh})$$

The following table gives, by way of example, the theoretical maximum that a green producer can expect during the first 10 years (before application of reducing factors and excluding cases of “legacy” installations), as well as the minimum income guaranteed (if the producer satisfies the criteria) by the regional mechanism.

TABLE 6      LEVEL OF SUPPORT FOR DIFFERENT GENERATION SECTORS (P>10 KW)

| Sectors (and total installed capacity) | Nominal granting rate (GC/MWh) | Guaranteed minimum level of support (EUR/MWh) |
|--|--------------------------------|---|
| Fossil cogeneration (≤ 20 MW)          | 0.1 to 0.4                     | 6.5 to 25                                     |
| Biomass (≤ 20 MW)                      | 0.1 to 2.5                     | 6.5 to 162.5                                  |
| Hydraulic power (≤ 20 MW)              | 0.8 to 2.5                     | 52 to 162.5                                   |
| Wind                                   | 1                              | 65  |
| Biomass cogeneration (≤ 5 MW)          | 0.15 to 2.5                    | 9.75 to 162.5                                 |
| Photovoltaic (10 - 250 kWc)            | 1.2 to 6                       | 78 to 390                                     |
| Photovoltaic (> 250 kWc)               | 1 to 4.1                       | 65 to 266.5                                   |

<sup>13</sup> Ministerial order of 12 March 2007 determining the procedures and the metering code applicable to energy volume measurements published in the Belgian Official Gazette of 20 April 2007 – Appendix “procedures and metering code for electricity generated from renewable energy sources and/or cogeneration”.

#### 2.2.2.4. Reservation

Installations in the photovoltaic sector with a capacity above 10 kW are subject to the reservation procedure from 1 January 2015 if they have a definitive licence (i.e. not subject to an appeal) or a compliance inspection (RGIE date) on a date after 31 December 2014.

A producer wishing to obtain GCs for its green electricity generation site has to reserve them in advance with the authority. To do this, it has to submit a technical and financial dossier to the authority using a specific form depending on the sector, which is available on the authority's website. The authority's decision, concerning eligibility to obtain GCs, is notified to the CWaPE and the producer who lodged the application within 45 days of its receipt.

Once the producer is in possession of the authority's approval as well as its agreement for commissioning, and its installation has been built, it has to request a visit by the approved body to prepare the CGO (certificate of guarantee of origin). This is sent to the CWaPE by the approved body and is examined with a view to the granting of GCs. A producer who has an electricity generation installation with a capacity over 10 kW no longer has to send a preliminary application for certification (PAC) to the CWaPE as was previously the case<sup>14</sup>.

#### 2.2.2.5. Certification of the generation site (CGO)

GC (and guarantee of origin labels) are granted for the electricity generated by a generation site provided that an approved inspection body<sup>15</sup> has verified that the volume of electricity generated by this site can be clearly identified and measured, in particular to certify the sources of energy (their renewable nature) and the efficiency of the conversion (the output from cogeneration). In practical terms, an approved body issues a certificate of conformity for an installation, called a *certificate of guarantee of origin (CGO)*, to an electricity-generating installation with energy metering compliant with the *Metering Code* and other regulations<sup>16</sup> in effect. Installations with a capacity below or equal to 10 kW benefit from an exemption<sup>17</sup> which removes the requirement for the involvement of an approved body. For these installations, the CGO is issued free of charge by the CWaPE. Among other things this document mentions the energy sources used, the generation technology and the net generating capacity of the installation.

It sets out, among other things, the *metering algorithms*, i.e. the mathematical equations used to calculate the different volumes of energy. These primarily include: the metering algorithm for net electricity generated (Eenp) - electricity consumed for own use (Eac) - electricity supplied locally (Eeloc) - electricity injected into the network (Eeinj); the metering algorithm for net heat recovered (Eqnv); the metering algorithm for net cooling energy recovered (Efnv); the metering algorithm for input energy (Ee).

In addition to random and targeted inspections organised by the CWaPE (order of the Walloon Government of 30 November 2006, art. 8) and inspections following modifications, each installation must be inspected by an approved body at a frequency based on its net developable electrical capacity: for installations above 20 kW, an annual inspection is required; for installations between 10 and 20 kW, an inspection is required every 5 years.

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<sup>14</sup> The procedure for electricity-generating installations with a capacity of up to 10 kW differs from the procedure applicable for electricity-generating installations with a capacity above 10 kW. The reader may refer to the CWaPE website for further information: <http://www.cwape.be/?dir=3.3.06>.

<sup>15</sup> The list of the approved inspection bodies can be consulted on the CWaPE website: <http://www.cwape.be/?lg=1&dir=3.7>

<sup>16</sup> Royal Decree dated 15 April 2016 relating to measurement instruments.

<sup>17</sup> Article 7(2) of the order of the Walloon Government of 30 November 2006 on the promotion of electricity generated from renewable energy sources or cogeneration

## 2.2.2.6. Review of k factors applied after 10 years and the support for the photovoltaic sector

### **k factor**

Since 1 January 2008, the granting period for GCs has increased from 10 years to 15 years subject, however, to the application of a reducing coefficient ("k" factor) for the last 5 years<sup>18</sup>. This factor is determined by the Minister, for each green electricity generation sector, based on a proposal from the CWaPE and is adjusted every three years (order of the Walloon Government of 30 November 2006, art. 15).

**TABLE 7** "K" FACTORS IN FORCE SINCE 1<sup>ST</sup> OCTOBER 2011

| ID         | Sectors   | k coefficient |
|------------|---|---------------|
| 0.         | Capacities ≤ 10 kWe   |               |
|            | Photovoltaic ≤ 10 kWe until 1 January 2009  |               |
|            | VAT investment 6 % Power class (kWc): 0-7   | 0             |
|            | Power class (kWc): 7-8  | 25            |
|            | Power class (kWc): 8-9  | 50            |
|            | Power class above 9 kWc   | 75            |
|            | VAT investment 21 % Power class (kWc): 0.0-4.5                                      | 0             |
|            | Power class (kWc): 4.5-5.5  | 25            |
|            | Power class (kWc): 5.5-6.5  | 75            |
|            | Power class above 6.5 kWc   | 100           |
|            | Photovoltaic ≤ 10 kWe from 1 January 2009   | 0             |
|            | Other sectors ≤ 10 kWe  | 100           |
| 1.         | Photovoltaic > 10 kWe until 7 November 2013   | 100           |
|            | Photovoltaic > 10 kWe from 8 November 2013  | 0             |
| 2.1        | Run-of-the-river hydropower ≤ 500 kWe   | 100           |
| 2.2        | Hydraulic power ≤ 1 MWe   | 65            |
| 2.3        | Hydraulic power > 1 MWe   | 25            |
| 3.         | Pumped storage hydraulic power  | 25            |
| 4.         | Wind  | 100           |
| 5.         | Biogas - EL   | 25            |
| 6.         | Biogas - domestic and similar waste sorting centre                                  | 25            |
| 7.         | Biogas - wastewater treatment plant (WWTP)  | 25            |
| 8.         | Biogas - agricultural products/residue/waste (AGRI)                                 | 100           |
| 9.1        | Biogas - agricultural and agri-food industry products/residue/waste (MIXED) ≤ 1 MWe | 85            |
| 9.2        | Biogas - MIXED > 1 MWe  | 55            |
| 10.        | Liquid biofuels 1 (used products/residue or waste)                                  | 25            |
| 11.1-2     | Liquid biofuels 2 (non-refined products/residue) ≤ 1 MWe                            | 100           |
| 11.3       | Liquid biofuels 2 (non-refined products/residue) ≤ 5 MWe                            | 75            |
| 11.4-5     | Liquid biofuels 2 (non-refined products/residue) > 5 MWe                            | 75            |
| 12.        | Liquid biofuels 3 (refined products/residue)  | 75            |
| 13.1       | Solid biofuels 1 (waste) ≤ 1 MWe  | 100           |
| 13.2       | Solid biofuels 1 (waste) ≤ 5 MWe  | 25            |
| 13.3       | Solid biofuels 1 (waste) ≤ 20 MWe   | 25            |
| 13.4       | Solid biofuels 1 (waste) > 20 MWe   | 25            |
| 14.        | Solid biofuels 2 (industrial residue)   | 100           |
| 15.        | Solid biofuels 3 (pellets and energy crops)   | 100           |
| 16.1       | Fossil cogeneration (natural gas, fuel oil, recovered gas and heat) ≤ 1 MWe         | 100           |
| 16.2-3-4-5 | Fossil cogeneration (natural gas, fuel oil, recovered gas and heat) > 1 MWe         | 25            |

<sup>18</sup>The values in force for the period 2003-2010 are listed in the ministerial order of 21 March 2008. The period of application for these values was extended to 30 September 2011. The ministerial order of 29 September 2011 sets the values applicable from 1 October 2011.

The ministerial order of 2 March 2015, amending the ministerial order of 29 September 2011 determining the "k" reducing factor as from 1 October 2011, resets to zero the "k" factor for photovoltaic installations with a capacity below or equal to 10 kW for which the date of the compliance inspection carried out by the RGIE approved inspection body is after 31 December 2008.

- Since 1 December 2011, the 'k' factor applied:
  - is the factor in effect on the installation reference date in order to determine the GC granting scheme;
  - is equal to 0 %.

Consequently, installations with a reference date, as defined in the order, that is later than 30 November 2011, may collect GC for 10 years.

- For installations with a 'k' factor in effect that applied before 1 December 2011 (100 %), the Walloon Minister of Energy determined, on the basis of the CWaPE's proposal, the following applicable 'k' factor, in light of the age of the installation and its rate of return:
  - for installations commissioned before 1 January 2009 (as evidenced by the RGIE inspection date), the 'k' factor now varies from 0 to 100 % (by 25 % tranche), according to the installation's capacity and the VAT rate applied to the investment;
  - for installations commissioned from 1 January 2009 (as evidenced by the RGIE inspection date), the 'k' factor is now 0 %

Pursuant to article 15 <sup>(1)</sup> *ter* of the Walloon Government order dated 30 November 2006 on the promotion of electricity generated from renewable energy sources or cogeneration, any producer referred to in paragraph 1 of said article can, between 18 months and at the latest, 6 months before the end of the GC granting period set pursuant to paragraph 1, lodge an application with the CWaPE to become eligible for the 'k' factor initially set pursuant to paragraph 1, sub-paragraph 6.

For installations subject to the new GC allocations and reservation scheme, the "k" factor is not applicable.

#### ***Photovoltaic installations with a capacity below or equal to 10 kW***

In connection with the previous section, in November 2011, the Walloon government decided on a gradual reduction of the support scheme for SOLWATT installations commissioned between 1 December 2011 and 31 March 2013. As for the "k" factor (see above), the implementation rules nevertheless provided for the possibility of benefiting from the previous scheme subject to the installation being ordered before 1 December 2011 and it being completed within a period of 6 months (period extended for days of inclement weather following an interpretative memo adopted in May 2012).

For installations dating from after 31 March 2013, the granting scheme switched to 1 GC/MWh for 10 years. However, in view of the slowdown in the market observed since the change of scheme on 31 March 2013, the Walloon government adopted an interim scheme, in July 2013, applying to installations dating from after 31 March 2013. This interim scheme provided for the application of a granting rate of 1.5 GC/MWh for 10 years for the first tranche of 5 kWc capacity.

The new QUALIWATT scheme came into effect on 1 March 2014 and provides for the payment of an annual incentive over 5 years by the distribution system operator (DSO) to which the installation is connected.

The following table sets out all of the schemes to which the "SOLWATT" installations are subject.

**TABLE 8** ***SCHEMES FOR GRANTING GC FOR PHOTOVOLTAIC INSTALLATIONS WITH A CAPACITY BELOW OR EQUAL TO 10 KW (EXCLUDING INCLEMENT WEATHER DAYS)***

|    | Ordering deadline   | RGIE inspection deadline (excluding inclement weather days) | Granting period | Granting rate   |
|----|---|---|-----------------|---|
| S1 | 30-11-11  | 31-05-12  | 15 years        | Variable from 7 to 1 GC/MWh depending on capacity and certain conditions                                      |
| S2 | 31-03-12  | 30-09-12  | 10 years        | Variable from 7 to 1 GC/MWh depending on capacity and certain conditions                                      |
| R3 | 31-08-12  | 28-02-13  | 10 years        | Declining rate<br>(e.g. an installation generating 1MWh per year will receive a total of 60 GC over 10 years) |
| S4 | 31-03-13  | 30-09-13  | 10 years        | Declining rate<br>(e.g. an installation generating 1MWh per year will receive a total of 50 GC over 10 years) |
| S5 | 28-02-14  | 31-08-14  | 10 years        | Variable from 1 to 1.5 GC/MWh depending on capacity   |
| S6 | RGIE inspection from 1/03/2014: QUALIWATT (see section 2.3) |   |                 |   |

### Photovoltaic installations with a capacity above 10 kW

As mentioned in section 2.2.2, photovoltaic installations with a capacity above 10 kW are also subject to a series of separate schemes. The applicable granting scheme is determined based on the valid RGIE inspection date.

**TABLE 9** SCHEMES FOR GRANTING GC FOR PHOTOVOLTAIC INSTALLATIONS WITH A CAPACITY OVER 10 KW

|                        | RGIE 2013   |                | RGIE 2014      |  |
|------------------------|---|----------------|----------------|--|
|                        | Until 07/11   | 08/11 to 31/12 | 01/01 to 07/08 | 08/08 to 31/12   |
| Granting period        | 15 years  | 10 years       |                |  |
| Granting scheme        | Multiplier coefficient (Decree, Art. 38(6))   |                |                |  |
| Granting rate – GC/MWh | <div>7</div> <div>5</div> <div>4 subject to certain conditions* or 1</div> <div>1</div> |                |                | 2.5** subject to certain conditions* or 1  |
| Capacity tranche:      |   |                |                |  |
| - From 0 to 5 kWc      |   |                |                |  |
| - From 5 to 10 kWc     |   |                |                |  |
| - From 10 to 250 kWc   |   |                |                |  |
| - Above 250 kWc        |   |                |                |  |
| *conditions            |   |                |                |  |
| 1. Self-consumption    | At least 50% on a quarterly basis   |                |                | At least 60% on an annual basis at the time of design                              |
| <u>CWaPE audit</u>     | <u>Ex-post</u> : via the quarterly readings   |                |                | <u>Ex-ante</u> (CGO dossier): consumption of the site > 60% solar power generation |
| 2. Cogeneration        | AMURE – UREBA audit   |                |                | /  |

\*\*A 0.5 GC/MWh incentive may be granted if the panels have been encapsulated and/or assembled within the European Economic Area and as long as the self-consumption criterion is met (see article 1 of the Walloon Government order dated 11 July 2013, amending article 15 *quater* of the Walloon Government order on the promotion of electricity generated from renewable energy sources or cogeneration dated 30 November 2006). However, this increase in the granting rate was repealed by article 4 of the order of the Walloon Government of 12 February 2015. Consequently, only producers that submitted a dossier to the CWaPE prior to the publication in the Belgian Official Gazette of 2 March 2015 of the order of the Walloon Government of 12 February 2015 and proving that the panels were encapsulated and/or assembled within the European Economic Area may claim an increase in the granting rate for their installation.

For RGIE inspections from 1 January 2015, the dossier is subject to the reservation procedure and the granting scheme ( $k_{ECO}$ ) is determined based on the date of submission of the dossier to the authority (see 2.2.2.1 GC allocations and reservation).

Furthermore, in order to benefit from the support scheme relating to the system of GC allocations with reservation, the photovoltaic panels must be certified in accordance with standard IEC 61215 for crystalline modules, standard 61646 for thin-film modules and standard IEC 61730 when the panels are integrated into or placed onto a building<sup>19</sup>.

<sup>19</sup> Article 3 of the order of the Walloon Government of 12 February 2015, amending article 15 of the order of the Walloon Government of 30 November 2006 on the promotion of electricity generated from renewable energy sources or cogeneration.

### 2.2.2.7. Specific measures relating to the biomethanisation sector and the solid biomass sector

Pursuant to article 15 octies (2) of the order of the Walloon Government of 30 November 2006 as amended by the order of the Walloon Government of 3 April 2014, 12 February 2015 and 23 June 2016 on the promotion of electricity generated from renewable sources of energy or cogeneration, producers of electricity from agricultural biomethanisation or solid biomass, the installations of which are not subject to the GC reservation procedure, may submit a dossier to the CWaPE with a view to benefiting from a  $k_{ECO}$  economic coefficient in line with the reference rates of return established by the Walloon Government. To benefit from this measure, it is therefore necessary for the green generation process to be agricultural biomethanisation or a unit that directly involves solid biomass.

For installations with an installed capacity above 1.5 MW, if the CWaPE notes, on an annual basis, an increase of more than 1 percentage point between the rate of return of the installation obtained by virtue of the application of the  $k_{ECO}$  coefficient in effect and the reference rate of return, the value of the  $k_{ECO}$  coefficient is again revised by the CWaPE in order to maintain the installation's rate of return at the reference level.

For installations with an installed capacity below or equal to 1.5 MW, if the CWaPE notes, on a triennial basis, an increase of more than 1 percentage point between the rate of return of the installation obtained by virtue of the application of the  $k_{ECO}$  coefficient in effect and the reference rate of return, the value of the  $k_{ECO}$  coefficient is again revised by the CWaPE in order to maintain the installation's rate of return at the reference level.

The Walloon Government order of 23 June 2016 also introduced general GC allocations, within the limits of which it allows a scheme change. The general allocation accessible to producers from installations for electricity generated from agricultural biomethanisation is 140,000 GCs and was spent as soon as it came into effect, on the date the Belgian Official Gazette was published on 6 July 2016. The general allocation accessible to producers from installations for electricity produced from solid biomass comprised 650,000 GCs, of which 570,000 GCs were allocated to existing installations.

### 2.2.2.8. Call for biomass proposals

The Walloon Government, following the methodology note on the establishment of centralised unit(s) with a capacity above 20 MW (support limited to an electrical capacity of 200 MW) powered by sustainable biomass, adopted the legislative texts<sup>20</sup> enabling the launch of a call for proposals for one or more installations for the generation of electricity from solid biomass with an installed capacity above 20 MW. Its purpose was to select a winner who would, if they fulfilled the criteria laid out by the order, obtain for their benefit the reservation of GC in the allocation dedicated to electricity generation installations of an electrical capacity above 20 MW and powered by biomass (maximum 1,028,160 GC)<sup>21</sup>.

The support surrounding this call for proposals is limited to a period of 20 years and has a granting rate corresponding to the minimum between the rate calculated by the CWaPE, enabling the project to reach an internal rate of return of 9 % as defined in appendix 7 of the AGW-PEV for the biomass sector, and the granting rate resulting from the application. In addition to a minimum annual generation level and a request for limited support, the project must also fulfil strict criteria for sustainability and integration in the country.

<sup>20</sup> Order of 11 March 2016 amending the order of 12 April 2001 on the organisation of the regional electricity market; Walloon Government order dated 23 June 2016 amending the Walloon Government order of 30 November 2006 on the promotion of electricity produced from renewable energy sources or cogeneration; specifications for the call for proposals on the establishment of centralised unit(s) of electricity generation with a capacity above 20MW (support limited to an electrical capacity of 200MW) powered by sustainable solid biomass.

<sup>21</sup> Order of the Walloon Government of 26 November 2015 amending the order of the Walloon Government of 30 November 2006 on the promotion of electricity generated from renewable energy sources or cogeneration.

Bids relating to the call for proposals were submitted by 30 November 2016, and after the list of comprehensive and admissible dossiers was established by the authority, they were analysed by the authority, the Cross-functional Committee on Biomass and the CWaPE. The different opinions were given at the start of 2017 and analysed by a panel tasked with submitting a winner to the Minister for Energy. The announcement of the winner by the Walloon Government is expected during 2017. The right to obtain GCs is authorised from 1 January 2022 or from the date the installation is commissioned if after 1 January 2022, if this takes place by 1 January 2024 at the latest. Furthermore, the Minister for Energy reserves the right not to announce a winner of the call for proposals.

### 2.2.3. The GC market

#### 2.2.3.1. Supply: granting of GC to green producers (order of the Walloon Government of 30 November 2006, art. 13)

Every quarter, each producer sends its meter readings to the CWaPE. Based on these readings and metering algorithms, the CWaPE calculates the granting rate (GC/MWh) on a quarterly basis and grants a number of GCs in proportion to the number of MWh generated by each certified electricity generation installation. In accordance with the provisions provided for by the order of the Walloon Government of 30 March 2006 on public service obligations, it is when submitting its quarterly reading that the producer must notify the CWaPE of its decision to sell the GCs on the market or to activate the purchase guarantee at the price of EUR 65/GC.

By way of derogation, for applications submitted from 1 December 2009 and, for the photovoltaic sector, until 18 July 2013, generation sites with a capacity below or equal to 10 kW benefit from an advance granting<sup>22</sup> of green certificates provided that the installation in question has not received or has waived the incentive provided for by the ministerial order of 20 December 2007. The GCs were granted in advance at the time of the notification by the CWaPE of the decision to accept the application, up to the estimated number of GCs to be received for a generation period of 5 years capped at 40 GC. The producers are still required to submit their metering readings each quarter in order to, firstly, repay the GCs granted in advance and, secondly, benefit from the granting of GCs over the rest of the 10 or 15-year period depending on the sector. These GCs may also be purchased from the LTSO (Elia) at the guaranteed price.

GCs issued in electronic form are valid for a period of 5 years. Each producer has access to the CWaPE extranet through which it can check the status of its granting account. Following each granting of GCs, the CWaPE provides green producers with a detailed breakdown of the GCs granted as well as the status of their account.

Producers with a photovoltaic installation or a fossil cogeneration installation<sup>23</sup> with a capacity of up to 10 kW can also submit their quarterly readings online through their access to the CWaPE extranet service. Except during periods of maintenance, this service can be accessed 24/7. For each reading submitted, the CWaPE performs an automated plausibility check on the quantity of electricity generated. In the CWaPE extranet, the message "check" is displayed for a meter reading when the alert threshold is exceeded. After a systematic check of the dossier, a CWaPE operator either releases the GC granted, requests an explanation from the producer or the DSO, or dispatches an approved inspection body to conduct an on-site inspection. In general, the answers received make it possible to remove the block. Less frequently, the CWaPE grants GCs based on average production (granting of what is unquestionably due).

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<sup>22</sup> By way of reminder, following the adoption of the order of the Walloon Government of 27 June 2013, installations for which the reference date for determining the procedures used for granting green certificates is after 18 July 2013 will not benefit from advance granting.

<sup>23</sup> Certain installations do however require a catch-up because they did not initially have access to the extranet.

In the case of a third-party investment (and other similar arrangements), the CWaPE has made an agreement template for the assignment of the right to obtain GCs available to those involved. The producer, referred to as the assignor, transfers to the assignee the right to obtain GCs granted by the CWaPE for the green electricity generated by its installation. The transfer is made in exchange for the assignee's services. Based on the assignment agreement template prepared by the CWaPE, the assignor gives the assignee authority to manage the entire administrative and technical dossier with respect to the CWaPE or the DSO for the duration of the assignment, including management of the GC account and the periodic submission of meter readings. The assignees must first register with the CWaPE, and a list of these registered assignees is published on the CWaPE website.

### 2.2.3.2. Demand: return of the annual GC quota

Each supplier is required to return, on a quarterly basis<sup>24</sup> to the CWaPE, a number of GCs corresponding to the number of MWh supplied to its end customers located in Wallonia, multiplied by the quota in force. For system operators, the quota applies to their own electricity consumption and, where applicable, to the electricity delivered to the end customers they supply. For holders of a limited licence for the purpose of supplying themselves, the quota applies based on the electricity consumed that was carried by the transmission system, the local transmission system or a distribution system (order of the Walloon Government of 30 November 2006, art. 25(2)).

Since 1 July 2014 and following the amendment of article 25 of the Walloon Government of 30 November 2006, suppliers' own consumption (excluding electrical energy absorbed by the pumping operation in pumped storage power plants) as well as the electricity generation of conventional self-producers for their own use are also subject to the quota.

There are four stages to the "return quota" procedure for suppliers and DSO:

1. submission of quarterly supply readings to the CWaPE;
2. calculation by the CWaPE of the number of GCs to be returned based on the quota and any reductions;
3. cancellation of the returned GCs in the CWaPE database;
4. calculation by the CWaPE of the amount of fines to be applied in the event that an insufficient number of GCs have been cancelled.

The quota to be achieved by the suppliers and system operators is set by the order of the Walloon Government of 30 November 2006, art. 25(3):

- ...
- **32.40 % between 1 January 2016 and 31 December 2016;**
- 34.03 % between 1 January 2017 and 31 December 2017;
- 35.65 % between 1 January 2018 and 31 December 2018;
- 37.28 % between 1 January 2019 and 31 December 2019;
- 37.9 % between 1 January 2020 and 31 December 2020;
- 34.03 % between 1 January 2021 and 31 December 2021;
- 35.65 % between 1 January 2022 and 31 December 2022;
- 37.28 % between 1 January 2023 and 31 December 2023;
- 37.9 % between 1 January 2024 and 31 December 2024.

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<sup>24</sup> Before the end of the second month following the quarter just ended (i.e. 31 May, 31 August, 30 November and 28 February).

Furthermore, in accordance with art. 25(4) of the order of the Walloon Government of 30 November 2006, depending on developments in the green electricity market the Walloon Government may review the above-mentioned quotas in the framework of a triennial evaluation process, and for the first time in 2014. On this basis, the Walloon Government may set new annual quotas so as to always cover a total period of 8 years. Each quarter, the CWaPE establishes a report covering developments in the GC market detailing the GC supply and demand in the previous quarter. This report is sent to the Minister no later than the thirtieth day of the following quarter. In the event of an imbalance between GC supply and demand that is deemed to be too significant, the CWaPE proposes an adjustment of the quotas for the following years in the conclusions of this report. Based on an opinion from the CWaPE, the Ministry adjusts the quotas referred to in paragraph 3 up to a maximum ceiling of 37.9% for the period 2017 to 2024<sup>25</sup>.

On 20 July 2016, the CWaPE also drafted a proposal<sup>26</sup> on the outlook of the certificates market, in connection with its dedicated annual report 2015 on changes in the GC market. In this proposal, the CWaPE observed that the volume of GC that may be financed by the LTSO (Elia) on the basis of the current surcharge (EUR 13.8159/MWh excl. VAT) is insufficient for it to be able to cope with the applications for the purchase of GC over the 2016-2024 period. The CWaPE highlights different drivers that can be used to ensure better market operation:

- Increasing the Walloon GC surcharge collected by Elia;
- Influencing GC demand and further adjusting the annual GC quota to absorb the surplus GC;
- Carrying out a new carry trade operation like that of 1 July 2015;
- Influencing supply in order to reduce the influx of new GCs onto the market.

The CWaPE then draws up different scenarios in which the surcharge and the quotas are adapted in order to re-establish the balance on the GC market.

The quotas set by the Walloon Government are “nominal” quotas which do not take account of reduction possibilities for suppliers supplying operating sites of companies that satisfy the conditions for the granting of a reduction in the GC quota (see next section). It should be noted that since 1 July 2014, the supply of protected regional customers is exempt from the quota. When the reductions granted are taken into account, the quota then becomes an “effective” quota.

The GCs taken into account in the quotas are limited to GCs granted in Wallonia.

### *The reduction*

In accordance with article 25 of the order of the Walloon Government of 30 November 2006, when a supplier supplies an end customer that has signed directly or through a federation an agreement with the Walloon Region aimed at improving its energy efficiency in the short-, medium- and long-term, it may benefit from a reduction in the number of GCs to be returned to the CWaPE.

Where the end customer is supplied by several suppliers for a single operating site, the reduction in the number of GCs is divided up in proportion to the volumes supplied by each supplier.

Any reductions in costs resulting from the provisions in this paragraph must be directly passed on by the suppliers to each end customer that is the source of such reduction.

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<sup>25</sup> Article 5 of the order of the Walloon Government of 26 November 2015 amending the order of the Walloon Government of 30 November 2006 on the promotion of electricity generated from renewable energy sources or cogeneration

<sup>26</sup> CD-16g20-CWaPE-1594 'Proposal on the outlook of the GC market and the adaptations necessary by 2024'

The procedure to be followed to be able to benefit from this quota reduction, as well as the calculation methods, are the subject of official notifications available on the CWaPE website.

The decree of 27 March 2014 amending the decree of 12 April 2001 on the organisation of the regional electricity market sets out a new scheme for the reduction of the number of GCs to be submitted to the CWaPE such that the total volume of GCs benefiting from this reduction corresponds to a maximum of 23% of the nominal quota. These new provisions are applicable from 1 July 2014. These reductions are allocated for an amount equal to 22.5% of the annual quota for the current year to professional customers (large enterprises and electro-intensive SMEs) that have signed, directly or through a federation, an agreement with the Walloon Region aimed at improving their energy efficiency in the short-, medium- and long-term, as well as to residential end customers (for social welfare reasons) for a maximum of 0.5% of the annual quota for the current year.

Furthermore, the amendment of 3 April 2014 of the order of the Walloon Government of 30 November 2006 removed the minimum consumption threshold of 1.25 GWh and determined new formulae for the calculation of the reductions to be applied.

The reduction of the number of GCs corresponds to a quota decrease in accordance with the following formulae and is applied to companies forming a geographic and technical entity within the meaning of the branch agreements:

- for the tranche of quarterly electricity consumption between 0 and 5 GWh inclusive, application of 75% of the annual quota for the current year;
- for the tranche of quarterly electricity consumption between 5 and 25 GWh inclusive, application of 50% of the annual quota for the current year;
- for the tranche of quarterly electricity consumption between 25 and 75 GWh inclusive, application of 15% of the annual quota for the current year;
- for the tranche of quarterly electricity consumption above 75 GWh inclusive, application of 10% of the annual quota for the current year;

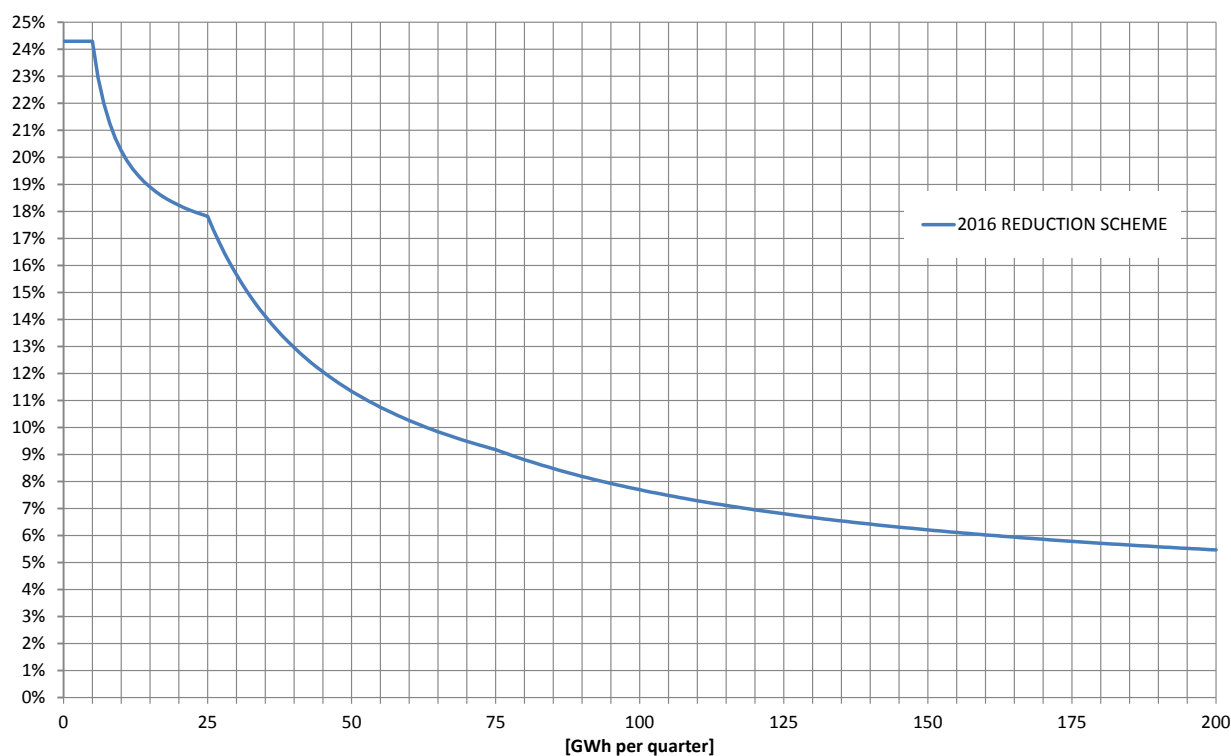
The table below provides a summary of the quota with the reduction applicable for 2016 for the different tranches of quarterly consumption.

**TABLE 10**      **QUOTA WITH REDUCTION FOR 2016**

| Year  | 2016    |
|---|---------|
| Nominal quota                                 | 32.40 % |
| Quota applicable for the tranche 0 to 5 GWh   | 24.30 % |
| Quota applicable for the tranche 5 to 25 GWh  | 16.20 % |
| Quota applicable for the tranche 25 to 75 GWh | 4.86 %  |
| Quota applicable for the tranche > 75 GWh     | 3.24 %  |

The figure below illustrates the quota applicable for 2016 with the different reduction levels relating to each tranche of quarterly consumption.

**FIGURE 5**      **DEVELOPMENTS IN THE QUOTA FOR DIFFERENT TRANCHES OF QUARTERLY CONSUMPTION APPLICABLE IN 2016**



**Penalty regime (order of the Walloon Government of 30 November 2006, art. 30)**

In the event of non-compliance with the target quota return obligation, the supplier or system operator is required to pay an administrative fine for the quarter in question. The fine is set by the Walloon Government and is currently EUR 100 per missing certificate.

### 2.2.3.3. Purchase guarantee systems for GC

#### *Regional obligation to purchase GCs on the part of the LTSO (Elia)*

Since 1 January 2008, the generation support mechanism has been supplemented by a purchase obligation mechanism<sup>27</sup> incumbent upon the Local Transmission System Operator (LTSO), Elia. The order of the Walloon Government of 30 March 2006 on public service obligations in the electricity market sets out the procedures and terms for submitting a request and for applying this purchase obligation (articles 24<sup>ter</sup> to *sexties*).

The price at which the LTSO is obliged to purchase green certificates is EUR 65. The purchase obligation takes effect in the month following the commissioning of the installation and lasts a maximum of 180 months.

In order to benefit from this purchase guarantee, a green producer, benefiting from the scheme in effect prior to 1 July 2014 (prior to 1 January 2015 for the photovoltaic solar power sector with a capacity above 10 kW), is required to submit an application to the authority (Department of Energy and Sustainable Building within the DGO4). The period of validity of the purchase obligation is determined by the CWaPE based on a methodology published on its website (see CD-5d05-CWaPE - Communication on the methodology for examining applications for generation support). The cumulative amount of the GC purchase price must make it possible to offset the higher cost of electricity generation compared to the market price during the write-off period for the installation in question, including as regards interest on the capital invested at the reference rate of return<sup>28</sup>.

By way of derogation, low-capacity installations ( $\leq 10$  kW) are not required to submit an application and benefit from an automatic purchase guarantee for a maximum period of 180 months.

The decision to opt for the guaranteed price or for the sale of GCs on the GC market is made by the green electricity producer each time that it submits its quarterly meter readings to the CWaPE. GCs for which the producer has not opted for the guaranteed price may be sold on the GC market throughout their validity period.

Pursuant to the order of the Walloon Government of 3 April 2014<sup>29</sup>, a new provision on the regional obligation to purchase GCs on the part of the LTSO (Elia) came into effect on 1 July 2014. Henceforth, the guaranteed purchase of GCs by Elia is automatic throughout the granting period for new generation units subject to the GC allocation and reservation system and no longer requires the submission of a dossier to the authority as was previously the case.

In accordance with the provisions provided for by the Walloon Government in the decree of 12 December 2014 as well as in the draft order submitted to the Walloon Parliament on 29 May 2017 on the organisation of the regional electricity market with a view to organising the external financing of GCs via an intermediary or the Walloon region itself, GCs acquired by the LTSO (Elia) since 1 January 2014, pursuant to its public service obligation, are either removed from the database held by the CWaPE or given by the LTSO to one or more intermediaries who have been given the task of acquiring GCs at the guaranteed minimum price set by the Walloon Government.

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<sup>27</sup> Art. 40 of the decree of 12 April 2001 on the organisation of the regional electricity market.

<sup>28</sup> Ministerial order of 21 March 2008 setting the reference rate of return used to determine the 'k' factor.

<sup>29</sup> Order of the Walloon Government of 3 April 2014 amending the order of the Walloon Government of 30 November 2006 on the promotion of electricity generated from renewable energy sources or cogeneration and the order of the Walloon Government of 20 February 2014 amending the order of the Walloon Government of 30 November 2006 on the promotion of electricity generated from renewable energy sources or cogeneration.

### *Federal obligation to purchase GCs on the part of the TSO (Elia)*

Pursuant to the royal decree of 16 July 2002 on the establishment of mechanisms to promote electricity generated from renewable energy sources (RES), the transmission system operator (TSO), Elia, in the context of its public service mission, has an obligation to purchase, from any green electricity producer who so requests, the GCs granted at a minimum price set depending on the generation technology. This purchase obligation comes into effect on the commissioning of the generation installation and lasts for a period of 10 years.

The Royal Decree of 16 July 2002 was amended on 21 December 2012 and, among others, henceforth limits this federal GC purchase guarantee to the offshore wind power sector, to photovoltaic solar power installations commissioned before 1 August 2012 and to installations generating electricity from water or tides (see table below).

**TABLE 11**      **PURCHASE PRICE FOR GCS GUARANTEED AT STATE LEVEL ACCORDING TO THE ROYAL DECREE OF 21 DECEMBER 2012**

| Generation technology  | Price per MWh-RES          |
|--|----------------------------|
| Offshore wind energy (installations subject to a public domain concession, the financial close of which took place no later than 1st May 2014) | EUR 107 / 90 <sup>30</sup> |
| Solar energy (units commissioned before 1st August 2012)   | EUR 150                    |
| Marine installations generating electricity from water or tides  | EUR 20                     |

In Wallonia, this system therefore only concerns GCs granted to photovoltaic units commissioned before 1 August 2012 (as evidenced by the date of commissioning on the certificate of guarantee of origin) for the tranche of capacity not benefiting from a multiplier coefficient (> 10 or 250 kWc, as applicable). That is because in this case (granting rate of 1 GC/MWh) the value of these GCs as purchased by the TSO is EUR 150/GC.

The TSO (Elia) has to offer these GCs on the market in order to recover the costs of fulfilling this obligation (see diagram 1). The net balance, resulting from the difference between the purchase price of the green certificate by the TSO and the selling price on the market, is funded by a surcharge on the access tariffs.

### **2.2.3.4. Structure of the market**

#### *Database (order of the Walloon Government of 30 November 2006, art. 21)*

The authenticity of GCs is guaranteed by their registration in a centralised GC register managed by the CWaPE. This register includes in particular information relating to the generation site, the producer, the date of issue and expiry of the GCs, their holder and the operations logged (granting, sale, purchase, cancellation for the quota, expiration).

Each stakeholder in the GC market (producer, assignee, intermediaries or brokers, suppliers and system operators) has an account opened in its name. A producer must be associated with a generation site. Each stakeholder has secure access to its account (extranet service [www.e-cwape.be](http://www.e-cwape.be)) enabling it to carry out all basic operations (consultation of accounts, inputting readings, recording of transactions for sales, purchases or cancellations for the quota).

<sup>30</sup> Through public domain concession, EUR 107/GC for the first 216 MW and EUR 90/GC for the remainder.

### *GC sale and purchase transactions*

In order to be authenticated, every transaction relating to a green certificate must be notified to the CWaPE and recorded in the GC register.

Market stakeholders trade GCs without any CWaPE involvement. In order to sell them, it is essential to obtain a written agreement from the purchaser. Once an agreement has been reached, the seller provides notification of the transfer of ownership of the GCs via the extranet or by sending the form provided for this purpose to the CWaPE.

The CWaPE provides stakeholders with an account statement giving the details of the transactions carried out as well as the status of their accounts.

### *Intermediaries*

Any private individual or legal entity that opens an account with the CWaPE may carry out transactions relating to GCs. In this way, for example, end customers may choose to directly purchase the GCs associated with their consumption and then transfer them to their electricity suppliers and, in doing so, negotiate an electricity price exclusive of GCs.

A number of intermediaries are active in the GC market. Some of them specialise in the purchase of GCs from private individuals, while others only target industrial producers. GC brokering is also permitted subject to compliance with a specific procedure and the opening of securities accounts reserved for brokerage activities.

The CWaPE publishes a list of potential GC buyers on its website (intermediaries, suppliers, system operators and industrial customers). This list only contains the details of entities that have specifically asked the CWaPE that they be identified as a potential buyer of GCs.

BELPEX, the Belgian power exchange, has set up a GC exchange (BELPEX GCE) which began operating in 2009. The advantage of this exchange is that it guarantees anonymity between professional buyers and sellers at the time of the transaction and provides a green certificate spot price. However, given the current imbalance in the GC market, BELPEX decided to suspend trading sessions in 2012.

### *VAT aspects<sup>31</sup>*

The tax authority, in its decision of 26 February 2008<sup>32</sup>, considers the transfer of GCs to be a supply of services referred to in article 18(1), paragraph 2, 7° of the VAT Code. This sale is subject to VAT, at the normal rate, when it is deemed to be in the country.

On 28 October 2014, FPS Finance further outlined its opinion on the VAT scheme relating to electricity generation and the sale of GCs by end consumers. In its decision<sup>33</sup>, it examines the issue of the sale of GCs alongside the issue of a potential delivery of electricity within the meaning of the tax legislation (VAT). A distinction is made depending on whether the producer has a single two-way meter with compensation or a dual metering device.

The CWaPE database was modified in accordance with the provisions provided for by FPS Finance regarding the sale of GCs and on the basis of information held by the CWaPE.

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<sup>31</sup> Taxation is not part of the normal regulatory activity assigned by decree to the CWaPE. The information communicated is therefore strictly indicative.

<sup>32</sup> Decision no. ET113522 of 26 February 2008

<sup>33</sup> VAT Decision no. E.T.114.454 dated 28 October 2014

### 2.2.3.5. Passing on of the PSO cost to end customers

#### *Passing on the cost of GC quotas*

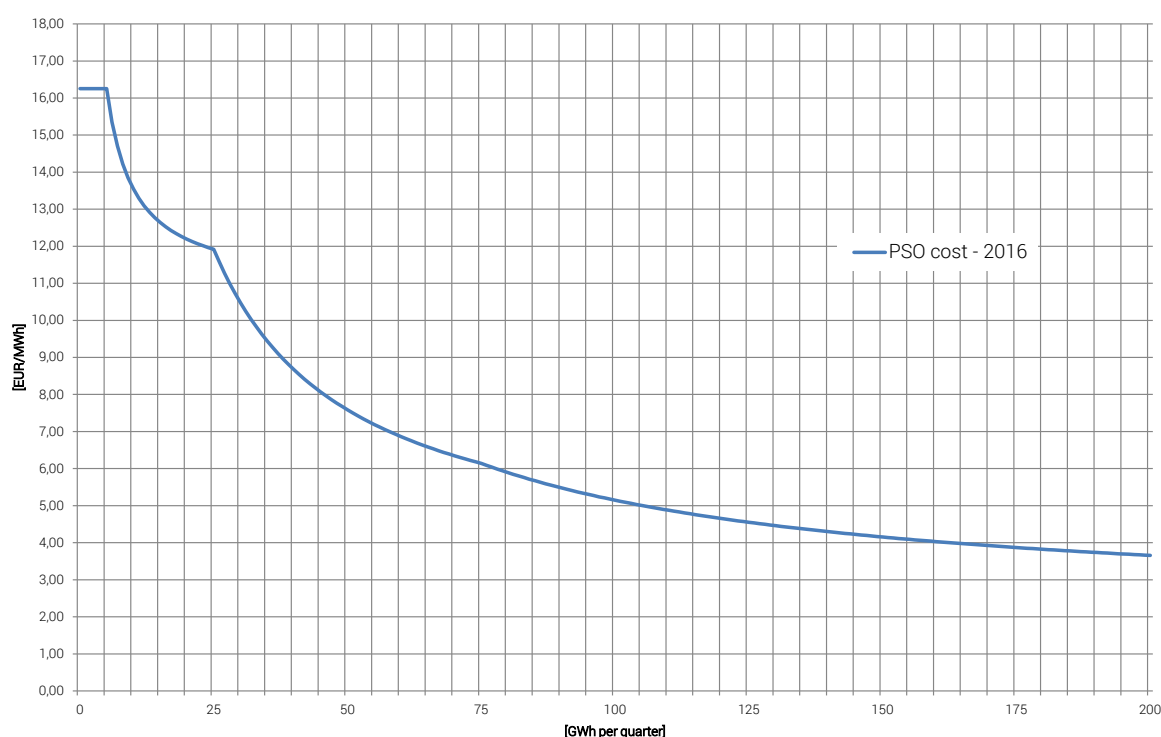
For the end customer, the theoretical cost of the public service obligation (PSO) relating to the GC quota is equal to:

$$\text{PSO cost} = \text{quota}_{2016} \times \text{average price}_{2016} \quad (\text{EUR/MWh EXCL. VAT})$$

For 2016, the average green certificate price was EUR 66.88 EXCL. VAT.

The graph below shows the value of this cost for 2016 depending on the tranche of quarterly consumption.

**FIGURE 6** COST TO AN END-CUSTOMER (EUR/MWH EXCL. VAT)



In practice, the cost of the PSO relating to the GC quota is passed on to the end customer, partly through the price of the "energy" component billed by the supplier and partly through the system usage tariffs for the portion of the PSO borne by the DSO.

As regards system operators, the passing on of the cost of this "green PSO" is monitored by the regional regulator (CWaPE) in the context of the approval of system usage tariffs (regulated tariffs).

As regards suppliers, the integration of the cost of this "green PSO" in the price of the "energy" component billed to the end customer is not regulated. In principle, it is freely negotiated by the supplier and its customer. Nevertheless, in the interest of transparency, the legislator has implemented three provisions in this area:

- For all customers, the order of the Walloon Government of 30 March 2006 on public service obligations requires suppliers to indicate in the contract and on bills the amount, specifically identified, corresponding to the passing on of the GC cost. This cost may not under any circumstances be included in the items relating to taxes and surcharges. Article 7(1), (9) of this same order is supplemented by the amending order of 3 April 2014, which henceforth requires suppliers to mention in their electricity bills the cost relating to GCs based on the average price of the GC for the previous four quarters as published by the CWaPE;
- For residential customers and SMEs, article 20<sup>quater</sup> of the law of 29 April 1999 in paragraph 1 stipulates that *"for residential customers and SMEs, the maximum amount a supplier may pass on to the end customer is the actual cost associated with the regional obligations relating to green certificates and cogeneration certificates, while only taking into account the market price of the certificates and a flat-rate transaction cost"*;
- For end customers benefiting from a quota reduction, the resulting cost reduction must be passed on directly by the suppliers to each end customer that is the source of such reduction.

The CWaPE is responsible for ensuring supplier compliance with these provisions. The CWaPE's periodic reports concerning the analysis of electricity prices in Wallonia include the amounts billed by suppliers for GCs to different categories of end customers.

***Passing on of the cost of the regional obligation to purchase GCs on the part of the local transmission system operator (LTSO)***

The amounts paid to producers by the LTSO (Elia) are recovered by the latter by means of a regional surcharge<sup>34</sup> applied to the electricity drawn by category 2, 3 and 4 users of the local transmission system in Wallonia (approximately 75 % of the supply in Wallonia). Specifically, the federal law of 29 April 1999 provides that *"the pricing methodology must make it possible to efficiently cover all the necessary or effective costs for the fulfilment of the legal or regulatory obligations of the system operator as well as for carrying out its activity of operating a transmission system or a system with a transmission function"*. Users of the system connected directly to the transmission system (380 kV, 220 kV or 150 kV) do not therefore contribute to this regional surcharge.

The regional surcharge has been relatively low for several years. At the beginning of 2012 it was EUR 1.1899/MWh (excl. VAT). This amount was based on a repurchase assumption of 300,000 GC in 2012. Elia then submitted two requests to the CREG for the revision of the surcharge. As such, the regional surcharge increased to EUR 5.9445/MWh (excl. VAT) from 1 October 2012 and to EUR 13.8159/MWh (excl. VAT) from 1 January 2013. The amount of this surcharge did not change in 2014, 2015 and 2016.

On 12 December 2014, the Walloon Government adopted a decree amending the decree of 12 April 2001 on the organisation of the regional electricity market with a view to organising the external financing of GCs. The main aim is to maintain the level of the GC surcharge collected by the local transmission system operator at EUR 13.82/MWh. The decree also identifies categories of companies that may benefit from a rate of exemption from the surcharge defined.

A partial exemption is granted to end customers connected at a voltage level lower than or equal to 70 kV. The exemption is as follows:

- 85% (i.e. payment of 15% of the surcharge) for end customers with a branch agreement irrespective of their level of consumption;

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<sup>34</sup> Article 12(5) of the federal law of 29 April 1999 on the organisation of the electricity market

- 50% for end customers without a branch agreement connected at a voltage level higher than low voltage and the activity of which falls under the NACE code "crop and animal production";
- 50% for end customers without a branch agreement connected at a voltage level higher than low voltage, the annual consumption of which is more than 1 GWh and the activity of which falls under the primary NACE codes "manufacturing companies", "education", "hospitals" or "medical-social".

In 2014 and 2015, the CWaPE worked on drawing up an indicative list of the companies benefiting from the exemption.

In 2016, the CWaPE observed<sup>35</sup> that the current surcharge level would no longer enable the LTSO (Elia) to cover costs relating to its PSO for purchasing GCs. On the basis of its estimate of GC market changes, the CWaPE estimated that at an unchanged surcharge level (first limit), on the basis of 100% consumption of GC allocations and taking into account the payment of exemptions detailed above, the number of surplus GCs would reach several million by 2024.

In this context, the Walloon Government decided at its 20 October 2016 session on the principle for implementing a GC deferral mechanism, planning for the acquisition and retention, for a given period of surplus GCs by one or more deferrers. Although this mechanism, under the Region's budget, does not provide a long-term solution to the structural GC surplus, it meets the goal of maintaining the surcharge at its current level and not affecting end consumers' electricity bills.

In its draft order submitted to the Walloon Parliament on 29 May 2017, the Walloon Government tasked the Walloon Air and Climate Agency with the GC deferral assignment. Surplus GC on the GC market between 2017 and 2021 will be subject to annual deferral operations for a maximum period of nine years, after which the GC must be bought back by the LTSO. Nevertheless, from 1 January 2022, if the market conditions allow it, deferred GCs may be put back on the market via an auction mechanism.

#### ***Passing on the cost of the federal obligation to purchase GCs on the part of the transmission system operator (TSO)***

In the context of its federal purchase obligation, the TSO (Elia) offers the GCs purchased on the market in order to recover the costs of fulfilling this obligation<sup>36</sup>. The net balance, resulting from the difference between the purchase price of the green certificate by the TSO and the selling price on the market, is funded by a surcharge applied to the transmission system usage tariffs. Approval and monitoring of this surcharge (amount and method of passing on to the different categories of consumers) is carried out by the federal regulator (CREG) in the framework of the approval of system usage tariffs (regulated tariffs).

#### ***Estimate of the cost of the public service obligations from 2016 to 2017***

The measures adopted by the Walloon Government, to establish the GC quota until 2024 and to maintain the surcharge for the guaranteed purchase of GCs at EUR 13.8159/MWh via the LTSO, make it possible to estimate the cost of these public service obligations for Walloon consumers for the coming years. The following assumption is that, given the Walloon Government's desire to put in place a deferral mechanism to mitigate the imbalance observed on the GC market, the values defined for the GC quotas and the current surcharge level remain unchanged.

<sup>35</sup> CD-16g20-CWaPE-1594 « Proposition sur les perspectives d'évolution du marché des CV et les adaptations nécessaires à l'horizon 2024 »

<sup>36</sup> See article 14 of the royal decree of 16 July 2002

The table below shows the estimate of the costs for the financing of support for green electricity generation in Wallonia via the 2 public service obligations referred to above.

**TABLE 12** ESTIMATE OF THE COST OF PUBLIC SERVICE OBLIGATIONS (IN EUR)

|   | 2016               | 2017               |
|---|--------------------|--------------------|
| ELIA (LTSO) GREEN CERTIFICATE PURCHASE GUARANTEE<br><i>based on the EUR 13.82/MWh surcharge</i>   | 221 767 300        | 218 377 017        |
| GREEN CERTIFICATE QUOTA<br><i>based on the effective quota defined in the AGW of 3 April 2014</i> | 355 680 432        | 368 554 266        |
| <b>TOTAL PROJECTED COST</b>   | <b>577 447 732</b> | <b>586 931 283</b> |

## 2.3. Direct electricity lines

Pursuant to the order of the Walloon Government of 17 September 2015 relating to direct electricity lines, the concept of direct electricity lines has been defined exhaustively and the procedures for the granting of authorisations have been determined.

Initially exempt from the GC discount obligation for the supply of green electricity<sup>37</sup>, generation installations using a direct electrical line have been subject to this obligation<sup>38</sup> since 1 July 2016.

## 2.4. Cross-functional committee on biomass (CTB)

The Government has established<sup>39</sup> a cross-functional committee on biomass bringing together representatives of the relevant authorities (DGO3, DGO4, DGO6) and the CWaPE. This cross-functional committee is entrusted with:

- The finalisation of the Walloon "Wood-Energy" strategy;
- The drafting of the Walloon "Biomass-Energy" strategy;
- The assessment of the sustainability of the resource in biomass-energy projects;
- The assessment of compliance with cascading in biomass-energy projects;
- The analysis, in the form of opinions on drafts and preliminary drafts of decrees, orders of the Government and ministerial orders relating to biomass or to its uses;
- The drafting of own initiative opinions.

The CTB meets regularly, at least once a month. It met for the first time in March 2016. Internal rules were set by the committee and approved by the Minister for Energy in September 2016 pursuant to art. 19 *septies* (4) of the AGW PEV of 30 November 2016. The Walloon Air and Climate Agency (AWAC) was appointed as a permanent expert to the committee.

<sup>37</sup> Art. 47 of 11 April 2014 amending the Decree of 12 April 2001 on the organisation of the regional electricity market.

<sup>38</sup> Decree of 11 March 2016 amending the Decree of 12 April 2001 on the organisation of the regional electricity market.

<sup>39</sup> Order of the Walloon Government of 26 November 2015 amending the Walloon order of 30 November 2006 on the promotion of electricity generated from renewable energy sources or cogeneration.

As part of its role, the committee gave an opinion on the special specifications concerning the establishment of centralised units with a capacity above 20 MW (support limited to an electrical capacity of 200 MW) powered by sustainable biomass.

It also initiated work to draft the "biomass" declaration and the Biomass strategy.

### 3. DEVELOPMENTS IN GREEN ELECTRICITY GENERATION FACILITIES IN 2016

#### 3.1. Developments on sites generating more than 10 kW

At the end of 2016, the CWaPE registered additional installed capacity<sup>40</sup> of just over 79 MW (compared to 61 MW in 2015 and 75 MW in 2014). Aside from the photovoltaic sector, there were few new generation sites.

TABLE 13 GREEN ELECTRICITY GENERATION SITES OVER 10 KW IN 2015 AND 2016

| Sector              | Number of new sites > 10 KW |            |
|---------------------|-----------------------------|------------|
|                     | 2015                        | 2016       |
| PV solar > 10kW     | 117                         | 175        |
| Hydraulic power     | 0                           | 2          |
| Wind                | 5                           | 7          |
| Biomass             | 0                           | 2          |
| Fossil cogeneration | 12                          | 9          |
| <b>Total</b>        | <b>134</b>                  | <b>195</b> |

There was a total of 195 additional generation sites compared to 134 in 2015. The vast majority of new installations came from the photovoltaic sector (175 new generation sites totalling 24MW). The installed photovoltaic capacity in 2016 was double the capacity in 2015. The average installed capacity per generation site (140 kWc) is on the increase. For the first time in 3 years, we saw the installation of two new hydropower sites (Hastière and Waulsort hydro dams). As for the wind sector, it seems to be picking up slightly (up by 51 MW) while there is no significant change to the biomass and fossil cogeneration sectors. Finally, two modest agricultural biogas installations (+65 kW) were commissioned.

In total, as at 31 December 2016, there were 1,444 installations above 10 kW that had been certified and registered in the CWaPE database (1,249 installations at the end of 2015). These installations were subject to quarterly monitoring both with regard to certification of the generation site (modifications, breakdowns, renewable nature and CO<sub>2</sub> emissions from biomass inputs, cogeneration audit for solar power installations, etc.) and with regard to the granting of GCs and guarantees of origin (GOL). A list of these generation sites can be found in Annex 1.

<sup>40</sup> All capacities, unless otherwise specified, are expressed in net developable electric capacity as defined in the metering code: "Electric power generated per generation installation before any transformation to the system, obtained by deducting the average capacity of functional facilities from the maximum achievable capacity". Although this convention facilitates comparison between sectors, this practice breaks with the custom of the photovoltaic sector in which capacities are expressed in installed peak capacity (Wc); the latter is approximately 10 % higher than the net capacity for solar power.

Certain sites were modified in 2016. The changes to existing generation sites include:

- adding a new 600 kW biogas engine to the Biospace site;
- recognition of significant change for the Mornimont Hydro site which is starting again with 15 years of GC granting;
- the replacement of the Heavy Fuel input with Natural Gas on the Burgo Ardennes site;
- the failure of the Seva biomass site which is leaving the list of producers (less than 2 MWe);
- PV generation sites >10kW have made extensions, under the  $k_{ECO}$  scheme, enabling them to approach or exceed 1 MWc, such as the Cora Messancy (1,243 kWc) and Châtelineau (962 kWc) sites.

**TABLE 14** *GREEN ELECTRICITY GENERATION SITES ABOVE 10 KW AT END OF 2016<sup>41</sup>*

| <b>Generation sites &gt; 10 kW</b> | <b>Number of sites</b> | <b>Capacity (kW)</b> |
|------------------------------------|------------------------|----------------------|
| PV solar > 10kW                    | 1135                   | 127,417              |
| Hydraulic power                    | 60                     | 114,204              |
| Wind                               | 78                     | 724,519              |
| Biomass                            | 60                     | 272,333              |
| Fossil cogeneration                | 111                    | 217,069              |
| <b>Total</b>                       | <b>1,444</b>           | <b>1,455,542</b>     |

As in 2015, certification of these green electricity generation sites was carried out by four inspection bodies, accredited by BELAC<sup>42</sup> in accordance with standard NBN EN ISO/IEC 17020 and approved by the Minister for Energy. These bodies are: AIB-Vinçotte Belgium (AVB), Bureau Technique Verbruggen (BTV), Electro-Test and SGS Statutory Services Belgium (SGS-SSB). Electro-Test has no longer met the criteria to be recognised as an inspection body approved at Belgium level since July 2016. In addition to the initial certification stage, the approved bodies conduct periodic inspections of all certified sites. The CWaPE may also at any time carry out an inspection or request that an approved inspection body carry out an inspection and examine whether the elements included in the certificate of guarantee of origin reflect the actual situation.

Amendments to the certificate of guarantee of origin are also made in the case of a modification to an installation, measurement instruments or any other element included in the certificate of guarantee of origin. Where biomass inputs are used (local and imported), certification also involves demonstrating the renewable nature of such inputs and their traceability throughout the entire production cycle.

The average time taken by the CWaPE to process new "complex" generation sites (excluding the photovoltaic sector) continues to be in the region of six months.

<sup>41</sup> The 30 MW Uvéla installation does not receive green certificates and is therefore not included in the statistics in this chapter.

<sup>42</sup> Belgian accreditation body: <http://economie.fgov.be/belac.jsp>

## 3.2. Development of sites generating up to 10 kW

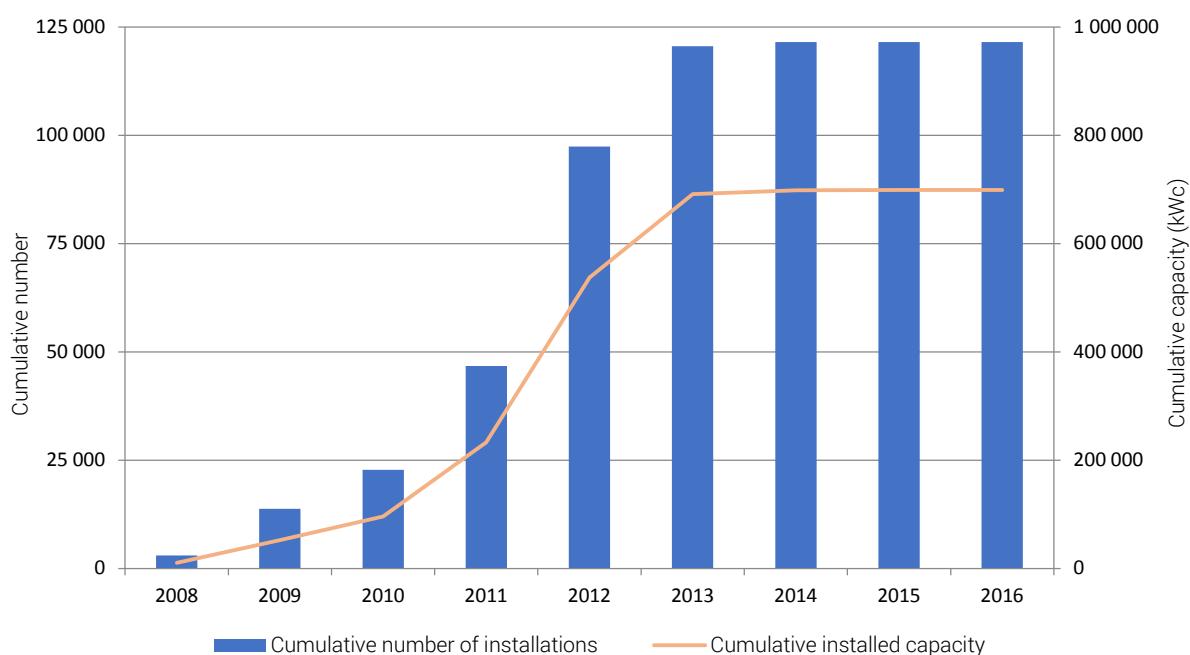
### 3.2.1. Photovoltaic installations up to 10 kW

#### 3.2.1.1. Photovoltaic installations – SOLWATT

The SOLWATT support scheme benefits installations with a capacity below or equal to 10 kW commissioned before 1 March 2014, the date on which the QUALIWATT support scheme came into effect.

At the end of 2016, all the SOLWATT facilities together amounted to 121,490 installations for a capacity of 699 MWc. This number represents 95% of installations below 10 kW located in Wallonia. The average capacity per installation is approximately 5.75 kWc.

**FIGURE 7** CHANGE IN THE NUMBER AND OUTPUT OF SOLWATT INSTALLATIONS

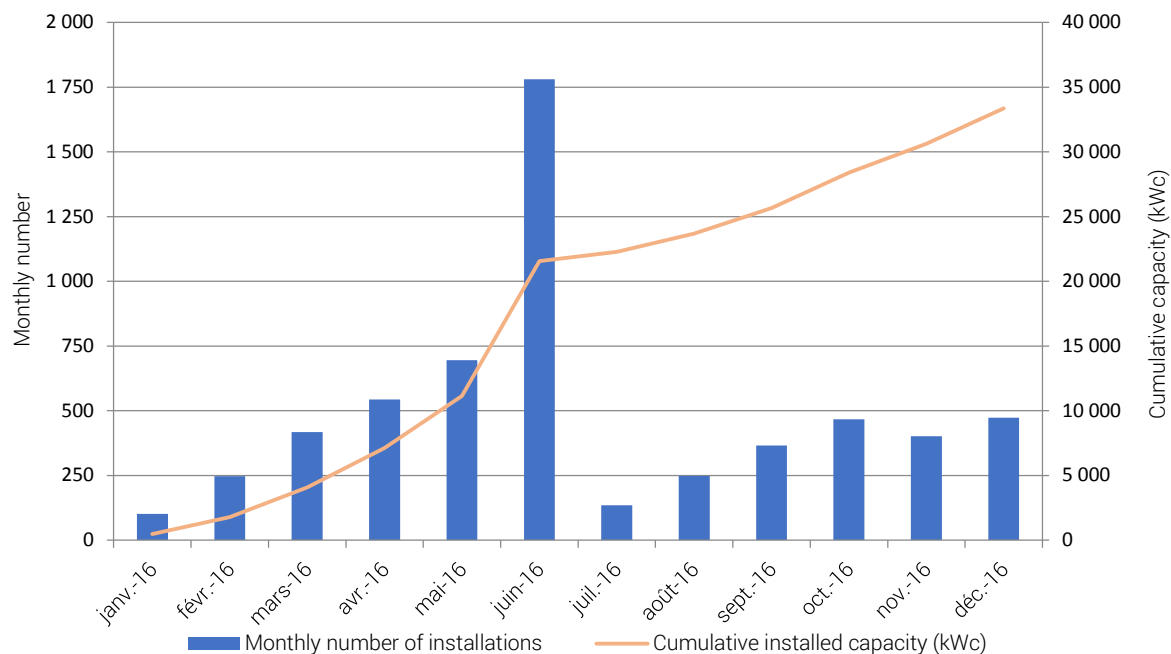


#### 3.2.1.2. Photovoltaic installations – QUALIWATT

The change in the number of installations and in the installed capacity in Wallonia, relating to the installations benefiting from the QUALIWATT incentive, is updated on the CWaPE website on a monthly basis. The website also provides a quarterly breakdown of the maximum number of installations that may benefit from support for generation by DSO as well as the number of incentives paid.

At the end of 2016, the group of QUALIWATT facilities consisted of approximately 11,655 installations, 50 % of which were commissioned in 2016 (as evidenced by the RGIE inspection date), accounting for a total installed capacity of over 65 MWc and an average capacity per installation of approximately 5.5 kWc.

**FIGURE 8** MONTHLY CHANGE IN QUALIWATT INSTALLATIONS COMMISSIONED IN 2016



More comprehensive information is available in the CWaPE's annual report since QUALIWATT installations do not receive a GC.

### 3.2.2. Other sectors up to 10 kW

In 2016, 15 new installations were registered. 11 hydropower sites and 4 wind power sites.

For the second year in a row, domestic micro-cogeneration units with a capacity of 1 kW are no longer increasing (none installed in 2016). Since 1 January 2015, these units are no longer eligible for a regional investment subsidy. However, based on the production readings submitted, the CWaPE notes the poor performance of these installations. As a result, these installations were only granted a GC in a very limited number of cases where CO<sub>2</sub> savings of at least 10% had been achieved. The best installations receive one green certificate per year at most. The requirements for producers to have their site recognised as a green electricity generation installation (installation of meters, on-site inspection by an inspection body, preparation of a certificate of guarantee of origin, sending of the readings to the CWaPE each quarter, etc.) therefore appear excessively complex given the benefit that can be obtained.

At the end of 2016, 233 non-photovoltaic installations below 10 kW were registered in the CWaPE database. This enabled the installed MW bar to be reached for the first time (1,058 kW installed at the end of 2016 as against 969 kW at the end of 2015).

**TABLE 15** GREEN ELECTRICITY GENERATION SITES  $\leq 10$  KW AT THE END OF 2016 (EXCLUDING THE PHOTOVOLTAIC SECTOR)

| Generation sites $\leq 10$ KW | Number of sites | Capacity (KW) |
|-------------------------------|-----------------|---------------|
| Hydraulic power               | 57              | 368           |
| Wind                          | 32              | 254           |
| Biomass                       | 10              | 81            |
| Fossil cogeneration           | 134             | 355           |
| <b>Total</b>                  | <b>233</b>      | <b>1 058</b>  |

As in previous years, the CWaPE tasked an approved inspection body with carrying out an audit with a view to verifying producer statements and collecting, on a systematic basis, all the technical data required for the preparation of certificates of guarantee of origin for complex low-power installations (cogeneration and biomass), given that such installations are not currently subject to any prior inspection by a "GC" approved body. Furthermore, as part of this audit mission, random or targeted inspections of photovoltaic solar, hydropower and wind installations are also carried out.

### 3.3. Generation facilities<sup>43</sup>

As at 31 December 2016, nearly 135,000 green electricity generation sites met the granting criteria for generation support of which more than 123,000 through green certificates (corresponding to a capacity of more than 2,100 MW) and 11,600 via the Quali watt programme (or 59 MW).

The table below breaks down these generation sites by type of technology and by sector. It distinguishes between sectors not using fuels (solar, wind, hydropower) for which generation costs are essentially determined by the investment cost (*CAPEX-driven technologies*) on the one hand, and the sectors using fuels (biomass and cogeneration) for which generation costs are essentially determined by operating and maintenance expenses (*OPEX-driven technologies*), on the other.

**TABLE 16** GREEN ELECTRICITY GENERATION SITES AS AT 31 DECEMBER 2016

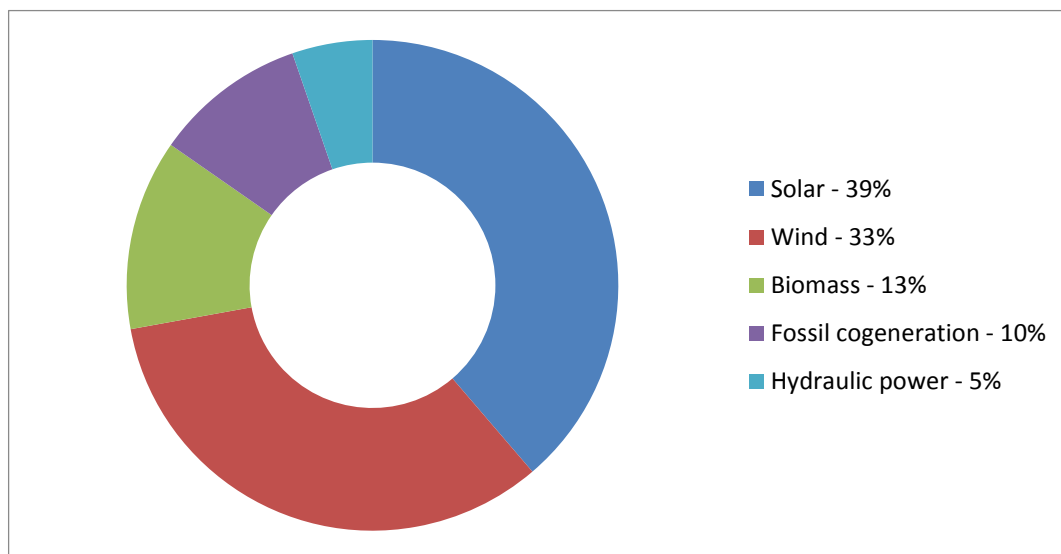
| Sectors                                   | Number of sites | Capacity (KW)    |
|---|-----------------|------------------|
| <i>OPEX-driven technologies sub-total</i> | 134.502         | 1.679.390        |
| Solar                                     | 134.275         | 840.044          |
| Wind                                      | 110             | 724.773          |
| Hydraulic power                           | 117             | 114.573          |
| <i>OPEX-driven technologies sub-total</i> | 315             | 489.838          |
| Biomass                                   | 70              | 272.414          |
| Fossil cogeneration                       | 245             | 217.424          |
| <b>Overall total</b>                      | <b>134 817</b>  | <b>2 169 228</b> |

In terms of installed capacity, as shown in the diagram below, 77 % of the green-certified electrical power at the end of 2016 corresponded to the *CAPEX-driven* sectors and 23 % to the *OPEX-driven* sectors. The photovoltaic sector alone represented 39 % of total installed capacity at the end of 2016.

<sup>43</sup> Excluding Quali watt and any installations that do not benefit from support

FIGURE 9

BREAKDOWN BY SECTOR OF CERTIFIED ELECTRIC POWER AS AT 31 DECEMBER 2016 (MW)



### 3.4. Green electricity generation

#### 3.4.1. Green electricity generation audit<sup>44</sup>

As at 31 December 2016, the 135,000 certified generation sites had generated over 5.2 TWh of green electricity. The biomass (with or without cogeneration) and fossil cogeneration sectors accounted for more than half of green generation in 2016.

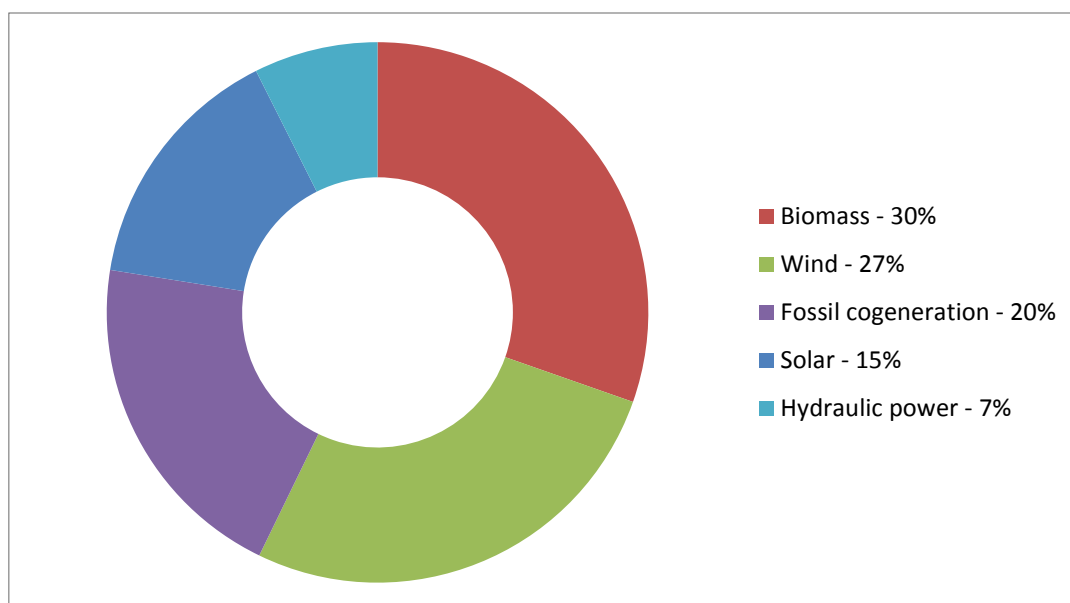
TABLE 17 OUTPUT OF GREEN ELECTRICITY GENERATION SITES AS AT 31 DECEMBER 2016

| Sectors                                   | Number of sites | Output (MWh)     |
|---|-----------------|------------------|
| <i>OPEX-driven technologies sub-total</i> | 134.502         | 2.577.485        |
| Solar                                     | 134.275         | 788.399          |
| Wind                                      | 110             | 1.401.964        |
| Hydraulic power                           | 117             | 387.122          |
| <i>OPEX-driven technologies sub-total</i> | 315             | 2.650.212        |
| Biomass                                   | 70              | 1.587.900        |
| Fossil cogeneration                       | 245             | 1.062.313        |
| <b>Overall total</b>                      | <b>134.817</b>  | <b>5.227.697</b> |

In terms of production, as shown in the graph below, it can be seen that 51 % of green electricity generation was from "OPEX-driven" sectors and 49 % from "CAPEX-driven" sectors. While the solar power sector represented over 39 % of total installed capacity at the end of 2016, it only delivered 15 % of green production in that year. Annex 2 sets out developments in electricity generation for the last 10 years.

<sup>44</sup> Generation values are based on declarations from producers verified by an approved body and by the CWaPE, except for the production of solar power installations of less than 10 kW where production is estimated based on a production profile corrected to take into account the observed performance of the facilities. For declarations at the beginning of the year not starting on 1 January or at the end of the year not ending on 31 December, the declared production has been allocated pro rata temporis, except for solar power, where the corrected production profile has been used. This allocation begins with the initial reading for sites that are starting up. The values of sites for which generation data is not yet available have been extrapolated in the same manner, except in the case of a shutdown or an incident. For solar power, production is estimated based on the installed capacity multiplied by the expected daily sunshine duration starting in the month following the installation's initial reading.

**FIGURE 10** BREAKDOWN BY SECTOR OF GREEN ELECTRICITY GENERATION OF CERTIFIED SITES AS A 31 DECEMBRE 2016 (MW)



### 3.4.2. Developments in production by sector over the period 2015-2016

The generation of green electricity<sup>45,46</sup> increased compared to the previous year (+4 %), reaching 5.2 TWh. The generation of renewable electricity<sup>47</sup> increased by 0.3 TWh, to 4.1 TWh.

The table below compares installed capacity (MW) and the production of green electricity (MWh) and renewable electricity (MWh-RES) by sector for 2015 and 2016. This table is commented on below.

<sup>45</sup> In accordance with the decree of 12 April 2001, green electricity comprises renewable electricity and electricity from high-quality cogeneration; it confers an entitlement to green certificates (see Chapter 2).

<sup>46</sup> The figures presented in the previous year's report were adjusted to take account of changes made pursuant to production corrections, dossiers which were submitted late, incomplete or rectified and an improved estimate of solar power generation taking into account the observed performance of the facilities.

<sup>47</sup> In accordance with the decree of 12 April 2001, renewable electricity only comprises electricity from renewable energy sources; under certain circumstances, it may be that it does not confer an entitlement to green certificates (e.g. for an installation that has already been receiving them for 15 years) (see Chapter 2). On the other hand, renewable electricity confers an entitlement to guarantee of origin labels, except in the case of compensation.

TABLE 18

## DEVELOPMENTS IN GREEN ELECTRICITY GENERATION BETWEEN 2015 AND 2016

| Sectors             | Fuel sectors               | 2015                                   |            |                          | 2016                                   |            |                          | 2016-2015 |       |       |
|---------------------|----------------------------|--|------------|--------------------------|--|------------|--------------------------|-----------|-------|-------|
|                     |                            | Net developable electrical capacity MW | Output MWh | Renewable output MWh RES | Net developable electrical capacity MW | Output MWh | Renewable output MWh RES | Variation |       |       |
| Solar               |                            | 799                                    | 796,753    | 796,753                  | 840                                    | 788,399    | 788,399                  | +5%       | -1%   | -1%   |
| of which            | Solwatt solar              | 654                                    | 672,102    | 672,102                  | 654                                    | 630,970    | 630,970                  | -0%       | -6%   | -6%   |
|                     | Qualiwatt solar            | 29                                     | 13,881     | 13,881                   | 59                                     | 41,641     | 41,641                   | +104%     | +200% | +200% |
|                     | Solar other <= 10 KW       | 0                                      | 138        | 138                      | 0                                      | 88         | 88                       | +223%     | -36%  | -36%  |
|                     | Solar > 10 KW              | 116                                    | 110,632    | 110,632                  | 127                                    | 115,700    | 115,700                  | +9%       | +5%   | +5%   |
| Hydraulic power     |                            | 111                                    | 327,402    | 327,402                  | 115                                    | 387,122    | 387,122                  | +3%       | +18%  | +18%  |
| Wind                |                            | 674                                    | 1,511,574  | 1,511,574                | 725                                    | 1,401,964  | 1,401,964                | +8%       | -7%   | -7%   |
| Biomass             |                            | 272                                    | 1,258,271  | 1,144,160                | 272                                    | 1,587,900  | 1,473,527                | +0%       | +26%  | +29%  |
| of which            | Biogas - EL                | 21                                     | 64,749     | 56,712                   | 21                                     | 65,097     | 64,963                   | 0%        | +1%   | +15%  |
|                     | Biogas - WWTP              | 7                                      | 26,752     | 15,013                   | 7                                      | 40,163     | 24,360                   | 0%        | +50%  | +62%  |
|                     | Biogas - agricultural      | 13                                     | 89,515     | 88,978                   | 14                                     | 90,541     | 90,254                   | +1%       | +1%   | +1%   |
|                     | Bioliquld                  | 3                                      | 130        | 126                      | 3                                      | 34         | 34                       | +0%       | -74%  | -73%  |
|                     | Solid - wood pellets       | 82                                     | 275,368    | 270,547                  | 82                                     | 508,798    | 504,185                  | 0%        | +85%  | +86%  |
|                     | Solid - mixed wood         | 108                                    | 608,254    | 579,234                  | 108                                    | 628,977    | 596,667                  | 0%        | +3%   | +3%   |
|                     | Solid - other              | 38                                     | 193,502    | 133,550                  | 38                                     | 254,289    | 193,065                  | 0%        | +31%  | +45%  |
| Fossil cogeneration |                            | 216                                    | 1,129,027  | 4,356                    | 217                                    | 1,062,313  | 3,803                    | +1%       | -6%   | -13%  |
| of which            | Gas co-generation          | 198                                    | 1,096,583  | 0                        | 200                                    | 1,051,823  | 0                        | +1%       | -4%   | -     |
|                     | Biogas - gas co-combustion | 18                                     | 32,444     | 4,356                    | 18                                     | 10,490     | 3,803                    | 0%        | -68%  | -13%  |
| Total               |                            | 2,072                                  | 5,023,027  | 3,784,245                | 2,169                                  | 5,227,697  | 4,054,815                | +5%       | +4%   | +7%   |

*Comment:*

The table above shows the net developable electric capacity for all sectors. In order to enable a comparison with the data from previous years, the table below shows the installed solar capacity expressed as peak capacity:

TABLE 19

## CORRESPONDANCE BETWEEN NET DEVELOPABLE CAPACITY AND PEAK CAPACITY

| Sectors  | Sector by scheme     | 2015 <sup>48</sup>                     |                                   | 2016                                   |                                   |
|----------|----------------------|--|-----------------------------------|--|-----------------------------------|
|          |                      | Net developable electrical capacity MW | Installed electrical capacity MWc | Net developable electrical capacity MW | Installed electrical capacity MWc |
| Solar    |                      | 799                                    | 860                               | 840                                    | 906                               |
| of which | Solwatt solar        | 654                                    | 698                               | 654                                    | 698                               |
|          | Qualiwatt solar      | 29                                     | 32                                | 59                                     | 65                                |
|          | Solar other <= 10 KW | 0                                      | 0                                 | 0                                      | 0                                 |
|          | Solar > 10 KW        | 116                                    | 131                               | 127                                    | 143                               |

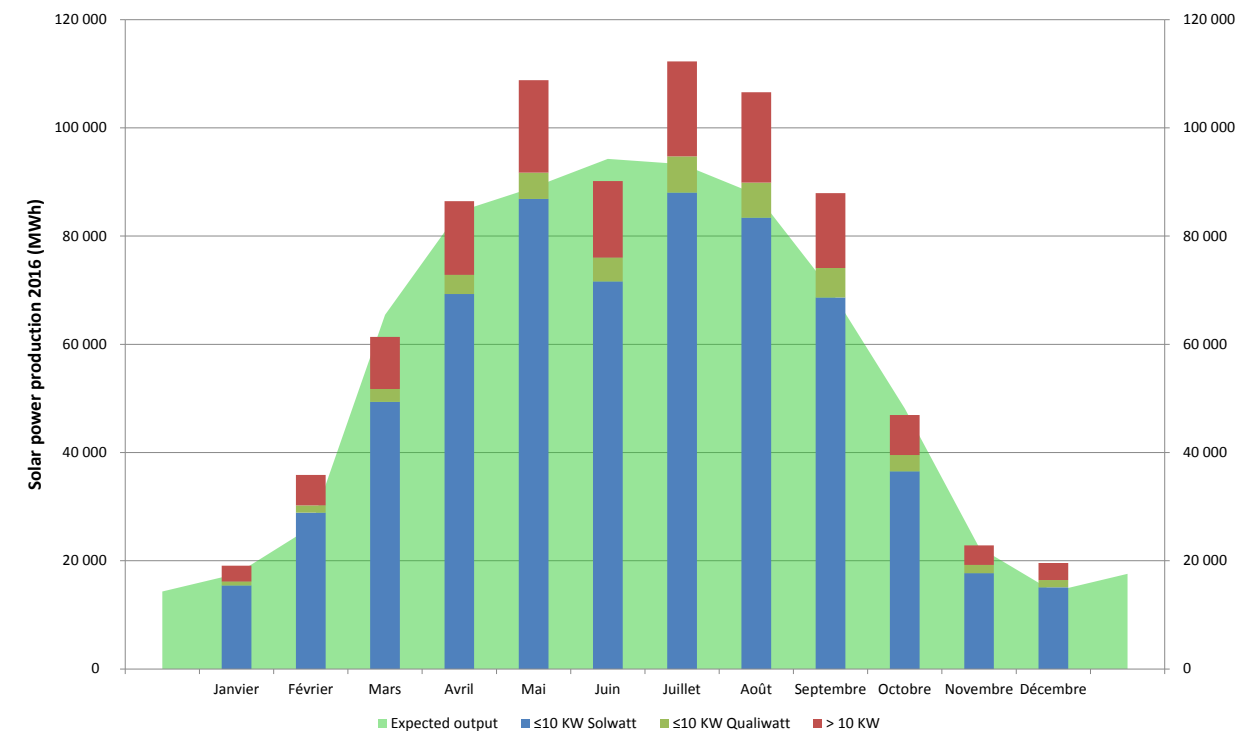
*CAPEX-driven technologies*

Renewable electricity production by sectors without fuels (solar, hydropower, wind) fell by 2 % in 2016 (compared to +11% in 2015 and +6% in 2014). These sectors are subject to uncontrollable weather factors and they all present annual and seasonal variability. Hydropower generation was excellent but could not counterbalance less exceptional sunshine that the previous year and less favourable wind.

<sup>48</sup> The figures for the year before were adjusted to take account of changes made pursuant to production corrections, dossiers which were submitted late, incomplete or rectified and an improved estimate of solar power generation taking into account the observed performance of the facilities.

The graph below provides an estimate of monthly electricity production during 2016 for photovoltaic installations. This estimate was established based on monthly developments in installed capacity as well as on the reference monthly production figures selected by the CWaPE (kWh/kWc/month) in order to take account of the weather conditions observed. It should be noted that the sub-optimal nature of the generation facilities, whether in terms of orientation, inclination or more general performance criteria, was also taken into account.

**FIGURE 11** MONTHLY GENERATION OF PHOTOVOLTAIC ELECTRICITY OBSERVED IN 2016 AND OUTPUT



Concerning annual variability, the table below provides the average usage times observed by sector in 2016 for existing installations as at 31 December.

**TABLE 20** *AVERAGE USAGE TIME OBSERVED BY SECTOR IN 2016<sup>49</sup>*

| Sectors    | Usage time (hours/year) | Reference |
|------------|-------------------------|-----------|
| Solar      | 971                     | 900-950   |
| Wind       | 1,934                   | 2,200     |
| Hydropower | 3,406                   | 3,000     |

The fall in generation from *CAPEX-driven* sectors (-2 % as against +11 % in 2015) is mainly due to the wind sector (-7 %, +13 % in 2015) and photovoltaic solar generation which decreased slightly (-1 %, +8 % in 2015). The new solar capacities remain proportionally modest (+5 % increase in capacity, +8 % in 2015) thanks to installations above 10 kW (+9 %) and the controlled success of QUALIWATT (+104 %). These new capacities represent 42% of new green generation capacities for the year.

Photovoltaic facilities continued to grow at a faster pace than wind facilities in terms of installed capacity, but benefited from weather conditions, i.e. sunshine, closer to the norm. The average usage time observed for the photovoltaic sector was compatible with the reference values of 900 hours/year for installations  $\leq$  10 kW and 950 hours/year for installations above 10 kW.

The hydropower sector saw a slight increase in capacity (+3%). Also subject to uncontrollable weather conditions, hydropower had an excellent year (+19%, +7% in 2015): this year was a record year in certified hydropower generation for 15 years.

As for the wind sector, its capacity had increased by 8% at 31 December 2016. This increase in capacity accounted for more than half (53%) of new installed green generation capacities in 2016. Nevertheless, wind electricity generation fell by 7 % following less favourable wind conditions.

### *OPEX-driven technologies*

In 2016, more than half of the green electricity in Wallonia (50.7 % compared to 47.5 % in 2015) was generated by installations using fossil fuels and/or biomass.

The electricity production of these sectors is mainly influenced by the prevailing economic conditions (heat requirement for industrial processes) and, to a lesser extent, by weather-related factors (heat requirement for heating). The average length of use observed was distinctly higher than for sectors without fuel: it was 5,800 h/year for the biomass sector (as against 4,600 h in 2015) while the fossil cogeneration sector reached 5,300 h/an on average (as against 5,550 h in 2015).

The production in the fossil cogeneration sector slightly decreased in comparison to 2015 (-6 %) while the biomass sector increased considerably (+26 %), in particular following the upturn in production at the Awirs plant (wood pellets +85 %) as well as plants such as Biowanze and Electrawinds Mouscron (solid biomass excluding wood +31 %). These upturns in production are primarily attributable to an improvement in the financial prospects of certain power plants benefiting from the measures to rescue biomass, and to the developments in fuel prices. Production in waste water treatment plants (WWTP) also increased sharply (+50 %), a logical consequence of investments in the agri-food industry. The agricultural biogas, mixed wood and EL sectors remain stable.

Given the significant heterogeneity of the biomass sector, a specific section is devoted to it below. The biomass energy sectors are presented in the tables and graphs in decreasing order of primary energy consumption.

<sup>49</sup> Reference source: Proposal CD-14b11-CWaPE-861 on a "Methodology for calculating new green certificate granting rates"; Communication CD-14b26-CWaPE on the "Methodology for calculating the QUALIWATT incentive"; Walloon energy audit 2012, SPW, January 2015

### 3.4.3. Focus on the biomass sector

#### 3.4.3.1. Classification of biomass types

Biomass covers a wide range of resources that are categorised as follows:

- solid biomass: primarily wood (in various forms: chips, bark, sawdust, pellets, etc.), but also household waste<sup>50</sup>, animal fats and agricultural residue;
- liquid biomass or bioliquid: primarily (non-refined) vegetable oils such as rapeseed oil;
- gaseous biomass or biogas: resulting from a microbial conversion of solid or liquid biomass into methane.

Products or raw materials may fall into these biomass categories, but they can also include residue or waste in the sense that the material cannot readily be used for a purpose considered noble for technical reasons (e.g. wood covered with lead paint or water from the washing of beets), commercial reasons (e.g. spoiled vegetables) or legal reasons (e.g. tinned food with a passed expiry date). Because this designation is, by its nature, dependent on the point of view of the owner, it does not facilitate the categorisation of biomass. Furthermore, the continuous and generalised rise in the price of biomass over the past ten years shows the concept of waste is evolving towards that of a resource.

#### 3.4.3.2. Classification of installations

The share of renewable energy used varies considerably from one installation to another. The table below shows the proportion of renewable primary energy observed in installations by category of biomass used in 2016. This proportion increased this year from 87 % to 91 %.

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<sup>50</sup> Waste-to-energy units (incinerators) in Wallonia do not reach the threshold of 10 % of CO<sub>2</sub> emissions avoided. They do not therefore receive green certificates and their production is not included in these figures.

TABLE 21

## PROPORTION OF RENEWABLE PRIMARY ENERGY BY BIOMASS CATEGORY IN 2016

| Biomass                    | Percentage of renewable energy |
|----------------------------|--------------------------------|
| Solid - mixed wood         | 94.3%                          |
| Solid - wood pellets       | 99.1%                          |
| Solid - other              | 69.6%                          |
| Biogas - EL                | 99.8%                          |
| Biogas - gas co-combustion | 31.8%                          |
| Biogas - agricultural      | 99.7%                          |
| Biogas - WWTP              | 62.2%                          |
| Bioliquid                  | 99.8%                          |
| <b>Overall total</b>       | <b>91.0%</b>                   |

Pursuant to an agreement, sites using over 50% renewable energy (biomass) are placed by the CWaPE in the "biomass sector" category. For most biomass sectors, a few tenths of percent of fossil energy alone are necessary to start up the installations. The biogas waste water treatment plant (WWTP) and non-wood solid biomass sectors use less biomass due to their industrial constraints (providing heat of a certain temperature, pressure or duration, etc.) or environmental constraints (effluent load, etc.).

Sites that use less than 50 % renewable energy (biomass) are placed by the CWaPE in the "gas co-combustion cogeneration sector" category. On average, these sites used 32 % renewable energy (compared to 14 % in 2015 and 8 % the previous year) and primarily operate in co-combustion mode (natural gas and biogas).

Overall, for all installations using biomass, energy of fossil origin (natural gas) accounts for just over 9% of primary energy in 2016.

### 3.4.3.3. Biomass audit 2016

The table below takes stock by biomass energy sector category. Biomass consumption for electricity generation purposes in Wallonia amounted to 6.8 TWh in 2016. Thanks to cogeneration, 30% of the energy of sites using biomass was used in thermal applications (or 2.0 TWh and therefore a reduction in comparison to 2015) and 23 % is converted into electricity (or 1.6 TWh, or an increase of 0.3 TWh in comparison to 2015).

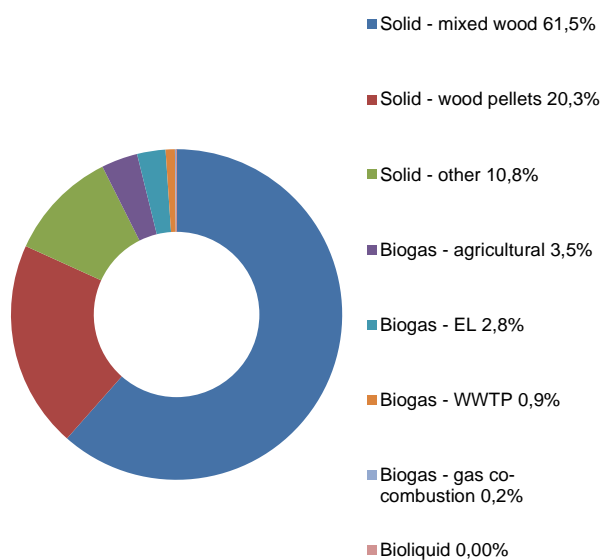
TABLE 22

## ENERGY GENERATED BY BIOMASS CATEGORY IN 2016 (GWH)

| Biomass (GWh)              | Primary energy | Biomass primary energy | Thermal energy recovered | Net electricity | Renewable electricity |
|----------------------------|----------------|------------------------|--------------------------|-----------------|-----------------------|
| Solid - mixed wood         | 4,202.7        | 3,962.8                | 1,262.7                  | 629.0           | 596.7                 |
| Solid - wood pellets       | 1,521.3        | 1,507.6                | 35.8                     | 508.8           | 504.2                 |
| Solid - other              | 1,157.1        | 805.3                  | 642.7                    | 254.3           | 193.1                 |
| Biogas - EL                | 206.3          | 205.9                  | 11.8                     | 65.1            | 65.0                  |
| Biogas - gas co-combustion | 37.0           | 11.8                   | 24.1                     | 10.5            | 3.8                   |
| Biogas - agricultural      | 266.7          | 265.7                  | 30.8                     | 90.5            | 90.3                  |
| Biogas - WWTP              | 108.2          | 67.3                   | 39.3                     | 40.2            | 24.4                  |
| Bioliquid                  | 0.1            | 0.1                    | 0.1                      | 0.0             | 0.0                   |
| <b>Overall total</b>       | <b>7,499.3</b> | <b>6,826.5</b>         | <b>2,047.4</b>           | <b>1,598.4</b>  | <b>1,477.3</b>        |

The figures below show a breakdown between the different categories of biomass according to the approach (primary energy, thermal energy and electrical energy).

**FIGURE 12** *BIOMASS PRIMARY ENERGY IN 2016*



**FIGURE 13** *THERMAL ENERGY RECOVERED IN 2016*

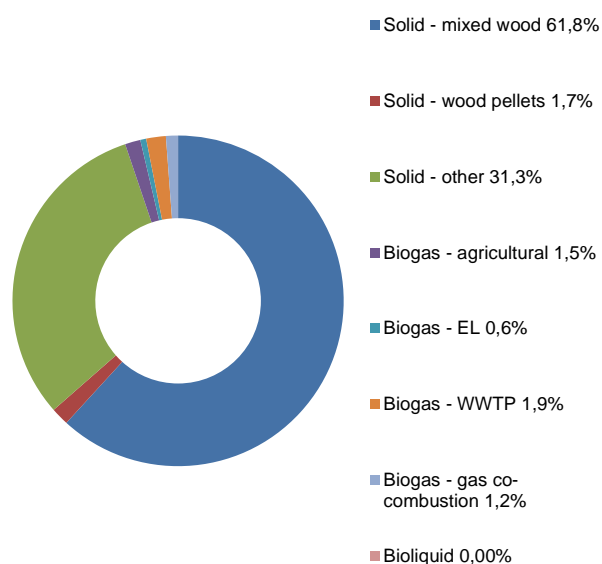


FIGURE 14

NET ELECTRICITY GENERATED IN 2016

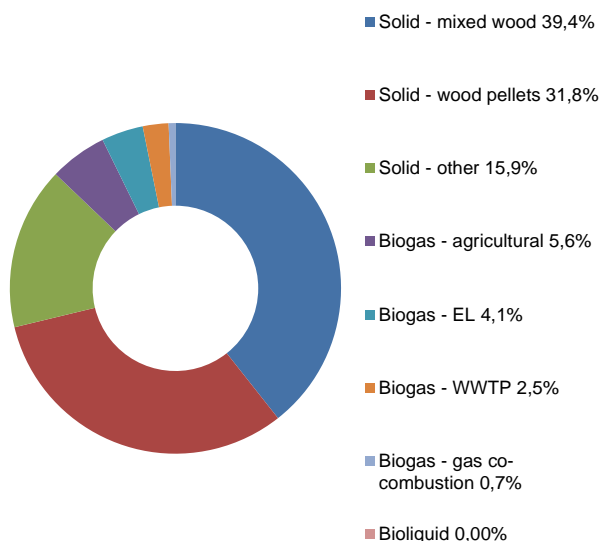
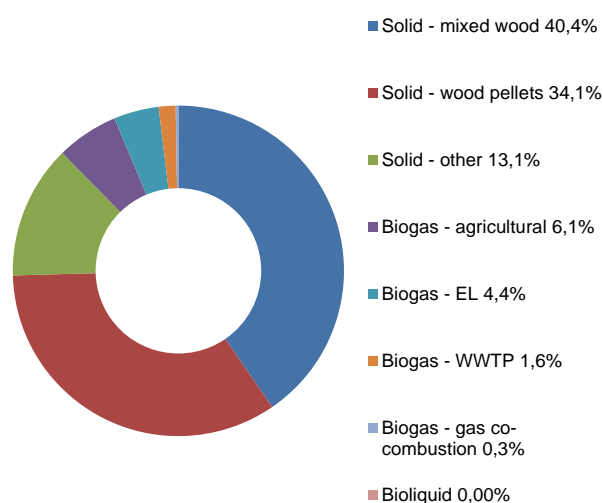


FIGURE 15

RENEWABLE ELECTRICITY GENERATED IN 2016



### 3.4.3.4. Solid biomass

In Wallonia, as shown in the biomass energies audit table, over 87 % of biomass-based electricity generation, i.e. 1.4 TWh, comes from solid biomass. Apart from a few installations primarily using animal fats from abattoirs or low-grade fats, and one installation using bran, solid biomass consists of 82% wood (like in 2015). Solid biomass is not subject to the sustainability criteria of Directive 2009/28/EC. The entitlement to receive green certificates is, however, dependent on the verification by the CWaPE of the renewable nature of the resource (this renewable nature being defined by the decree of 12 April 2001 as *"any source of energy (...) the consumption of which does not limit its future use"*). However, the orders and decisions that result from it limit the verification to CO<sub>2</sub> emissions avoided. Nevertheless, for practical reasons and when it is available, operators prefer to use certified or controlled wood, the certification of which attests to sustainable forest management (FSC<sup>51</sup>, PEFC<sup>52</sup>); it is then still necessary to add to this the CO<sub>2</sub> emissions throughout the fuel production, packaging and transport chain<sup>53</sup>.

In 2016, wood pellets were used more than in 2015, but at a consumption level 70 % below that of 2010 (peak of consumption for electric purposes), still for economic reasons. The primary consumption of 1.50 TWh, corresponding to approximately 308,000 tonnes of wood<sup>54</sup>, enabled the generation of 504 GWh of electricity.

Since 2008, pellets from Wallonia no longer confer an entitlement to subsidies in Flanders; having been replaced there by US pellets, their share in supplies to power plants in Wallonia had skyrocketed until it made up 75% of consumption. The proportion of Walloon pellets was gradually reduced<sup>55</sup> until it disappeared altogether in 2014. This reflected the demand from traditional users of sawdust and by-products of the wood industry (manufacture of panels and paper) while new users, who are Walloon wood pellet producers, saw their production capacity significantly under-utilised.

<sup>51</sup> FSC: Forest Stewardship Council: [www.fsc.be](http://www.fsc.be)

<sup>52</sup> PEFC: Programme for the Endorsement of Forest Certification Schemes: [www.pefc.be](http://www.pefc.be)

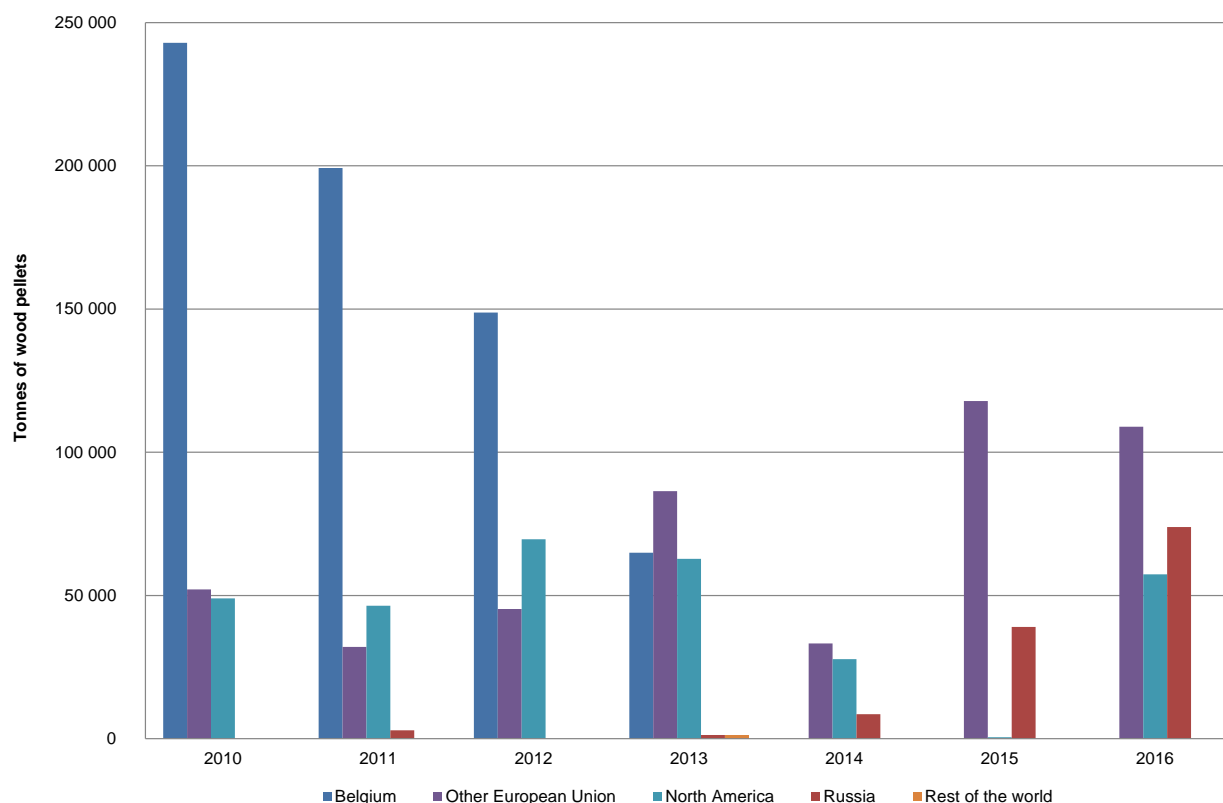
<sup>53</sup> The biomass certification of the Sustainable Biomass Partnership (SBP) includes the gathering of information required for the CO<sub>2</sub> calculation: <https://sbp-cert.org/>

<sup>54</sup> With a conversion factor of 1 tonne of wood = 4,900 kWh. This value is representative of the industrial pellets used in Wallonia.

<sup>55</sup> Walloon wood pellet production then switched to sale for domestic heating purposes while the importing of industrial pellets has facilitated the low-cost importing of domestic pellets without a proper check of their sustainable nature.

In 2016, the majority of imports came from Europe and from Russia. The methods for transporting these pellets over very long distances (by boat for long journeys) had specific emission rates (kg of CO<sub>2</sub> emitted per tonne of pellets) equivalent to, or even less than emissions relating to the transformation into pellets.

**FIGURE 16** ANNUAL CHANGE IN SOURCE OF SUPPLIES FOR THE 80 MW AWIRS POWER PLANT (TONNES OF WOOD PELLETS PER YEAR)



Excluding pellets, wood biomass generated 597 GWh of electricity in Wallonia. This wood accounts for 3.96 TWh of primary energy, which is the equivalent of approximately 976,000 tonnes of wood, in the form of residue from the processing of wood or, for example, wood from waste recycling facilities intended for energy recovery. The remaining solid biomass comprises animal fats and bran. These cogeneration units, which are integrated into industry, use these fuels in their processes as attested to by the overall electricity and heat conversion efficiency shown in the table below.

**TABLE 23** *ELECTRICAL AND HEAT EFFICIENCY OF BIOMASS INSTALLATIONS IN 2016*

| Biomass                    | Electrical efficiency | Electrical + heat efficiency |
|----------------------------|-----------------------|------------------------------|
| Solid - mixed wood         | 14.97%                | 45.01%                       |
| Solid - wood pellets       | 33.45%                | 35.80%                       |
| Solid - other              | 21.98%                | 77.53%                       |
| Biogas - EL                | 31.55%                | 37.28%                       |
| Biogas - gas co-combustion | 28.36%                | 93.58%                       |
| Biogas - agricultural      | 33.95%                | 45.51%                       |
| Biogas - WWTP              | 37.12%                | 73.45%                       |
| Bioliquid                  | 27.62%                | 77.35%                       |
| <b>Overall total</b>       | <b>21.31%</b>         | <b>48.61%</b>                |

Following the economic difficulties encountered by sites generating electricity from solid biomass (some of which had to shut down), the Walloon Government decided<sup>56</sup> to extend the rescue measure originally reserved for agricultural biomethanisation to solid biomass. These installations can thus benefit from a  $k_{ECO}$  economic coefficient in line with the reference rate of return set by the Walloon Government (see Chapter 2).

The conditions to be met in order to benefit from the measure are as follows:

1. The green electricity generation installation must be a solid biomass installation.
2. The green electricity generation installation must have a definitive licence prior to 1 July 2014.
3. The producer must demonstrate that the installation does not achieve the reference rate of return<sup>57</sup> in respect of the support scheme from which it benefits.

Based on the actual accounting data and a detailed business plan, the CWaPE determines a  $k_{ECO}$  economic coefficient specific to each installation by following the methodology adopted for the setting of the  $k_{ECO}$  economic coefficients. Five installations submitted an application.

**TABLE 24** *APPLICATION DOSSIERS FOR A KECO ECONOMIC COEFFICIENT (RESCUE)*

| Generation site                                 | Net electrical capacity (kW) | Specific $k_{ECO}$ application | $k_{ECO}$ | Decision reference       |
|---|------------------------------|--------------------------------|-----------|--------------------------|
| 97 BIOMASS WOOD AWIRS                           | 80,000                       | Yes                            | 1.768     | CD-15j30-CWaPE           |
| 153 BIOMASS ELECTRAWINDS (MOUSCRON)             | 17,240                       | Yes                            | 1.812     | CD-16d22-CWaPE-0015      |
| 149 BIOMASS WOOD RENOGEN (KAISERBARACKE)        | 9,700                        | Yes                            | 3.239     | CD-16b22-CWaPE-0004      |
| 9,056 BIOMASS WOOD ENERWOOD (DISON)             | 950                          | Yes                            | 2.486     | CD-16l08-CWaPE-0048      |
| 148 BIOMASS WOOD VALORBOIS (THIMISTER-CLERMONT) | 3,865                        | Yes                            |           | Clarifications requested |

<sup>56</sup> Article 15 *octies* (2) of the order of the Walloon Government of 30 November 2006 on the promotion of electricity generated from renewable energy sources or cogeneration

<sup>57</sup> Annex 7 of the order of the Walloon Government of 30 November 2006

### 3.4.3.5. Biogas

43% of biogas comes from agricultural biomethanisation and 33 % from engineered landfills (EL)<sup>58</sup>. The rest comes from waste water treatment plants (WWTP), energy recovery from agri-industrial waste<sup>59</sup>. With the exception of one installation in Libramont designed to use maize despite its location in the Ardennes, Walloon agricultural biomethanisation installations primarily use waste from the agri-food industry and to a lesser extent materials from agriculture, such as maize or liquid manure.

For waste water treatment plants with anaerobic digestion, such as at a number of sugar production sites, biogas is added. In this case, overall production is listed as biogas in co-combustion.

Following the significant difficulties encountered by agricultural biomethanisation sites, the Walloon Government decided<sup>60</sup> to create a rescue measure for producers with a licence. They can thus benefit from a  $k_{ECO}$  economic coefficient in line with the reference rate of return set by the Walloon Government (see Chapter 2).

The conditions to be met in order to benefit from the measure are as follows:

1. The green electricity generation installation must be an agricultural biomethanisation installation.  
NB: Within the framework of this rescue measure<sup>61</sup>, the CWaPE selected an exclusively technological criterion to specify the notion of agricultural biomethanisation: *"an installation designed to enable biomethanisation of agricultural materials (maize taken as reference input) at a normal rate under nominal operating conditions"*.
2. The green electricity generation installation must have a definitive licence prior to 1 July 2014.
3. The producer must demonstrate that the installation does not achieve the reference rate of return<sup>62</sup> in respect of the support scheme from which it benefits.

The value of the  $k_{ECO}$  coefficient applicable for these applications is that published by the CWaPE on 16 September 2014<sup>63</sup> for the BIOGAS - OTHER sector, i.e.:

#### **$k_{ECO}$ economic coefficient – BIOGAS - OTHER (CD-14i11-CWaPE)**

|   |     |
|---|-----|
| Net developable electrical capacity $\leq$ 1,500 kW | 3,5 |
| Net developable electrical capacity $>$ 1,500 kW    | 1,2 |

Based on the actual accounting data and a detailed business plan, the CWaPE determines a  $k_{ECO}$  economic coefficient specific to each installation having submitted a dossier in the context of the measure described above by following the methodology adopted for the setting of the  $k_{ECO}$  economic coefficients published on 16 September 2014. Sixteen dossiers were submitted of which thirteen in 2014<sup>64</sup>, one in 2015 and two in 2016. Two other applications were received in 2016.

<sup>58</sup> The Tenneville engineered landfill (EL) also has a biomethanisation unit. The biogas produced on-site from domestic waste comes from both the landfill and biomethanisation, without it being possible to distinguish between them. For the purposes of this report, it has been placed in the "Biogas - EL" category.

<sup>59</sup> For the purposes of this report, the Vanheede group's waste processing site in Quévy has been placed in the "biogas - agricultural" category due to the similarity with the materials processed by the installations in this category.

<sup>60</sup> Article 15 *octies* (2) of the order of the Walloon Government of 30 November 2006 on the promotion of electricity generated from renewable energy sources or cogeneration

<sup>61</sup> Management committee meeting of 14 September 2014

<sup>62</sup> Annex 7 of the order of the Walloon Government of 30 November 2006

<sup>63</sup> See CD-14i11-CWaPE - Communication on the  $k_{ECO}$  coefficients applicable to the different green electricity generation sectors for the period from 1 July 2015 to 31 December 2015.

<sup>64</sup> A list of applicants and the related decisions is available at [www.cwape.be](http://www.cwape.be)

### 3.4.3.6. Liquid biomass

The liquid biomass sector is marginal because it mainly consists of very small-scale installations using rapeseed oil produced locally. This biomass satisfies the sustainability criteria established by the order of the Walloon Government of 30 November 2006 on the promotion of electricity generated from renewable energy sources or cogeneration.

## 3.5. Green electricity generation in relation to electricity supply

The electricity output of green certified installations based on the quantity of electricity supplied to third parties in Wallonia grew in relative terms and reached 25.0 % (23.7 % in 2015). The figure below shows the rise in green certified production in 2016 compared to this supply to third parties.

Over the period 2003-2016 the electricity generated from renewable energy sources in Wallonia increased from 2.5% to 19.4 % of supply to third parties. With regard to high-quality cogeneration (CHP-E), it increased from 4.5 % to 10.1 %<sup>65</sup>.

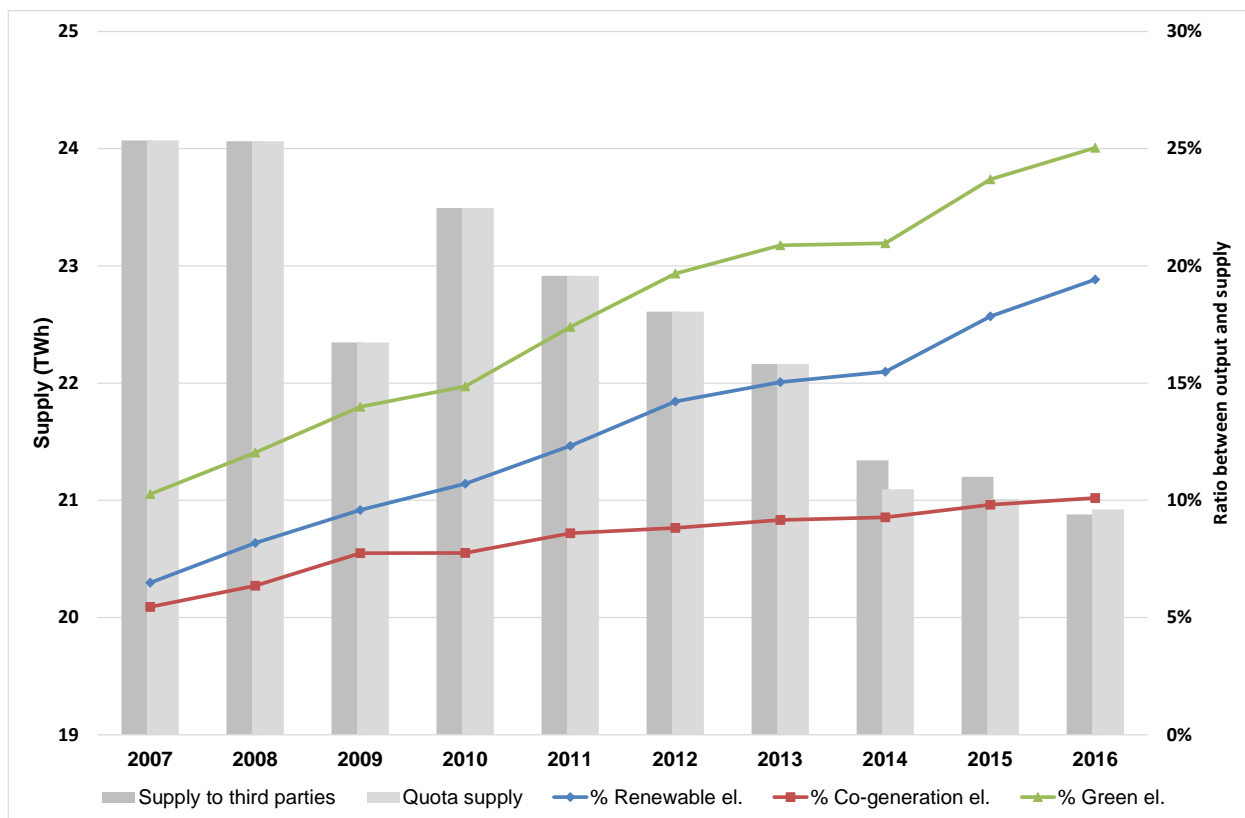
Because it translates the changes in the electricity market, the basis for comparison chosen is *supply to third parties*, defined as supply to end customers with the deduction of suppliers' own consumption (in particular the powering of nuclear and pumped storage power plants). Supply to third parties is separate from *supply subject to a quota* which, since 1 July 2014, uses supply to end customers without deducting suppliers' own consumption (exactly like green producers whose functional electricity drawn from the network is subject to a quota) nor conventional self-generated production, but excludes protected customers (see chapter 5).

The figure below shows the developments in the share of green electricity generation in electricity supply to third parties in Wallonia and compares the supply subject to a quota to the supply to third parties.

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<sup>65</sup>The total exceeded the electricity output of green certified installations because a portion of the green electricity was generated from renewable energy in high-quality cogeneration.

FIGURE 17 DEVELOPMENTS IN GREEN ELECTRICITY GENERATION COMPARED TO SUPPLY IN WALLONIA



### 3.6. Level of support by sector<sup>66</sup>

For all green electricity generation facilities, the effective average granting rate was 1.658 GC/MWh (1,679 GC/MWh in 2015). This high, yet still falling value can be attributed to the significant share of the photovoltaic sector in green certificate issuances, a logical result of the application of the multiplier coefficients scheme, the effects of which were still being felt, and to the measures to rescue biomass.

With an average purchase price in 2016 of EUR 65.33/GC (-0.9 % compared to 2015) for SOLWATT producers and EUR 68.24/GC (-2.7 %) for other producers (see Chapter 4), the average support is estimated at EUR 110.50/MWh, which is a decrease of approximately 3.6 % compared to 2015 (EUR 114.66/MWh).

The table below provides the values for the average level of support by sector in 2016.

<sup>66</sup>The figures for the year before were adjusted to take account of changes made pursuant to production corrections, dossiers which were submitted late, incomplete or rectified and an improved estimate of solar power generation taking into account the observed performance of the facilities.

TABLE 25

AVERAGE LEVEL OF SUPPORT PER SECTOR IN 2016 (GC MARKET PRICE IN ITALICS - SEE CHAPTER 4)

| Sectors                    | Average granting rate | Average price to the producer | Average level of support |
|----------------------------|-----------------------|-------------------------------|--------------------------|
|                            | GC/MWh                | EUR/GC                        | EUR/MWh                  |
| <b>Solar</b>               | 5,719                 | 67,15                         | 383,99                   |
| Solwatt solar              | 6,514                 | 65,33                         | 425,54                   |
| Qualiwatt solar            | 0,000                 | 0,00                          | 168,43                   |
| Solar > 10 KW              | 3,447                 | 68,24                         | 235,81                   |
| <b>Hydraulic power</b>     | 0,397                 | 68,24                         | 27,10                    |
| <b>Wind</b>                | 1,000                 | 68,24                         | 68,22                    |
| <b>Biomass</b>             | 1,489                 | 68,24                         | 101,61                   |
| Biogas - EL                | 1,103                 | 68,24                         | 75,25                    |
| Biogas - WWTP              | 1,031                 | 68,24                         | 70,34                    |
| Biogas - agricultural      | 2,762                 | 68,24                         | 188,45                   |
| Bioliquid                  | 1,554                 | 68,24                         | 106,05                   |
| Solid - wood pellets       | 1,417                 | 68,24                         | 96,67                    |
| Solid - wood other         | 1,272                 | 68,24                         | 86,83                    |
| Solid - other              | 1,887                 | 68,24                         | 128,80                   |
| <b>Fossil cogeneration</b> | 0,103                 | 68,24                         | 7,03                     |
| Gas co-generation          | 0,094                 | 68,24                         | 6,40                     |
| Biogas - co-combustion     | 1,030                 | 68,24                         | 70,31                    |
| <b>Average</b>             | <b>1,633</b>          | <b>67,66</b>                  | <b>110,50</b>            |

This table illustrates in particular the ability of the Walloon green certificate mechanism to adjust the level of support for green electricity based both on the CO<sub>2</sub> savings rate achieved and the additional generation costs for each sector. This average support can therefore be directly compared with a *feed-in premium* system; a comparison with a *feed-in tariff* system, however, requires the addition of the selling price of the electricity to the values set out above.

Levels of support are highest for the solar power sector, followed by the biomass, wind power, hydropower and finally the natural gas fossil cogeneration sectors.

The average support granted for photovoltaic installations of less than 10 kW is clearly falling: on one hand, the Solwatt mechanism is no longer accepting new dossiers while the gradual reduction in the number of green certificates per MWh for scaled down schemes is starting to be felt; on the other, the Qualiwatt mechanism in effect provides for a revision of the support granted every 6 months. The average support for photovoltaic installations of more than 10 kW is also falling.

For the biomass sector, agricultural biomethanisation installations and those that use solid fuels other than wood benefit from the highest level of support. The lowest level of support is for co-combustion installations and wood pellets. This support varies from one year to another based on the performance of the installations.

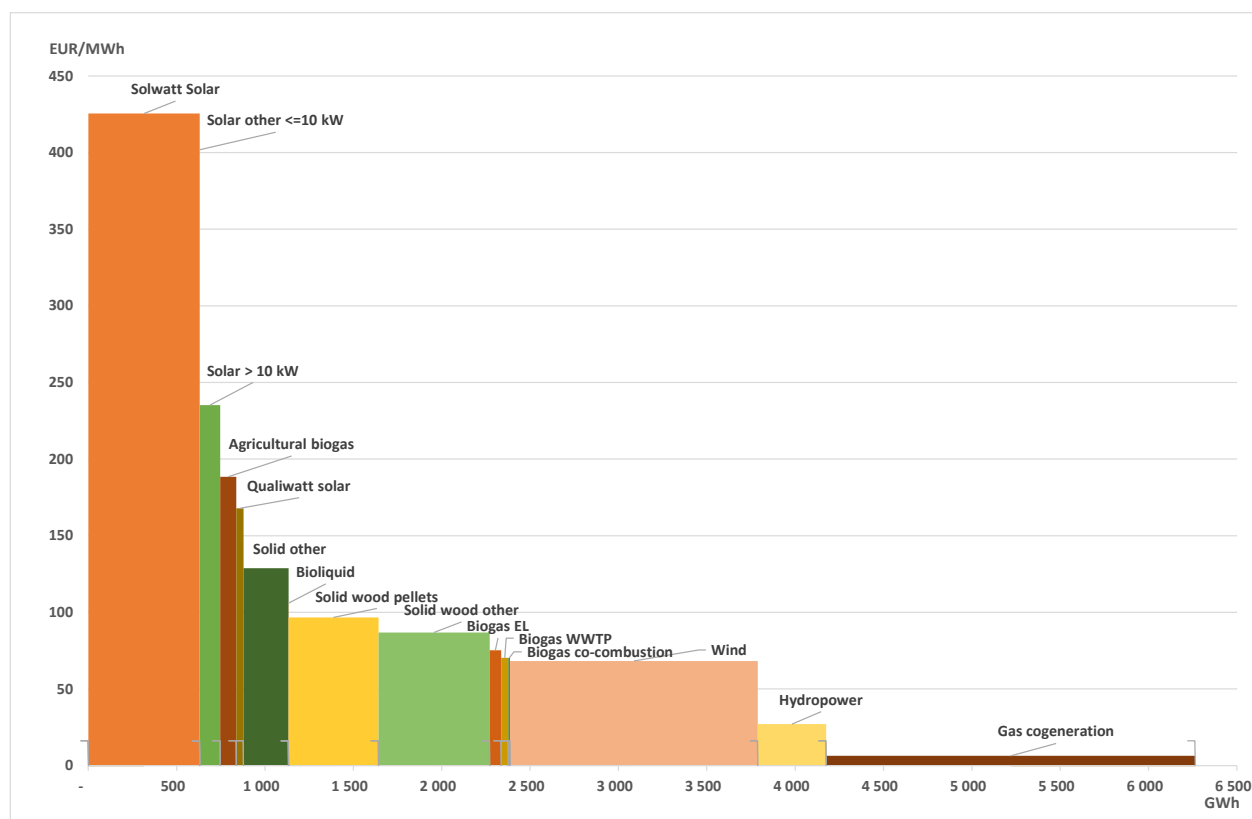
A lower level of support for the hydropower sector compared to wind power can be explained by the application of a reducing coefficient for legacy installations (see Chapter 2).

The level of support for the natural gas cogeneration sector can be explained by a CO<sub>2</sub> savings rate that is lower than for biomass installations, as well as by the limitation of support to the first tranche of 20 MW of installed capacity.

The graph below shows the cost of the different sectors in terms of the electricity generated in 2016. In this figure, the surface area of each rectangle corresponds to the cost of the sector, the height to the unit cost of support and the base to electricity production. Over 78 % of the green electricity generated in 2016 benefited from a level of support

under EUR 100/MWh. The 3 green sectors with the lowest cost are gas cogeneration, hydropower and wind power. They generated more than half the green electricity last year and saw their capacity increase.

**FIGURE 18**      *LEVEL OF SUPPORT VS GREEN ELECTRICITY GENERATED – 2016*



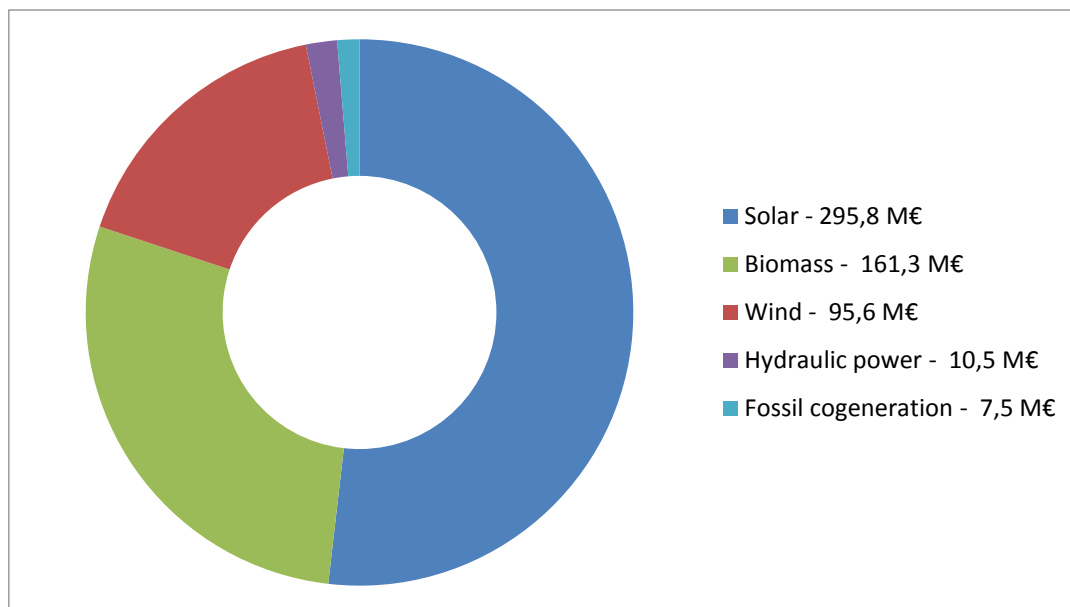
The table below shows the total level of support in decreasing order excluding compensation by sector. These costs were obtained by multiplying, for each sector, the average level of support by the quantity of electricity generated. In total, support for green electricity generation is estimated at EUR 577.7 M for 2016 (+0.3%).

**TABLE 26** *BREAKDOWN OF COST OF MECHANISM BY SECTOR – 2016 (EUR M)*

| Sectors                      | 2015<br>EUR M | 2016<br>EUR M | Variation<br>% |
|------------------------------|---------------|---------------|----------------|
| Solwatt solar                | 298.1         | 268.5         | -10%           |
| Wind                         | 105.9         | 95.6          | -10%           |
| Solid - wood other           | 52.2          | 54.6          | +5%            |
| Solid - wood pellets         | 19.4          | 49.2          | +154%          |
| Solid - other                | 26.1          | 32.8          | +26%           |
| Solar > 10 KW                | 27.4          | 27.2          | -1%            |
| Biogas - agricultural        | 17.4          | 17.1          | -2%            |
| Hydropower                   | 8.7           | 10.5          | +21%           |
| Qualiwatt solar              | 3.7           | 7.0           | +89%           |
| Gas co-generation            | 8.2           | 6.7           | -18%           |
| Biogas - EL                  | 5.0           | 4.9           | -3%            |
| Biogas - WWTP                | 1.7           | 2.8           | +67%           |
| Gas cogeneration with biogas | 2.1           | 0.7           | -65%           |
| Solar - other > 10 KW        | 0.06          | 0.04          | -40%           |
| Bioliquid                    | 0.01          | 0.00          | -73%           |
| OVERALL                      | 575.9         | 577.7         | +0.3%          |

The graph below shows the contribution of each sector to the total cost of the green certificate mechanisms and QUALIWATT. It can be seen that the photovoltaic sector still accounts for over half (52 %) of the total cost, a reduction in comparison to the previous year (57 %). The “OPEX-driven” sectors (fossil and biomass cogeneration) represent 29% of the total cost of the mechanism while they generate 51% of green electricity.

**FIGURE 19** *BREAKDOWN OF COST OF SUPPORT MECHANISMS BY SECTOR – 2016*



## 4. GC MARKET

### 4.1. Granting of GCs

#### 4.1.1. Developments over the period 2003-2016

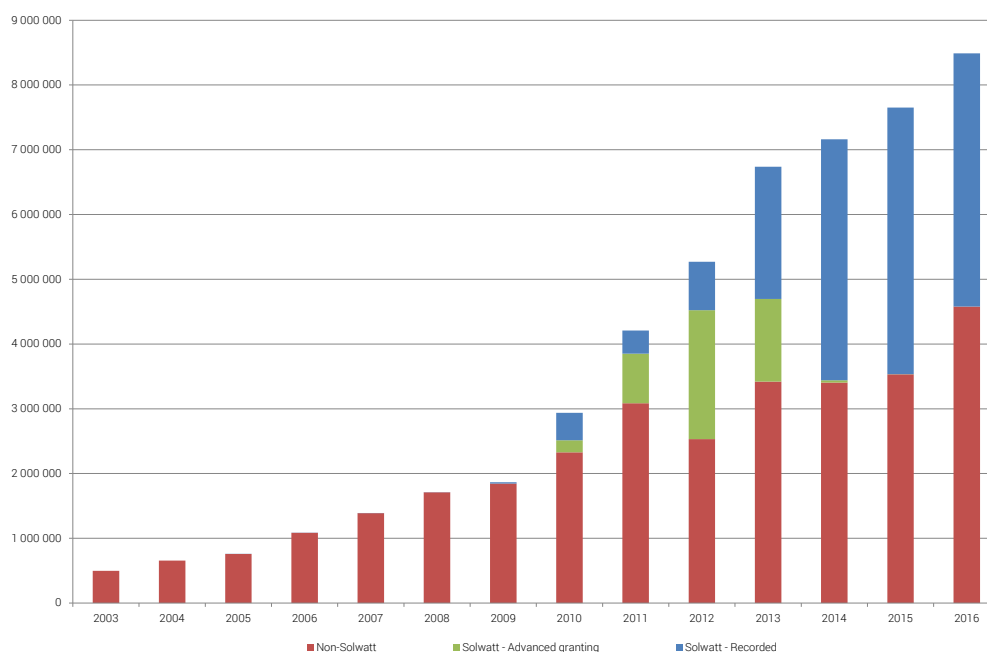
Until 2009, issuances<sup>67</sup> of GCs mainly concerned installations with a capacity above 10 kW. With the introduction of a multiplier factor for photovoltaic installations with a capacity less than or equal to 10 kW, the SOLWATT sector has accounted for an increasingly significant share in the total number of GCs issued in the Walloon Region.

While the SOLWATT sector only accounted for approximately 20% of total GC issuances in 2010, it reached its highest level of almost 54% in 2015. In 2016, the SOLWATT sector only accounted for 46 % of total GC issuances. These issuances resulted from the readings submitted by producers.

The issuances relating to the readings submitted by SOLWATT producers accounted for approximately 2,045,000 GC in 2013, approximately 3,720,000 GC in 2014, over 4,115,000 GC in 2015 and approximately 3,909,000 GC in 2016. It should be noted that issuances relating to the readings submitted by producers for 2010, 2011 and 2012 were estimated<sup>68</sup> based on the average time frame for the reimbursement of the GCs granted in advance, taking into account the installed capacity and the average amount of sunshine recorded.

The number of GCs granted in advance has been negligible since 2014 due to the limitation of the eligibility for the measure of photovoltaic installations with a net capacity below or equal to 10 kW for which the reference date for determining the provisions used for granting GCs is before 19 July 2013.

**FIGURE 20** DEVELOPMENTS IN NUMBER OF GC ISSUED OVER THE PERIOD 2003-201



<sup>67</sup> Issuance: the number of GCs granted and then deposited in the producers' accounts which then become available for sale on the market.

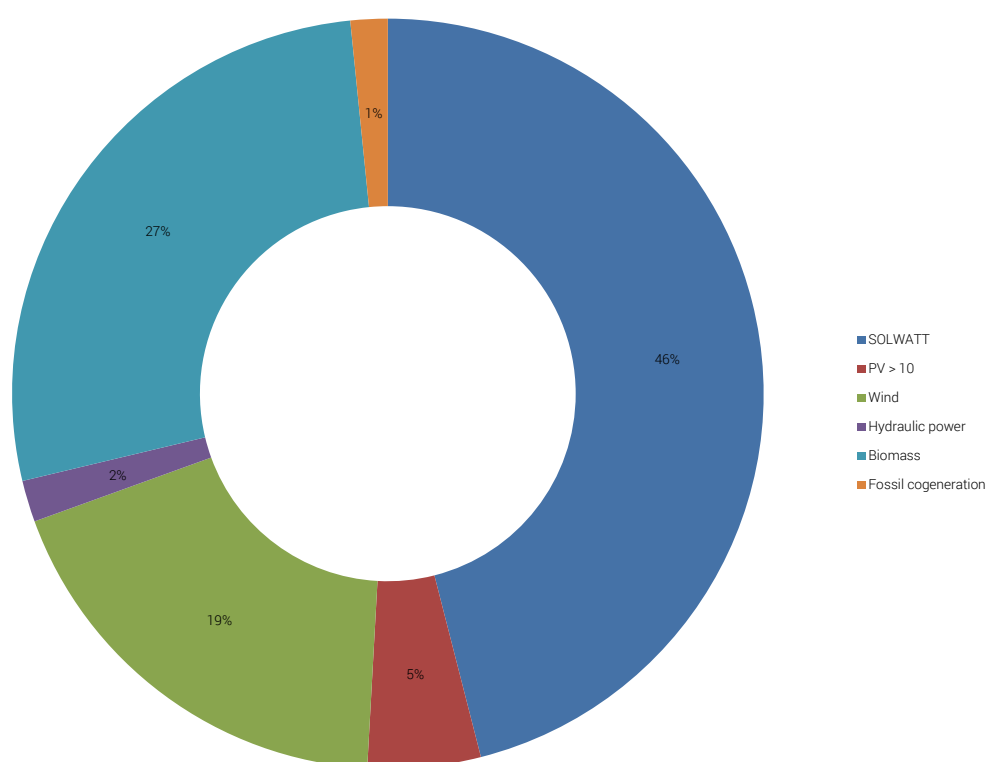
<sup>68</sup> Until mid-2012, the statistics available to the CWaPE did not make it possible to distinguish, for generations sites having benefited from advance granting, between the GCs used, on the one hand, to reimburse the GCs granted in advance and, on the other, the GCs no longer used to reimburse the GCs granted in advance and therefore available for sale on the market ("issuances"). An IT update made it possible to make this distinction and therefore avoid any need to make estimates for subsequent years.

In total, for the period 2003-2016, all sectors taken together, almost 50,400,000 GCs were granted, including over 30,800,000

GCs for installations above 10 kW (61 % of GCs granted) and almost 19,600,000 GCs for SOLWATT installations (39 % of GCs granted).

In 2016, approximately 8,487,000 GCs were issued. 54 % of GCs issued were from “non-SOLWATT” installations and 46 % were GCs issued subsequent to readings submitted by SOLWATT producers.

**FIGURE 21**      **BREAKDOWN BY SECTOR OF GC ISSUED IN 2016**

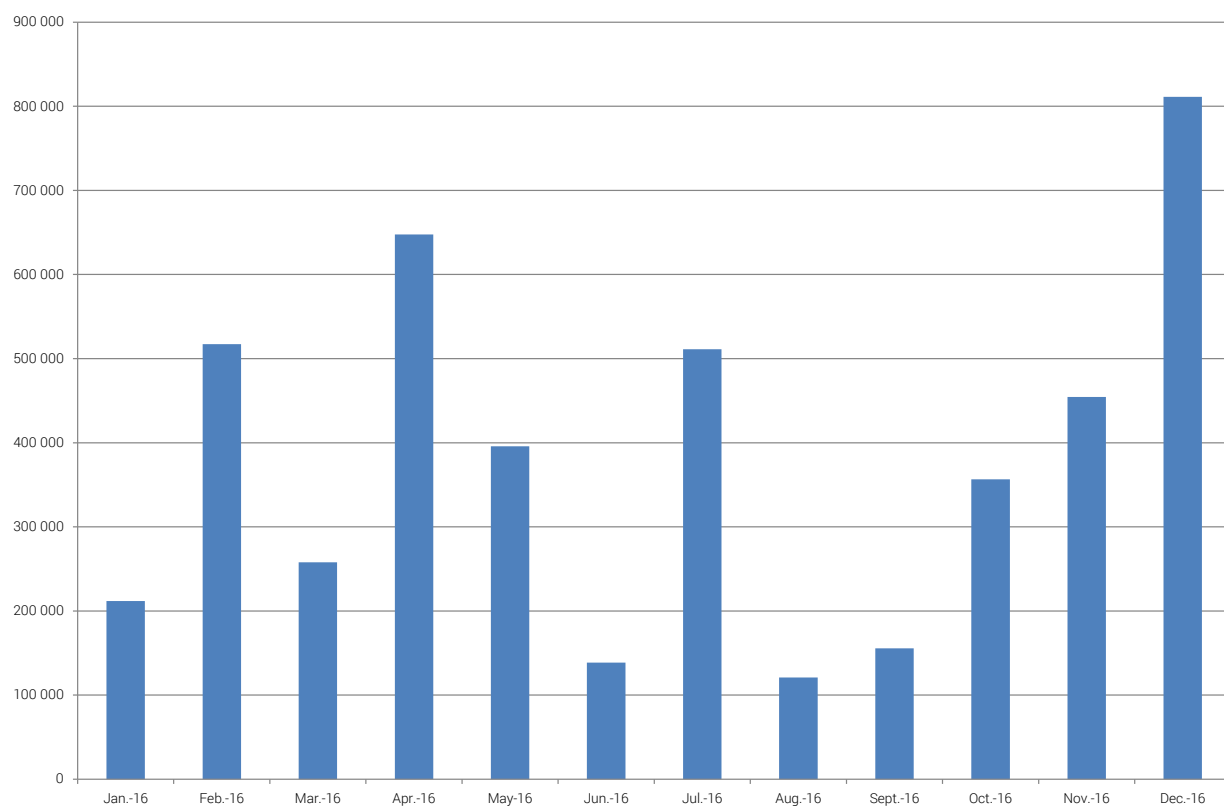


## 4.1.2. Developments in 2016

### 4.1.2.1. Sites generating more than 10 kW

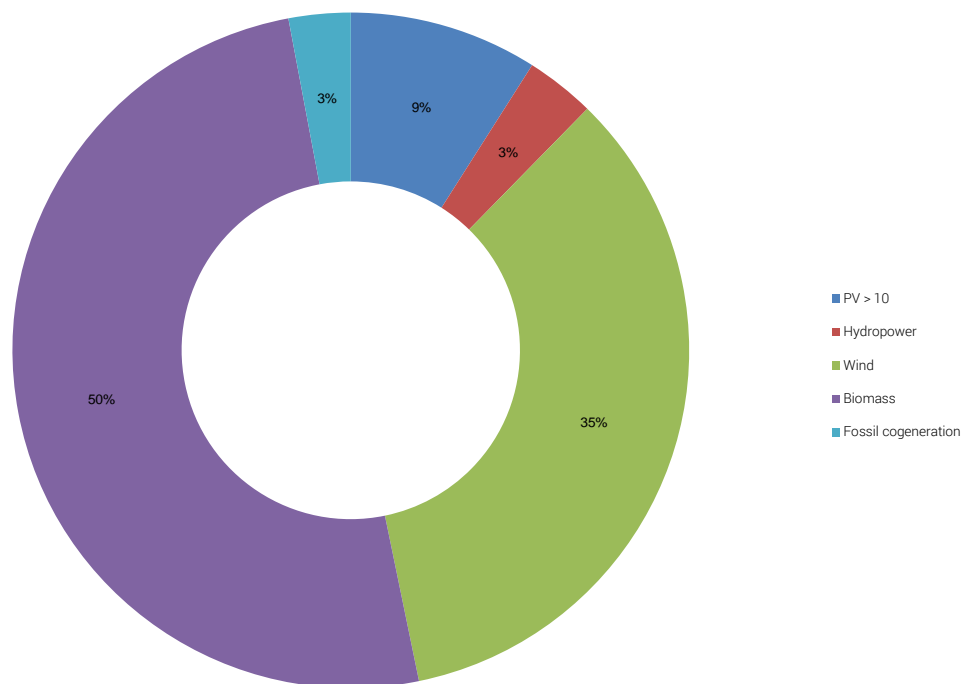
In 2016, more than 1,250 generation readings were transmitted on a quarterly basis on average to the CWaPE. In total, approximately 4,578,000 GCs were granted on the basis of these readings in 2016.

**FIGURE 22** GC GRANTED TO INSTALLATIONS GENERATING MORE THAN 10 KW IN 2016



As illustrated in the graph below, the share of GCs granted to generation sites in the biomass and wind sectors alone accounted for approximately 85 % of the GCs granted to sites generating more than 10 kW in 2016.

**FIGURE 23** GC GRANTED TO INSTALLATIONS GENERATING MORE THAN 10 KW IN 2015 - BREAKDOWN BY SECTOR



The average processing time for GC granting was still approximately three months depending on the complexity of the installation and the checks required by the legislation (record of inputs, calculation of effective CO<sub>2</sub> savings rate, reasonable recovery of heat, etc.).

All photovoltaic installations have, since 2013, gradually been able to benefit from IT developments aimed at giving producers access to the system for the online inputting of readings, as is the case for the approximately 120,000 installations with a capacity below or equal to 10 kW. Following a running-in period in 2013, the online inputting system became fully operational in 2014 by in particular making possible the online activation of sales of GCs to Elia at the guaranteed price of EUR 65/GC while integrating the specific constraints relating to the limited period of this purchase guarantee (period calculated by the CWaPE on a case-by-case basis; see next section).

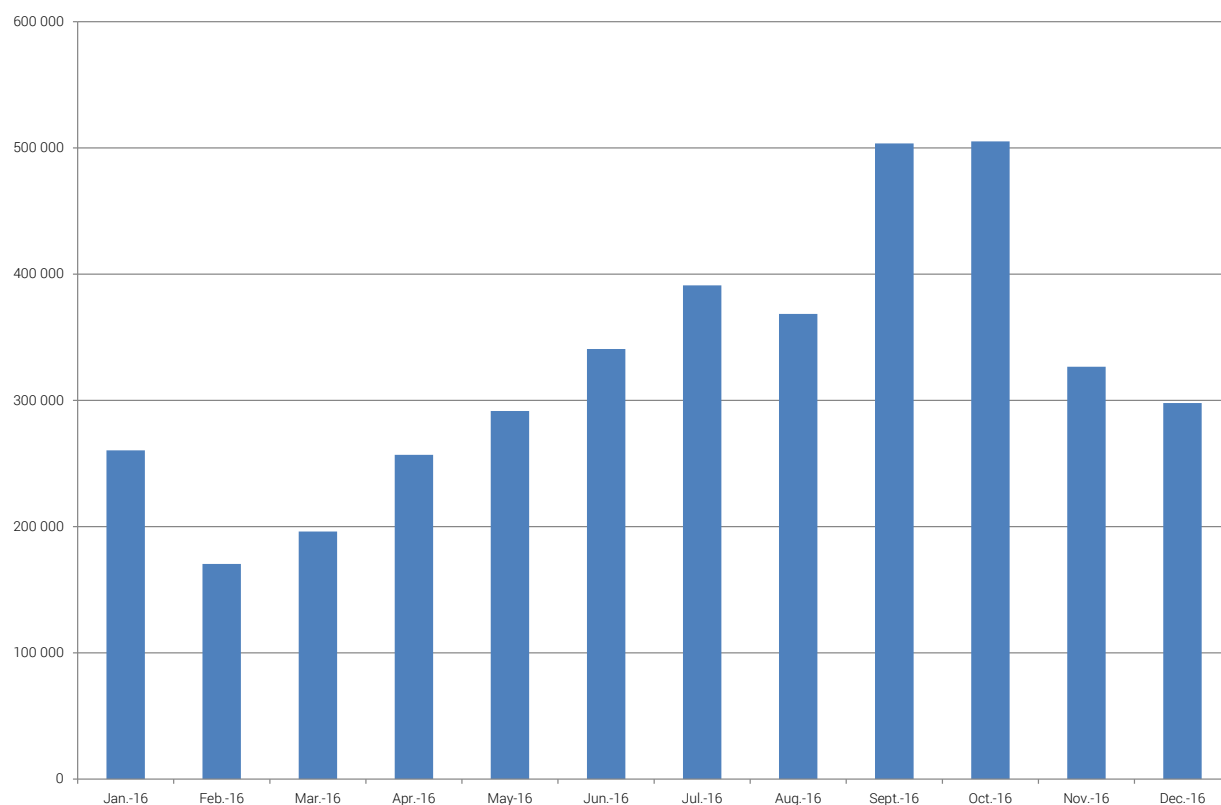
#### 4.1.2.2. Sites generating less than 10 kW

##### *Photovoltaic installations*

SOLWATT producers submitted almost 268,000 readings in 2016. Based on these readings, following the deduction of the GCs set aside and used to first reimburse the advance granting, approximately 3,909,000 GCs were issued and deposited in these producers' accounts.

The mechanism for the advance granting of GCs, introduced in the wake of the abolition of the SOLWATT incentives, was put in place in June 2010. The number of GCs granted in advance corresponded to the number of GCs expected for an installation during its first five years of operation. This amount was capped at 40 GCs. In July 2013, advance granting was terminated for new photovoltaic installations.

**FIGURE 24** GC GRANTED TO SOLWATT INSTALLATIONS IN 2016



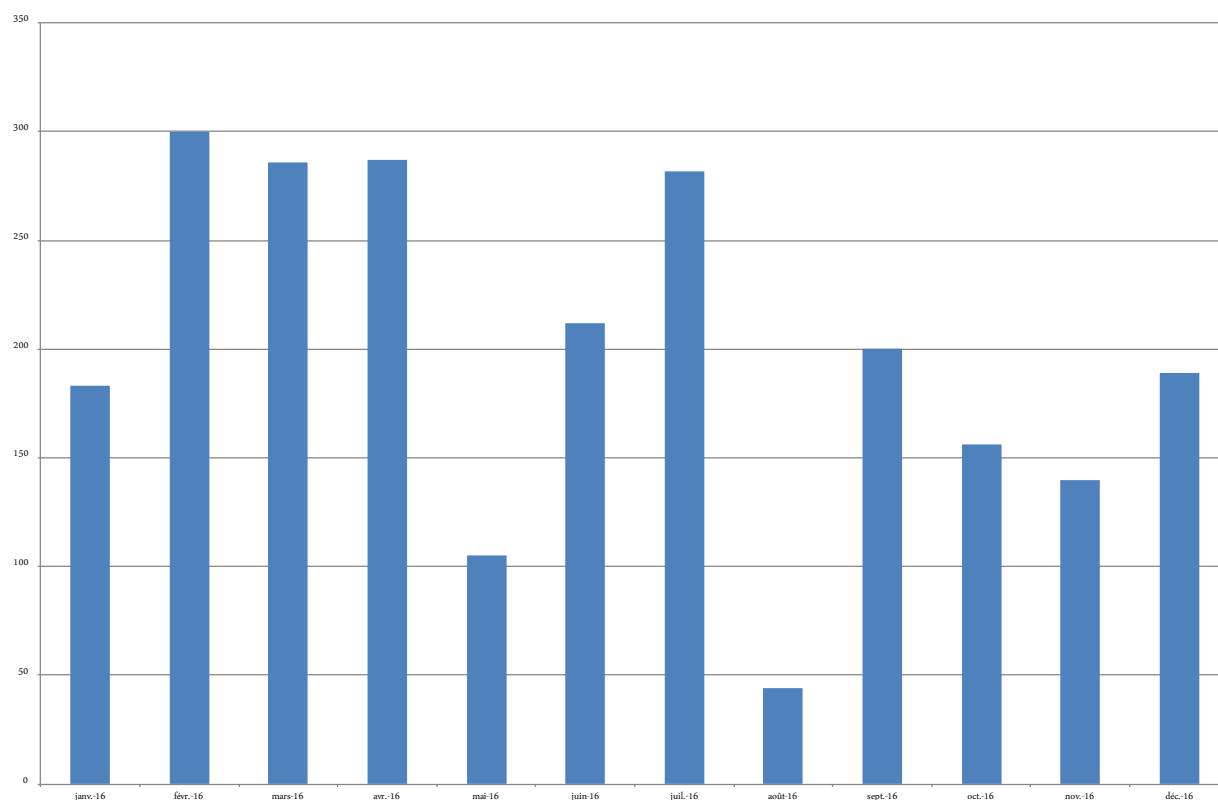
The CWaPE extranet service made available to SOLWATT producers enables the online inputting of production readings. Producers have to input their readings each quarter. The number of readings input was on average 735 per day, with peaks of up to 2,500 per day.

The rate of activity, i.e. the ratio between the number of SOLWATT producers who submitted a production reading for year n and those who did not, was 91 % for 2016. The highest rate of inactivity is observed for installations commissioned in 2012 (approximately 3,700 installations).

### *Other sectors*

In 2016, approximately 2,400 GCs were granted to non-photovoltaic installations of less than 10 kW. It can be seen that this number of GCs is negligible compared to the total number of GCs granted to SOLWATT installations and installations generating more than 10 kW.

**FIGURE 25** GC GRANTED TO NON-PHOTOVOLTAIC INSTALLATIONS GENERATING LESS THAN 10 KW IN 2016



## 4.2. Sale of GCs

### 4.2.1. GC transactions

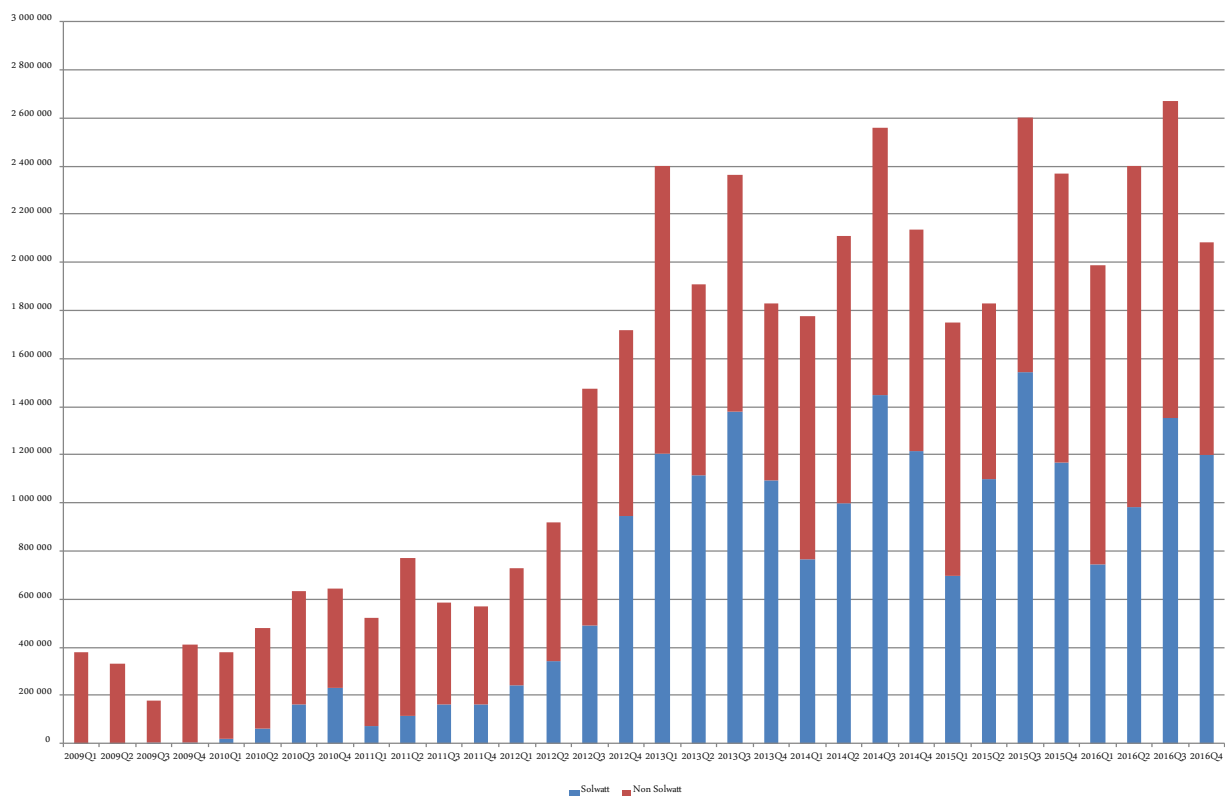
The period 2013 to 2016 was characterised by a significant number of transactions, mainly attributable to the high number of small-scale producers who sold GCs granted based on readings submitted via the CWaPE extranet service.

**TABLE 27** *DEVELOPMENTS IN TRANSACTIONS OVER THE PERIOD 2009-2016*

| Years | Solwatt      |           | Non-Solwatt  |           | Overall market |           |
|-------|--------------|-----------|--------------|-----------|----------------|-----------|
|       | Transactions | GC volume | Transactions | GC volume | Transactions   | GC volume |
|       | Number       | Number    | Number       | Number    | Number         | Number    |
| 2009  | 364          | 9 770     | 329          | 1 287 921 | 693            | 1 297 691 |
| 2010  | 20 697       | 468 909   | 475          | 1 670 449 | 21 172         | 2 139 358 |
| 2011  | 16 666       | 512 225   | 569          | 1 931 292 | 17 235         | 2 443 517 |
| 2012  | 63 154       | 2 020 503 | 1 167        | 2 824 108 | 64 321         | 4 844 611 |
| 2013  | 188 881      | 4 792 070 | 1 357        | 3 709 894 | 190 238        | 8 501 964 |
| 2014  | 233 111      | 4 421 627 | 1 994        | 4 158 849 | 235 105        | 8 580 476 |
| 2015  | 241 615      | 4 508 679 | 2 828        | 4 034 511 | 244 443        | 8 543 190 |
| 2016  | 226 230      | 4 275 398 | 3 204        | 4 862 699 | 229 434        | 9 138 097 |

In 2016, there were over 229,000 transactions totalling approximately EUR 611 M (excl. VAT) identified. They represent a total volume of over 9,138,000 GC, i.e. approximately 108 % of the GCs issued in 2016.

**FIGURE 26** *QUARTERLY DEVELOPMENTS IN NUMBER OF GC SOLD OVER THE PERIOD 2009-2016*



Based on the figure above, it can be seen that the GCs sold originating from the SOLWATT sector accounted for an increasing share of the GCs sold over the period 2009-2015 with, however, a reduction observed in 2016. Specifically, almost 53% of the number of GCs sold in 2016 came from the Non-SOLWATT sector.

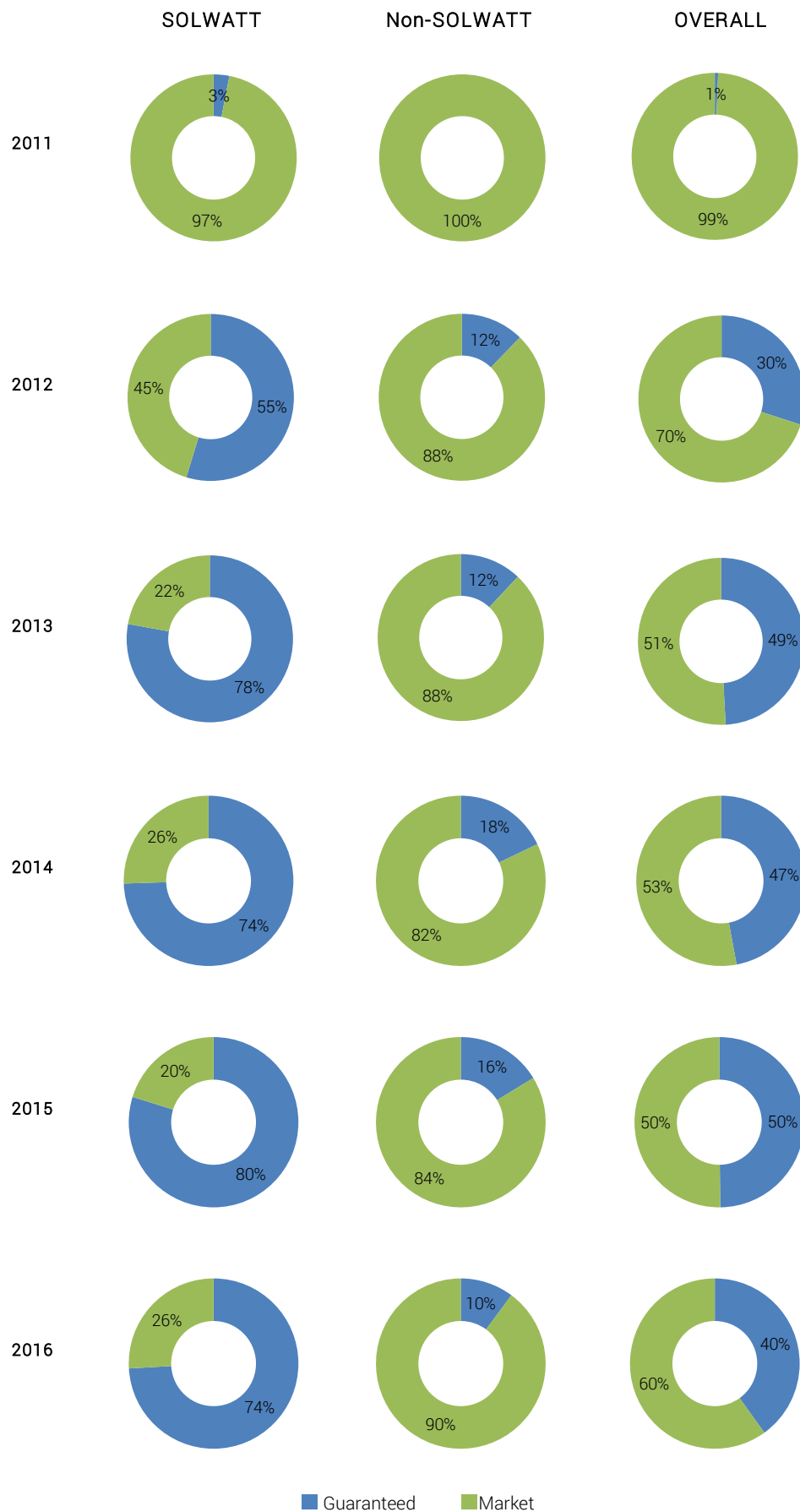
#### 4.2.2. Sales options for GCs

Producers have the option of selling their GCs on the market or at the guaranteed price. The choice of the guaranteed price is made at the time of the submission of the readings and is automatically available to installations with a capacity less than or equal to 10 kW. As regards advance granting, the decision to opt for the guaranteed price or for the sale of GCs on the market can be made by the green electricity producer throughout the period of validity of the GCs, i.e. 5 years.

By way of reminder, for installations generating more than 10 kW subject to the old scheme, in order to benefit from the purchase guarantee provided by the local transmission system operator (LTSO), Elia, the green producer is required to submit an application to the authorities. The period of validity of the purchase obligation is determined by the CWaPE based on a methodology it publishes. It should be noted that, for installations subject to the GC allocations and reservation scheme, the GC purchase obligation is 10 or 15 years depending on the sector and no longer requires a specific application.

The figure below illustrates developments in the share of GCs sold on the market or at the guaranteed price over the period 2011-2016. The SOLWATT sector stands out from the other sectors.

FIGURE 27 SALE OF GC - MARKET VS LTSO GUARANTEED PRICE

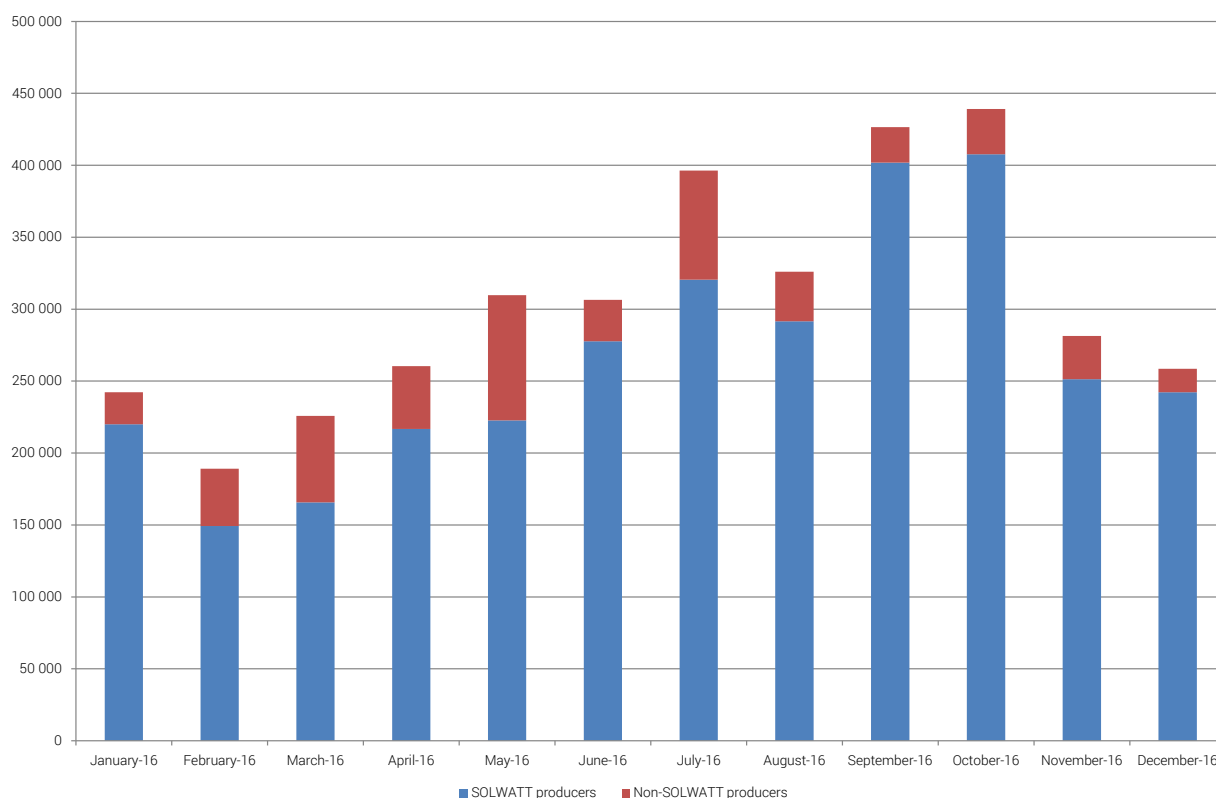


There was high use of the guaranteed price system organised through the local transmission system operator (Elia) for the SOLWATT sector: 3% of sales in 2011, almost 80% in 2015 and 74 % in 2016. For non-SOLWATT sectors there were no sales at the guaranteed price in 2011, followed by approximately 12% of sales for 2012 and 2013, nearly 16 % in 2015 and approximately 10 % in 2016. In the market as a whole ("Overall"), sales at the guaranteed price accounted for almost half of sales in 2013, 2014 and 2015 and approximately 40 % in 2016.

In total, over 3,661,000 GCs were sold to Elia in 2016, of which approximately 3,167,000 GCs were granted to SOLWATT producers, so approximately 86% of the GCs sold to Elia in 2016, with the remaining 494,000 GCs coming from installations above 10 kW.

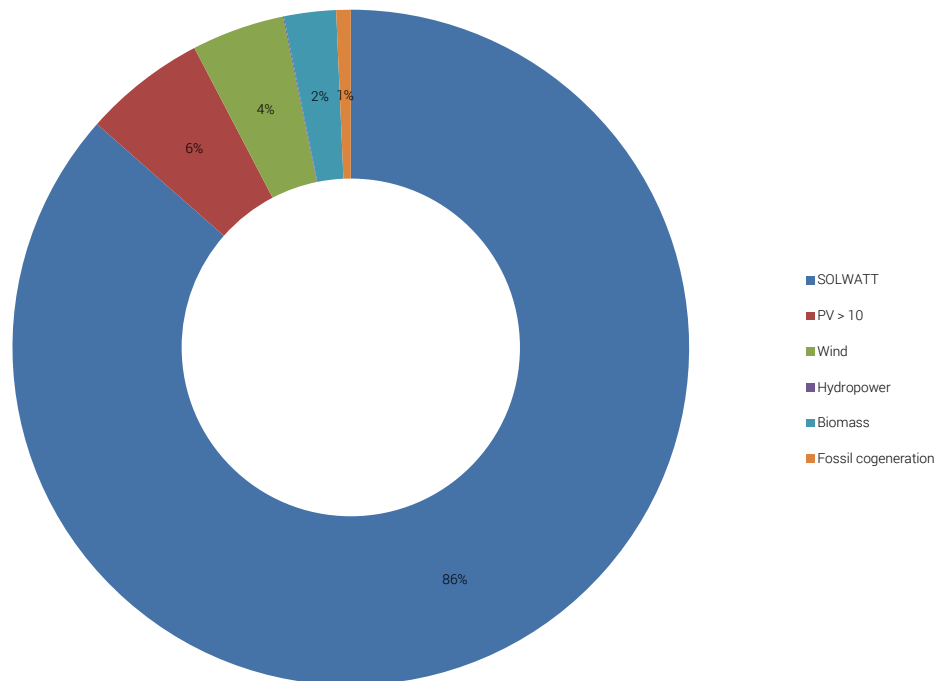
The figure below shows developments in the number of GCs sold to Elia in 2016.

**FIGURE 28** MONTHLY DEVELOPMENTS IN NUMBER OF GC SOLD TO THE LTSO (ELIA) AT GUARANTEED PRICE OF 65 EUR/GC (EXCL. VAT)



The huge surge in sales to Elia by producers is creating a significant additional workload for the CWaPE and Elia, which have had to implement cooperation and monitoring procedures so as to ensure the proper execution of payments.

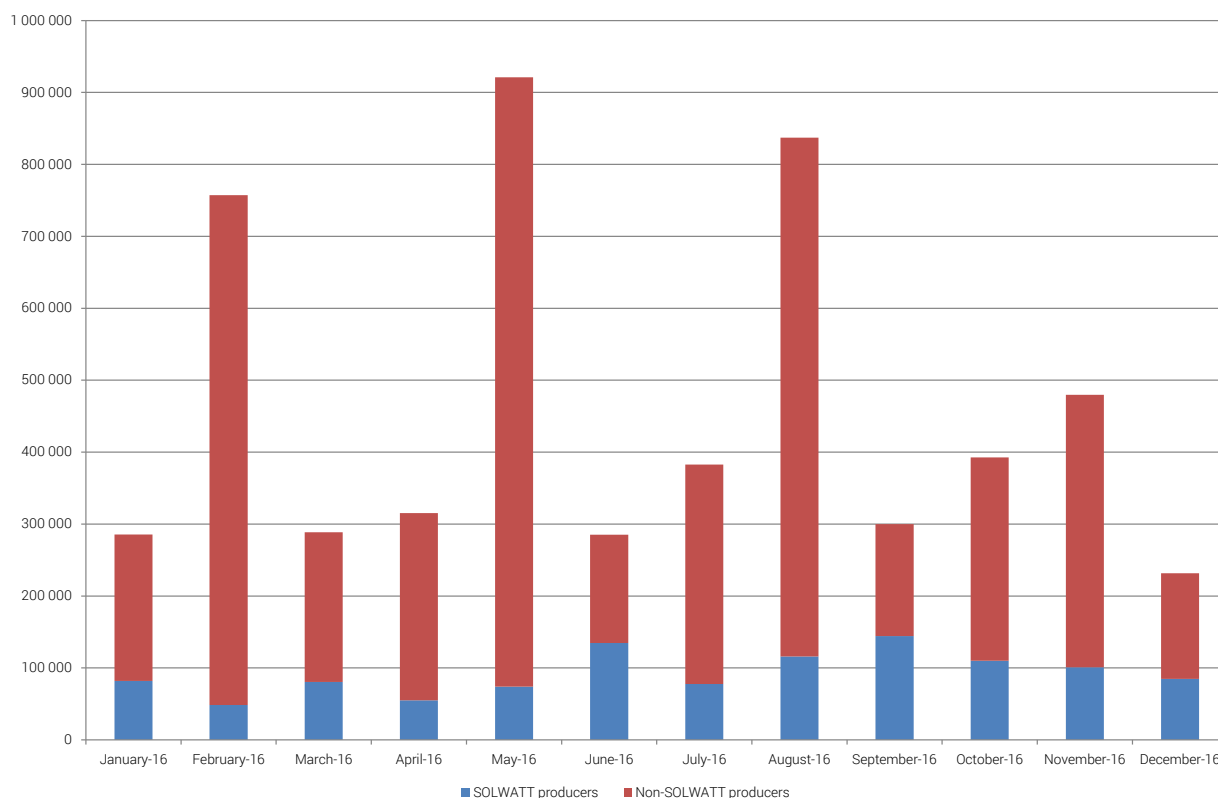
**FIGURE 29** GC SOLD TO ELIA AT GUARANTEED PRICE OF EUR 65/GC (EXCL. VAT) IN 2016 – BREAKDOWN BY SECTOR



Approximately 5,600 GCs were sold at the federal guaranteed price (EUR 150/MWhe-RES) via the transmission system operator (Elia) and the vast majority of these were the GCs granted to installations above 10kW. This federal guaranteed price was activated, on the one hand, by SOLWATT producers with an installation for which the installed peak capacity is over 10 kWc and which benefit from a granting rate of 1 GC/MWh for production relating to the tranche of capacity above 10 kWc and, on the other hand, by producers with photovoltaic installations above 10 kW for which the installed peak capacity is over 250 kWc and which therefore benefit from a granting rate of 1 GC/MWh for production relating to the tranche of capacity above 250 kWc. The Royal Decree of 16 July 2002 was amended on 21 December 2012 and henceforth limits this federal GC purchase guarantee to the offshore wind power sector, photovoltaic installations commissioned before 1 August 2012 and installations generating electricity from water or tides.

The figure below illustrates developments in the number of GCs sold on the market in 2016. It shows quarterly developments relating to the granting of GCs for installations generating more than 10 kW ("Non-SOLWATT").

**FIGURE 30** MONTHLY DEVELOPMENTS IN NUMBER OF GC SOLD ON THE MARKET



It can also be seen that sales on the market are dominated by GCs from sectors other than the SOLWATT sector. In total, approximately 5,476,000 GCs were sold on the market in 2016, 4,368,000 of which came from installations generating more than 10 kW (80% of sales on the market) and 1,108,000 from SOLWATT installations (20%).

In summary, of the total number of GCs sold in 2016, 40 % were sold at the guaranteed price to the local transmission system operator (Elia) and 60 % were sold on the market. Of the total number of GCs sold at the guaranteed price, 86 % came from the SOLWATT sector. Moreover, of the total number of GCs sold on the market, 80 % came from installations generating more than 10 kW.

#### 4.2.3. Price developments

Since June 2013, each month the CWaPE has published the average price paid to producers per green certificate in Wallonia while making a distinction between what is sold by SOLWATT producers and what is sold by other green electricity producers. An average price for all the sectors is also published ("Overall market").

The surplus of GCs on the market has resulted in a gradual drop in selling prices. These prices cover forward contracts concluded in the past (not affected by the current imbalance), new forward contracts (potentially affected by the current imbalance) and sales on the "spot" market. A sharper drop can therefore be seen in selling prices for SOLWATT producers, which do not for the most part have forward contracts and mostly sell to Elia at the minimum price guaranteed of EUR 65/GC (excluding VAT).

For other producers, the price drop is less marked. These prices are mostly still covered by forward contracts preceding the imbalance on the market. It can, however, be seen that since the end of 2013 this initial trend has tended to fade.

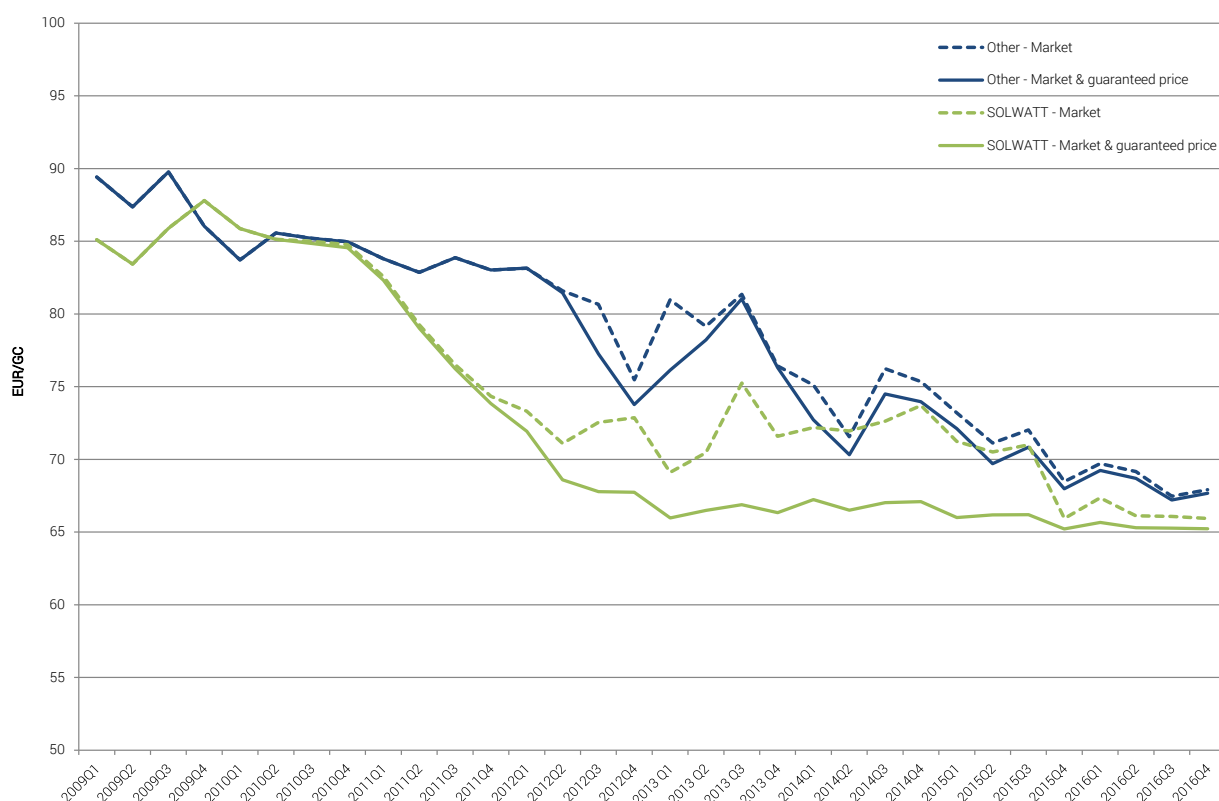
The table below indicates the values for transactions carried out in 2016. This is the price paid to green electricity producers for all types of GC sale transactions, whether on the *spot* market or on the basis of forward contracts. It shows the average price in the market on the one hand (all sales excluding those at the guaranteed price) and, on the other hand, the average price across all sales ("Market & guaranteed price").

**TABLE 28 AVERAGE PRICES FOR GC TRANSACTIONS IN 2016**

|        | Price to the producer |           |                  |                                     |              |           |                  |                                     |                |           |                  |                                     |
|--------|-----------------------|-----------|------------------|-------------------------------------|--------------|-----------|------------------|-------------------------------------|----------------|-----------|------------------|-------------------------------------|
|        | Solwatt               |           |                  |                                     | Non-Solwatt  |           |                  |                                     | Overall market |           |                  |                                     |
|        | Transactions          | GC volume | Average price    |                                     | Transactions | GC volume | Average price    |                                     | Transactions   | GC volume | Average price    |                                     |
|        | Number                | Number    | Market<br>EUR/GC | Market & guaranteed price<br>EUR/GC | Number       | Number    | Market<br>EUR/GC | Market & guaranteed price<br>EUR/GC | Number         | Number    | Market<br>EUR/GC | Market & guaranteed price<br>EUR/GC |
| 2016Q1 | 51 881                | 745 825   | 67,36            | 65,67                               | 769          | 1 242 613 | 69,71            | 69,24                               | 52 650         | 1 988 438 | 69,33            | 67,90                               |
| 2016Q2 | 56 030                | 980 551   | 66,12            | 65,30                               | 708          | 1 417 564 | 69,15            | 68,69                               | 56 738         | 2 398 115 | 68,63            | 67,30                               |
| 2016Q3 | 59 495                | 1 352 172 | 66,08            | 65,27                               | 821          | 1 316 262 | 67,46            | 67,21                               | 60 316         | 2 668 434 | 67,15            | 66,23                               |
| 2016Q4 | 58 824                | 1 196 850 | 65,93            | 65,23                               | 906          | 886 260   | 67,92            | 67,66                               | 59 730         | 2 083 110 | 67,39            | 66,26                               |
| 2016   | 226 230               | 4 275 398 | 66,29            | 65,33                               | 3 204        | 4 862 699 | 68,61            | 68,24                               | 229 434        | 9 138 097 | 68,14            | 66,88                               |

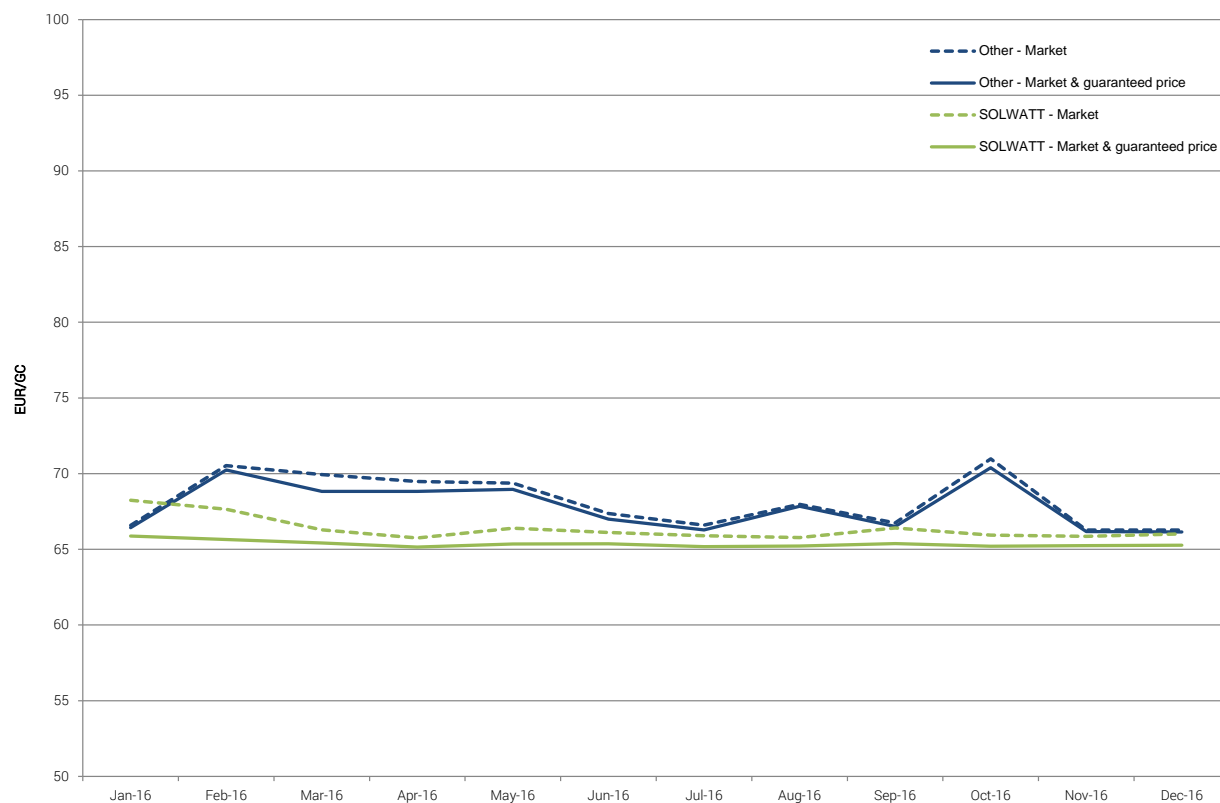
In 2016, the average unit price in the market (excluding guaranteed price) for all sectors was EUR 68.14, which is a drop of almost EUR 20 compared to the average price in 2009.

**FIGURE 31 QUARTERLY DEVELOPMENTS IN AVERAGE GC SELLING PRICE OVER THE PERIOD 2009-2015**



The monthly developments in the average green certificate selling price during 2016, as illustrated in the figure below, generally range from EUR 65/GC to EUR 70 /GC.

**FIGURE 32**      *MONTHLY DEVELOPMENTS IN AVERAGE GC SELLING PRICE IN 2016*



As regards the average green certificate selling price in the market, the "Overall" average price (all sectors taken together) fell from EUR 86/GC in the fourth quarter of 2009 to EUR 67/GC in the last quarter of 2016, which is a decrease of approximately EUR 19/GC in the space of 7 years. Looking at the "Overall" average price while taking into account sales at the guaranteed price, the decrease is approximately EUR 20/GC.

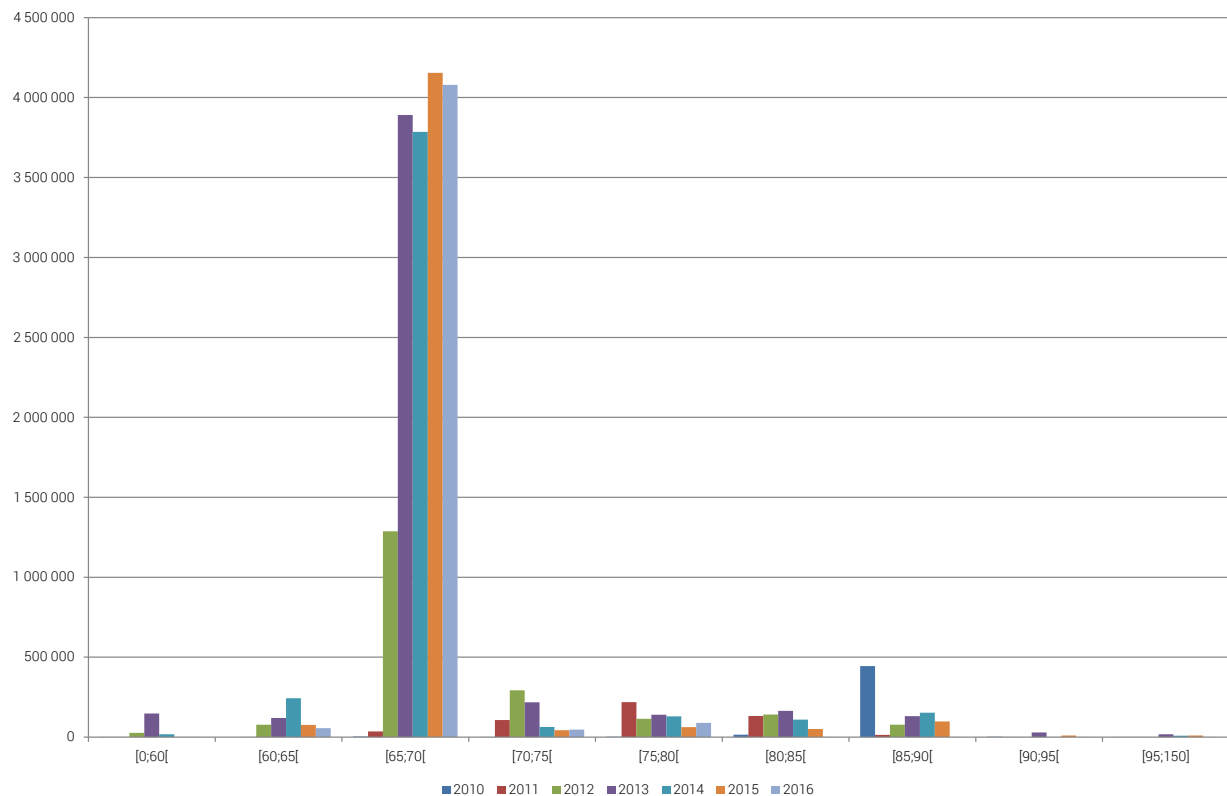
**FIGURE 33** *FALL IN AVERAGE GC SELLING PRICES OVER THE PERIOD 2009-2016*



#### 4.2.3.1. Photovoltaic sector generating less than 10 kW

As the figure below illustrates, the annual average values conceal a distinct variability in GC prices. In almost 78 % of cases, these were sold at a price of between EUR 65/GC and EUR 70/GC over the period 2010-2016.

**FIGURE 34** VARIABILITY IN "SOLWATT" GC SELLING PRICES OVER THE PERIOD 2010-2016



While in 2010 the mode<sup>69</sup> of transactions at EUR 85/GC dominated the market, a slide towards lower price intervals could be seen in 2011 and particularly in 2012. This trend has become more marked since 2013.

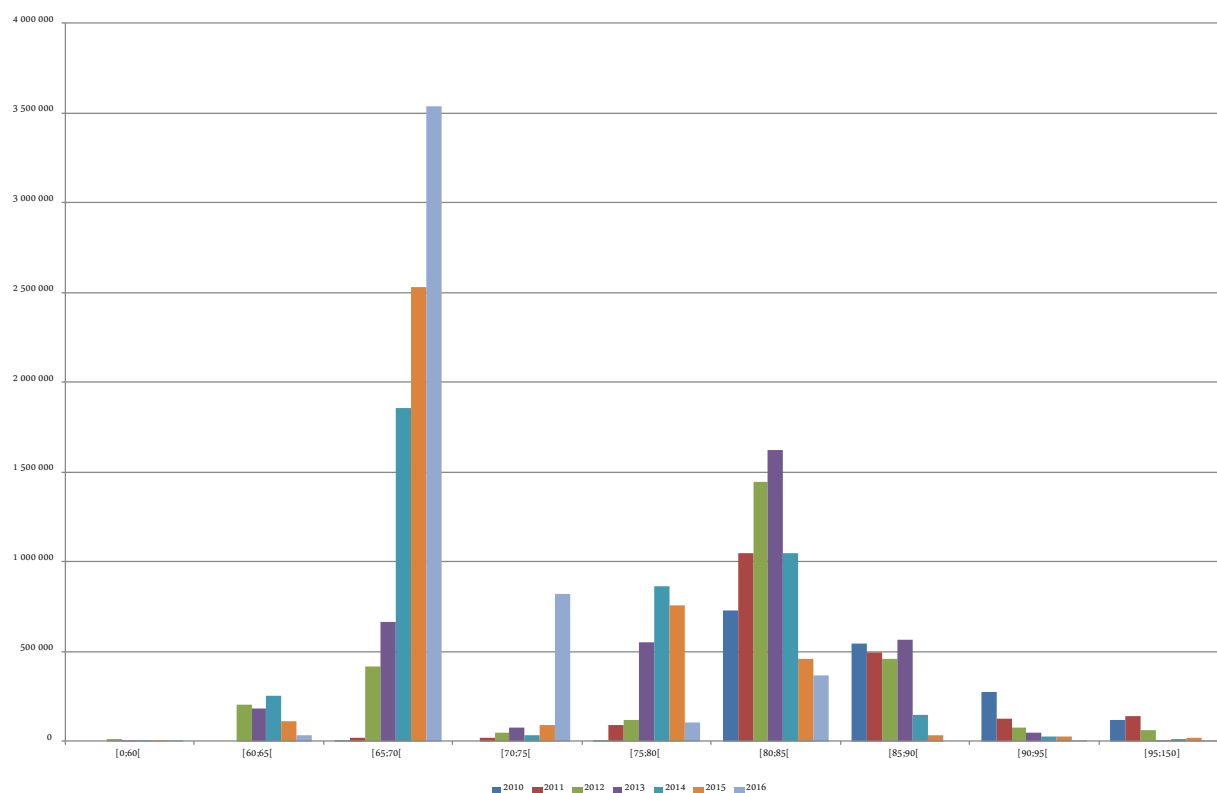
In 2016, approximately 88% of GCs were sold at a price of EUR 65/GC, while approximately 1 % were sold at a price below EUR 65/GC and, finally, 11 % were sold at a price above EUR 65/GC.

#### 4.2.3.2. Sectors generating more than 10 kW

A certain degree of variability in the price of GCs was also observed in the other sectors. Nevertheless, in approximately 58 % of cases these were sold at a price above or equal to EUR 70/GC over the period 2010-2016.

<sup>69</sup> In the statistical sense, mode means the most represented value of any variable within a given population; graphically, it corresponds to a peak.

**FIGURE 35** VARIABILITY IN "NON-SOLWATT" GC SELLING PRICES OVER THE PERIOD 2010-2016



As for the SOLWATT sector, a slide towards lower price intervals can be observed. However, since 2010, the majority of GC transactions have been carried out at a price of between EUR 80/GC and EUR 84/GC. The trend changed in 2014 since approximately 44% of GCs were sold at a price between EUR 65 and 70. This trend continued in 2015 with around 63 % of GCs sold at a price between EUR 65 and 70 and more in 2016 with approximately 73 % of GCs sold at a price between EUR 65 and 70.

Finally, while the number of GCs sold at a price below EUR 80/GC amounted to no more than 170 GCs in 2010 (0.01%), this figure increased significantly to reach approximately 790,000 GCs in 2012 (27.9%), almost 1,480,000 GCs in 2013 (approximately 40%), almost 3,000,000 GCs in 2014 (71%), over 3,494,000 GCs in 2015 (87%) and nearly 4,490,000 GCs in 2016 (92%).

### 4.3. Cancellation of GCs with a view to meeting the quota return obligation

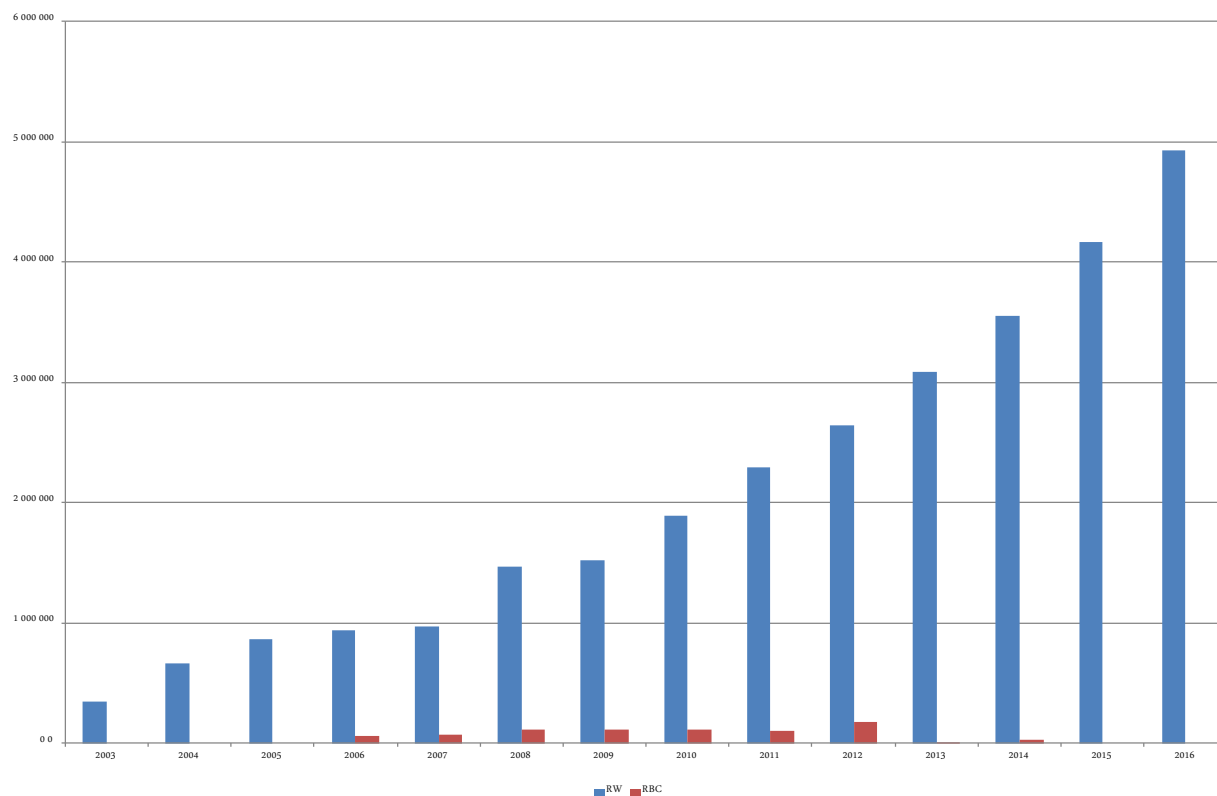
This section refers to the cancellation of GCs by suppliers and distribution system operators (DSO) with a view to meeting their quota obligation in the Walloon Region (WR).

Unlike the next chapter on the GC quotas applicable for 2016, this section is based solely on the effective date of the logging by the supplier or the DSO, in the CWaPE database, of the GC cancellation transaction specific to its quota.

As soon as the transaction is logged in the CWaPE database, the GCs relating to that transaction are no longer available on the market.

The figure below shows developments in the cancellation of GCs over the period 2003-2016 based on the transaction cancellation logging date.

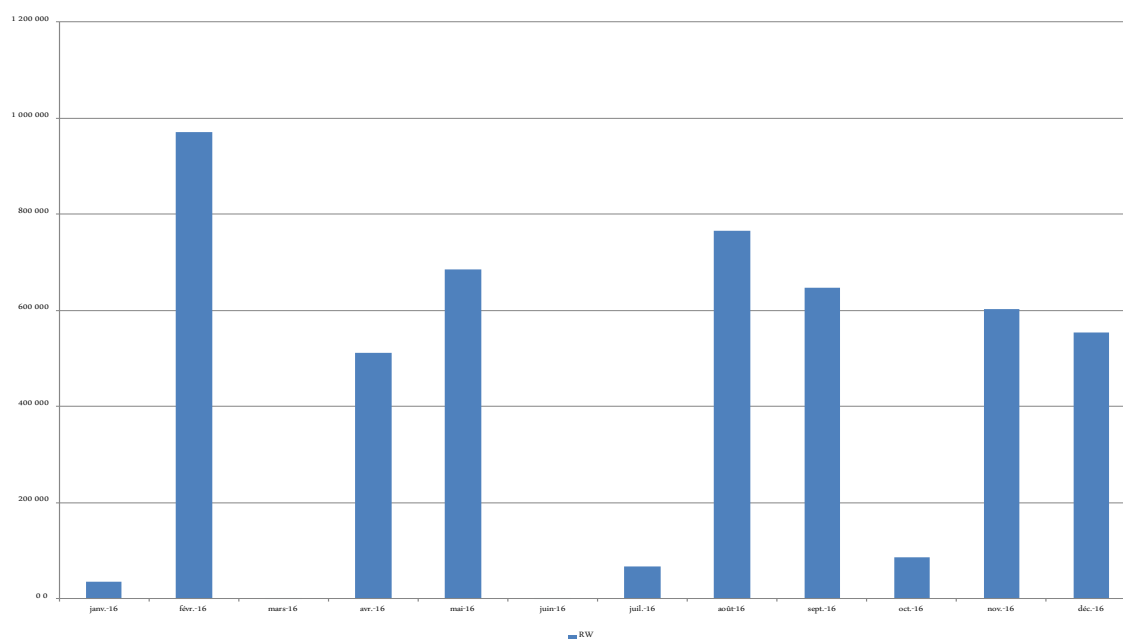
**FIGURE 36** *DEVELOPMENTS IN CANCELLATION OF GREEN CERTIFICATES OVER THE PERIOD 2003-2016*



In 2016, over 4,923,000 GCs were effectively cancelled and therefore withdrawn from the market. A portion of these GCs relates to the 2015 quota, which was partially cancelled at the beginning of 2016. Similarly, a portion of the GCs relating to the 2016 quota will be cancelled at the beginning of 2017.

The figure below illustrates monthly developments in GCs cancelled in 2016 based on the date of logging by the supplier in the CWaPE database.

**FIGURE 37** *MONTHLY DEVELOPMENTS IN CANCELLATION OF GC IN 2016*

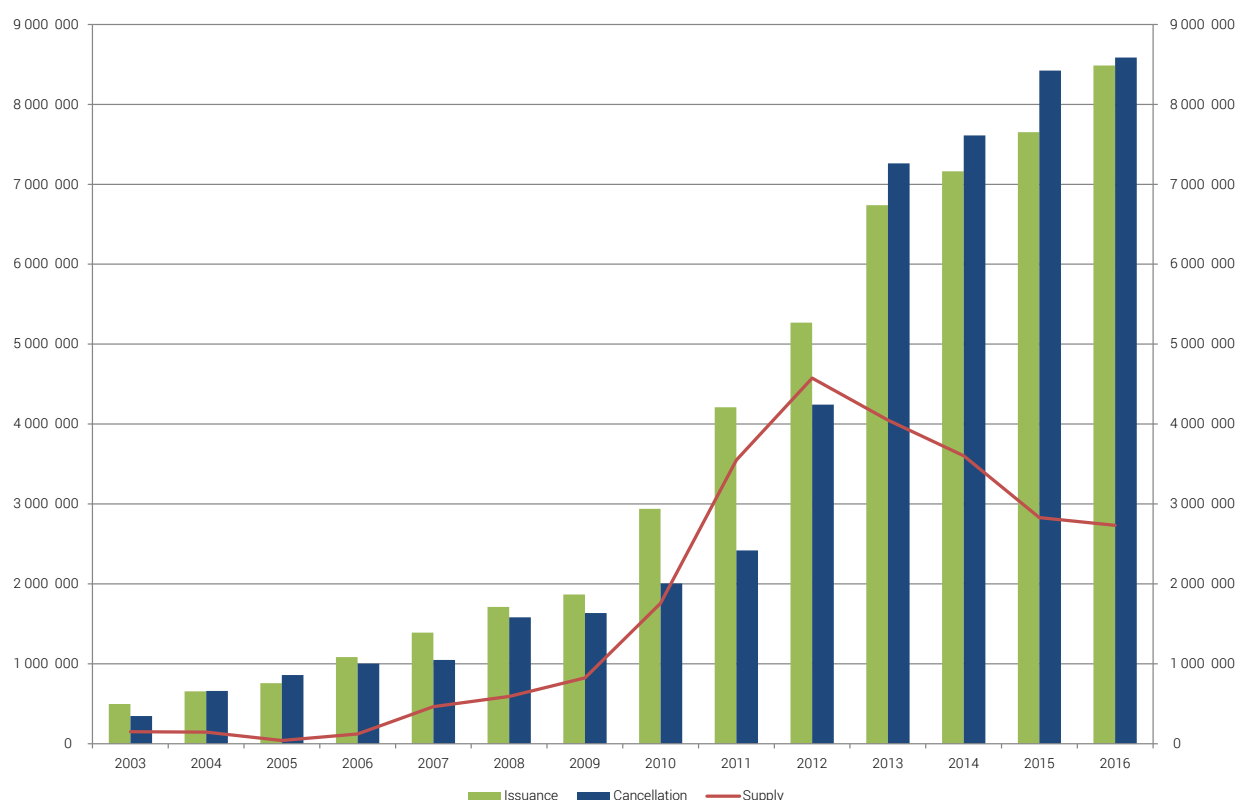


#### 4.4. Development of GCs in circulation (supply)

In 2016, the GC market was marked, for the fourth consecutive year, by a decrease in the supply<sup>70</sup> of GCs available on the market. This can be explained by the increase in quotas and by the recourse to selling to the local transmission system operator, Elia, at the guaranteed minimum price of EUR 65/GC.

The end-of-year supply as such decreased from over 4,050,000 GCs at the end of 2013 to approximately 3,600,000 GCs at the end of 2014 then to approximately 2,830,000 GCs in 2015 to finally reach almost 2,730,000 GCs at the end of 2016.

**FIGURE 38** DEVELOPMENTS IN SUPPLY OF GC OVER THE PERIOD 2003-2016



As illustrated by the figure above, it can be seen that the total number of GCs granted increased by a factor of 17 in the space of 14 years. In 2016, this figure reached over 8,487,000 GCs. As for the total number of GCs cancelled<sup>71</sup>, this reached over 8,585,000 GCs, of which approximately 43 % were GCs sold to ELIA at the minimum regional guaranteed price of EUR 65/GC.

This imbalance is mainly the result of the growth in photovoltaic installations below 10 kW (SOLWATT), the number of which increased by over 48,000 units in 2012, by 21,000 units in 2013 and by less than 1000 in 2014, taking the total number of SOLWATT installations to over 121,000 at the end of 2016. The number of GCs granted in 2016 for these installations (3,909,000 GCs) was for the first time reduced since the peak observed in 2015 (4,120,000 GCs).

<sup>70</sup> The supply is represented by the difference between the number of GCs issued and the number of GCs cancelled. As such the supply represents the quantity of GCs available on the market. These end up in the accounts of producers, intermediaries, suppliers and DSO.

<sup>71</sup> The term "cancellation" refers to GCs cancelled by suppliers with a view to meeting their quota obligation in Wallonia or in the Brussels-Capital Region on the one hand, as well as the GCs returned to the local transmission system operator (LTSO Elia) at the minimum guaranteed price of EUR 65 GC (and therefore not available for sale on the market) on the other, which are then cancelled.

The cancellation of GCs by suppliers with a view to meeting their quota obligation in Wallonia or in the Brussels-Capital Region is based on the effective date of the logging by the supplier, in the CWaPE database, of the GC cancellation transaction specific to its quota. As soon as the transaction is logged in the CWaPE database, the GCs relating to that transaction are no longer available on the market.

## 5. GC QUOTA APPLICATION

The number of GCs to be returned by suppliers and system operators is established on a quarterly basis by the CWaPE based on the "nominal" quota applicable to electricity supplies as well as the quota reductions granted to electricity-intensive end customers.

This chapter takes stock of the application of this public service obligation incumbent upon electricity suppliers and system operators for electricity supplies between 1 January and 31 December 2016 and validated by the CWaPE based on declarations submitted up to the beginning of March 2017 (declaration for the fourth quarter of 2016). It should be noted that, given the statutory deadline in effect, GC cancellation transactions relating to the fourth quarter declaration can be logged in the CWaPE database until April or May of the following year. For this reason the data presented in this chapter differs from the data relating to the cancellation transactions observed strictly in 2016 in the previous chapter.

### 5.1. Nominal GC quota in Wallonia

The nominal GC quota is set at 32.40 % for 2016 (27.70 % in 2015).

Electricity supplies declared and taken into consideration for the GC return obligation in 2016 were 20,922,911 MWh<sup>72</sup>, which is a decrease of 0.40% compared to 2015.

The number of GCs to be cancelled in 2016 (excluding quota reduction) was 6,779,023 compared to 5,820,182 in 2015, which is an increase in the "nominal" quota by 958,841 GCs. It should be noted that this increase is mainly due to the amendment to the AGW-PEV of 30 November 2006, which increased the nominal quota provided for by the legislator from 27.70 % to 32.40 %.

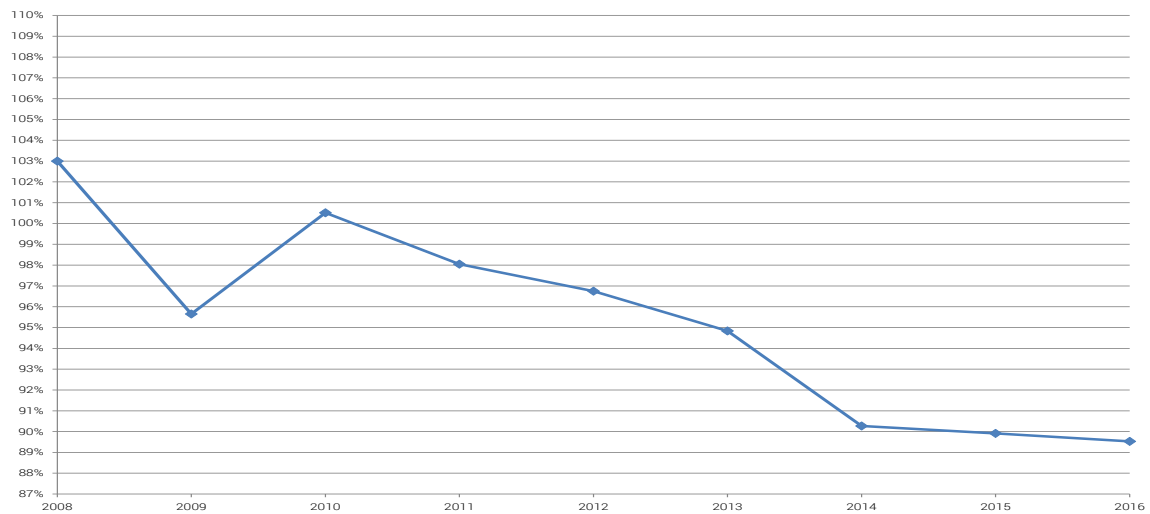
However, the number of GCs actually returned in 2016 was 5,269,401 GCs. The difference between the nominal quota and the number of GCs returned to the CWaPE (effective quota) results from the quota reductions granted to some companies (see next section).

The figure below shows the decrease observed in the level of supply subject to the GC quota in Wallonia between 2008 and 2016. This decrease was approximately 10% and was due both to a decrease in the overall level of supply and to the variation in the scope of application of the GC quota.

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<sup>72</sup> This is the value declared by suppliers at the beginning of March 2017. Corrections after this date were not taken into account in the calculations for the 2016 quotas but were included in the calculations for the 2017 quotas.

**FIGURE 39**      *DEVELOPMENTS IN SUPPLY SUBJECT TO GC QUOTA OVER THE PERIOD 2008-2016*



## 5.2. GC quota reductions

GC quota reductions were applied to companies forming a geographic and technical entity within the meaning of the branch agreements.

In order to receive this reduction, 2 conditions must be met:

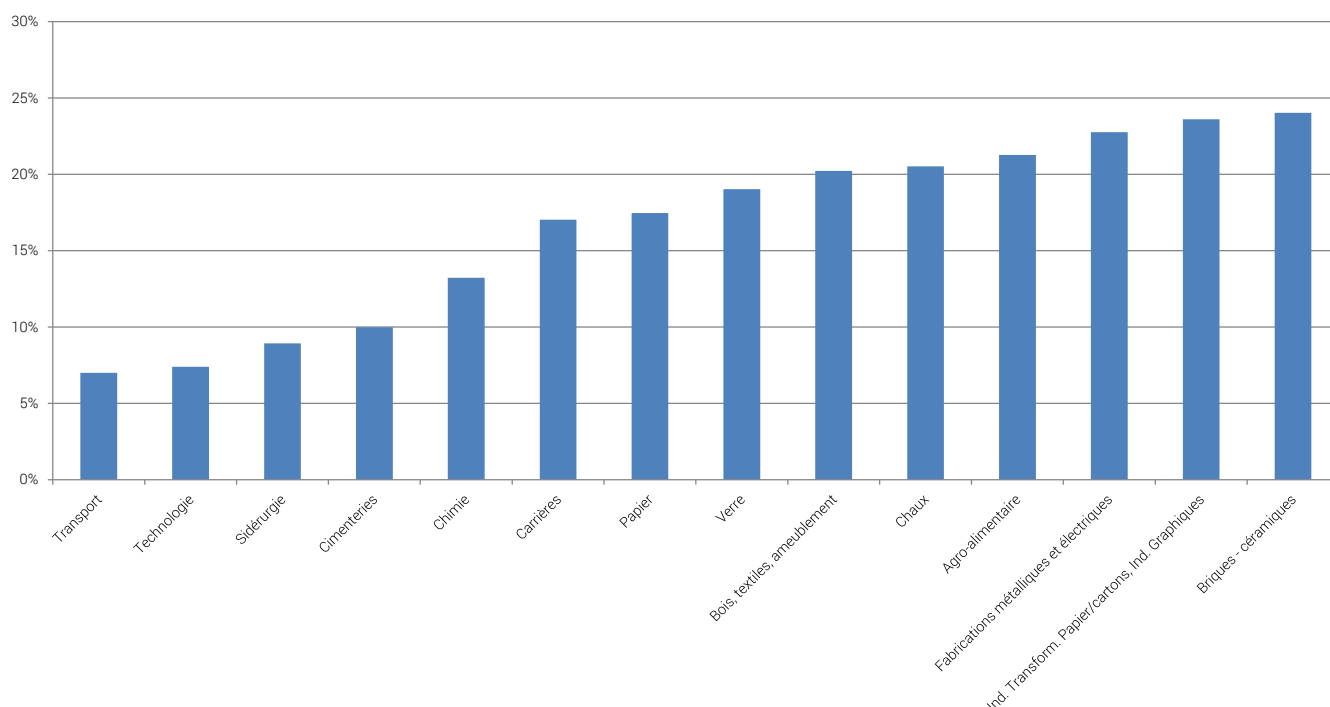
1. Signature of a branch agreement;
2. Submission of a certificate to the CWaPE each quarter, through the entity's supplier, within the statutory period imposed, meaning that the certificates must be received before the end of the second month following the quarter just ended.

These conditions are verified each quarter, and if one of them is not met no reduction is granted.

In 2016, out of 224 entities registered with the CWaPE, 219 received a GC quota reduction. The difference can in particular be explained by the fact that some certificates were not sent within the period set out, the entity withdrew from the branch agreement or ceased its activities. Annex 3 provides a breakdown of the entities by sector of activity ("branch agreements").

The figure below illustrates the effective quotas (following application of the GC reduction) broken down by sector of activity for 2016.

**FIGURE 40** GC REDUCTION - EFFECTIVE QUOTA BY SECTOR OF ACTIVITY IN 2016



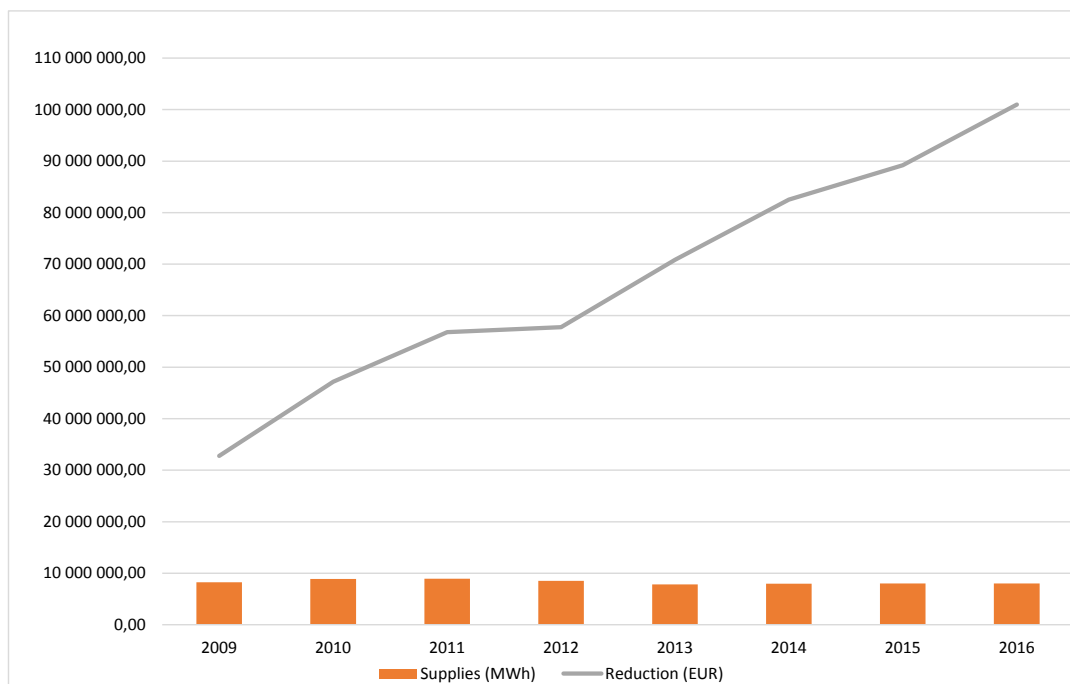
The table below provides an estimate of the saving obtained in this manner by suppliers for the benefit of their end customers based on the average green certificate market price in 2016, which was EUR 66.88.

**TABLE 29** AVOIDED COST CORRESPONDING TO GC QUOTA REDUCTION – BREAKDOWN BY SECTOR

| SECTORS  | No. of entities | Supplies (MWh) | Reduction (GC) | Reduction (EUR) |
|--|-----------------|----------------|----------------|-----------------|
| Transport  | 2               | 527 691,45     | 134 007,93     | 8 962 450,63    |
| Technology   | 1               | 428 579,76     | 107 153,86     | 7 166 450,02    |
| Steel industry   | 9               | 1 841 426,97   | 432 015,13     | 28 893 171,56   |
| Cement plants  | 2               | 504 949,68     | 113 143,14     | 7 567 013,47    |
| Chemistry  | 51              | 2 035 494,42   | 390 293,81     | 26 102 849,95   |
| Quarries   | 12              | 436 756,16     | 67 101,02      | 4 487 716,49    |
| Paper  | 4               | 246 897,26     | 36 853,02      | 2 464 729,91    |
| Glass  | 13              | 478 513,48     | 63 971,88      | 4 278 439,40    |
| Wood, textiles, furniture                              | 14              | 225 658,53     | 27 474,19      | 1 837 473,63    |
| Lime   | 2               | 74 863,82      | 8 887,94       | 594 425,29      |
| Agri-food  | 64              | 752 548,57     | 83 721,83      | 5 599 315,66    |
| Metal and electrical manufacturing                     | 29              | 357 654,92     | 34 473,42      | 2 305 582,53    |
| Processing industry Paper/cardboard, Printing industry | 10              | 77 860,29      | 6 840,83       | 457 514,98      |
| Bricks - ceramics                                      | 6               | 44 020,90      | 3 683,99       | 246 385,25      |
| OVERALL  | 219             | 8 032 916,20   | 1 509 621,99   | 100 963 518,76  |

The graph below shows the change in total supply (in MWh) for entities with a branch agreement on one hand, and the amounts of reductions granted (or the number of GCs for the reduction multiplied by the market price of the year concerned) on the other.

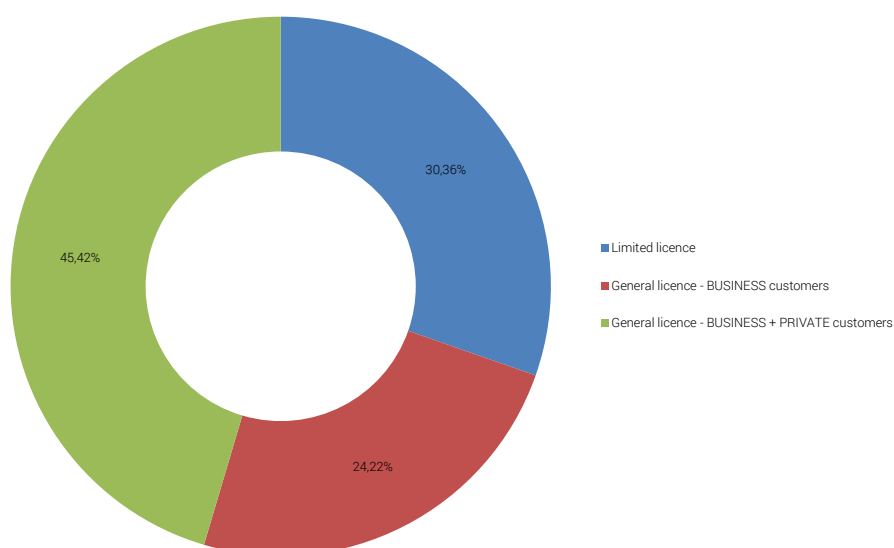
**FIGURE 41** *CHANGE IN SUPPLY OF ENTITIES WITH BRANCH AGREEMENTS AND REDUCTIONS*



We observe that the amount relating to GC reductions has only increased since 2009 contrary to the supply for entities with a branch agreement which shows a slight decline.

The figure below shows a breakdown of GC quota reductions into 3 categories of suppliers in Wallonia established based on the type of licence (general or limited) and the type of clientèle (private individuals or business customers).

**FIGURE 42** *BREAKDOWN OF QUOTA REDUCTIONS BETWEEN DIFFERENT CATEGORIES OF SUPPLIERS*



With regards to quota reductions, the CWaPE must take into account article 39 of the decree of 12 April 2001 which stipulates: "After an opinion from the CWaPE, the Walloon Government sets the minimum quantity and the characteristics of GCs which must be returned to the CWaPE by system operators, suppliers and holders of a limited supply licence with a view to providing their own supply and conventional self-producers in order to constantly cover a total period of eight years. The Walloon Government may adjust the minimum quantity referred to in paragraph 1 according to the level of consumption and the proportion of the cost of the GC mechanism in end customer production costs, with a commitment made by the latter in terms of saving energy. ***This adjustment directly benefits the customers in question and cannot exceed a volume of 22.5 % of the annual quota for the current year.***

The Walloon Government may adjust the minimum quantity referred to in paragraph 1 for social reasons. ***This adjustment directly benefits residential end customers in question and cannot exceed a volume of 0.5 % of the annual quota for the current year.***

This therefore means that the volume of GC reduction granted cannot exceed 23 % of the nominal quota for the current year.

Below is the table listing the data for 2016:

**TABLE 30                      CALCULATION OF THE THRESHOLD OF REDUCTION GRANTED FOR COMPANIES WITH A BRANCH AGREEMENT FOR 2016**

| 2016   |                |
|--|----------------|
| Supplies submitted (MWh)                             | 20 922 911, 00 |
| Quota  | 32,40%         |
| Nominal quota excl. reduction                        | 6 779 023, 16  |
| Reduction granted to companies with branch agreement | 1 509 621, 99  |
| Percentage of reduction granted (art 39 decree)      | 22,27%         |

**TABLE 31                      CALCULATION OF THE THRESHOLD OF REDUCTION GRANTED FOR PROTECTED REGIONAL CLIENTS FOR 2016**

| 2016   |                |
|--|----------------|
| Supplies submitted (MWh)   | 20 922 911, 00 |
| Quota  | 32,40%         |
| Nominal quota excl. reduction  | 6 779 023, 16  |
| Reduction granted to protected clients (100% exemption from the quota for this type of client) | 19 220, 98     |
| Percentage of reduction granted (art 39 decree)  | 0,28%          |

The total is 22.55 % for 2016 within the maximum of 23 %.

Note that these figures are not yet final as suppliers have the possibility of making changes over a period from Qn-3 to Qn-1: the operating principle is that of a moving train over a maximum of four quarters that can overlap over two financial years.

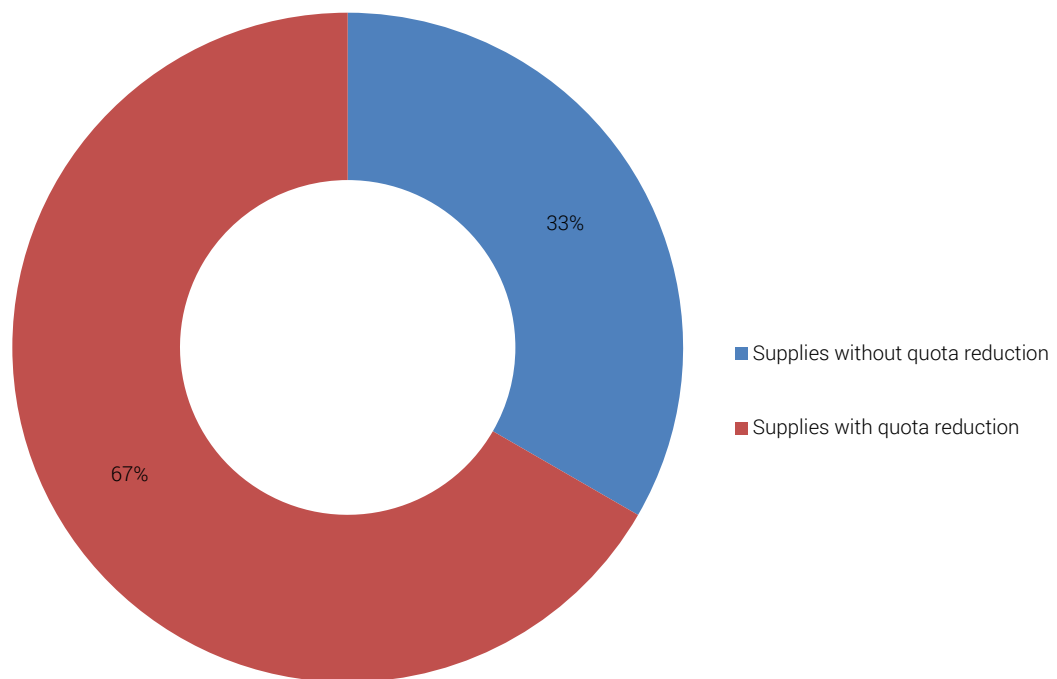
In light of the ever growing number of companies who are signing branch agreements, the CWaPE drew the Minister of Energy's attention to the fact that no measure is envisaged if the thresholds set are exceeded.

### 5.3. Effective quotas applicable to suppliers and DSO

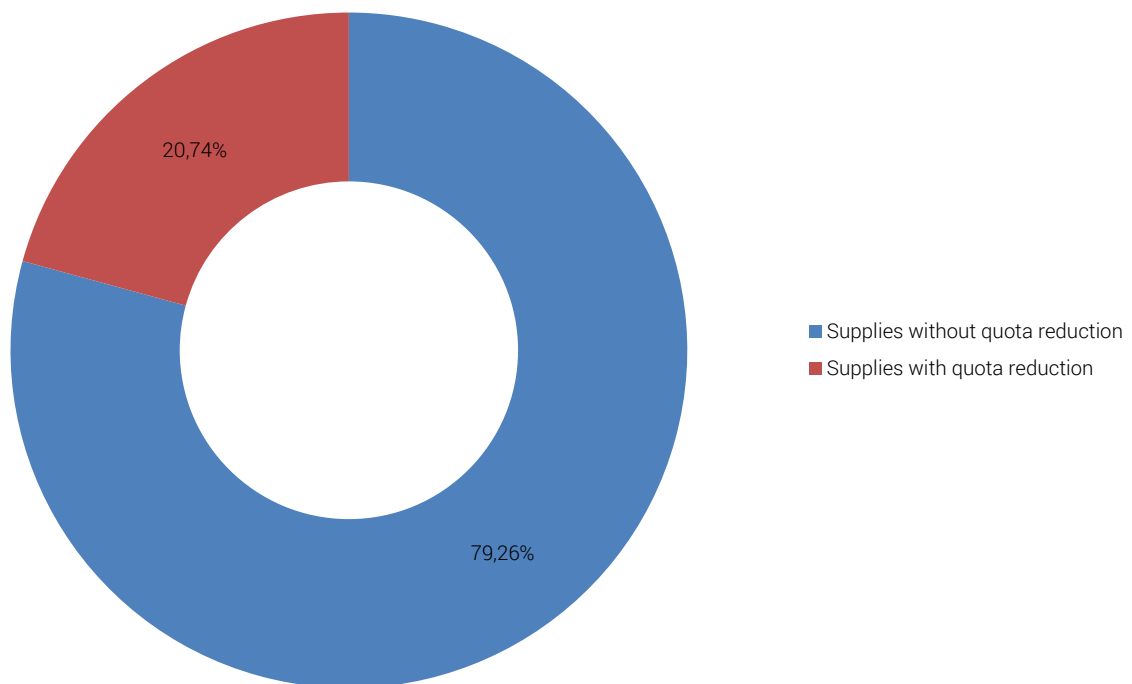
In view of the quota reductions granted individually and on a quarterly basis to end customers eligible for them, the overall effective quota (ratio between the number of GCs to be cancelled and the number of MWh supplied) applied for 2016 is 25.18 % (21.45 % in 2015). This represents 5,269,401 GCs to be returned by suppliers and system operators to the CWaPE for cancellation.

The figures below provide a breakdown of the supplies benefiting from quota reductions (supplies with reduction) and supplies to which the nominal quota was applied (supplies with no reduction). As in 2015, the total consumption of the companies that received a quota reduction accounted for approximately 38% of the electricity supply subject to the GC quota in Wallonia in 2016.

**FIGURE 43**      **BREAKDOWN OF SUPPLIES**



**FIGURE 44**      **BREAKDOWN OF GC TO BE RETURNED**



The number of suppliers and system operators that, in 2016, were required to submit their supplies to the CWaPE on a quarterly basis, as well as a number of GCs corresponding to the effective quota calculated for their end customers, is as follows:

- 32 suppliers with a general supply licence;
- 5 suppliers with a limited supply licence;
- 13 distribution system operators.

The number of GCs returned to the CWaPE pursuant to the public service obligation for suppliers and system operators amounted to 5,269,401 GCs for the whole of 2016, which is the total number to be returned in application of the effective quota. As such, no fines had to be applied.

The graphs below provide a breakdown, by category of suppliers and distribution system operators (DSO), of electricity supplies and GCs to be returned. The difference between the two figures can be explained by a different quota for each supplier based on the quota reductions that may be applied to its customers.

FIGURE 45 BREAKDOWN OF SUPPLIES

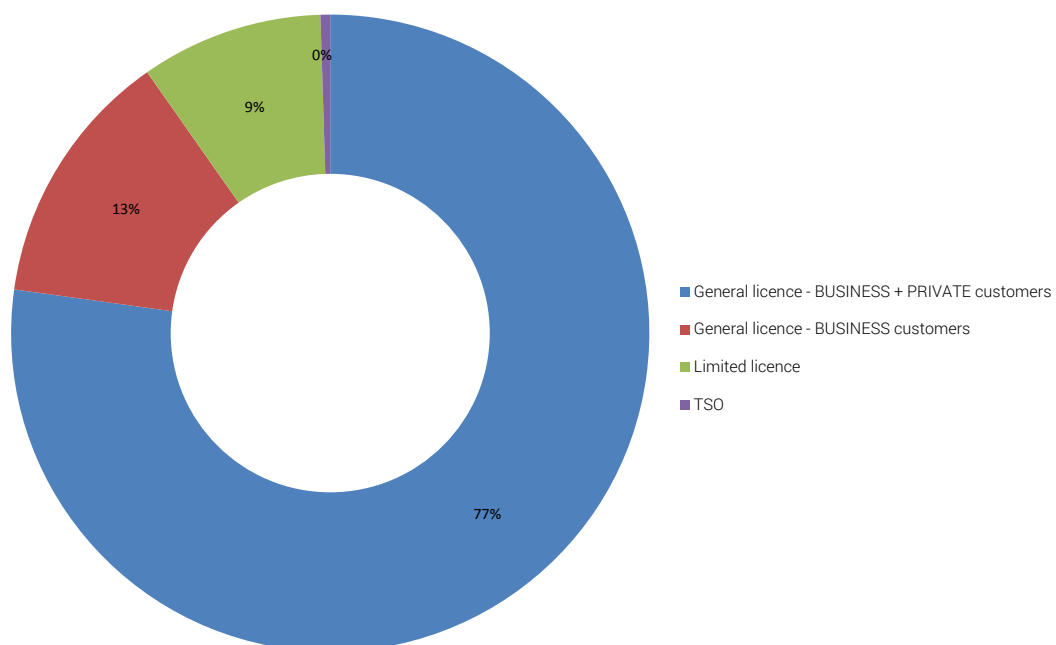


FIGURE 46 BREAKDOWN OF GC TO BE RETURNED

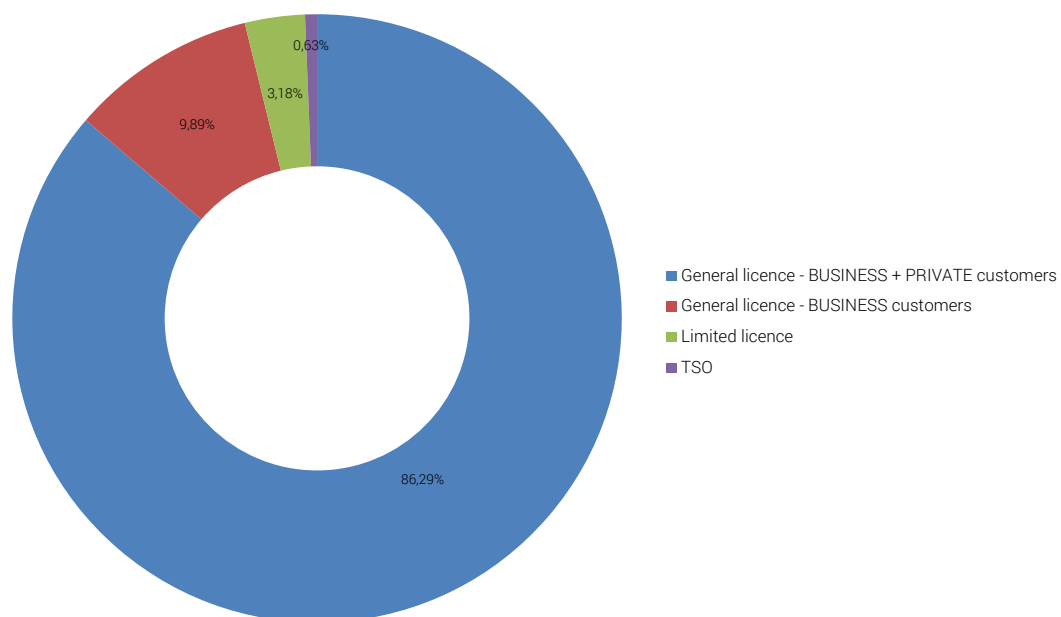


TABLE 32

## RETURNS FOR GC QUOTAS IN 2016

| 2016                                       | Licence type / TSO | Supplies submitted for the year (MWh) | GC quota excl. reduction | GC reduction        | GC to be submitted  | Effective quota | GC returned      | Missing GC      | Admin. fine (in euros) |
|--|--------------------|---------------------------------------|--------------------------|---------------------|---------------------|-----------------|------------------|-----------------|------------------------|
| <b>Suppliers</b>                           |                    |                                       |                          |                     |                     |                 |                  |                 |                        |
| ASPIRAVI ENERGY NV                         | General licence    | 7 876,06                              | 2 551,84                 | 0                   | 2 552               | 32,40%          | 151              | 2 401           | 0                      |
| AXPO FRANCE & BENELUX SA                   | General licence    | 27 299,51                             | 8 845,04                 | 0                   | 8 845               | 32,40%          | 235 126          | -226 281        | 0                      |
| BELGIAN ECO ENERGY SA                      | General licence    | 1 533,80                              | 496,95                   | -124                | 621                 | 40,50%          | 2 552            | -1 931          | 0                      |
| BIOWANZE                                   | General licence    | 1 533,80                              | 496,95                   | 124                 | 373                 | 24,30%          | 373              |                 |                        |
| COMFORT ENERGY SA                          | General licence    | 1 081,41                              | 350,38                   | 0                   | 350                 | 32,40%          | 350              | 0               | 0                      |
| DIRECT ENERGIE BELGIUM SA                  | General licence    | 51 295,36                             | 16 619,70                | 0                   | 16 620              | 32,40%          | 16 620           | 0               | 0                      |
| EDF LUMINUS SA                             | General licence    | 3 955 448,96                          | 1 281 565,46             | 66 577              | 1 214 989           | 30,72%          | 1 214 989        | 0               | 0                      |
| ELECTRABEL SA                              | General licence    | 6 774 982,60                          | 2 195 094,36             | 502 797             | 1 692 297           | 24,98%          | 1 692 297        | 0               | 0                      |
| ELECTRABEL CUSTOMER SOLUTIONS SA           | General licence    | 1 765 532,00                          | 572 032,37               | 502 797             | 69 235              | 3,92%           | 554 857          | -485 622        | 0                      |
| ELEGANT                                    | General licence    | 41,11                                 | 13,32                    | 0                   | 13                  | 32,40%          | 13               |                 |                        |
| ELINDUS                                    | General licence    | 274,11                                | 88,81                    | 0                   | 89                  | 32,40%          | 89               |                 |                        |
| ENDESA ENERGIA SA                          | General licence    | 4 501,27                              | 1 458,41                 | 0                   | 1 458               | 32,40%          | 1 458            | 0               | 0                      |
| ENECO BELGIE BV                            | General licence    | 266 347,82                            | 86 296,69                | 4 176               | 82 120              | 30,83%          | 82 120           | 0               | 0                      |
| ENERGIE 2030 AGENCE SA                     | General licence    | 10 361,73                             | 3 357,20                 | 0                   | 3 357               | 32,40%          | 3 357            | 0               | 0                      |
| ENERGIE DER NEDERLANDEN BV                 | General licence    | 2 799,69                              | 907,10                   | 0                   | 907                 | 32,40%          | 907              | 0               | 0                      |
| ENI SA                                     | General licence    | 937 445,08                            | 303 732,21               | 22 973              | 280 760             | 29,95%          | 280 760          | 0               | 0                      |
| ENOVOS LUXEMBOURG SA                       | General licence    | 75 708,66                             | 24 529,61                | 4 940               | 19 590              | 25,88%          | 19 590           | 0               | 0                      |
| EOLY SA                                    | General licence    | 57 693,30                             | 18 692,63                | 0                   | 18 693              | 32,40%          | 18 693           | 0               | 0                      |
| E.ON BELGIUM SA                            | General licence    | 925 617,32                            | 299 900,01               | 59 944              | 239 956             | 25,92%          | 239 956          | 0               | 0                      |
| ESSENT BELGIUM SA                          | General licence    | 396 657,91                            | 128 517,16               | 0                   | 128 517             | 32,40%          | 128 517          | 0               | 0                      |
| KLINKENBERG ENERGY SA                      | General licence    | 7 231,94                              | 2 343,15                 | 0                   | 2 343               | 32,40%          | 2 343            | 0               | 0                      |
| LAMPIRIS SA                                | General licence    | 1 264 183,30                          | 409 595,39               | 2 770               | 406 825             | 32,18%          | 406 825          | 0               | 0                      |
| OCTA+ ENERGIE SA                           | General licence    | 120 382,91                            | 39 004,06                | 0                   | 39 004              | 32,40%          | 39 004           | 0               | 0                      |
| POWER ONLINE SA                            | General licence    | 79 001,08                             | 25 596,35                | 0                   | 25 596              | 32,40%          | 25 596           | 0               | 0                      |
| POWERHOUSE BV                              | General licence    | 152 358,69                            | 49 364,21                | 17 465              | 31 899              | 20,94%          | 31 899           | 0               | 0                      |
| RECYBOIS                                   | General licence    | 1 222,25                              | 396,01                   | 0                   | 396                 | 32,40%          | 396              |                 |                        |
| SCHOLT ENERGY CONTROL SA                   | General licence    | 40 629,50                             | 13 163,96                | 267                 | 12 897              | 31,74%          | 12 897           | 0               | 0                      |
| TOTAL GAS & POWER BELGIUM SA               | General licence    | 79 855,64                             | 25 873,23                | 0                   | 25 873              | 32,40%          | 25 873           | 0               | 0                      |
| TOTAL GAS & POWER LIMITED                  | General licence    | 290 694,15                            | 94 184,91                | 64 071              | 30 114              | 10,36%          | 30 114           | 0               | 0                      |
| TREVION NV                                 | General licence    | 1 065,00                              | 345,06                   | 0                   | 345                 | 32,40%          | 345              | 0               | 0                      |
| VLAAMS ENERGIEBEDRIJF NV                   | General licence    | 58,37                                 | 18,91                    | 0                   | 19                  | 32,40%          | 19               | 0               | 0                      |
| WATZ                                       | General licence    | 835,73                                | 270,78                   | 0                   | 271                 | 32,40%          | 271              |                 |                        |
| ARCELORMITTAL ENERGY SCA                   | Limited licence    | 1 219 314,68                          | 395 057,96               | 290 278             | 104 780             | 8,59%           | 104 780          | 0               | 0                      |
| BELPOWER INTERNATIONAL SA                  | Limited licence    | 27 299,51                             | 8 845,04                 | 0                   | 8 845               | 32,40%          | 8 845            | 0               | 0                      |
| ELEXYS SA                                  | Limited licence    | 51 816,16                             | 16 788,44                | 1 031               | 15 757              | 30,41%          | 15 757           | 0               | 0                      |
| SEGE SA                                    | Limited licence    | 634 031,59                            | 205 426,24               | 167 040             | 38 386              | 6,05%           | 38 386           | 0               | 0                      |
| XYLOWATT SA                                | Limited licence    | 115,16                                | 37,31                    | 0                   | 37                  | 32,40%          | 37               |                 |                        |
| <b>Sub-total</b>                           |                    | <b>19 234 127,18</b>                  | <b>6 231 857,21</b>      | <b>1 707 126,08</b> | <b>4 524 731,13</b> | <b>23,52%</b>   | <b>5 236 164</b> | <b>-713 834</b> | <b>0</b>               |
| <b>Transmission system operators (TSO)</b> |                    |                                       |                          |                     |                     |                 |                  |                 |                        |
| AIEG                                       | Pure TSO           | 697,67                                | 226                      | 0                   | 226                 | 32,40%          | 226              | 0               | 0                      |
| AIESH                                      | Pure TSO           | 5 430,21                              | 1 759                    | 0                   | 1 759               | 32,40%          | 1 759            | 0               | 0                      |
| INFRAX                                     | Pure TSO           | 426,69                                | 138                      | 0                   | 138                 | 32,40%          | 138              | 0               | 0                      |
| RESEAU D'ENERGIES DE WAVRE                 | Pure TSO           | 198,51                                | 64                       | 0                   | 64                  | 32,40%          | 64               | 0               | 0                      |
| RESA                                       | Pure TSO           | 37 927,09                             | 12 288                   | 0                   | 12 288              | 32,40%          | 12 288           | 0               | 0                      |
| ORES (Namur)                               | Mixed TSO          | 11 270,78                             | 3 652                    | 0                   | 3 652               | 32,40%          | 3 652            | 0               | 0                      |
| ORES (Hainaut)                             | Mixed TSO          | 31 853,98                             | 10 321                   | 0                   | 10 321              | 32,40%          | 10 321           | 0               | 0                      |
| ORES (Est)                                 | Mixed TSO          | 1 454,16                              | 471                      | 0                   | 471                 | 32,40%          | 471              | 0               | 0                      |
| ORES (Luxembourg)                          | Mixed TSO          | 5 725,86                              | 1 855                    | 0                   | 1 855               | 32,40%          | 1 855            | 0               | 0                      |
| ORES (Verviers)                            | Mixed TSO          | 198,51                                | 64                       | 0                   | 64                  | 32,40%          | 64               | 0               | 0                      |
| ORES (Brabant Wallon)                      | Mixed TSO          | 5 430,21                              | 1 759                    | 0                   | 1 759               | 32,40%          | 1 759            | 0               | 0                      |
| ORES (Mouscron)                            | Mixed TSO          | 2 062,59                              | 668                      | 0                   | 668                 | 32,40%          | 668              | 0               | 0                      |
| GASELWEST (EANDIS)                         | Mixed TSO          | 697,67                                | 226                      | 0                   | 226                 | 32,40%          | 226              | 0               | 0                      |
| <b>Sub-total</b>                           |                    | <b>103 374</b>                        | <b>33 493</b>            | <b>0</b>            | <b>33 493</b>       | <b>32,40%</b>   | <b>33 493</b>    | <b>0</b>        | <b>0</b>               |
| <b>OVERALL TOTAL</b>                       |                    | <b>19 337 501</b>                     | <b>6 265 350</b>         | <b>1 707 126</b>    | <b>4 558 224</b>    | <b>23,57%</b>   | <b>5 269 657</b> | <b>-713 834</b> | <b>0</b>               |

The table above provides details on an annual basis<sup>73</sup>, by supplier and by distribution system operator, of the electricity supplies, GC reductions granted, and GCs to be returned and actually returned in 2016.

<sup>73</sup> The total sales included in this table correspond to the amounts declared at the beginning of March 2016. Corrections after this date were not taken into account in the calculations for the 2015 quotas but were included in the calculations for the 2016 quotas.

## 5.4. State subsidy

The order of 23 June 2016 amending the order of the Walloon Government of 30 November 2006 on the promotion of electricity generated from renewable energy sources or cogeneration stipulates:

*"For any supply enabling a reduction in the number of GCs to be returned, in application of this paragraph, the supplier concerned must return to the CWaPE, **a number of GCs corresponding to at least 15 % of the GC quota imposed**, for this supply, by paragraph 3 of this article. The holder of a limited licence with a view to providing its own supply, the system operator and the conventional self-producer that are eligible for a reduction in the number of GCs to return, in application of this paragraph, must also return to CWaPE a number of GCs corresponding to at least 15 % of the GC quota imposed by paragraph 3 of this article.*

*The CWaPE must annually check the compliance of those concerned, on the basis of their situation as at 31 December of year N, with their obligation to return GCs provided for in the previous paragraph. Should they fail to comply with this obligation, the suppliers, system operators and holders of a limited licence with a view to providing their own supply or conventional self-producers concerned are subject, as for their entire obligation to return GCs provided for in this article, in application of article 30 of this order for any missing green certificate and must fulfil the obligations that result from article 30 by 31 March of year N+2 at the latest.*

*The cost reductions, including the obligation to return and the potential application of article 30 of this order, resulting from the provisions of this paragraph, are applied directly to each end customer or conventional self-producer at their origin".*

After analysis, it has been observed that on average companies return 68.8% of the quota imposed. The minimum is 18 % and the maximum around 75 %. The 15 % threshold is therefore observed.

## 5.5. Cancellation of Walloon GCs for the Brussels-Capital Region quota

The GC quota in the Brussels-Capital Region (BCR) is not applied on a quarterly basis as in Wallonia, but instead once per year (on 31 March).

Initially, only Brussels GCs are eligible for the quota. Subsequently, if the number of GCs available on the Brussels market is insufficient to enable suppliers to meet their quota obligations, the Brussels regulator, BRUGEL, may allow these suppliers to return Walloon GCs for the purpose of meeting their GC quota in the Brussels-Capital Region (BCR).

This recognition mechanism was valid for a period of 10 years, i.e. from 2005 to 2014 and, given that no statutory changes have been made, Walloon GCs may no longer be used for the Brussels return quota.

## 6. GUARANTEE OF ORIGIN MARKET

This chapter first of all provides a reminder of the *guarantee of origin* concept as well as a brief description of the activities conducted by the CWaPE at European level with a view to improved harmonisation and implementation of these mechanisms. It then presents the different statistics available in this area.

## 6.1. Development objectives for green electricity in Wallonia

### 6.1.1. Guarantee of origin concepts (GOL/GO)

The guarantee of origin is a traceability instrument put in place at European level in the context of Directives 2009/28/EC and 2012/27/EU respectively on the promotion of the use of energy from renewable sources (GO-RES) and the promotion of high-efficiency cogeneration (GO-COGEN).

These guarantees of origin allow the monitoring of electricity, in the European internal market, from the producer to the end customer and ensure that the renewable or cogeneration nature of one MWh generated is sold only once.

They may be sold by the producer independently of the electricity generated. Guarantee of origin transactions are recorded in electronic registers monitored by the authorities and there may only be one official register per geographic zone. Belgium is made up of four zones: three regional zones and one federal zone for the Belgian maritime zone in the North Sea. The different registers may be interconnected in order to allow guarantee of origin operations between geographic zones and thus ensure the circulation of these instruments throughout the internal market for electricity. The *European Energy Certificate System* (EECS) described below has allowed this since 2003.

The information contained in these guarantees of origin is standardised (energy source used, installation type, capacity, date of commissioning, generation period, type of public support granted, etc.). Despite the abundance of verified information, in practice guarantee of origin labels continue to be used primarily to guarantee the renewable nature of electricity.

### 6.1.2. Implementation in the internal market for electricity

Guarantees of origin may be traded in different European markets because, according to European legislation, each Member State must recognise the guarantees of origin issued elsewhere in the European Union and, pursuant to the European Economic Area Agreement, in Iceland and Norway; Switzerland could shortly also be covered.

In this context, the CWaPE is a member of the Association of Issuing Bodies<sup>74</sup> (AIB), which has established a standard for these guarantees of origin, the European Energy Certificate System (EECS), in order to promote international trades (24 countries represented in 2016)<sup>75</sup>. For the CWaPE this membership has facilitated the importing, from 2008 and, since 1 July 2009, the re-exporting, of guarantees of origin. Since the transposition of the new directive, the export of Walloon guarantees of origin is theoretically possible everywhere, even if in practice it remains for the moment subject to effective transposition in the destination country.

It is nevertheless important to point out that these guarantees of origin at present remain a rigorous European instrument, one that is still in the process of being implemented and gradually harmonised throughout Europe.

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<sup>74</sup> See website: [www.aib-net.org](http://www.aib-net.org)

<sup>75</sup> Of which 19 countries are members of the EEA and the AIB operating with GO: Austria, Belgium, Cyprus, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Slovenia, Spain and Sweden. Source " Fact Sheet 17 - EECS Scheme Members and EECS Products - Release 1.27 ", [https://www.aib-net.org/eees/fact\\_sheets](https://www.aib-net.org/eees/fact_sheets) consulted on 22/05/2017.

## 6.2. GOL market in Wallonia in 2016

### 6.2.1. Granting of GOL in Wallonia

In total, in 2016, 3,260,841 GOL were granted by the CWaPE for electricity generated. The table below sets out the breakdown by green electricity generation sector of GOL granting to certified generation installations located in Wallonia.

**TABLE 33** GRANTING OF GOL BY THE CWAPE IN 2016

| Sector               | GOL-RES          | GOL-CHP        | GOL total        |
|----------------------|------------------|----------------|------------------|
| Photovoltaic         | 26,531           |                | 26,531           |
| Hydraulic power      | 341,983          | 0              | 341,983          |
| Wind                 | 1,537,583        | 0              | 1,537,583        |
| Biomass              | 595,591          | 0              | 595,591          |
| Biomass cogeneration | 381,388          | 22,620         | 404,008          |
| Fossil cogeneration  | 0                | 355,144        | 355,144          |
| <b>Total</b>         | <b>2,883,077</b> | <b>377,764</b> | <b>3,260,841</b> |

*GOL-RES : renewable energy sources including biomass cogeneration (GOL-RES & CHP)*

*GOL-CHP : fossil energy sources and high-efficiency cogeneration*

### 6.2.2. Market price of GOL

Generally speaking, the price levels observed in Belgium are mainly influenced by the relative abundance of supply compared to the low demand in Europe. Local green generation does not cover the contractual demand for green supply and this is causing a massive influx of imported guarantees of origin.

No price indicators are available at European level for guarantees of origin, which are always sold via bilateral transactions. This price may vary depending on the sector and origin as well as the proximity of the GOL expiry date.

The CWaPE currently has the prices for transactions within Wallonia, which are essentially the prices offered to Walloon producers by local suppliers. The table below sets out the values observed this year. These prices are between EUR 0 and EUR 4. A significant number of GOL are traded at zero prices or prices not specified in the sale transactions within the framework, in particular, sale contracts combining GCs and GOL.

**TABLE 34** AVERAGE PURCHASE PRICES TO WALLOON PRODUCERS FOR GOL IN 2016

| Period           | Average price per GOL (€) | Cumulative volume |
|------------------|---------------------------|-------------------|
| 1st quarter 2016 | 0.3231                    | 182,499           |
| 2nd quarter 2016 | 0.2659                    | 194,586           |
| 3rd quarter 2016 | 0.3023                    | 204,613           |
| 4th quarter 2016 | 0.3794                    | 233,402           |

The average price of GOL trades, incorporating the sale transactions of producers to a third party as well as of non-producer third parties to other market players, was lower than the sale price of GOL directly from the Belgian producer. The GOL sale volume was 2.16 million in 2016. Of nearly 200 sale transactions, the 10 largest transactions add up to a total of nearly 900,000 GOL at the average price of EUR 0.2699/GOL.

**TABLE 35** AVERAGE PRICES OF GOL TRADES IN WALLONIA IN 2016

| Period           | Average price per GOL | Cumulative volume |
|------------------|-----------------------|-------------------|
| 1st quarter 2016 | 0.3135                | 564,057           |
| 2nd quarter 2016 | 0.2525                | 597,346           |
| 3rd quarter 2016 | 0.3090                | 398,572           |
| 4th quarter 2016 | 0.3146                | 599,825           |

Annex 4 of this report summarises the issuance, transfer, cancellation and import and export volumes. The annual report and the website of the *Association of Issuing Bodies* (AIB) provide the issuance, transaction and cancellation volumes by country and by technology for its member countries.

## 7. OUTLOOK FOR THE PERIOD 2017-2024

The prospects for development of the GC market for the period 2017-2024 are presented below. They take account of the revisions to the GC mechanism adopted in recent years.

The basis proposed for all the projections included in this chapter is the order of the Walloon Government translating the Walloon strategy in terms of electricity from renewable sources. In particular it sets the GC quotas as well as the GC allocations per sector for new projects until 2024. The CWaPE is also based on the best data available when this report was drafted.

In order to establish the prospects for development of the GC market up to 2024, the CWaPE has adopted a methodology based on two perspectives: GC supply and demand. The tables, simulations and estimates presented in this chapter were established on the basis of data that may include certain uncertainties and approximations that the CWaPE cannot reasonably be expected to detect. These projections are therefore based on the best possible estimates, but they must be considered in light of differences that may potentially be observed regarding the actual data that will ultimately be recorded.

GCs are granted to producers on the basis of the output of the installations covered. They constitute part of the GC **SUPPLY in the market**. This supply is placed in the accounts of producers, suppliers, intermediaries and distribution system operators. Granting projections are in particular dependent on the installations that have been set up during the year.

The quota constitutes the GC **DEMAND**. It is applied to the volume of supply subject to a GC quota. The estimate made in 2015 for 2016 is very close to the volume actually supplied. The projections made in 2015 are therefore retained for this report.

The balance of available GC (supply less demand) constitutes the GC supply. However, producers may activate the GC purchase guarantee for part of this surplus which is then bought by the local transmission system operator, Elia, for the price of EUR65/GC. This cost, like that of the GC quota, is passed along in the bills of Walloon consumers (see Chapter 2).

The assumptions made in this chapter are based on the additional opinion CD-17e03-CWaPE- 1693 addendum of 3 May 2017. This opinion relates to the deferral mechanisms proposed by the Walloon Government, as presented in chapter 2.

## 7.1. Projections of developments in GC supply

Projections of GC supply are based on the estimate of the number of GCs to be granted to installations benefiting from the new scheme (reservation system) and the old scheme, of Solwatt installations and of GC that will be released at the end of the carry trade executed on 1 July 2015 (if they have not been disposed of before then) and deferred GCs<sup>76</sup> whose deferral ends between 1 January 2022 and 31 December 2030 at the latest.

Thus, the projections concerning the new scheme are based on the actual use of the 2014, 2015 and 2016 allocations. For the following years, the consumption of the allocations adopted was 78 %<sup>77</sup>, or the actual consumption of allocations in 2016. These GC volumes will be granted to producers based on their generation volume. Finally, concerning GC supply, the CWaPE based itself on the assumption adopted in its additional opinion CD-17e03-CWaPE-1693 addendum which takes into account the implementation of the biomass power station with capacity above 20 MW and the consequent GC granting from 2022.

As regards GCs granted in the context of the old scheme, the projections are established based on the production sites benefiting from the scheme in effect prior to 1 July 2014 (excluding Solwatt). The possibility of certain generation sites benefiting from the application of article 15<sup>ter</sup> but also article 15<sup>octies</sup> (2) of the AGW of 30 November 2006 is taken into account here. These projections take into account the latest dossiers submitted to the CWaPE. Furthermore, pursuant to the additional opinion CD-17e03-CWaPE-1693 addendum on the "Special specifications on the deferral of Walloon GC", the CWaPE also takes into account the limitation of the granting rate for installations requesting application of article 15<sup>ter</sup> (significant modification), up to a level of 50 % of the granting rate observed before application of the measure.

The projections relating to the number of GCs to be issued for the output of Solwatt sites are based on 10 grant years. This assumption is also confirmed by the order of the Council of State, administrative legal section, of 30 March 2017 rejecting the requests made by the non-profit organisation Touche Pas à mes CV, requesting the cancellation of the ministerial order of 29 September 2011 determining the reducing 'k' factor from 1 October 2011, published in the Belgian Official Gazette on 13 March 2015.

Simulation of demand, depending in particular on the deferral mechanism, is set out in table 37 detailing the change in the GC market.

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<sup>76</sup> Cf. 2.2.3.5. Passing on of the PSO cost to end customers

<sup>77</sup> Scenarios predicting allocation consumption of 100 % and 60 % are presented in the additional opinion CD-17e03-CWaPE-1693 addendum on the "Special specifications on the deferral of Walloon GC".

## 7.2. Projections of developments in GC demand

In order to be able to assess GC demand from 2017, it is necessary to estimate the volume of supply subject to a quota<sup>78</sup>. According to the decree of 11 April 2014 amending the decree of 2001 on the organisation of the regional electricity market, this volume corresponds to the total electricity supply<sup>79</sup> plus conventional self-generated production and less the supply volume required for pumping operations for the Coe and Plate Taille power plants, and the supply to protected customers. The decree amendment on the abolition of the exemption of supply via a direct green line from 1 July 2016 has also been taken into account.

As observed in the table below it decreases over the period, owing in particular to growing self-consumption stemming from green electricity generation, which accounts for an increasing share of Wallonia's total electricity consumption. The number of GCs constituting demand is obtained by multiplying the supply volume by the annual quota set out by the Walloon Government and by taking account of the maximum quota reduction amount defined in the decree of 12 December 2014 amending the decree of 12 April 2001 on the organisation of the regional electricity market, or 23 %.

Pursuant to the additional opinion CD-17e03-CWaPE-1693 addendum on the 'Special specifications on the deferral of Walloon GC', the CWaPE considered an adaptation of quotas applicable for the years 2021 to 2023 with a cap of 37.9 %.

**TABLE 36** *GREEN CERTIFICATES DEMAND IN THE MARKET (GC)*

|   | 2017             | 2018             | 2019             | 2020             | 2021             | 2022             | 2023             | 2024             |
|---|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Supplies eligible for GC (in MWh)                           | 21 311 049       | 21 250 902       | 21 113 191       | 20 971 861       | 20 827 546       | 20 745 010       | 20 577 410       | 20 333 435       |
| Nominal quota (% of supply)                                 | 34,03%           | 35,65%           | 37,28%           | 37,90%           | 37,90%           | 37,90%           | 37,90%           | 37,90%           |
| Effective quota (% of supply)                               | 26,20%           | 27,45%           | 28,71%           | 29,18%           | 29,18%           | 29,18%           | 29,18%           | 29,18%           |
| <b>No. of GC to be returned based on the quota (demand)</b> | <b>5 584 156</b> | <b>5 833 479</b> | <b>6 060 668</b> | <b>6 120 218</b> | <b>6 078 103</b> | <b>6 054 016</b> | <b>6 005 106</b> | <b>5 933 906</b> |

## 7.3. Projections of developments in the GC market

The projections relating to GC supply and demand (sections 7.1 and 7.2) allow the CWaPE to determine the developments in the GC market.

On the basis of all the data available at the time of the writing of this report, the CWaPE has adopted the following assumptions, which it considers to be the most realistic. They are identical to those in the additional opinion CD-17e03- CWaPE-1693 already mentioned, except for changes proposed in the draft Decree the full text of which was submitted to the Parliament on 29 May 2017 (see opposite):

- for 2017, producer behaviour remains in line with what was observed by the CWaPE in the last two years (80 % of GCs granted to Solwatt producers are sold at the minimum guaranteed price compared to 18 % for non-Solwatt producers);

<sup>78</sup> The Federal Planning Bureau published, at the end of April 2015, a Work Paper entitled '2030 Climate and Energy Framework for Belgium – Impact Assessment of a selection of scenarios up to 2050 – April 2015'. This document defines several end consumption scenarios for energy and electricity in Belgium. For its analysis, the CWaPE decided to apply, to Wallonia, the Belgian trends of the Federal Planning Bureau REF scenario, which is a "Business as Usual" scenario.

<sup>79</sup> The electricity supply corresponds to the volume of electricity delivered to the end customer in the context of a supply contract.

- for 2018, Solwatt producer behaviour remains unchanged but that of non-Solwatt producers does change. The share of granted non-Solwatt GCs sold at the minimum guaranteed price decreases by half following the upwards revision of the quotas;
- for the following years, the supply level defined by the CWaPE in order to have sufficient voltage is a quota equivalent to 1.5 quarters, taking into account, for the early years, the inertia in the system;
- the volume of GCs sold annually by producers at the minimum price guaranteed to the LTSO is consequently deduced;
- for 2017 to 2021, considering the implementation of the deferral mechanism which provides for five deferrals, the volume of GCs bought by the LTSO and cancelled in the CWaPE databank is determined aiming at a balance between revenues generated by the Walloon GC surcharge, maintained at the current level of EUR 13.8159/MWh, and the financing of all related charges incumbent on the local transmission system operator within the framework of implementing this public service obligation;
- the volume of GCs to be deferred annually between 2017 and 2021 is then deduced from the difference between the volume of GCs sold to the LTSO at the minimum price guaranteed and the volume of GCs bought by the LTSO, enabling a balanced net position of the surcharge;
- the partial exemption from the first limit of the surcharge, as provided for in article 40*bis* (5) of the electricity order, is maintained for the years 2023 and 2024;
- in order to avoid a systematic postponement of partial exemptions from the first limit of the surcharge (only if the net position of the surcharge is beneficial) and advance of 50 % in comparison to the estimate of the surplus GC volume for the year  $n+1$  is taken into account in determining the GC volumes to be deferred in a year  $n$ .

The draft decree of 29 May 2017 presents changes to the draft text submitted to the CWaPE after the first reading in the Walloon Government. The table below incorporates these changes and therefore is an update of the tables presented in the additional opinion CD-17e03-CWaPE-1693 addendum on the 'Special specifications on the deferral of Walloon GC'.

The changes taken into account are as follows:

- the maximum deferral period is 9 years (this duration may be reduced by the order of the Walloon Government annually determining the volume of GCs to be deferred);
- deferred GCs may be put back on the market from 1 January 2022 if the market conditions allow it;
- putting back reserved GCs on the market (carry trade) is only permitted in the last year of each deferral.

For the current projection, the CWaPE is using a 78 % allocation consumption scenario as a basis. The volume of GCs to be deferred over the period 2017 - 2021 is **8,308,320 GCs**.

**TABLE 37** *DEVELOPMENTS IN THE GC MARKET*

|                            | Initial supply  | 2017             | 2018             | 2019              | 2020              | 2021             | 2022             | 2023             | 2024             |
|----------------------------|---|------------------|------------------|-------------------|-------------------|------------------|------------------|------------------|------------------|
| S<br>U<br>P<br>P<br>L<br>Y | No. of GC granted - new scheme                              | 309 517          | 719 062          | 1 195 244         | 1 666 752         | 2 072 807        | 3 463 797        | 3 685 233        | 3 899 434        |
|                            | No. of GC granted - old scheme                              | 4 866 492        | 4 865 288        | 4 817 769         | 4 661 993         | 3 984 141        | 3 656 613        | 3 657 998        | 3 211 980        |
|                            | No. of GC granted - Solwatt 10 years                        | 3 831 803        | 3 730 617        | 3 432 412         | 2 961 586         | 2 392 817        | 774 803          | 125 570          | 2 120            |
|                            | <b>Total no. of GC granted</b>                              | <b>9 007 812</b> | <b>9 314 968</b> | <b>9 445 425</b>  | <b>9 290 331</b>  | <b>8 449 765</b> | <b>7 895 212</b> | <b>7 468 801</b> | <b>7 113 535</b> |
|                            | Return to market of GC put in reserve in 2015/2016          |                  |                  | 615 385           | 1 384 615         | 1 538 462        | 600 000          |                  |                  |
|                            | Return to market of deferred GC                             |                  |                  |                   |                   |                  |                  | 667 034          | 1 020 200        |
|                            | <b>Total no. of GC coming onto the market (supply)</b>      | <b>9 007 812</b> | <b>9 314 968</b> | <b>10 060 810</b> | <b>10 674 946</b> | <b>9 988 227</b> | <b>8 495 212</b> | <b>8 135 835</b> | <b>8 133 735</b> |
| D<br>E<br>M<br>A<br>N<br>D | Supplies eligible for GC (in MWh)                           | 21 311 049       | 21 250 902       | 21 113 191        | 20 971 861        | 20 827 546       | 20 745 010       | 20 577 410       | 20 333 435       |
|                            | Nominal quota (% of supply)                                 | 34,03%           | 35,65%           | 37,28%            | 37,90%            | 37,90%           | 37,90%           | 37,90%           | 37,90%           |
|                            | Effective quota (% of supply)                               | 26,20%           | 27,45%           | 28,71%            | 29,18%            | 29,18%           | 29,18%           | 29,18%           | 29,18%           |
|                            | <b>No. of GC to be returned based on the quota (demand)</b> | <b>5 584 156</b> | <b>5 833 479</b> | <b>6 060 668</b>  | <b>6 120 218</b>  | <b>6 078 103</b> | <b>6 054 016</b> | <b>6 005 106</b> | <b>5 933 906</b> |
|                            | <b>No of GC sold to the LTSO</b>                            | <b>3 997 124</b> | <b>3 487 085</b> | <b>3 884 506</b>  | <b>4 532 397</b>  | <b>3 925 917</b> | <b>2 450 228</b> | <b>2 149 071</b> | <b>2 226 528</b> |
|                            | of which GC covered by the €13.8159/MWh surcharge           | 1 671 638        | 2 552 866        | 2 479 624         | 2 431 160         | 2 383 423        | 2 327 150        | 2 149 071        | 2 226 528        |
|                            | of which GC not covered by the €13.8159/MWh surcharge       | 2 325 486        | 934 220          | 1 404 883         | 2 101 237         | 1 542 494        | 123 078          | 0                | 0                |
|                            | <b>No. of deferred GC</b>                                   | <b>2 792 596</b> | <b>1 169 551</b> | <b>1 753 060</b>  | <b>1 821 865</b>  | <b>771 247</b>   |                  |                  |                  |
|                            | <b>Supply estimate in no. of GC</b>                         | <b>2 736 179</b> | <b>2 162 711</b> | <b>2 157 115</b>  | <b>2 272 751</b>  | <b>2 295 082</b> | <b>2 279 288</b> | <b>2 270 256</b> | <b>2 251 915</b> |
|                            |   |                  |                  |                   |                   |                  |                  | <b>2 251 915</b> | <b>2 225 215</b> |

The CWaPE observes that in 2022, there is still a surplus of GCs on the market. These GCs not covered by the surcharge of EUR13.8159 EUR/MWh (123,078 GC) should therefore be 'reabsorbed' by the LTSO's cash flow surplus in 2023 thanks to the fall in supply of GCs arriving on the market. This cash flow surplus should enable an effective end of deferral from 2023.

It is important to point out that, in the context of Elia's obligation to purchase GCs, Elia has no choice but to finance all the purchase applications submitted to it without any limit being imposed. For the scheme in effect until 1 July 2014, not all producers systematically have a purchase guarantee. It must be applied for and have a specific procedure. A ministerial order determined in particular the period during which they could benefit from this purchase guarantee. From 1 July 2014, with the introduction of the new scheme for additional GC allocations and reservation, all producers benefit from an automatic purchase guarantee from Elia for all projects subject to reservation. This last element is likely to have an impact on the GC volumes to be purchased by Elia as from 2017 and 2018, significantly increasing the share of GCs covered by a purchase guarantee. It is therefore particularly difficult to forecast the volume of GCs to be purchased by Elia.

Furthermore, the CWaPE would like to emphasise that the lack of vision by 2030 due to no quotas or allocations being defined beyond 2024, does not enable us to make the necessary projections on the change in deferrals and their reabsorption by the market.

In conclusion, all the analyses carried out by the CWaPE in the context of this section, and in its opinion CD-15h26-CWaPE-1510 of 28 August 2015, show once again that the calling of the guarantee for the purchase of Walloon GC by Elia at present no longer serves as a safety net (original objective of the measure) but is becoming a source of financing that is an integral part of the support mechanism for the development of green electricity in Wallonia in the same way as GC quotas when the volumes involved are considered. This situation therefore resulted in a series of additional measures that the Walloon Government decided to put in place in order to maintain a constant level of Elia surcharge for the electricity consumer in coming years.

The market, initially driven by the simple operation of supply (granting of GCs) and demand (GC quota) is disrupted and cannot naturally return to balance over the period. Furthermore, the forecasts relating to the collection base for quotas show a decline between 2017 and 2024. The same applies to the collection base for the Walloon GC surcharge collected by the local transmission system operator, Elia.

## Annex 1 - List of green electricity generation sites at the end of 2016 (Net developable electric power > 10 kW) by sector

### ❖ Photovoltaic sector

| Producteur                                       | Site de production (avec n° de dossier)              | Pend [kW] | Peinst [kW] |
|--|--|-----------|-------------|
| 7C Rooftop Exchange                              | 136123_PHOTOVOLTAIQUE CHARPENTES JONCKHEERE SPANTEN  | 235       | 259,78      |
| A.C.I.T  | 9319_PHOTOVOLTAIQUE USINE A.C.I.T                    | 97        | 100,98      |
| A.D.N  | 9124_PHOTOVOLTAIQUE A.D.N                            | 30        | 34          |
| ABBIUSI  | 7993_PHOTOVOLTAIQUE ABBIUSI                          | 29        | 29,9        |
| ACCUBEL  | 8027_PHOTOVOLTAIQUE ACCUBEL                          | 54,3      | 54,3        |
| ACP de La Résidence le Clairvaux C/O IGE Gestion | 10127_PHOTOVOLTAIQUE ACP CLAIRVAUX                   | 60        | 71,5        |
| ADAMS PETER                                      | 7931_PHOTOVOLTAIQUE ADAMS                            | 74,04     | 80,915      |
| ADOLPHE DOUTREMONT ET COMPAGNIE                  | 9225_PHOTOVOLTAIQUE AD DELHAIZE WELKENRAEDT          | 110       | 142,8       |
| ADVACHEM   | 8837_PHOTOVOLTAIQUE ADVACHEM                         | 193,2     | 249,6       |
| AERTSSEN TERRASSEMENTS                           | 8301_PHOTOVOLTAIQUE AERTSSEN TERRASSEMENTS           | 42        | 46,53       |
| AGC GLASS EUROPE                                 | 9084_PHOTOVOLTAIQUE HEAD QUARTIERS                   | 190       | 217,5       |
| A***   | 10093_P*** (SAINT-GERMAIN)                           | 60        | 69,96       |
| A***   | 9490_P*** (VEZIN)                                    | 20        | 22          |
| AGRI-DETROZ                                      | 8126_PHOTOVOLTAIQUE AGRI-DETROZ                      | 223       | 250,08      |
| AGRISEM  | 8454_PHOTOVOLTAIQUE AGRISEM                          | 16,5      | 17,64       |
| AIR-TRENDS                                       | 9285_PHOTOVOLTAIQUE AIR-TRENDS                       | 62,23     | 62,23       |
| AKAPLAST   | 9064_PHOTOVOLTAIQUE AKAPLAST                         | 170       | 245         |
| ALAN & CO  | 172_PHOTOVOLTAIQUE ALAN & CO                         | 45,1      | 48,14       |
| ALIMAD FOOD                                      | 8514_PHOTOVOLTAIQUE ALIMAD FOOD                      | 117,5     | 127,89      |
| ALIMBATTICE                                      | 9248_PHOTOVOLTAIQUE ALIMBATTICE                      | 80        | 97,92       |
| ALIZÉ  | 9286_PHOTOVOLTAIQUE ALIZE                            | 90        | 100,155     |
| ALL SNACKS PRODUCTION                            | 8756_PHOTOVOLTAIQUE ALL SNACKS PRODUCTION            | 100       | 112,5       |
| ALLAERTS Bruno                                   | 9541_PHOTOVOLTAIQUE ETS DENIS QUINCAILLERIE          | 39        | 44,1        |
| ALMECO   | 9176_PHOTOVOLTAIQUE ALMECO                           | 43        | 61,2        |
| ALTACOUSTIC                                      | 9581_PHOTOVOLTAIQUE ALTACOUSTIC                      | 22        | 23          |
| AMAL GAMME                                       | 9565_PHOTOVOLTAIQUE AMAL GAMME NIVELLES              | 66        | 76          |
| AMU ROBOTIC                                      | 9112_PHOTOVOLTAIQUE AMU ROBOTIC                      | 27,6      | 31,392      |
| ANAPHARMA  | 7998_PHOTOVOLTAIQUE ANAPHARMA                        | 23,8      | 28,06       |
| ANC. ETS CHARLIER BRISON                         | 9317_PHOTOVOLTAIQUE CHARLIER - BRISON                | 90        | 100         |
| A***   | 8007_P*** (GRANDMENIL)                               | 43,6      | 50,29       |
| ANDRÉ PIRON ET FILS                              | 8891_PHOTOVOLTAIQUE ANDRE PIRON ET FILS HANGAR GRAIN | 22        | 24,5        |
|  | 8882_PHOTOVOLTAIQUE ANDRE PIRON ET FILS USINE        | 22        | 24,5        |
| A***   | 9393_P*** (FLORÉE)                                   | 26        | 30          |
| ANFLO  | 8562_PHOTOVOLTAIQUE ANFLO HALMA                      | 54        | 55          |
| ANPI   | 9543_PHOTOVOLTAIQUE ANPI                             | 73        | 85,5        |
| AQUA YPSOROOF                                    | 9316_PHOTOVOLTAIQUE AQUA YPSOROOF                    | 40,5      | 40,5        |
| ARALIA   | 9310_PHOTOVOLTAIQUE IONICS                           | 182       | 197         |
|  | 9309_PHOTOVOLTAIQUE MATERIA NOVA                     | 87,75     | 92,25       |

|                                    |   |        |        |
|------------------------------------|---|--------|--------|
| ARMAND ADANS & FILS                | 9523_PHOTOVOLTAIQUE ARMAND ADANS & FILS               | 111    | 120,79 |
| ARMURERIE PAUL PLETTERS            | 9492_PHOTOVOLTAIQUE ARMURERIE PAUL PLETTERS           | 23     | 26,52  |
| ARPAL MANAGEMENT                   | 8011_PHOTOVOLTAIQUE ARPAL MANAGEMENT                  | 90     | 98,28  |
| ASSOCIATION DE PAEPE JEAN & MARK   | 10084_PHOTOVOLTAIQUE ASSOCIATION DE PAEPE JEAN & MARK | 39     | 47,7   |
| ATELIER 2000                       | 8090_PHOTOVOLTAIQUE ATELIER 2000. BAT 1H11            | 247,5  | 247,5  |
|                                    | 8186_PHOTOVOLTAIQUE ATELIER 2000. BAT 8000            | 247,5  | 249,4  |
|                                    |   |        |        |
| Atelier de Construction Métallique | 7951_PHOTOVOLTAIQUE ACM                               | 221    | 246,59 |
| ATELIER LES GAILLETES              | 8800_PHOTOVOLTAIQUE ATELIER LES GAILLETES             | 167    | 187,92 |
| ATELIERS CERFONTAINE               | 9462_PHOTOVOLTAIQUE ATELIERS CERFONTAINE              | 120    | 122    |
| ATELIERS DU MONCEAU                | 8465_PHOTOVOLTAIQUE ATELIER DU MONCEAU                | 173    | 199,87 |
| ATELIERS LUCIEN SIMON              | 8761_PHOTOVOLTAIQUE ATELIERS LUCIEN SIMON             | 64     | 72,52  |
| ATELIERS MARTIN                    | 8716_PHOTOVOLTAIQUE ATELIERS MARTIN                   | 75     | 83,25  |
| ATELIERS MERSCH                    | 9299_PHOTOVOLTAIQUE ATELIERS MERSCH                   | 45     | 50     |
| ATI                                | 9493_PHOTOVOLTAIQUE PELZER                            | 60     | 61,2   |
| ATI INDUSTRIE                      | 1238_PHOTOVOLTAIQUE A.T.I. INDUSTRIE                  | 29,9   | 31,78  |
| ATMA                               | 9219_PHOTOVOLTAIQUE ATMA                              | 18     | 19,89  |
| AU PAIN CINACIEN                   | 8003_PHOTOVOLTAIQUE AU PAIN CINACIEN                  | 44     | 50,88  |
| AUGUSTIN PEIFFER                   | 9526_PHOTOVOLTAIQUE AUGUSTIN PEIFFER                  | 69     | 83     |
| AUTO-LUTTRE                        | 8535_PHOTOVOLTAIQUE AUTO-LUTTRE                       | 23,4   | 23,4   |
| AX INV                             | 8322_PHOTOVOLTAIQUE AXIMA                             | 38,535 | 38,535 |
|                                    | 8323_PHOTOVOLTAIQUE MEISCH 1                          | 15     | 15,84  |
|                                    | 8324_PHOTOVOLTAIQUE MEISCH 2                          | 30     | 31,68  |
| AZ PARTNERS                        | 9535_PHOTOVOLTAIQUE AZ PARTNERS                       | 58,24  | 58,24  |
| BALTEAU                            | 1156_PHOTOVOLTAIQUE BALTEAU                           | 28,6   | 30,36  |
| BAM MAT                            | 3728_PHOTOVOLTAIQUE BAM MAT                           | 47,6   | 47,6   |
| BARBIER DENIS & HERVE              | 8065_PHOTOVOLTAIQUE BARBIER                           | 32,2   | 32,2   |
| B***                               | 8082_P*** (NADRIN)                                    | 50     | 55,125 |
| BATITEC                            | 8417_PHOTOVOLTAIQUE BATITEC                           | 32     | 33,849 |
| BC ENTREPRISES                     | 8964_PHOTOVOLTAIQUE AD DELHAIZE                       | 82     | 85,26  |
| BEUSOV NEW                         | 8589_PHOTOVOLTAIQUE AD DELHAIZE BEURAING              | 84     | 88,2   |
| BEAUVAL                            | 8508_PHOTOVOLTAIQUE BEAUVAL                           | 69     | 72,03  |
| BELGIAN FIBERS MANUFACTURING       | 9339_PHOTOVOLTAIQUE BELGIAN FIBERS MANUFACTURING      | 562    | 576    |
| BELGIUM METAL                      | 8956_PHOTOVOLTAIQUE BELGIUM METAL                     | 219,45 | 250    |
| BEM'S                              | 8114_PHOTOVOLTAIQUE BEM'S                             | 40     | 44,64  |
| BEPCO PARTS                        | 9110_PHOTOVOLTAIQUE BEPCO PARTS                       | 132    | 167,28 |
| B***                               | 9202_P*** (COUTHUIN)                                  | 30     | 35,1   |
| BIB                                | 9260_PHOTOVOLTAIQUE BIB                               | 25,6   | 25,6   |
| BIEMAR BOIS                        | 8528_PHOTOVOLTAIQUE BIEMAR BOIS SOUMAGNE              | 221    | 250,04 |
| Bières de Chimay                   | 2046_PHOTOVOLTAIQUE Bières de Chimay                  | 191,1  | 217,65 |
| BIKERS DESIGN                      | 8468_PHOTOVOLTAIQUE BIKERS DESIGN                     | 42,875 | 42,875 |
| BILIA EMOND BELGIUM                | 8877_PHOTOVOLTAIQUE GARAGE EMOND BMW                  | 100    | 113,36 |
| BIO-ZONE                           | 9340_PHOTOVOLTAIQUE BIO-ZONE                          | 222    | 244,8  |
| BLANCHISSERIE BASSE-MEUSE          | 9215_PHOTOVOLTAIQUE BLANCHISSERIE BASSE-MEUSE         | 119    | 132,75 |
| BLUE RIBBON                        | 9322_PHOTOVOLTAIQUE BLUE RIBBON                       | 46,8   | 53,985 |
| BMW CONSTRUCT                      | 8780_PHOTOVOLTAIQUE BMWILL CONSTRUCT                  | 74,4   | 84     |

|                              |  |       |         |
|------------------------------|--|-------|---------|
| BOIS ET TRAVAUX              | 9394_PHOTOVOLTAIQUE BOIS ET TRAVAUX              | 30    | 30,42   |
| BOISELEC                     | 8319_PHOTOVOLTAIQUE BOISELEC                     | 21,66 | 24,05   |
| BOULANGERIE DELHAYE          | 8685_PHOTOVOLTAIQUE BOULANGERIE DELHAYE          | 66    | 68,6    |
| BOULEMBERG                   | 8997_PHOTOVOLTAIQUE BOULEMBERG                   | 175   | 239,98  |
| BOUNAMEAUX                   | 8690_PHOTOVOLTAIQUE OPEL BOUNAMEAUX              | 200   | 200     |
| BOURGUIGNON                  | 8527_PHOTOVOLTAIQUE BOURGUIGNON                  | 63    | 72,96   |
| BRANIMMO                     | 9284_PHOTOVOLTAIQUE BRANIMMO                     | 68    | 69,25   |
| BRASSERIE DES FAGNES         | 10027_PHOTOVOLTAIQUE BRASSERIE DES FAGNES        | 44    | 44      |
| BRASSERIE DUBUISSON FRÈRES   | 8520_PHOTOVOLTAIQUE BRASSERIE DUBUISSON FRERES   | 136   | 144,18  |
| BRASSERIE VANUXEEM           | 8192_PHOTOVOLTAIQUE VANUXEEM                     | 185   | 211,5   |
| BREDA                        | 8160_PHOTOVOLTAIQUE BREDA                        | 52,5  | 58,65   |
| BREUER TECHNICAL DEVELOPMENT | 9121_PHOTOVOLTAIQUE BREUER TECHNICAL DEVELOPMENT | 30    | 30,525  |
| BRICO BOIS                   | 10042_PHOTOVOLTAIQUE BRICO CLABECQ               | 100   | 100     |
| BRICO RESIMONT               | 8501_PHOTOVOLTAIQUE HUBO WANZE                   | 57,6  | 70,08   |
| BRICO SAINT-ELOI             | 8678_PHOTOVOLTAIQUE BRICO SAINT-ELOI             | 69    | 78      |
| BRICO SERVICE                | 8435_PHOTOVOLTAIQUE BRICO SERVICE                | 68    | 70,8    |
| BRICOLAGES LESSINES          | 8437_PHOTOVOLTAIQUE BRICOLAGES LESSINES          | 50    | 54,6    |
| BRICOMA                      | 8503_PHOTOVOLTAIQUE HUBO EUPEN                   | 54,9  | 61,92   |
| BRICOPHI                     | 8872_PHOTOVOLTAIQUE BRICOPHI- HUBO               | 23    | 25,5    |
| BRICOSTORE                   | 8560_PHOTOVOLTAIQUE BRICOSTORE                   | 85    | 89,915  |
| BRIDGESTONE AIRCRAFT TIRE    | 7926_PHOTOVOLTAIQUE BRIDGESTONE AIRCRAFT TIRE    | 31,5  | 32,4    |
| BRIMOU                       | 8502_PHOTOVOLTAIQUE HUBO MOUSCRON                | 48,4  | 53,28   |
| BRONE                        | 9297_PHOTOVOLTAIQUE BRONE                        | 49    | 62,73   |
| BSOLUTIONS MANAGEMENT        | 9249_PHOTOVOLTAIQUE BSOLUTIONS                   | 22    | 22,05   |
| BUILDING SOLAR II            | 9009_PHOTOVOLTAIQUE COBATIM                      | 79,8  | 116     |
|                              | 9007_PHOTOVOLTAIQUE COBEFA                       | 165   | 230     |
|                              | 9324_PHOTOVOLTAIQUE DECOMO                       | 198   | 249,76  |
|                              | 9293_PHOTOVOLTAIQUE DELY WAFELS                  | 79,2  | 110,005 |
|                              | 9008_PHOTOVOLTAIQUE H&V                          | 175   | 250     |
|                              | 9325_PHOTOVOLTAIQUE PLUKON MOUSCRON              | 198   | 248,96  |
|                              | 9323_PHOTOVOLTAIQUE REX PANELS & PROFILES II     | 165   | 240     |
|                              | 9377_PHOTOVOLTAIQUE SIOEN CALENDERING            | 198   | 250     |
|                              | 9181_PHOTOVOLTAIQUE SIOEN FIBRES                 | 198   | 249,76  |
| BUILDINGS & RETROFIT         | 8967_PHOTOVOLTAIQUE ABBAYE-DE-MAREDSOUS          | 195   | 227,96  |
|                              | 9000_PHOTOVOLTAIQUE BODART & GONAY               | 216   | 250     |
|                              | 8745_PHOTOVOLTAIQUE BOULET MENAGE                | 156   | 191,5   |
|                              | 8321_PHOTOVOLTAIQUE BTN                          | 166   | 192,97  |
|                              | 8769_PHOTOVOLTAIQUE CHIMAC                       | 219   | 249,75  |
|                              | 8770_PHOTOVOLTAIQUE FACQ                         | 102   | 119,98  |
|                              | 8768_PHOTOVOLTAIQUE FACQ LOGISTICS               | 211   | 250,48  |
|                              | 8682_PHOTOVOLTAIQUE GAUDER                       | 163   | 192,815 |
|                              | 10146_PHOTOVOLTAIQUE HOTEL ALIZÉE MOUSCRON       | 45    | 45      |
|                              | 8219_PHOTOVOLTAIQUE MECAMOLD                     | 68    | 74,52   |
|                              | 8771_PHOTOVOLTAIQUE PACARBEL                     | 171   | 192,39  |
|                              | 9001_PHOTOVOLTAIQUE REGISTER                     | 219   | 249,84  |

|   |   |       |         |
|---|---|-------|---------|
| BUMA  | 9113_PHOTOVOLTAIQUE BUMA  | 17    | 17      |
| BURE  | 8434_PHOTOVOLTAIQUE BURE  | 34    | 37,895  |
| BUSINY  | 9312_PHOTOVOLTAIQUE BUSINY  | 192   | 220     |
| BUTTIENS FRUITS                               | 8596_PHOTOVOLTAIQUE FRIGOS VERLAINE                               | 124,9 | 166     |
| BV CATERING                                   | 9555_PHOTOVOLTAIQUE DOMAINE LA BLOMMERIE                          | 29,5  | 29,5    |
| BW EUPEN                                      | 8371_PHOTOVOLTAIQUE BW EUPEN 1                                    | 69    | 76,685  |
|   | 8372_PHOTOVOLTAIQUE BW EUPEN 2                                    | 26    | 27,44   |
|   |   |       |         |
| C. CONSULTING                                 | 9214_PHOTOVOLTAIQUE T.L.I   | 107   | 125     |
| C.E.W.A.C.                                    | 9439_PHOTOVOLTAIQUE CEWAC   | 80    | 88,92   |
| CAFÉS LIÉGÉOIS                                | 9431_PHOTOVOLTAIQUE CAFÉS LIÉGEOIS                                | 220   | 249,48  |
| CAISSERIES BELLE-VUE                          | 8405_PHOTOVOLTAIQUE CAISSERIES BELLE-VUE                          | 238   | 249,9   |
| CAPPAUL                                       | 8168_PHOTOVOLTAIQUE CAPPAUL                                       | 236   | 250,145 |
| CARACTERE MB                                  | 9040_PHOTOVOLTAIQUE CARACTERE MB                                  | 21,42 | 21,42   |
| CARDON LOGISTIQUE                             | 8664_PHOTOVOLTAIQUE CARDON LOGISTIQUE                             | 240   | 246,96  |
| CARGO LIFTING                                 | 8162_PHOTOVOLTAIQUE CARGO LIFTING                                 | 120   | 130,41  |
| CARLIER BOIS                                  | 8159_PHOTOVOLTAIQUE CARLIER BOIS                                  | 26    | 26      |
| CARO FERNELMONT                               | 8945_PHOTOVOLTAIQUE CARO FERNELMONT                               | 500   | 506     |
| CARO-CONFORT                                  | 9048_PHOTOVOLTAIQUE CARO-CONFORT                                  | 41    | 41,76   |
| CARRIERE DE LA HAZOTTE                        | 10211_PHOTOVOLTAIQUE CARRIERE DE LA HAZOTTE                       | 75    | 81,12   |
| CARRO WAVRE                                   | 8314_PHOTOVOLTAIQUE INTERCARRO                                    | 59    | 63,92   |
| CARROQUAD                                     | 8714_PHOTOVOLTAIQUE CARROQUAD                                     | 45    | 50,4    |
| CARROSSERIE DELTENRE                          | 9450_PHOTOVOLTAIQUE CARROSSERIE DELTENRE                          | 37    | 37,7    |
| CARROSSERIE PIRON                             | 8302_PHOTOVOLTAIQUE CARROSSERIE PIRON                             | 34    | 38,54   |
| CARROSSERIE VANDERHEYDEN FRÈRES               | 8538_PHOTOVOLTAIQUE CARROSSERIE VANDERHEYDEN                      | 28    | 30      |
| CARRY GERON                                   | 10078_PHOTOVOLTAIQUE CARRY GERON                                  | 83    | 83      |
| CARTONNERIES DE WALLONIE                      | 10200_PHOTOVOLTAIQUE CDW-COURCELLES                               | 225   | 249,9   |
| CASTEL ENGINEERING                            | 8860_PHOTOVOLTAIQUE CASTEL ENGINEERING                            | 382,8 | 463,62  |
| CATOULE                                       | 8381_PHOTOVOLTAIQUE CATOULE                                       | 68    | 84      |
| CBC BANQUE                                    | 10532_PHOTOVOLTAIQUE CBC BANQUE BATTICE                           | 40    | 40      |
| CELEM   | 8193_PHOTOVOLTAIQUE CELEM   | 45    | 47,559  |
| CENTRE  | 8713_PHOTOVOLTAIQUE CARREFOUR MARKET SAINT-HUBERT                 | 45    | 52,92   |
| CENTRE D'AFFAIRES SYNERGIE ET CROISSANCE      | 9364_PHOTOVOLTAIQUE CENTRE D'AFFAIRES SYNERGIE ET CROISSANCE      | 69    | 83,058  |
|   |   |       |         |
| CENTRE DE DEVELOPPEMENT RURAL                 | 9350_PHOTOVOLTAIQUE HALLE DE HAN                                  | 50    | 60      |
| CENTRE ÉQUESTRE HARAS WISBECQ                 | 8358_PHOTOVOLTAIQUE CENTRE EQUESTRE HARAS WISBECQ                 | 96    | 110,25  |
| CENTRE HOSPITALIER REGIONAL DE LA HAUTE SENNE | 9398_PHOTOVOLTAIQUE CENTRE HOSPITALIER REGIONAL DE LA HAUTE SENNE | 370   | 425,22  |
|   |   |       |         |
| CENTRE MEDICAL HELIPORTE                      | 8431_PHOTOVOLTAIQUE CMH   | 32,5  | 33,28   |
| CENTRETOILE                                   | 9065_PHOTOVOLTAIQUE CENTRETOILE                                   | 79,44 | 79,44   |
| CERAL   | 10288_PHOTOVOLTAIQUE CERAL  | 55    | 64,8    |
| CERATEC ELECTROTECHNICS                       | 63873_PHOTOVOLTAIQUE CERATEC ELECTROTECHNICS                      | 210   | 230,88  |
| CEZAR MEUBLES                                 | 7968_PHOTOVOLTAIQUE CEZAR MEUBLES                                 | 82,8  | 84,6    |
| CHACON  | 8258_PHOTOVOLTAIQUE CHACON  | 80    | 80,92   |
| CHAPELLERIE HERMAN                            | 8039_PHOTOVOLTAIQUE CHAPELLERIE HERMAN                            | 21    | 22,08   |
| CHARLEROI SALAISON                            | 9402_PHOTOVOLTAIQUE CHASAL  | 83,2  | 84,25   |
| CHATEAUXX                                     | 8781_PHOTOVOLTAIQUE CHATEAUXX                                     | 62,32 | 79,38   |

|                                |   |        |         |
|--------------------------------|---|--------|---------|
| CHAUDRO 2000                   | 7942_PHOTOVOLTAIQUE CHAUDRO 2000                          | 50,5   | 51,84   |
| CHIMAC                         | 8772_PHOTOVOLTAIQUE CHIMAC BUREAUX                        | 42     | 44,16   |
| CHIRURGICAL MAINTENANCE        | 8853_PHOTOVOLTAIQUE CHIRURGICAL MAINTENANCE               | 42     | 54,755  |
| CHOCOLATERIE BELVAS            | 8163_PHOTOVOLTAIQUE CHOCOLATERIE BELVAS                   | 69     | 74,88   |
| CHRISTIAENS BETON              | 8720_PHOTOVOLTAIQUE CHRISTIAENS BETON                     | 45     | 49      |
| CHRISTIAN LECLERCQ             | 51651_Photovoltaïque BOUCHONS Leclercq                    | 44     | 51,72   |
| CIBB                           | 8568_PHOTOVOLTAIQUE CIBB                                  | 166,5  | 166,5   |
| CIC PACKAGING                  | 8590_PHOTOVOLTAIQUE CIC PACKAGING                         | 110,4  | 129,54  |
| CIREPA                         | 8607_PHOTOVOLTAIQUE CIREPA                                | 192,4  | 228,225 |
| CLEMENCO                       | 8765_PHOTOVOLTAIQUE CLEMENCO                              | 75     | 91      |
| CLIBO                          | 10116_PHOTOVOLTAIQUE LES AMANDIERS                        | 29     | 32,895  |
| CLIMACOOOL                     | 8399_PHOTOVOLTAIQUE CLIMACOOOL                            | 24     | 25      |
| COCA COLA                      | 8127_PHOTOVOLTAIQUE COCA COLA                             | 96,6   | 98,7    |
| COCA-COLA ENTREPRISES BELGIUM  | 9403_PHOTOVOLTAIQUE COCA-COLA CHAUDFONTAINE               | 120    | 136,08  |
| CODE IMMO                      | 8377_PHOTOVOLTAIQUE CODE IMMO                             | 38     | 40,3    |
| CODIBEL                        | 8099_PHOTOVOLTAIQUE CODIBEL                               | 115    | 123,97  |
| COFELY FABRICOM INDUSTRIE SUD  | 8855_PHOTOVOLTAIQUE COFELY FABRICOM ANS                   | 175    | 200,64  |
|                                | 8857_PHOTOVOLTAIQUE COFELY FABRICOM FLEURUS               | 48     | 55,25   |
| COFELY FABRICOM INFRA SUD      | 8856_PHOTOVOLTAIQUE COFELY FABRICOM BRAINE L'ALLEUD       | 175    | 201,6   |
| COFELY SERVICES                | 9005_PHOTOVOLTAIQUE TECHNIFUTUR                           | 96     | 113,75  |
| COGEAF GROUP                   | 9046_PHOTOVOLTAIQUE COGEAF GROUP                          | 112    | 112,5   |
| COGETRINA S.A                  | 8813_PHOTOVOLTAIQUE SOCIETE DUFOUR - COGETRINA            | 223    | 250     |
| COLLINET                       | 8753_PHOTOVOLTAIQUE COLLINET                              | 31,2   | 35,25   |
| COLLINET                       | 8754_PHOTOVOLTAIQUE COLLINET HERMALLE                     | 75     | 84,6    |
| COLONA                         | 10108_PHOTOVOLTAIQUE COLONA                               | 300    | 350     |
| COMES BOIS                     | 8789_PHOTOVOLTAIQUE COMES BOIS                            | 86     | 93,71   |
| COMIJN HERVE ET COMIJN MATHIEU | 10050_PHOTOVOLTAIQUE FERME COMIJN                         | 85     | 103,02  |
| COMITE DU LAIT                 | 10176_PHOTOVOLTAIQUE COMITÉ DU LAIT                       | 80     | 88,02   |
| COMMUNE D'ATTERT               | 193_PHOTOVOLTAIQUE ÉCOLE COMMUNALE D'ATTERT               | 18,9   | 21,12   |
| COMMUNE D'AUBEL                | 9506_PHOTOVOLTAIQUE ABATTOIR AUBEL                        | 114,8  | 149,96  |
| COMMUNE DE FARCIENNES          | 10170_PHOTOVOLTAIQUE COMMUNE DE FARCIENNES                | 103    | 120     |
| COMMUNE DE FERNELMONT          | 10217_PHOTOVOLTAIQUE COMMUNE DE FERNELMONT                | 25     | 25,85   |
| COMMUNE de Libramont           | 8987_PHOTOVOLTAIQUE HALL DES FOIRES DE LIBRAMONT          | 60     | 64,8    |
| COMMUNE DE PERWEZ              | 7965_PHOTOVOLTAIQUE HALL DES SPORTS (PERWEZ)              | 29     | 32,4    |
| COMMUNE DE ROUVROY             | 9049_PHOTOVOLTAIQUE COMPLEXE SPORTIF ET CULTUREL          | 85     | 107,1   |
| COMMUNE DE SAINT-LÉGER         | 10354_PHOTOVOLTAIQUE ADMINISTRATION COMMUNALE SAINT-LÉGER | 26     | 26      |
| COMMUNE de THUIN               | 8890_PHOTOVOLTAIQUE HALL POLYVALENT THUIN                 | 25     | 29,76   |
| COMMUNE D'ÉTALLE               | 9373_PHOTOVOLTAIQUE SERVICE RÉGIONAL D'INCENDIE           | 21     | 22,05   |
| COMPTOIR DES FAGNES            | 10026_PHOTOVOLTAIQUE COMPTOIR DES FAGNES                  | 72     | 81,9    |
| CONCEPTEXPO PROJECT            | 8499_PHOTOVOLTAIQUE CONCEPTEXPO PROJECT                   | 240    | 249,9   |
| COONEN GRAPHICS                | 10304_PHOTOVOLTAIQUE COONEN GRAPHICS                      | 100    | 124,8   |
| C***                           | 9479_P*** (LOBBES)  | 50     | 59,67   |
| COPERFIN                       | 8738_PHOTOVOLTAIQUE ADS                                   | 50,16  | 50,16   |
| COPPÉE et COPPÉE               | 1838_PHOTOVOLTAIQUE IXINA                                 | 47,915 | 47,915  |

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|-------------------------|--|--------|---------|
| CORA                    | 8255_PHOTOVOLTAIQUE CORA CHATELINEAU                         | 805    | 962,82  |
|                         | 8253_PHOTOVOLTAIQUE CORA LA LOUVIÈRE                         | 571    | 659,815 |
|                         | 8252_PHOTOVOLTAIQUE CORA MESSANCY                            | 1048   | 1243,65 |
|                         | 8251_PHOTOVOLTAIQUE CORA ROCOURT                             | 438    | 499,5   |
| CORI                    | 10159_PHOTOVOLTAIQUE CORI                                    | 50,7   | 52      |
| CORMAN - HALLEUX & FILS | 9197_PHOTOVOLTAIQUE CORMAN - HALLEUX                         | 50     | 50      |
| COULEMBIER & CIE        | 8762_PHOTOVOLTAIQUE COULEMBIER & CIE                         | 45     | 58,86   |
| C***                    | 8389_P*** (BAELEN (LG.))                                     | 20     | 20      |
| C***                    | 10409_P*** (FOSSES-LA-VILLE)                                 | 40     | 46,98   |
| CSPV                    | 9359_PHOTOVOLTAIQUE ION BEAM APPLICATIONS (IBA)              | 100    | 111,28  |
| DAD FRÈRES              | 8563_PHOTOVOLTAIQUE AD DELHAIZE VERLAINE                     | 85     | 92,96   |
| Daniel MINNE-HOCK       | 8980_PHOTOVOLTAIQUE DANIEL MINNE HOCK                        | 129,9  | 129,9   |
| DANNEMARK               | 10235_PHOTOVOLTAIQUE DANNEMARK                               | 60     | 68,9    |
| DARIO & CO              | 8633_PHOTOVOLTAIQUE DALLA VALLE                              | 30     | 35,28   |
|                         | 8634_PHOTOVOLTAIQUE METAL QUARTZ                             | 47,6   | 54,88   |
| DAUVISTER               | 9090_PHOTOVOLTAIQUE DAUVISTER                                | 48,12  | 48,12   |
| D***                    | 8158_P*** (HOUYET)   | 27     | 31,68   |
| DB SCHENKER             | 8683_PHOTOVOLTAIQUE DB SCHENKER                              | 190    | 216     |
| DB SERVICES             | 8571_PHOTOVOLTAIQUE DB SERVICES                              | 100    | 115,2   |
| DE BROGNIEZ             | 9522_PHOTOVOLTAIQUE DE BROGNIEZ                              | 34     | 44,88   |
| D***                    | 66418_P*** (FOCANT)  | 20     | 22,31   |
| D***                    | 8885_P*** (DONGELBERG)                                       | 29     | 30      |
| DEBAENST                | 8331_PHOTOVOLTAIQUE DEBAENST                                 | 225    | 248,7   |
| D***                    | 9272_P*** (GESVES)   | 40     | 44,37   |
| DÉCOR ET JARDIN         | 8225_PHOTOVOLTAIQUE DÉCOR ET JARDIN                          | 192    | 201,135 |
| DECRAENE Kris           | 9041_PHOTOVOLTAIQUE BUSINESS CENTER POINT CARRE              | 75     | 82,04   |
| D***                    | 8457_P*** (DOTTIGNIES)                                       | 68     | 70,03   |
| D***                    | 9120_P*** (THY-LE-CHÂTEAU)                                   | 11,4   | 14,5    |
| DELABIE                 | 7166_PHOTOVOLTAIQUE DELABIE                                  | 1394,9 | 1537,76 |
| DELBAR                  | 9556_PHOTOVOLTAIQUE GARAGE DELBAR                            | 60     | 60,48   |
| D***                    | 8700_P*** (FAIMES)   | 20     | 21,56   |
| DELHEZ                  | 8755_PHOTOVOLTAIQUE DELHEZ                                   | 204    | 242,75  |
| DÉLICES DE COMINES      | 8595_PHOTOVOLTAIQUE DELICES DE COMINES                       | 180    | 199,8   |
| DELISNACK               | 8040_PHOTOVOLTAIQUE DELISNACK                                | 67,16  | 67,16   |
| DELPLEX                 | 10324_PHOTOVOLTAIQUE DELPEX                                  | 50     | 56,28   |
| DELTA LUMINANCE         | 9196_PHOTOVOLTAIQUE DELTA LUMINANCE                          | 40     | 45,825  |
| DELTA SOLAR ENERGY      | 8458_PHOTOVOLTAIQUE CARREFOUR MARKET CHAPELLE-LEZ-HERLAIMONT | 60     | 62,96   |
|                         | 8448_PHOTOVOLTAIQUE CARREFOUR MARKET GERPINNES               | 139    | 144,06  |
|                         | 8445_PHOTOVOLTAIQUE CARREFOUR MARKET JAMBES                  | 64     | 65,66   |
|                         | 8449_PHOTOVOLTAIQUE CARREFOUR MARKET MESTDAGH GILLY          | 210    | 219,27  |
|                         | 8446_PHOTOVOLTAIQUE CARREFOUR MARKET TRAZEGNIES              | 126    | 132,3   |
|                         | 8447_PHOTOVOLTAIQUE CARREFOUR MARKET WAVRE                   | 80     | 83,3    |
|                         | 8229_PHOTOVOLTAIQUE UCB PHARMA                               | 225    | 249,9   |
| DELTRIAN INTERNATIONAL  | 8316_PHOTOVOLTAIQUE DELTRIAN INTERNATIONAL                   | 30     | 30,82   |

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| DENIS BALTUS                     | 8830_PHOTOVOLTAIQUE DENIS BALTUS                     | 30     | 31,8    |
| D***                             | 9415_P*** (PONT-À-CELLES)                            | 36     | 36      |
| DEOM                             | 9538_PHOTOVOLTAIQUE DEOM                             | 43,8   | 45      |
|                                  | 9539_PHOTOVOLTAIQUE DEOM LIBIN                       | 140    | 150     |
| DEPRO PROFILES                   | 9002_PHOTOVOLTAIQUE DEPRO PROFILES                   | 165    | 240     |
| DEQUACHIM                        | 8839_PHOTOVOLTAIQUE DEQUACHIM                        | 180    | 200     |
| DERCO                            | 8076_PHOTOVOLTAIQUE DERCO                            | 20     | 23,5    |
| D***                             | 9517_P*** (MARCQ)                                    | 24     | 26,52   |
| DESIGN METAL                     | 9006_PHOTOVOLTAIQUE DESIGN METAL                     | 91     | 122,2   |
| DETANDT SIMON                    | 8724_PHOTOVOLTAIQUE DETANDT SIMON                    | 149,96 | 149,96  |
| DEVAMEAT                         | 8408_PHOTOVOLTAIQUE DEVAMEAT                         | 150    | 154,36  |
| D***                             | 103082_P*** (BASSILLY)                               | 40     | 47,32   |
| D***                             | 10228_P*** (BOUSVAL)                                 | 30     | 31,2    |
| D'ICI                            | 8946_PHOTOVOLTAIQUE D'ICI                            | 56     | 66,88   |
| DIEDERICKX J-F                   | 8037_PHOTOVOLTAIQUE DIEDERICKX                       | 19,9   | 19,9    |
| DINIMA                           | 10337_PHOTOVOLTAIQUE DINIMA                          | 53,4   | 53,4    |
| D'INTERIEUR                      | 8625_PHOTOVOLTAIQUE D'INTERIEUR                      | 140    | 149,76  |
| DISTRI- INCOURT                  | 8466_PHOTOVOLTAIQUE DISTRI-INCOURT                   | 85     | 88,66   |
| DISTRIFOOD II                    | 8425_PHOTOVOLTAIQUE AD DELHAIZE FLORENVILLE          | 105,75 | 116     |
| DISTRY HANNUT                    | 9509_PHOTOVOLTAIQUE DISTRY HANNUT                    | 49     | 53,25   |
| DIVINS                           | 8325_PHOTOVOLTAIQUE DIVINS                           | 24     | 26,79   |
| DLDB                             | 9087_PHOTOVOLTAIQUE DLDB                             | 52     | 56      |
| DMPI                             | 8889_PHOTOVOLTAIQUE DMPI                             | 40     | 45,54   |
| DOLCE LA HULPE                   | 8185_PHOTOVOLTAIQUE DOLCE LA HULPE                   | 238    | 249,805 |
| DOMAINE DE BERINZENNE            | 8412_PHOTOVOLTAIQUE BERINZENNE - MAISON NATURE       | 25     | 26,46   |
|                                  | 8411_PHOTOVOLTAIQUE BERINZENNE - MUSEE               | 36     | 37,73   |
| DOMAINE PROVINCIAL DE CHEVETOGNE | 6369_PHOTOVOLTAIQUE DOMAINE PROVINCIAL DE CHEVETOGNE | 60     | 62,9    |
| DRAFIL                           | 8626_PHOTOVOLTAIQUE DRAFIL                           | 228    | 249     |
| DRINK SCAILLET                   | 8461_PHOTOVOLTAIQUE DRINK SCAILLET                   | 51     | 55,46   |
| DUBONDIS                         | 9095_PHOTOVOLTAIQUE DUBONDIS BON-SECOURS             | 90     | 91,14   |
|                                  | 9071_PHOTOVOLTAIQUE PROXY DELHAIZE                   | 45     | 47,04   |
|                                  | 9074_PHOTOVOLTAIQUE PROXY DELHAIZE COMINES           | 82     | 83,3    |
| DUCHENE                          | 9451_PHOTOVOLTAIQUE DUCHENE                          | 189    | 213,72  |
| DUFOUR                           | 8343_PHOTOVOLTAIQUE DUFOUR                           | 230    | 250     |
| DUTRA                            | 9044_PHOTOVOLTAIQUE DUTRA                            | 37     | 45      |
| DUVINDIS                         | 9073_PHOTOVOLTAIQUE DUVINDIS                         | 30     | 31,605  |
| E&D DISTRIBUTION                 | 8572_PHOTOVOLTAIQUE E&D DISTRIBUTION                 | 54     | 58,88   |
| E.C.F.                           | 8164_PHOTOVOLTAIQUE E.C.F                            | 72     | 79,44   |
| ECO LOGIX WALLONIE               | 8616_PHOTOVOLTAIQUE BEP FLOREFFE                     | 220    | 249,9   |
|                                  | 9003_PHOTOVOLTAIQUE DECO LOGIS                       | 130    | 149,685 |
|                                  | 9353_PHOTOVOLTAIQUE DOW CORNING                      | 180    | 246,33  |
|                                  | 9354_PHOTOVOLTAIQUE DOW CORNING - UTI                | 180    | 246,33  |
|                                  | 8998_PHOTOVOLTAIQUE FOODPARTNERS                     | 220    | 249,9   |
|                                  | 8743_PHOTOVOLTAIQUE GO PATAT                         | 220    | 249,9   |
|                                  | 8999_PHOTOVOLTAIQUE GOEMAERE                         | 220    | 249,9   |

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|   | 9306_PHOTOVOLTAIQUE MC BRIDE I                        | 180   | 246,33  |
|   | 9305_PHOTOVOLTAIQUE MC BRIDE II                       | 180   | 246,33  |
| ECO SOLAR INVEST                              | 9545_PHOTOVOLTAIQUE BRU CHEVRON                       | 220   | 249,9   |
|   | 9554_PHOTOVOLTAIQUE CLINIQUE SAINTE-ÉLISABETH         | 129   | 143,055 |
|   | 9559_PHOTOVOLTAIQUE SPA MONOPOLE                      | 220   | 249,9   |
|   | 9544_PHOTOVOLTAIQUE SWDE - BARRAGE DE LA VESDRE       | 210   | 234,78  |
|   | 9495_PHOTOVOLTAIQUE SWDE COUILLET                     | 231   | 249,84  |
|   | 9552_PHOTOVOLTAIQUE SWDE GAURAIN                      | 100   | 113,1   |
|   | 9508_PHOTOVOLTAIQUE SWDE Herstal                      | 231   | 250,08  |
|   | 9553_PHOTOVOLTAIQUE SWDE NAGIMONT                     | 220   | 243,36  |
|   | 9465_PHOTOVOLTAIQUE SWDE STEMBERT                     | 231   | 250,595 |
|   |   |       |         |
| ECOBATI                                       | 8994_PHOTOVOLTAIQUE ECOBATI                           | 65,2  | 73,44   |
| E-COCOON                                      | 8621_PHOTOVOLTAIQUE FINITION METAL                    | 186   | 216,825 |
|   | 8620_PHOTOVOLTAIQUE GASCARD GSC                       | 34    | 41,16   |
| ECORUS INVEST II                              | 8644_PHOTOVOLTAIQUE FORUM EUPEN                       | 207,5 | 249,9   |
|   | 9351_PHOTOVOLTAIQUE TOTAL DEPOT PETROLIER FELUY       | 220,8 | 249,828 |
| ECOSTAL                                       | 8450_PHOTOVOLTAIQUE ECOSTAL                           | 48    | 58,8    |
| EDF Luminus                                   | 10476_PHOTOVOLTAIQUE CENTRALE HYDRAULIQUE DE MONSIN   | 130   | 130     |
| ÉDITIONS DUPUIS                               | 9456_PHOTOVOLTAIQUE EDITIONS DUPUIS                   | 52    | 56,16   |
| ÉDITIONS PANINI BELGIQUE                      | 8991_PHOTOVOLTAIQUE EDITIONS PANINI BELGIQUE          | 48    | 52,92   |
| ELEAFIN                                       | 9224_PHOTOVOLTAIQUE MENUISERIE DE BAERE               | 40    | 42,63   |
| ELOY PREFAB                                   | 8157_PHOTOVOLTAIQUE ELOY PREFAB                       | 233,1 | 248,4   |
| ELSA  | 9436_PHOTOVOLTAIQUE LA CRECHE CHAMPS ET GAZOUILLIS    | 31    | 34,8    |
| EMPREINTE                                     | 10473_PHOTOVOLTAIQUE EMPREINTE                        | 25    | 26,52   |
| ENDECO  | 7996_PHOTOVOLTAIQUE ENDECO                            | 38    | 39,6    |
| ENECO SOLAR BELGIUM                           | 8298_PHOTOVOLTAIQUE BRIQUETERIE WIENERBERGER PERUWELZ | 229   | 244,575 |
|   | 9029_PHOTOVOLTAIQUE CENTRE ADMINISTRATIF DE CINEY     | 40    | 42,875  |
|   | 10233_PHOTOVOLTAIQUE STOCKHABO ICE                    | 950   | 999,75  |
|   | 8297_PHOTOVOLTAIQUE TUILERIE WIENERBERGER MOUSCRON    | 220   | 242     |
| ENECO SOLAR ENERGY 1                          | 8778_PHOTOVOLTAIQUE GOURMAND                          | 220   | 237,5   |
|   | 8741_PHOTOVOLTAIQUE INTERWAFFELS - LOTUS BAKERIES     | 240   | 249,78  |
|   | 9063_PHOTOVOLTAIQUE MYDIBEL                           | 250   | 278,48  |
|   | 8911_PHOTOVOLTAIQUE STOCKHABO                         | 230,4 | 251,4   |
|   | 8819_PHOTOVOLTAIQUE THIRY                             | 240   | 249,32  |
|   | 9361_PHOTOVOLTAIQUE TRANSMYL MOUSCRON                 | 240   | 249,57  |
|   | 9376_PHOTOVOLTAIQUE XPO LOGISTICS                     | 240   | 249,57  |
| ENECO SOLAR ENERGY 3                          | 8744_PHOTOVOLTAIQUE GRAMYBEL                          | 900   | 990     |
| ENERSOL                                       | 9256_PHOTOVOLTAIQUE ENERSOL                           | 42    | 48,88   |
|   | 9255_PHOTOVOLTAIQUE GARAGE LIEGEOIS                   | 42    | 44,472  |
|   | 9327_PHOTOVOLTAIQUE SYLVAIN LIEGEOIS                  | 36    | 38,88   |
|   | 9027_PHOTOVOLTAIQUE TRAITEUR LES COURS                | 112   | 126,222 |
| ENGEM   | 9229_PHOTOVOLTAIQUE IDBA                              | 30    | 41,16   |
| ENR INVEST                                    | 8732_PHOTOVOLTAIQUE ECOCABLE THE SPIN                 | 41,4  | 42      |
| ENTRAIDE PAR LE TRAVAIL D'ENGHIEN ET ENVIRONS | 9414_PHOTOVOLTAIQUE ETA                               | 40    | 50      |
| ENTRANAM                                      | 9024_PHOTOVOLTAIQUE ENTRANAM                          | 57,6  | 67,62   |

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| ENTREPRISE GÉNÉRALE GUSTAVE ET YVES LIÉGEOIS | 7918_PHOTOVOLTAIQUE LIÉGEOIS G ET Y                  | 12    | 12,98  |
| ENTREPRISES GOFFREDO                         | 9437_PHOTOVOLTAIQUE ENTREPRISES GOFFREDO             | 68    | 74,97  |
| ENTREPRISES SCHMITZ                          | 9530_PHOTOVOLTAIQUE MENUISERIE SCHMITZ               | 37    | 37     |
| ENTREPRISES VINCENT T'SERSTEVENS             | 8561_PHOTOVOLTAIQUE EVS                              | 210   | 244,5  |
| ENVEMAT                                      | 9083_PHOTOVOLTAIQUE B-M-V                            | 30    | 35,72  |
| EOLY   | 9015_PHOTOVOLTAIQUE COLRUYT BASÈCLES                 | 68    | 72,5   |
|  | 10344_PHOTOVOLTAIQUE COLRUYT CHAPELLE-LEZ-HERLAIMONT | 100   | 126,48 |
|  | 9334_PHOTOVOLTAIQUE COLRUYT CINEY                    | 98    | 115    |
|  | 9012_PHOTOVOLTAIQUE COLRUYT DINANT                   | 68    | 74,97  |
|  | 9014_PHOTOVOLTAIQUE COLRUYT ERQUELINNES              | 68    | 75,215 |
|  | 9332_PHOTOVOLTAIQUE COLRUYT GREZ_DOICEAU             | 68    | 82     |
|  | 9016_PHOTOVOLTAIQUE COLRUYT LEUZE                    | 68    | 75     |
|  | 9017_PHOTOVOLTAIQUE COLRUYT LIBRAMONT                | 68    | 75     |
|  | 9013_PHOTOVOLTAIQUE COLRUYT MONS                     | 79    | 90,005 |
|  | 9333_PHOTOVOLTAIQUE COLRUYT OLLIGNIES                | 200   | 248,92 |
|  | 9566_PHOTOVOLTAIQUE COLRUYT SERAING                  | 120   | 146,28 |
|  | 9018_PHOTOVOLTAIQUE COLRUYT WAREMME                  | 51    | 55,575 |
|  | 9567_PHOTOVOLTAIQUE COLRUYT WATERLOO                 | 100   | 121,9  |
|  | 8433_PHOTOVOLTAIQUE COLRUYT WÉPION                   | 60    | 75,14  |
| EPCO   | 9117_PHOTOVOLTAIQUE EPCO                             | 210   | 249,9  |
| EPSILON SOLAR ENERGY                         | 8254_PHOTOVOLTAIQUE CORA HORNU                       | 248   | 249,9  |
|  | 8223_PHOTOVOLTAIQUE EUROPAL PACKAGING                | 238   | 249,9  |
|  | 8409_PHOTOVOLTAIQUE PRATT & WHITNEY                  | 238   | 249,9  |
| EQUISTAL                                     | 8439_PHOTOVOLTAIQUE EQUISTAL                         | 40    | 40     |
| ERPC   | 10250_PHOTOVOLTAIQUE ERPC                            | 175   | 175    |
| ESMOBEL                                      | 10186_PHOTOVOLTAIQUE ESPACE MODE AUBEL               | 90    | 90     |
| ETA LE SAUPONT                               | 8360_PHOTOVOLTAIQUE ATELIER PROTÉGÉ LE SAUPONT       | 221   | 235,2  |
| ÉTABLISSEMENTS BRACONNIER                    | 8470_PHOTOVOLTAIQUE ETABLISSEMENTS BRACONNIER        | 20    | 22,4   |
| ÉTABLISSEMENTS CARLIER RODOLPHE              | 9184_PHOTOVOLTAIQUE CARLIER - NOUGAT                 | 207   | 249,6  |
| ÉTABLISSEMENTS CHARLES LAMBERT               | 9424_PHOTOVOLTAIQUE ETABLISSEMENTS CHARLES LAMBERT   | 52    | 61,2   |
| ÉTABLISSEMENTS KEVERS                        | 8139_PHOTOVOLTAIQUE KEVERS MATERIAUX                 | 16,8  | 18,62  |
| Établissements Paque Yvan                    | 9257_PHOTOVOLTAIQUE PAQUE                            | 104   | 108,12 |
| ÉTABLISSEMENTS WUST Jean                     | 8166_PHOTOVOLTAIQUE ETABLISSEMENT WUST Jean          | 170   | 188    |
| ÉTIENNE - BONNE FORTUNE                      | 8305_PHOTOVOLTAIQUE ETIENNE BONNE FORTUNE            | 60    | 66     |
| ETILUX                                       | 8361_PHOTOVOLTAIQUE ETILUX                           | 90    | 90     |
| ETS A. SCHROYEN                              | 8416_PHOTOVOLTAIQUE SCHROYEN                         | 32    | 36,75  |
| ETS DENIS                                    | 7975_PHOTOVOLTAIQUE DENIS Jean-Luc                   | 118,4 | 129,03 |
| ETS DEVILLERS                                | 8722_PHOTOVOLTAIQUE GARAGE DEVILLERS                 | 47    | 52,5   |
| ETS E. RONVEAUX                              | 9050_PHOTOVOLTAIQUE ETS. E. RONVEAUX                 | 216   | 250    |
| Ets Emile Vanhulen                           | 10402_PHOTOVOLTAIQUE ETS EMILE VANHULEN              | 220   | 220    |
| ETS FELIX SPIRLET FILS                       | 8430_PHOTOVOLTAIQUE SPIRLET AUTOMOBILES              | 131   | 138,32 |
| ETS G. FAYEN                                 | 9092_PHOTOVOLTAIQUE FAYEN                            | 83    | 92,18  |
| ETS HOORNE                                   | 8588_PHOTOVOLTAIQUE HOORNE                           | 44    | 44     |
| ETS MARCEL COLLIGNON                         | 8064_PHOTOVOLTAIQUE ETS MARCEL COLLIGNON             | 46    | 49,14  |
| EUROMI                                       | 8436_PHOTOVOLTAIQUE EUROMI DISON - ANDRIMONT         | 32    | 38,88  |

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| EUROPEAN METROLOGY SYSTEMS   | 10134_PHOTOVOLTAIQUE EMS                          | 62     | 74,556  |
| EUROPLANTES                  | 8981_PHOTOVOLTAIQUE EUROPLANTES                   | 39     | 43,2    |
| EUROSHOP                     | 8438_PHOTOVOLTAIQUE EUROSHOP                      | 195    | 224,94  |
| EUROVER                      | 9460_PHOTOVOLTAIQUE EUROVER                       | 216,8  | 250     |
| EUTRONIX                     | 9237_PHOTOVOLTAIQUE EUTRONIX                      | 80     | 97,92   |
| EVS BROADCAST EQUIPMENT      | 9182_PHOTOVOLTAIQUE EVS                           | 142    | 153     |
| FABRIBOIS                    | 10104_PHOTOVOLTAIQUE FABRIBOIS                    | 220    | 249,895 |
| FAMENNE BETON                | 10172_PHOTOVOLTAIQUE FAMENNE BETONS               | 49,92  | 49,92   |
| FAMIFLORA                    | 8725_PHOTOVOLTAIQUE FAMIFLORA NV                  | 242,92 | 242,92  |
| FASTRAL SERVICES             | 9498_PHOTOVOLTAIQUE FASTRAL SERVICES FAMILLEUREUX | 202    | 249,78  |
|                              | 9500_PHOTOVOLTAIQUE FASTRAL SERVICES MANAGE       | 22     | 24,84   |
| FAYMONVILLE AG               | 8566_PHOTOVOLTAIQUE FAYMONVILLE AG                | 221    | 250,04  |
|                              | 8570_PHOTOVOLTAIQUE FAYMONVILLE CNC               | 221    | 250,04  |
|                              | 8443_PHOTOVOLTAIQUE FAYMONVILLE SERVICES          | 221    | 250,04  |
| FCM CLARINVAL                | 8825_PHOTOVOLTAIQUE FCM CLARINVAL                 | 69,92  | 69,92   |
| FEBELCO                      | 9025_PHOTOVOLTAIQUE MAUROY                        | 238    | 249,9   |
| FEMAT                        | 9564_PHOTOVOLTAIQUE FEMAT                         | 60     | 60      |
| FERMALUX                     | 9371_PHOTOVOLTAIQUE FERMALUX                      | 62     | 73,84   |
| FERME AVICOLE DE LONGUEVILLE | 8518_PHOTOVOLTAIQUE FERME AVICOLE DE LONGUEVILLE  | 81,4   | 90      |
| FERME D'ARTHIMA              | 8803_PHOTOVOLTAIQUE FERME D'ARTHIMA               | 20     | 24,5    |
| FERME DEJONCKHEERE           | 10262_PHOTOVOLTAIQUE FERME DEJONCKHEERE SAGR      | 99     | 99      |
| FERME DU MOULIN DE CAUMONT   | 9404_PHOTOVOLTAIQUE FERME DU MOULIN DE CAUMONT    | 41,4   | 42,84   |
| FERNEL-DIS                   | 8469_PHOTOVOLTAIQUE FERNEL-DIS                    | 82     | 88,4    |
| FERRONNERIE DOBBELSTEIN      | 8983_PHOTOVOLTAIQUE FERRONNERIE DOBBELSTEIN       | 32     | 36      |
| FIB Belgium                  | 3639_PHOTOVOLTAIQUE FIB BELGIUM                   | 224    | 230,34  |
| FINALE 24                    | 8958_PHOTOVOLTAIQUE FINALE 24 EUPEN               | 39,5   | 45,23   |
| FINENERGY                    | 9287_PHOTOVOLTAIQUE ETS DE RIJCKEL                | 59,67  | 59,67   |
|                              | 9331_PHOTOVOLTAIQUE INSTITUT LOUIS MARIE          | 66     | 66,6    |
| F***                         | 9467_P*** (ÉGHEZÉE)                               | 40     | 48      |
| FLAMEXCO INDUSTRIE           | 8766_PHOTOVOLTAIQUE FLAMEXCO INDUSTRIE            | 70     | 79,68   |
| FLAUREA CHEMICALS            | 8022_PHOTOVOLTAIQUE USINE DE ATH                  | 221    | 228,78  |
| FLAXSEED SERVICES            | 9356_PHOTOVOLTAIQUE FLAXSEED SERVICES             | 126,6  | 183     |
| FLORAGRI                     | 9307_PHOTOVOLTAIQUE MAGASIN FLORAGRI              | 60     | 68,85   |
| FONDERIE JACQUET             | 8347_PHOTOVOLTAIQUE FONDERIE JACQUET              | 54,78  | 54,78   |
| FPR LEUZE                    | 8975_PHOTOVOLTAIQUE PRISON LEUZE                  | 328    | 405,23  |
| FRANKI FOUNDATIONS BELGIUM   | 9026_PHOTOVOLTAIQUE FRANKI                        | 164,4  | 188,955 |
| FROM-UN                      | 9441_PHOTOVOLTAIQUE FROM-UN                       | 75     | 82,62   |
| FUGEL FRAIS                  | 7997_PHOTOVOLTAIQUE FUGEL FRAIS                   | 21     | 22,54   |
| GAI SEJOUR                   | 8993_PHOTOVOLTAIQUE FERME DE BELLE VUE            | 168    | 190,785 |
| GALÈRE                       | 8303_PHOTOVOLTAIQUE GALERE                        | 33,8   | 33,81   |
| GALLOO WALLONIE              | 9270_PHOTOVOLTAIQUE GALLOO WALLONIE GHISLENGHIEN  | 170    | 170     |
| GAMMA SOLAR ENERGY           | 8183_PHOTOVOLTAIQUE CHAMPION MESTDAGH MAISIÈRE    | 241    | 249,56  |
|                              | 8379_PHOTOVOLTAIQUE CHAMPION JUMET                | 88     | 93,59   |
|                              | 8053_PHOTOVOLTAIQUE CHAMPION MESTDAGH COUILLET    | 163,66 | 163,66  |
|                              | 8146_PHOTOVOLTAIQUE CHAMPION MESTDAGH CERFONTAINE | 66     | 68,85   |

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|  | 8148_PHOTOVOLTAIQUE CHAMPION MESTDAGH CHARLEROI VILLE 2     | 112    | 114,17  |
|  | 8106_PHOTOVOLTAIQUE CHAMPION MESTDAGH CHATELINEAU           | 119    | 125,44  |
|  | 8096_PHOTOVOLTAIQUE CHAMPION MESTDAGH FARCIENNES            | 75     | 76,93   |
|  | 8110_PHOTOVOLTAIQUE CHAMPION MESTDAGH GOSSELIES             | 238    | 249,9   |
|  | 8109_PHOTOVOLTAIQUE CHAMPION MESTDAGH JEMEPPE SUR SAMBRE    | 46     | 46,795  |
|  | 8147_PHOTOVOLTAIQUE CHAMPION MESTDAGH TAMINES               | 102    | 107,065 |
|  | 8095_PHOTOVOLTAIQUE CHAMPION-MESTDAGH FONTAINE-L'ÉVÊQUE     | 92     | 96,04   |
|  | 8094_PHOTOVOLTAIQUE CHAMPION-MESTDAGH GEMBOUX               | 112    | 113,19  |
|  | 8295_PHOTOVOLTAIQUE CHAMPION-MESTDAGH GENAPPE               | 55     | 56,35   |
|  | 8091_PHOTOVOLTAIQUE CHAMPION-MESTDAGH LUTTRE                | 92     | 94,08   |
|  | 8092_PHOTOVOLTAIQUE CHAMPION-MESTDAGH MONCEAU               | 102    | 106,82  |
|  | 8093_PHOTOVOLTAIQUE CHAMPION-MESTDAGH MONT-SUR-MARCHIENNE   | 226    | 235,69  |
| GARAGE BREUER ANTOINE                  | 8687_PHOTOVOLTAIQUE GARAGE BREUER ANTOINE                   | 69,795 | 69,795  |
| GARAGE C. HAVELANGE                    | 10131_PHOTOVOLTAIQUE GARAGE HAVELANGE                       | 68     | 80,08   |
| GARAGE CONDROTTE                       | 9574_PHOTOVOLTAIQUE GARAGE CONDROTTE                        | 48     | 50      |
| GARAGE DU HAINAUT VANDECASTEELE        | 8569_PHOTOVOLTAIQUE GARAGE DU HAINAUT VANDECASTEELE         | 45     | 49,98   |
| GARAGE GHEYSSENS                       | 9355_PHOTOVOLTAIQUE GARAGE GHEYSSENS                        | 47,6   | 60      |
| GARAGE LANGE                           | 9262_PHOTOVOLTAIQUE GARAGE LANGE - DINANT                   | 34     | 34,75   |
|  | 9263_PHOTOVOLTAIQUE GARAGE LANGE - METTET                   | 21     | 22      |
| GARAGE MIOLI                           | 8971_PHOTOVOLTAIQUE GARAGE MIOLI                            | 130    | 140,14  |
|  | 8972_PHOTOVOLTAIQUE GARAGE MIOLI - CARROSSERIE              | 57     | 59,78   |
| GARAGE MONNIER                         | 8764_PHOTOVOLTAIQUE GARAGE MONNIER                          | 95     | 111,18  |
| GARAGE OCM                             | 8752_PHOTOVOLTAIQUE GARAGE OCM                              | 30     | 33,6    |
| G***                                   | 8783_P*** (HERMETON-SUR-MEUSE)                              | 36     | 40,8    |
| GARSOU-ANGENOT                         | 9106_PHOTOVOLTAIQUE GARSOU-ANGENOT                          | 45     | 50      |
| GAUME BOIS                             | 7925_PHOTOVOLTAIQUE GAUME BOIS                              | 15     | 16,56   |
| GE4S SOLAR INVEST HAINAUT PRO          | 8645_PHOTOVOLTAIQUE VANDEPUTTE - OLEOCHEMICALS              | 219    | 250     |
| GENAPPE MATERIAUX                      | 9265_PHOTOVOLTAIQUE GENAPPE MATERIAUX                       | 29,89  | 29,89   |
| GENER                                  | 8969_PHOTOVOLTAIQUE SEMAF - AD DELHAIZE THOREMBAIS          | 89,2   | 102,25  |
| GERARD CONSTRUCTION                    | 10132_PHOTOVOLTAIQUE GERARD CONSTRUCTION                    | 30     | 31,2    |
| GESTION BIENS ET SERVICES              | 8406_PHOTOVOLTAIQUE GESTION BIENS ET SERVICES               | 17     | 17,42   |
| GESTION- MANAGEMENT- COMMERCIALISATION | 9496_PHOTOVOLTAIQUE GEMACO                                  | 42     | 50,18   |
| GG MODE                                | 9097_PHOTOVOLTAIQUE COLOR CODE                              | 50     | 55,8    |
| GHL Groupe                             | 8081_PHOTOVOLTAIQUE GHL Groupe                              | 113    | 113,28  |
| GIACOMINI BENELUX                      | 9478_PHOTOVOLTAIQUE GIACOMINI                               | 40     | 49,98   |
| GILFI                                  | 8653_PHOTOVOLTAIQUE GILFI                                   | 90     | 99,567  |
| GIRRETZ PIERRE ENERGIES ALTERNATIVES   | 9338_PHOTOVOLTAIQUE GIRRETZ PIERRE ENERGIES ALTERNATIVES II | 66     | 72,52   |
| GLAXOSMITHKLINE VACCINES               | 8395_PHOTOVOLTAIQUE GLAXOSMITHKLINE VACCINES RIXENSART      | 72     | 78,474  |
|  | 8396_PHOTOVOLTAIQUE GLAXOSMITHKLINE VACCINES WAVRE          | 99     | 100,19  |
|  | 3418_PHOTOVOLTAIQUE GSK WAVRE                               | 144,2  | 150,639 |
| GMED HEALTHCARE                        | 9576_PHOTOVOLTAIQUE JOHNSON & JOHNSON                       | 240    | 250     |
| GODFRIAUX & FILS                       | 9193_PHOTOVOLTAIQUE GODFRIAUX & FILS                        | 150    | 153,18  |
| GOFFETTE                               | 8041_PHOTOVOLTAIQUE GOFFETTE                                | 59,8   | 59,925  |
| GOHY                                   | 8963_PHOTOVOLTAIQUE GOHY                                    | 45     | 50,16   |

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| GOLD GO                     | 9123_PHOTOVOLTAIQUE GOLD GO                               | 30    | 36,5    |
| GOLDIE                      | 10411_PHOTOVOLTAIQUE GOLDIE SA                            | 160   | 160     |
| GOOSSE                      | 8428_PHOTOVOLTAIQUE GOOSSE                                | 46    | 47,88   |
| GOUTHIÈRE ET VANKERCKEM     | 9304_PHOTOVOLTAIQUE GOUTHIÈRE ET VANKERCKEM               | 43    | 50,22   |
| GRANDIS                     | 9476_PHOTOVOLTAIQUE LES CROISSETTES                       | 68    | 76,518  |
| GRANIT INTER                | 8226_PHOTOVOLTAIQUE GRANIT INTER                          | 150   | 168     |
| GRAUX                       | 10219_PHOTOVOLTAIQUE GRAUX                                | 70    | 70      |
| GREEN CONSTRUCT             | 8823_PHOTOVOLTAIQUE GREEN CONSTRUCT                       | 173,6 | 187,2   |
| GREEN ENERGY 4 SEASONS      | 8509_PHOTOVOLTAIQUE AVICOLES DU WAYA                      | 27    | 30,25   |
| GREEN-INVEST                | 10139_PHOTOVOLTAIQUE ORCQ DISTRIBUTION                    | 210   | 210     |
| GREENWATCH 4-Indus          | 8565_PHOTOVOLTAIQUE ACEMAL                                | 100   | 102,9   |
|                             | 8344_PHOTOVOLTAIQUE AGR GALET MARCEL                      | 60    | 60      |
|                             | 8386_PHOTOVOLTAIQUE ANTOINE ACTIVE                        | 30    | 31,36   |
|                             | 8228_PHOTOVOLTAIQUE BLAISE                                | 70,56 | 70,56   |
|                             | 8840_PHOTOVOLTAIQUE BRUYERRE                              | 249,9 | 249,9   |
|                             | 8452_PHOTOVOLTAIQUE COGEZAF                               | 40    | 41,16   |
|                             | 8689_PHOTOVOLTAIQUE DELTA CAPITAL LOGISTICS HALLS 2A      | 238   | 249,9   |
|                             | 8688_PHOTOVOLTAIQUE DELTA CAPITAL LOGISTICS HALLS 2B ET C | 238   | 249,9   |
|                             | 8801_PHOTOVOLTAIQUE DIMAGES                               | 129   | 135,485 |
|                             | 8407_PHOTOVOLTAIQUE DISTRIFOOD                            | 163   | 166,845 |
|                             | 8618_PHOTOVOLTAIQUE ENTREPRISES KOECKELBERG               | 92    | 94,815  |
|                             | 8802_PHOTOVOLTAIQUE EXKI                                  | 47    | 49,98   |
|                             | 8526_PHOTOVOLTAIQUE FERNAND GEORGES                       | 170   | 178,85  |
|                             | 8077_PHOTOVOLTAIQUE GALVAMETAUX                           | 132   | 136,71  |
|                             | 8115_PHOTOVOLTAIQUE INDUMET BELGIUM                       | 202   | 221,44  |
|                             | 8985_PHOTOVOLTAIQUE MECANIC SYSTEMS                       | 249,9 | 249,9   |
|                             | 8410_PHOTOVOLTAIQUE PERFECTY                              | 41    | 42,48   |
|                             | 8315_PHOTOVOLTAIQUE PIERRE VAN OOST                       | 15    | 19,03   |
|                             | 8609_PHOTOVOLTAIQUE SANDERMANS                            | 105   | 110,495 |
|                             | 8935_PHOTOVOLTAIQUE SKIMAGES                              | 112,8 | 112,8   |
|                             | 8757_PHOTOVOLTAIQUE THOMAS ET PIRON                       | 238   | 250,04  |
|                             | 8079_PHOTOVOLTAIQUE TKM INDUSTRIES SA                     | 110   | 137     |
|                             | 8989_PHOTOVOLTAIQUE WEERTS SUPPLY CHAIN (1)               | 249,6 | 249,6   |
|                             | 8990_PHOTOVOLTAIQUE WEERTS SUPPLY CHAIN (2)               | 246   | 249,6   |
| GROUPE TERRE                | 9267_PHOTOVOLTAIQUE GROUPE TERRE                          | 47    | 49,86   |
| GROUPE VDRT                 | 8339_PHOTOVOLTAIQUE GROUPE VDRT                           | 102   | 115,92  |
| H&M                         | 8066_PHOTOVOLTAIQUE H&M GHLIN                             | 238   | 250,572 |
| H. ESSERS LOGISTICS COMPANY | 8112_PHOTOVOLTAIQUE ESSERS COURCELLES                     | 218   | 249,84  |
| H.P. LINDEN                 | 9466_PHOTOVOLTAIQUE ALPHA BETON                           | 225   | 249,9   |
| HANAVI                      | 10209_PHOTOVOLTAIQUE HANAVI                               | 250   | 250     |
| HANNUT FRUIT                | 8880_PHOTOVOLTAIQUE HANNUT FRUIT                          | 154   | 180,32  |
| HANSEZ - DALHEM             | 5300_PHOTOVOLTAIQUE HANSEZ - DALHEM                       | 25    | 25,815  |
| HARVESTMENTS                | 10156_PHOTOVOLTAIQUE CITROEN BELUX WIERDE                 | 75    | 75      |
| H***                        | 9261_P*** (CHASTRÈS)                                      | 59,67 | 59,67   |
| H***                        | 7970_P*** (BAELEN (LG.))                                  | 26,4  | 26,4    |

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| HD GROUP IMMO                 | 8824_PHOTOVOLTAIQUE HD GROUP IMMO                   | 66     | 74,75   |
| HECK & SOHN                   | 8841_PHOTOVOLTAIQUE H. HECK & SOHN                  | 161,8  | 201,3   |
| HELEXIA BELGIUM 1             | 8775_PHOTOVOLTAIQUE AUTOMOBILE VISETOISE            | 38,6   | 44      |
|                               | 8635_PHOTOVOLTAIQUE BELMEDIS                        | 205    | 249,395 |
|                               | 8776_PHOTOVOLTAIQUE CARROSSERIE VISETOISE           | 27,6   | 34      |
|                               | 9527_PHOTOVOLTAIQUE DECATHLON VERVIERS              | 176    | 202,75  |
|                               | 8996_PHOTOVOLTAIQUE LANTMANNEN UNIBAKE MOUSCRON     | 219    | 247,86  |
|                               | 9578_PHOTOVOLTAIQUE LES ECURIES D'ECAUSSINNES 2     | 40     | 50      |
|                               | 9540_PHOTOVOLTAIQUE MALYSSE VILLERS-LE-BOUILLET     | 198    | 249,645 |
|                               | 9537_PHOTOVOLTAIQUE TRAITEX                         | 220    | 250     |
| HENDRICHS & CIE A.G.          | 9326_PHOTOVOLTAIQUE ECORUS - HENDRICHS              | 88,2   | 106,08  |
| HERBAGRI                      | 7978_PHOTOVOLTAIQUE HERBAGRI 1                      | 60     | 66,24   |
| HERVECO                       | 9253_PHOTOVOLTAIQUE AD DELHAIZE HERVE               | 68     | 78,54   |
| HESBYGRAM                     | 10088_PHOTOVOLTAIQUE HESBYGRAM                      | 125    | 142,8   |
| HOPITAL LA CLÉ                | 8959_PHOTOVOLTAIQUE HOPITAL LA CLE                  | 43,75  | 43,75   |
| Hôtel Restaurant La Côte d'Or | 8632_PHOTOVOLTAIQUE LA COTE D'OR                    | 19,8   | 19,845  |
| HOTEL TIEFENBACH              | 9313_PHOTOVOLTAIQUE HOTEL TIEFENBACH                | 55     | 57,6    |
| H***                          | 9266_P*** (FLORÉE)                                  | 37     | 44      |
| HUBLET OAK                    | 9295_PHOTOVOLTAIQUE HUBLET OAK                      | 69     | 90      |
| H***                          | 8068_P*** (GLONS)                                   | 141,9  | 142     |
| I.E.G                         | 9020_PHOTOVOLTAIQUE I.E.G - CART                    | 19,716 | 19,716  |
| ICE                           | 9489_PHOTOVOLTAIQUE ICE WATCH                       | 200    | 217,5   |
| ICE-MOUNTAIN                  | 8748_PHOTOVOLTAIQUE ICE-MOUNTAIN                    | 56     | 66,3    |
| ICR GROUP IMPRIMERIES         | 8992_PHOTOVOLTAIQUE ICR GROUP IMPRIMERIES           | 130    | 157,335 |
| ID GROUP                      | 9233_PHOTOVOLTAIQUE INDUSCABEL BRAINE               | 35     | 37,5    |
|                               | 9236_PHOTOVOLTAIQUE INDUSCABEL FROYENNES            | 75     | 75      |
|                               | 9234_PHOTOVOLTAIQUE INDUSCABEL HEPPIGNIES           | 60     | 65      |
|                               | 9232_PHOTOVOLTAIQUE INDUSCABEL JUMET                | 46     | 46,25   |
|                               | 9235_PHOTOVOLTAIQUE INDUSCABEL LOVERVAL             | 40     | 40      |
| IDELUX                        | 5109_PHOTOVOLTAIQUE GALAXIA                         | 350,8  | 371,6   |
| IDEMASPORT                    | 8050_PHOTOVOLTAIQUE IDEMASPORT                      | 33,84  | 33,84   |
| IDETA                         | 9300_PHOTOVOLTAIQUE CRECHE LES FOURMIS              | 16     | 16,5    |
|                               | 8441_PHOTOVOLTAIQUE HALL RELAIS 5 ET 6 GHISLENGHIEN | 30     | 33,6    |
|                               | 8442_PHOTOVOLTAIQUE HALL RELAIS 7 ET 9 TOURNAI      | 40     | 48      |
|                               | 9416_PHOTOVOLTAIQUE NEGUNDO 2                       | 51,45  | 51,45   |
| IECBW                         | 8132_PHOTOVOLTAIQUE IECBW                           | 221    | 238,75  |
| IGRETEC                       | 8014_PHOTOVOLTAIQUE Bâtiment TELECOM 1              | 20     | 20,185  |
| IGRETEC                       | 8015_PHOTOVOLTAIQUE Bâtiment TELECOM 2              | 15,275 | 15,275  |
| IKEA ZAVENTEM                 | 9086_PHOTOVOLTAIQUE IKEA ARLON                      | 1035   | 1222,45 |
|                               | 9043_PHOTOVOLTAIQUE IKEA HOGNOUL                    | 900    | 1026    |
| I***                          | 9387_P*** (MARCHIN)                                 | 10,5   | 10,5    |
| ILLUDESIGN                    | 8043_PHOTOVOLTAIQUE ILLUDESIGN                      | 71,53  | 71,53   |
| IMMO 4D                       | 9226_PHOTOVOLTAIQUE IMMO 4D                         | 27,6   | 35,28   |
| IMMOBILIERE EVERAD            | 9385_PHOTOVOLTAIQUE AB INBEV                        | 231    | 249,9   |
| IMMOFER                       | 9093_PHOTOVOLTAIQUE IMMOFER                         | 165    | 249,6   |

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| IMPERBEL                             | 7994_PHOTOVOLTAIQUE IMPERBEL PERWEZ                | 33,8  | 37,718  |
| IMPRIMERIE AZ PRINT                  | 8463_PHOTOVOLTAIQUE AZ PRINT                       | 99    | 107,8   |
| IMPRIMERIE DONEUX                    | 9546_PHOTOVOLTAIQUE IMPRIMERIE DONEUX              | 75    | 75      |
| IMPRIMERIE NUANCE 4                  | 9321_PHOTOVOLTAIQUE IMPRIMERIE NUANCE 4            | 30    | 39,6    |
| INDUSTRIE DU CHASSIS PHILIPPE        | 8597_PHOTOVOLTAIQUE USINE BOIS D'HAINE             | 135   | 138,275 |
| INFORMATIQUE COMMUNICATIONS SERVICES | 7986_PHOTOVOLTAIQUE I.C.S                          | 21,16 | 21,16   |
| INFRATECH                            | 8456_PHOTOVOLTAIQUE INFRATECH                      | 46    | 49,92   |
| INSTITUT NOTRE-DAME                  | 8594_PHOTOVOLTAIQUE INSTITUT NOTRE-DAME MALMEDY    | 10,1  | 12      |
| INTEGRALE GREEN ENERGY               | 9501_PHOTOVOLTAIQUE BELDICO                        | 163,8 | 200,84  |
|                                      | 9486_PHOTOVOLTAIQUE CARRIERES DU HAINAUT           | 191   | 249,9   |
|                                      | 10227_PHOTOVOLTAIQUE CHU CHÊNÉE                    | 150   | 171,34  |
|                                      | 10220_PHOTOVOLTAIQUE FOOD INGREDIENTS TECHNOLOGIES | 101   | 124,68  |
|                                      | 9502_PHOTOVOLTAIQUE ISOSYSTEMS                     | 180   | 246,33  |
|                                      | 9485_PHOTOVOLTAIQUE MAFER                          | 180   | 246,33  |
|                                      | 9433_PHOTOVOLTAIQUE MECAR                          | 180   | 246,33  |
|                                      | 10074_PHOTOVOLTAIQUE PREFER                        | 270   | 339,82  |
|                                      | 9494_PHOTOVOLTAIQUE SADAPS BARDAHL                 | 180   | 246,33  |
|                                      | 9484_PHOTOVOLTAIQUE TISSAGE D'ARCADE               | 193,8 | 246,33  |
|                                      | 9434_PHOTOVOLTAIQUE VOESTALPINE                    | 193,8 | 243,78  |
| INTERBLOCS                           | 8537_PHOTOVOLTAIQUE INTERBLOCS                     | 112   | 130,5   |
| INTERCOMMUNALE ORES ASSETS           | 10086_PHOTOVOLTAIQUE ORES ASSETS LEUZE             | 34    | 41,04   |
| INTERMARCHÉ BAUDHUIN                 | 8576_PHOTOVOLTAIQUE INTERMARCHÉ PERWEZ             | 40    | 48      |
| INTERSAC                             | 8723_PHOTOVOLTAIQUE INTERSAC                       | 135   | 162,75  |
| INTERVEST OFFICES & WAREHOUSES       | 8067_PHOTOVOLTAIQUE STOCKAGE INDUSTRIEL            | 232   | 249,78  |
| INTERWOOD PRODUCT                    | 9418_PHOTOVOLTAIQUE INTERWOOD                      | 49,98 | 49,98   |
| INVEST & CORPORATE                   | 7943_PHOTOVOLTAIQUE INVEST & CORPORATE SOLAR       | 32,64 | 32,64   |
| IRENE III                            | 8639_PHOTOVOLTAIQUE BETON DE LA LOMME - BESSER 2   | 193,2 | 231,6   |
|                                      | 8640_PHOTOVOLTAIQUE BETON DE LA LOMME 1            | 151,8 | 171,6   |
|                                      | 8641_PHOTOVOLTAIQUE EURODYE                        | 154,2 | 180     |
| ISSOL                                | 8338_PHOTOVOLTAIQUE ISSOL                          | 228,7 | 249,985 |
| IVIN                                 | 8656_PHOTOVOLTAIQUE ISPC HERSTAL                   | 460   | 529,92  |
| IWAN SIMONIS                         | 7936_PHOTOVOLTAIQUE IWAN SIMONIS                   | 105   | 116,16  |
| JACKSON PINEWOOD                     | 8613_PHOTOVOLTAIQUE JACKSON PINEWOOD               | 66    | 69,6    |
| JACO ET FILS                         | 9061_PHOTOVOLTAIQUE JACO ET FILS                   | 46    | 55,5    |
| J***                                 | 8979_P*** (ATH)                                    | 17,64 | 17,64   |
| JANSSEN PHARMACEUTICA                | 9461_PHOTOVOLTAIQUE SODIAC                         | 240   | 250     |
| JARDI-TON                            | 8624_PHOTOVOLTAIQUE HUBO PERUWELZ                  | 102,8 | 116,62  |
| JIDE                                 | 9259_PHOTOVOLTAIQUE JIDE                           | 68    | 75      |
| JNL                                  | 8350_PHOTOVOLTAIQUE JNL WAVRE                      | 138   | 147     |
| JOHN MARTIN                          | 7952_PHOTOVOLTAIQUE JOHN MARTIN                    | 51,25 | 55,2    |
| JOLIPA                               | 9004_PHOTOVOLTAIQUE JOLIPA                         | 99    | 144     |
|                                      | 9328_PHOTOVOLTAIQUE JOLIPA II                      | 99    | 144     |
| JORION                               | 10099_PHOTOVOLTAIQUE JORION                        | 90    | 120,12  |
| JOST LOGISTICS                       | 9382_PHOTOVOLTAIQUE JOST GROUP LOGISTICS           | 215   | 250,12  |
|                                      | 8101_PHOTOVOLTAIQUE JOST LOGISTICS                 | 144,9 | 160,32  |

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| JOURDAN                             | 8333_PHOTOVOLTAIQUE JOURDAN                       | 110    | 116,8   |
| JUMATT                              | 9504_PHOTOVOLTAIQUE JUMATT                        | 120    | 129,66  |
| JUTOMAPI                            | 9368_PHOTOVOLTAIQUE GITE 1024                     | 19     | 20,02   |
| KALSCHUEUR EUPEN                    | 9213_PHOTOVOLTAIQUE KALSCHUEUR                    | 150    | 170     |
| KARL HUGO AG                        | 9401_PHOTOVOLTAIQUE KARL HUGO AG                  | 49     | 50,235  |
| KARTELL +                           | 8121_PHOTOVOLTAIQUE MPR                           | 75,9   | 80,11   |
| KOCKARTZ                            | 2279_PHOTOVOLTAIQUE BACKEREI-KONDI TOREI-KOCKARTZ | 21     | 22      |
| KS SERVICES                         | 8829_PHOTOVOLTAIQUE KS SEPPI                      | 51     | 55      |
| K***                                | 8318_P*** (PLAINEVAUX)                            | 20     | 22,08   |
| LA FONTAINE DES VENNES C/O JMPL-SPA | 8264_PHOTOVOLTAIQUE AD DELHAIZE TROIS PONTS       | 135    | 155     |
| LA LORRAINE                         | 8631_PHOTOVOLTAIQUE LA LORRAINE                   | 75,2   | 75,46   |
| LA PETITE BILANDE                   | 8995_PHOTOVOLTAIQUE LA PETITE BILANDE             | 63     | 79,56   |
| LA PETITE FOURNÉE                   | 8189_PHOTOVOLTAIQUE LA PETITE FOURNÉE             | 22,77  | 22,77   |
| LA PORTE OUVERTE FAVENCE            | 9288_PHOTOVOLTAIQUE LA PORTE OUVERTE - FAVENCE    | 47     | 49,98   |
| LA VERTEFEUILLE                     | 9030_PHOTOVOLTAIQUE LA VERTEFEUILLE               | 30     | 35,5    |
| LABORATOIRE ORTIS                   | 10305_PHOTOVOLTAIQUE LABORATOIRE ORTIS            | 220    | 249,86  |
| LABORATOIRES PHACOBEL               | 9276_PHOTOVOLTAIQUE LABORATOIRES PHACOBEL         | 30     | 35,04   |
| L'AIDE FRATERNELLE                  | 9264_PHOTOVOLTAIQUE L'AIDE FRATERNELLE            | 30     | 38,75   |
| LANGE JM & Fils                     | 8004_PHOTOVOLTAIQUE LANGE JM & FILS               | 42     | 49,68   |
| L***                                | 5936_P*** (ELSENBO RN)                            | 26,12  | 26,88   |
| L'ARBRE DE LIEGE                    | 9457_PHOTOVOLTAIQUE OFFICE HOUSE                  | 23     | 27,825  |
| LASERFLASH                          | 8767_PHOTOVOLTAIQUE LASERFLASH                    | 222    | 224,16  |
| L'ATELIER                           | 8692_PHOTOVOLTAIQUE L'ATELIER                     | 249,6  | 249,6   |
| L'AUBIER                            | 10023_PHOTOVOLTAIQUE L'AUBIER                     | 36     | 43,35   |
| LE BON BOEUF TIN BOMALOIS           | 8844_PHOTOVOLTAIQUE LE BON BOEUF TIN BOMALOIS     | 30     | 35,52   |
| LE LAGON BLEU                       | 9091_PHOTOVOLTAIQUE LAGON BLEU                    | 27     | 27      |
| LE MIDI                             | 8143_PHOTOVOLTAIQUE LE MIDI                       | 100    | 126,665 |
| LE PÔLE IMAGE DE LIÈGE              | 8352_PHOTOVOLTAIQUE LE POLE-BATIMENT S            | 41,28  | 41,28   |
|                                     | 8351_PHOTOVOLTAIQUE LE POLE-BATIMENT T            | 200    | 252     |
| LE RY DE LEERS                      | 8345_PHOTOVOLTAIQUE LE RY DE LEERS                | 32,4   | 34,5    |
| LE TRAIT D'UNION                    | 9380_PHOTOVOLTAIQUE LE TRAIT D'UNION              | 126    | 150,02  |
| L***                                | 8001_P*** (NEUFCHÂTEAU (LG.))                     | 37,2   | 40,5    |
| L'ECOPAIN D'IGNACE                  | 9580_PHOTOVOLTAIQUE L'ECOPAIN D'IGNACE            | 144    | 187,5   |
| L***                                | 8978_P*** (SAINT-LÉGER (HT.))                     | 30     | 37,485  |
| LEGRAND CARROSSERIE                 | 9369_PHOTOVOLTAIQUE CARROSSERIE LEGRAND           | 47     | 56,16   |
| LEHDIS                              | 8719_PHOTOVOLTAIQUE INTERMARCHÉ HERVE             | 90     | 99,735  |
| LEMMENS                             | 10126_PHOTOVOLTAIQUE LEMMENS                      | 80     | 95,88   |
| LES 3 ARBRES                        | 9410_PHOTOVOLTAIQUE LES 3 ARBRES                  | 51     | 59      |
| LES ATELIERS DE LA MEUSE            | 9407_PHOTOVOLTAIQUE LES ATELIERS DE LA MEUSE      | 213    | 250     |
| LES CAFÉS RECSI                     | 8459_PHOTOVOLTAIQUE LES CAFES RECSI               | 17     | 19,11   |
| LES ÉDITIONS DE L'AVENIR            | 9454_PHOTOVOLTAIQUE LES EDITIONS DE L'AVENIR      | 67     | 72,28   |
| LES ENTREPOTS DE LA FAMENNE         | 8507_PHOTOVOLTAIQUE LES ENTREPOTS DE LA FAMENNE   | 51     | 52,75   |
| LES ERABLES                         | 9315_PHOTOVOLTAIQUE LES ERABLES                   | 112    | 149,94  |
| LES GLYCINES                        | 9438_PHOTOVOLTAIQUE LES GLYCINES                  | 40     | 42,44   |
| LES TOURNESOLS                      | 8627_PHOTOVOLTAIQUE LES TOURNESOLS                | 147,25 | 147,25  |

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| LES VÉRANDAS 4 SAISONS        | 5592_PHOTOVOLTAIQUE LES VÉRANDAS 4 SAISONS        | 101,13 | 101,13  |
| LESAGE HUYSENTRUYT            | 8970_PHOTOVOLTAIQUE EXTRA PLOEGSTEERT             | 137    | 161,7   |
| LEXIAGO                       | 8703_PHOTOVOLTAIQUE LEXIAGO                       | 131,4  | 134,75  |
| LEYSKENS                      | 10187_PHOTOVOLTAIQUE LEYSKENS                     | 130    | 144,99  |
| LIÈGE - AUTO                  | 9534_PHOTOVOLTAIQUE LIEGE-AUTO                    | 36     | 40,035  |
| LIETAR                        | 10115_PHOTOVOLTAIQUE LICTAR                       | 100    | 109,2   |
| LINK BUILD                    | 9400_PHOTOVOLTAIQUE LINK                          | 80     | 94,08   |
| L'INSTANT GOURMAND            | 9518_PHOTOVOLTAIQUE BOULANGERIE                   | 25     | 28,449  |
| LITHOBETON                    | 8293_PHOTOVOLTAIQUE LITHOBETON BAUDOUR            | 132    | 160,72  |
| LOBET - NOËL ET ENFANTS       | 8246_PHOTOVOLTAIQUE AD DELHAIZE HABAY-LA-NEUVE    | 43,8   | 46,5    |
|                               | 8584_PHOTOVOLTAIQUE AD ETALLE                     | 172    | 180,48  |
| LOCAL ENERGY SAVING SOLUTIONS | 9573_PHOTOVOLTAIQUE RESIDENCE SEIGNEURIE DU VAL   | 200    | 243,8   |
| LOLIBEOS                      | 8311_PHOTOVOLTAIQUE PROXY DELHAIZE TIEGE          | 75     | 79      |
| LOXAM                         | 10029_PHOTOVOLTAIQUE LOXAM                        | 27,6   | 31,5    |
| LUMYNI                        | 8851_PHOTOVOLTAIQUE FP BROWN                      | 110,4  | 124,95  |
|                               | 8977_PHOTOVOLTAIQUE L'ETAL                        | 90     | 111,69  |
|                               | 8698_PHOTOVOLTAIQUE PERUWELD                      | 150    | 163,965 |
| LUTEX                         | 9383_PHOTOVOLTAIQUE LUTEX                         | 100    | 114,966 |
| M.J. SPORT                    | 8888_PHOTOVOLTAIQUE MJ SPORT                      | 49,75  | 49,75   |
| MABRILUX                      | 8788_PHOTOVOLTAIQUE MABRILUX                      | 60     | 66,24   |
| MAHIEU-SUN                    | 8332_PHOTOVOLTAIQUE FERME MAHIEU                  | 36     | 45,12   |
| MAISON BUTERA                 | 8169_PHOTOVOLTAIQUE MAISON BUTERA                 | 82     | 85,305  |
| MAISON DES SYNDICATS          | 7949_PHOTOVOLTAIQUE FG TB LIÈGE-HUY-WAREMME       | 18,4   | 18,8    |
| MAISON DESPRIET               | 8024_PHOTOVOLTAIQUE MAISON DESPRIET               | 80,73  | 80,73   |
| MAISON GILSON                 | 9231_PHOTOVOLTAIQUE MAISON GILSON                 | 29     | 35,19   |
| MAISON LARUELLE               | 8131_PHOTOVOLTAIQUE MAISON LARUELLE HALL1         | 64     | 66,885  |
|                               | 8130_PHOTOVOLTAIQUE MAISON LARUELLE HALL2         | 68     | 75,46   |
| MAISON SYNDICALE WALLONNE     | 8582_PHOTOVOLTAIQUE MAISON SYNDICALE WALLONNE     | 65,8   | 68,16   |
| MAISON WILLEMS                | 9252_PHOTOVOLTAIQUE MAISON WILLEMS                | 36,995 | 36,995  |
| MAISONCELLE                   | 8792_PHOTOVOLTAIQUE MAISONCELLE                   | 41,25  | 45      |
| MALTERIE DU CHÂTEAU           | 8138_PHOTOVOLTAIQUE MALTERIE DU CHATEAU (BELOEIL) | 40     | 49,28   |
| MANICO                        | 8677_PHOTOVOLTAIQUE BRICO HACCOURT                | 100    | 111,25  |
| M***                          | 8691_P*** (HÉRON)                                 | 51     | 60      |
| M***                          | 9571_P*** (CELLES (LG.))                          | 28,08  | 28,08   |
| MARIENHEIM RAEREN             | 8179_PHOTOVOLTAIQUE MARIENHEIM                    | 26     | 30,16   |
| MARKSPORTS                    | 8863_PHOTOVOLTAIQUE MARKSPORTS                    | 41,4   | 50      |
| MARVAN                        | 8614_PHOTOVOLTAIQUE DELHAIZE MICHEROUX            | 56     | 59,737  |
| MARYSNACK                     | 9384_PHOTOVOLTAIQUE MARYSNACK                     | 202    | 219,09  |
| MATÉRIAUX 2000                | 8612_PHOTOVOLTAIQUE D'UNE COULEUR A L'EAU         | 32     | 37,5    |
|                               | 8629_PHOTOVOLTAIQUE MATERIAUX 2000                | 53     | 68,75   |
| MATERIAUX BRICO LEQUEUX       | 8930_PHOTOVOLTAIQUE MATERIAUX BRICO LEQUEUX       | 46,7   | 51,8    |
| MATÉRIAUX GONDRY              | 8649_PHOTOVOLTAIQUE MATERIAUX GONDRY              | 41,4   | 44,1    |
| MATHIEU                       | 8510_PHOTOVOLTAIQUE MATHIEU                       | 60     | 66,5    |
| MAYA FAIR TRADE               | 9119_PHOTOVOLTAIQUE MAYA FAIR TRADE               | 34     | 40      |
| M***                          | 9386_P*** (HANNUT)                                | 90     | 95,88   |

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| MC TECHNICS                      | 8089_PHOTOVOLTAIQUE MC TECHNICS                      | 36    | 40,32   |
| MEAT SERVICE DISTRIBUTION        | 9443_PHOTOVOLTAIQUE MSD                              | 120   | 140,14  |
| MECASPRING                       | 9365_PHOTOVOLTAIQUE MECASPRING                       | 217   | 249,86  |
| MEENS André                      | 7989_PHOTOVOLTAIQUE MEENS André                      | 39    | 42,24   |
| MEERSMAN - FERME DE HAILLOT      | 9080_PHOTOVOLTAIQUE FERME DE HAILLOT                 | 64    | 69,12   |
| MENUISERIE EMAC                  | 9358_PHOTOVOLTAIQUE MENUISERIE EMAC                  | 170   | 200     |
| MENUISERIE KEPPELNE              | 5108_PHOTOVOLTAIQUE MENUISERIE KEPPELNE              | 18    | 20,16   |
| MENUISERIE LUC HALLEUX           | 8583_PHOTOVOLTAIQUE MENUISERIE LUC HALLEUX           | 159   | 173,215 |
| MENUISERIE TYCHON                | 8961_PHOTOVOLTAIQUE MENUISERIE TYCHON                | 24    | 26      |
| MENUISERIE-ÉBENISTERIE VANDEGAAR | 8306_PHOTOVOLTAIQUE MENUISERIE-EBENISTERIE VANDEGAAR | 68    | 71,76   |
| MERLIN                           | 8429_PHOTOVOLTAIQUE MERLIN                           | 72,85 | 72,85   |
| MERTENS PLASTIQUE                | 9107_PHOTOVOLTAIQUE MERTENS PLASTIQUE                | 150   | 154,35  |
| MÉRY-BOIS                        | 8887_PHOTOVOLTAIQUE MERY-BOIS                        | 80    | 96      |
| MÉTAL DÉPLOYÉ BELGE              | 8654_PHOTOVOLTAIQUE MDB                              | 120   | 130     |
| METAL PROTECTION                 | 9374_PHOTOVOLTAIQUE METAL PROTECTION                 | 103,8 | 110,45  |
| MEUBELGALERIJEN GAVERSICHT       | 8341_PHOTOVOLTAIQUE OKAY MEUBLES                     | 160   | 244,8   |
| MEUBLES AU BOSQUET               | 8763_PHOTOVOLTAIQUE MEUBLES AU BOSQUET               | 85    | 100     |
| MEULDERS VICTOR MANAGEMENT       | 10201_PHOTOVOLTAIQUE PORTE SESAME                    | 131   | 179,4   |
| MGS                              | 8617_PHOTOVOLTAIQUE DEMA MONTIGNY-LE-TILLEUL         | 50    | 52,5    |
| ML CONCEPT                       | 7903_PHOTOVOLTAIQUE ML CONCEPT                       | 35,6  | 40,02   |
| MLD CONCEPT                      | 8432_PHOTOVOLTAIQUE MLD CONCEPT                      | 37,5  | 39      |
| MONFORT TERRASSEMENT             | 9487_PHOTOVOLTAIQUE MONFORT TERRASSEMENT             | 45    | 60,06   |
| MONNAIE                          | 5107_PHOTOVOLTAIQUE MONNAIE-BAYS                     | 228   | 250     |
| MONSEU                           | 8536_PHOTOVOLTAIQUE MONSEU                           | 231   | 249,6   |
| MONTEA                           | 8113_PHOTOVOLTAIQUE MONTEA                           | 198   | 250     |
| MONUMENT HAINAUT                 | 8222_PHOTOVOLTAIQUE MONUMENT HAINAUT                 | 180   | 210     |
| MOSSelman                        | 8575_PHOTOVOLTAIQUE MOSSelman                        | 200   | 250     |
| MOULAN                           | 9419_PHOTOVOLTAIQUE MOULAN                           | 98    | 114,01  |
| MOULIN BURETTE                   | 8864_PHOTOVOLTAIQUE FAUNE ET FLORE                   | 51,4  | 57,5    |
| MP DIFFUSION                     | 8962_PHOTOVOLTAIQUE MP DIFFUSION                     | 30    | 30      |
| MR DISTRIBUTION                  | 8694_PHOTOVOLTAIQUE PROXY DELHAIZE RANCE             | 44    | 44,935  |
| MS DECOUPE                       | 9432_PHOTOVOLTAIQUE MS DECOUPE                       | 68    | 78      |
| MSG OFFICE                       | 8852_PHOTOVOLTAIQUE MSG OFFICE                       | 16    | 19,38   |
| M***                             | 10491_P*** (BLANDAIN)                                | 30    | 30      |
| MULTIFLEURS                      | 8370_PHOTOVOLTAIQUE MULTIFLEURS                      | 79,98 | 79,98   |
| MULTITRA                         | 8216_PHOTOVOLTAIQUE MULTITRA 1                       | 34    | 34,5    |
|                                  | 8217_PHOTOVOLTAIQUE MULTITRA 2                       | 38    | 40,48   |
| MWB-FINANCE                      | 8581_PHOTOVOLTAIQUE MWB-FINANCE                      | 65,8  | 68,16   |
| NATIONAAL BAANWINKEL FONDS       | 9011_PHOTOVOLTAIQUE EVA AMEUBLEMENT                  | 99    | 115,2   |
| NAXHELET                         | 9440_PHOTOVOLTAIQUE GOLF DE WANZE                    | 60    | 63      |
| NEKTO                            | 8606_PHOTOVOLTAIQUE NEKTO                            | 98    | 119     |
| NETHYS                           | 10417_PHOTOVOLTAIQUE ACADÉMIE JUSTINE HENIN          | 125   | 140,4   |
|                                  | 10097_PHOTOVOLTAIQUE COUNTRY-HALL                    | 245   | 290     |
|                                  | 10125_PHOTOVOLTAIQUE INTERMARCHÉ ASSESSE             | 100   | 109,2   |
|                                  | 10068_PHOTOVOLTAIQUE INTERMARCHÉ NANDRIN             | 122   | 140,45  |

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|---|---|--------|--------|
|   | 9417_PHOTOVOLTAIQUE WALLONIE DATA CENTER                        | 410    | 481,6  |
| NEW VEPELI  | 9524_PHOTOVOLTAIQUE NEW VEPELI                                  | 223,8  | 231,3  |
| NEW VERLAC  | 3608_PHOTOVOLTAIQUE VERLAC                                      | 15     | 15,84  |
| NGK CERAMICS EUROPE   | 8728_PHOTOVOLTAIQUE NGK CERAMICS EUROPE                         | 55,2   | 65,025 |
| NIMO  | 8676_PHOTOVOLTAIQUE ERIKS                                       | 99     | 108    |
| NISSAN MOTOR MANUFACTURING                                      | 4111_PHOTOVOLTAIQUE NISSAN NTCEB                                | 52,88  | 52,88  |
|   | 151_PHOTOVOLTAIQUE NISSAN TECHNICAL CENTER EUROPE               | 34     | 35,68  |
| NIZET ENTREPRISE  | 6146_PHOTOVOLTAIQUE NIZET ENTREPRISE S.A.                       | 130,22 | 150,72 |
| NMC   | 8304_PHOTOVOLTAIQUE NMC   | 230,3  | 250,5  |
| NOIRFALISE & FILS   | 8049_PHOTOVOLTAIQUE SEOS  | 94,14  | 94,14  |
| NOUKIES   | 9308_PHOTOVOLTAIQUE NOUKIES                                     | 74     | 80     |
| NOUVELLES TECHNOLOGIES  | 8637_PHOTOVOLTAIQUE AXIS PARC                                   | 115    | 130,25 |
| NOVALUX PRODUCTS  | 8088_PHOTOVOLTAIQUE NOVALUX PRODUCTS                            | 227,7  | 249,78 |
| OCEANIC   | 10087_PHOTOVOLTAIQUE OCEANIC                                    | 24,18  | 24,18  |
| OFFICE WALLON DE LA FORMATION<br>PROFESSIONNELLE ET DE L'EMPLOI | 9491_PHOTOVOLTAIQUE CENTRE DE COMPETENCES MECATRONIQUE          | 37     | 50,235 |
| ONEM - RVA  | 9426_PHOTOVOLTAIQUE ONEM BUREAU DU CHOMAGE NIVELLES             | 29     | 35,88  |
| OPTIMIZED RADIOCHEMICAL APPLICATIONS                            | 8648_PHOTOVOLTAIQUE ORA   | 27,2   | 30,72  |
| ORES (Brabant wallon)   | 8651_PHOTOVOLTAIQUE ORES ASSETS LOUVAIN-LA-NEUVE                | 60     | 70,08  |
| ORES (Hainaut Électricité)                                      | 9318_PHOTOVOLTAIQUE ORES ASSETS - STREPY - POLE<br>CONSTRUCTION | 27     | 32,16  |
|   | 9311_PHOTOVOLTAIQUE ORES ASSETS FRAMERIES                       | 44     | 50,16  |
| ORES (Namur)  | 9314_PHOTOVOLTAIQUE ORES ASSETS NAMUR                           | 34     | 40,56  |
| ORES (Verviers)   | 9435_PHOTOVOLTAIQUE ORES ASSETS VERVIERS                        | 37     | 45,6   |
| ORGELBAU SCHUMACHER   | 9200_PHOTOVOLTAIQUE ORGELBAU SCHUMACHER                         | 60,6   | 71,58  |
| ORTMANS   | 8383_PHOTOVOLTAIQUE ORTMANS                                     | 136    | 150,08 |
| OTIUM   | 8423_PHOTOVOLTAIQUE BRICO BURENVILLE - OTIUM                    | 39     | 43,7   |
| PANIBEL   | 10392_PHOTOVOLTAIQUE PC DISTRIBUTION                            | 185    | 208,71 |
| PARC COMMERCIAL LES DAUPHINS                                    | 8657_PHOTOVOLTAIQUE H&M - Les Dauphins                          | 210    | 219    |
|   | 8658_PHOTOVOLTAIQUE MAGASIN DELHAIZE                            | 200    | 250    |
|   | 9238_PHOTOVOLTAIQUE MAGASIN ZEB                                 | 100    | 120    |
| PARC GASTUCHE   | 10231_PHOTOVOLTAIQUE PARC GASTUCHE                              | 70     | 78     |
| PARCOM  | 9246_PHOTOVOLTAIQUE PARCOM                                      | 120    | 120    |
| PASCALINO   | 8809_PHOTOVOLTAIQUE CARREFOUR MARKET BASTOGNE                   | 32     | 36,97  |
| PATRIMOINE DE L'INSTITUT SAINT-SÉPULCRE                         | 9346_PHOTOVOLTAIQUE INSTITUT SAINT-SEPULCRE                     | 60     | 70,56  |
| PAUL GOOSSE CONFECTION  | 8854_PHOTOVOLTAIQUE GOOSSE CONFECTION                           | 105    | 110,4  |
| P***  | 9529_P*** (VELAINES)  | 75     | 84,24  |
| PELPAT  | 8161_PHOTOVOLTAIQUE PELPAT                                      | 100    | 106,6  |
| PERUWELZ AUTOMOBILES  | 9205_PHOTOVOLTAIQUE GARAGE VANDECASTEELE PERUWELZ               | 32     | 33,81  |
| PESSLEUX  | 8708_PHOTOVOLTAIQUE PESSLEUX                                    | 18,4   | 22,08  |
| PETER MÜLLER  | 8751_PHOTOVOLTAIQUE PETER MULLER                                | 215    | 249,87 |
| PETERS MASCHINENBAU   | 9349_PHOTOVOLTAIQUE PETERS MASCHINENBAU                         | 45     | 50     |
| PHARMACIE MOLITOR - MEIRLAEN                                    | 9072_PHOTOVOLTAIQUE PHARMACIE MOLITOR - MEIRLAEN                | 16     | 16,695 |
| Pharmacies Populaires de Verviers et Arrondissement             | 10460_PHOTOVOLTAIQUE VPHARMA LATINNE                            | 25     | 30,24  |
| PHELECT   | 7913_PHOTOVOLTAIQUE PHELECT                                     | 44,8   | 50,625 |
| PHOENIX METALWORK   | 8072_PHOTOVOLTAIQUE PHOENIX METALWORK                           | 33,3   | 37,26  |

|                       |   |        |         |
|-----------------------|---|--------|---------|
| PIRON FRERES          | 9201_PHOTOVOLTAIQUE Q8                              | 29,25  | 29,25   |
| P***                  | 8500_P*** (CINEY)                                   | 40     | 44,4    |
| P***                  | 9075_P*** (PECQ)                                    | 48     | 56,16   |
| POLMANS               | 9422_PHOTOVOLTAIQUE POLMANS                         | 115    | 129,54  |
| POMFRESH              | 8968_PHOTOVOLTAIQUE POMFRESH                        | 160    | 191,685 |
| POUCETTRI             | 7953_PHOTOVOLTAIQUE POUCKETTRI                      | 40,5   | 40,5    |
| POUR DEMAIN           | 9258_PHOTOVOLTAIQUE VAL DU GEER - ANS               | 100    | 102     |
|                       | 8717_PHOTOVOLTAIQUE VAL DU GEER - BOIRS             | 55     | 58,56   |
| PQA                   | 8791_PHOTOVOLTAIQUE PQA                             | 202    | 217,5   |
| PRADO                 | 9230_PHOTOVOLTAIQUE PRADO                           | 157    | 174     |
| PROCOTEX              | 8715_PHOTOVOLTAIQUE PROCOTEX DOTTIGNIES             | 191    | 249,84  |
| PVFINVEST             | 9166_PHOTOVOLTAIQUE CERP COURCELLES                 | 219,45 | 250     |
|                       | 10049_PHOTOVOLTAIQUE FIRMENICH LOUVAIN-LA-NEUVE     | 225    | 248,68  |
|                       | 9375_PHOTOVOLTAIQUE GALLER                          | 193    | 208,5   |
|                       | 9254_PHOTOVOLTAIQUE IBW                             | 175,25 | 187     |
|                       | 9347_PHOTOVOLTAIQUE IPEX                            | 77     | 83,25   |
|                       | 8424_PHOTOVOLTAIQUE SUN CHEMICAL                    | 190    | 203,04  |
|                       | 10111_PHOTOVOLTAIQUE TRUCK CENTER                   | 135    | 149,94  |
| QUERTINMONT           | 10296_PHOTOVOLTAIQUE ATELIER QUERTINMONT            | 20     | 20,4    |
| QUINCAILLERIE CONRADT | 8525_PHOTOVOLTAIQUE QUINCAILLERIE CONRADT           | 185    | 197,96  |
| QUINCAILLERIE ROUFFIN | 9411_PHOTOVOLTAIQUE QUINCAILLERIE ROUFFIN           | 27     | 33      |
| R***                  | 10472_P*** (ERMETON-SUR-BIERT)                      | 40     | 40      |
| RADCO                 | 9175_PHOTOVOLTAIQUE RADCO                           | 99     | 144     |
| RADERMACHER           | 9053_PHOTOVOLTAIQUE GEBRÜDER RACHERMACHER           | 15     | 15      |
| RADHADESH             | 8401_PHOTOVOLTAIQUE RADHADESH                       | 207    | 249,6   |
| RAMC                  | 8592_PHOTOVOLTAIQUE RAMC                            | 49     | 49,98   |
| REAL                  | 9069_PHOTOVOLTAIQUE REAL                            | 68     | 83,21   |
| REAL                  | 10190_PHOTOVOLTAIQUE REAL 2                         | 50     | 63,6    |
| REALCO                | 9066_PHOTOVOLTAIQUE REALCO                          | 60     | 65,52   |
| RECOVAL BELGIUM       | 9378_PHOTOVOLTAIQUE RECOVAL BELGIUM 15              | 240    | 249,6   |
|                       | 9379_PHOTOVOLTAIQUE RECOVAL BELGIUM 46              | 210    | 220,66  |
| RECUPLAST             | 8026_PHOTOVOLTAIQUE RECUPLAST                       | 99,1   | 100,8   |
| REDDY                 | 8884_PHOTOVOLTAIQUE REDDY                           | 103,8  | 109,395 |
| RÉGIE DES BÂTIMENTS   | 10030_PHOTOVOLTAIQUE CENTRE PHYSIQUE DU GLOBE (IRM) | 276    | 306     |
| REIFF                 | 8706_PHOTOVOLTAIQUE REIFF VERVIERS                  | 27     | 29,4    |
| REMI TACK ET FILS     | 8814_PHOTOVOLTAIQUE REMI TACK                       | 216,6  | 249     |
| REMY INTERNATIONAL    | 8519_PHOTOVOLTAIQUE REMY INTERNATIONAL              | 42     | 43,86   |
| RENAULT NERI LIEGE    | 9206_PHOTOVOLTAIQUE RENAULT NERI LIEGE              | 129    | 170,04  |
| RENÉ SCHWANEN ET FILS | 7959_PHOTOVOLTAIQUE SCHWANEN                        | 41,4   | 42,3    |
| RENSONNET             | 10247_PHOTOVOLTAIQUE RENSONNET                      | 50     | 57,51   |
| RESA                  | 8467_PHOTOVOLTAIQUE TECTEO - MAGASIN CENTRAL        | 205,7  | 249,9   |
| REWER LOGISTICS       | 8790_PHOTOVOLTAIQUE VYNCKIER TOOLS                  | 138    | 149,94  |
| ROCHESTER GAUGES      | 9430_PHOTOVOLTAIQUE ROCHESTER GAUGES                | 60     | 60      |
| ROELS                 | 8619_PHOTOVOLTAIQUE ROELS                           | 96,6   | 115,15  |
| ROGER AND ROGER       | 9352_PHOTOVOLTAIQUE CROKY                           | 175    | 249,9   |

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| ROOSENS BETON                   | 8873_PHOTOVOLTAIQUE ROOSENS BETON - PARTIE PRODUCTION      | 204     | 230,88  |
|                                 | 8871_PHOTOVOLTAIQUE ROOSENS BETONS - PARTIE ADMINISTRATIVE | 88      | 100,36  |
| ROSSEL PRINTING COMPANY         | 9363_PHOTOVOLTAIQUE ROSSEL PRINTING COMPANY                | 163,8   | 215,22  |
| ROUSSEAU SERVICE                | 10136_PHOTOVOLTAIQUE ROUSSEAU SERVICE                      | 25      | 29,415  |
| ROX AUTO                        | 9423_PHOTOVOLTAIQUE ROX AUTO                               | 32      | 33      |
| RSCL                            | 9045_PHOTOVOLTAIQUE RSCL                                   | 22,2    | 25,833  |
| RTBF                            | 8455_PHOTOVOLTAIQUE MEDIA RIVES                            | 154,4   | 178,08  |
|                                 | 10225_PHOTOVOLTAIQUE RTBF CHARLEROI                        | 20      | 25,48   |
|                                 | 10238_PHOTOVOLTAIQUE RTBF MONS                             | 22      | 25,74   |
|                                 | 10197_PHOTOVOLTAIQUE RTBF RHISNES                          | 82      | 100,1   |
| RV CARROSSERIE                  | 9391_PHOTOVOLTAIQUE RV CARROSSERIE                         | 45,5    | 49,2    |
| SABERT CORPORATION EUROPE       | 9320_PHOTOVOLTAIQUE SABERT CORPORATION EUROPE              | 231     | 249,75  |
| SAFETYGLASS                     | 9021_PHOTOVOLTAIQUE SAFETYGLASS                            | 160     | 188,7   |
| SAG                             | 8504_PHOTOVOLTAIQUE SAG PHARMA FLORENVILLE                 | 60      | 64,32   |
|                                 | 8505_PHOTOVOLTAIQUE SAG SAINTE-CECILE                      | 156     | 161,76  |
| SAINT-NICOLAS MOTOR             | 8758_PHOTOVOLTAIQUE SAINT-NICOLAS MOTOR                    | 60      | 62,4    |
| SAJOBEL                         | 9022_PHOTOVOLTAIQUE ESPACE MODE                            | 17      | 17,658  |
| SANGLIER                        | 8655_PHOTOVOLTAIQUE SANGLIER                               | 210     | 214,62  |
| SANIDEL                         | 7971_PHOTOVOLTAIQUE SANIDEL TOITURE                        | 54      | 56,58   |
| SAVIMETAL                       | 8426_PHOTOVOLTAIQUE SAVIMETAL                              | 99      | 101,52  |
| SCALDIS ST-MARTIN               | 9220_PHOTOVOLTAIQUE SCALDIS ST-MARTIN                      | 136     | 148,17  |
| SCANDIA                         | 9341_PHOTOVOLTAIQUE SCANDIA                                | 49      | 49      |
| SCAR                            | 7958_PHOTOVOLTAIQUE SCAR HERVE                             | 48      | 50,4    |
| SCHELFHOUT                      | 8227_PHOTOVOLTAIQUE SCHELFHOUT                             | 105     | 117,6   |
| SCHMETZ                         | 8221_PHOTOVOLTAIQUE SCHMETZ                                | 60      | 60      |
| SCHREIBER                       | 8070_PHOTOVOLTAIQUE SCHREIBER                              | 94      | 99,82   |
| SCHREINEREI ARDENNA             | 9399_PHOTOVOLTAIQUE SCHREINEREI ARDENNA                    | 40      | 40      |
| SCIERIE DES CARRIERES DE MAFFLE | 9167_PHOTOVOLTAIQUE SCIERIE DES CARRIERES DE MAFFLE        | 210     | 221,052 |
| SCIERIE MAHY                    | 87186_PHOTOVOLTAIQUE SCIERIE MAHY                          | 17,3    | 20,42   |
| SCIMA                           | 9210_PHOTOVOLTAIQUE SCIMA                                  | 221     | 249,78  |
|                                 | 8422_PHOTOVOLTAIQUE SCIMA 1                                | 222,5   | 249,78  |
|                                 | 9211_PHOTOVOLTAIQUE SCIMA ACDE                             | 221     | 249,9   |
| SEALTECH                        | 5710_PHOTOVOLTAIQUE SEALTECH                               | 57,51   | 57,51   |
| SEDEG                           | 9089_PHOTOVOLTAIQUE KINEO BARCHON                          | 59,5    | 59,5    |
| SEDIS LOGISTICS                 | 8610_PHOTOVOLTAIQUE SEDIS 1-2                              | 204     | 249,78  |
|                                 | 8611_PHOTOVOLTAIQUE SEDIS 3-4                              | 165     | 200     |
| SEMOULIN PACKAGING              | 9442_PHOTOVOLTAIQUE SEMOULIN PACKAGING                     | 240     | 249,828 |
| SENTEURS CARTONS                | 9396_PHOTOVOLTAIQUE SENTEURS CARTONS                       | 204     | 250     |
| SEOS PAPNAM                     | 8593_PHOTOVOLTAIQUE SEOS PAPNAM AUVELAIS                   | 41      | 51,52   |
| SERVICES ARDENNES               | 9372_PHOTOVOLTAIQUE RESIDENCE DES ARDENNES                 | 47      | 55,64   |
| SERVIMAT                        | 8846_PHOTOVOLTAIQUE SERVIMAT                               | 68      | 80      |
| SI-HBEL                         | 9070_PHOTOVOLTAIQUE SI-HBEL                                | 100,345 | 100,345 |
| SILIDIS                         | 8988_PHOTOVOLTAIQUE AD DELHAIZE SILLY                      | 32      | 33,32   |
| SITA GROUP                      | 8628_PHOTOVOLTAIQUE SITA GROUP COURCELLES                  | 229,6   | 250     |
|                                 | 8672_PHOTOVOLTAIQUE SITA GROUP LA LOUVIERE                 | 49,99   | 62,5    |

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| S***                                     | 8418_P*** (ROMEDENNE)   | 110   | 132,775 |
| SNCB                                     | 8029_PHOTOVOLTAIQUE GARE DE CHARLEROI SUD                     | 55,2  | 55,2    |
| SOBELVIN DIFFUSION                       | 8444_PHOTOVOLTAIQUE SOBELVIN DIFFUSION                        | 33    | 36,4    |
| Société Agricole de la Praule            | 140259_Photovoltaïque Société Agricole de la Praule           | 61    | 68,885  |
| SOCIÉTÉ AGRICOLE ET FORESTIÈRE D'ARVILLE | 10081_PHOTOVOLTAIQUE SOCIETE AGRICOLE ET FORESTIERE D'ARVILLE | 90    | 91,52   |
| SOCIÉTÉ ALBERT ANCION                    | 8886_PHOTOVOLTAIQUE ALBERT ANCION                             | 95,75 | 95,76   |
| SOCIÉTÉ DE LIZIN                         | 8375_PHOTOVOLTAIQUE LIZIN (HODY)                              | 32,9  | 33,84   |
|  | 8374_PHOTOVOLTAIQUE SOCIÉTÉ DE LIZIN 1                        | 32,9  | 33,84   |
| SOCIÉTÉ DES QUATRE CHEMINS               | 8190_PHOTOVOLTAIQUE FLORENCHAMP                               | 23,1  | 26,4    |
|  | 8191_PHOTOVOLTAIQUE VIVIER                                    | 15    | 17,6    |
|  |   |       |         |
| SOCIÉTÉ DU TERROIR DE GEER               | 10056_PHOTOVOLTAIQUE SOCIÉTÉ DU TERROIR DE GEER               | 120   | 163,8   |
| SOCIÉTÉ HÉRION                           | 8328_PHOTOVOLTAIQUE SOCIETE HERION                            | 67    | 71,82   |
| SOCIÉTÉ PHOTOVOLTAIQUE DU SÉNÉGAL        | 9168_PHOTOVOLTAIQUE FSC FELUY                                 | 210   | 249,9   |
| SODIMED                                  | 10052_PHOTOVOLTAIQUE SODIMED                                  | 50    | 50      |
| SODISTAL                                 | 8523_PHOTOVOLTAIQUE PROXY DELHAIZE SOMZEE                     | 33,36 | 33,36   |
| SOGELOR - Organisation & Logistique      | 9042_PHOTOVOLTAIQUE RINALDI YVO                               | 69    | 70      |
| SOLAR CITY WALLONIE                      | 9051_PHOTOVOLTAIQUE ARTEC                                     | 80    | 92      |
|  | 9455_PHOTOVOLTAIQUE BANQUETS LOCATIONS                        | 225   | 249,6   |
|  | 8909_PHOTOVOLTAIQUE CARTONNAGES DELSAUX                       | 180   | 200     |
|  | 9516_PHOTOVOLTAIQUE CENTRE OMNISPORT DE DURBUY                | 98    | 116,21  |
|  | 8826_PHOTOVOLTAIQUE GRIMONPREZ TRANSMISSION GEARS             | 160   | 171     |
|  | 8904_PHOTOVOLTAIQUE JORIS IDE DIVISION ISOMETALL              | 220   | 250     |
|  | 9108_PHOTOVOLTAIQUE POLYONE BELGIUM - SHIPPING                | 97    | 108     |
|  | 9301_PHOTOVOLTAIQUE POLYONE PRODUCTIONS                       | 188   | 217,88  |
|  | 8874_PHOTOVOLTAIQUE URBASTYLE                                 | 97    | 112,75  |
|  | 8705_PHOTOVOLTAIQUE WALIBI BELGIUM                            | 222   | 250     |
|  | 9203_PHOTOVOLTAIQUE WALL INDUSTRIES                           | 240   | 249,6   |
|  |   |       |         |
| SOLAR PANELS BRUSSELS                    | 9503_PHOTOVOLTAIQUE OLEFFE IMPRIMERIE                         | 73,8  | 95,88   |
|  | 9499_PHOTOVOLTAIQUE PLASTICENTRE                              | 103,8 | 124,95  |
| SOLDERIE JOS                             | 8247_PHOTOVOLTAIQUE SOLDERIE JOS                              | 45    | 45,12   |
| SONIMAT                                  | 8188_PHOTOVOLTAIQUE BIGMAT GEMBLOUX                           | 117   | 127,88  |
| SONODI - HUET                            | 9370_PHOTOVOLTAIQUE SONODI - HUET                             | 39    | 46,28   |
| SORESCOL SERVICES                        | 8838_PHOTOVOLTAIQUE SORESCOL                                  | 215,2 | 249,9   |
| SOTEX-BOIS                               | 10155_PHOTOVOLTAIQUE SOBOIS - ATELIER                         | 20    | 20      |
| SOUS-TRAITANCE INDUSTRIELLE              | 9557_PHOTOVOLTAIQUE SOUS-TRAITANCE INDUSTRIELLE               | 41    | 55      |
| SPAQUE                                   | 10173_PHOTOVOLTAIQUE SAFEA - CET                              | 850   | 999,44  |
| SPAW TECH                                | 8400_PHOTOVOLTAIQUE SPAW TECH                                 | 222,5 | 260,64  |
| SPRIMOGLASS                              | 6308_PHOTOVOLTAIQUE SPRIMOGLASS                               | 127,7 | 129,72  |
| STALPOM                                  | 8591_PHOTOVOLTAIQUE STALPOM                                   | 46    | 50      |
| STATION INTERZONING                      | 8083_PHOTOVOLTAIQUE STATION INTERZONING                       | 34    | 37,98   |
| STEF TRANSPORT SAINTES                   | 8679_PHOTOVOLTAIQUE STEF TRANSPORT SAINTES                    | 225   | 248,4   |
| STOCK ATH                                | 8622_PHOTOVOLTAIQUE STOCK ATH                                 | 110,4 | 127,89  |
| STUV                                     | 8787_PHOTOVOLTAIQUE STUV                                      | 156   | 158,68  |
|  | 9405_PHOTOVOLTAIQUE STUV FLOREFFE                             | 27,6  | 33,81   |

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| SUCRERIE COUPLET                 | 8330_PHOTOVOLTAIQUE SUCRERIE COUPLET                  | 249,36  | 249,36  |
| SUPER TAGADA                     | 9277_PHOTOVOLTAIQUE SUPER TAGADA                      | 49      | 57      |
| SUPERPLASTIC                     | 9519_PHOTOVOLTAIQUE SUPERPLASTIC                      | 51      | 59,75   |
|                                  | 9575_PHOTOVOLTAIQUE SUPERPLASTIC MAGASIN              | 59      | 61,84   |
| SWIFT                            | 8608_PHOTOVOLTAIQUE CENTRE SPORTIF SWIFT              | 178,542 | 178,542 |
| SYSTÈMES PHOTOVOLTAIQUES WALLONS | 9429_PHOTOVOLTAIQUE MIMOB (CHICK & KOT)               | 12      | 14,25   |
|                                  | 9227_PHOTOVOLTAIQUE ABBM                              | 117     | 139,92  |
|                                  | 8598_PHOTOVOLTAIQUE AD DELHAIZE MAD                   | 68      | 83,75   |
|                                  | 9222_PHOTOVOLTAIQUE ALEXANDRE & CIE BRAINE L'ALLEUD   | 102     | 122,5   |
|                                  | 9221_PHOTOVOLTAIQUE ALEXANDRE & CIE GENVAL            | 59      | 70,5    |
|                                  | 9223_PHOTOVOLTAIQUE ALEXANDRE & CIE NIVELLES          | 153     | 182     |
|                                  | 9366_PHOTOVOLTAIQUE APRICOT                           | 42      | 49,5    |
|                                  | 8087_PHOTOVOLTAIQUE ATELIERS BODART ET VANGE          | 77,785  | 77,785  |
|                                  | 9268_PHOTOVOLTAIQUE BIG MAT (GIBOMA)                  | 68      | 80,08   |
|                                  | 9283_PHOTOVOLTAIQUE BIGMAT CATALDO                    | 102     | 120,25  |
|                                  | 9548_PHOTOVOLTAIQUE BIGMAT HORNU                      | 85      | 100     |
|                                  | 9447_PHOTOVOLTAIQUE BRICOLAGE CHIEVRES                | 90      | 107     |
|                                  | 9449_PHOTOVOLTAIQUE CARREFOUR BASTOGNE (ARILMART)     | 211     | 250     |
|                                  | 9191_PHOTOVOLTAIQUE CARREFOUR HOTTON HODICA SA        | 36      | 39,33   |
|                                  | 9520_PHOTOVOLTAIQUE CARREFOUR MARKET DE SAINT-GEORGES | 68      | 80,08   |
|                                  | 9228_PHOTOVOLTAIQUE CARREFOUR ON                      | 111     | 130,5   |
|                                  | 9425_PHOTOVOLTAIQUE CHEVRERIE DU TRY MOUSSOUX         | 126     | 150,5   |
|                                  | 9189_PHOTOVOLTAIQUE CORTIGROUPE                       | 39      | 45      |
|                                  | 9291_PHOTOVOLTAIQUE DESSERT FACTORY                   | 54      | 62,75   |
|                                  | 8815_PHOTOVOLTAIQUE DOMAINE DU CHATEAU DE LA NEUVILLE | 50      | 55      |
|                                  | 10428_PHOTOVOLTAIQUE DUMOULIN AERO                    | 165     | 196,65  |
|                                  | 9216_PHOTOVOLTAIQUE EUROSPAR                          | 68      | 72      |
|                                  | 9531_PHOTOVOLTAIQUE FUN GYM                           | 27      | 30      |
|                                  | 9335_PHOTOVOLTAIQUE GB FLEMALLE                       | 68      | 80      |
|                                  | 9390_PHOTOVOLTAIQUE GOOSSE                            | 42      | 48,96   |
|                                  | 9337_PHOTOVOLTAIQUE GOOSSE J-L                        | 39      | 48,75   |
|                                  | 9281_PHOTOVOLTAIQUE GOUVYMAT                          | 32,5    | 32,5    |
|                                  | 9282_PHOTOVOLTAIQUE HORIZON VEGETAL                   | 34      | 40      |
|                                  | 8646_PHOTOVOLTAIQUE KENOMAR                           | 83      | 99,68   |
|                                  | 9170_PHOTOVOLTAIQUE KIDIKIDS                          | 68      | 84      |
|                                  | 9169_PHOTOVOLTAIQUE LEBOUTTE & CIE                    | 85      | 99      |
|                                  | 9164_PHOTOVOLTAIQUE LYRECO BELGIUM                    | 211     | 249,86  |
|                                  | 8779_PHOTOVOLTAIQUE MAISON TASSET                     | 27      | 28,91   |
|                                  | 9446_PHOTOVOLTAIQUE MONSIEUR BRICOLAGE COUILLET       | 68      | 81      |
|                                  | 9528_PHOTOVOLTAIQUE MR BRICOLAGE - HANNUT             | 98      | 116,75  |
|                                  | 9445_PHOTOVOLTAIQUE MR BRICOLAGE AUBEL                | 63      | 73,25   |
|                                  | 9448_PHOTOVOLTAIQUE MR BRICOLAGE FRAMERIE             | 87      | 103,5   |
|                                  | 9568_PHOTOVOLTAIQUE NRB                               | 204     | 239,7   |
|                                  | 9412_PHOTOVOLTAIQUE POP SOLUTION                      | 68      | 80      |
|                                  | 9171_PHOTOVOLTAIQUE PREDIS SA                         | 75      | 88,75   |

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|-------------------------------------|---|--------|---------|
|                                     | 8647_PHOTOVOLTAIQUE RESIDENCE DU LAC                      | 30     | 34      |
|                                     | 9217_PHOTOVOLTAIQUE RESIDENCE LA HOUSIERE                 | 61     | 70,25   |
|                                     | 9389_PHOTOVOLTAIQUE SOBELCOMP                             | 68     | 81,09   |
|                                     | 9190_PHOTOVOLTAIQUE SPAR TOURNAI                          | 17     | 21,62   |
|                                     | 9336_PHOTOVOLTAIQUE STIERNON                              | 60     | 69,75   |
|                                     | 9427_PHOTOVOLTAIQUE TER BEKE (LES NUTONS)                 | 211    | 250     |
|                                     | 9428_PHOTOVOLTAIQUE TER BEKE WANZE - COME A CASA          | 240    | 250     |
|                                     | 9569_PHOTOVOLTAIQUE TROC INTERNATIONAL                    | 27     | 30      |
|                                     | 9192_PHOTOVOLTAIQUE TROC TOURNAI                          | 26     | 30,82   |
| TAL TRADING                         | 8693_PHOTOVOLTAIQUE TAL TRADING                           | 202    | 210,96  |
| TAVEIRNE                            | 9345_PHOTOVOLTAIQUE TAVEIRNE PLOEGSTEERT                  | 240    | 250     |
|                                     | 9343_PHOTOVOLTAIQUE TAVEIRNE WARNETON                     | 240    | 250     |
| TECHNIC ONE                         | 9023_PHOTOVOLTAIQUE TECHNIC ONE                           | 66,6   | 67,32   |
| TECHNIQUE ET PROTECTION DES BOIS    | 8337_PHOTOVOLTAIQUE TECHNIQUE ET PROTECTION DES BOIS      | 91,77  | 91,77   |
| TECHNO-CON                          | 8881_PHOTOVOLTAIQUE TECHNO-CON                            | 154    | 180,32  |
| TECHNOFLUID/ TECHNOSUN              | 6108_PHOTOVOLTAIQUE TECHNOFLUID / TECHNOSUN               | 54,4   | 62,54   |
| TENNIS COUVERT DU CONDOZ            | 8402_PHOTOVOLTAIQUE TENNIS COUVERT DU CONDOZ              | 68     | 77,785  |
| TENNISSIMO                          | 8821_PHOTOVOLTAIQUE TENNISSIMO                            | 160    | 193,5   |
| TERVAL                              | 8534_PHOTOVOLTAIQUE TERVERAL                              | 211    | 249,78  |
| THE CLAY AND PAINT FACTORY          | 8156_PHOTOVOLTAIQUE THE CLAY AND PAINT FACTORY            | 85     | 90      |
| THERMO CLEAN WALLONIE - FRANCE NORD | 8464_PHOTOVOLTAIQUE THERMO CLEAN WALLONIE - FRANCE NORD   | 106,1  | 120,24  |
| THETA SOLAR ENERGY                  | 8957_PHOTOVOLTAIQUE AGC FLEURUS                           | 249,9  | 249,9   |
|                                     | 9459_PHOTOVOLTAIQUE AGC GLASS EUROPE - LODELINSART        | 100    | 250     |
|                                     | 8832_PHOTOVOLTAIQUE AGC MOUSTIER                          | 249,9  | 249,9   |
|                                     | 8834_PHOTOVOLTAIQUE AGC SENEFFE                           | 250    | 250     |
|                                     | 8953_PHOTOVOLTAIQUE BRENNTAG MOUSCRON                     | 149,93 | 149,93  |
|                                     | 8786_PHOTOVOLTAIQUE CARREFOUR MARKET - SENEFFE            | 121    | 125,44  |
|                                     | 8950_PHOTOVOLTAIQUE CARREFOUR MARKET DINANT               | 71     | 73,5    |
|                                     | 8949_PHOTOVOLTAIQUE CARREFOUR MARKET LONTZEN              | 61     | 63,7    |
|                                     | 8955_PHOTOVOLTAIQUE CARREFOUR MARKET OUPEYE               | 56     | 58,31   |
|                                     | 8951_PHOTOVOLTAIQUE CARREFOUR MARKET VIELSALM             | 63     | 67,13   |
|                                     | 10065_PHOTOVOLTAIQUE CORA CHATELINEAU GALERIE COMMERCIALE | 200    | 249,6   |
|                                     | 8552_PHOTOVOLTAIQUE CORA EST ROCOURT                      | 187    | 199,43  |
|                                     | 8553_PHOTOVOLTAIQUE CORA OUEST ROCOURT                    | 187    | 199,43  |
|                                     | 8831_PHOTOVOLTAIQUE COSUCRA                               | 200    | 249,6   |
|                                     | 8960_PHOTOVOLTAIQUE DECATHLON ALLEUR                      | 200    | 249,6   |
|                                     | 8954_PHOTOVOLTAIQUE DECATHLON CUESMES                     | 180    | 222,3   |
|                                     | 8861_PHOTOVOLTAIQUE DECATHLON LA LOUVIERE                 | 200    | 249,6   |
|                                     | 8947_PHOTOVOLTAIQUE DECATHLON WAVRE                       | 200    | 249,6   |
|                                     | 8675_PHOTOVOLTAIQUE DELEYE PRODUCTS                       | 228    | 240,59  |
|                                     | 8539_PHOTOVOLTAIQUE ENTREPOT DELFOOD                      | 238    | 249,9   |
|                                     | 9488_PHOTOVOLTAIQUE EURO MEAT GROUP                       | 140    | 172     |
|                                     | 8695_PHOTOVOLTAIQUE IDEMPAPERS                            | 233    | 242,305 |
|                                     | 8555_PHOTOVOLTAIQUE MATCH ANDENNE                         | 146    | 151,9   |

|                               |  |        |         |
|-------------------------------|--|--------|---------|
|                               | 8540_PHOTOVOLTAIQUE MATCH ATH                        | 49     | 49,98   |
|                               | 8556_PHOTOVOLTAIQUE MATCH BINCHE                     | 90     | 92,855  |
|                               | 8547_PHOTOVOLTAIQUE MATCH BRAINE L'ALLEUD            | 112    | 116,375 |
|                               | 8557_PHOTOVOLTAIQUE MATCH BURDINNE                   | 75     | 78,155  |
|                               | 8866_PHOTOVOLTAIQUE MATCH CHARLEROI                  | 95     | 99,96   |
|                               | 8544_PHOTOVOLTAIQUE MATCH ERQUELINNES                | 72     | 75,75   |
|                               | 8542_PHOTOVOLTAIQUE MATCH FLEURUS                    | 37     | 38,955  |
|                               | 8549_PHOTOVOLTAIQUE MATCH GEMBLOUX                   | 66     | 68,845  |
|                               | 8543_PHOTOVOLTAIQUE MATCH MARCINELLE                 | 134    | 138,915 |
|                               | 8541_PHOTOVOLTAIQUE MATCH MOUSCRON                   | 97     | 100,695 |
|                               | 8551_PHOTOVOLTAIQUE MATCH WANFERCEE-BAULET           | 51     | 54,39   |
|                               | 8546_PHOTOVOLTAIQUE MATCH WANGENIES                  | 438    | 499,5   |
|                               | 8548_PHOTOVOLTAIQUE MATCH WAREMME                    | 75     | 77,175  |
|                               | 9165_PHOTOVOLTAIQUE MESTDAGH ENTREPOT FROID          | 562    | 694,2   |
|                               | 9159_PHOTOVOLTAIQUE SITA ETALLE                      | 200    | 249,6   |
|                               | 8948_PHOTOVOLTAIQUE SITA GRACE-HOLLOGNE              | 150    | 155,1   |
|                               | 9132_PHOTOVOLTAIQUE TRAFIC ARLON                     | 50     | 59,8    |
|                               | 9179_PHOTOVOLTAIQUE TRAFIC AYWAILLE                  | 40     | 46,8    |
|                               | 9141_PHOTOVOLTAIQUE TRAFIC DINANT                    | 40     | 49,4    |
|                               | 9151_PHOTOVOLTAIQUE TRAFIC FLEURUS                   | 40     | 44,2    |
|                               | 8952_PHOTOVOLTAIQUE TRAFIC FLORENNES                 | 249,41 | 249,41  |
|                               | 9144_PHOTOVOLTAIQUE TRAFIC FLORENVILLE               | 40     | 44,2    |
|                               | 9146_PHOTOVOLTAIQUE TRAFIC GERPINNES                 | 40     | 44,2    |
|                               | 9133_PHOTOVOLTAIQUE TRAFIC HAINE SAINT PAUL          | 35     | 44,72   |
|                               | 9153_PHOTOVOLTAIQUE TRAFIC JEMEPPE-SUR-SAMBRE        | 35     | 39,52   |
|                               | 9139_PHOTOVOLTAIQUE TRAFIC JODOIGNE                  | 40     | 44,98   |
|                               | 9127_PHOTOVOLTAIQUE TRAFIC NEUPRÉ                    | 40     | 49,92   |
|                               | 9134_PHOTOVOLTAIQUE TRAFIC PERUWELZ                  | 40     | 45,76   |
|                               | 9140_PHOTOVOLTAIQUE TRAFIC SAINT GHISLAIN            | 35     | 45,24   |
| THIRION PRODUCTION            | 55592_PHOTOVOLTAIQUE THIRION PRODUCTION              | 163,85 | 163,85  |
| THOMAS ET PIRON BATIMENTS     | 9570_PHOTOVOLTAIQUE T & P BATIMENTS WIERDE           | 35     | 39,5    |
| THORROUT VINS LES GRANDS CRUS | 8883_PHOTOVOLTAIQUE TGVINS                           | 49,98  | 49,98   |
| TIGIDI                        | 8564_PHOTOVOLTAIQUE AD DELHAIZE ROCOURT              | 102    | 117,25  |
| TILMAN                        | 9280_PHOTOVOLTAIQUE TILMAN                           | 85     | 102,024 |
| TISS ET TEINT                 | 8125_PHOTOVOLTAIQUE TISS ET TEINT                    | 105    | 115,69  |
| TIVOLUX PRO                   | 9381_PHOTOVOLTAIQUE TIVOLUX PRO                      | 220    | 249,6   |
| TRENDY FOODS                  | 9081_PHOTOVOLTAIQUE TRENDY FOODS                     | 136    | 159,6   |
| TRICOBEL                      | 8062_PHOTOVOLTAIQUE TRICOBEL                         | 90     | 92,69   |
| TRIPLE B                      | 8859_PHOTOVOLTAIQUE TRIPLE B JUMET                   | 59,9   | 75      |
| TRI-TERRE                     | 8828_PHOTOVOLTAIQUE TRI-TERRE                        | 105    | 120     |
| TRUCK SERVICES SEBASTIAN      | 8650_PHOTOVOLTAIQUE TRUCK SERVICES SEBASTIAN         | 20,6   | 26,32   |
|                               | 9096_PHOTOVOLTAIQUE TRUCK SERVICES SEBASTIAN HERSTAL | 27     | 27      |
| TUBIZE BRICOLAGE              | 8427_PHOTOVOLTAIQUE HUBO ANDENNE                     | 54,9   | 61,92   |
| UCM TECHNICS                  | 8727_PHOTOVOLTAIQUE UCM                              | 75     | 88      |
| ULIS                          | 8712_PHOTOVOLTAIQUE ULIS                             | 110    | 124,95  |

|   |   |       |         |
|---|---|-------|---------|
| US MILITARY FORCES                          | 9397_PHOTOVOLTAIQUE CHIÈVRES AIR BASE                           | 450   | 451,29  |
| V.P.D.                                      | 8170_PHOTOVOLTAIQUE V.P.D.                                      | 81    | 91,65   |
| V***  | 8038_P*** (SAINT-REMY (HT.))                                    | 45,38 | 49      |
| VALADIS                                     | 9094_PHOTOVOLTAIQUE VALADIS                                     | 79,8  | 115,26  |
| VAMODIS                                     | 8812_PHOTOVOLTAIQUE AD DELHAIZE / VAMODIS                       | 77    | 80,36   |
| VAN COLEN                                   | 8220_PHOTOVOLTAIQUE VAN COLEN                                   | 204   | 212,75  |
| V***  | 8784_P*** (LEERNES)   | 81    | 100     |
| VAN OVERSCHELDE                             | 8218_PHOTOVOLTAIQUE VAN OVERSCHELDE                             | 16,5  | 17,28   |
| VANCASTER-DEBLONDE                          | 113202_Photovoltaïque VANCATER-DEBLONDE                         | 43,7  | 52,52   |
| VANDECASTEELE TOURNAI                       | 9204_PHOTOVOLTAIQUE VANDECASTEELE TOURNAI                       | 51    | 57,88   |
| VANDEN BROUCKE BETON                        | 10454_PHOTOVOLTAIQUE VANDEN BROUCKE BETON                       | 100   | 100     |
| VANDEPUTTE Huilerie                         | 8524_PHOTOVOLTAIQUE VANDEPUTTE GROUP - HUILERIE                 | 647   | 749,2   |
| V***  | 9477_P*** (ARBRE (HT.))   | 65    | 79,56   |
| VANDIJCK                                    | 8615_PHOTOVOLTAIQUE VANDIJCK                                    | 100   | 115,64  |
| VANDYCK FRÈRES                              | 8460_PHOTOVOLTAIQUE VANDYCK                                     | 40    | 45,12   |
| VANHEEDE BIOMASS SOLUTIONS                  | 8317_PHOTOVOLTAIQUE VANHEEDE BIOMASS SOLUTIONS                  | 225   | 250,275 |
| VANHOEBROCK                                 | 9292_PHOTOVOLTAIQUE VANHOEBROCK                                 | 150   | 150     |
| VANO IMMO                                   | 10119_PHOTOVOLTAIQUE BORNOVILLE                                 | 240   | 250     |
| VDO WAREHOUSING                             | 8845_PHOTOVOLTAIQUE DHL   | 69    | 84      |
| VDS FOOD                                    | 8080_PHOTOVOLTAIQUE VDS FOOD                                    | 305   | 354,98  |
| VEEP TWO                                    | 8071_PHOTOVOLTAIQUE VEEP TWO                                    | 25    | 27,6    |
| VEILING BORGLOON - BELORTA                  | 8878_PHOTOVOLTAIQUE VEILING BORGLOON FERNELMONT                 | 420   | 508,62  |
|   | 8879_PHOTOVOLTAIQUE VEILING BORGLOON VISE                       | 440   | 526,26  |
| VERGER DU PARADIS SKM                       | 8340_PHOTOVOLTAIQUE VERGER DU PARADIS                           | 119   | 122,84  |
| VERMEIRE TRANSMISSIONS                      | 7910_PHOTOVOLTAIQUE VERMEIRE TRANSMISSIONS                      | 67,6  | 70,27   |
| VERSATILE SOLAR SOLUTIONS                   | 9047_PHOTOVOLTAIQUE VERSATILE 320/1                             | 49,6  | 73,12   |
| VICA-BOIS                                   | 8933_PHOTOVOLTAIQUE VICA-BOIS                                   | 116,5 | 130     |
| VIGAN TECHNOLOGY                            | 9512_PHOTOVOLTAIQUE VIGAN TECHNOLOGY                            | 220   | 249,9   |
| VILLAGE DE LOISIRS ET VACANCES LES FOURCHES | 8759_PHOTOVOLTAIQUE VILLAGE DE LOISIRS ET VACANCES LES FOURCHES | 102,6 | 119,52  |
| VILLAGE n°3 - MANUPAL                       | 9118_PHOTOVOLTAIQUE VILLAGE n°3 - MANUPAL                       | 170   | 200     |
| Ville de Gembloux                           | 10096_PHOTOVOLTAIQUE HOTEL DE VILLE DE GEMBOUX                  | 20    | 22,36   |
|   | 9388_PHOTOVOLTAIQUE SALLE SPORTIVE CORROY-LE-CHATEAU            | 51    | 53,82   |
| VILLE DE MONS                               | 7950_PHOTOVOLTAIQUE ATELIER PIERART                             | 12    | 13,8    |
| VILLE DE MOUSCRON                           | 9109_PHOTOVOLTAIQUE ATELIERS COMMUNAUX                          | 50    | 56,4    |
|   | 10292_PHOTOVOLTAIQUE ÉCOLE CEE                                  | 24,57 | 24,57   |
|   | 10295_PHOTOVOLTAIQUE HALL DERLYS                                | 83,46 | 83,46   |
|   | 10294_PHOTOVOLTAIQUE HALL J. ROUSSEAU                           | 70,72 | 70,72   |
|   | 10293_PHOTOVOLTAIQUE HALL M. LESSINES                           | 21,84 | 21,84   |
| VILLE DE SERAING                            | 8686_PHOTOVOLTAIQUE ECOLE ALFRED HEYNE                          | 28,4  | 28,52   |
|   | 8567_PHOTOVOLTAIQUE ECOLE DE LIZE                               | 24,84 | 24,84   |
|   | 8718_PHOTOVOLTAIQUE ECOLE DES TRIXHES                           | 20    | 20,01   |
| VILLE DE VISÉ                               | 8680_PHOTOVOLTAIQUE ÉCOLE CHERATTE BAS                          | 27,6  | 27,6    |
|   | 8681_PHOTOVOLTAIQUE ECOLE CHERATTE HAUT                         | 13,44 | 13,44   |
| VINCE                                       | 8976_PHOTOVOLTAIQUE CAMAIR                                      | 82,8  | 89,76   |

|  |   |                |                |
|--|---|----------------|----------------|
| VITANUTRINAT   | 8623_PHOTOVOLTAIQUE VITANUTRINAT                        | 84             | 85             |
| VITIELLO   | 8359_PHOTOVOLTAIQUE VITIELLO BATTICE                    | 100            | 111            |
| V***   | 7921_P*** (TROOZ)                                       | 33,5           | 34,862         |
| VOS  | 9409_PHOTOVOLTAIQUE DE LAAK LIEGE                       | 125            | 143,055        |
| VP REC   | 9482_PHOTOVOLTAIQUE VISE PNEU                           | 187            | 239,46         |
| VRS PRODUCT  | 10120_PHOTOVOLTAIQUE VRS-SABBE                          | 60,2           | 71,4           |
| W***   | 8684_P*** (AYE)   | 54             | 68,4           |
| WANTY  | 8806_PHOTOVOLTAIQUE WANTY                               | 149            | 159            |
| WAREHOUSES DE PAUW                                       | 10046_PHOTOVOLTAIQUE WDP COURCELLES                     | 480            | 500            |
|  | 10044_PHOTOVOLTAIQUE WDP JUMET - CONWAY                 | 152            | 160,65         |
|  | 10043_PHOTOVOLTAIQUE WDP NIVELLES                       | 240            | 250            |
|  | 10047_PHOTOVOLTAIQUE WDP NIVELLES - BOSQUET             | 480            | 500            |
|  | 10045_PHOTOVOLTAIQUE WDP NIVELLES - CH. NAMUR           | 480            | 500            |
| WAREMME FRUIT  | 8102_PHOTOVOLTAIQUE OLEYE                               | 233            | 249,69         |
| WERELDHAVE BELGIUM                                       | 9536_PHOTOVOLTAIQUE BELLE-ÎLE                           | 211            | 249,9          |
|  | 8329_PHOTOVOLTAIQUE SHOPPING DE NIVELLES 1              | 230            | 250,56         |
|  | 8394_PHOTOVOLTAIQUE SHOPPING DE NIVELLES 2              | 230            | 250,56         |
| WIDART ENTREPRISES                                       | 9521_PHOTOVOLTAIQUE ENTREPRISES WIDART                  | 36,75          | 36,75          |
| WILBOW   | 8187_PHOTOVOLTAIQUE WILBOW                              | 17             | 17             |
| WONDERFOOD   | 9085_PHOTOVOLTAIQUE WONDERFOOD                          | 30             | 45,6           |
| WONITROL   | 8061_PHOTOVOLTAIQUE WONITROL MONS                       | 81,9           | 81,9           |
| WORLD TRADE  | 8918_PHOTOVOLTAIQUE WORLD TRADE                         | 170            | 237,9          |
| WOW COMPANY  | 8739_PHOTOVOLTAIQUE WOW COMPANY                         | 153            | 156            |
| ZOETIS BELGIUM   | 8058_PHOTOVOLTAIQUE ZOETIS BELGIUM                      | 181,2          | 204,832        |
| ZONE DE POLICE OUEST BRABANT WALLON                      | 9212_PHOTOVOLTAIQUE ZONE DE POLICE OUEST BRABANT WALLON | 24             | 30,09          |
| <b>Net developable electrical capacity &gt; 1,500 KW</b> |   | <b>127 417</b> | <b>143 174</b> |
| <b>Nombre de sites</b>                                   |   | <b>1 135</b>   |                |

## ❖ Hydropower sector

| Producteur            | Site de production (avec n° de dossier)      | Pend [kW]  |
|-----------------------|--|------------|
| AFA Denis             | 52_HYDRO DES FORGES                          | 66,000     |
| C.E. Bruno MARAITE    | 61_HYDRO MARAITE (LIGNEUVILLE)               | 217,000    |
| C.E. LA FENDERIE      | 71_HYDRO LA FENDERIE (TROOZ)                 | 276,340    |
| CARMEUSE              | 435_HYDRO NEUVILLE (MOHA)                    | 89,730     |
| CARRIÈRE DE VINALMONT | 58_HYDRO DE RABORIVE (AYWAILLE)              | 60,300     |
| CENTRALES GAMBY       | 59_HYDRO CHAPUIS (BELLEVAUX)                 | 100,000    |
|                       | 60_HYDRO D'OLNE                              | 255,500    |
| DE FABRIBECKERS TOM   | 8267_HYDRO LES AUBES DE LA BIESME (GOUGNIES) | 86,000     |
| DEGESTEN              | 8313_HYDRO LES AMEROIS (BOUILLON)            | 73,810     |
| DONY                  | 48_HYDRO DU VAL DE POIX                      | 91,000     |
| EDF Luminus           | 15_HYDRO D'AMPSIN-NEUVILLE                   | 9 910,000  |
|                       | 14_HYDRO D'ANDENNE                           | 8 986,000  |
|                       | 12_HYDRO DE FLORIFFOUX                       | 843,000    |
|                       | 18_HYDRO DE LIXHE                            | 22 979,000 |
|                       | 17_HYDRO DE MONSIN                           | 17 765,000 |

|  |   |           |
|--|---|-----------|
|  | 13_HYDRO DES GRANDS-MALADES (JAMBES)          | 4 887,000 |
|  | 16_HYDRO D'IVOZ-RAMET                         | 9 742,000 |
| ELECTRABEL                                     | 36_HYDRO DE BÉVERCÉ                           | 9 902,200 |
|  | 35_HYDRO DE BÜTGENBACH                        | 2 106,000 |
|  | 33_HYDRO DE CIERREUX (GOUVY)                  | 99,700    |
|  | 31_HYDRO DE COO DÉRIVATION                    | 385,400   |
|  | 29_HYDRO DE HEID-DE-GOREUX (AYWAILLE)         | 7 344,000 |
|  | 34_HYDRO DE LA VIERRE (CHINY)                 | 1 976,000 |
|  | 28_HYDRO DE LORCÉ                             | 80,000    |
|  | 32_HYDRO DE STAVELOT                          | 106,000   |
|  | 30_HYDRO D'ORVAL                              | 47,400    |
|  | 77_MOULIN DE BARDONWEZ (RENDEUX)              | 32,000    |
| ÉNERGIE BERCHIWÉ                               | 122_MOULIN DE BERCHIWÉ                        | 22,000    |
| ÉNERGIE-FLEUVES                                | 9463_HYDRO BARRAGE DE HASTIÈRE                | 1 902,000 |
|  | 207_HYDRO BARRAGE DE HUN                      | 1 965,000 |
|  | 9464_HYDRO BARRAGE DE WAULSORT                | 1 480,000 |
| ENHYDRO  | 65_HYDRO DE PONT-À-SMUID (SAINT-HUBERT)       | 174,000   |
|  | 66_HYDRO DE SAINTE-ADELINE (SAINT-HUBERT)     | 116,000   |
| F.Y.M CONSULT                                  | 73_MOULIN FISENNE (PEPINSTER)                 | 95,000    |
| HYDRO B  | 8073_HYDRO DE MARCINELLE                      | 656,000   |
| HYDROLEC DENIS                                 | 51_HYDRO DE DOLHAIN (BILSTAIN)                | 140,000   |
|  | 53_MOULIN PIRARD (NESSONVAUX)                 | 48,960    |
| HYDROVAL                                       | 47_HYDRO ZOUE (SAINT-HUBERT)                  | 178,450   |
| IKONOMAKOS Xavier                              | 564_HYDRO BARSE (MARCHIN)                     | 45,000    |
| JEANTY Nadine                                  | 76_MOULIN DE VILLERS-LA-LOUE                  | 14,950    |
| LA TRAPPERIE                                   | 2501_HYDRO DE LA TRAPPERIE (HABAY-LA-VIEILLE) | 37,000    |
| MERYTHERM                                      | 57_HYDRO DE MÉRY (TILFF)                      | 205,000   |
| MOULINS HICK                                   | 158_MOULIN HICK (VAL-DIEU)                    | 18,000    |
| MUYLE HYDROÉLECTRICITÉ                         | 87_HYDRO DE MORNIMONT                         | 698,000   |
| PHY  | 74_HYDRO PIRONT (LIGNEUVILLE)                 | 62,200    |
|  | 75_MOULIN MAYERES (MALMEDY)                   | 104,000   |
| REFAT ELECTRIC                                 | 67_HYDRO DE REFAT (STAVELOT)                  | 245,400   |
| SAPIEF   | 72_HYDRO DE FRAIPONT                          | 75,000    |
| SCIERIE MAHY                                   | 83_MOULIN DE LA SCIERIE MAHY (CHANLY)         | 25,000    |
| SHEM   | 8270_HYDRO DU MAKI (YVOIR)                    | 29,310    |
| SPW  | 6677_HYDRO BARRAGE DE LA GILEPPE              | 581,000   |
|  | 78_HYDRO DE L'EAU D'HEURE                     | 951,000   |
|  | 79_HYDRO DU PLAN INCLINÉ DE RONQUIÈRES        | 2 690,000 |
| SWDE   | 55_HYDRO COMPLEXE DE LA VESDRE (EUPEN)        | 1 519,000 |
|  | 54_HYDRO COMPLEXE DE L'OURTHE (NISRAMONT)     | 1 208,000 |
| VAL NOTRE DAME HYDRO                           | 8268_HYDRO VAL-NOTRE-DAME (WANZE)             | 55,000    |
| VERTWATT                                       | 202_HYDRO SAINT-ROCH (COUVIN)                 | 92,000    |
| WAL D'OR                                       | 1375_HYDRO WALD'OR (MARCHIN)                  | 75,000    |
| WILLOT Jean-Luc                                | 99_MOULIN JEHOULET (MOHA)                     | 21,700    |
| ZEYEN Dietmar                                  | 62_MOULIN DE WEWELER (BURG-REULAND)           | 169,000   |
| Net developable electrical capacity > 1,500 KW |   | 114 204   |
| Nombre de sites                                |   | 60        |

❖ Wind power sector

| Producteur                    | Site de production (avec n° de dossier)              | Pend [kW] |
|-------------------------------|--|-----------|
| A + ENERGIES                  | 117_ÉOLIENNE BRONROMME                               | 328       |
| ALLONS EN VENT                | 132_ÉOLIENNE TIENNE DU GRAND SART                    | 794       |
| ASPIRAVI                      | 250_PARC ÉOLIEN D'AMEL                               | 9 897     |
|                               | 8559_PARC ÉOLIEN DE PERWEZ 6                         | 6 000     |
|                               | 5713_PARC ÉOLIEN VAUBAS (VAUX-SUR-SURE)              | 5 923     |
| CAPE DOCTOR                   | 7901_PARC ÉOLIEN DE WARISOULX                        | 9 842     |
| DOW CORNING EUROPE            | 8242_ÉOLIENNE DOW CORNING SENEFFE                    | 2 274     |
| ECOPOWER                      | 8241_PARC ÉOLIEN RECOPIA (HOUEY)                     | 11 475    |
| EDF Luminus                   | 7055_PARC ÉOLIEN DE BERLOZ                           | 5 955     |
|                               | 9562_PARC ÉOLIEN DE BERLOZ 2                         | 9 858     |
|                               | 8009_PARC ÉOLIEN DE CINEY 1                          | 10 052    |
|                               | 8013_PARC ÉOLIEN DE CINEY 2                          | 10 052    |
|                               | 163_PARC ÉOLIEN DE DINANT & YVOIR                    | 11 447    |
|                               | 3094_PARC ÉOLIEN DE FERNELMONT                       | 6 831     |
|                               | 7056_PARC ÉOLIEN DE FOSSE-LA-VILLE 2                 | 7 919     |
|                               | 100_PARC ÉOLIEN DE VILLERS-LE-BOUILLET               | 12 000    |
|                               | 121_PARC ÉOLIEN DE WALCOURT                          | 9 000     |
|                               | 3093_PARC ÉOLIEN SPE DE VERLAINE/VILLERS LE BOUILLET | 7 959     |
|                               | 8869_PARC ÉOLIEN SPY                                 | 6 761     |
|                               | 7946_PARC ÉOLIEN WINDVISION WINDFARM FLOREFFE        | 6 839     |
| ELECTRABEL                    | 8760_ÉOLIENNES 2 ET 3 DE FRASNES-LEZ-ANVAING         | 4 073     |
|                               | 7906_PARC ÉOLIEN DE BÜLLINGEN                        | 11 919    |
|                               | 70_PARC ÉOLIEN DE BÜTGENBACH                         | 7 993     |
|                               | 7905_PARC ÉOLIEN DE DOUR                             | 9 553     |
|                               | 8122_PARC ÉOLIEN DE LEUZE-EN-HAINAUT                 | 14 255    |
|                               | 7984_PARC ÉOLIEN QUÉVY 2                             | 5 909     |
| ELECTRASTAR                   | 144_PARC ÉOLIEN DE MARBAIS                           | 21 747    |
| ELECTRAWINDS BASTOGNE         | 3786_PARC ÉOLIEN BASTOGNE 1                          | 5 923     |
| ELECTRAWINDS WIND BELGIUM     | 8385_PARC ÉOLIEN DE PERWEZ 5                         | 4 000     |
| ÉLECTRICITÉ DU BOIS DU PRINCE | 233_PARC ÉOLIEN DE FOSSES-LA-VILLE                   | 30 854    |
| ELSA                          | 8123_PARC ÉOLIEN DE LEUZE EUROPE 10                  | 2 036     |
|                               | 8144_PARC ÉOLIEN DE LEUZE EUROPE 9                   | 2 036     |
| ENAIRGIE DU HAINAUT           | 160_PARC ÉOLIEN DE DOUR-QUIÉVRAIN                    | 14 124    |
|                               | 9413_PARC ÉOLIEN DOUR EXTENSION NORD                 | 4 613     |
| ENECO WIND BELGIUM            | 9551_PARC ÉOLIEN DE GEER                             | 7 393     |
|                               | 9483_PARC ÉOLIEN MESSANCY                            | 5 965     |
| ENERCITY                      | 3118_PARC ÉOLIEN DE VERLAINE / VILLERS-LE-BOUILLET   | 1 990     |
| Energie 2030                  | 104_ÉOLIENNE DE ST-VITH                              | 593       |
| ENERGIE 2030 AGENCE           | 180_ÉOLIENNE DE CHEVETOGNE                           | 800       |
| ENI Wind Belgium              | 130_PARC ÉOLIEN DE PERWEZ 3                          | 4 495     |
| ÉOLIENNES DE LORRAINE         | 9525_PARC ÉOLIEN DE HONDELANGE (éoliennes 4 et 5)    | 3 920     |
| EOLY                          | 147_ÉOLIENNE WALDICO GHISLENGHIEN                    | 1 969     |
|                               | 9510_PARC ÉOLIEN DE SPY - ÉOLIENNE 2                 | 3 381     |
|                               | 10242_ÉOLIENNE ATH/LESSINES (OLLIGNIES)              | 2 000     |
| FLAWIND                       | 8231_ÉOLIENNE 1 DE FRASNES-LES-ANVAING               | 2 036     |
| FRASNES-LES-VENTS             | 9421_PARC ÉOLIEN FRASNES-LEZ-BUISSENAL               | 1 960     |

|  |   |                |
|--|---|----------------|
| GESTAMP WIND BEAUMONT                                    | 10092_PARC ÉOLIEN BEAUMONT                                      | 11 876         |
| GESTAMP WIND FELUY                                       | 10013_PARC ÉOLIEN FELUY   | 14 335         |
| GREEN WIND   | 3028_PARC ÉOLIEN DE CERFONTAINE                                 | 21 834         |
|  | 3027_PARC ÉOLIEN DE CHIMAY                                      | 23 405         |
|  | 2825_PARC ÉOLIEN DE FROIDCHAPELLE                               | 24 855         |
| HÉGOA WIND   | 7963_PARC ÉOLIEN DE PERWEZ 4 (AISCHE-EN-REFAIL)                 | 7 411          |
| KVNRG  | 7929_PARC ÉOLIEN QUÉVY 1  | 10 465         |
| LAMPIRIS WIND I  | 146_ÉOLIENNE DE COUVIN  | 1 977          |
| LES MOULINS DU HAUT PAYS                                 | 7954_PARC ÉOLIEN MOULIN DU HAUT PAYS - EXTENSION DOUR-QUIEVRAIN | 4 533          |
| LES VENTS DE L'ORNOI                                     | 86_PARC ÉOLIEN DE GEMBOUX-SOMBREFFE                             | 8 982          |
| LES VENTS DE PERWEZ                                      | 107_PARC ÉOLIEN DE PERWEZ 2                                     | 7 396          |
| MAGNA WIND PARK  | 10025_PARC ÉOLIEN GAROCENTRE                                    | 9 283          |
| MICHAUX Jean-Pierre                                      | 91_ÉOLIENNE DU CHAMP DE RANCE                                   | 18             |
| MOBILAE  | 7930_PARC ÉOLIEN WAIMES-CHAIVREMONT                             | 11 371         |
| PBE  | 69_ÉOLIENNE DE PERWEZ 1   | 597            |
| PELZ   | 8173_PARC ÉOLIEN DE LEUZE EUROPE 8                              | 2 036          |
| RENEWABLE POWER COMPANY                                  | 7987_PARC ÉOLIEN DE BOURCY                                      | 17 433         |
|  | 50_PARC ÉOLIEN DE SAINTE-ODE                                    | 7 484          |
|  | 7911_PARC ÉOLIEN DE SAINTE-ODE 2                                | 14 944         |
| Sky Sweeper  | 2412_PARC ÉOLIEN DE PONT-À-CELLES (NIVELLES)                    | 15 753         |
| SOLANO WIND  | 8276_PARC ÉOLIEN DE CINEY PESSOUX                               | 14 818         |
| TABNRG   | 7928_PARC ÉOLIEN TOURNAI ANTOING                                | 15 915         |
| TIVANO   | 8150_PARC ÉOLIEN DE GOUVY                                       | 11 307         |
| VANHEEDE WINDPOWER                                       | 7962_ÉOLIENNE VANHEEDE WINDPOWER                                | 2 000          |
| VENTS D'AUTELBAS   | 9079_ÉOLIENNE ARLON 6   | 1 960          |
| Vents d'Houyet   | 94_ÉOLIENNE AUX TCHERETTES                                      | 1 390          |
| WIND4WALLONIA  | 9583_PARC ÉOLIEN DOUR EXTENSION NORD (HENSIES)                  | 4 654          |
|  | 9585_PARC EOLIEN STERPENICH                                     | 5 965          |
| WINDFARM BIÈVRE  | 7999_PARC ÉOLIEN BIÈVRE   | 14 000         |
| WINDFARM SANKT VITH                                      | 8054_PARC ÉOLIEN DE SAINT-VITH                                  | 9 714          |
| WINDVISION WINDFARM ESTINNES                             | 798_PARC ÉOLIEN D'ESTINNES                                      | 79 589         |
| WINDVISION WINDFARM LEUZE-EN-HAINAUT                     | 8414_PARC ÉOLIEN DE LEUZE-EN-HAINAUT 2                          | 20 475         |
| <b>Net developable electrical capacity &gt; 1,500 KW</b> |   | <b>724 519</b> |
| <b>Nombre de sites</b>                                   |   | <b>78</b>      |

#### ❖ Biomass sector

| Producteur         | Site de production (avec n° de dossier)                              | Pend [kW] | Pqnv [kW] |
|--------------------|--|-----------|-----------|
| AGRIBERT - BENIEST | 140_BIOGAZ C.E.T. FERME DE LA GRANGE DE LA DÎME (MONT-SAINT-GUIBERT) | 245       | 0         |
| AIGREMONT          | 109_BIOMASSE AIGREMONT (FLÉMALLE)                                    | 1 090     | 1 318     |
| AIVE               | 186_BIOGAZ C.E.T. DE HABAY   | 444       | 693       |
|                    | 63_BIOGAZ C.E.T. DE TENNEVILLE                                       | 1 660     | 1 692     |
| ARBORETUM          | 183_BIOFUEL L'ARBORETUM (PÉRUWELZ)                                   | 25        | 41        |
| BIOENERGIE EGH     | 263_BIOGAZ BIOENERGIE EGH (NIDRUM)                                   | 220       | 268       |
| BIOSPACE           | 9104_BIOGAZ BIOSPACE (GESVES)  | 961       | 0         |
| BIOWANZE           | 1151_BIOMASSE BIOWANZE   | 18 750    | 77 700    |
| BURGO ARDENNES     | 43_BIOMASSE BOIS BURGO ARDENNES (VIRTON)                             | 58 900    | 103 381   |
| B***               | 123_B*** (SURICE)  | 85        | 56        |
| C.E.T.B.           | 7923_BIOGAZ C.E.T. LE BEAUMONT                                       | 477       | 258       |
| CAP FORME          | 128_BIOFUEL CAP FORME (LA GLANERIE)                                  | 12        | 26        |

|  |   |         |         |
|--|---|---------|---------|
| CAROLIMMO                                      | 134_BIOFUEL BUSINESS HOTEL (CHARLEROI)                | 12      | 26      |
| CINERGIE                                       | 8277_BIOGAZ CINERGIE FLEURUS                          | 949     | 1 282   |
| CITÉ DE L'ESPOIR                               | 8002_BIOFUEL CITÉ DE L'ESPOIR (ANDRIMONT)             | 59      | 104     |
| COMMUNE DE GEDINNE                             | 142_BIOMASSE BOIS COMMUNE DE GEDINNE                  | 306     | 337     |
| COMMUNE D'OTTIGNIES - LOUVAIN-LA-NEUVE         | 188_BIOFUEL CENTRE CULTUREL D'OTTIGNIES               | 90      | 156     |
| DRIES ENERGY                                   | 8286_BIOGAZ DRIES ENERGY (AMEL)                       | 565     | 726     |
| ECOGEEER                                       | 2177_BIOGAZ DU HAUT GEER (GEER)                       | 1 062   | 914     |
| ELECTRABEL                                     | 97_BIOMASSE BOIS AWIRS 4                              | 80 000  | 0       |
| ELECTRAWINDS BIOMASSE MOUSCRON                 | 153_BIOMASSE ELECTRAWINDS MOUSCRON                    | 17 240  | 4 701   |
| ENERWOOD                                       | 9056_BIOMASSE BOIS ENERWOOD (DISON)                   | 1 159   | 4 000   |
| ERDA   | 152_BIOMASSE BOIS ERDA (BERTRIX)                      | 6 300   | 19 000  |
| ERPC   | 8057_BIOFUEL ERPC (COURCELLES)                        | 115     | 142     |
| ETA LE SAUPONT                                 | 126_BIOMASSE BOIS LE SAUPONT (BERTRIX)                | 141     | 1 525   |
| FERME DE BAMISCH                               | 10117_FERME DE BAMISCH (HOMBOURG)                     | 32      | 61      |
| FRIEBARA                                       | 23_BIOGAS HOF HECK (NIDRUM)                           | 153     | 226     |
| GEBRÜDER LENGES                                | 24_BIOGAS HOF LENGES (RECHT)                          | 2 200   | 2 871   |
| G***   | 10015_B*** (COURTIL (BOVIGNY))                        | 11      | 26      |
| HOLZINDUSTRIE PAULS AG                         | 8793_BIOMASSE BOIS HOLZINDUSTRIE PAULS (GOUVY)        | 5 000   | 15 000  |
| I.D.E.A. HENNUYERE                             | 68_BIOGAZ STEP STATION D'ÉPURATION DE WASMUEL         | 429     | 0       |
| IBV and Cie                                    | 1152_BIOMASSE BOIS IBV (VIELSALM)                     | 17 769  | 27      |
| IBW  | 7967_BIOGAZ STEP IBW BASSE-WAVRE                      | 236     | 0       |
| INTRADEL                                       | 82_BIOGAZ C.E.T. D'HALLEMBAYE                         | 2 167   | 602     |
| IPALLE   | 8398_BIOGAZ STEP IPALLE (MOUSCRON)                    | 248     | 0       |
| JOLUWA   | 7957_BIOGAZ JOLUWA (NIVELLES)                         | 88      | 110     |
| KESSLER FRÈRES                                 | 38_BIOGAZ FERME DE FAASCHT (ATTERT)                   | 774     | 1 011   |
| L'ORÉAL LIBRAMONT                              | 5712_BIOGAZ BIOENERGIE L'ORÉAL (LIBRAMONT)            | 3 102   | 1 543   |
| MONSOTEL                                       | 204_BIOFUEL HOTEL MERCURE (NIMY)                      | 25      | 44      |
| MOULIN G SCHYNS                                | 2181_BIOMASSE BOIS MOULIN SCHYNS (BATTICE)            | 964     | 2 000   |
| MYDIBEL  | 135_BIOGAZ STEP MYDIBEL (MOUSCRON)                    | 4 154   | 5 256   |
| NEW VERLAC                                     | 155_BIOFUEL VERLAC (ALLEUR)                           | 50      | 88      |
| N***   | 8811_B*** (BURG-REULAND)                              | 15      | 17      |
| RECYBOIS                                       | 112_BIOMASSE BOIS RECYBOIS (LATOIR)                   | 3 800   | 8 000   |
| RENOGEN  | 138_BIOFUEL RENOGEN KAISERBARACKE                     | 2 949   | 3 607   |
|  | 149_BIOMASSE BOIS RENOGEN KAISERBARACKE               | 9 700   | 16 000  |
| SCHEP HEERSCHOP                                | 9582_BIOGAZ SCHEP HEERSCHOP                           | 32      | 61      |
| SHANKS   | 2_BIOGAZ C.E.T. DE MONT-ST-GUIBERT / CETEM            | 10 657  | 0       |
| SIBIOM   | 10_BIOGAZ STEP LUTOSA (LEUZE)                         | 2 190   | 2 703   |
| SITA WALLONIE                                  | 84_BIOGAZ C.E.T. DE MONTZEN                           | 120     | 0       |
|  | 1_BIOGAZ C.E.T. D'ENGIS-PAVIOMONT                     | 1 780   | 0       |
| SPAQUE   | 64_BIOGAZ C.E.T. D'ANTON (BONNEVILLE)                 | 102     | 171     |
|  | 105_BIOGAZ C.E.T. DES ISNES                           | 49      | 105     |
| SUCRERIE COUPLET                               | 8017_BIOFUEL SUCRERIE COUPLET (SAINT-MAUR)            | 433     | 400     |
| T***   | 10020_B*** (PESSOUX)                                  | 11      | 33      |
| UNIVERSITÉ DE LIÈGE                            | 6454_BIOMASSE BOIS CHAUFFERIE CENTRALE DU SART TILMAN | 1 731   | 7 000   |
| VAN GANSEWINKEL ENVIRONMENTAL SERVICES         | 20_BIOGAZ C.E.T. DE COUR-AU-BOIS                      | 3 041   | 1 000   |
| VANHEEDE BIOMASS SOLUTIONS                     | 205_BIOGAZ SODECOM (QUÉVY)                            | 3 297   | 2 274   |
| WOODENERGY                                     | 148_BIOMASSE BOIS VALORBOIS (THIMISTER-CLERMONT)      | 3 865   | 6 400   |
| XYLOWATT                                       | 2824_BIOMASSE BOIS GAZENBOIS (TOURNAI)                | 292     | 600     |
| Net developable electrical capacity > 1,500 KW |   | 272 333 | 295 582 |
| Nombre de sites                                |   | 60      |         |

❖ Fossil cogeneration sector

| Producteur                                 | Site de production (avec n° de dossier)                     | Pend [kW] | Pqnv [kW] |
|--|---|-----------|-----------|
| AU CLOS DES FREESIAS                       | 9242_COGEN AU CLOS DES FREESIAS (PONT-À-CELLES)             | 30        | 65        |
| AW EUROPE                                  | 8097_COGEN AW EUROPE (BAUDOUR)                              | 70        | 124       |
| BAXTER                                     | 8063_COGEN BAXTER LESSINES                                  | 5 336     | 8 410     |
| BEAUVENT                                   | 10048_COGEN GRAMYBEL (MOUSCRON)                             | 829       | 980       |
| BELGIAN QUALITY FISH                       | 161_COGEN BQF (DOTTIGNIES)                                  | 375       | 655       |
| BENEO-Orafti                               | 113_COGEN RAFFINERIE NOTRE-DAME (OREYE)                     | 9 500     | 70 000    |
| BIESBROUCK                                 | 150_COGEN BIESBROUCK (PECQ)                                 | 4 942     | 6 539     |
| BOWLING SQUASH NAMUR                       | 10031_COGEN BOWLIN SQUASH NAMUR                             | 20        | 40        |
| BRICOPHI - HUBO                            | 9330_COGEN HUBO - BRICOPHI                                  | 15        | 32        |
| BRIQUETERIES DE PLOEGSTEERT                | 8036_COGEN BRIQUETERIE DE PLOEGSTEERT DIVISION BARRY        | 301       | 510       |
|  | 1973_COGEN BRIQUETERIES DE PLOEGSTEERT                      | 889       | 1 187     |
| C.H.A.A.P                                  | 7916_COGEN L'ORÉE DU BOIS (QUEVAUCAMPS)                     | 15        | 32        |
| C.H.R DE LA CITADELLE DE LIÈGE             | 7976_COGEN C.H.R DE LA CITADELLE DE LIÈGE                   | 1 532     | 1 651     |
| CARGILL CHOCOLATE BELGIUM                  | 9245_COGEN CARGILL CHOCOLATE BELGIUM                        | 249       | 321       |
| CENTRE HOSPITALIER PSYCHIATRIQUE DE LIÈGE  | 185_COGEN CHP PETIT BOURGOGNE (SCLESSIN)                    | 137       | 207       |
| CENTRE MEDICO SOCIAL DU TOURNAISIS         | 9475_COGEN CMST   | 19        | 40        |
| CENTRE NEUROLOGIQUE WILLIAM LENNOX         | 9037_COGEN CENTRE NEUROLOGIQUE LENNOX                       | 123       | 176       |
| CENTRE PUBLIC D'ACTION SOCIALE LE ROEULX   | 10276_COGEN HOME SAINT JACQUES (LE ROEULX)                  | 20        | 40        |
| CENTRE PUBLIC D'ACTION SOCIALE DE HERVE    | 8265_COGEN CPAS DE HERVE                                    | 48        | 79        |
| CENTRE PUBLIC D'ACTION SOCIALE DE MONS     | 8145_COGEN RÉSIDENCE DU BOIS D'HAVRÉ                        | 138       | 216       |
| CHIREC                                     | 8795_COGEN HÔPITAL DE BRAINE-L'ALLEUD-WATERLOO              | 392       | 571       |
| CHR DE NAMUR                               | 4_COGEN CHR DE NAMUR  | 813       | 1 046     |
| CHU AMBROISE PARÉ                          | 170_COGEN CHU AMBROISE PARÉ (MONS)                          | 680       | 954       |
| CHU MONT- GODINNE DINANT                   | 8326_COGEN CHU MONT- GODINNE                                | 1 034     | 1 304     |
| CHU UCL MONT-GODINNE DINANT                | 10051_COGEN CHU DINANT GODINNE                              | 235       | 363       |
| CLINIQUE DE L'IPAL                         | 208_COGEN PÊRÎ DES CLINIQUES DE L'IPAL (SCLESSIN)           | 119       | 201       |
| CLINIQUE NOTRE-DAME DE GRÂCE               | 9195_COGEN HÔPITAL NOTRE DAME DE GRÂCE                      | 232       | 372       |
| CLINIQUE PSYCHIATRIQUE DES FRÈRES ALEXIENS | 103_COGEN CLINIQUE PSY DES FRÈRES ALEXIENS (HENRI-CHAPELLE) | 205       | 254       |
| CLINIQUE SAINT PIERRE                      | 8266_COGEN CLINIQUE SAINT-PIERRE                            | 395       | 474       |
| COMMUNE DE CHAUDFONTAINE                   | 8577_COGEN CENTRE SPORTIF EMBOURG                           | 48        | 81        |
| COSUCRA GROUPE WARCOING                    | 96_COGEN PROVITAL INDUSTRIE (WARCOING)                      | 1 375     | 1 861     |
|  | 41_COGEN SUCRERIE DE WARCOING 1 - VW                        | 832       | 1 249     |
|  | 118_COGEN SUCRERIE DE WARCOING 2 - SITE NIRO                | 976       | 1 249     |
|  | 119_COGEN SUCRERIE DE WARCOING 3 - TURBO                    | 6 547     | 40 710    |
| CPAS DE COURCELLES                         | 10163_COGEN CENTRE SPARTACUS HUART (COURCELLES)             | 70        | 115       |
| CPAS DE MOUSCRON                           | 10016_COGEN CPAS DE MOUSCRON                                | 142       | 206       |
| CPAS DE NAMUR                              | 164_COGEN CPAS DE NAMUR                                     | 118       | 200       |
| DECOCK PLANTS                              | 8021_COGEN PELARGONIUM DECOCK (COMINES)                     | 1 477     | 1 909     |
| DEPAIRON                                   | 3381_COGEN DEPAIRON (VERVIERS)                              | 122       | 186       |
| DOW CORNING EUROPE                         | 3042_COGEN DOW CORNING SENEFFE                              | 909       | 1 319     |
| E.VICTOR-MEYER                             | 10202_COGEN E.VICTOR-MEYER                                  | 835       | 1 045     |
| ENEAS                                      | 45_COGEN MOTEL DE NIVELLES                                  | 65        | 109       |
| FERRERO ARDENNES                           | 359_COGEN FERRERO ARDENNES (ARLON)                          | 4 204     | 4 848     |
| FIRME DERWA                                | 7780_COGEN DERWA (LIÈGE)                                    | 510       | 772       |
| FUNDP                                      | 1174_COGEN FUNDP CHAUFFERIE DE CHIMIE (NAMUR)               | 234       | 372       |

|  |   |        |        |
|--|---|--------|--------|
| GALACTIC                                       | 8005_COGEN GALACTIC (CELLES)                      | 1 981  | 2 110  |
| GLAXOSMITHKLINE VACCINES                       | 3523_COGEN GSK GEMBLOUX                           | 139    | 251    |
|  | 3522_COGEN GSK WAVRE 1                            | 1 183  | 1 315  |
|  | 8035_COGEN GSK WAVRE 2                            | 1 174  | 1 507  |
| GOBEL  | 371_COGEN AU JARDIN DU COEUR (FLÉRON)             | 18     | 32     |
| GRAND HÔPITAL DE CHARLEROI                     | 10263_COGEN HÔPITAL CHARLEROI                     | 241    | 314    |
| GREEN-INVEST                                   | 9278_COGEN AGC FLEURUS                            | 610    | 880    |
| GRETRYTAIL                                     | 9302_COGEN MR BRICOLAGE LIÈGE - GRÉTRY            | 15     | 35     |
| HERITAGE 1466                                  | 8707_COGEN HERITAGE 1466 (HERVE)                  | 151    | 265    |
| HOTEL LES 3 CLÉS                               | 8451_COGEN HOTEL LES 3 CLÉS (GEMBLOUX)            | 30     | 67     |
| IDEMPAPERS                                     | 7992_COGEN IDEMPAPERS VIRGINAL                    | 8 850  | 39 770 |
| INOVYN MANUFACTURING BELGIUM                   | 39_COGEN SOLVAY (JEMEPE)                          | 94 447 | 116    |
| INSTITUT SAINTE ANNE                           | 9532_COGEN INSTITUT SAINTE ANNE                   | 20     | 40     |
| INTERAGRI DUMOULIN                             | 4823_COGEN DUMOULIN (SEILLES)                     | 1 113  | 620    |
| INTERCOMMUNALE DE SOINS SPECIALISÉS DE LIÈGE   | 9513_COGEN LE VALDOR                              | 398    | 201    |
| INVEST MINGUET GESTION                         | 8105_COGEN HOTEL HUSA DE LA COURONNE (LIÈGE)      | 29     | 62     |
| IPALLE   | 89_COGEN STATION D'ÉPURATION DE MOUSCRON          | 403    | 644    |
| ISERA & SCALDIS SUGAR                          | 98_COGEN SUCRERIE DE FONTENOY                     | 9 806  | 31 077 |
| LA REPOSÉE                                     | 8796_COGEN LA REPOSÉE                             | 20     | 40     |
| LE POLE IMAGE DE LIÈGE                         | 254_COGEN LE PÔLE-BÂTIMENT S (LIÈGE)              | 79     | 121    |
|  | 7909_COGEN LE PÔLE-BÂTIMENT T (LIÈGE)             | 123    | 205    |
| LES ACACIAS                                    | 9241_COGEN LES ACACIAS                            | 18     | 40     |
| LES BOULEAUX                                   | 10282_COGEN MAISON DE REPOS (OUPEYE)              | 20     | 40     |
| LES GLYCINES                                   | 10011_COGEN LES GLYCINES                          | 20     | 40     |
| LES JARDINS DE SCAILMONT                       | 9273_COGEN JARDINS DE SCAILMONT                   | 19     | 34     |
| LES NUTONS                                     | 8044_COGEN LES NUTONS (MARCHE)                    | 621    | 983    |
| L'HOUGNETTE                                    | 9173_COGEN PRISON DE MARCHE-EN-FAMENNE            | 138    | 216    |
| LOUYET   | 10033_COGEN LOUYET                                | 20     | 40     |
| MALTERIE DU CHATEAU                            | 2179_COGEN MALTERIE DU CHATEAU (BELOEIL)          | 330    | 630    |
| MARIENHEIM RAEREN                              | 8104_COGEN MARIEHEIM (RAEREN)                     | 59     | 129    |
| MIMOB  | 8810_COGEN MIMOB HORS-CHATEAU                     | 15     | 30     |
| Ministerium der Deutschsprachigen Gemeinschaft | 8735_COGEN MINISTERIUM DER DG (EUPEN)             | 48     | 81     |
|  | 10518_COGEN KONIGLICHES ATHENAUM EUPEN            | 20     | 42     |
| MONDELEZ INTERNATIONAL                         | 1722_COGEN KRAFT FOODS NAMUR                      | 610    | 808    |
| NEKTO  | 8124_COGEN NEKTO (SOIGNIES)                       | 29     | 62     |
| ORES (Hainaut Électricité)                     | 10107_COGEN ORES STREPY                           | 20     | 40     |
| PROGEST  | 7904_COGEN CHANTEBRISSE (WAREMME)                 | 48     | 77     |
| RADERMECKER                                    | 8349_COGEN RADERMECKER (BATTICE)                  | 434    | 662    |
| RAFFINERIE TIRLEMONTTOISE                      | 37_COGEN RAFFINERIE DE WANZE                      | 12 475 | 60 000 |
|  | 108_COGEN RÂPERIE DE LONGCHAMPS                   | 6 888  | 15 502 |
| RCA DES SPORTS ET LOISIRS DU CONDOZ            | 9472_COGEN PISCINE COMMUNALE DE CINEY             | 50     | 82     |
| RÉGIE COMMUNALE AUTONOME DE LA LOUVIÈRE        | 422_COGEN CENTRE AQUATIQUE DE LA LOUVIÈRE         | 300    | 458    |
| RÉGIE COMMUNALE AUTONOME D'OUPEYE              | 10323_COGEN CENTRE SPORTIF J. STAINIER (HACCOURT) | 20     | 39     |
| Régie des Bâtiments                            | 8721_COGEN PRISON DE JAMILOUX                     | 151    | 265    |
|  | 8018_COGEN PRISON DE HUY                          | 52     | 79     |
| RÉSIDENCE ELISABETH                            | 9408_COGEN RESIDENCE ELISABETH                    | 15     | 32     |
| RÉSIDENCE LES PEUPLIERS                        | 9194_COGEN RESIDENCE LES PEUPLIERS                | 15     | 32     |
| ROSSEL PRINTING COMPANY                        | COGEN ROSSEL PRINTING (BAULERS)                   | 150    | 186    |
| RTBF   | 8462_COGEN MÉDIA RIVES (LIÈGE)                    | 67     | 114    |
| SOCIÉTÉ D'EXPLOITATION DES THERMES DE SPA      | 7907_COGEN THERMES DE SPA                         | 390    | 582    |

|  |  |                |                |
|--|--|----------------|----------------|
| SOLAREC  | 8453_COGEN SOLAREC (LIBRAMONT)                       | 2 650          | 2 967          |
| SOWAER   | 2374_COGEN AÉROPORT DE CHARLEROI                     | 70             | 114            |
| SPA MONOPOLE   | 1178_COGEN SPA MONOPOLE                              | 1 947          | 2 441          |
| SPW  | 1659_COGEN CA MET (NAMUR)                            | 329            | 481            |
| STANDINGHOTES  | 9269_COGEN LE ROYAL                                  | 19             | 45             |
| STUV   | 8048_COGEN STUV BOIS-DE-VILLERS                      | 140            | 220            |
| SWDE   | 8151_COGEN STATION DE TRAITEMENT DE STEMBERT         | 50             | 79             |
| TAPIS RENT   | 8056_COGEN TAPIS RENT (EUPEN)                        | 30             | 62             |
| TECHSPACE AERO   | 141_COGEN TECHSPACE-AERO (MILMORT)                   | 1 548          | 1 920          |
| TOTAL PETROCHEMICALS FELUY                               | 8074_COGEN TPF (FELUY)                               | 14 037         | 38 330         |
| TRAITEUR PAULUS  | 8382_COGEN PAULUS (CINEY)                            | 12             | 28             |
| UNIVERSITÉ CATHOLIQUE DE LOUVAIN                         | 8012_COGEN UCL (LOUVAIN-LA-NEUVE)                    | 3 768          | 4 112          |
| UNIVERSITÉ DE LIÈGE                                      | 6500_COGEN BÂTIMENT DE RADIOCHIMIE (LIÈGE)           | 134            | 202            |
|  | 6499_COGEN ULG BÂTIMENT D'ÉDUCATION PHYSIQUE (LIÈGE) | 134            | 202            |
| UNIVERSITÉ LIBRE DE BRUXELLES                            | 8586_COGEN ULB GOSSÉLIES                             | 808            | 1 033          |
| VIVALIA - CLINIQUE SAINT-JOSEPH                          | 8531_COGEN CLINIQUE SAINT-JOSEPH (ARLON)             | 364            | 486            |
| <b>Net developable electrical capacity &gt; 1,500 KW</b> |  | <b>217 069</b> | <b>366 793</b> |
| <b>Nombre de sites</b>                                   |  | <b>111</b>     |                |

## Annex 2 - Developments in electricity generation for the last 10 years by sector

|                                    |                                       | 2007       | 2008       | 2009       | 2010       | 2011       | 2012       | 2013       | 2014       | 2015       | 2016       |
|------------------------------------|---------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| <b>Solaire</b>                     | CV produits                           | 25         | 10 138     | 152 004    | 370 914    | 938 066    | 2 749 567  | 4 006 364  | 4 755 128  | 4 915 077  | 4 509 236  |
|                                    | Électricité SER produite (MWh)        | 25         | 1 519      | 22 233     | 54 594     | 140 663    | 416 174    | 578 019    | 724 730    | 796 753    | 788 399    |
|                                    | Électricité nette produite (MWh)      | 25         | 1 519      | 22 233     | 54 594     | 140 663    | 416 174    | 578 019    | 724 730    | 796 753    | 788 399    |
| <b>Hydraulique</b>                 | CV produits                           | 377 909    | 190 851    | 167 623    | 163 237    | 101 201    | 175 564    | 116 976    | 104 413    | 123 826    | 153 752    |
|                                    | Électricité SER produite (MWh)        | 377 909    | 365 843    | 317 582    | 295 535    | 187 780    | 363 474    | 372 695    | 286 694    | 327 402    | 387 122    |
|                                    | Électricité nette produite (MWh)      | 377 909    | 365 843    | 317 582    | 295 535    | 187 780    | 363 474    | 372 695    | 286 694    | 327 402    | 387 122    |
| <b>Éolien</b>                      | CV produits                           | 204 840    | 296 432    | 496 410    | 697 775    | 1 029 347  | 1 194 692  | 1 233 240  | 1 325 285  | 1 511 039  | 1 401 501  |
|                                    | Électricité SER produite (MWh)        | 204 840    | 296 902    | 496 561    | 697 777    | 1 029 512  | 1 194 850  | 1 233 434  | 1 325 597  | 1 511 574  | 1 401 964  |
|                                    | Électricité nette produite (MWh)      | 204 840    | 296 902    | 496 561    | 697 777    | 1 029 512  | 1 194 850  | 1 233 434  | 1 325 597  | 1 511 574  | 1 401 964  |
| <b>Biomasse</b>                    | CV produits                           | 379 548    | 477 891    | 385 731    | 495 492    | 410 356    | 385 038    | 324 342    | 120 125    | 305 881    | 754 785    |
|                                    | Électricité SER produite (MWh)        | 562 933    | 691 036    | 545 109    | 612 051    | 582 750    | 470 091    | 404 586    | 150 553    | 294 108    | 536 958    |
|                                    | Électricité nette produite (MWh)      | 576 441    | 702 682    | 559 207    | 620 999    | 658 283    | 478 527    | 412 756    | 157 548    | 306 868    | 541 631    |
| <b>Cogénération biomasse</b>       | CV produits                           | 497 315    | 658 669    | 851 714    | 1 051 197  | 1 166 602  | 1 101 340  | 1 149 771  | 1 280 245  | 1 431 172  | 1 609 550  |
|                                    | Électricité SER produite (MWh)        | 414 110    | 611 668    | 758 130    | 854 591    | 882 492    | 767 421    | 739 929    | 814 100    | 850 052    | 936 569    |
|                                    | Électricité COGEN produite (MWh)      | 434 025    | 632 348    | 814 675    | 943 826    | 965 520    | 859 307    | 862 614    | 904 948    | 951 403    | 1 046 268  |
|                                    | Électricité nette produite (MWh)      | 434 025    | 632 348    | 814 675    | 943 826    | 965 520    | 859 307    | 862 614    | 904 948    | 951 403    | 1 046 268  |
| <b>Biomasse</b>                    | CV produits                           | 876 863    | 1 136 560  | 1 237 446  | 1 546 688  | 1 576 958  | 1 486 378  | 1 474 113  | 1 400 371  | 1 737 053  | 2 364 335  |
|                                    | Électricité SER produite (MWh)        | 977 043    | 1 302 705  | 1 303 239  | 1 466 642  | 1 465 242  | 1 237 512  | 1 144 515  | 964 653    | 1 144 160  | 1 473 527  |
|                                    | Électricité COGEN produite (MWh)      | 434 025    | 632 348    | 814 675    | 943 826    | 965 520    | 859 307    | 862 614    | 904 948    | 951 403    | 1 046 268  |
|                                    | Électricité nette produite (MWh)      | 1 010 466  | 1 335 029  | 1 373 882  | 1 564 825  | 1 623 803  | 1 337 834  | 1 275 370  | 1 062 496  | 1 258 271  | 1 587 900  |
| <b>Cogénération fossile</b>        | CV produits                           | 101 721    | 112 256    | 114 781    | 101 623    | 124 911    | 162 664    | 140 629    | 136 965    | 146 433    | 109 386    |
|                                    | Électricité SER produite (MWh)        | 1 564      | 1 585      | 2 920      | 1 409      | 822        | 2 874      | 4 257      | 3 337      | 4 356      | 3 803      |
|                                    | Électricité COGEN produite (MWh)      | 878 115    | 896 877    | 916 388    | 878 133    | 1 004 634  | 1 135 467  | 1 167 179  | 1 073 748  | 1 129 027  | 1 062 313  |
|                                    | Électricité nette produite (MWh)      | 878 115    | 896 877    | 916 388    | 878 133    | 1 004 634  | 1 135 467  | 1 167 179  | 1 073 748  | 1 129 027  | 1 062 313  |
| <b>Total électricité verte</b>     | CV produits                           | 1 561 359  | 1 746 237  | 2 168 264  | 2 880 237  | 3 770 484  | 5 768 865  | 6 971 322  | 7 722 162  | 8 433 428  | 8 538 210  |
|                                    | Électricité SER produite (MWh)        | 1 561 382  | 1 968 555  | 2 142 535  | 2 515 957  | 2 824 018  | 3 214 885  | 3 332 919  | 3 305 011  | 3 784 245  | 4 054 815  |
|                                    | Électricité COGEN produite (MWh)      | 1 312 140  | 1 529 225  | 1 731 063  | 1 821 959  | 1 970 154  | 1 994 773  | 2 029 792  | 1 978 696  | 2 080 430  | 2 108 581  |
|                                    | Électricité nette produite (MWh)      | 2 471 356  | 2 896 171  | 3 126 646  | 3 490 864  | 3 986 391  | 4 447 798  | 4 626 696  | 4 473 265  | 5 023 027  | 5 227 697  |
|                                    | Tonnes de CO <sub>2</sub> évitées     | 711 980    | 796 284    | 988 728    | 1 313 388  | 1 719 340  | 2 630 602  | 3 178 923  | 3 521 306  | 3 845 643  | 3 893 424  |
| <b>Part dans la fourniture****</b> | Fournitures d'électricité en Wallonie | 24 070 385 | 24 062 992 | 22 347 398 | 23 492 682 | 22 915 218 | 22 608 953 | 22 162 214 | 21 340 684 | 21 200 092 | 20 878 458 |
|                                    | % électricité SER *                   | 3.5        | 3.5        | 3.5        | 3.5        | 3.5        | 3.5        | 3.5        | 3.5        | 3.5        | 3.5        |
|                                    | % électricité COGEN**                 | 3.5        | 3.5        | 3.5        | 3.5        | 3.5        | 3.5        | 3.5        | 3.5        | 3.5        | 3.5        |
|                                    | % électricité nette produite          | 3.5        | 3.5        | 3.5        | 3.5        | 3.5        | 3.5        | 3.5        | 3.5        | 3.5        | 3.5        |

\* L'électricité SER correspond à l'électricité produite à partir de sources d'énergie renouvelables au sens européen (Directive 2009/28/CE).

\*\* L'électricité COGEN correspond à l'électricité produite à partir d'installation de cogénération de qualité (combustibles fossiles et biomasses) ;

cette notion wallonne est proche mais différente de la notion de cogénération à haut rendement au sens européen (Directive 2004/8/CE).

\*\*\*\*La fourniture reprise est la fourniture à des tiers. Elle diffère légèrement de la fourniture soumise à quota à partir de 2014.

## Annex 3 - Operating sites that received a GC quota reduction in 2016

| CLIENT FINAL<br>(nom, raison sociale)          | SIEGE D'EXPLOITATION<br>(nom, adresse)                               | FEDERATION          | SECTEUR                                 |
|--|--|---------------------|---|
| Entité AIR LIQUIDE                             |  |                     |   |
| Air Liquide Industries Belgium S.A             | AIR LIQUIDE MARCHIENNE Rue de la Réunion,127,6030 MARCHIENNE-AU-PONT | ESSENSCIA           | Chimie                                  |
| Air Liquide Industries Belgium S.A             | AIR LIQUIDE BAUDOUR Route de Wallonie,B-7331 BAUDOUR                 | ESSENSCIA           | Chimie                                  |
| Air Liquide Industries Belgium S.A             | AIR LIQUIDE LIEGE Rue de la Vieille Espérance, 86B-4100 SERAING      | ESSENSCIA           | Chimie                                  |
| Akzonobel Chemicals S.A                        | AKZO GHLIN Parc Industriel de Ghlin,Zone A B-7011 GHLIN              | ESSENSCIA           | Chimie                                  |
| Ampacet SPRL                                   | AMPACET Rue d'Ampacet 1 B-6780 MESSANCY                              | ESSENSCIA           | Chimie                                  |
| Caterpillar Belgium S.A                        | CATERPILLAR Avenue des Etats-Unis 1B-6041 GOSSELIES                  | AGORIA              | Fabrications métalliques et électriques |
| Entité CBR                                     |  |                     |   |
| CBR S.A  | CBR ANTOING Rue du Coucou 8,B-7640 ANTOING                           | FEBELCEM            | Cimenteries                             |
| CBR S.A  | CBR HARMIGNIES Rue Blancart 1B-7022 HARMIGNIES                       | FEBELCEM            | Cimenteries                             |
| CBR S.A  | CBR LIXHE Rue des Trois FermesB-4600 LIXHE                           | FEBELCEM            | Cimenteries                             |
| CCB S.A  | CCB G-RXGrand- Route, 260B-7530 GAURAIN-RAMECROIX                    | FEBELCEM            | Cimenteries                             |
| Arcelor Mittal Industeel Belgium S.A           | INDUSTEEL Rue de Chatelet,266, B-6033 MARCHIENNE-AU-PONT             | GSV                 |   |
| APREM Stainless Belgium S.A                    | ARCELOR CHATELET Rue des Ateliers, 14 B-6200 CHATELET                | GSV                 |   |
| Entité ARCELOR MITTAL                          |  |                     |   |
| Arcelor Mittal Belgium S.A                     | CHAUD-SERAINGRue Boverie,5,B-4100 SERAING                            | GSV                 | Sidérurgie                              |
| Arcelor Mittal Belgium S.A                     | FROID-FLEMALLE-RAMETChaussée de Ramioul, 50B-4400 FLEMALLE           | GSV                 | Sidérurgie                              |
| Arcelor Mittal Belgium S.A                     | FROID-TILLEUR-JEMEPEB-4101 JEMEPPE SUR MEUSE                         | GSV                 | Sidérurgie                              |
| Arcelor Mittal Belgium S.A                     | TOLERIA DELHOYE-MATHIEU (TDM)Chaussée des Forges,5,B-4570 MARCHIN    | GSV                 | Sidérurgie                              |
| Arcelor Mittal Belgium S.A                     | CHAUD-CHERTALPont de WandreB-4683 VIVEGNIS                           | GSV                 | Sidérurgie                              |
| Segal S.A                                      | SEGALChaussée de Ramioul, 50B-4400 FLEMALLE                          | GSV                 | Sidérurgie                              |
| Dow Corning S.A                                | DOW CORNINGParc Industriel Zone CB-7180 SENEFFE                      | ESSENSCIA           | Chimie                                  |
| NLMK Clabecq S.A (anciennement Duferco)        | NLMK CLABECQRue de Clabecq 101B-1460 ITTRE                           | GSV                 | Sidérurgie                              |
| NLMK La Louvière S.A (anciennement Duferco)    | NLMK LA LOUVIERERue des Rivaux 2 B- 7100 LA LOUVIERE                 | GSV                 | Sidérurgie                              |
| ENGINEERING STEEL BELGIUM SPRL                 | ENGINEERING STEELRue de l'environnement 8B-4100 SERAING              | GSV                 | Sidérurgie                              |
| AGC Flat Glass Europe S.A                      | AGC MOUSTIERRue de la Glacerie 167B-5190 JEMEPPE-SUR-SAMBRE          | FIV                 | Verre                                   |
| Entité Holcim                                  |  |                     |   |
| Holcim S.A                                     | HOLCIM ERMITAGERue des sergents 20B-7864 LESSINES                    | FEDIEX              | Carrières                               |
| Holcim S.A                                     | HOLCIM LEFFERRoute de spontin B-5501 DINANT                          | FEDIEX              | Carrières                               |
| Holcim S.A                                     | HOLCIM MILIEUGrand route 19B-7530 GAURAIN RAMECROIX                  | FEDIEX              | Carrières                               |
| Holcim S.A                                     | HOLCIM PERLONJOURChemin de Perlonjour 120B-7060 SOIGNIES             | FEDIEX              | Carrières                               |
| Holcim S.A                                     | HOLCIM SOIGNIESRue de Neufvilles 260                                 | FEDIEX              | Carrières                               |
| Holcim S.A                                     | HOLCIM TROOZRue de Verviers 56B-4870 TROOZ                           | FEDIEX              | Carrières                               |
| Infrabel S.A                                   | INFRABELWallonie   | Spécifique INFRABEL | Transport                               |
| Ineos Feluy SPRL                               | INEOS FELUYParc Industriel de Feluy NordB-7171 FELUY                 | ESSENSCIA           | Chimie                                  |
| Kabelwerk Eupen A.G.                           | KABELWERK EUPENMaldystrasse 9B- 4700 EUPEN                           | AGORIA              | Fabrications métalliques et électriques |
| Mondelez Namur Production S.A                  | MONDELEZNouvelle route de Suarlée 6B-5020 SUARLEE                    | FEVIA               | Agro-alimentaire                        |
| Carrières et fours à chaux Dumont Wauthier S.A | DUMONT-WAUTHIERB-4470 SAINT-GEORGES-SUR-MEUSE                        | LHOIST              | Chaux                                   |
| Lhoist Industrie S.A                           | LHOIST MARCHEUsine de OnB-6900 MARCHE-EN-FAMENNE                     | LHOIST              | Chaux                                   |
| Magotteaux Liège S.A                           | MAGOTTEAUXRue Près Tour 55B-4051 CHAUDFONTAINE                       | AGORIA              | Fabrications métalliques et électriques |
| MD Verre S.A                                   | MANUFACTURE VERRERoute de Baudour 2B-7011 GHLIN                      | FIV                 | Verre                                   |
| Gerresheimer Momignies S.A                     | GERRESHEIMER MOMIGNIESRue Mandenne 19-20B - 6590 MOMIGNIES           | FIV                 | Verre                                   |
| Entité PRAYON RUPPEL                           |  |                     |   |
| Prayon Ruppel S.A                              | PRAYONRue Joseph Wauters 144B-4480 ENGIS                             | ESSENSCIA           | Chimie                                  |

|  |  |             |   |
|--|--|-------------|---|
| SILOX S.A  | SILOX Rue Joseph Wauters 144B-4480 ENGIS   | ESSENSCIA   | Chimie                                  |
| BELIFE   | BELIFE Rue Joseph Wauters 144 - 4480 ENGIS   | ESSENSCIA   | Chimie                                  |
| Entité SAINT GOBAIN                                |  |             |   |
| Saint-Gobain Glass Benelux S.A                     | SAINT GOBAIN GLASSRue des Glaces Nationales 169B-5060 AUVELAIS                         | FIV         | Verre                                   |
| Saint-Gobain Sekurit S.A                           | SAINT GOBAIN SEKURITRue des Glaces Nationales 169B-5060 AUVELAIS                       | FIV         | Verre                                   |
| SCA Hygiène Products S.A                           | SCARue de la Papeterie 2B-4801 STEMBERT  | COBELPA     | Papier                                  |
| Sol Spa S.A  | SOL SPAZonning B de Feluy, B-7180 SENEFFE  | ESSENSCIA   | Chimie                                  |
| Entité INOVYN                                      |  |             |   |
| Inovyn S.A   | SOLVICRue de Solvay 39 B- 5190 JEMEPPE-SUR-SAMBRE                                      | ESSENSCIA   | Chimie                                  |
| Solvay Chimie                                      | SOLVAY chimie Rue de Solvay 39 B- 5190 JEMEPPE-SUR-SAMBRE                              | ESSENSCIA   | Chimie                                  |
| SPA Monopole SPRL                                  | SPA MONOPOLERue Auguste Laporte 34B-4900 SPA   | FEVIA       | Agro-alimentaire                        |
| Société Thy-Marcinelle S.A                         | THY-MARCINELLEBoîte Postale 1502B-6000 CHARLEROI                                       | GSV         | Sidérurgie                              |
| Entité TOTAL                                       |  |             |   |
| Total Petrochemicals Feluy S.A                     | TOTAL FELUYZone Industrielle-Zone CB-7181FELUYBE0416670824                             | ESSENSCIA   | Chimie                                  |
| Total Petrochemicals Feluy S.A                     | TOTAL ECAUSSINESZone Industrielle-Zone CB-7181FELUYBE0466813884                        | ESSENSCIA   | Chimie                                  |
| Total Petrochemicals Feluy S.A                     | TOTAL ANTWERPENZone Industrielle-Zone CB-7181FELUYBE0433182895                         | ESSENSCIA   | Chimie                                  |
| Total Petrochemicals Feluy S.A                     | TOTAL DEVELOPMENT FELUYZone industrielle- zone CB-7181 FELUYBE0874422435               | ESSENSCIA   | Chimie                                  |
| UCB division pharmaceutique S.A                    | UCBChemin du ForestB-1420 BRAINE-L'ALLEUD  | ESSENSCIA   | Chimie                                  |
| Pinguin Lutos foods S.A                            | PINGUINLUTOSAZoning Industriel de Vieux Pont 5B-7900 LEUZE EN HAINAUT                  | FEVIA       | Agro-alimentaire                        |
| NGK Europe (anciennement NGK Ceramics Europe) S.A. | NGKRue des Azalées 1,B-7331 BAUDOUR (Saint-Ghislain)                                   | FBB-FEDICER | Briques- céramiques                     |
| Yara Tertre S.A (anciennement Kemira Growhow SA)   | YARA Rue de la Carbo, 10B-7333 TERTRE  | ESSENSCIA   | Chimie                                  |
| Erachem Comilog SA                                 | ERACHEMRue du Bois 7334 SAINT GHISLAIN   | ESSENSCIA   | Chimie                                  |
| Imerys Minéraux Belgique SA                        | IMERYSRue du canal 2B-4600 LIXHE   | FORTEA      | Carrières                               |
| Entité IDEM PAPERS                                 |  |             |   |
| Idem papers  | IDEMPAPERS VIRGINALRue d'Asquempont , 2, B-1460 ITTRE                                  | COBELPA     | Papier                                  |
| Idem papers  | IDEMPAPERS NIVELLESRue des Déportés, 12B-1400 Nivelles                                 | COBELPA     | Papier                                  |
| Knauf Insulation S.A                               | KNAUFRue de Maestricht, 95 B-4600 VISE   | FIV         | Verre                                   |
| 3B Fibreglass SPRL                                 | 3B FibreglassRoute de MaestrichtB-4651 BATTICE   | FIV         | Verre                                   |
| Burgo Ardennes S.A                                 | BURGORue de la PapeterieB- 6760 VIRTON   | COBELPA     | Papier                                  |
| GSK Biologicals S.A                                | GSK WAVRErue Fleming 1 B-1300 WAVRE  | ESSENSCIA   | Chimie                                  |
| GSK Biologicals S.A                                | GSK RIXENSARTrue de l'Institut 89 B-1330 RIXENSART                                     | ESSENSCIA   | Chimie                                  |
| Sonaca S.A   | SONACAroute nationale,5 B-6041 GOSSELIES   | AGORIA      | Fabrications métalliques et électriques |
| Techspace Aero S.A                                 | TECHSPACErue de Liers 121 B-4041 MILMORT   | AGORIA      | Fabrications métalliques et électriques |
| Inbev S.A  | INBEVavenue J. Prevert 23 B-4020 JUPILLE   | FEVIA       | Agro-alimentaire                        |
| SAPA EXTRUSION RAEREN S.A                          | SAPA EXTRUSIONWaldstrasse 91, B-4730 RAEREN  | AGORIA      | Fabrications métalliques et électriques |
| PURATOS S.A  | PURATOSRue Bourrie, B-5300 ANDENNE   | FEVIA       | Agro-alimentaire                        |
| Entité CARMEUSE                                    |  |             |   |
| Carmeuse S.A                                       | CARMEUSE AISEMONTRue de Boudjesse 1, AisémontB-5070 FOSSES-LA-VILLE                    | CARMEUSE    | Carrières                               |
| Carmeuse S.A                                       | CARMEUSE MOHARue Val Notre Dame 300, B-4520 MOHA                                       | CARMEUSE    | Carrières                               |
| Carmeuse S.A                                       | CARMEUSE SEILLESRue du château 13AB-5300 SEILLES                                       | CARMEURS    | Carrières                               |
| MOLKEREI - LAITERIE DE WALHORN S.A.                | MOLKEREIMolkereiweg, 14B-4711 WALHORN  | FEVIA       | Agro-alimentaire                        |
| CORMAN S.A   | CORMANRue de la Gileppe 4,B-7834 GOE   | FEVIA       | Agro-alimentaire                        |
| BAXALTA  | BAXTERBid René Branquant 80B-7860 LESSINES   | ESSENSCIA   | Chimie                                  |
| Ideal Fibers & Fabrics                             | IDELA FIBERS Route des Ecluses, 52B-7780 COMINES                                       | FEDUSTRIA   | Bois, textiles,ameublement              |
| Sioen Industries SA                                | SIOEN INDUSTRIESZone Industrielle du Blanc BallotBoulevard Metropole, 9B-7700 MOUSCRON | FEDUSTRIA   | Bois, textiles,ameublement              |

|  |   |                 |   |
|--|---|-----------------|---|
| Beaulieu Technical Textiles SA (anc. Ideal Fibers & Fabriccs Komen SA) | BEAULIEU-T-Boulevard Industriel, 3B-7780 COMINES                  | FEDUSTRIA       | Bois, textiles,ameublement                      |
| Spanolux SA  | SPANO INVESTZone Industrielle de Burtonville, 10B-6690 VIELSALM   | FEDUSTRIA       | Bois, textiles,ameublement                      |
| Solarec SA   | SOLARECRoute de Saint-Hubert, 75B-6800 RECOGNE                    | FEVIA           | Agro-alimentaire                                |
| Européenne de Lyophilisation SA  | EDEL Rue de Wallonie 16, B-4460 GRACE-HOLLOGNE                    | FEVIA           | Agro-alimentaire                                |
| Dumoulin SA  | DUMOULIN INTERAGRI Rue Bourrie, 18B-5300 SEILLES                  | FEVIA           | Agro-alimentaire                                |
| Ahlstrom Malmédyl SA   | AHLSTROM MALMEDY Avenue du Pont de Warche 1, B-4960 MALMEDY       | COBELPA         | Papier  |
| Gabriel Technologie SA   | GABRIEL TECHNOLOGIE Rue des Roseaux 1, B-7331 SAINT-GHISLAIN      | ESSENSCIA       | Chimie  |
| Mactac Europe S.A.   | MACTACBld J.Kennedy 1 - B-7060 SOIGNIES                           | FETRA FELBELGRA | Ind. Transform. Papier/cartons, Ind. Graphiques |
| Nexans Benelux S.A.  | NEXANS MARCINELLE Rue Vital Françoisse, 21B B-6001 MARCINELLE     | AGORIA          | Fabrications métalliques et électriques         |
| Nexans Benelux S.A.  | NEXANS DOUR Rue Benoît, 1 B-7370 ELOUGES                          | AGORIA          | Fabrications métalliques et électriques         |
| MC BRIDE SA  | MC BRIDE Rue du Moulin Masure, 4 B-7730 ESTAIMPUIS                | ESSENSCIA       | Chimie  |
| Helio Charleroi S.A  | HELIOZONING INDUSTRIEL, Avenue de Spirou, 23 B-6220 FLEURUS       | FETRA-FEBELGRA  | Ind. Transform. Papier/cartons, Ind. Graphiques |
| Magolux S.A  | MAGOLUX Rue de la Hart, 1 B-6780 MESSANCY                         | AGORIA          | Fabrications métalliques et électriques         |
| Mydibel S.A  | MYDIBEL Rue du Piro Lannoy, 30 B-7700 MOUSCRON                    | FEVIA           | Agro-alimentaire                                |
| Cosucra Groupe Warcoing S.A  | COSUCRA WARCOING Rue de la Sucrerie, 1 B-7740 WARCOING            | FEVIA           | Agro-alimentaire                                |
| Dicogel S.A  | DICOCEL Parc Industriel Rue de la Bassée, 3B-7700 MOUSCRON        | FEVIA           | Agro-alimentaire                                |
| Imperbel S.A   | IMPERBEL Chaussée de Wavre, 13 B-1360 PERWEZ                      | ESSENSCIA       | Chimie  |
| Chemviron Carbon S.A.  | CHEMVIRON CARBON Parc Industriel de Feluy Zone CB-7181 FELUY      | ESSENSCIA       | Chimie  |
| Beneo-Orafti S.A   | ORAFIT Rue Louis Maréchal, 1 B-4360 OREYE                         | FEVIA           | Agro-alimentaire                                |
| TEC Charleroi  | TEC CHARLEROI Place des Tranways 9/1 B- 6000 Charleroi            | Spécifique TEC  | Transport                                       |
| Entité SAGREX  |   |                 |   |
| Sagrex   | SAGREX QUENAST Rue de Rebecq B-1430 QUENAST                       | FEDIEX          | Carrières                                       |
| Sagrex   | SAGREX BEEZ RUE DES GRANDS MALADES B - 5000 BEEZ                  | FEDIEX          | Carrières                                       |
| Sagrex   | CARRIERES LEMAY (SAGREX VAULX*Vieux Chemin de Mons 12B-7536 VAULX | FEDIEX          | Carrières                                       |
| Sagrex   | ENROBES DU BASSIN DE L'ESCAUT BE0447354201                        | FEDIEX          | Carrières                                       |
| Sagrex   | SAGREX LUSTIN   | FEDIEX          | Carrières                                       |
| Sagrex   | SAGREX MARCHE LES DAMES   | FEDIEX          | Carrières                                       |
| Sagrex   | SAGREX MONCEAU SUR SAMBRE   | FEDIEX          | Carrières                                       |
| Sagrex   | CARRIERES ANTOING Rue du coucou, 8B-7640 ANTOING                  | FEDIEX          | Carrières                                       |
| Briqueterie de Ploegsteert S.A   | PLOEGSTEERT BARRY Chaussée de Bruxelles, 33B-7534 BARRY           | FBB-Fedicer     | Briques- céramiques                             |
| Briqueterie de Ploegsteert S.A   | PLOEGSTEERT AFMA & BRISTAL Rue du Touquet 228B-7783 PLOEGSTEERT   | FBB-Fedicer     | Briques- céramiques                             |
| Gramybel S.A   | GRAMYBEL Bld de l'Eurozone, 80 B-7700 MOUSCRON                    | FEVIA           | Agro-alimentaire                                |
| Wienerberger Mouscron S.A  | WIENERBERGER MOUSCRON RUE DE LA ROYENNE 55 B - 7700 MOUSCRON      | FBB-Fedicer     | Briques- céramiques                             |
| Entité RAFFINERIE TIRLEMONTTOISE                                       |   |                 |   |
| Raffinerie Tirlemontoise S.A   | RAFFINERIE WANZERUE DE MEUSE 9 B - 4520 WANZE                     | FEVIA           | Agro-alimentaire                                |
| Raffinerie Tirlemontoise S.A   | RAPERIE DE LONGCHAMPS   | FEVIA           | Agro-alimentaire                                |
| Detry Freres S.A   | DETRY AUBEL RUE DE MERCKHOF 110 B - 4880 AUBEL                    | FEVIA           | Agro-alimentaire                                |
| Materne-confilux S.A   | MATERNE FLOREFFE ALLEE DES CERISIERS 1 B-5150 FLOREFFE            | FEVIA           | Agro-alimentaire                                |
| Coca Cola entreprises Belgique S.A                                     | COCA COLA CHAUFONTAINE RUE DU CRISTAL 7 B - 4050 CHAUFONTAINE     | FEVIA           | Agro-alimentaire                                |
| Briqueterie de Peruwelz SA   | WIENERBERGER PERUWELZ Rue de l'Europe, 11 B - 7600 PERUWELZ       | FBB-Fedicer     | Briques- céramiques                             |
| Carrières du Hainaut SA  | CARRIERE HAINAUT Rue de Cognebeau, 245 B - 7060 SOIGNIES          | FEDIEX          | Carrières                                       |
| Cargill chocolate products S.A   | CARGILL CHOCOLATEDrève de Gustave Fache, 13B - 7700 LUINGNE       | FEVIA           | Agro-alimentaire                                |
| Rosier S.A   | ROSIERRue du Berceau, 1B - 7911 MOUSTIER                          | ESSENSCIA       | Chimie  |
| RKW Ace S.A  | RKW ACERue de Renory, 499B - 4031 ANGLEUR                         | ESSENSCIA       | Chimie  |
| Tensachem S.A  | TENSACHEM Rue de Renory, 284102 OUGREE                            | ESSENSCIA       | Chimie  |

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| Fonderies marichal ketin S.A           | FONDERIES MARICHAL KETINVerte Voie, 394000 LIEGE                         | AGORIA         | Fabrications métalliques et électriques        |
| Entité VANDEPUTTE                      |  |                |  |
| Vandeputte                             | HUILERIES SAVONNERIES VANDEPUTTEBoulevard Industriel 120B-7700 MOUSCRON  | ESSENSCIA      | Chimie   |
| Vandeputte                             | VANDEPUTTE OLEACHEMICALSBoulevard Industriel 120B-7700 MOUSCRON          | ESSENSCIA      | Chimie   |
| CARMEUSE S.A                           | CARMEUSE ENGISC Chaussée de Ramoul 1B-4480 ENGIS                         | FEDIEX         | Carrières                                      |
| TERBEKE - Les Nutons S.A               | LES NUTONSChemin Saint Antoine, 85B-6900 MARCHE EN FAMENNE               | FEVIA          | Agro-alimentaire                               |
| TERBEKE - Come a casa                  | Come a casa Chaussée de Wave, 259aB-450 WANZE                            | FEVIA          | Agro-alimentaire                               |
| VPRINT S.A                             | VPRINTBoulevard industriel,95B-7700 MOUSCRON                             | FETRA-FEBELGRA | Ind. Transform. Papier/cartons,Ind. Graphiques |
| DUROBOR S.A                            | DUROBORRue mademoiselle Hanicq, 39B-7060 SOIGNIES                        | FIV            | Verre  |
| REMY ROTO S.A                          | REMY ROTORue de Rochefort,211B-5570 BEAURAING                            | FEBELGRA       | Ind. Transform. Papier/cartons,Ind. Graphiques |
| VALEO VISION S.A                       | VALEO VISION BELGIUMRue du Parc Industriel,31B-7822 MESLIN-L'EVEQUE      | AGORIA         | Fabrications métalliques et électriques        |
| AUTOMOTIVE BELGIUM                     | AGC AUTOMOTIVEAvenue du Marquis B- 6220 FLEURUS                          | FIV            | Verre  |
| LOVENFOSSE S.A                         | LOVENFOSSERue Merckhof 110B-4880 AUBEL                                   | FEVIA          | Agro-alimentaire                               |
| EMERSON CLIMATE TECHNOLOGIES GMBH      | EMERSON CLIMATE TECHNOLOGIES Rue des 3 Bourdons 27B-4840 WELKENRAEDT     | AGORIA         | Fabrications métalliques et électriques        |
| OPTICABLE S.A                          | OPTICABLERue de l'Europe 1B-7080 FRAMERIES                               | AGORIA         | Fabrications métalliques et électriques        |
| AW Europe S.A.                         | AW EUROPERue des Azalées B-7331 BAUDOUR                                  | AGORIA         | Fabrications métalliques et électriques        |
| VANDEMOORTELE SENEFFE S.A              | VANDEMOORTELE SENEFFEZoning industriel Seneffe B-7180 SENEFFE            | FEVIA          | Agro-alimentaire                               |
| MAMMA LUCIA S.A                        | MAMMA LUCIA Rue buissons aux loups, 9B-7180 NIVELLES                     | FEVIA          | Agro-alimentaire                               |
| MIMA FILMS                             | MIMA FILMS Zoning industriel de LatourB-6761 LATOUR                      | ESSENSCIA      | Chimie   |
| LONZA BRAINE S.A                       | LONZA BRAINEChaussée de Tubize 297B-1420 BRAINE L'ALLEUD                 | ESSENSCIA      | Chimie   |
| GOURMAND S.A                           | GOURMANDRêve Gustave fache 6B-7700 LUIGNE                                | FEVIA          | Agro-alimentaire                               |
| CALCAIRES DE LA SAMBRE S.A             | CALCAIRES DE LA SAMBRERue blanc Caillou, 1B-6111 LANDELES                | FEDIEX         | Carrières                                      |
| UTEXBEL S.A                            | UTEXBELAvenur césar snoeck 30B-9600 RENAIX                               | FEDUSTRIA      | Bois, textiles,ameublement                     |
| CRYSTAL COMPUTING SPRL                 | CRYSTAL COMPUTINGRue de Ghlin 100B-7311 BAUDOUR                          | GOOGLE         | Technologie                                    |
| STEF LOGISTICS                         | STEF LOGISTICSAvenue Zenobe gramme 23B - 1480 SAINTES                    | FEVIA          | Agro-alimentaire                               |
| CL WARNETON                            | CL WARNETONChaussée de Lille,61B-7784 WARNETON                           | FEVIA          | Agro-alimentaire                               |
| BEL'ARDENNE                            | BEL'ARDENNEParc artisanal de VillerouxRoute de Bastogne B-6640 VILLEROUX | FEVIA          | Agro-alimentaire                               |
| PLUKON                                 | PLUKONAvenue de l'eau vive,5B-7700 MOUSCRON                              | FEVIA          | Agro-alimentaire                               |
| TI AUTOMOTIVE GROUP SYSTEM S.A         | TI AUTOMOTIVERue Wérihet 61B-4020 LIEGE                                  | AGORIA         | Fabrications métalliques et électriques        |
| NEKTO                                  | NEKTORue du clypot,3B-7063 NEUFVILLES                                    | FEDUSTRIA      | Bois, textiles,ameublement                     |
| BELREF                                 | BELREFRue de la Rivière 100B-7330 SAINT GHISLAIN                         | FBB FEDICER    | Briques- céramiques                            |
| CARRIERES ET ENTREPRISES MARCEL BERTHE | CARRIERES MARCEL BERTHERoute de Corenne 60B-5620 FLORENNES               | FEDIEX         | Carrières                                      |
| TRAITEX                                | TRAITEXRue de Limbourg 145B-4800 VERVERS                                 | FEDUSTRIA      | Bois, textiles,ameublement                     |
| IWAN SIMONIS S.A                       | IWAN SIMONISRue de Renoupré 2B-4821 ANDRIMONT                            | FEDUSTRIA      | Bois, textiles,ameublement                     |
| EPUR'AUBEL                             | EPUR'AUBELRue Kan 63B-4880 AUBEL   | FEVIA          | Agro-alimentaire                               |
| GHL GROUP S.A                          | GHL GROUPRue de Merckhod 113B-4880 AUBEL                                 | FEVIA          | Agro-alimentaire                               |
| AUREA SPRL                             | AUREA Rue du château d'eau 29B-1420 BRAINE L'ALLEUD                      | ESSENSCIA      | Chimie   |
| CARTONNERIES THULIN S.A                | CARTONNERIES THULINHameau de Debiham 20B-7350 THULIN                     | ESSENSCIA      | Chimie   |
| JINDAL FILMS EUROPE                    | JINDAL FILMSZoning artisanal LATOURB-6761 VIRTON                         | ESSENSCIA      | Chimie   |
| LAMBIOTTE S.A                          | LAMBIOTTE  | ESSENSCIA      | Chimie   |
| PB CLERMONT                            | PB CLERMONTRue de Clermont 176B-4460 ENGIS                               | ESSENSCIA      | Chimie   |
| JTEKT TORSER EUROPE S.A                | JTEKT TORSER Rue du grand peuplier 11B-7110 STREPY BRACQUEGNIES          | AGORIA         | Fabrications métalliques et électriques        |
| Carmeuse S.A                           | CARMEUSE FRASNES   | FEDIEX         | Carrières                                      |
| BRU CHEVRON                            | BRU CHEVRONRue de la bruyère 151B-4987 STOUMONT                          | FEVIA          | Agro-alimentaire                               |
| BIOWANZE                               | BIOWANZERue Léon Charlier B-4520 WANZE                                   | FEVIA          | Agro-alimentaire                               |

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| BIERES DE CHIMAY S.A            | BIERES DE CHIMAYroute de charlemagne 8B-6464 FORGES                     | FEVIA          | Agro-alimentaire                                |
| BELOURTHE S.A                   | BELOURTHEavenue des villas 3B-4180 HAMOIR                               | FEVIA          | Agro-alimentaire                                |
| BISCUITS DELACRE                | BISCUITS DELACRERue de Wegnez 11B-4800 LAMBERMONT                       | FEVIA          | Agro-alimentaire                                |
| BELGOMALT S.A                   | BELGOMALTChaussée de Charleroi 40B-5030 GEMBLoux                        | FEVIA          | Agro-alimentaire                                |
| HERITAGE 1466 S.A               | HERITAGE 1466Rue de Charneux 32B-4650 HERVE                             | FEVIA          | Agro-alimentaire                                |
| SUCRERIE COUPLET S.A            | SUCRERIE COUPLET Rue de la sucrerie 30B-7620 BRUNEHAUT WEZ              | FEVIA          | Agro-alimentaire                                |
| ROGER & ROGER S.A               | ROGER & ROGERRue de la basse 1B-7700 MOUSCRON                           | FEVIA          | Agro-alimentaire                                |
| ARCELOR RINGMILL                | ARCELOR RINGMILL Rue Philippe de Marnix 3B-4100 SERAING                 | AGORIA         | Fabrications métalliques et électriques         |
| STASSEN S.A                     | STASSEN Rue Kan, 7B-4880 AUBEL  | FEVIA          | Agro-alimentaire                                |
| HEIMBACH SPECIALITIES           | HEIMBACHTulje 65B-4721 NEU-MORESNET                                     | FEDUSTRIA      | Bois, textiles, ameublement                     |
| Cosucra Groupe Warcoing S.A     | COSUCRA site de Provital  | FEVIA          | Agro-alimentaire                                |
| SAPA RC PROFILES S.A            | SAPA RCSite de GhlinRoute de wallonie 1 B-7011 GHILIN                   | AGORIA         | Fabrications métalliques et électriques         |
| NESTLE WATERS BENELUX           | NESTLERue du bois, 100B-6740 ETALLE                                     | FEVIA          | Agro-alimentaire                                |
| AIGREMONT                       | AIGREMONTRue des Awirs 8B-4400 FLEMALLE                                 | FEVIA          | Agro-alimentaire                                |
| HESBAYE FROST                   | HESBAYE FROSTRue E. Lejeune 20B-4250 GEER                               | FEVIA          | Agro-alimentaire                                |
| FERRARI GRANULATS               | FERRARI GRANULATSRue Bay-Bonnat 13B-4870 TROOZ                          | FEDIEIX        | Carrières                                       |
| IMPERIAL MEAT PRODUCTS          | IMPERIAL MEAT PRODUCTSRoute de la barrière 72B-6971 CHAMPLON            | FEVIA          | Agro-alimentaire                                |
| ROSSEL PRINTING COMPANY         | ROSSEL PRINTING COMPANYAvenue Schuman 101B-1400 NIVELLES                | FETRA-FEBELGRA | Ind. Transform. Papier/cartons, Ind. Graphiques |
| ROYALE LACROIX                  | ROYALE LACROIXAvenue Théodore Gonda 4B-4400 FLEMALLE                    | FEVIA          | Agro-alimentaire                                |
| Sagrex                          | CIMESCAUT MATERIAUXRue du coucou 37B-76040 ANTOING                      | FEDIEIX        | Carrières                                       |
| ARCELORMITTAL BELGIUM SA        | ARCELOR MITTAL BELGIUMMaréchalfoch 11B-4400 Flemalle                    | GSV            | Sidérurgie                                      |
| PASTIFICIO DELLA MAMMA          | PASTIFICIO DELLA MAMMAZI des Hauts Sarts 354ème AvenueB-4040 HERSTAL    | FEVIA          | Agro-alimentaire                                |
| BRASSERIE DU BOCQ               | BRASSERIE DU BOCQSite de PurnodeRue de la brasserie 4B-5530 PURNODE     | FEVIA          | Agro-alimentaire                                |
| BELDEM S.A                      | BELDEM Site de Saint VithRue de Prum 51B-4780 SAINT VITH                | FEVIA          | Agro-alimentaire                                |
| BRASSERIE LEFEBVRE              | BRASSERIE LEFEBVREChemin du Croly541430 REBECQ                          | FEVIA          | Agro-alimentaire                                |
| AW Europe S.A.                  | AW EUROPE BRAINE L'ALLEUDAvenue de l'industrie, 19-1420 BRAINE L'ALLEUD | AGORIA         | Fabrications métalliques et électriques         |
| BIERES DE CHIMAY S.A            | BIERES DE CHIMAYRoute Charlemagne, 8-6464 BAILLEUX                      | FEVIA          | Agro-alimentaire                                |
| UMICORE                         | UMICORE Rue de Chenée, 53/1B-4031 ANGLEUR                               | AGORIA         | Fabrications métalliques et électriques         |
| Holcim S.A                      | HOLCIM OBOURG Rue des fabriques 27034 OBOURG                            | FEBELCEM       | Cimenteries                                     |
| Kabelwerk Eupen A.G.            | KABELWERK EUPEN (TUBE)Malmedystrasse 9B- 4700 EUPEN                     | AGORIA         | Fabrications métalliques et électriques         |
| Kabelwerk Eupen A.G.            | KABELWERK EUPEN (CABLES)Malmedystrasse 9B- 4700 EUPEN                   | AGORIA         | Fabrications métalliques et électriques         |
| STOCKHABO SPRL                  | STOCKHABODrève Gustave Fache 157700 MOUSCRON                            | FEVIA          | Agro-alimentaire                                |
| 5N PLUS BELGIUM SA              | Rue de la Station 7B-1495 TILLY   | ESSENSCIA      | Chimie  |
| ZOETIS BELGIUM S.A              | ZOETISRue laid burniat, 1B-1348 LOUVAIN LA NEUVE                        | ESSENSCIA      | Chimie  |
| DELABIE S.A                     | DELABIEBoulevard de l'Eurozone 9B-7700 MOUSCRON                         | FETRA-FEBELGRA | Ind. Transform. Papier/cartons, Ind. Graphiques |
| BELGIAN FIBERS MANUFACTURING SA | BELGIAN FIBERS MANUFACTURING SABoulevard Industriel 91B-7700 MOUSCRON   | FEDUSTRIA      | Bois, textiles, ameublement                     |
| PROCOPLAST                      | PROCOPLAST SASchnellewindgasse 17 B-4700 EUPEN                          | ESSENSCIA      | Chimie  |
| ZINACOR SA                      | ZINACOR Rue de Chénée 53,4031 Angleur                                   | AGORIA         | Fabrications métalliques et électriques         |
| NYCO-STPC SA                    | NYCO STPC Rue de l'ancienne Potence, 22 7503 FROYENNES                  | ESSENSCIA      | Chimie  |
| DEVAGEL                         | DEVAGEL Rue des Garennes 12-7700 MOUSCRON                               | FEVIA          | Agro-alimentaire                                |
| Entité CABOT PLASTICS           |   |                |   |
| CABOT PLASTICS                  | CABOT PLASTICS - site de loncin Rue E. Vandervelde 131-4431 LONCIN      | ESSENSCIA      | Chimie  |
| CABOT PLASTICS                  | CABOT PLASTICS - site de Pepinster Rue Prevochamps 78-4860 PEPINSTER    | ESSENSCIA      | Chimie  |
| HOGANAS BELGIUM S.A             | HOGANAS BELGIUM Rue LLE Gros Pierre 10B-7800 ATH                        | ESSENSCIA      | Chimie  |
| SMURFITKAPPA CARTOMILLS SPRL    | SMURFITKAPPA Rue de Douvrain 197011 GHILIN                              | FETRA FEBELGRA | Ind. Transform. Papier/cartons, Ind. Graphiques |

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| PROCOTEX CORPORATION S.A.             | PROCOTEX CORPORATIONRue Théodor Kluber 87711 DOTTIGNIES                  | FEDUSTRIA      | Bois, textiles, ameublement                     |
| ECOFROST SA                           | ECOFROST Rue de l'Europe 347600 PERUWELZ                                 | FEVIA          | Agro-alimentaire                                |
| BRIDGESTONE AIRCRAFT TIRE (EUROPE) SA | BRIDGESTONE Route de Bavay 27080 Frameries                               | ESSENSCIA      | Chimie  |
| AGC Glass Europe SA                   | Site de LodelinsartAvenue J. Monnet, 4 1348 Louvian la Neuve             | FIV            | Verre   |
| AGC Glass Europe SA                   | Site de Seneffe1348 Louvian-la-NeuveRue Jules Bordet, zone C7180 Seneffe | FIV            | Verre   |
| NOMACORC SA                           | Rue des Alouettes 04041 MILMORT  | ESSENSCIA      | Chimie  |
| NOMACORC SA                           | Chemin de Xhénorie 74890 THIMISTER                                       | ESSENSCIA      | Chimie  |
| HYDROMETAL                            | HYDROMETALRue de Parc Industriel3B-4480 ENGIS                            | ESSENSCIA      | Chimie  |
| NMC SA                                | NMCRovert 10B-4731 EYNATTEN  | ESSENSCIA      | Chimie  |
| STERIGENICS SA                        | STERIGENICSAvenue André Ernst 214800 Verviers                            | ESSENSCIA      | Chimie  |
| CARTONNAGE LAMMERANT                  | CARTONNAGE LAMMERANTZI DE L'EUROPE 37900 LEUZE-EN-HAINAUT                | FETRA FEBELGRA | Ind. Transform. Papier/cartons, Ind. Graphiques |
| DAWN FOODS BELGIUM                    | DAWN FOODS BELGIUMRue du Chenia 107170 Manage                            | FEVIA          | Agro-alimentaire                                |
| STOW INTERNATIONAL                    | Stow InternationalAvenue du Bois Jacquet 10/7711 Dottignies              | AGORIA         | Fabrications métalliques et électriques         |
| DERKENNE COULINNE                     | DERKENNE COULINERue champs de Tignée 74671 BARCHON                       | ESSENSCIA      | Chimie  |
| CAFE LIEGEOIS                         | CAFE LIEGEOISRue de Verviers 1814651 BAT TICE                            | ESSENSCIA      | Chimie  |
| Slicing Packing Fun & Many More       | Slicing Packing Fun & Many MoreVecmont 21, 6980 La-Roche-en-Ardenne      | ESSENSCIA      | Chimie  |
| Asten Johnson GmbH                    | Asten Johnson GmbHBushberger Weg 46 4701 Eupen                           | ESSENSCIA      | Chimie  |
| Stall Bois                            | StallboisRue belle vue 26740 ETALLE                                      | ESSENSCIA      | Chimie  |
| GSK Biologicals S.A                   | GSK BIOLOGICALS - site Les ISNESRue de Genonceaux 135032 LES ISNES       | FETRA FEBELGRA | Ind. Transform. Papier/cartons, Ind. Graphiques |
| SYNGENTA CHEMICALS                    | SYNGENTARue de Ty Berchamps 377180 SENEFFE                               | FEVIA          | Agro-alimentaire                                |
| TIMAC AGRO                            | TIMAC AGROrue de la jonction 46030 MARCHIENNE AU PONT                    | AGORIA         | Fabrications métalliques et électriques         |
| HUSQVARNA                             | HUSQVARNAAvenue des artisans 507822 ATH                                  | FEVIA          | Agro-alimentaire                                |
| Mölnlycke Health Care SA              | MOLNLYCKE HEALTH CAREChaussée Romaine 1764300 Waremmes                   | FEVIA          | Agro-alimentaire                                |
| Les Ateliers Jean Regniers ASBL       | LES ATELIERS JEAN REGNIERSRue Baronne E. DRORY 56543 BIENNE LEZ HAPPART  | FEVIA          | Agro-alimentaire                                |
| BELGIAN QUALITY FISH S.A              | BELGIAN QUALITY FISHRue Théodor Kluber 47711 DOTTIGNIES                  | FEDUSTRIA      | Bois, textiles, ameublement                     |
| MALTERIE DU CHÂTEAU                   | MALTERIE DU CATEAURue de Mons 947970 BELOEIL                             | FEDUSTRIA      | Bois, textiles, ameublement                     |
| BRASSERIE ORVAL                       | BRASSERIE D'ORVALCabien centre dépuraton6823 VILLERS DEVANT ORVAL        | ESSENSCIA      | Chimie  |
| THALES ALENIA SPACE BELGIUM           | THALES ALENIA Rue chapelle beaussart 1016032 MONT SUR MARCHIENNE         | ESSENSCIA      | Chimie  |
| NETWORK RESEARCH BELGIUM              | NRBParc industriel de hauts Sarts, 654040 HERSTAK                        | ESSENSCIA      | Chimie  |
| ATELIERS DU MONCEAU                   | ATELIERS DU MONCEAURue de l'avenir 754460 GRACE HOLLOGNE                 | AGORIA         | Fabrications métalliques et électriques         |
| CARRIERES UNIS DE LA PORPHYRE         | CARRIERES PORPHYREChaussée Maieur Habils 1771430 BIERGHES                | FETRA FEBELGRA | Ind. Transform. Papier/cartons, Ind. Graphiques |
| CARRIERES UNIS DE LA PORPHYRE         | CARRIERES PORPHYREChaussée Gabrielle Richet 193B7860 LESSINES            | FEDUSTRIA      | Bois, textiles, ameublement                     |
| COEFLY DATA SOLUTIONS                 | COEFLY Rue Guillaume Fouquet 175032 LES ISNES                            | FEVIA          | Agro-alimentaire                                |
| ELPRINTA                              | ELPRINTA Rue des Bengalís 57700 MOUSCRON                                 | FEVIA          | Agro-alimentaire                                |
| LANOLINES STELLA                      | LANOLINES Rue des Garennes 67700 MOUSCRON                                | FEVIA          | Agro-alimentaire                                |
| ADVACHEM                              | ADVACHEM Route n°624 Wallonie7334 SAINT GHISLAIN                         | AGORIA         | Fabrications métalliques et électriques         |
| CARBODOUR                             | CARBODOUR Rue de la Carbo, 107333 TERTRE                                 | AGORIA         | Fabrications métalliques et électriques         |

## Annex 4 - International statistics relating to GOL

Les statistiques ci-dessous sont les statistiques officielles de l'*Association of Issuing Bodies (AIB)* pour l'année 2015 pour la Wallonie. De nouvelles garanties d'origine sont inscrites dans le registre wallon lors des émissions (*issue*) et importations (*import*) ; des garanties d'origine existantes sont rayées du registre lors des exportations (*export*) et annulations (*cancel*) ; les transferts (*transfer*) indiquent un changement de propriétaire ou de détenteur dans le registre wallon. Les annulations ex-domain ne figurent pas dans ce tableau. Seules les garanties d'origine émises sous le régime de reconnaissance mutuelle intitulé *European Energy Certificate System (EECS)* établi par l'*Association of Issuing Bodies (AIB)* sont reprises ci-dessus. Les sites de production wallons pour lesquels les propriétaires n'avaient pas encore accepté les conditions générales requises par l'AIB au moment de leur émission ne figurent donc pas dans ces statistiques (la plupart l'ont fait en 2013).

| Belgium (Wallonia) |  | Production |        |           | Transaction |           |                |             |             |                |         |           |
|--------------------|--|------------|--------|-----------|-------------|-----------|----------------|-------------|-------------|----------------|---------|-----------|
| 2016               |  | Issue      | Expire | Cancel    | Issue       | Transfer  | Export (Ex-BE) | Export (BE) | Import (BE) | Import (ex-BE) | Expire  | Cancel    |
| Wind               | Wind onshore                                   | 0          | 0      | 168 822   | 0           | 0         | 18 004         | 51 087      | 324 437     | 50 770         | 1       | 207 035   |
| Wind               | Wind offshore                                  | 0          | 0      | 242 310   | 0           | 0         | 7 609          | 55 419      | 321 426     | 7 607          | 0       | 274 005   |
| Wind               | Wind unknown                                   | 1 289 752  | 39 191 | 332 371   | 1 522 202   | 2 141 060 | 95 668         | 1 230 950   | 298 674     | 234 666        | 109 613 | 677 526   |
| Hydropower         | Hydro/marine                                   | 284 063    | 566    | 1 707 874 | 289 215     | 822 288   | 8 891 245      | 1 780 845   | 2 698 462   | 12 531 684     | 152 269 | 3 052 107 |
| Unspecified        | Unspecified renewable energy                   | 0          | 0      | 0         | 0           | 0         | 0              | 0           | 0           | 0              | 0       | 0         |
| Solar              | Solar  | 0          | 0      | 45 646    | 0           | 0         | 0              | 100 612     | 5 611       | 120 519        | 0       | 0         |
| Geothermal         | Geothermal                                     | 0          | 0      | 0         | 0           | 0         | 0              | 0           | 0           | 0              | 0       | 0         |
| Biomass            | Solid agricultural biomass (inc. energy crops) | 24 766     | 1 057  | 46 691    | 26 523      | 1 465     | 190 431        | 111         | 16 301      | 619 610        | 21 404  | 446 446   |
| Biomass            | Solid agricultural products                    | 0          | 1 357  | 49 667    | 0           | 0         | 24 000         | 153 627     | 121 476     | 174 136        | 0       | 116 628   |
| Biomass            | Solid renewable fuels (inc. For&Ag bp & w)     | 0          | 3 991  | 40 937    | 0           | 7 718     | 0              | 47 230      | 34 543      | 20 920         | 515     | 3 718     |
| Biomass            | Solid forestry products                        | 0          | 0      | 6 745     | 0           | 1 750     | 0              | 1 262       | 0           | 3 867          | 700     | 1 905     |
| Biomass            | Solid forestry byproducts & waste              | 0          | 0      | 25 894    | 0           | 0         | 0              | 12 197      | 72 921      | 21 585         | 0       | 80 839    |
| Biomass            | Gas landfill                                   | 463 513    | 0      | 16 332    | 556 295     | 0         | 0              | 18 819      | 0           | 20 751         | 0       | 262 658   |
| Biomass            | Gas sewage                                     | 196 309    | 592    | 85 804    | 203 367     | 404 568   | 4              | 141 685     | 29 363      | 68 996         | 36 331  | 119 663   |
| Biomass            | Gas other biogas                               | 45 579     | 0      | 32 471    | 70 842      | 68 447    | 6 932          | 3 962       | 9 535       | 0              | 6 475   | 55 655    |
| Biomass            | Solid municipal biogenic waste                 | 0          | 0      | 0         | 0           | 18        | 0              | 251         | 0           | 1 007          | 326     | 430       |
| Biomass            | Liquid renewable fuels (inc. Mun.waste)        | 29 765     | 1 261  | 126 943   | 29 599      | 46 280    | 19 332         | 37 670      | 135 230     | 15 659         | 4 219   | 119 558   |
| Biomass            | Liquid black liquor                            | 0          | 0      | 34 614    | 0           | 6 762     | 0              | 15 629      | 22 318      | 41 737         | 6 415   | 72 482    |
| Biomass            | Solid unspecified wood                         | 0          | 0      | 0         | 0           | 0         | 0              | 0           | 0           | 0              | 0       | 0         |
| Biomass            | Solid industrial & commercial waste            | 0          | 0      | 0         | 0           | 0         | 0              | 0           | 0           | 18 205         | 0       | 18 205    |
| Nuclear            | Unknown  | 0          | 0      | 0         | 0           | 0         | 0              | 0           | 0           | 0              | 0       | 0         |
| Fossil             | Unknown  | 0          | 0      | 0         | 0           | 0         | 0              | 0           | 0           | 0              | 0       | 0         |
|                    |  | 2 333 747  | 48 749 | 3 030 503 | 2 698 096   | 3 502 604 | 9 253 225      | 3 752 244   | 4 221 611   | 14 111 041     | 345 557 | 5 748 727 |

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