

# ENVIRONMENT<sup>1</sup>

G4-DMA G4-35



ENERGY



POLLUTION



MOBILITY



CERTIFICATION

In view of the scale of its real-estate business, the main focus of Befimmo's Social Responsibility is on the environment.

Befimmo is aware that the value of a building is no longer measured solely in terms of its intrinsic value but also of other criteria related to sustainable development. The external stakeholders have also broadly confirmed that this topic is the most important overall and want to see

short-term action by Befimmo on the priorities related to the topic: **energy, pollution, mobility and certification.**

The implementation, monitoring and control of specific measures related to the environment are managed primarily by the Environmental Technical Team (ETT), composed of 5 experienced people, which reports directly to the Social Responsibility team.

**-30%<sup>2</sup>**  
Electricity (2008-2015)

**-23%<sup>2</sup>**  
Gas (2008-2015)

**-64%**  
CO<sub>2</sub> emissions (2008-2015)

**+3,760 m<sup>2</sup>**  
Solar panels

## ENERGY

Energy consumption (oil, gas, district heating and electricity) and water consumption by tenants and corporate activities.

### ISSUES

raised by stakeholders:

- climate change;
- use of natural resources;
- energy consumption;
- renovation/construction;
- maintenance of portfolio.

### COMMITMENTS

Befimmo undertakes to:

- position itself as a reference in terms of reducing energy consumption (gas, heating oil, district heating and electricity) of all the buildings in its portfolio;
- anticipate future regulatory requirements and find a balance between "cost and energy efficiency" in its investment projects;
- maintain all of its operational portfolio in line with standards;
- lead by example in the energy management of its "corporate" premises;
- strive to cut water consumption in operational buildings and analyse opportunities for reducing consumption in all its renovation and/or construction projects.

## Reporting of consumption

For its non-financial reporting, Befimmo has chosen to report the data for the Befimmo and Fedimmo portfolios separately. Befimmo's commitments to sustainable development apply to its whole portfolio. However the policy implemented by Befimmo at operational level cannot be applied in the same way to the Fedimmo portfolio, almost all of which is let to the Buildings Agency.

Indeed, under the lease agreements with the Buildings Agency, most of the recurring work and the operational management of buildings are the Agency's responsibility, so Befimmo has only limited control over these activities.

Nevertheless, through regular dialogue and consultation with the Buildings Agency, potential improvements in the environmental performance of the buildings are gradually being proposed by Befimmo and, in some cases, directly implemented.

1. The detailed Action Plan for 2016, in particular the part related to the Environment, is annexed to this Report on pages 226 to 229.

2. Befimmo portfolio (excluding Fedimmo), common areas, specific consumptions (kWh/m<sup>2</sup>).

Given its limited control, Befimmo cannot readily access the data on energy consumption and waste production of Fedimmo's buildings, which makes it hard to set meaningful and representative quantitative objectives.

For the Befimmo portfolio, **10 quantitative objectives, including 5 new ones**, have been set for the coming years.

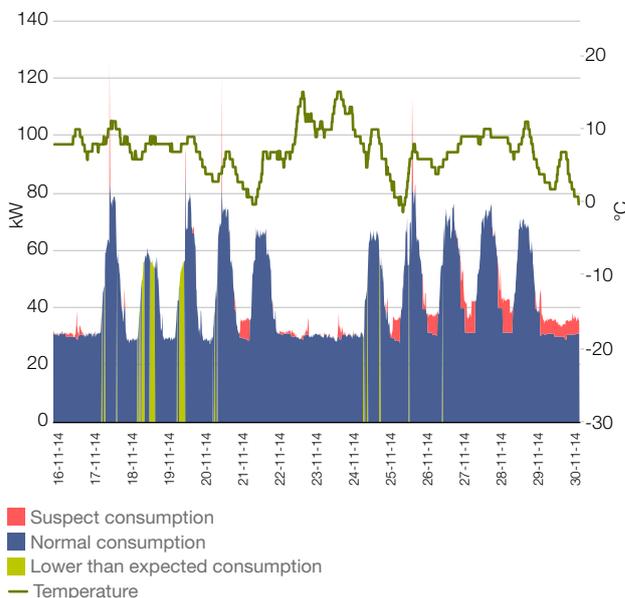
In most cases, in addition to providing overall data, data from the two portfolios have been segmented by size [1-5000 m<sup>2</sup>], [5001-10000 m<sup>2</sup>], [>10,000 m<sup>2</sup>] of the buildings, which allows analysis from various angles and certain specific data to be exploited. The full detailed tables, covering 4 reporting years (2008 and 2013 to 2015) and the **Methodology** necessary for the proper interpretation and understanding of the data, are annexed to this report on pages 237 to 243 and page 101 respectively.

## Main achievements and objectives

### Management of consumption data

All energy-consumption data and information are obtained via (i) the network managers and energy suppliers, (ii) the maintenance companies, (iii) the telemonitoring of consumption and (iv) the internal manager.

#### Typical example of statistical model of a Befimmo building



Telemonitoring now covers 91% of the buildings in the Befimmo portfolio and a small proportion of the buildings in the Fedimmo portfolio. The data collected generally cover all consumption (water, gas and electricity). This centralisation of data and online real-time access to them allows us to remotely identify any malfunctioning technical installations, immediately take the necessary corrective action, and to assess the energy performance of each building and identify priority future investments to be considered.

With regard to the management of electricity consumption data, Befimmo is continuing to work on separating consumption for private and common areas of the buildings in which it has control over the energy supply contract. Regarding the buildings in which the supply contracts are not in Befimmo's name, the Environmental Technical Team directly asks tenants for consumption data and/or the renewal of the mandates needed for obtaining data via the network managers. This approach is systematically applied to all new tenants, notably when signing the lease.

In this way, Befimmo is increasing its reporting scope year by year, with the goal of eventually obtaining 100% of consumption data. All the data obtained are centralised, consolidated, compared and analysed in detail. The information extracted is also compared with the telemonitoring tool to ensure that it is effectively and accurately calibrated.

Also in 2015, Befimmo has been systematically using statistical models to refine the detection of abnormal electricity, water and gas consumption. These models for predicting future consumption are based on the energy signature of the building and working hours. More relevant than generic alarms triggered when a maximum threshold is exceeded, these models can detect very slight overconsumption in relation to total consumption.

### Objective for 2016

**Continue implementing systems for consolidating and monitoring energy consumption data. The objective is to collect, analyse and exploit the consumption data on a quarterly basis, by the end of 2016.**



### Multi-annual investment plan G4-EN31

Befimmo strives to keep its buildings attractive to tenants, thereby maintaining as high an occupancy rate as possible in its portfolio, by continually carrying out renovation and redevelopment in its properties or improving their energy and environmental performance, to upgrade them or maintain them at a high level of quality and performance.

Befimmo is implementing a specific multi-annual investment plan designed to carry out work to optimise the sustainable performance of the operational buildings (replacement of old technical installations by energy-saving equipment, installation of new equipment management technologies, installation of water-recovery systems, improved insulation, installation of photovoltaic panels, etc.) and generally to improve the BREEAM In-Use certification of the buildings. In 2015, the budget for this work was of the order of €1.5 million.

As for major renovations, part of the overall renovation budget is allocated to sustainable optimisation and anticipating new regulations on the improvement of the environmental performance of buildings.

► “Outlook and dividend forecast, on page 68”

### Objectives for 2016-2018

Befimmo plans to continue these initiatives and maintain a recurrent budget for the improvement of existing technical installations in addition to the share of the major renovation budgets allocated to the sustainable optimisation of the environmental performance of buildings.

(IN € MILLION)	REALISED	OUTLOOK		
	2015	2016	2017	2018
<b>Total</b>	<b>1.48</b>	<b>1.99</b>	<b>1.77</b>	<b>1.53</b>
Energy	1.00	1.38	1.53	1.47
Environment	0.48	0.61	0.24	0.06

### Investment criteria G4-DMA

Befimmo is interested in real-estate projects that meet the standard investment criteria such as quality, critical mass, flexibility, the rental situation and the potential for value creation. However, in line with its Social Responsibility policy and in a process of continuous improvement, when considering acquisition projects it also reviews and analyses energy efficiency, aspects related to soil pollution and the presence of hazardous substances, together with aspects related to mobility, such as location, accessibility, proximity to public transport, etc.

► “Identity and strategy, on page 18”

1. EPRA: European Public Real Estate Association – [www.epra.com](http://www.epra.com).

2. Befimmo called upon Deloitte to carry out a limited assurance review. Data with the **V** symbol were controlled within the framework of this limited assurance review. The Deloitte report can be found on page 119 of this chapter.

3. Waste linked to buildings under construction (works) and operational buildings.



### Summary table of EPRA sustainable performance indicators

Befimmo is following the trend towards standardisation of financial reporting and also reporting on Social Responsibility by subscribing to the indicators published by EPRA<sup>1</sup> in its report “Best Practices Recommendations on Sustainability Reporting (2<sup>nd</sup> version – September 2014)”.

EXTERNAL ASSESSMENT <sup>2</sup>	EPRA SUSTAINABILITY PERFORMANCE MEASURES	GRI G4 (CRESD) INDICATOR	PORTFOLIO	DATA 2015	PAGE(S) AFR 2015
V	Elec-Abs non-normalised	G4-EN3	Befimmo Fedimmo	47.1 GWh 15.2 GWh	
V	Elec-LfL non-normalised	G4-EN3	Befimmo 2014 Befimmo 2015 Fedimmo 2014 Fedimmo 2015	44.9 GWh 40.7 GWh 14.6 GWh 13.5 GWh	92 238
V	DH&C-Abs normalised	G4-EN3	Befimmo	1.4 GWh	92
V	DH&C-LfL normalised	G4-EN3	Befimmo 2014 Befimmo 2015	1.7 GWh 1.4 GWh	238
V	Fuels-Abs normalised	G4-EN3	Befimmo Fedimmo	41.9 GWh 37.0 GWh	93 237
V	Fuels-LfL normalised	G4-EN3	Befimmo 2014 Befimmo 2015 Fedimmo 2014 Fedimmo 2015	37.3 GWh 36.3 GWh 29.9 GWh 34.7 GWh	-
V	Energy-Int non-normalised	CRE1	Befimmo Fedimmo	163 kWh/m <sup>2</sup> 148 kWh/m <sup>2</sup>	94 239
V	GHG-Dir-Abs	G4-EN15	Befimmo Fedimmo	8 152 tonnes CO <sub>2</sub> e 6 653 tonnes CO <sub>2</sub> e	
V	GHG-Indir-Abs	G4-EN16	Befimmo Fedimmo	580 tonnes CO <sub>2</sub> e 0 tonne CO <sub>2</sub> e	
V	GHG-Dir-LfL	G4-EN15	Befimmo 2014 Befimmo 2015 Fedimmo 2014 Fedimmo 2015	5 795 tonnes CO <sub>2</sub> e 6 520 tonnes CO <sub>2</sub> e 4 646 tonnes CO <sub>2</sub> e 6 232 tonnes CO <sub>2</sub> e	97 241
V	GHG-Indir-LfL	G4-EN16	Befimmo 2014 Befimmo 2015 Fedimmo 2014 Fedimmo 2015	522 tonnes CO <sub>2</sub> e 490 tonnes CO <sub>2</sub> e 0 tonne CO <sub>2</sub> e 0 tonne CO <sub>2</sub> e	
V	GHG-Int	CRE3	Befimmo Fedimmo	14.33 19.02	
V	Water-Abs	G4-EN8	Befimmo Fedimmo	159 560 m <sup>3</sup> 72 741 m <sup>3</sup>	
V	Water-LfL	G4-EN8	Befimmo 2014 Befimmo 2015 Fedimmo 2014 Fedimmo 2015	145 954 m <sup>3</sup> 132 204 m <sup>3</sup> 47 091 m <sup>3</sup> 50 729 m <sup>3</sup>	95 240
V	Water-Int	CRE2	Befimmo Fedimmo	0.29 m <sup>3</sup> /m <sup>2</sup> 0.23 m <sup>3</sup> /m <sup>2</sup>	
V	Waste-Abs <sup>3</sup>	G4-EN23	Befimmo Fedimmo	Recycled: 2 871 tonnes Reused: 17 tonnes Composted: 0 tonne Incinerated: 1 117 tonnes Landfill/dump: 65 tonnes Recycled: 2 799 tonnes Reused: 0 tonne Composted: 0 tonne Incinerated: 724 tonnes Landfill/dump: 961 tonnes	96 97 242 243
V	Waste-LfL <sup>3</sup>	G4-EN23	Befimmo Fedimmo	Recycled 2014: 1 433 tonnes Recycled 2015: 2 851 tonnes Composted 2014: 3 tonnes Composted 2015: 0 tonne Incinerated 2014: 1 021 tonnes Incinerated 2015: 1 117 tonnes Recycled 2014: 214 tonnes Recycled 2015: 323 tonnes Composted 2014: 0 tonne Composted 2015: 0 tonne Incinerated 2014: 331 tonnes Incinerated 2015: 92 tonnes	
V	Cert-Tot	CRE8	Befimmo & Fedimmo	Breeam Design   Outstanding   1 building Breeam Design   Excellent   5 buildings Breeam Design   Very Good   9 buildings Breeam Design   Good   2 buildings Breeam In-Use (Asset)   Very Good   3 buildings Breeam In-Use (Asset)   Good   37 buildings Breeam In-Use (Asset)   Pass   26 buildings Breeam In-Use (Asset)   Non certified   2 buildings Breeam In-Use (Management)   Very Good   2 buildings Breeam In-Use (Management)   Good   2 buildings Breeam In-Use (Management)   Pass   50 buildings Breeam In-Use (Management)   Acceptable   9 buildings	99 100

## Indirect energy consumption (GWh and kWh/m<sup>2</sup>)

DH&C-Abs DH&C-LfL Elec-Abs Elec-LfL G4-EN3  
G4-EN4 G4-EN5 G4-EN6 G4-EN7

The Axento building located in Luxembourg, built in 2009, is heated by a district heating system, the data of which are not included in this graph<sup>1</sup>.

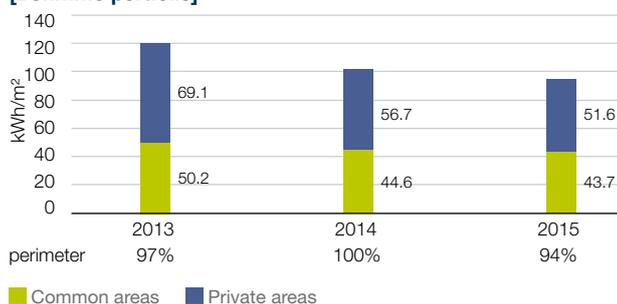
The specific data in the graph below relate to electricity consumption purchased from utility companies (94% green energy<sup>2</sup>) and/or self-generated by solar panels and cogeneration units. This self-generated energy is included in the specific data (kWh/m<sup>2</sup>) for common areas.

Specific electricity consumption of the common areas of Befimmo's portfolio fell from 50.2 kWh/m<sup>2</sup> in 2013 to 43.7 kWh/m<sup>2</sup> in 2015, exceeding the objective of cutting -2.5% per year for three years from 2013 to 2016. Two thirds into the period, the actual reduction achieved is -13%, which exceeds the ultimate objective. This improvement is due mainly to energy-efficiency measures and the addition to the portfolio of an energy-efficient building.

Specific electricity consumption of the private areas of Befimmo's portfolio fell from 69.1 kWh/m<sup>2</sup> in 2013 to 51.6 kWh/m<sup>2</sup> in 2015, also exceeding the objective of cutting 1% per year for three years from 2013 to 2016. Two thirds into the period, the actual reduction achieved is -25%, which exceeds the ultimate objective. This performance is mainly due, firstly, to the departure of a tenant with a data processing centre that needed a substantial cooling plant and, secondly, to very considerable cuts in private consumption in two large buildings<sup>3</sup> in the portfolio.

In order to ensure consistency and be representative of office consumption, the calculation of specific consumption also excludes the private consumption data of a fitness centre with an indoor pool.

### Specific indirect consumption (kWh/m<sup>2</sup>) [Befimmo portfolio]



The objective of reducing total gross electricity consumption in the common areas of Befimmo's portfolio, at constant floor area [LfL] by -1% over the period 2014-2015 has been substantially exceeded, achieving a total reduction of -5.8%.

Despite already substantially exceeding the three objectives set in early 2014 for the end of 2016, Befimmo has decided to wait for the deadline it had set before setting new objectives.

Full tables of absolute and specific indirect consumption of the Befimmo and Fedimmo portfolios are annexed to this Report, on page 238.

## Objectives

**Befimmo is pursuing its commitment to cut energy consumption in its buildings. Priority is given to cutting consumption of common areas, over which Befimmo has more control, although efforts to reduce private consumption are also systematically considered, especially during renovation work, commercial renegotiations or when setting up an Environmental Cooperation Agreement with tenants.**

The objectives set are:

1. Reduce specific consumption (kWh/m<sup>2</sup>) of electricity in common areas of Befimmo's portfolio by -2.5% per year for 3 years, i.e. a total of -7.5% by the end of 2016.
2. Reduce specific consumption (kWh/m<sup>2</sup>) of electricity in private areas of Befimmo's portfolio by -1% per year for three years, i.e. a total of -3% by the end of 2016.
3. NEW: Reduce absolute gross electricity consumption of the common areas in the Befimmo portfolio, at constant floor area [LfL], by -1.5% over the period 2015-2016.
4. NEW: Reduce specific electricity consumption (kWh/m<sup>2</sup>) in the private areas in Befimmo's portfolio of tenants who register and actively participate in the Environmental Cooperation Agreement project, by -5% over one year, at constant floor area [LfL].
5. NEW: Increase, at constant floor area [LfL], the overall percentage of green energy used in the Befimmo portfolio from 94% to 97%. The idea is to increase the use of green energy in private areas and indirectly cut CO<sub>2</sub>e related to the use of electricity.

The data below represent the objectives of reducing specific electricity consumption (kWh/m<sup>2</sup>) from 2014 to 2016, for common and private areas in the Befimmo portfolio in relation to the reference period of 2013.

### Plan 2013-2016

	2013	2014	2015	TARGETS 2016
Common targets	Reference period	-2.5%	-5.0%	-7.5%
Private targets	Reference period	1.0%	-2.0%	-3.0%

1. The table of Axento consumption data is annexed to this Report on page 239.

2. Green energy: energy produced from renewable sources.

3. For one of these buildings, private data are incomplete.

## Befimmo corporate electricity consumption (MWh and kWh/FTE<sup>4</sup>)

G4-EN3 G4-EN5

As a responsible landlord and occupant of one of its buildings, Befimmo itself strives to apply the good environmental practices it develops. Constantly seeking ways to reduce its environmental footprint and improve its performance, in 2014 Befimmo set itself an objective of reducing standby private electricity consumption (chargers, computers, printers, photocopiers, etc.) on its own premises by 5% in relation to 2013 (approx. 6,800 kWh). With the installation in the third quarter of 2015 of an intelligent system for automatically shutting down electricity consumption after office hours, in a few months it succeeded in achieving a reduction of 2.7% in 2015 in relation to 2013, from 136.1 MWh in 2013 to 132.5 MWh in 2015 (representing 2,268 kWh/FTE in 2013 and 1,920 kWh/FTE in 2015 respectively).

### Objective for 2016

In 2016, when refurbishing the “corporate” premises as part of the SWOW project, special attention will be paid to the new electrical installations to keep consumption as low as possible.

## Direct energy consumption (kWh/m<sup>2</sup>)

Fuels-Abs G4-EN3 G4-EN4 G4-EN5

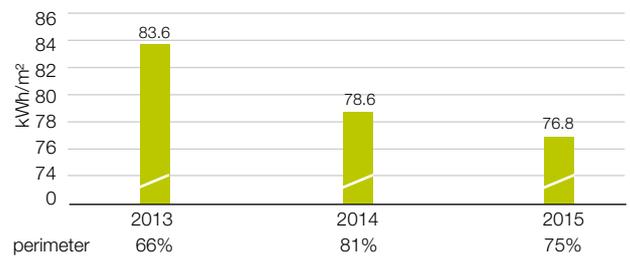
The specific data given in the chart hereafter relate to consumption of natural gas, gross and normalised for all above-ground space in the Befimmo portfolio.

Where available, these data are supplemented by normalised heating oil consumption data.

Consumption data for heating oil are normalised for the influence of the outdoor temperature using the 16.5/16.5 degree-day method. This method can compare the consumption of different years by overcoming climate-related effects. The degree days for Belgium are calculated by the observatory in Uccle.

At the end of 2015, two thirds into the three-year period set as a objective for reducing Befimmo’s normalised specific direct consumption by 9%, consumption has already been cut by 8%. It fell from 83.6 kWh/m<sup>2</sup> in 2013 to 76.8 kWh/m<sup>2</sup> in 2014.

## Specific direct energy consumption (kWh/m<sup>2</sup>) [Befimmo portfolio]



At constant floor area [LfL], the gas consumption of Befimmo’s portfolio also decreased, by -2.7% over the period 2014-2015.

Full tables of absolute and specific direct energy consumption of the Befimmo and Fedimmo portfolios are annexed to this Report, on page 237.

### Objectives

Befimmo is pursuing its commitment to cut the energy consumption of its buildings by maintaining its objective set in early 2014.

1. Reduce normalised specific consumption (kWh/m<sup>2</sup>) of gas in Befimmo’s portfolio by -3% per year for 3 years, i.e. a total of -9% by the end of 2016.
2. NEW: Reduce the absolute normalised gas consumption of Befimmo’s portfolio, at constant floor area [LfL], by -2% over the period 2015-2016.

The data below are the objectives for cutting specific gas consumption (kWh/m<sup>2</sup>) from 2014 to 2016, weighted by degree days in relation to the reference period of 2013.

#### Plan 2013-2016

	2013	2014	2015	TARGET 2016
Gas targets	Reference period	-3.0%	-6.0%	-9.0%

4. FTE: Full-time equivalent. At 31 December 2015, the number of FTEs was 69 and 60 at 31 December 2013.

## Total and specific energy consumption (GWh and kWh/m<sup>2</sup>)

Energy-Int | G4-EN3 | G4-EN4 | G4-EN5 | CRESS-CRE1

The absolute and specific (normalised and non-normalised<sup>1</sup>) data presented in the tables below relate to the total energy

purchased and/or generated for the use of the private and common areas of the buildings in the Befimmo portfolio.

Full tables of absolute and specific total energy consumption of the Befimmo and Fedimmo portfolios are annexed to this Report, on page 239.

BEFIMMO PORTFOLIO (EXCLUDING FEDIMMO)	UNITS	2013	2014	2015	2015		
					1 - 5 000 M <sup>2</sup>	5 001 - 10 000 M <sup>2</sup>	> 10 000 M <sup>2</sup>
Total portfolio area	m <sup>2</sup>	549 360	539 530	576 957	84 646	75 012	417 299
Total	GWh	101.7	87.6	88.3	14.4	11.2	62.7
<b>Total (non-normalised)</b>	<b>kWh/m<sup>2</sup></b>	<b>208.3</b>	<b>162.7</b>	<b>163.4</b>	<b>143.4</b>	<b>160.6</b>	<b>167.4</b>
<b>Total (normalised degree/day)</b>	<b>kWh/m<sup>2</sup></b>	<b>196.1</b>	<b>176.7</b>	<b>166.9</b>	<b>147.3</b>	<b>164.4</b>	<b>170.8</b>

## Cost savings due to energy savings G4-EN6

The data given in the table below refer to the direct financial impact on Befimmo and its tenants of (i) measures taken to cut energy consumption (excluding potential benefits of green certificates from self-generation) and (ii) close management of

the technical installations in the portfolio for 2014 and 2015. These cost savings are calculated using the average cost per kWh depending on the energy supply contract<sup>2</sup>.

There were also reductions electricity consumption in private areas but they are not included in the financial savings set out below.

BEFIMMO PORTFOLIO (EXCLUDING FEDIMMO)		PERIMETER	ENERGY (KWH)	FINANCIAL SAVINGS (€) (ANNUAL BASIS)
<b>Total savings</b>			<b>1 445 247</b>	<b>€168 519</b>
Like-for-Like [LfL]	of which common electricity reduction	71%	1 532 441	€165 504
-	of which autoproduction [solar panels and cogenerations]		134 821	€14 561
2013-2014	of which gas reduction (including heating network)	74%	-222 015	-€11 545
<b>Total savings</b>			<b>2 623 643</b>	<b>€227 806</b>
Like-for-Like [LfL]	of which common electricity reduction	86%	1 170 174	€138 432
-	of which autoproduction [solar panels and cogenerations]		324 983	€38 445
2014-2015	of which gas reduction (including heating network)	90%	1 128 487	€50 929



1. Non-normalised data: data not adjusted to allow for the influence of the outdoor temperature using the degree-day method 16.5/16.5.

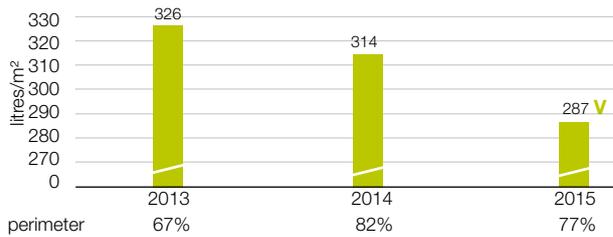
2. The average prices for calculating the cost savings, for 2013 and 2014, amount respectively to €108/MWh (including VAT) ▼ for electricity, €52/MWh (including VAT) ▼ for gas €118/MWh (including VAT) ▼ for electricity €45/MWh (including VAT) ▼ for gas for 2014-2015. These prices include transmission costs.

## Water consumption (litres/m<sup>2</sup>)

Water-Abs Water-Int Water-LfL G4-EN8 G4-EN10  
CRESS-CRE2

The data for the Befimmo buildings given in the chart below relate to the specific consumption of water (litres/m<sup>2</sup>) from the water mains, water recovery systems (rainwater cisterns and recovery of grey water) and abstraction of groundwater.

### Specific water consumption (litres/m<sup>2</sup>) [Befimmo portfolio<sup>3</sup>]



Specific consumption (litres/m<sup>2</sup>) in 2015 was down 12% compared with 2013 from 326 l/m<sup>2</sup> to 287 l/m<sup>2</sup>.

Moreover, at the end of 2015, half-way through the two-year period set for the objective of covering 2% of its total water requirements from recovery systems, Befimmo already achieved two thirds of the objective, covering 1.3% of its needs, at constant floor area [LfL], in relation to 2014.

Full tables of absolute and specific water consumption of the Befimmo and Fedimmo portfolios are annexed to this Report, on page 240.

### Objective

Befimmo has set a quantitative objective for water recovery (m<sup>3</sup>) of covering 2% of water requirements, at constant floor area [LfL], of the Befimmo portfolio by the end of 2017, in relation to the reference period of 2014.

## POLLUTION

Greenhouse gas emissions (carbon equivalent) and waste management.

### ISSUES

raised by stakeholders:

- environmental footprint;
- greenhouse-gas emissions.

### COMMITMENTS

Befimmo undertakes to:

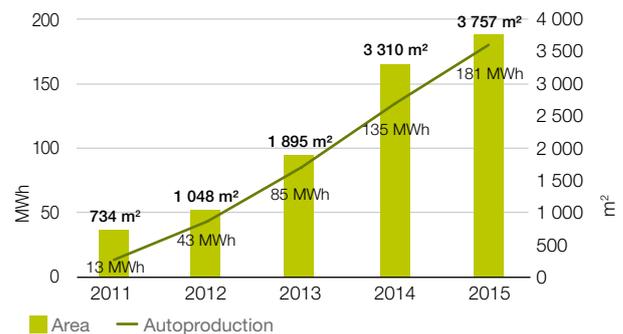
- protect the environment, including pollution prevention;
- reduce CO<sub>2</sub>e emissions for its “corporate” premises;
- reduce “corporate” waste and educate its staff to improve recycling;
- implement a strategy for reducing CO<sub>2</sub>e emissions and waste for the entire portfolio and raise awareness among its tenants and suppliers.

## Main achievements and objectives

### Self-generation of renewable energy (MWh) and production area (m<sup>2</sup>) G4-EN3

#### Photovoltaic panels (m<sup>2</sup>)

The current total coverage of photovoltaic panels for the Befimmo and Fedimmo portfolios is 3,757 m<sup>2</sup> as against 1,895 m<sup>2</sup> installed at the end of 2013 and 3,310 m<sup>2</sup> at the end of 2014.



3. Excluding the data for the fitness centre located in the View Building.

## Objective

In view of ongoing and planned renovation and construction projects, the total area of solar panels will be further increased in line with progress on worksites.

By 2020 the total area of the photovoltaic panels should achieve 11,000 m<sup>2</sup>.

## Cogeneration

There are currently two cogeneration systems in the Befimmo portfolio, one in the View Building, which has an indoor pool, and a second in the WTC III building (Fedimmo portfolio). Both buildings have a very high heating requirement, thereby justifying the installation of such a system.

In 2015, two feasibility studies were conducted for the installation of additional cogeneration units in the Central Gate and Brederode 9 buildings in the Befimmo portfolio.

## Objective

**Based on the analysis of the consumption data of the portfolio, there are currently no other profitable opportunities for investing in cogeneration systems in the portfolio. We will nevertheless keep reassessing the situation throughout the portfolio including the Fedimmo buildings in the course of 2016.**

## Self-generation of energy - electricity

The objective for self-generated energy (photovoltaic panels and cogeneration), set in 2015, of covering 5% of electricity needs, at constant floor area [LfL], for the common areas of Befimmo's portfolio (excluding Fedimmo) by the end of 2017, compared with the reference period of 2014, will probably not be achieved, mainly because of the temporary suspension of the installation of a cogeneration unit in a building of Befimmo's portfolio.

## Objective for 2017

However, the remaining projects planned by the deadline and the start of full production at some sites still under construction in 2015 are expected to give reasonable coverage of 2% of electricity needs, at constant floor area [LfL], of the common areas in the Befimmo portfolio (excluding Fedimmo) by the end of 2017.

## Reporting

### Total waste by type (tonnes)

G4-EN23 Waste-Abs Waste-LfL

The data given in the table hereafter relate to the quantities of hazardous<sup>1</sup> and non-hazardous waste, of all categories (paper and cardboard, plastic, glass, wood, earth, concrete, rubble, metals and other mixed waste).

Building waste includes all waste related to building and/or major renovation projects, all of which is reported. Information on the waste associated with such projects has been systematically collected since 2013.

In 2014 Befimmo, in cooperation with an external partner, launched an awareness campaign for tenants and their respective cleaning companies with a view to reducing the total amount of unsorted waste (= household waste) and thereby improve the recycling rate.

This awareness-raising has led to a reduction of more than 50% in unsorted waste in relation to 2012, with an increase in the volume of paper of the order of 36% over the past two years.

In 2014 and 2015, the percentage of recycled waste for the operational buildings which Befimmo collects itself was 63%.

Moreover, in 2015 Befimmo continued to take part in the circular economy project with Rotor ASBL on some of its sites that had a potential for recovery. In this way, more than 17 tonnes of materials were removed and reused in various projects.



1. Hazardous waste is waste that presents a specific hazard to humans or the environment. Types of hazardous waste are identified and listed in regional regulations.

**Total waste by type (tonnes)**

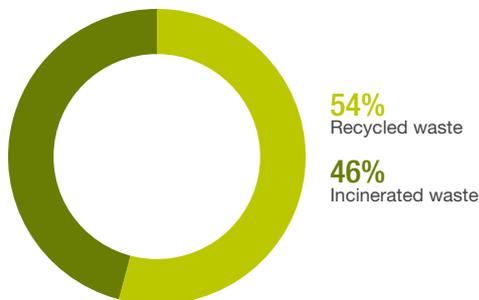
BEFIMMO PORTFOLIO (EXCLUDING FEDIMMO)	UNITS	2013	2014	2015	2015		
					1 - 5 000M <sup>2</sup>	5 001- 10 000M <sup>2</sup>	>10 000M <sup>2</sup>
Total portfolio area	m <sup>2</sup>	549 360	539 530	576 957	84 646	75 012	417 299
Reporting perimeter	%	100%	100%	100%	100%	0%	100%
<b>Total linked to works</b>	<b>tonnes</b>	<b>5 505</b>	<b>664</b>	<b>2 078</b>	<b>4</b>	<b>0</b>	<b>2 074</b>
of which non-hazardous	tonnes	5 503	658	2 078	4	0	2 074
of which hazardous	tonnes	2.0	5.6	0.4	0.0	0.0	0.4
Reporting perimeter	%	72%	90%	86%	91%	76%	87%
<b>Total linked to operational buildings</b>	<b>tonnes</b>	<b>1 966</b>	<b>1 994</b>	<b>1 992</b>	<b>209</b>	<b>331</b>	<b>1 452</b>
of which non-hazardous	tonnes	1 966	1 994	1 990	209	329	1 452
of which hazardous	tonnes	0.4	0.0	2.0	0.1	1.9	0.0
<b>Total</b>	<b>tonnes</b>	<b>7 471</b>	<b>2 658</b>	<b>4 070</b>	<b>214</b>	<b>331</b>	<b>3 526</b>

The complete tables of waste by type from the Befimmo and Fedimmo portfolios are annexed to this Report on page 242.

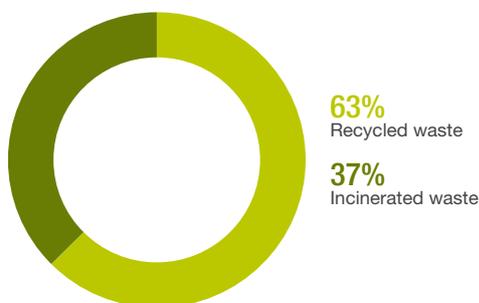
**Treatment of waste from operational buildings (%)** G4-EN23

The data in the charts hereafter give the breakdown of total waste by type of disposal. The percentage for each type of disposal is quantified by collector, type and category of the waste.

**Waste treatment (%) [Befimmo portfolio]**



**Waste treatment (%) [Befimmo portfolio which it collects itself]**



The complete tables of waste treatment from the Befimmo and Fedimmo portfolios are annexed to this Report on page 243.

**Objective for 2016**

**NEW:** Increase the recycling rate of the operational buildings in which Befimmo collects waste itself from 63% to 65%, at constant floor area [LfL], by the end of 2016, educating tenants and companies cleaning the common and private areas. To date, no objective has been set for waste from building sites except for improving the collection of the relevant data.

**Non-normalised specific energy-related greenhouse gas (GHG) emissions (kg CO<sub>2</sub>e/m<sup>2</sup>)**

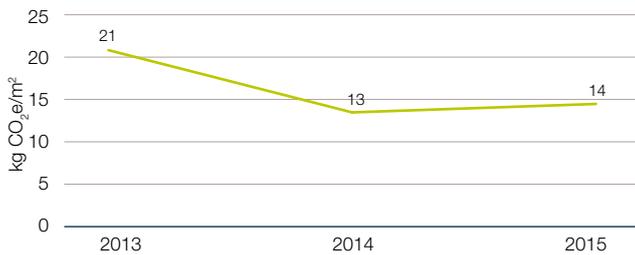
- CRESS-CRE3 GHG-Dir-Abs GHG-Dir-LfL GHG-Int
- GHG-Indir-Abs GHG-Indir-LfL G4-EN15 G4-EN16
- G4-EN17 G4-EN18 G4-EN19

The non-normalised specific greenhouse gas emissions data (kg CO<sub>2</sub>e/m<sup>2</sup>) shown in the chart hereafter relate to greenhouse gas emissions associated with energy consumption in Befimmo buildings (electricity, gas, district heating and heating oil).

The reductions in CO<sub>2</sub>e emissions related to energy (-64%) between 2008 and 2015 in the Befimmo portfolio are explained mainly by (i) energy-saving measures between 2008 and 2015, (ii) an increase in the supply of green energy, related to private electricity contracts of tenants, and (iii) close management of technical systems (Green Adviser, telemonitoring, etc.).

The 12% increase in specific CO<sub>2</sub>e emissions (kg CO<sub>2</sub>e/m<sup>2</sup>) for 2015 compared with 2014 is explained by the fact that 2015 was cooler than 2014 (1,800 degree days in 2014 as against 2,100 degree days in 2015) which led to an increase in absolute gas consumption in the portfolio.

### Energy-related greenhouse gas (GHG) emissions (kg CO<sub>2</sub>e/m<sup>2</sup>)



The complete tables of greenhouse gas (GHG) emissions from the Befimmo and Fedimmo portfolios are annexed to this Report on page 241.

### CO<sub>2</sub>e emissions related to Befimmo "corporate" business

G4-EN15 G4-EN17

Emissions of CO<sub>2</sub>e linked to Befimmo "corporate" business, i.e. the bureaucratic activities of its staff, were evaluated according to the carbon balance method<sup>1</sup>. The operational scope covers travel in company cars, business travel by air and rail, the use of paper and the use of the Company's headquarters building (heating and electricity).

### Emissions linked to Befimmo's business (Tonnes CO<sub>2</sub>e, kg CO<sub>2</sub>e/m<sup>2</sup> and Tonnes CO<sub>2</sub>e/FTE)

	UNITS	2013	2014	2015	
Befimmo « corporate » areas	m <sup>2</sup>	2 150	2 150	2 150	✓
# full time equivalents (FTE)	#	60	68	69	✓
<b>Total emissions linked to direct energy</b>	<b>Tonnes</b>	<b>238</b>	<b>265</b>	<b>291</b>	<b>✓</b>
of which total heating emissions	Tonnes	18.2	14.8	18.5	✓
emissions per FTE (heating)	Tonnes / FTE	0.3	0.2	0.3	✓
emissions per m <sup>2</sup> (heating)	kg CO <sub>2</sub> e/m <sup>2</sup>	8.5	6.9	8.6	✓
Total heating [Lfl]	%	-19%	-19%	24%	✓
of which diesel car emissions <sup>2</sup>	Tonnes	207.0	238.0	252.0	✓
of which petrol car emissions <sup>2</sup>	Tonnes	12.8	12.6	20.6	✓
<b>Total emissions linked to indirect energy</b>	<b>Tonnes</b>	<b>35</b>	<b>36</b>	<b>36</b>	<b>✓</b>
emissions per ETP	Tonnes / ETP	0.6	0.5	0.5	✓
emissions per m <sup>2</sup>	kg CO <sub>2</sub> e/m <sup>2</sup>	16.4	16.7	16.6	✓
Total electricity [Lfl]	%	9%	2%	0%	✓
<b>Total emissions linked to travel, paper consumption</b>	<b>Tonnes</b>	<b>13</b>	<b>7</b>	<b>10</b>	<b>✓</b>
Plane short-haul travel	Tonnes	1.1	0.3	3.7	✓
Plane long-haul travel	Tonnes	6.7	2.1	2.2	✓
High-speed train	Tonnes	0.2	0.2	0.1	✓
Paper consumption	Tonnes	5.0	4.3	4.3	✓

For some years now, Befimmo has been raising awareness in its team of good (corporate) waste management through various specific measures including cutting paper consump-

tion per employee. Average paper consumption was 53 kg/employee in 2013 and fell to 47 kg/employee in 2015, a cut of 11%<sup>3</sup>.

## MOBILITY



Accessibility of buildings and business and private travel policy.

### ISSUES

- raised by stakeholders:
- changing working methods;
  - location;
  - mobility;
  - parking.

### COMMITMENTS

- Befimmo undertakes to:
- take account of location and accessibility when considering new real-estate investment opportunities;
  - educate and inform its tenants;
  - educate its team and encourage sustainable mobility.

1. Methodology developed by ADEME (the French Environment and Energy Management Agency (Agence de l'Environnement et de la Maîtrise de l'Énergie)).

2. CO<sub>2</sub>e emissions related to the fuel consumed by "corporate" vehicles include the upstream emissions required to produce and transport the fuel. The table showing emission factors related to transport can be found under Methodology on pages 101 and 102.

3. The conversion factor used to calculate CO<sub>2</sub>e emissions related to paper consumption is 1.3157 kg CO<sub>2</sub>e/kg of paper.

## Main achievements and objectives

### CO<sub>2</sub>e emissions related to Befimmo corporate transport (tonnes CO<sub>2</sub>e)

G4-EN15 | G4-EN30 | GHG-Dir-Abs

Befimmo reduced the overall rate of average emissions per vehicle (CO<sub>2</sub>e/km) of its fleet by 2.94% in 2015 in relation to 2014. This decrease is the result of applying the updated car policy to vehicles purchased new or replaced during the fiscal year.

The absolute increase in CO<sub>2</sub>e vehicle-related emissions from 250.6 tonnes in 2014 to 272.6 tons in 2015 (9%), is explained mainly by a 10% increase in the number of vehicles in relation to 2013.

### Electric vehicle

After various analyses, in 2014 Befimmo opted to include a pooled electric vehicle in its fleet of vehicles for intra-urban travel. It is in regular use by the team.

### Objective

Befimmo intends to pursue its policy of awareness-raising in the team. It aims to develop a mobility plan to encourage sustainable mobility (use of carpooling, public transport or, for the more sporty, cycling, etc.).

## CERTIFICATION

Audit of the management of the business's environmental impact (methodology, communication, transparency) by an external certification body.

### ISSUES

raised by stakeholders:

- improve certifications obtained;
- relevance of other certifications.

### COMMITMENTS

Befimmo undertakes to:

- further improve Befimmo's Environmental Management System (EMS) (ISO 14001) and adapt to developments of this standard;
- consider the relevance of other potential certifications (ISO 9001, ISO 50001, etc.);
- improve the Befimmo portfolio's BREEAM Asset & Management rating.



## Main achievements and objectives

### Environmental Management System, ISO 14001 certified G4-PR3

In 2010, Befimmo introduced an Environmental Management System (EMS) based on ISO 14001. It ensures a systematic approach to the environmental aspects of its activities and also contributes to the sustainable ongoing implementation and monitoring of its commitments.

During 2015, Befimmo gave priority to developing, simplifying and improving its ISO 14001-certified Environmental Management System with a vision expanded to embrace ISO 9001.

### Objective

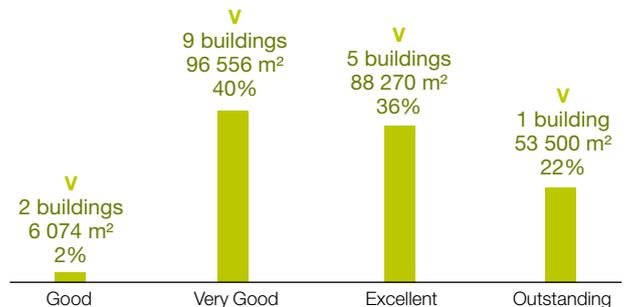
In 2016, Befimmo undertakes to further improve its EMS in line with the evolution of the standard and to consider the relevance of other potential certifications (ISO 9001, ISO 50001, etc.).

## BREEAM Design and Post-Construction

G4-PR3 | Cert-Tot | CRESS-CRE8

The following chart illustrates the BREEAM Design certifications obtained since 2010 for all buildings being renovated or built in the Befimmo and Fedimmo portfolios. These projects relate to 17 buildings<sup>4</sup> with a total space of 244,400 m<sup>2</sup>.

### BREEAM Design ? "Glossary"



4. Including the WTC IV and Quatuor Building projects.

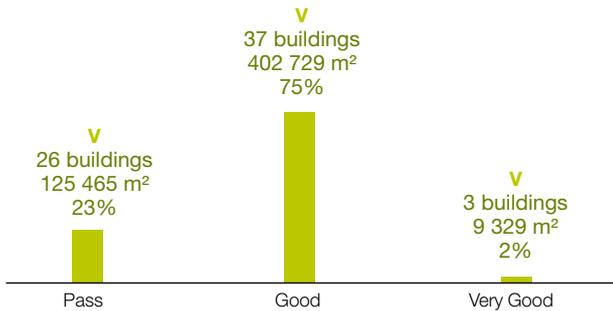
## BREEAM In-Use

G4-PR3 Cert-Tot CRESS-CRE8

### BREEAM In-Use Asset (# of assets)

The chart below shows the BREEAM In-Use (Asset) certifications for operational buildings in the Befimmo and Fedimmo portfolios<sup>1</sup>. This relates to a total of 66 buildings with a total space of 537,523 m<sup>2</sup> (57% of Befimmo's consolidated portfolio).

### BREEAM In-Use Asset [? "Glossary"](#)



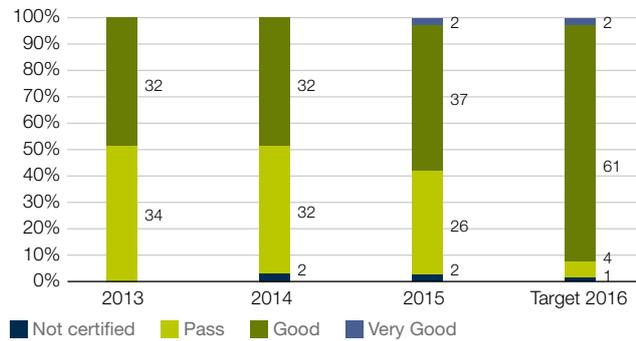
### Objective

Befimmo will continue this process of improving the ratings of its portfolio (PASS to GOOD) and complete it by the end of 2016. Following a cost/benefit assessment, the Pass rating of 3 buildings will not be upgraded.

Furthermore, by the end of 2017 it will assess whether to upgrade all of its certificates based on a portfolio oriented approach. This comprehensive approach to administrative simplification is a first for a portfolio as large as Befimmo's. If the experience is positive, it will also be extended to the upgrading of the BREEAM In-Use Management certificates.

The rating of renovated buildings is reviewed as appropriate in each case after completion of the work.

### Befimmo BREEAM In-Use certifications (# of assets)

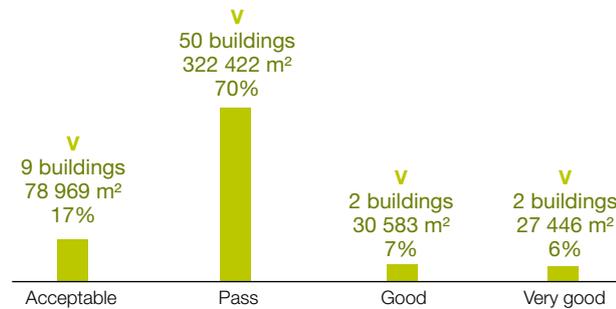


### BREEAM In-Use Management (# of assets)

The chart below shows the BREEAM In-Use (Management) certifications obtained for operational buildings in the Befimmo and Fedimmo portfolios<sup>2</sup>. This relates to a total of 63 buildings with a total space of 459,420 m<sup>2</sup> (49% of Befimmo's consolidated portfolio).

In 2015, Befimmo embarked on the necessary steps to obtain BREEAM Management certification for one of its new buildings. On that occasion a dialogue was established with BRE to re-assess the certification of all the buildings following an approach based on an online portfolio with the approach envisaged for the upgrade of the BREEAM In-Use Asset certificates.

### BREEAM In-Use Management [? "Glossary"](#)



### Objective

In 2016 and 2017, Befimmo will continue its work of improving BREEAM In-Use Management certification following a comprehensive approach.

1. Only two buildings in the Fedimmo portfolio are certified.  
 2. For the Fedimmo portfolio, only one building is certified.

## METHODOLOGY G4-22

Direct energy (gas and heating oil), indirect energy (electricity and district heating), water, greenhouse gas emissions.

The reporting methodology in 2015 has not fundamentally changed in relation to 2014, with the exception of all the measures taken to comply with the new version<sup>3</sup> of the EPRA Best Practices Recommendations on Sustainability Reporting.

### General remarks

Some additional historical data, complete or partial, obtained after the publication of the last Annual Financial Report were verified and then integrated with previously published data. This could explain any differences with previous publications.

Furthermore, all the areas used for reporting were reviewed and adapted to recognise only the above-ground spaces of the buildings (floor area for lease). This new approach allows a more representative and accurate calculation of specific consumption data, particularly for heating-related consumption. The recalculated areas no longer include unheated spaces, which is basically in line with the calculation method used for EPB.

Other minor adjustments were also made to the data with a view to improving the quality and accuracy of the consolidated data of non-financial reporting, notably:

- the conversion factors needed to calculate the CO<sub>2</sub>e were verified and updated and the 2014 conversion factors used in reporting associated with waste were adjusted;
- the accuracy and updating of tariff data were verified for energy supply contracts used to calculate the financial savings from energy saving.

### Interpretation of data in the environmental reporting tables

In most cases the available information was processed separately for the Befimmo and Fedimmo portfolios. These two entities were also subdivided by the size of the buildings in the portfolio. Segmentations by region and age of buildings, used in previous reporting, have been suspended as they were found to be of less interest from an analytical point of view.

FEDIMMO PORTFOLIO	TOTAL FLOOR AREA FOR LEASE		
	2013	2014	2015
Building 1 - 5 000 m <sup>2</sup>	30%	27%	25%
Building 5 001 - 10 000 m <sup>2</sup>	21%	19%	19%
Building >10 000 m <sup>2</sup>	49%	54%	56%
<b>Total (m<sup>2</sup>)</b>	<b>342 123</b>	<b>379 318</b>	<b>368 116</b>

### Reporting perimeter

The reporting perimeter is expressed as a percentage and is determined on the basis of the ratio between the area covered by the data obtained and the total floor area of the portfolio for the period. It is directly affected by any sales and/or acquisitions. For detailed information on the 2014 financial year, see the reporting perimeter and changes since 1 January 2015, on page 119.

The areas mentioned above each table correspond to the figures as at 31 December 2015.

### Calculation at constant floor area

The calculation at constant floor area (like-for-like [LFL]), expressed as a year-on-year percentage difference, helps to assess how an indicator changes over time. Indeed, by excluding variations due to changes in floor area (as a result of major renovations, acquisitions or sales), it is possible to analyse, compare and explain the results achieved in relation to the stated objectives. Note, however, that the calculation at constant floor area does not take account of changes in the occupancy of the buildings.

BEFIMMO PORTFOLIO	TOTAL FLOOR AREA FOR LEASE		
	2013	2014	2015
Building 1 - 5 000 m <sup>2</sup>	15%	16%	15%
Building 5 001 - 10 000 m <sup>2</sup>	16%	14%	13%
Building >10 000 m <sup>2</sup>	69%	70%	72%
<b>Total (m<sup>2</sup>)</b>	<b>549 360</b>	<b>539 530</b>	<b>576 957</b>

3. Second version | September 2014.

## Calculation of specific consumption (kWh/m<sup>2</sup> and litres/m<sup>2</sup>)

To ensure consistency in specific consumption and to ensure that it is properly representative, some buildings are excluded from the scope solely for the calculation of specific consumption. This applies to:

- buildings under construction and/or renovation;
- buildings for uses other than offices (for 2015, this concerns only part of one building, which houses an indoor pool/fitness centre);
- buildings with incomplete consumption data;
- buildings with an average annual occupancy rate below 50%<sup>1</sup> (calculated on the basis of the monthly occupancy history).

Regarding the calculation of the greenhouse gas emissions intensity **G4-EN18**, the following are excluded from the reporting scope:

- all buildings under construction, bought and/or sold during the year;
- buildings whose occupancy rate is less than 50%;
- buildings for which consumption data are incomplete and/or missing.

The resulting emission values form the numerator which is divided by the total area of buildings within the perimeter.

## Emission factors

Furthermore, calculations of CO<sub>2</sub>e emissions are reviewed and adjusted, including for historical data, based on any new information provided by the tenants regarding their private energy supply contracts.

As regards the calculation of the CO<sub>2</sub>e related to private consumption of non-green electricity by its tenants, for convenience until 2014 Befimmo had to use by default the average emission factor for non-green electricity, provided by its own energy supplier.

Now, since it follows the GHG protocol and its recommendations, for calculating electricity-related emissions it will use the factor provided by the International Energy Agency (IEA). Note that the latter has not been reviewed since 2011.

## CO<sub>2</sub>e emission factors (g CO<sub>2</sub>e/kWh)

TYPE	2012	2013	2014	2015
Gas	-	188	188	188
Non-green electricity Belgium <sup>2</sup>	196	196	196	196
Non-green electricity Luxembourg <sup>2</sup>	387	387	387	387
Green electricity	0	0	0	0
Heating network	43	43	43	43

## CO<sub>2</sub>e emission factors (kg CO<sub>2</sub>e/litre) (kg CO<sub>2</sub>e/kWh)

TYPE	2009-2014	UNITS
Diesel	2.662	kg CO <sub>2</sub> e/litre
Petrol	2.425	kg CO <sub>2</sub> e/litre
Plane (short-haul flight)	0.126	kg CO <sub>2</sub> e/km
Plane (long-haul flight)	0.113	kg CO <sub>2</sub> e/km
Train	0.015	kg CO <sub>2</sub> e/km

## Not applicable

The expression “n/a” used several times in the data analysis tables means “not applicable”.

This applies:

- where a building is not in the portfolio at the reporting date;
- where data are not available;
- for the scope relating to renewable energy production, which is not measured.

Generally speaking,

- in the few cases where consumption of common and private areas could not be obtained separately, a distribution of 40/60 between common areas and private areas assumed in 2012 is confirmed and retained for 2013 to 2015;
- the electricity consumption data for private areas obtained directly from information received from tenants with a utility-company meter and unspecified own supply contracts are counted as non-renewable energy. Where the type of supply contract is known, only contracts specified as “100% green” are considered renewable, and a zero CO<sub>2</sub>e emission rate is applied.

1. On the basis of the long-term lease agreement with the Buildings Agency, the occupancy rate of Fedimmo's buildings is considered to be 100%. It may nevertheless happen that, in certain special circumstances, that rate does not reflect the actual occupancy of the building and that the figures reported in these few cases are not representative.

2. EIA Statistics 2013 Edition.