

## 5-6 ECO-EFFICIENCY OF THE RESIDENTIAL SECTOR

The development of the number and size of households compared with that of the environmental impacts of the residential sector (land take, energy and water consumption, emissions of atmospheric pollutants, waste generation, etc.) allows the eco-efficiency of this sector to be assessed.

### KEY MESSAGE

Actual energy consumption<sup>1</sup> in Wallonia's residential sector has decreased substantially since 2005, despite some consumption peaks in harder winters (e.g. 2008 and 2010). Normalised energy consumption<sup>2</sup> (excluding electricity) is also decreasing, reflecting the efforts of households to reduce energy consumption within their homes regardless of the climatic conditions. In addition, emissions of acidifying substances per unit of energy actually consumed<sup>1</sup> dropped by 39% between 1997 and 2012, against just 2% for greenhouse gases emissions. This evolution is attributable in particular to the growing use of natural gas (in particular as a substitute for coal, -79%) and improved boiler performance.

Particulate matter<sup>3</sup> emissions have risen sharply as a result of the increasing use of firewood by households (+127% between 2002 and 2012).

For its part, electricity consumption has been rising steadily (+17% between 1997 and 2012), reflecting above all the growing number of electrical appliances and electronic devices in homes. As for the amounts of municipal waste<sup>4</sup>, this is rising in line with household numbers.

### Evaluation ?

Irrelevant or unfeasible evaluation

[1] Registered consumption, excluding electricity and renewable energy - including wood.

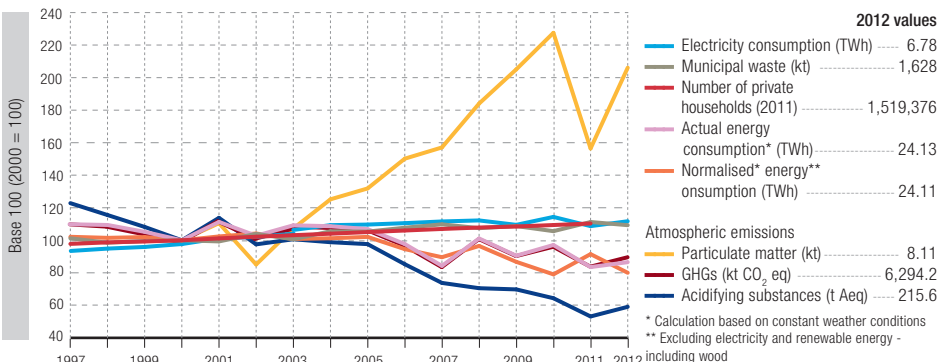
[2] Calculated consumption considering constant weather conditions, excluding electricity and renewable energy

[3] The residential sector alone was responsible for 35% of total emissions in 2012 (against 8.8% in 2002).

[4] Household and similar waste, excluding construction and demolition waste and waste water treatment sludges.

Due to the lack of data for the whole period 1997 - 2012, domestic drinking water consumption is not dealt with here.

Fig. 5-6 Eco-efficiency of the residential sector in Wallonia



EOW 2014 – Sources: SPW - AwAC (reporting conducted in February and April 2014); SPW - DG04 - DEBD (energy balance 2012); SPW - DG03 - DSD; SPF Economie - DG Statistique