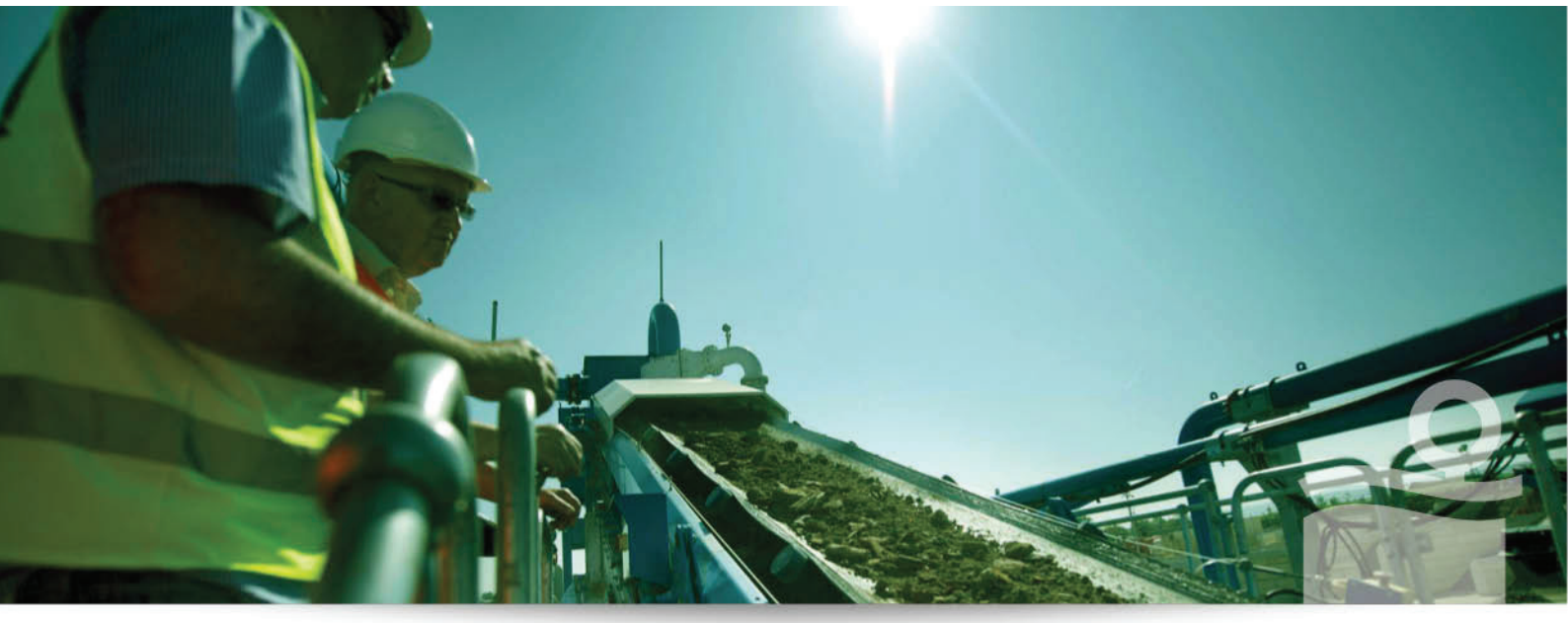
Environmental Balance of the Walloon enterprises

Summary, Industrial waste section, 2014 data



ICEDD asbl on behalf of the **Walloon Public Service**
Operational Directorate General for Agriculture, Natural resources and the Environment

Wallonie
SPW
Service public de Wallonie
DGO 3

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Industrial waste generation in Wallonia

This document summarizes the main figures of waste generation of the sample of companies from the Integrated Environment Survey (409 companies). It covers waste from manufacturing, extractive and energy producing businesses, as well as industrial laundry services. It however does not cover waste from the primary and tertiary sector, including construction and demolition waste and excavated soils.

In 2014, the Integrated Environment Survey collected 3 275 ktonnes of waste generated by the Walloon industry. The extrapolation to the entire Walloon region resulted in 5 186 ktonnes of industrial waste generated. The survey thus represents 63 % of total waste generation.

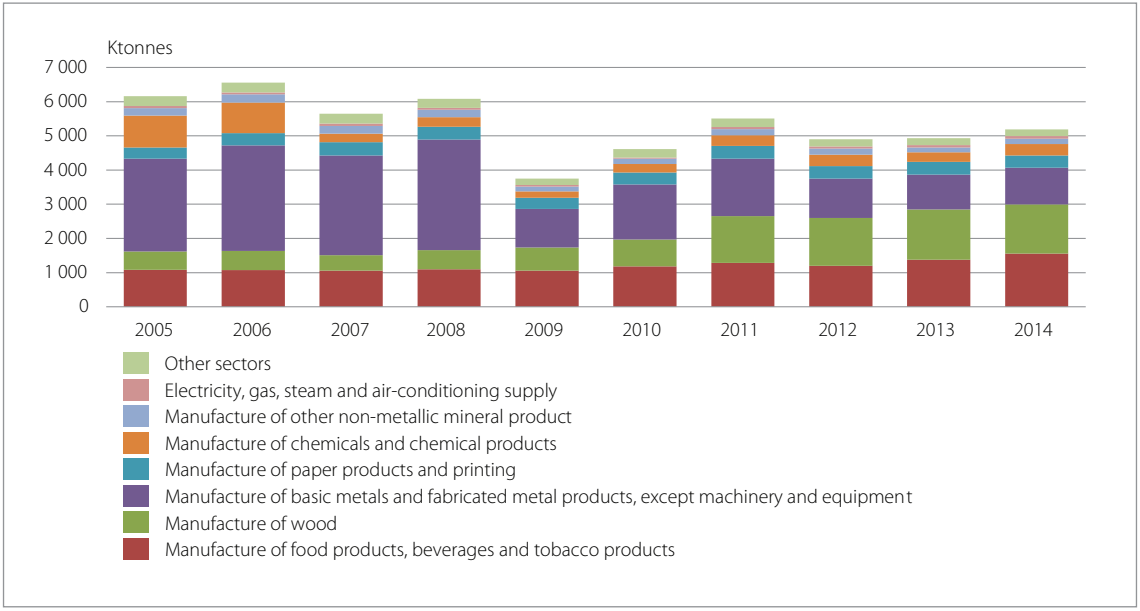
In 2014, the total amount of industrial waste generated resulted in 5186 ktonnes. These wastes are mainly generated by the food industry, wood industry and the methallurgy.

The three most waste generating sectors are the food industry, wood industry and the metallurgy, representing respectively 30 %, 28 %, and 21 % of the total industrial waste generation in Wallonia. From 2005 to 2014, similar shares can be observed, except for the metallurgy, which shifted from being the first waste generating activity to being the third waste producing sector. This is due to a general economic slowdown in this specific sector.

The main waste categories generated in Wallonia are wood waste (31 % of total waste generated), vegetal waste (21 %), and sorting residues (15 %).

Waste generated is composed of 86 % of non-hazardous waste, 8 % of mineral waste and 6 % of hazardous waste. The latter is mainly produced by the metallurgy, generating 53 % of the total hazardous waste, and the chemical industry (21 %).

Figure 1. Sectoral evolution of the total extrapolated industrial waste generation in Wallonia between 2005 and 2014 (data retrieved on 31/07/2016)



Source : Bilan environnemental des entreprises - Enquête intégrée environnement – volet déchets industriels, DGARNE - ICEDD 2016.

Overall, waste generation decreased by 16 % from 2005 to 2014 across all industrial sectors. The figure below shows the evolution of waste generation compared to the added value from the entire industrial sector on the same time span.

*Figure 2. Indexed evolution of the added value in volumes (*of the industry, except of the construction and waste/sewage water treatment) and total industrial waste generation in Wallonia between 2005 and 2014 (data retrieved on 31/07/2016)*

Source : Bilan environnemental des entreprises - Enquête intégrée environnement – volet déchets industriels, DGARNE - ICEDD 2016.

Sources : boeing mediaroom, Pizzorno Environnement.

Source : Hantsch

Walloon producers and actors of waste recovery

Besides waste generation, the Walloon manufacturing industries are essential actors when considering waste recovery. In 2014, almost 3 694 ktonnes of waste entered these producing businesses for material recovery – mainly mineral waste recycling and metallic fusion – or energy recovery, principally in cement works or in the wood industry. Waste entering in these enterprises is thus inserted in the production processes. 65 % of this waste is non-hazardous, whereas 24 % is hazardous and 13 % is of mineral nature. The main wastes entering these producing enterprises are combustion wastes (27 %), sorting residues (20 %), and wood wastes (19 %).

Wallon manufacturing industies are an essential player of waste recovery. In 2014, 3694 ktonnes of waste were recovered in industries.

Figure 3. Evolution of total waste entering Walloon producing enterprises 2010 and 2014 (in ktonnes and in number of businesses in the sample survey)

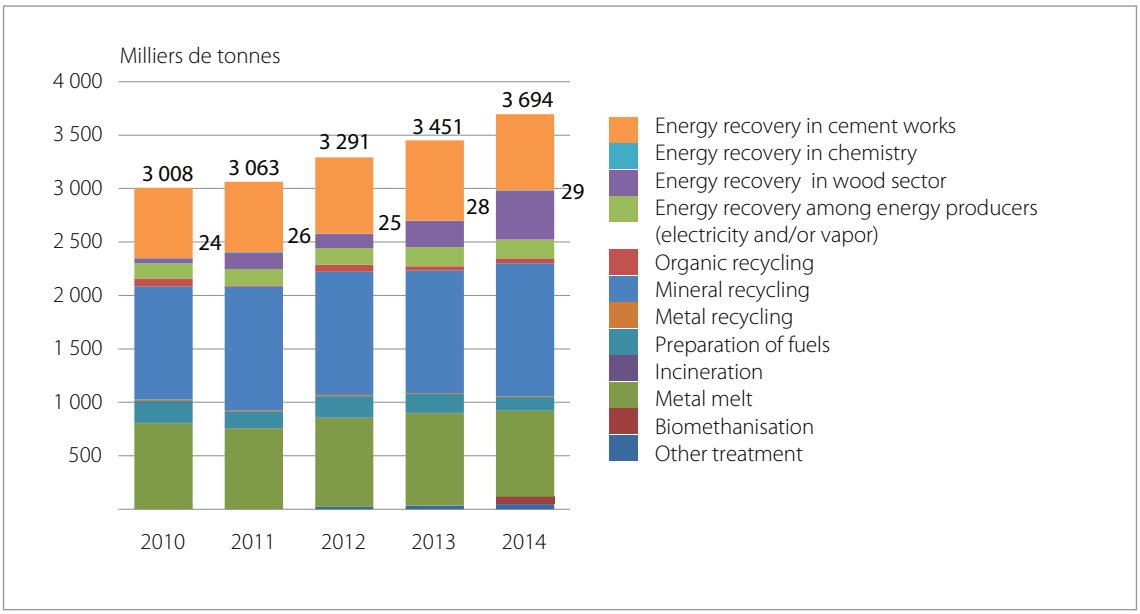


Figure 4. Origin of waste imported in Walloon producing enterprises of the sample survey in 2014

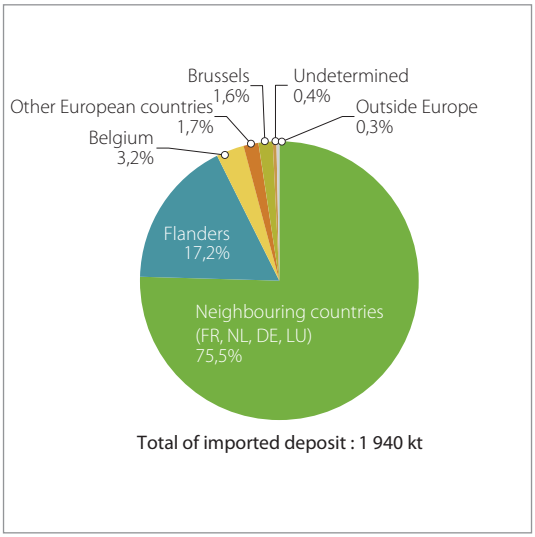
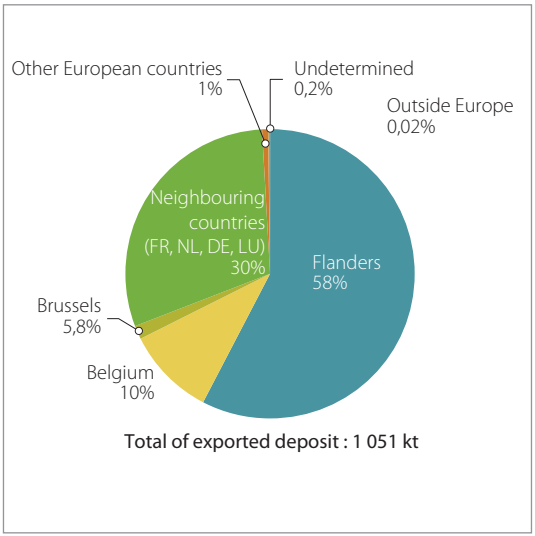


Figure 5. Destination of waste exported by Walloon producing enterprises of the sample survey in 2014



Three quarters of imported waste originates from neighbouring countries.

Main destinations of waste are other regions of Belgium and neighbouring countries.

Imports in Walloon producing establishments

From the 3 694 ktonnes of waste entering the Walloon producing enterprises from the sample survey, 1940 ktonnes, or 52.5 % of the total waste entering these enterprises, were imported (i.e. transferred from other Belgian regions or imported from abroad). Three quarters of imported waste originates from neighbouring countries as is shown in Figure 3. More than half of these wastes are of non-hazardous nature (58 %). The remaining fraction is hazardous (23 %) and mineral (19 %). Wastes are mainly imported for mineral (48 %), metallic (34 %), and energy recovery in cement works (13 %).

Exports from Walloon producing establishments

In 2014, 1 051 ktonnes of waste were exported by producing businesses from the sample survey (i.e. transferred to the other Belgian regions or exported abroad). This represents 32 % of total waste quantities that leave these producing entities (total amount of waste leaving producing businesses, including those staying in the Walloon region: 3283 ktonnes). The main destinations are the other Belgian regions (68 %) and the Belgian neighbouring countries (30 %). The main exported wastes are sorting residues (33% of which blast furnace slag, ashes and dust), vegetal wastes (33 %) and ferrous metal wastes (9 %). 96 % of wastes exported are sent to recovery facilities, of which 38 % are materially recovered. The remaining 38 ktonnes of exported wastes are sent to the following disposal operations: incineration or physico-chemical treatment.

Source : World Ocean Review.

Treatment by Walloon waste treatment facilities

In the frame of the Integrated Environment Survey, data are also collected on waste entering and leaving treatment facilities, which are businesses that have as main activity the treatment of waste and not the production of materials, goods or energy. In 2014, 5 833 ktonnes of waste entered treatment facilities from the sample survey and 4 062 ktonnes left these same facilities.

Wastes entering treatment facilities are mainly composed of ferrous metal wastes (22 %), household and similar waste (14 %), soils (10 %) and sorting residues (9 %).

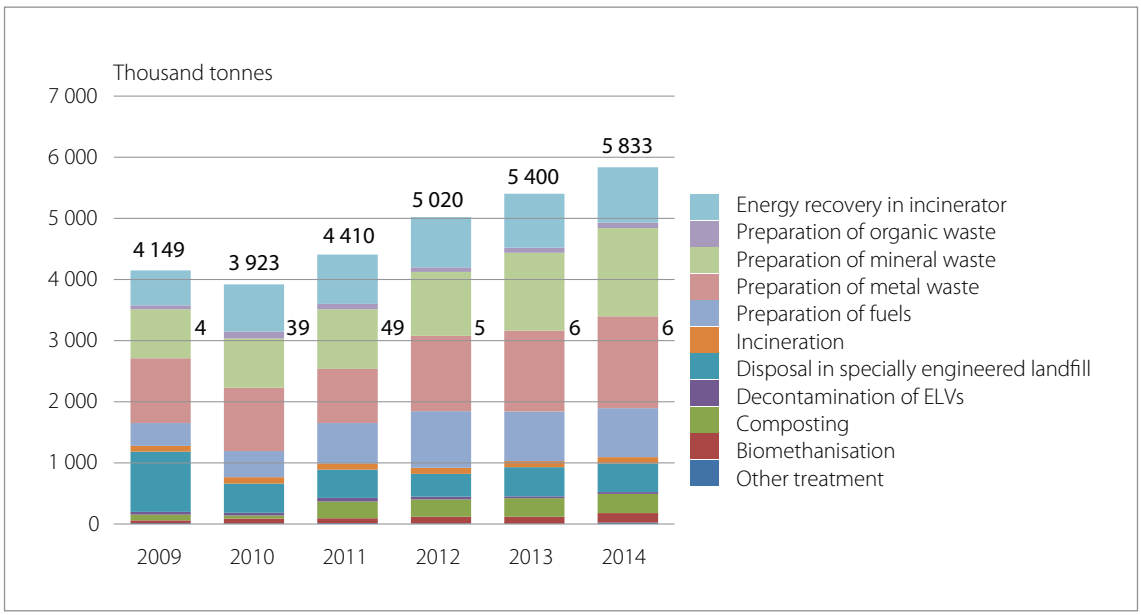
Wastes leaving the treatment facilities from the survey amounted to 4 062 ktonnes and are mainly composed of ferrous metallic wastes (28 %), soils (15 %), sorting residues (14 %), and mineral wastes from waste treatment and stabilised wastes (8 %).

These wastes are originating from material recovery operations (73 %), energy recovery (15 %), and disposal operations (9 %). The remaining part is stored on site (3 %).

The figures below show the evolutions of waste entering and leaving the different treatment operations in the Walloon treatment facilities from the sample survey from 2009 to 2014

In 2014, 5 833 ktonnes of waste entered treatment facilities from the sample survey and 4 062 ktonnes left these same facilities.

Figure 6. Evolution of the waste quantities entering Walloon treatment facilities between 2009 and 2014 (in ktonnes and in number of businesses in the sample survey)




Source : Le Monde.

The total amount of waste entering treatment facilities increased by almost 30 % between 2009 and 2014, whereas the quantities leaving these facilities increased by 42% during the same period. This raise can be explained by an increase in treatment facilities surveyed in the frame of the Integrated Environment Survey, which expands from 41 to 67 facilities declaring waste entering from 2009 to 2014. The same trend is observed for the facilities declaring waste leaving their businesses (from 42 in 2009 to 70 treatment facilities in 2014).

Figure 7. Evolution of the total amounts of waste leaving Walloon treatment facilities between 2009 and 2014 (in ktonnes and in number of businesses in the sample survey)

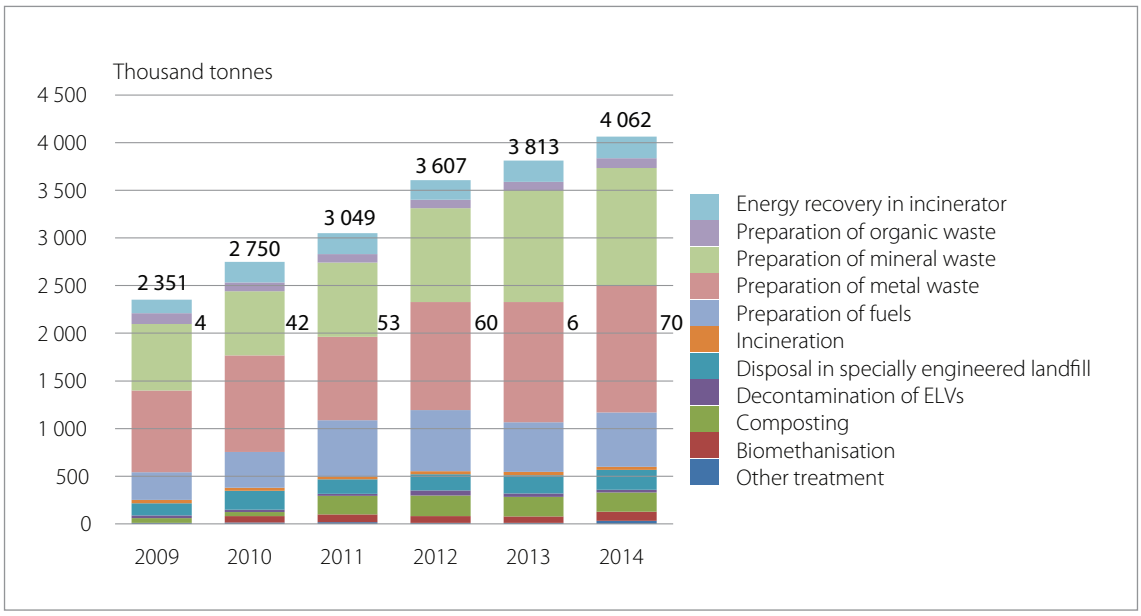


Figure 8. Origin of imported waste in Walloon treatment facilities of the sample survey in 2014

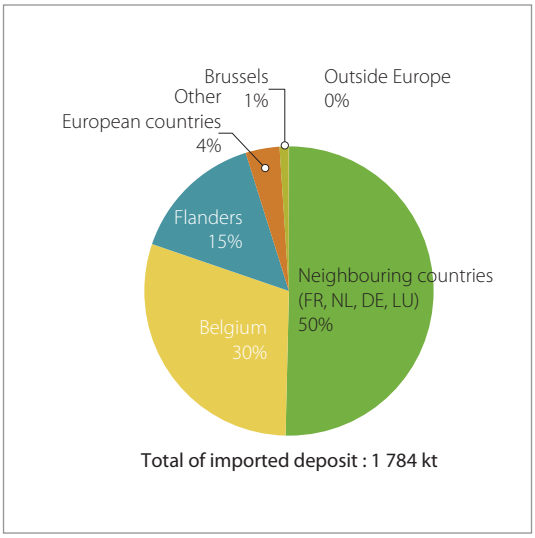
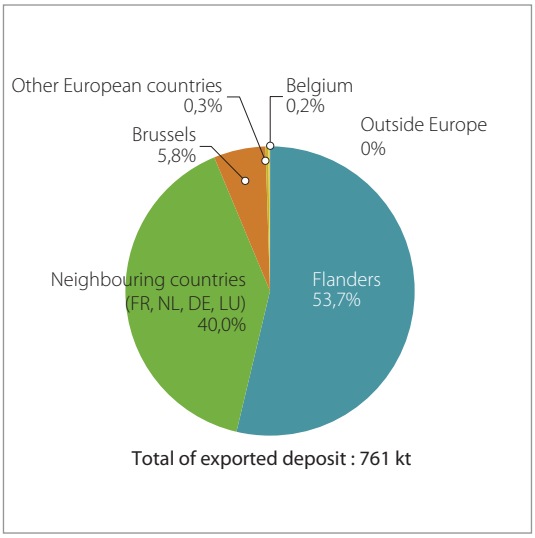


Figure 9. Destinations of waste exported by Walloon treatment facilities of the sample survey in 2014



In 2014, almost one-third of waste entering treatment facilities of the sample survey was imported.

Imports in Walloon waste treatment facilities

From the total waste entering Walloon treatment facilities (5 833 kt), 1 784 ktonnes or 31 % of total waste entering the waste treatment facilities were imported (i.e. transferred from other Belgian regions or imported from abroad). It should be noted that half of the imported waste comes from neighbouring countries, 30 % originates from Belgium without specification on the region and 15 % from Flanders. Imported wastes are mainly composed of ferrous metal waste (44 %), mixed and undifferentiated materials (16 %), and sorting residues (16 %). The major part of imported wastes is non-hazardous (83 %), while 17 % of these wastes are hazardous. Imported waste mainly enters treatment facilities for recovery, and more specifically: preparation of metallic wastes (53 %), preparation of fuels (20 %), energy recovery in incinerators (13 %), and preparation of mineral wastes (8 %). Only 26 tonnes of imported waste are landfilled (D5).

In 2014, nearly 20 % of waste from treatment facilities of the sample survey were exported mainly to be recovered.

Exports from Walloon waste treatment facilities

From the total amount of waste leaving treatment facilities (4 062kt), only 761 ktonnes are exported out of Wallonia, representing 19 % of the total waste leaving the facilities). Exported waste is mainly sent to Flanders and Belgian neighbouring countries. They are mostly recovered by the following treatment operations (664 ktonnes): recycling of inorganic materials (R5), Recycling of metals (R4), energy recovery (R1), and recycling of organic substances (R3). The remaining part is disposed of in landfills (D5), undergoes a physico-chemical or biological treatment (D9 and D8) or is incinerated (D10).

Colophon

CONTRACT DETAILS

Further development of an integrated environmental balance, the simplification and rationalisation of a unique application (SPW – DGO3 CSC n°03.09.01-13C53 - Visa n° 13/65679)

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Service public
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de l'Environnement

DGO 3