

WHAT IS BELGIAN WASTE-TO-ENERGY?

Belgian Waste-to-Energy, or BW2E for short, unites the 15 Belgian installations that process household and similar waste with energy recovery. Sharing knowledge and experience on 'best practices' is at the centre of the action. To this end, BW2E thoroughly monitors the technological evolutions in the sector. Regional, national and European laws are strictly observed and followed. Waste-to-energy is the best solution for waste that no longer qualifies for prevention, reuse or materials recycling.

WHAT DOES BELGIAN WASTE-TO-ENERGY DO?

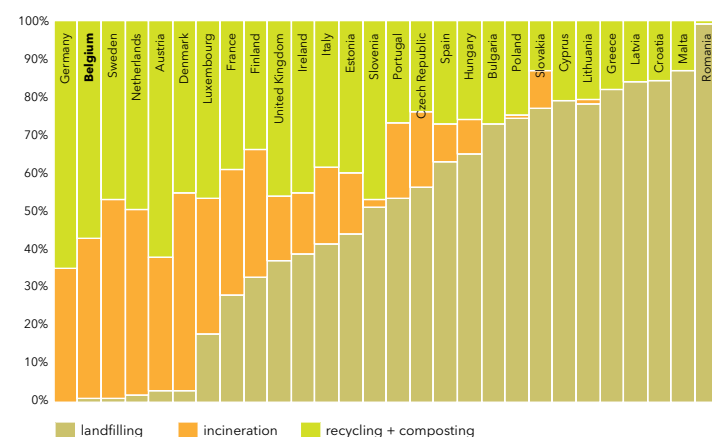
Since its foundation in 2009 BW2E has focused on the following topics:

- conversion of European law into regional law
- defending the correct application of the R1 formula for Belgian waste-to-energy plants
- monitoring the export of mixed municipal waste
- sharing knowledge among the members, both at technological, legal and safety level
- supervision of accurate measuring of the biogenic content of residual waste, which defines the renewable energy share
- dialogue partner for regional environmental authorities

RECYCLING AND WASTE-TO-ENERGY GO HAND IN HAND

Recycling and waste-to-energy go together perfectly. When materials recycling is no longer possible due to environmental, technological, economic or other reasons waste-to-energy is a good alternative. On the one hand by generating energy (heat and electricity) and on the other by recycling ferrous and non-ferrous metals, granulates and/or sand.

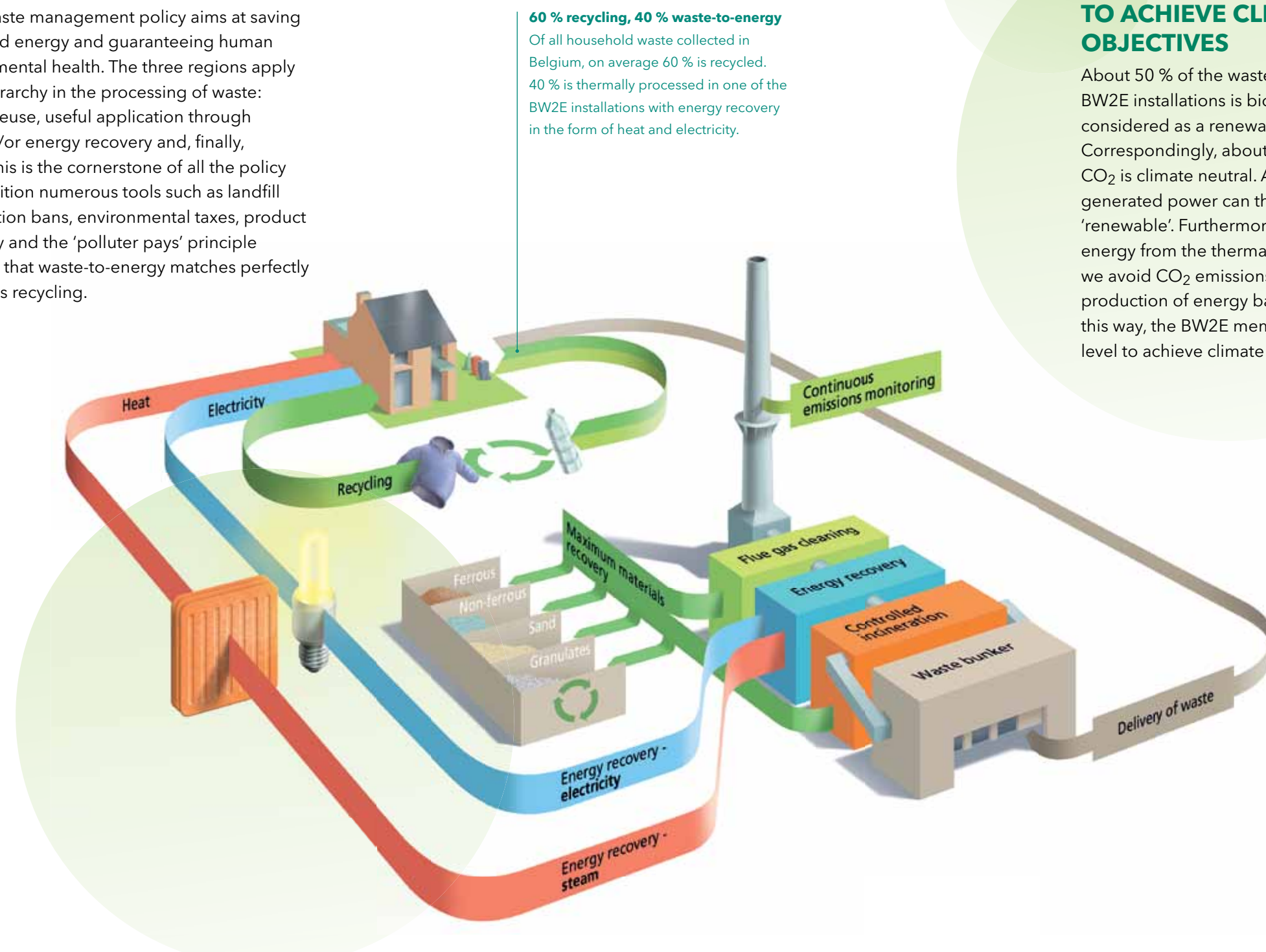
The diagram below shows the amount of waste directed to recycling, waste-to-energy and landfilling in the countries of the European Union. These figures prove that energy recovery and recycling are complementary.



BW2E-plants use part of the generated energy internally, but also supply power to the national grid and heat to the surrounding industry, hospitals, homes and apartment blocks. By using waste as an energy source we save fossil fuels such as oil, gas and coal. Most BW2E members are also responsible for other waste management tasks at a local level such as waste prevention, reuse, selective collection and stimulation of materials recycling.

SMART WASTE MANAGEMENT

Belgium's waste management policy aims at saving resources and energy and guaranteeing human and environmental health. The three regions apply the same hierarchy in the processing of waste: prevention, reuse, useful application through material and/or energy recovery and, finally, landfilling. This is the cornerstone of all the policy plans. In addition numerous tools such as landfill and incineration bans, environmental taxes, product responsibility and the 'polluter pays' principle demonstrate that waste-to-energy matches perfectly with materials recycling.



WASTE-TO-ENERGY HELPS TO ACHIEVE CLIMATE OBJECTIVES

About 50 % of the waste that is treated in BW2E installations is biodegradable and is considered as a renewable energy source. Correspondingly, about half of the emitted CO₂ is climate neutral. An equal part of the generated power can therefore be called 'renewable'. Furthermore, by recovering energy from the thermal processing of waste, we avoid CO₂ emissions elsewhere for the production of energy based on fossil fuels. In this way, the BW2E members help at a local level to achieve climate objectives.

MATERIALS RECYCLING IN
WASTE-TO-ENERGY PLANTS

After thermal processing, approximately 20 % (by weight) of the waste remains as bottom ash. They are recycled for the most part. Approximately 10 % of the bottom ash are ferrous and non-ferrous metals, which are recycled in the scrap industry. Granulates can be used as foundation material in road construction or in construction or stability works in landfills.

EMISSION CONTROL

The members of Belgian Waste-to-Energy have a broad expertise and technical experience. They help them to permanently evaluate their installations and processes and check them against the current state of technology. This is the basis for improvement actions in the recovery of energy and materials, without increasing emission levels. Quite the contrary: over the past 15 years the BW2E installations managed to reduce SO₂ emissions by 50 %, fine dust by more than 80 %, NO_x by 35 % and dioxins by 99.8 %.

Materials and
green energy
for today and
tomorrow

BW2E IN
FIGURES
average
annual figures

2 780 000 tonnes Total incineration capacity

1 210 000 MWh Annual electricity production

350 000 Number of households that can be supplied with electricity

1 230 000 MWh Annual heat production

470 000 MWh MWh heat for applications in industry and residential heating

MEMBERS



BW2E is a member of CEWEP
(Confederation of European
Waste-to-Energy Plants)

BW2E

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