

# Energy, Heat, Steam and Materials from Waste

*WASTE-TO-ENERGY IS DEFINITELY MORE THAN JUST BURNING WASTE*

Waste incineration is commonly known as the technique of combustion of non-recyclable waste.

Not everyone knows that in exchange, Waste-to-Energy plants recover electricity, heat, steam, and secondary raw materials.

## Electricity and Heat

In 2019 in Europe, Waste-to-Energy plants generated around 40 billion kWh electricity and 90 billion kWh heat.

As a result, electricity was supplied to 18 million citizens and heat to 15 million, all generated from non-recyclable waste.

Thousands of houses, offices, shopping malls, schools, hospitals and industries are powered and heated by waste.



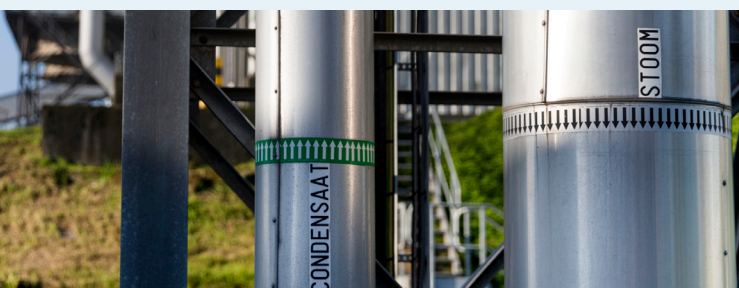
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## Steam



Waste-to-Energy plants supply steam at suitable pressure and temperature for industrial purposes.



For example, the ECLUSE network in Belgium supplies steam to six chemical companies at the port of Antwerp. It replaces the use of fossil-fuel fired boilers, saving up to 100,000 tonnes of CO<sub>2</sub> emissions per year.

## Materials

Metals such as iron, steel, aluminium, copper and zinc can be recovered in Waste-to-Energy plants, extracted from the bottom ash or separated before waste is treated.

The remaining part of the bottom ash is used in construction, for roads or as an aggregate for concrete. This allows to save virgin materials like gravel and sand.