

A WASTE ATLAS OF THE NETHERLANDS:

What happens to that garbage bag you put out on the street?

INCINERATION

77%

77% of all residual municipal waste is incinerated over 13 incineration plants in the Netherlands with little correlation between the origin of the waste and the processing of the waste

WASTE GROWTH

17%

The amount of waste we produce has grown by 17% since 1990

OVER THE BORDER

34%

More than 34% of our waste crosses European borders. This includes the waste we import from Naples and Dublin to feed the overcapacity of Dutch incinerators

RE-USE

30%

Direct re-use of municipal waste has increased from 26% to 30% since 1999

THE NETHERLANDS' LARGE-SCALE, CENTRALISED APPROACH TO WASTE MANAGEMENT NOW RESULTS IN

Waste transportation to incinerators



over road and river of 86 000 000 km per annum in the Netherlands alone



OR

177 347 tons transportation-based CO₂-emissions per annum



OR

2 700 000 saplings needed per annum to compensate for waste transportation

How much CO₂ do the incinerators in the Netherlands emit?

Incinerators assume 1000 kg of CO₂ are generated per 1000 kg processed waste, i.e. a ratio of 1:1. Because incineration represents an emissions reduction compared to energy generated from fossil fuels, electricity generated from coal is used as a baseline. Furthermore, because the proportion of organic matter contained in household waste is higher than 51%, more than half of our processed waste is labelled as 'sustainable' and consequently incinerated waste may be labelled as 'sustainable energy'. In 2011, this method of calculation resulted in official emissions of 5912 kilotons of CO₂ based on incineration of 7207 kilotons of waste.

2016: Let's go back to the future

Imagine a municipality that dares to try something different



Since 2015, this medium sized municipality transforms 40 0000 tons of low-value residual waste annually into high-value energy (in the form of electricity and fuel) for the benefit of local government, entrepreneurs and residents.



The first 20 000 tons of waste are decentrally transformed into electricity whilst the remaining 20 000 tons are converted into fuel:

- Generating 9975 MWh of electricity
- Saving € 204 700 on waste processing costs
- Decreasing CO₂-emissions by 108 478 tons on transport
- Generating 7 mln liters of fuel
- New income stream from the sale of fuel: € 600 000

} per annum

SMALL SCALE – HIGH IMPACT: de-centralised waste-to-energy conversion today

The Waste Transformers converts low-value waste into high-value energy by placing and operating small installations that efficiently and effectively convert local residual waste streams into energy for local consumption.

CREATED BY: The Waste Transformers BV in close co-operation with the BioBrug programme of the University of Groningen. Contact us should you want to download the full report.

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