



**WTERT Fall Meeting of 2005
at Columbia University**

New York, NY October 20-21, 2005

Waste-to-Energy in Europe

Instrumental in EU Waste and Energy Policy Goals

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Confederation of European Waste-to-Energy Plants



CEWEP

Confederation of European Waste-to-Energy Plants

**CEWEP represents over 200
Waste-to-Energy Plants in
13 European countries.**

**Member associations and
plants provide necessary
public infrastructure –**

- **Careful handling of waste**
- **Conserving natural resources**
- **Minimising possible emissions**





The plants, represented by CEWEP, annually treat about 30 million tonnes of waste in an environmentally sound way.

This covers about 60 % of the whole European waste incineration market.

The annual turnover is approximately €4500 million.



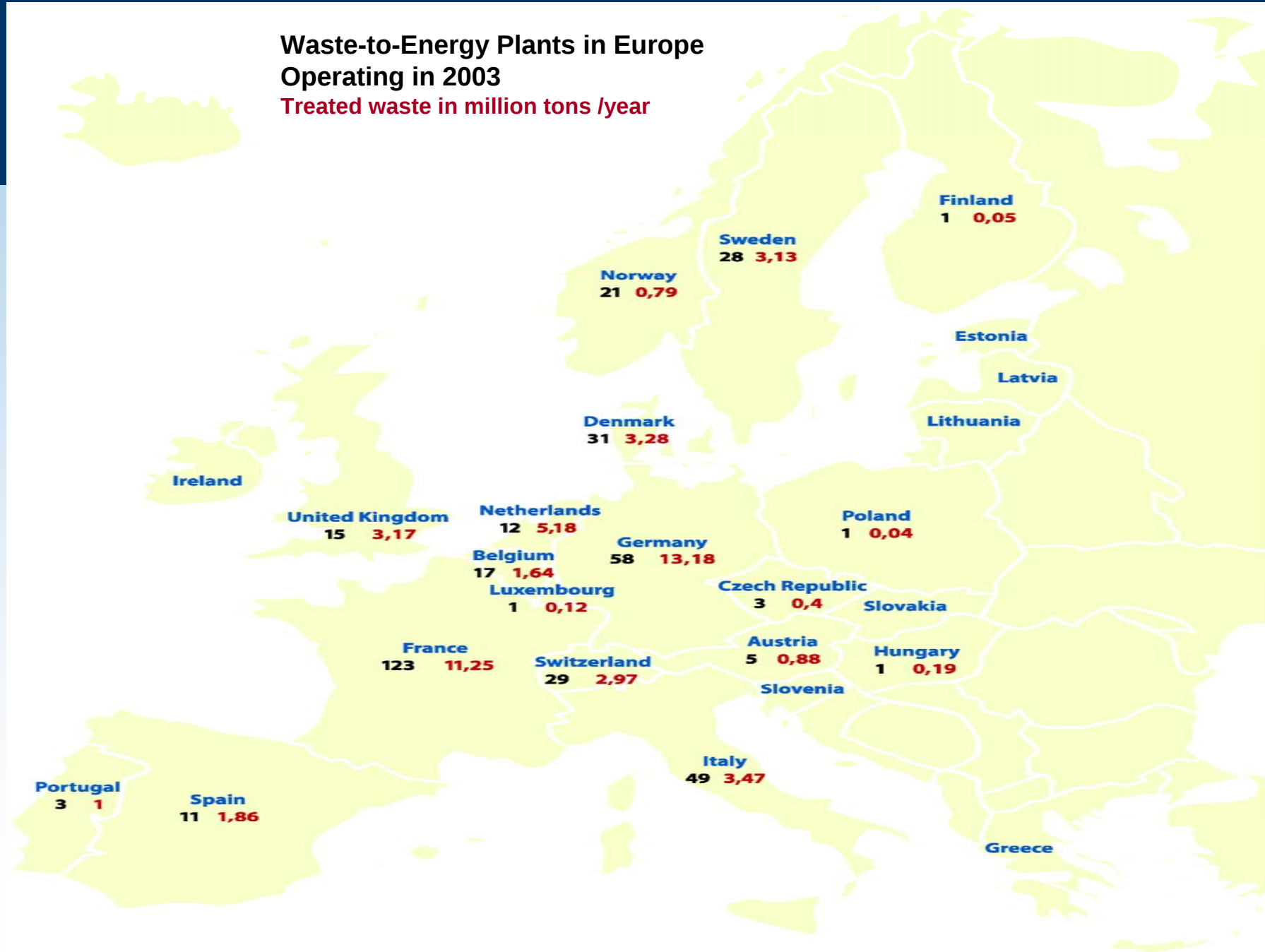
Membership of CEWEP underlines a Waste-to-Energy Plant's commitment to high environmental standards, achieving very low emissions by operating best available technique and maintaining state of the art energy production from otherwise unusable materials.

Waste treated by CEWEP Members in 2003

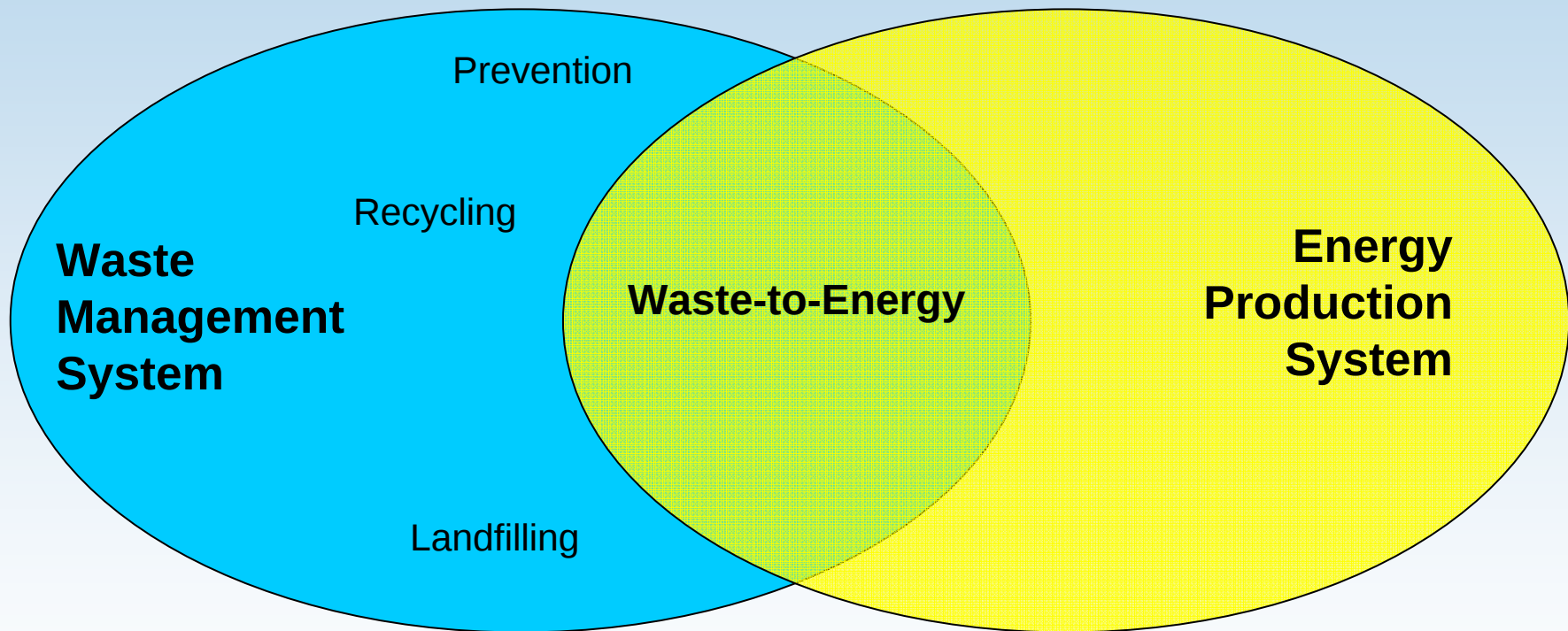
MEMBERS	Treated waste in 2003 (tons)
AUSTRIA, Fernwärme Wien, ENAGES, KRV	582.296
CZECH REPUBLIC, Pražské služby, SAKO Brno, Termizo, Sdružení STEO	436.527
DENMARK, Reno-Sam	912.179
FRANCE, Séché Environnement	82.000
GERMANY, ITAD	13.004.912
HUNGARY, FKF Budapest	192.300
IRELAND, Indaver	<i>Indaver Ireland currently have two plants in the planning stages</i>
ITALY, Federambiente	2.884.861
PORTUGAL, VALORSUL	591.432
SPAIN, AEVERSU	1.451.682
SWEDEN, RVF	3.132.500
THE NETHERLANDS, VA incl. AEB	5.029.000
SWITZERLAND, VBSA	2.973.753
Total	31.273.442

Waste-to-Energy Plants in Europe Operating in 2003

Treated waste in million tons /year



The role of Waste-to-Energy



WtE: Complementary in the waste management system

- **recovers energy from waste not recycled by other means**

Not all household waste can be adequately sorted and recycled. Why not use this un-sorted waste as a resource to produce energy?

Considering that more than half of MSW is biodegradable (62 %) this part is considered biomass and thus a renewable energy source (RES Electricity Directive 2001/77/EC).

- **hand-in-hand with recycling**

It is no coincidence that the EU Member States with the highest recycling rates, also have the highest levels of Waste-to-Energy Production.

- **is instrumental to fulfil the EU Landfill Directive**

WtE: Instrumental in EU Waste Policy



According to the Landfill Directive (1999/31/EC) biodegradable municipal waste going to landfills must be reduced: to 35 % of the total amount (base year 1995) by 2016.

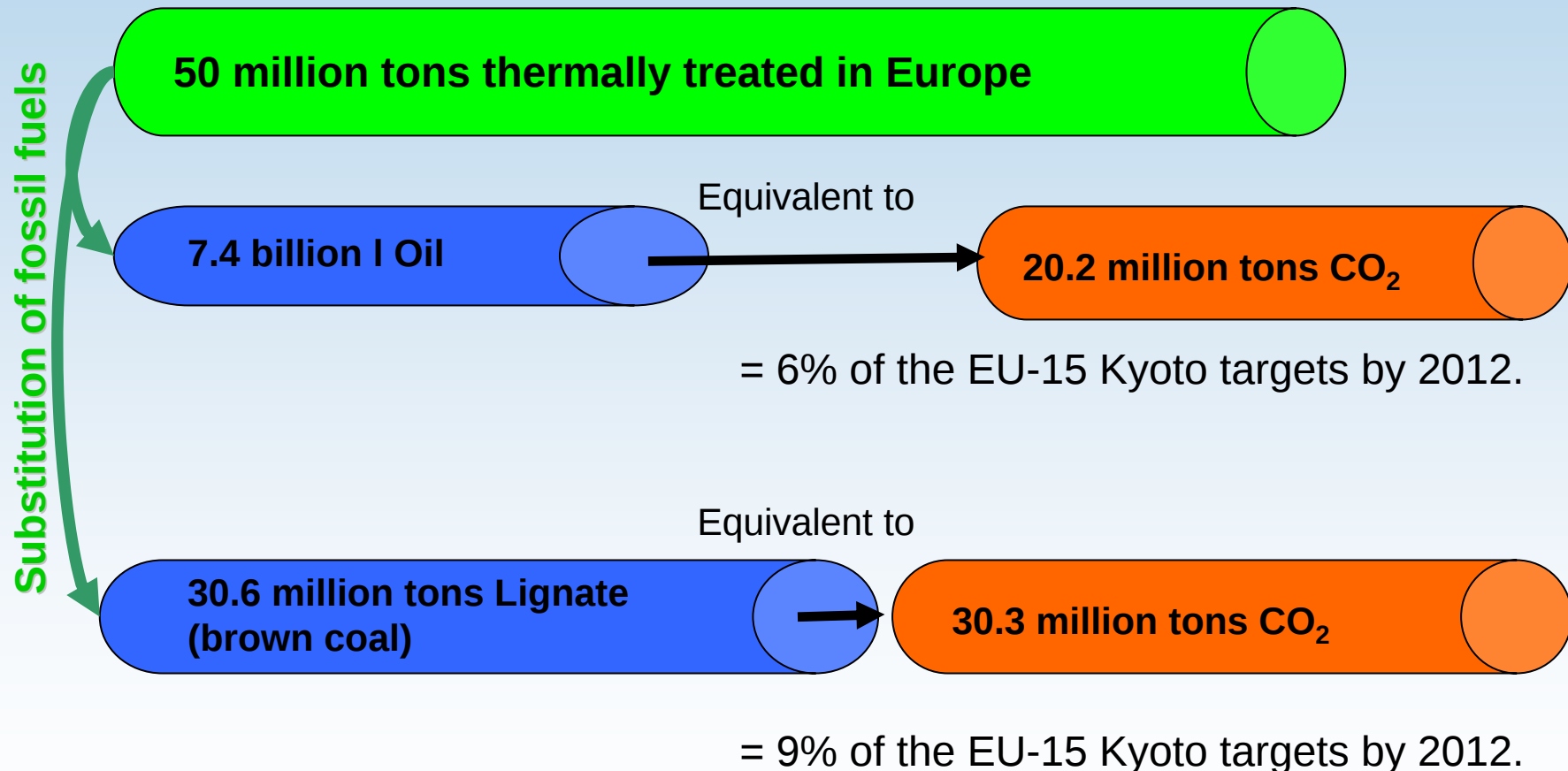


Methane emissions

- According to a German study http://www.bmu.de/files/pdfs/allgemein/application/pdf/klima_abfal1050907.pdf the application of the Landfill Directive will save **74 million tons CO₂-equivalents by 2016**, thanks to avoided landfill gas (methane) emissions.
- The study estimates that the saving of CO₂-equivalents could increase to 134 million tons if a landfill ban on untreated waste would be implemented across Europe.

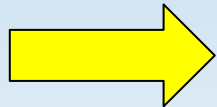
WtE helps to fulfill the Landfill Directive while also contributing to climate protection through the substitution of fossil fuels.

WtE: Contribution to Climate Protection



WtE: Complementary in the Energy Production System

- **provides electricity and heat**
50 million tons of MSW annually treated



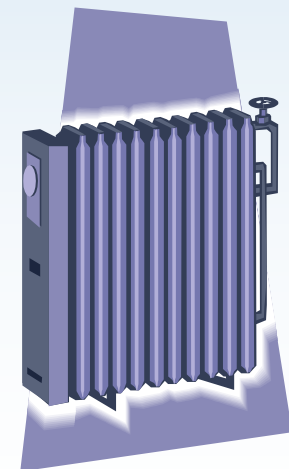
27 TWh of electricity

(= population of the NL, Denmark and Finland)

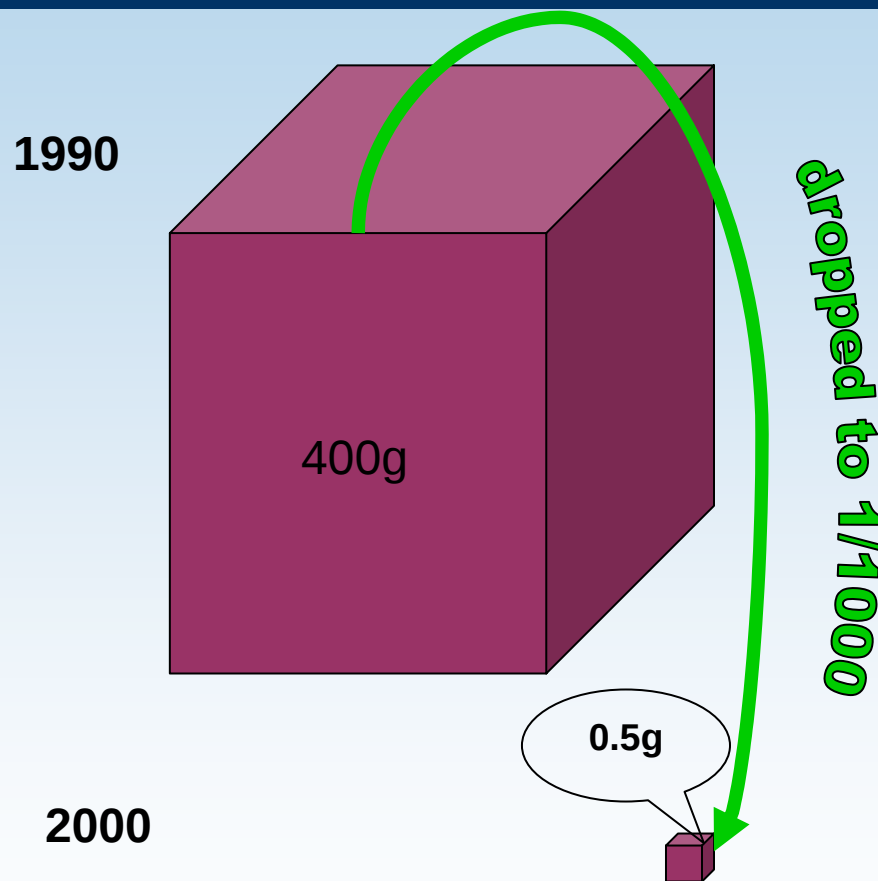


63 TWh of heat

(= population of Austria, Ireland and Estonia)



WtE: reduces emissions



“in 1990 one third of all dioxin emissions in Germany came from waste incineration plants, for the year 2000 the figure was less than 1% ” (BMU July 2005).

Source: German Federal Environment Ministry (BMU), July 2005.

CEWEP's aims



Boost renewable energy from waste



End landfilling of combustible waste



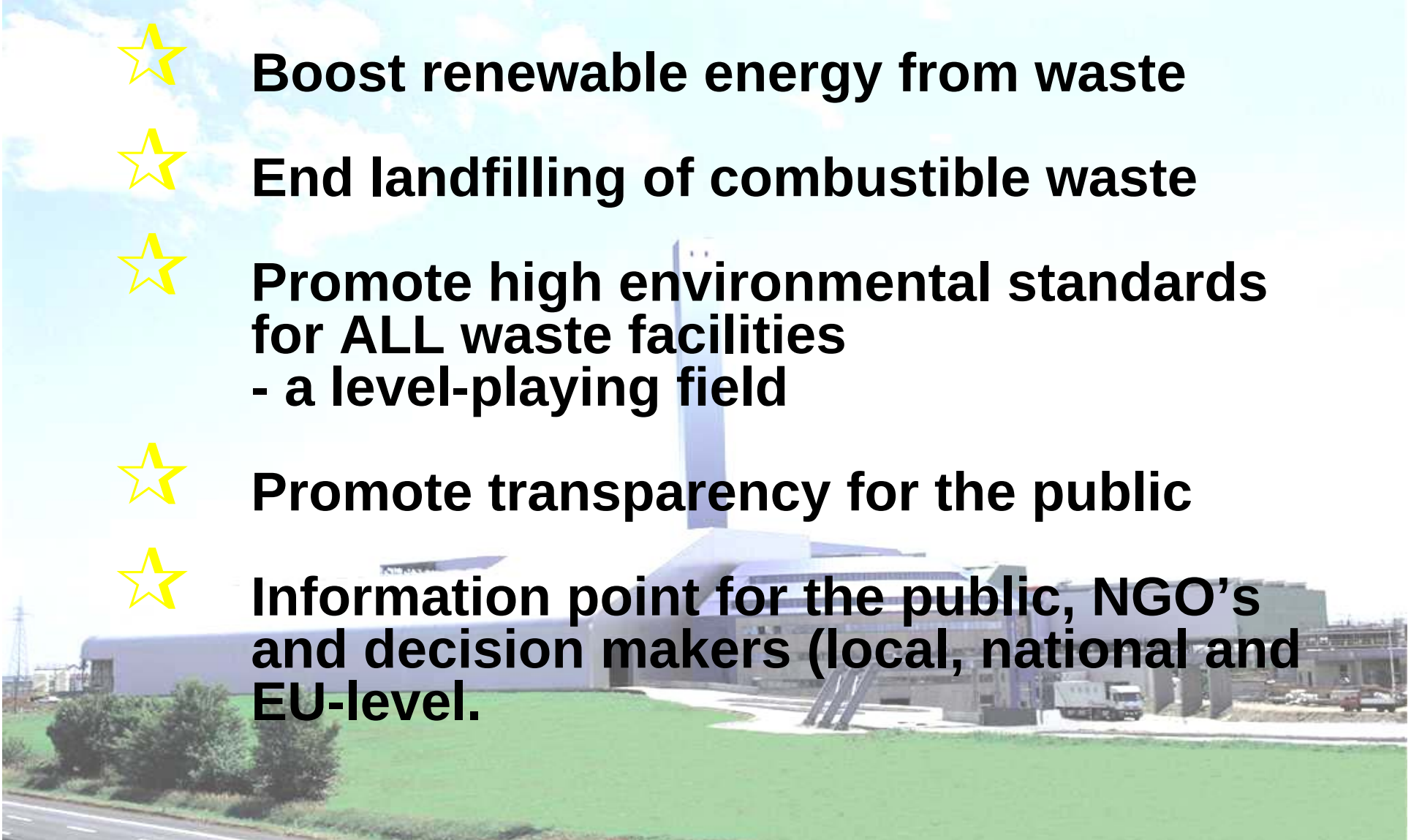
**Promote high environmental standards
for ALL waste facilities
- a level-playing field**



Promote transparency for the public



**Information point for the public, NGO's
and decision makers (local, national and
EU-level).**



In summary

- Waste-to-Energy plants are an essential part of both the waste management and the energy supply network.
- provides solutions for EU and Member States Waste Management policy and climate protection goals.
- creates jobs and know-how in a world leading technology

Further questions?



Please contact us if you would like some further information about Waste-to-Energy



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