Communication on Waste-to-Energy
Fact #1

W2E is the bridge between Circular Economy and the Energy Union
Fact #2

Approximately 1.5 % of the EU’s total final energy consumption comes from waste
Fact #3

W2E covers more than waste incineration
Fact #4

…but, they are not all the same

Examples of waste-to-energy processes

- Anaerobic digestion of organic waste where the digestate is recycled as a fertiliser
- Waste incineration and co-incineration operations with a high level of energy recovery
  Reprocessing of waste into materials that are to be used as solid, liquid or gaseous fuels
- Waste incineration and co-incineration operations with limited energy recovery
  Utilisation of captured landfill gas
Fact #5

…and they are not all incinerating the same

Source: EUROSTAT, 2015
Fact #6

Feedstock for W2E forecast

**Mixed waste**: waste prevention, widespread separate collection and ambitious recycling targets could potentially lead to less feedstock available for W2E

**Wood, plastic, textile, tyre, solvents, etc**: energy recovery could see a reduced role in future, primarily due to the better application of the waste hierarchy

**Biodegradable waste**: energy recovery through anaerobic digestion should increase
Fact #7

"Getting more energy from less waste"

- Co-incineration of syngas from SRF
- Conversion of waste heat to power in cement kilns
- Raising the temperature in dedicated incinerators (super heaters, heat pumps)
- Turning biogas from anaerobic digestion into bio-methane

...but also

fostering the use of CHP and facilitating the use of heating (and cooling) district networks and symbiosis in industrial parks
Message #1

Public support for W2E should be aligned with the waste hierarchy
Message #2

MS with low or non-existent incineration:

● Careful and forward-looking planning
● Considering available W2E capacity
Message #3

MS with high incineration:

- Use of economic instruments (e.g. taxes)
- Rearranging existing support schemes
- Moratorium & decommissioning
Message #4

...and if incineration is absolutely needed:

- Suitable location
- Optimal capacity
- Proven state-of-the-art energy-efficient technology
Message #5

The Commission will remain committed to:

➢ assessing waste management plans to ensure that MS give priority to separate collection and recycling where prevention or re-use is not achievable

➢ ensuring that EU funding and other public financial support is directed towards waste treatment options that are in line with the waste hierarchy

➢ promoting W2E processes with high energy (and material) yields
**RED II**

- MS to design national renewable policies, including support schemes in line with the waste hierarchy

- MS shall grant no support for renewable energy produced from incineration of waste, if waste separate collection obligations are not complied with

- Biowaste and waste edible oils and fats can contribute to the production of advanced biofuels and biogas and to the share of 14% or renewable energy for transport sector by 2030
ONLY ONE EARTH

Don’t waste it!

http://ec.europa.eu/environment/