



European
Commission

Communication on Waste-to-Energy

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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

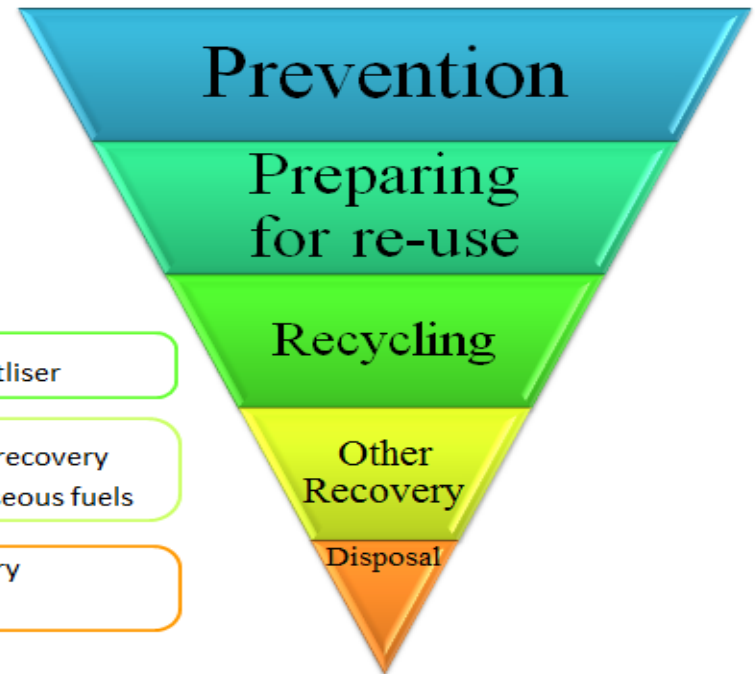
....but, they are not all the same

Examples of waste-to-energy processes

Anaerobic digestion of organic waste where the digestate is recycled as a fertiliser

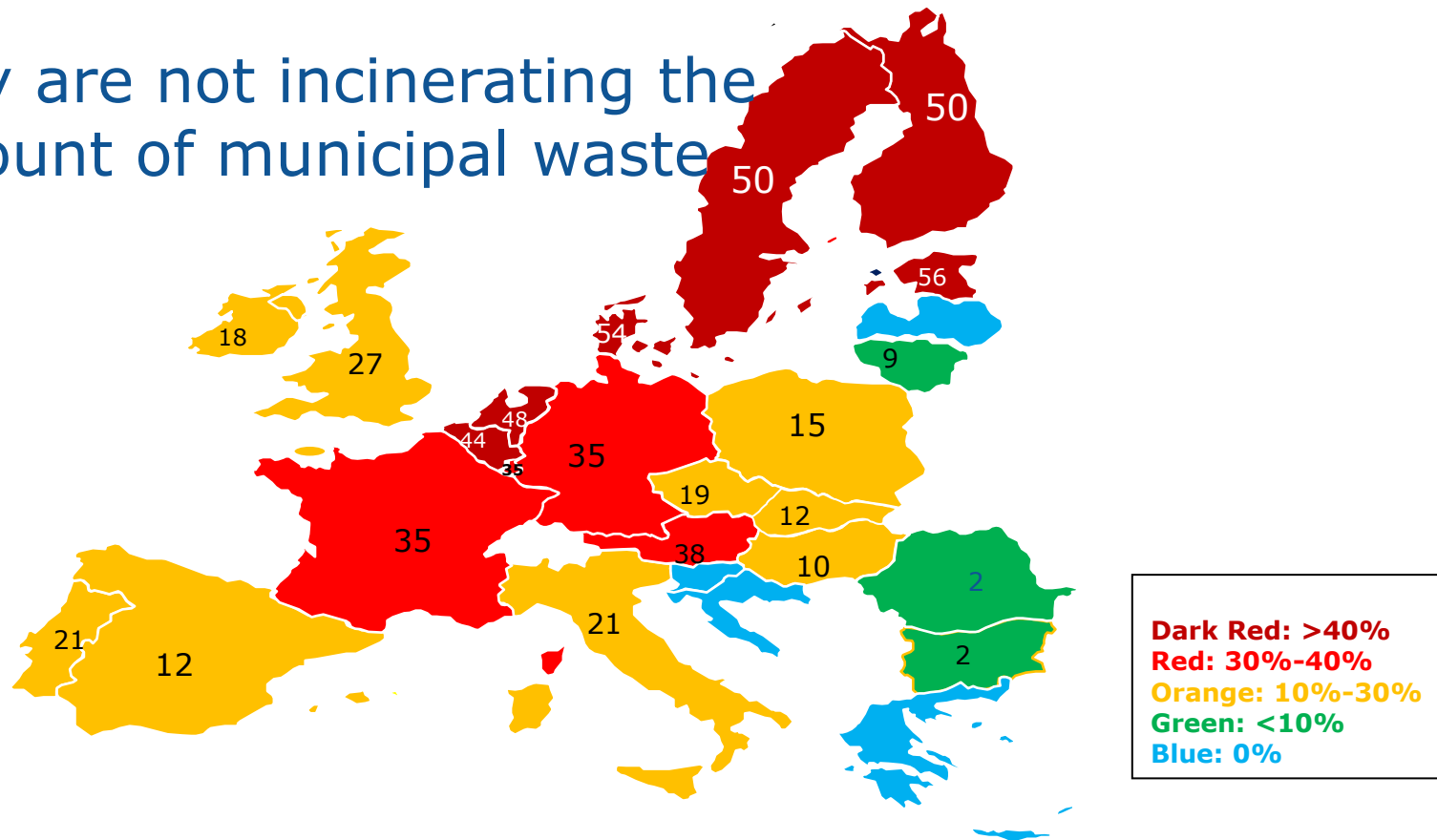
Waste incineration and co-incineration operations with a high level of energy recovery
Reprocessing of waste into materials that are to be used as solid, liquid or gaseous fuels

Waste incineration and co-incineration operations with limited energy recovery
Utilisation of captured landfill gas



Fact #5

...and they are not incinerating the same amount of municipal waste



Source: EUROSTAT, 2015

Cyprus & Malta

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

ONLY ONE EARTH



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