European session: WtE situation in Austria

Alexander Kirchner

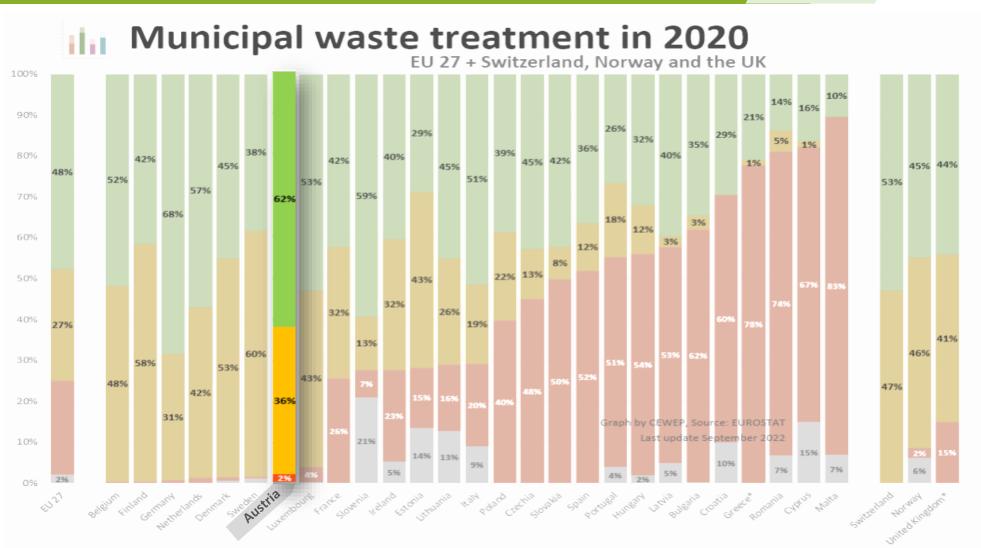
14.05.2024

IFAT



Austria is performing well in waste management





Landfill
WtE
Recycling &
composting
Missing data

source: CEWEP 2024

Municipal waste treatment



Recycling rates for municipal wastes in Europe

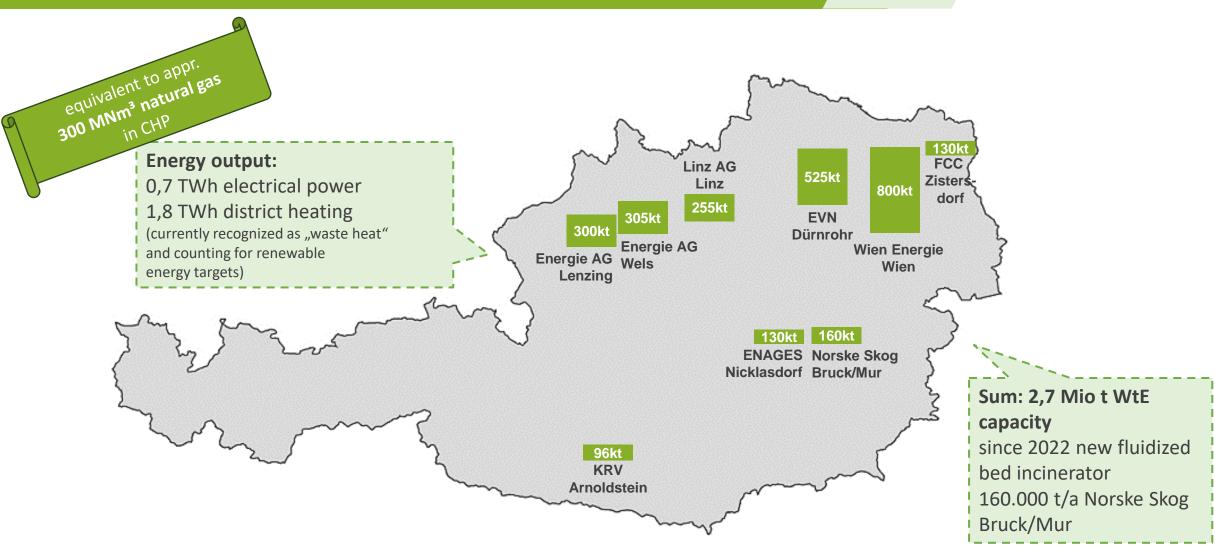


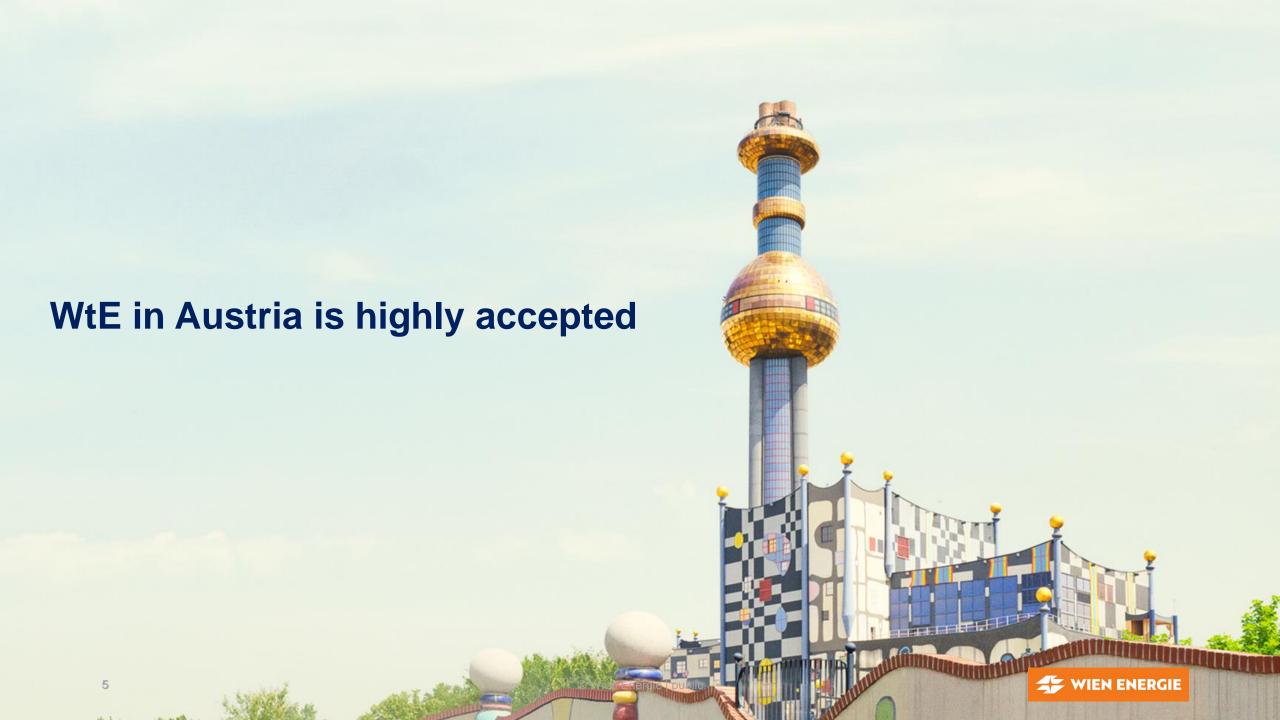




WtE plants in Austria

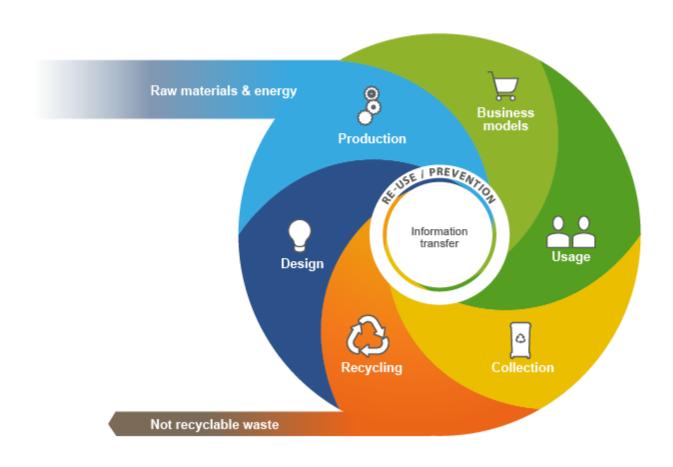






The "REST of the REST": non-recyclable wastes in the life cycle of products



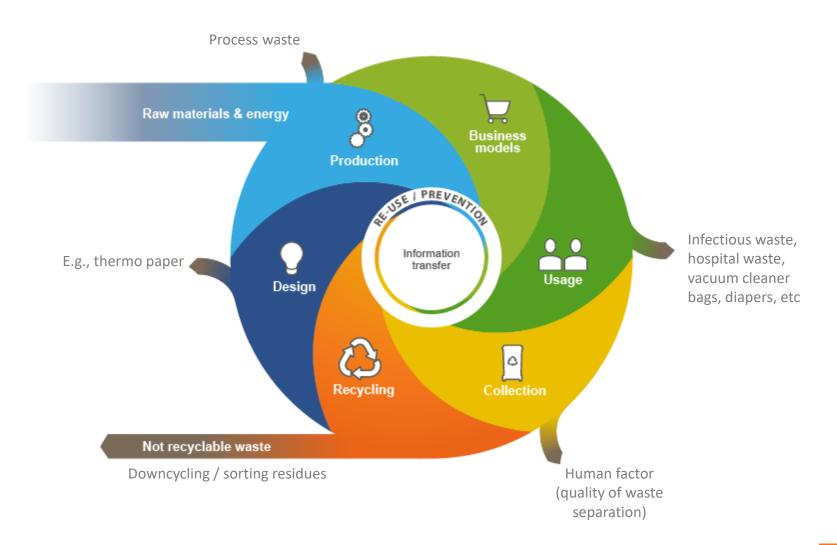




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The "REST of the REST": non-recyclable wastes in the life cycle of products





The "REST of the REST": non-recyclable wastes in the life cycle of products





By integrating WtE, raw materials and energy are recovered and the cycle is closed!



Municipal waste sorting and residue recovery achieve many products!















Moving from waste management to circular economy including WtE











Waste

- reduce volume
- hygienisation
- reduce mass



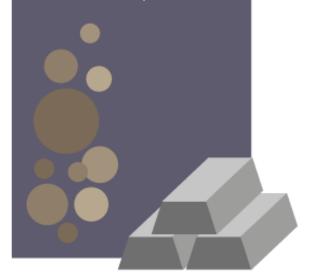
Energy

- power
- steam
- heat
- cold



Resources

- metals
- minerals
- CO₂
- water
- and many others





Wien Energie goes circular!

Many projects and plattforms for a circular future



Phosphorus Recycling

fertilizer from fly ash



Waste2Value

green gas or sustainable fuels out of waste gasification



Urban Mining from Bottom and Fly Ashes

recycling of metals, glass or minerals

new concepts for end-of-life of renewable power plants, and future waste management



Climate Lab

cross-sector innovation forum for sustainability and circular economy





Carbon Capture & Storage/Utilization

CO₂-capture (and synthesis of products)



several other projects





CO





Questions?

DI Alexander Kirchner, MBA Wien Energie GmbH

authorized officer, division manager energy production & circular economy

+43 664 6235151 alexander.kirchner@wienenergie.at





Sustainable biogenic CO₂ from WtE

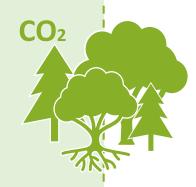
Austrian ministry officials are still insisting on certifying green CO_2 and believe it will be mandatory for all MS



- Austrian regulation ("Biomasseenergie-Nachhaltigkeitsverordnung") for RED III Art. 29/30 criteria → opinion
 of fed. ministry this is eligible for WtE as well
- Austrian WtE operators need a system acc. RED III Art. 29
 - all other MS in EU have an exemption
 - fed. ministry thinks this is will be mandatory for all EU MS in the future



- Certification for biogenic CO₂ out of wastes can be done using **SURE** or (possibly) ISCC **systems**
 - systems require the certification of all prior waste owners (including the producers) → practically impossible to implement for WtE
- Without certification: WtE will need to buy ETS certificates for their biogenic CO₂ as well
 - possibly higher scope emissions including fossil count of energy output still tbd
 - Austrian WtE operators decline to implement certification system
- CCU: possible partners for biogenic CO₂ require certification acc RED III Art 29/30

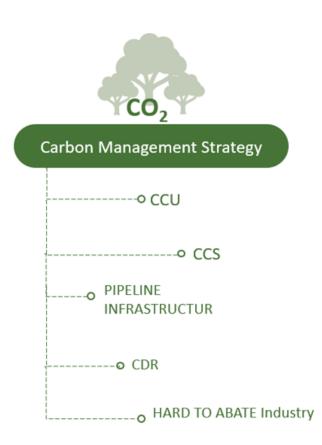




Carbon Managment Strategy



...will be an important basis for CCUS projects especially for hard to abate (including WtE)



- National Carbon Management Strategy being developed by the Federal Ministry
- This initiative underscores the government's commitment to achieving environmental goals and addressing climate change challenges effectively
- The Federal Ministry communicated an ambitious timeline the Austrian Carbon Management Strategy should be completed by June 2024 - discussions with relevant stakeholders are currently taking place
- The lifting of the CCS (Carbon Capture and Storage) ban in Austria is being discussed
- Focus on CCS (including export) will be for hard to abate industries (including WtE)
- The development of robust pipeline infrastructure is crucial for CCU and CCS