

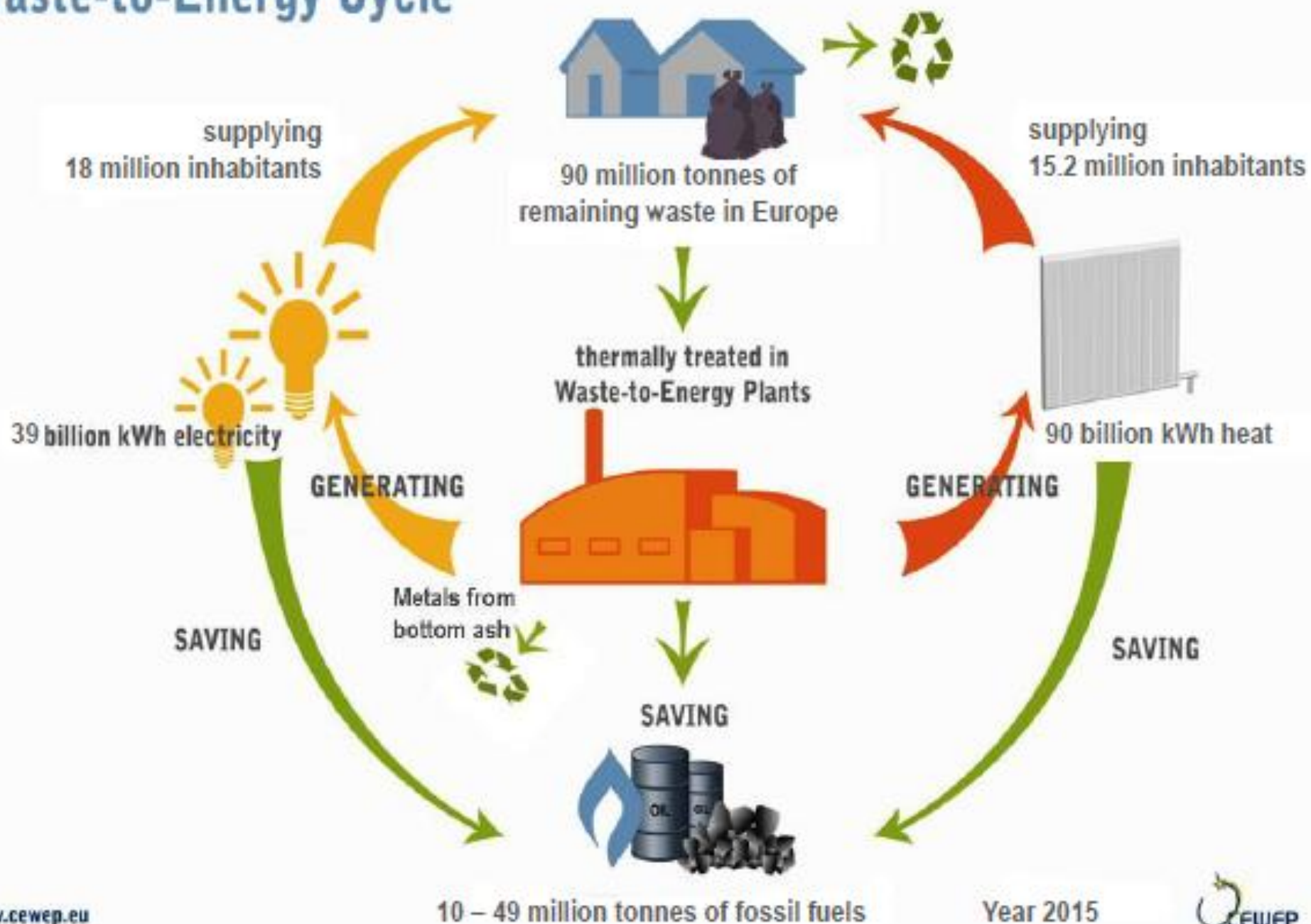
ADVANCING SUSTAINABLE WTE IN AFRICA : CONTRIBUTION IN CIRCULAR ECONOMY

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International WTE Expert

<https://www.routledge.com/Waste-to-Energy-Technologies-and-Global-Applications/Kalogirou/p/book/9781138035201>

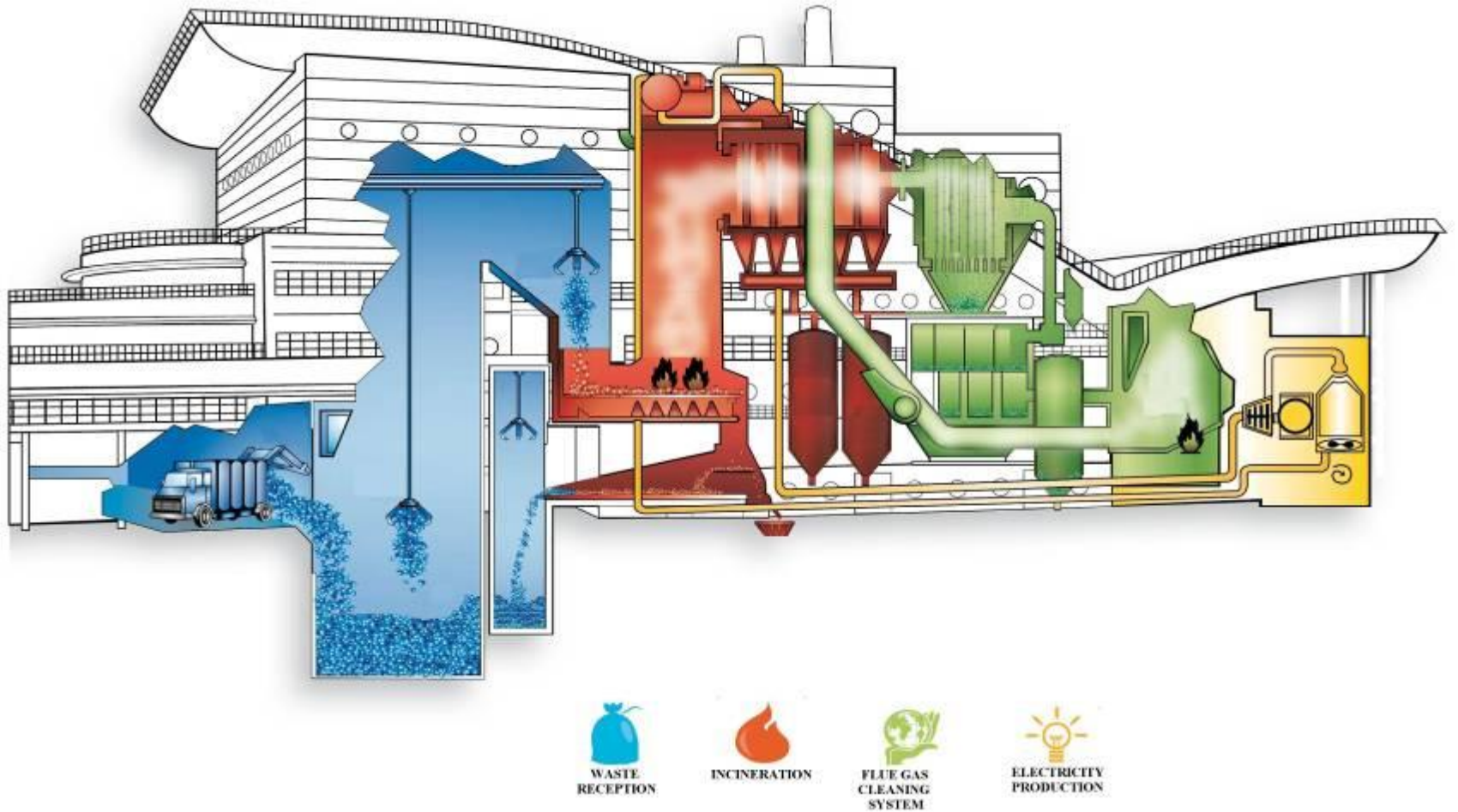
7th October 2021

Waste-to-Energy Cycle



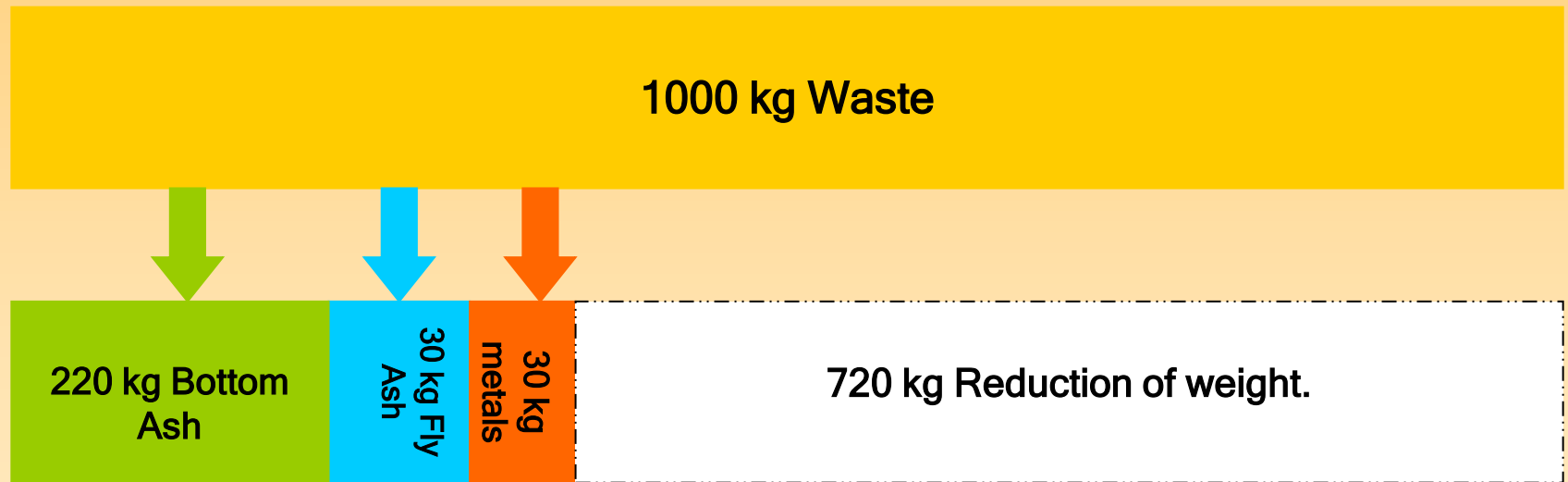
Waste-to-Energy in Europe

Typical WTE Plant



Thermal treatment of waste with energy recovery (WTE)

Incineration plant producing 500-750 kWh/ton of post recycled municipal solid waste.



With the incineration of 1 ton of waste we save 1 ton of lignite

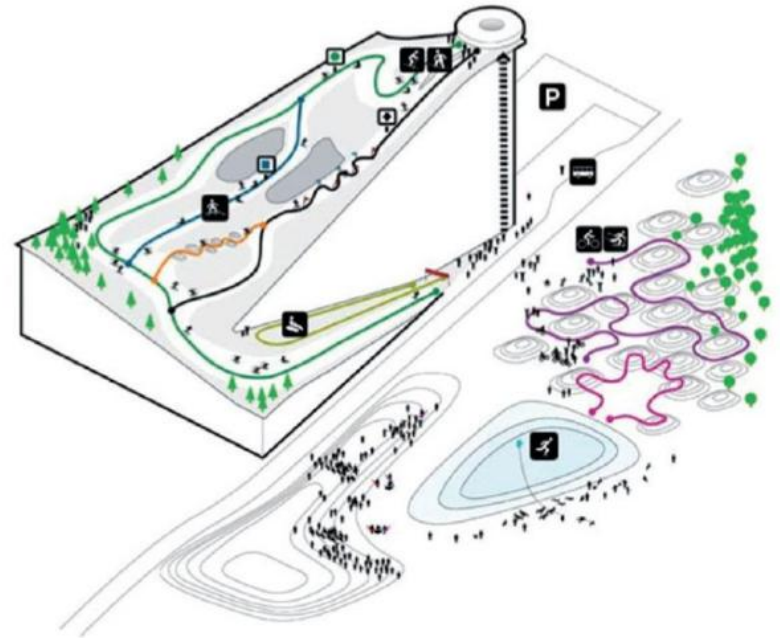
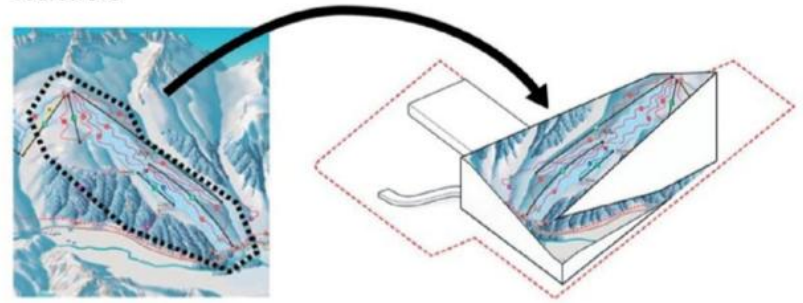
COPENHAGEN WASTE TO ENERGY PLANT



High Steam Data + CHP

- 440 °C and 67 bar
- $\eta = 29\%$
- $R = 1.56$

Source: BIG



Amager Bakke features a artificial ski slope inspired by the ski slopes in the Alps.

CHINA WtE



Ningbo WtE plant

ADDIS ABABA NEW WTE PLANT



ADDIS ABABA NEW WTE PLANT



CHEMICAL ENGINEERING/ENVIRONMENTAL ENGINEERING/
ENERGY ENGINEERING

Waste-to-Energy Technologies and Global Applications

Through Waste-to-Energy (WTE) technology, plants use waste as a renewable fuel to co-produce electricity, heating, and cooling for urban utilization. This professional book presents the latest developments in WTE technologies and their global applications. The first part of the book covers thermal treatment technologies, including combustion, novel gasification, plasma gasification, and pyrolysis. It then examines 35 real-world WTE case studies from around the world, analyzing technical information behind planning, execution, goals, and national strategies. Results through the years show the benefits of the technology through the life cycle of the products. The book also examines financial and environmental aspects.

Features

- Discusses thermal treatment technologies, including combustion, novel gasification, plasma gasification, and pyrolysis.
- Offers 35 real-world international case studies from the Americas, Asia, Europe, and Africa
- Provides different approaches for different geographic areas.
- Offers a multiparameter WTE model for preliminary technical and financial WTE calculations.
- Describes policy making procedures, in the public and private sectors as well as in local industry.
- Examines financial and environmental aspects.

Author's

Waste-to-Energy Technologies and Global Applications



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Host: Zanzibar Planning Commission

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KEY NOTE SPEAKERS



07 - 09
DEC 2021



FROM 08 AM
TO 05 PM



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ZANZIBAR



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