WASTE MANAGEMENT

Introduction

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60% OF POPULATION LIVES IN THE CITY

- At the same time, cities produce about 80% of global economic activity.
- Cities are concentrated hubs for innovation, growth and economic activity.
- Due to this agglomeration of people, cities become a major contribution to climate change and the generation of greenhouse gas (GHG) emissions.

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EU TARGETS FOR CITIES

- The EU has set targets for reducing its GHG emissions progressively up to 2050:
  - set out in the 2020 climate and energy package,
  - the 2030 climate and energy framework,
  - the European Green Deal, and 2050 long-term strategy.
- The EU strategy emphasized smart, sustainable, and inclusive growth with manageable targets for climate change and energy.

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AIR

- The air we breathe is a vital resource on which all life depends.
- Clean air is essential for the good health and well-being of humans and animals and plants.
- Air quality is influenced by human and industrial activity, climate, and geographical conditions.
- Half of the population of the world live in nations with unsafe air quality. More deaths globally occur due to poor quality of air than water.

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THE COMMON POLLUTANTS AND THEIR SOURCE

- Nitrogen dioxide - NO2
- Ozone
- Particulate matter PM
- Sulfur dioxide SO2

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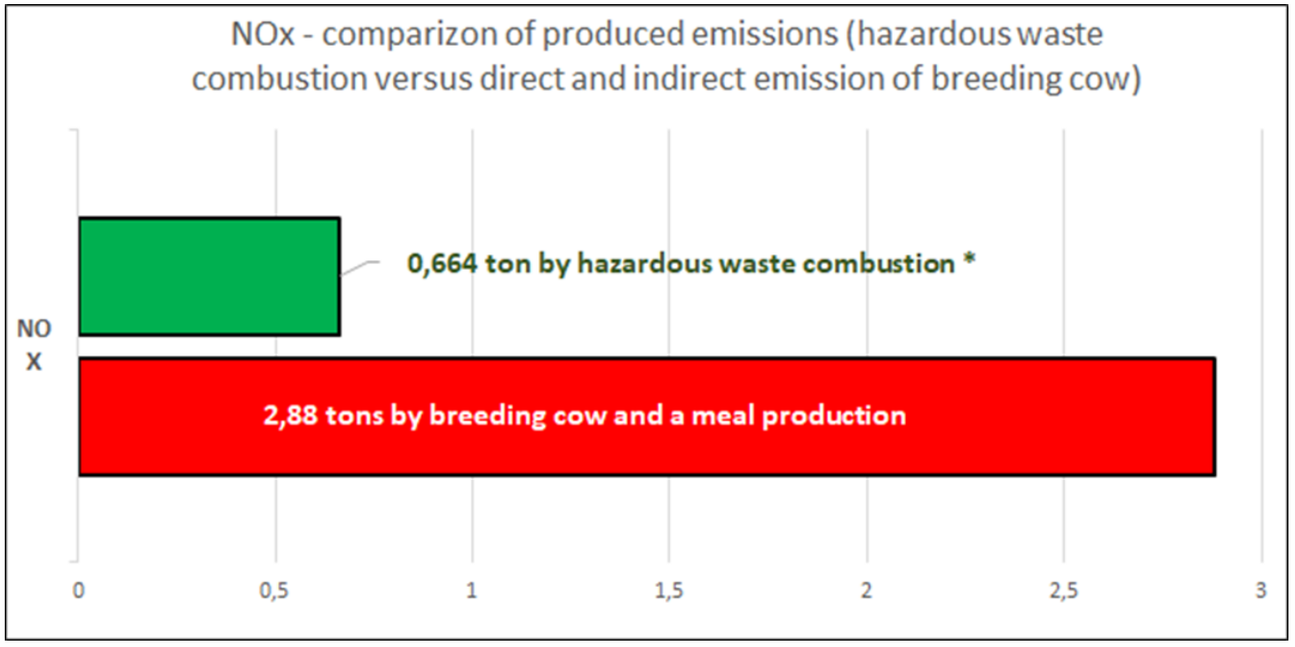
NITROGEN DIOXIDE

- Nitrogen dioxide - NO2 - or NOx emissions.
- The major source is combustion processes, diesel vehicle exhaust but these emissions are also produced by breeding and processing of beef meal.
- But people often misunderstood the sources of emissions.



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OZONE

- Sources of ozone are items of everyday use, such as e.g. sprays, refrigerators, air conditioners, foams, agricultural pesticides, solvents, and cleaning agents, release gases containing chlorine and bromide which deplete the ozone layer.
- These pollutants react with ozone molecules and destroy them. This reduces the ozone layer, and in some cases even creates holes in it.

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OZONE

- Stratospheric ozone is vital for us, but ground-level ozone is harmful to human health.
- Exhaust gases from cars, such as nitrogen oxides (NOx) and volatile organic compounds (VOCs), mix to form ozone (O3), which has an important function high in the atmosphere but low above the ground is very harmful.
- This problem increases especially in summer when ozone remains low above the ground due to excessive heat.

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PARTICULATE MATTER PM

- Originates from natural sources such as sea salt, dust, volcanic ash, and from human activities as fuel combustion for power generation, domestic heating and transport, industry and other types of man-made dust.

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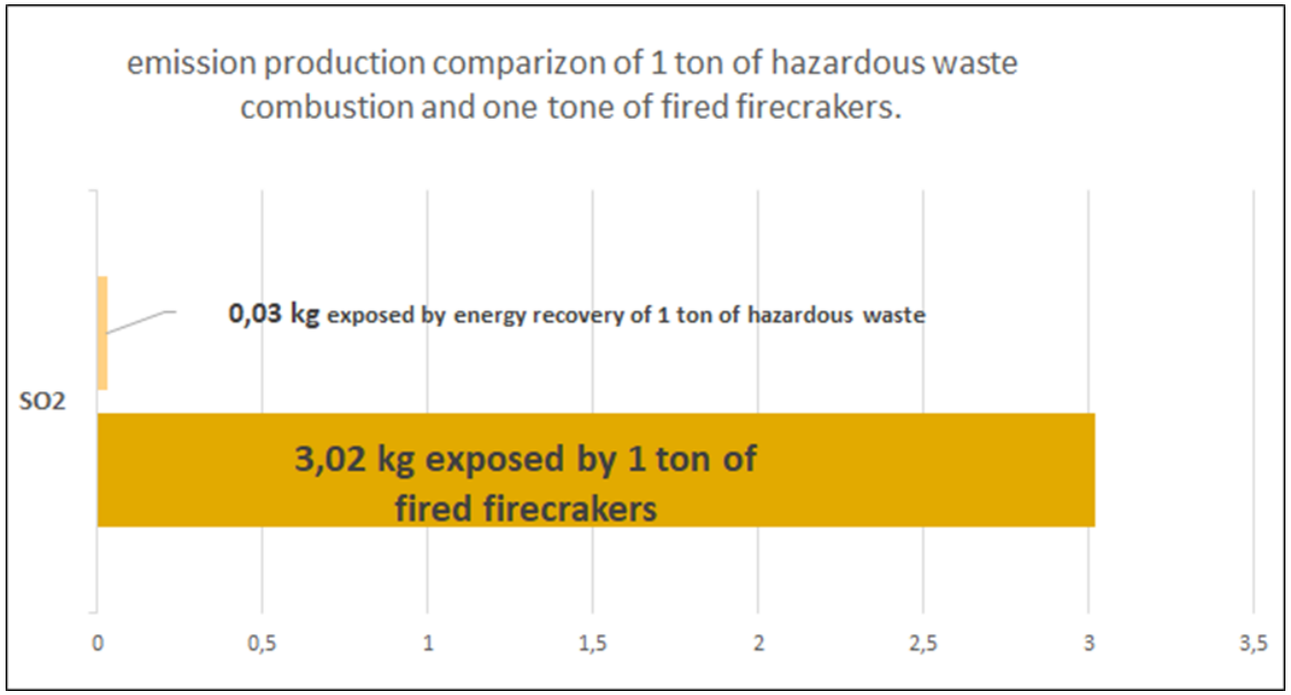
SULFUR DIOXIDE SO2

- Mainly emitted from fuel combustion for stationary power generation, industry, and domestic fuel combustion and firecrakers.



WATER

- Adequate treatment of wastewater is required to minimize the negative impact on the wider environment, once wastewater has been discharged back to the rivers. When we discharge wastewater without treatment, it is usually toxic harm to the ecosystem.

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WATER

- Cities are major consumers of water and a significant generator of wastewater. Clean water is vital to our cities, not only for humans.
- Yet 23% of countries have no wastewater treatment so it is 80% of the world's discharged water is untreated.

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