THREE ZERO WASTE STRATEGIES TOWARD CARBON NEUTRALITY

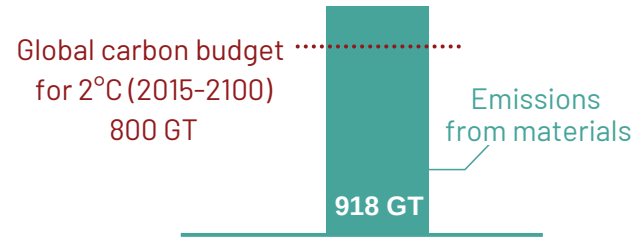
62% of global GHGs come from the materials economy — from raw material extraction and processing to goods manufacture and disposal.[1] How can we unlock the GHG reduction potential embedded in materials management?

1 REDUCE EMISSIONS AT THE SOURCE

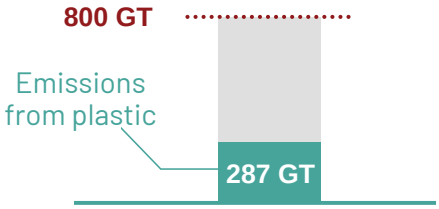
Reduce GHGs emitted from materials production

End extraction of fossil fuels for plastic

Materials production will emit 918 gigatonnes (GT) CO_2e by 2100 even with improved energy efficiency.[2]



Plastic alone will emit more than one-third of the global carbon budget for 2°C.[3]



2 CLOSE HIGH-EMISSION WASTE FACILITIES

End waste incineration/WTE/PTF

End landfilling of organic waste

"Waste-to-energy" incinerators emit more GHGs than coal.[4]

Plastic is made from fossil fuels. "Plastic-to-Fuel" results in similar climate impacts to burning other fossil fuels.[5]

Organic waste in landfills emits methane, a GHG 25 times more potent than CO_2.

Preventing food waste is the best option to avoid emissions from landfills; it can reduce emissions by **70.5 GT** CO_2e over the next 30 years.[6]

Organic materials should be collected separately and treated with climate-friendly solutions.

3 SCALE UP RECYCLING & COMPOSTING

Reduce extraction through recycling

Fight climate change with composting

Recycling paper avoids deforestation.

Composting avoids methane emissions from landfills and enhances soil's capacity to sequester carbon.

Recycling plastic displaces virgin plastic production and avoids fossil fuel use.

It's also **3 times** more energy efficient.[7]

In 25 years, soils could sequester more than **10%** of annual anthropogenic emissions.[9]

By incorporating informal recyclers, cities can strengthen their recycling systems![8]

TACKLING THE CLIMATE EMERGENCY BY BUILDING

ZERO WASTE COMMUNITIES

Zero waste conserves resources through responsible production, consumption, reuse, and recovery of materials. It is one of the fastest, cheapest, and most effective strategies that cities can invest in to protect the climate and the environment.

ZERO WASTE REDUCES EMISSIONS

By advancing **zero waste,** the EU and the U.S. can reduce GHG emissions by **606 megatonnes CO_2 e** per year by 2030.[10]

That is equivalent to emissions from **156** coal power plants

or **128 million** cars off the road.

AND BRINGS SO MUCH MORE!

Zero waste saves public money

Reducing waste generation and diverting waste from incinerators and landfills lowers the costs of disposal and disposal site maintenance for cities. Reduction, reuse, recycling, and composting systems are cost-effective, readily available, and easily scalable.

Zero waste creates green jobs – the number of jobs created per 10,000 tons of materials[11]

Zero waste communities are healthier

- Avoided health impacts from incinerators/landfills
- Clean air, water, and land
- Healthier local food systems

VISIT ZEROWASTEWORLD.ORG TO LEARN HOW YOUR CITY CAN GO ZERO WASTE!

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