

Global Waste Management Outlook 2024

Regional Training on the production and use of waste and circular economy statistics and indicators

The Global Waste Management Outlook 2024



- Developed in response to Resolution 2/7 from the second session of the United Nations Environment Assembly (UNEA-2)
- Reaffirmed in Resolution 4/7 from at UNEA-4
- GWMO 2024 provides:
 - updated assessment of global waste management and an analysis of data concerning municipal solid waste management
 - Forecasting waste's impact on society, the environment, and the global economy.
 - strategies for waste reduction and enhanced management

The triple planetary crisis and waste

Climate crisis

The collection, processing and disposal of solid waste generates carbon dioxide (CO₂) and other greenhouse gases and air pollutants, including methane (CH₄) released from waste disposal sites and black carbon emitted from open waste burning.

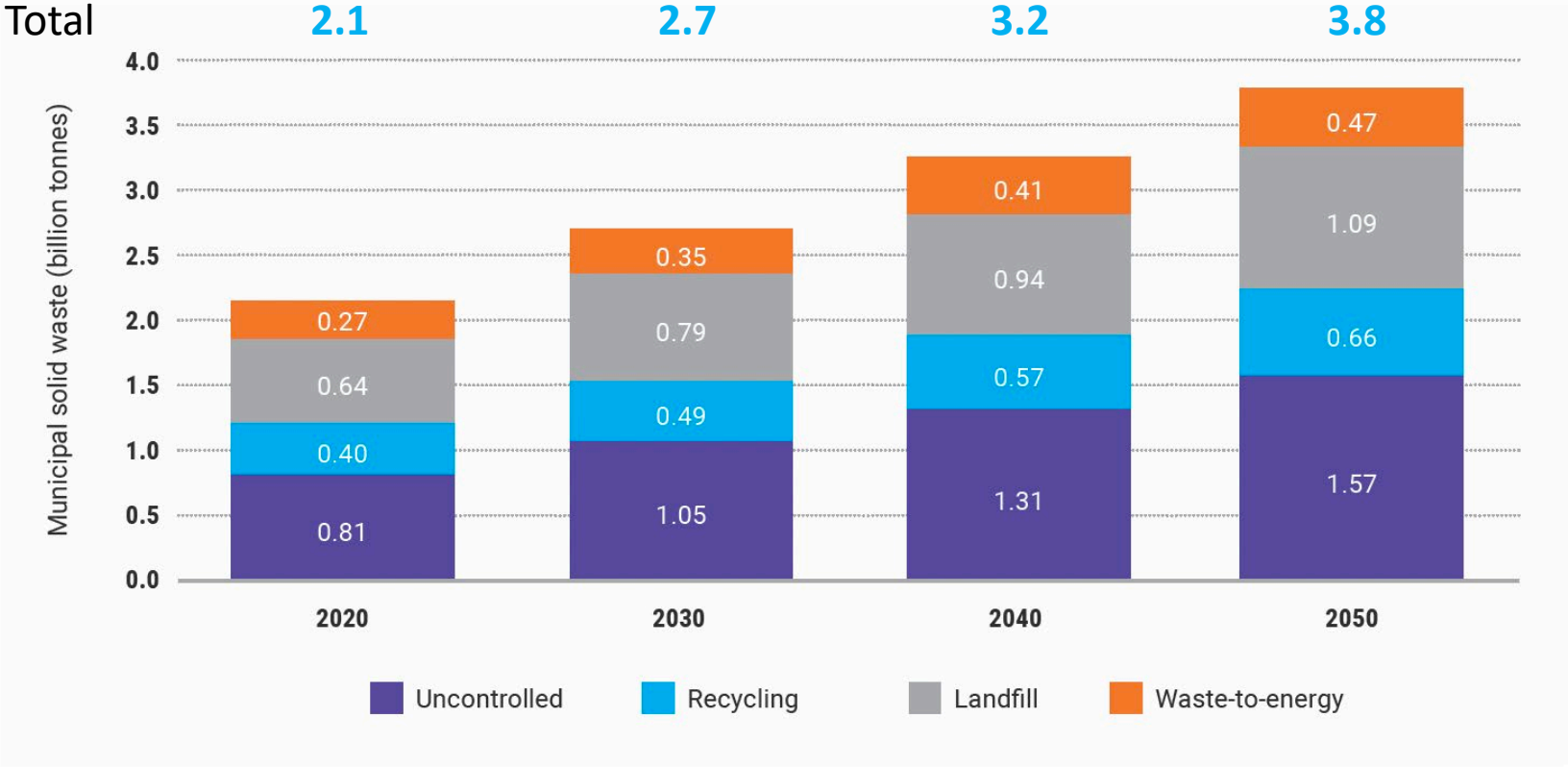
Pollution

Long-term pollution by waste, one of the main drivers of biodiversity loss, puts the integrity of ecosystems at risk.
For example, waste disposed of on land can cause long-term pollution of freshwater sources by pathogens, heavy metals, endocrine-disrupting chemicals and other hazardous compounds.

Biodiversity loss

Open burning of waste releases Unintentional Persistent Organic Pollutants (UPOS), “forever chemicals” that can be transported long distances in the air, concentrate in the food chain, and have significant negative effects on wildlife and human health including cancer and infertility.

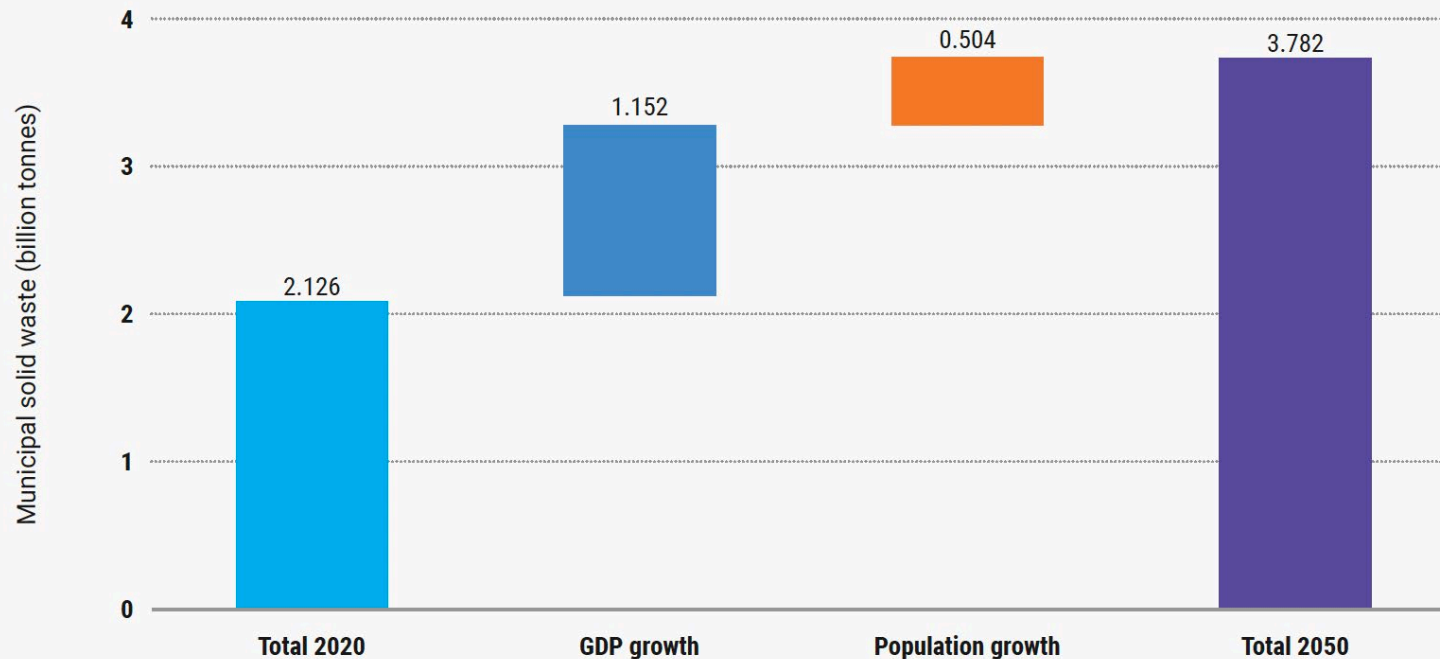
Projected global municipal solid waste destinations (baseline: 2020)



In a business-as-usual scenario we will end up with **1.57 billion tonnes** annually being openly dumped and/or burned

Main cause for projected growth in waste

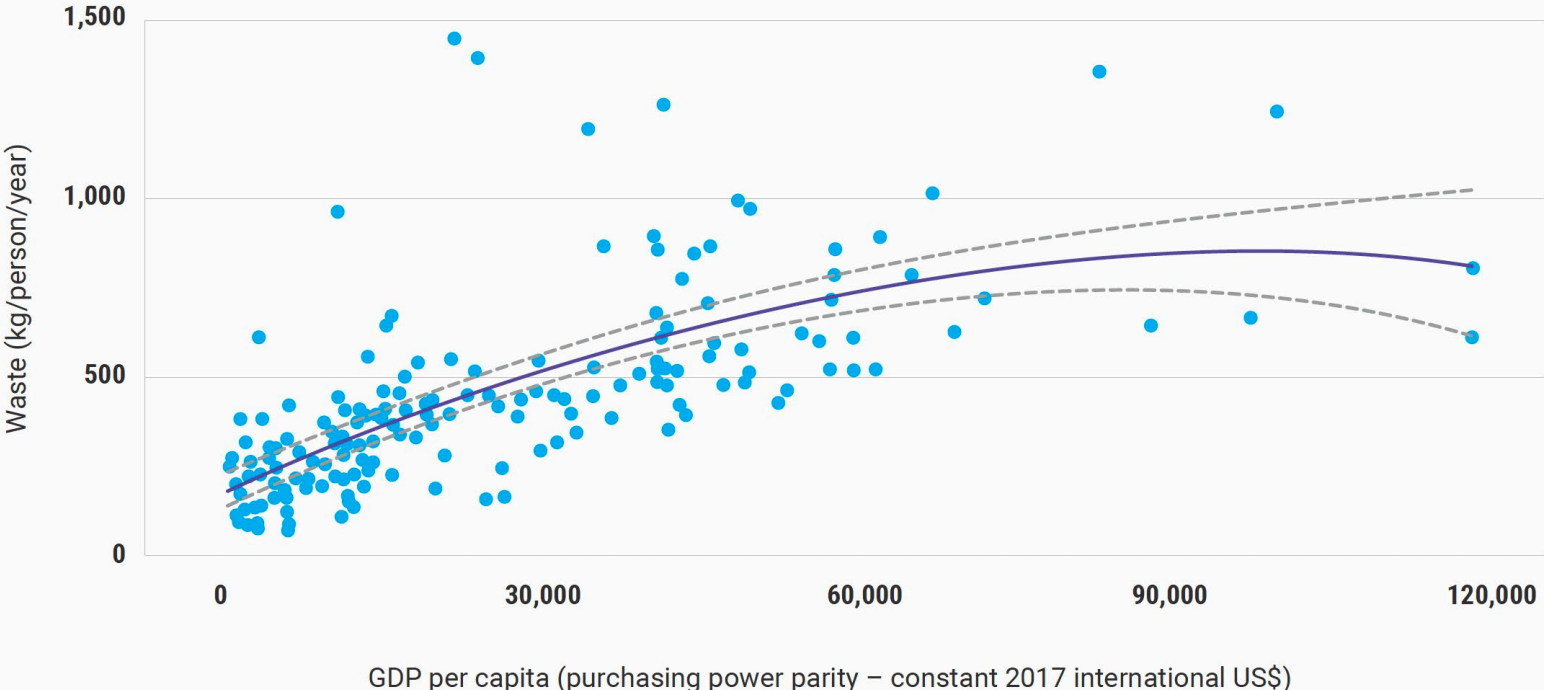
Contribution of gross domestic product growth and population growth to the projected increase in global municipal solid waste generation in 2050.



Increased consumption through higher income has more than double the impact on waste generation compared to increase in population

Economic growth and waste generation remain closely linked

Relationship between gross domestic product (GDP) and waste generation in most recent year available between 2010 and 2020



Higher income countries generate more waste per person – **unsustainable levels of resource use**

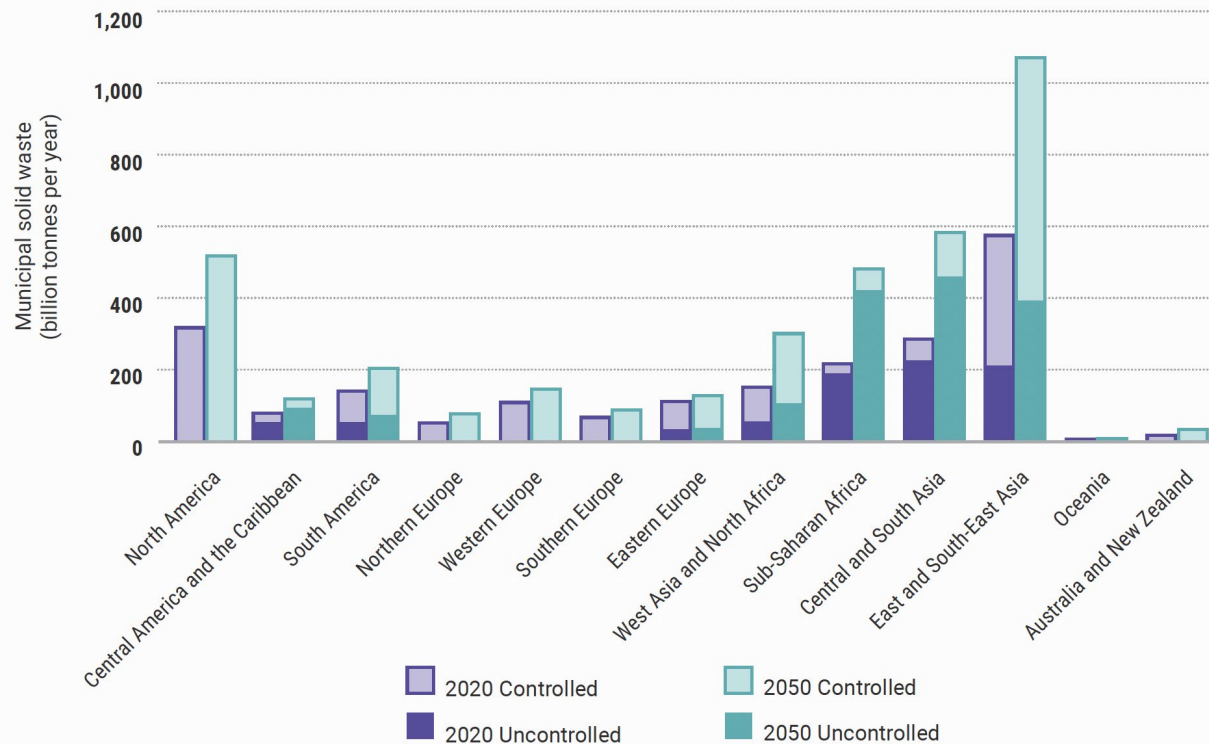
● = individual country

Waste destination in 2020: controlled vs uncontrolled



Large projected increase in dumping and burning by 2050

Municipal solid waste generation and how much of this waste was uncontrolled in 2020, with projections for 2050 unless urgent action is taken.



Fast-growing economies that still rely on open burning and dumping have the largest projected waste growth – **unsustainable levels of leakage and pollution.**

The three scenarios and their assumptions

Waste Management as Usual (WMU)

Practices continue as today,
with waste generation
projected to grow fastest in
regions without adequate
waste management capacity.

Waste Under Control (WUC)

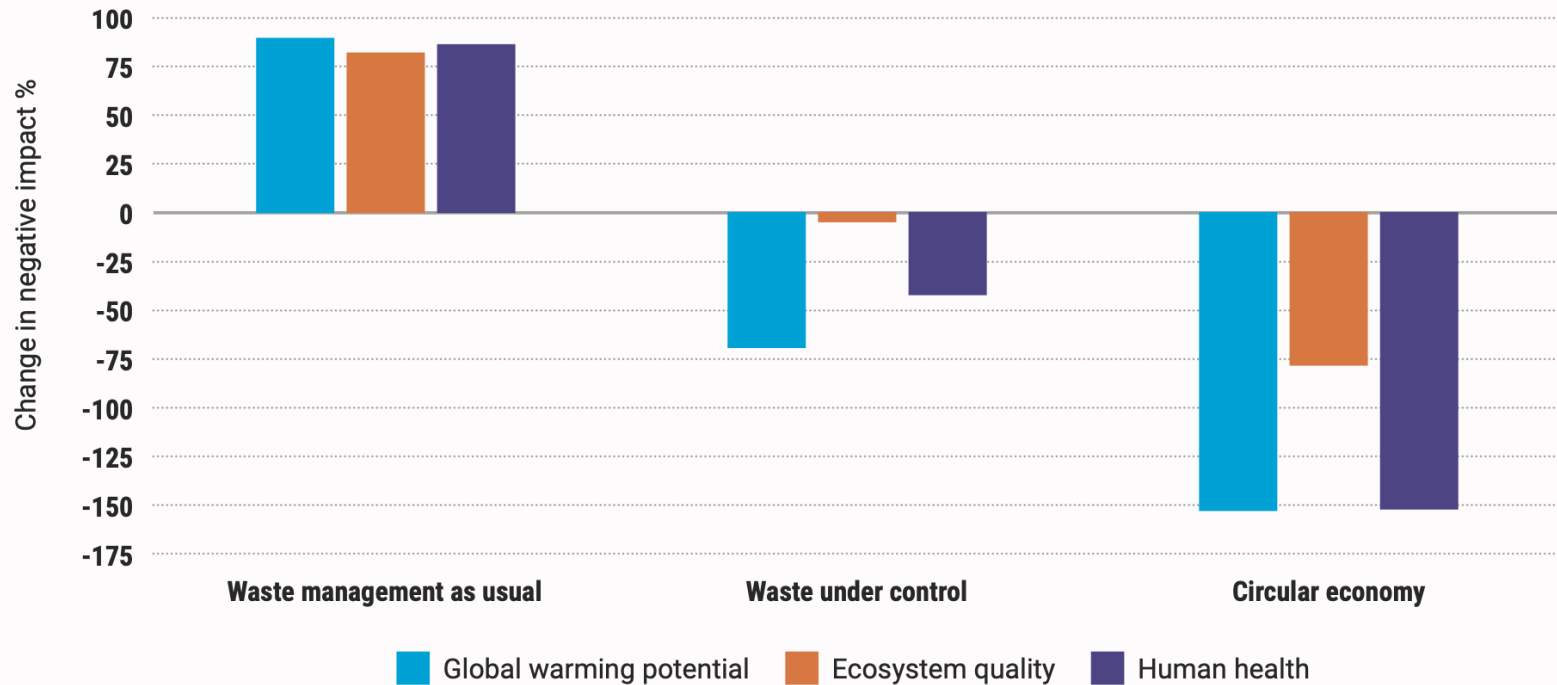
A midway point, with some
progress made towards
preventing waste and
improving its management.

Circular Economy (CE)

Waste generation decoupled from
economic growth, with the global
MSW recycling rate reaching 60
per cent and the remainder
managed safely.

Increase in negative impact by 2050

Projected change in negative impacts by 2050 according to the three modelled scenarios



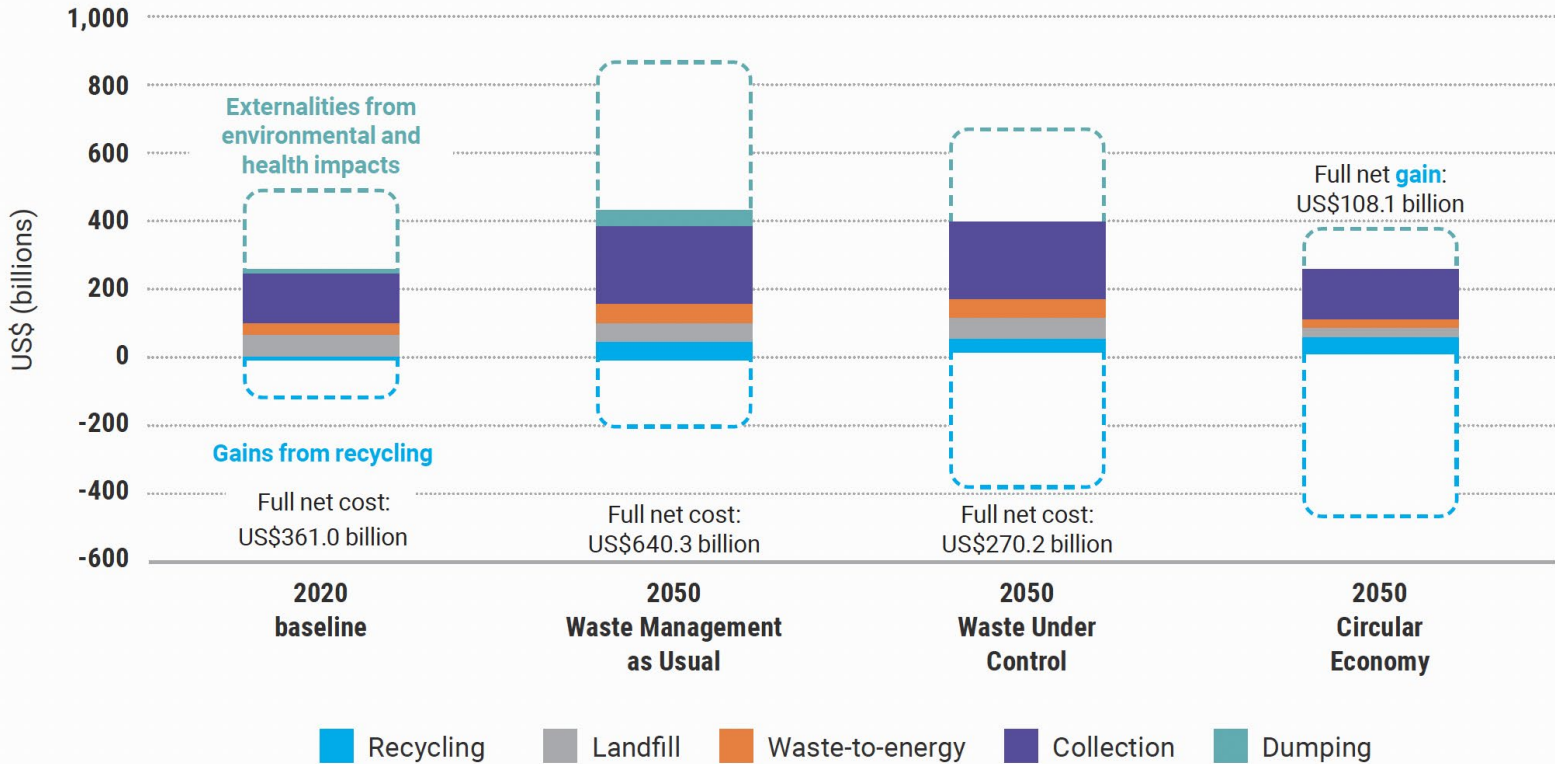
Waste Management as Usual:
Negative impacts almost double by 2050

Waste Under Control:
Small net improvements are happening

Circular Economy:
Improvements even on 2020 baseline

Projected costs of the three scenarios

Overall cost of global waste management under the three scenarios (US\$ 2020).



Why is progress so slow?



- Health and climate impacts are overlooked
- Women and informal workers are neglected
- Enforcement and penalties are weak
- Polluters are not paying... or changing

Three waste priorities

01

To prevent runaway negative impacts from municipal solid waste, actions must be taken urgently to halt waste growth and to shift towards zero waste and circular economy models.

02

Municipal solid waste management must be prioritised, in order to provide all communities with affordable services and end the harmful and widespread practice of open dumping and waste burning.

03

Producers and retailers need to be motivated to provide goods and services in ways that avoid waste generation, while the most problematic and polluting materials should be phased out.

Recommended pathways



- Harness data and **digitalisation**.
- Introduce mandatory schemes to ensure that **polluters pay**.
- Adopt **inclusive** approaches to engage citizens.
- Integrate the principles of a **just transition** into decision-making.
- Build **national expertise**.

Thank you



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