

Waste and the Climate

Why is waste a climate issue?



1 in 3 people globally do not have a waste management service, and often resort to burning their waste in backyards or at dumpsites.

Open burning of waste generates up to 10 per cent of anthropogenic climate emissions, double that of aviation. It also has significant negative impacts on public health.

Waste management is a cost-effective way for countries to reduce climate emissions.

In order to attract climate finance, the international community needs an agreed standard for estimating emissions from open burning.



Photo by Timothy Bouldry

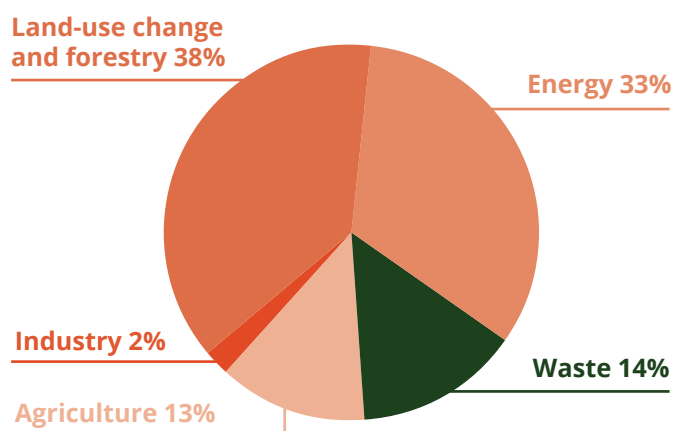
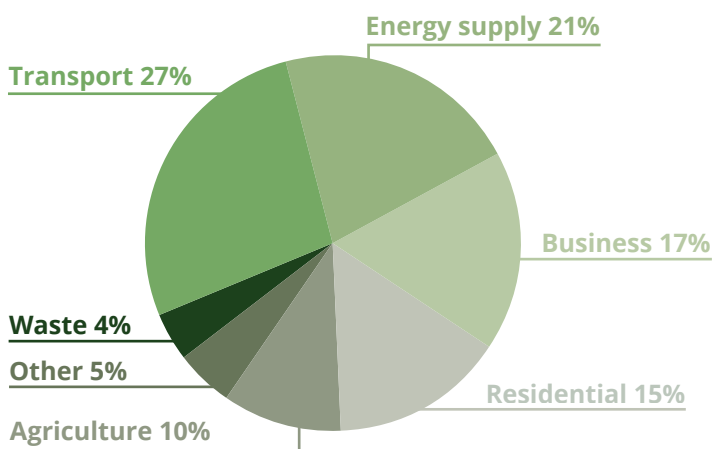
Open burning of waste emits black carbon (particulate matter) and harmful gases including dioxins and furans. These not only contribute to climate change, but also have serious health impacts, affecting childhood development and causing cancers among local populations.

The UK and Nigeria both generate around 500MtCO₂e per annum. In the UK, waste generates 4% of national emissions, whereas in Nigeria waste contributes 14% due to open burning.

United Kingdom
Population: 68million

500MtCO₂e per annum

Nigeria
Population: 200million



Data: UK Greenhouse Gas Emissions 2019 (DBEIS, UK government); Greenhouse Gas Emissions in Nigeria, 2014 (US Aid)

How WasteAid is making an impact through its projects

Many of WasteAid's activities **reduce climate emissions from the management of solid waste**. Re-use and recycling offsets the need for waste disposal, reducing:

- Demand for raw materials and carbon-intensive extraction and processing of products from mines and forests;
- Open burning which emits significant climate change gases and particulate matter;
- Biodegradable waste disposed of at dumpsites, where it has the potential to generate methane.

WasteAid's activities also **build climate resilience by:**

- Reducing waste blocking drains, which contributes to flash floods and associated water-borne and mosquito-borne diseases;
- Regenerating natural systems e.g. by using food waste to make compost that improves soil health and water retention, and helps preserve soils for future harvests.



Approach	Preventing climate emissions	Building climate resilience
Plastic collection and recycling in Cameroon, Kenya and The Gambia	Recycling waste reduces open burning.	Removing litter from drains reduces flood risk and disease.
Food waste collection and composting in The Gambia	Diverting food waste from dumpsites prevents methane emissions.	Converting woody waste into cooking fuel reduces deforestation. Converting food waste into compost improves soil health and water retention.
Circular economy innovation in South Africa, India and Vietnam	Designing out waste reduces the need for disposal. Keeping materials in the loop reduces the climate impacts of raw material extraction and processing.	Regenerating natural systems preserves natural resources for future generations.

Together for our planet

COP26 is the 26th United Nations Climate Change conference, to be held in the UK. This conference is the first time that Parties are expected to commit to enhanced ambition since COP21. Under the Paris Agreement, countries submitted Intended Nationally Determined Contributions, to reduce greenhouse gas emissions compared to a "business as usual" scenario. Under the framework of the Paris Agreement, each country is expected to submit enhanced Nationally Determined Contributions every five years, to ratchet up ambition to mitigate climate change.

COP27 is planned to be held in Africa, where open burning is one of the dominant forms of waste disposal. WasteAid and partners will keep the momentum with the aim of putting the waste management needs of billions of people on the agenda.



WasteAid and partners' goals for COP26 and COP27

Short-term goals

1. Poor waste management in lower- and middle-income countries is recognised by global decision makers as a significant greenhouse gas emitter and barrier to climate resilience;
2. Governments recognise that waste management is a cost-effective and achievable way to reduce climate emissions;
3. Global decision makers agree to an internationally agreed standard for estimating the climate impact of poorly managed waste;
4. A circular economy approach and its positive contribution to preventing climate change is recognised by policy makers and supported through funding decisions.

Mid-term goals

1. All countries include solid waste management in their Nationally Determined Contributions;
2. Climate finance is directed towards sustainable waste management.

Long-term goals

1. Funding and policy focus lead to improved waste management in lower- and middle-income countries;
2. Improved waste management reduces climate emissions and builds climate resilience.

Poverty, pollution and climate change are major global challenges which can all be alleviated through supporting WasteAid's work, are you ready to support us?

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