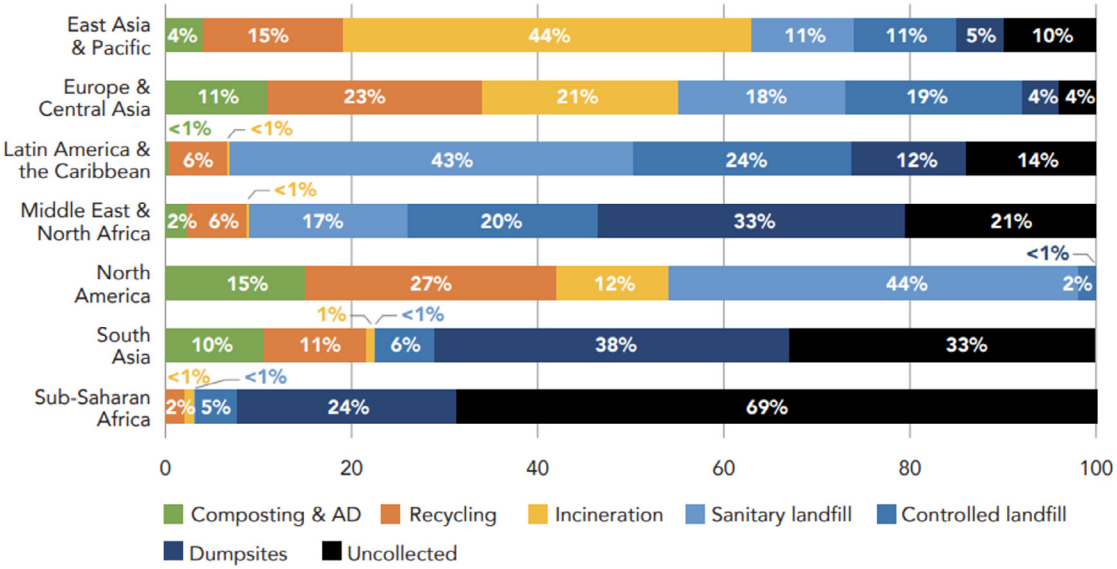
Urban Highlight 5

WHAT A WASTE 3.0: GLOBAL SNAPSHOT OF SOLID WASTE MANAGEMENT TOWARD CIRCULARITY UNTIL 2050

The third edition of the World Bank **flagship report** on global solid waste management provides a **valuable technical reference** consolidating structured data on all segments of municipal solid waste management (MSWM) – from generation to disposal – to support evidence-based decision marking and planning. EU Delegations can draw on this detailed report, accompanied by **online open access datasets** for country- and city-level, to gain in-depth understanding of the **size of both challenges and opportunities** of tackling waste management in their country and region.

While the cost of MSWM is already high and expected to rise, **the cost of inaction is even higher**. Existing shortfalls need to be addressed while preparing to meet future demand and this requires accelerating investment which in turn needs comprehensive data.

Figure S.4 Municipal solid waste treatment, disposal, and uncollected waste by region



Source: Original figure for this report.
Note: Proportion of uncollected and treated waste multiplied by the weight of waste generated in 2022. AD = anaerobic digestion.

Graph taken from What a Waste 3.0 Report.

Some key figures from the report:

- Cities already generate about **2.56 billion tonnes** of municipal waste per year; under business-as-usual scenarios this could reach **3.86 billion tonnes by 2050**, with the **fastest growth in Sub-Saharan Africa and South Asia**.
- Around **30% of waste is still uncollected or openly dumped**, driving pollution and health risks; universal basic systems are affordable compared to the long-term costs of inaction.
- The waste sector accounts for roughly **20% of global anthropogenic methane emissions** and employs **millions of workers**, making it a strategic entry point for climate action, circular economy and decent jobs.

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The report shows that municipal solid waste is growing faster than many cities anticipated. In **2022**, the world generated an estimated **2.56 billion tonnes** of municipal waste; without major policy changes this could rise to **3.86 billion tonnes by 2050**, a **50% increase**. The steepest growth is expected in **Sub-Saharan Africa** and **South Asia**, where urbanisation is rapid and systems are least prepared, with the lowest collection rates. This means partner cities might be planning infrastructure against outdated baselines, with a risk of under sized or quickly obsolete facilities.

Across regions and countries, service coverage and quality remain highly unequal. **High-income countries** collect almost all municipal waste, but coverage drops sharply in lower-income settings; in many low-income countries, **less than one-third** of waste is collected and only a small share is disposed of in controlled facilities. Globally, **around 30% of municipal waste is still openly dumped or left uncollected**, contributing to air and water pollution, flooding and local health impacts. The composition of waste suggests clear entry points: organics (food and garden waste) represent roughly **40–50%** of the stream in many low-income countries, while plastics make up about **10–15%** globally, dominated by single-use items. Yet only a small fraction of organic waste is composted or treated via anaerobic digestion, and mismanaged plastics continue to leak into rivers and oceans.

The report underlines that waste management is also a **climate and employment issue**. Decomposing waste in dumps and landfills makes the sector one of the largest global sources of **methane**, responsible for around **one-fifth of anthropogenic methane emissions**. At the same time, waste management and recycling provide livelihoods for around **18 million urban workers**, many of them informal and exposed to health and safety risks. Most countries now have solid waste and plastics legislation and a national strategy, but implementation and enforcement are uneven. Municipalities typically bear main responsibility for service delivery, working with a mix of public and private operators and facing recurrent budget shortfalls.

Global municipal waste management already costs over **US$250 billion per year**, and spending will rise if systems are not reformed. To achieve universal basic services, middle-income countries would need to invest only a small share of GDP, while low-income countries require more, but still at levels that are modest compared to the **social, environmental and climate costs of inaction**. However, public expenditure in many low- and middle-income countries remains below what is needed, and official development finance to the sector has been relatively limited.

The report, however, supports a shift from viewing waste purely as a municipal cost to seeing it as an area where investments can reduce emissions, address pollution and health risks, create local value chains and jobs, and enhance urban resilience. For EU Delegations, it provides a strong evidence base to bring waste systematically into **urban development, climate and circular-economy** dialogues.