

Environmental Sustainability 101

Where our rubbish ends up, what it costs us, and what actually helps. For school students and community groups.

1 THE PROBLEM

Most of what we buy follows the same path. Dig up materials, make a thing, use it, bin it. UNEP's *Global Waste Management Outlook 2024* projects municipal solid waste rising from **2.1 billion tonnes in 2023 to 3.8 billion tonnes by 2050**.

Plastic is the clearest case. The world makes about **460 million tonnes of plastic a year** and about **350 million tonnes of plastic waste**. Around a quarter of that waste is not handled properly. (Our World in Data, using OECD *Global Plastics Outlook*, 2022)

Hong Kong sends **10,510 tonnes of municipal solid waste to landfill every day**. The biggest single part of that is food.

1.40 kg

of municipal solid waste sent to landfill per person, per day, in Hong Kong — down from 1.44 kg the year before.

Environmental Protection Department, *Monitoring of Solid Waste in Hong Kong: Waste Statistics for 2024* (issued December 2025).



■ Food 29% ■ Paper 23% ■ Plastics 18% ■ Everything else 30%

Composition of Hong Kong municipal solid waste landfilled, 2024 (EPD)

2 WHY IT MATTERS

It costs a lot

Add up the pollution, the illness and the climate damage and waste cost the world about **USD 361 billion in 2020**. If nothing changes, UNEP expects roughly USD 640 billion a year by 2050. (UNEP, 2024)

It warms the planet

Human activity has raised global surface temperature to **1.1°C above 1850–1900**, measured over 2011–2020. Making things nobody ends up using, then shipping them around, adds to that. (IPCC AR6 Synthesis Report, 2023)

Some people get more of it

Landfills and incinerators usually end up near the people with the least say over where they go. So do the gaps in collection, and the people who sort waste informally for a living. (UNEP, 2024)

3 WHAT CAN BE DONE

1 Prevent before you recycle

The waste hierarchy puts avoiding and reusing above recycling. Buy one less thing, repair the one you have, refill the bottle you already carry, and there is nothing to throw away in the first place.

2 Keep materials in use

The Ellen MacArthur Foundation sets out three principles for a circular economy: eliminate waste and pollution, keep products and materials in use, and regenerate nature.

3 Sort it properly

Hong Kong recovered **34% of municipal solid waste in 2024**, up from 33%. Food waste recycling went up 33% in a year, from 79,000 to 104,800 tonnes, as more collection points opened. (EPD, 2024)

4 Weigh it, then tell people

Weigh what your school, estate or event actually throws out. Do it before you change anything and again afterwards, so you can see whether the change did anything. A real number on the wall usually works better than a poster.

One caution. About **80% of Hong Kong's recovered recyclables are shipped elsewhere for processing** (EPD, 2024). Our recycling only works for as long as those places keep taking the material. Carry on sorting — just do not treat recycling as the whole answer.

4 LEARN MORE AND TAKE PART

- UNEP — Global Waste Management Outlook 2024
unep.org/resources/global-waste-management-outlook-2024
- Hong Kong Waste Reduction Website
wastereduction.gov.hk/en-hk
- Our World in Data — Plastic Pollution
ourworldindata.org/plastic-pollution
- HK EPD — Waste statistics for Hong Kong (annual reports)
wastereduction.gov.hk/en-hk/resources-centre/waste-statistics
- Ellen MacArthur Foundation — What is a circular economy?
ellenmacarthurfoundation.org/topics/circular-economy-introduction
- IPCC — AR6 Synthesis Report: Climate Change 2023
ipcc.ch/report/ar6/syr

4 TAKE PART WITH SUSTAINIFY

Sustainify is a youth-led organisation in Hong Kong. If you have an idea about waste or everyday shopping, what we offer is mentorship, networks and educational materials. A few sentences is enough to start. You do not need a registered organisation or a finished prototype. We can only offer as much as we have people for, so working with us does not come with funding attached.

MENTORSHIP

We talk through the problem, who it affects, and what you could realistically do first.

NETWORKS

Introductions to a school, an estate or a recycler who could host that first activity.

EDUCATIONAL MATERIALS

Guides, worksheets and explainers like this one, to work on between meetings.

FROM ENQUIRY TO A FIRST ACTIVITY

1. **Bring the idea.** The need you have seen, who would benefit, and what help you want.
2. **Talk it over.** What it would change, why you want to do it, and whether we can actually help.
3. **Agree one small first activity.** A waste audit, a repair afternoon or a workshop. Name who is leading it and pick a date.
4. **Prepare and deliver.** Plan it with the people involved, then confirm the arrangements with the host.
5. **Learn and decide what comes next.** Ask people how it went, write down what happened, then run it again, change it, or stop.

WHAT TO TELL US WHEN YOU WRITE

- What idea would you like to explore?
- What have you tried so far, if anything?
- How much time can you contribute?
- Who could benefit, and what need have you noticed?
- What help would make the biggest difference?
- How would you like us to get in touch?

Write to us in plain language. If you are neurodivergent that is no disadvantage here; just tell us how you prefer to communicate. **Sustainable everyday choices is one of our three workshop themes**, and this explainer is the material behind it. Write to info@sustainifysdg.com