

# The Challenge of Zero Waste

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We are generating too much of it. It is ubiquitous. It chokes the rivers; contaminates the vast oceans; defaces the pristine mountain slopes; poisons the air; degrades the land; kills millions of life forms; and affects the health of millions of humans. Yes, it is WASTE!

Waste is a grave, real, and tangible problem, and it has to be dealt with fast. To highlight this problem, the United Nations General Assembly (UNGA) on 14 December 2022, passed a resolution and declared March 30 as *International Day of Zero Waste*. The aim was to draw the world's attention to this problem; to educate the public; to mobilise political will and resources to address it.

**T**OO much and wrongly disposed waste — Garbage or Trash — is a global problem. Every individual is a waste producer. Every house, every business, every production and service industry produces waste. According to the United Nations (UN), more than 2.1 billion tonnes of Municipal Solid Waste (MSW) were produced in 2023. MSW includes waste from packaging, electronics, plastic products of different types, food, clothes, diapers, etc. Even a lot of industrial waste finds its way to dumps. 2.1 billion tonnes of waste packed in standard shipping containers placed end to end, will encircle the equator 25 times! Shocking but true. If proper measures are not taken, waste is expected to rise to 3.8 billion tonnes by 2050.

We are Midas but with a Garbage touch. Many things man has produced in the lab so far are generally non-biodegradable, and when dumped, they pile up as waste. The problem of waste was manageable in the past. Our lifestyle was based on circularity, and we wasted the bare minimum. Burning and dumping took care of almost all waste. The nature and quantity of present-day waste became a problem, especially after the Industrial Revolutions 1.0 to 4.0. Each Industrial Revolution, aided by new inventions, increased and sped up production. The invention of thousands of synthetic chemicals and products developed from petroleum was initially fantastic. They were cheap and unlimited compared to those from natural sources. The World War II-associated