REPUBLIC OF THE PHILIPPINES
PHILIPPINE STATISTICS AUTHORITY

PRESS RELEASE

Compendium of Philippine Environment Statistics
Component 3: Residuals

Date of Release: 07 December 2023
Reference No. 2023 - SSO-231

The Compendium of Philippine Environment Statistics (CPES) is a compilation of environment and related socioeconomic statistics collected from various government agencies. The CPES has six components, namely: 1) environmental conditions and quality, 2) environmental resources and their use, 3) residuals, 4) extreme events and disasters, 5) human settlements and environmental health, and 6) environmental protection, management, and engagement.

Component 3 of the CPES compiles statistics on residuals, which are defined as flows of solid, liquid, and gaseous materials, and energy that are discarded, discharged, or emitted by establishments and households through processes of consumption, production, or accumulation. It has four subcomponents: Emissions to Air, Generation and Management of Wastewater, Generation and Management of Waste, and Release of Chemical Substances.

Emissions to Air

This subcomponent covers sources and quantities of gaseous and particulate substances released to the atmosphere by establishments and households through production, consumption, and accumulation processes.

The Montreal Protocol is a global agreement that commits parties to take concrete measures to protect the ozone layer by freezing, reducing, or ending production and consumption of controlled substances. Ozone-depleting substances (ODS), which include hydrochlorofluorocarbons (HCFCs) and methyl bromide, are controlled under the Montreal Protocol and its amendments.[1]

[1] Department of Environment and Natural Resources Administrative Order (DAO) 2013-25: Revised Regulations on the Chemical Control Order for Ozone Depleting Substances (ODS)

In 2022, the country used 1.20 million kilograms of HCFCs, an increase of 7.7 percent from 1.12 million kilograms in 2021. Meanwhile, 29.39 thousand kilograms of methyl bromide were used in 2022. This was a 28.1 percent decline from the reported 40.90 thousand kilograms in 2021. (Table 3.3)

Generation and Management of Wastewater

This subcomponent covers statistics on the generation, management, discharge, and pollutant content of wastewater. Wastewater is a discarded water that is no longer needed by the owner or user.

The volume of wastewater generated in the West Zone of Manila increased to 421.56 million cubic meters in 2022 from 415.72 million cubic meters in 2021. Of the total wastewater generated in the West Zone, 15.6 percent was discharged to the environment after treatment, while the remaining 84.4 percent was discharged without treatment. (Table 3.4.1)

Meanwhile, in the East Zone of Manila, 400.65 million cubic meters of wastewater was generated in 2022. Of the total wastewater generated in the East Zone, 13.7 percent was discharged to the environment after treatment, while 86.3 percent was discharged without treatment. (Table 3.4.2)

Generation and Management of Waste

This subcomponent covers statistics on the amount and characteristics of waste. Waste includes discarded materials, in solid or liquid state, that are no longer needed by the owner or user.

In 2022, the country generated a total of 252,758.67 tons of hazardous waste. Among the types of generated hazardous waste, oil contributed the largest amount of 71,958.19 tons or equivalent to 28.5 percent. This was followed by miscellaneous wastes such as pathological or infectious wastes, pharmaceuticals and drugs, pesticides, and waste electrical and electronic equipment[2] with 40,344.33 tons or 16.0 percent contribution in 2022. On the other hand, organic chemicals contributed the least with 203.95 tons or 0.1 percent share. The total hazardous waste treated in 2022 reached 247,010.66 tons. (Tables 3.6.11 and 3.8.11)

[2] DAO No. 2013-22: Revised Procedures and Standards for the Management of Hazardous Wastes (Revising DAO 2004-36).

As of 2022, 153 treatment, storage, and disposal (TSD) facilities were registered. TSD facilities are facilities where hazardous wastes are transported, stored, treated, recycled, or disposed of.[3] (Table 3.9)

In addition, the country has 11,779 material recovery facilities and 290 sanitary landfills as of 2022. These facilities served as solid waste disposal facilities. Solid waste refers to all discarded household, commercial waste, non-hazardous institutional and industrial waste, street sweepings, construction debris, agriculture waste, and other non-hazardous/non-toxic solid waste.[4] (Table 3.7)

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[3] Ibid.
[4] Philippine Republic Act No. 9003 or the "Ecological Solid Waste Management Act of 2000".