



Background of the Dataset, 2024

Dataset Overview from the Source

“The United Nations Sustainable Development Goals (SDGs) outline global development targets set for achievement by 2030. The SDG Tracker utilizes data from the *Our World in Data* database, incorporating official statistics from the UN and other international bodies to monitor progress towards these goals. This accessible resource empowers individuals worldwide to monitor their governments' adherence to the agreed-upon objectives. While data is available for numerous indicators, collaborative efforts are ongoing to fill existing gaps and ensure comprehensive tracking of global progress. Initially launched in 2018 and revised in 2023, the tracker remains dedicated to providing the most recent data and updates on SDG developments until the culmination of the 2030 Agenda.”

Our World in Data team (2023) - “SDG Tracker: Measuring progress towards the Sustainable Development Goals” Published online at [OurWorldInData.org](https://ourworldindata.org). Retrieved from: '<https://ourworldindata.org/sdgs>' [Online Resource]

About the Dataset

In the Excel file, you will find a total of 22 sheets; of these, 21 sheets contain data belonging to their respective SDG Indicator. These sheets represent individual datasets, which follow the following sequence.

- **Country:** The name of the country
- **Code:** The country code
- **Year:** The year of the survey
- **SDG Dedicated Column:** This column contains data unique to the SDG Indicator of the specific dataset.

The "Master Sheet" consolidates data from all individual sheets for ease of use, merging information under common columns such as Country, Code, Year, and SDG Indicator-specific data.

The following are the SDG Indicators used in the dataset. Please note that SDG Indicator 10.b.1 and 12.4.2 have been divided into separate datasets for ease of understanding, and are found on separate sheets on the Excel file:

- **7.1.1** - Access to electricity (% of population)
- **7.1.2** - Access to clean fuels and technologies for cooking (% of population)
- **7.2.1** - Renewable energy share in the total final energy consumption (%)
- **7.3.1** - Energy intensity level of primary energy (MJ/\$2017 PPP GDP)
- **7.a.1** - International financial flows to developing countries in support of clean energy R&D and renewable energy production (millions of constant 2020 United States dollars)
- **7.b.1** - Installed renewable electricity-generating capacity (watts per capita)
- **9.4.1** - Annual CO₂ emissions per GDP (kg per international-\$)
- **9.5.1** - Research and development expenditure (% of GDP)
- **9.a.1** - Total official flows for infrastructure, by recipient countries (millions of constant 2021 United States dollars)
- **10.b.1** - Total assistance for development, by recipient countries (millions of current United States dollars)
- **10.b.1** - Total assistance for development, by donor countries (millions of current United States dollars)
- **12.2.2** - Domestic material consumption per capita, by type of raw material (tonnes)
- **12.4.2** - Total waste generation, by Agriculture, forestry and fishing (Tonnes)
- **12.4.2** - Total waste generation, by Household activity (Tonnes)
- **12.4.2** - Total waste generation, by Construction (Tonnes)
- **12.4.2** - Total waste generation, by Manufacturing (Tonnes)
- **12.4.2** - Total waste generation, by Electricity, gas, steam and air conditioning supply (Tonnes)
- **12.4.2** - Total waste generation, by Mining and quarrying (Tonnes)
- **12.4.2** - Total waste generation, by other activity (Tonnes)
- **17.1.1** - Total government revenue (budgetary central government) as a proportion of GDP (%)

- **17.8.1** - Individuals using the Internet (% of population)

Sustainable Development Goals Used

SDG 7: Affordable and Clean Energy

- **7.1.1 - Access to electricity (% of population)**
 - Definition of the SDG indicator: Indicator 7.1.1 is the “proportion of population with access to electricity” in the UN SDG framework.
 - This indicator is measured as the share of the population that has access to consistent sources of electricity, focusing on access where the primary source of lighting is the local energy provider, solar systems, mini-grids and stand-alone systems. It does not consider more limited back-up sources like generators or batteries.
- **7.1.2 - Access to clean fuels and technologies for cooking (% of population)**
 - Definition of the SDG indicator: Indicator 7.1.2 is the “proportion of population with primary reliance on clean fuels and technology” in the UN SDG framework.
 - This is measured as the share of the total population using clean fuels and technologies for cooking, heating and lighting, out of the total population that report using any fuel for cooking, heating, or lighting. Use of clean fuels or technologies such as natural gas, electricity, or clean cookstoves reduce exposure to indoor air pollutants, a leading cause of death and disease in low-income households.
- **7.2.1 - Renewable energy share in the total final energy consumption (%)**
 - Definition of the SDG indicator: Indicator 7.2.1 is “renewable energy share in the total final energy consumption” in the UN SDG framework.
 - This is measured as consumption of renewable energy – which includes solar, wind, geothermal, hydropower, bioenergy, and marine sources – as a share of final energy consumption. Final energy consumption is defined as the total energy consumption after subtracting non-energy use and energy losses.
- **7.3.1 - Energy intensity level of primary energy (MJ/\$2017 PPP GDP)**

- Definition of the SDG indicator: Indicator 7.3.1 is “energy intensity measured in terms of primary energy and GDP” in the UN SDG framework.
- This is measured as the energy supplied to the economy per unit value of economic output. It’s given in megajoules per dollar (adjusted for cross-country price differences and inflation).
- **7.a.1 - International financial flows to developing countries in support of clean energy R&D and renewable energy production (millions of constant 2020 United States dollars)**
 - Definition of the SDG indicator: Indicator 7.a.1 is “international financial flows to developing countries in support of clean energy research and development and renewable energy production, including in hybrid systems” in the UN SDG framework.
 - This indicator is measured in terms of two sources of financial flows. The first, which is monitored by the Organization for Economic Co-operation and Development (OECD), refers to relevant official loans, grants, and equity investments from donor countries and multilateral agencies to countries eligible to receive official development assistance who are thus on the OECD’s Development Assistance Committee (DAC) List. The second, which is monitored by the International Renewable Energy Agency (IRENA), refers to additional relevant loans, grants, and equity investments to countries in developing regions (as defined by the United Nations). Relevant purposes include both hybrid and fully renewable sources.
 - The units of measurement are million United States dollars at constant prices, with the base year for prices updating with subsequent data releases.
- **7.b.1 - Installed renewable electricity-generating capacity (watts per capita)**
 - Definition of the SDG indicator: Indicator 7.b.1 is “installed renewable energy-generating capacity in developing countries (in watts per capita)” in the UN SDG framework.
 - This indicator is defined as the installed capacity of renewable energy-based power plants, divided by the total population of a country. This includes capacity from power plants using hydropower, marine, wind, solar, bioenergy, and geothermal energy.

SDG 9: Industry, Innovation and Infrastructure

- **9.4.1 - Annual CO₂ emissions per GDP (kg per international-\$)**

- Definition of the SDG indicator: Indicator 9.4.1 is “CO₂ emissions per unit of value added” in the UN SDG framework.
- This indicator is a measure of carbon intensity; it reports the quantity of carbon dioxide emitted per unit of economic value (kilograms of CO₂ emitted per dollar of GDP).

- **9.5.1 - Research and development expenditure (% of GDP)**

- Definition of the SDG indicator: Indicator 9.5.1 is “research and development expenditure as a proportion of GDP” in the UN SDG framework.
- This indicator measures expenditure on research and development (R&D) activities as a percentage of total gross domestic product (GDP) of a given country.
- Expenditures for research and development are current and capital expenditures (both public and private) on creative work undertaken systematically to increase knowledge, including knowledge of humanity, culture, and society, and the use of knowledge for new applications. R&D covers basic research, applied research, and experimental development.

- **9.a.1 - Total official flows for infrastructure, by recipient countries (millions of constant 2021 United States dollars)**

- Definition of the SDG indicator: Indicator 9.a.1 is the “total official international support (official development assistance plus other official flows) to infrastructure” in the UN SDG framework.
- Official development assistance refers to flows provided by official agencies, with the primary goal of promoting economic development and welfare in developing countries, and are concessional, with a grant element of at least 25 per cent.

SDG 10: Reduced Inequalities

*SDG Indicator 10.b.1 has been divided into 2 sub-datasets, for ease of understanding

Definition of the SDG indicator: Indicator 10.b.1 is the “total resource flows for development, by recipient and donor countries and type of flow (e.g. official development assistance, foreign direct investment and other flows)” in the UN SDG framework.

Official development assistance refers to flows to countries and territories on the Organization for Economic Co-operation and Development’s Development Assistance Committee (DAC) and to multilateral institutions which meet a set of criteria related to the source of the funding, the purpose of the transaction, and the concessional nature of the funding.

- **10.b.1 - Total assistance for development, by recipient countries (millions of current United States dollars)**
- **10.b.1 - Total assistance for development, by donor countries (millions of current United States dollars)**

SDG 12: Responsible Consumption and Production

- **12.2.2 - Domestic material consumption per capita, by type of raw material (tonnes)**
 - Definition of the SDG indicator: Indicator 12.2.2 is “domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP” in the UN SDG framework.
 - Domestic Material Consumption measures the total amount of material directly used in an economy. It measures material production, rather than consumption because it is not adjusted for trade.
 - “Materials” include biomass, fossil fuels, metal ores and non-metallic minerals.

*SDG Indicator 12.4.2 has been divided into 7 sub-datasets, for ease of understanding

Definition of the SDG indicator: Indicator 12.4.2 is “(a) hazardous waste generated per capita; and (b) proportion of hazardous waste treated, by type of treatment” in the UN SDG framework.

Hazardous waste is defined as waste that is harmful to human health, or the environment. This indicator captures how much hazardous waste is generated, and how it is treated or disposed of.

- **12.4.2 - Total waste generation, by Agriculture, forestry and fishing (Tonnes)**
- **12.4.2 - Total waste generation, by Household activity (Tonnes)**
- **12.4.2 - Total waste generation, by Construction (Tonnes)**
- **12.4.2 - Total waste generation, by Manufacturing (Tonnes)**
- **12.4.2 - Total waste generation, by Electricity, gas, steam and air conditioning supply (Tonnes)**
- **12.4.2 - Total waste generation, by Mining and quarrying (Tonnes)**
- **12.4.2 - Total waste generation, by other activity (Tonnes)**

SDG 17: Partnerships for the Goals

- **17.1.1 - Total government revenue (budgetary central government) as a proportion of GDP (%)**
 - Definition of the SDG indicator: Indicator 17.1.1 is “total government revenue as a proportion of GDP, by source” in the UN SDG framework.
 - Because budgetary accounts may not include all central government units (such as social security funds), they usually provide an incomplete picture. In federal states the central government accounts provide an incomplete view of total public finance.
- **17.8.1 - Individuals using the Internet (% of population)**
 - Definition of the SDG indicator: Indicator 17.8.1 is the “proportion of individuals using the Internet” in the UN SDG framework.

These variables offer a comprehensive framework for assessing and analyzing various aspects of sustainable development and energy access worldwide. By examining metrics such as access to electricity, renewable energy consumption, CO2 emissions, research expenditure, waste generation, and internet usage, policymakers, researchers, and stakeholders can gauge progress towards achieving Sustainable Development Goals and broader sustainability targets.