



**15TH NATIONAL
CONVENTION
ON STATISTICS**

03-05 OCTOBER 2022

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Compendium of Philippine Environment Statistics and Its Link to the Global Set of Climate Change Statistics and Indicators: Assessment and Challenges

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Statistics on Climate Change and Environmental Sustainability

Crowne Plaza Galleria Manila

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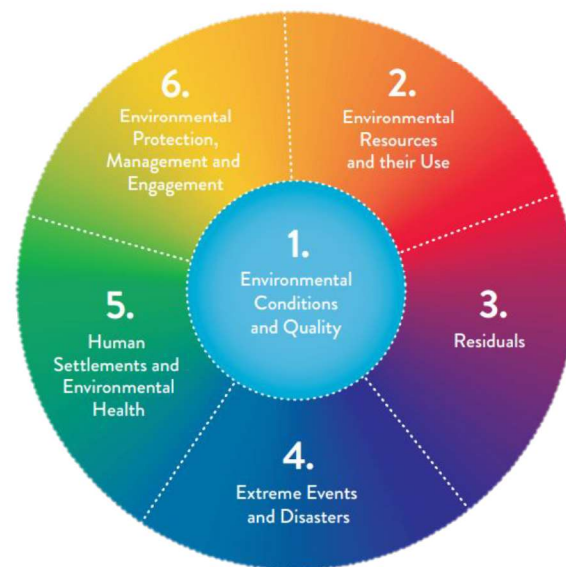
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Framework for the Development of Environment Statistics (FDES)

The FDES is a flexible, multi-purpose conceptual and statistical framework that brings together data from various subject areas and sources to address environmental issues and aspects relevant to evidence-based policy analysis and decision making.





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Compendium of Philippine Environment Statistics (CPES)

The Compendium is a compilation of statistical information collected from various government agencies, presented as an adoption of the FDES 2013. CPES focuses on the core set of environment statistics of the six components of FDES.

Global Set of Climate Change Statistics and Indicators (GSCCSI)

The GSCCSI is a comprehensive statistical framework, with statistics, indicators, and metadata, designed to support countries in preparing their own sets of climate change statistics and indicators according to their individual concerns, priorities, and resources.



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The scope of the global set covers the climate change aspects defined by the five policy areas of the Intergovernmental Panel on Climate Change, namely **drivers, impacts, vulnerability, mitigation, and adaptation.**





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Drivers

Changes in the concentrations of greenhouse gases (GHGs) and aerosols in the atmosphere, land cover, and solar radiation that affect the energy balance of climate systems.

Global Set of Climate Change Statistics and Indicators		FDES	CPES
Total (Including repeating indicators)	16	19	9
Statistics and Indicators*	Total primary energy production from fossil fuels	2.2.2.a.1 Production of energy: total production	Table 2.5.10 Energy Balance Table, 2019
	Total greenhouse gas emissions per year (SDG 13.2.2)	3.1.1.a Total emissions of direct greenhouse gases (GHGs, excluding LULUCF)	Table 3.1 Emissions of Greenhouse Gases by Sector, 2010
	Urban population as a proportion of total population	5.1.1.a Population living in urban areas	Table 5.1 Total Population, Urban Population, and Level of Urbanization by Region: 2010 and 2015
*Sample Statistics			



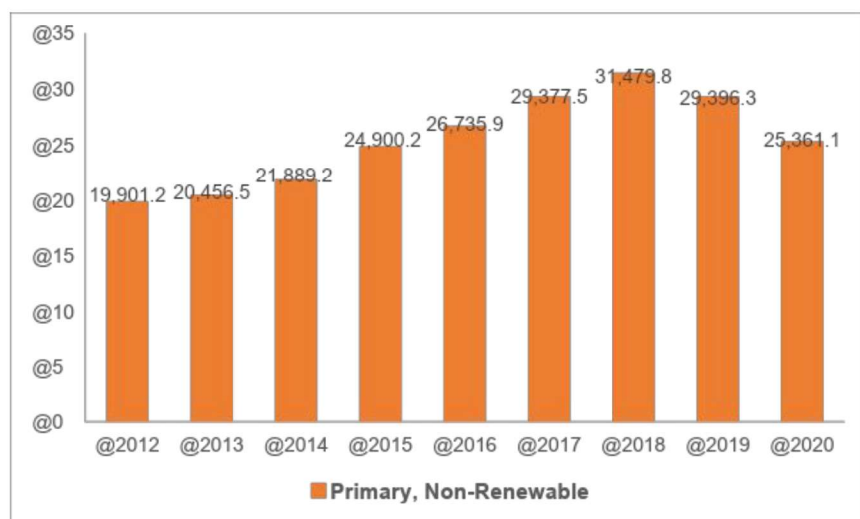
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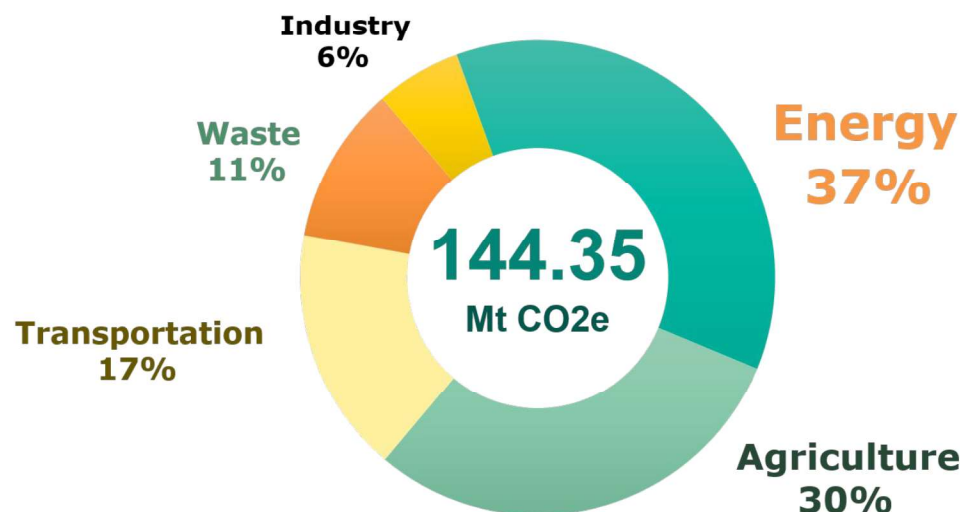


Drivers



**Total Non-Renewable Energy Supply
2012 to 2020, in million Tons of Oil Equivalent (mTOE)**

Source: Department of Energy



**Sectoral Greenhouse Gas Emissions
in 2010 in million metric tons of CO2 equivalent (Mt CO2e)**

Source: Climate Change Commission



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Impacts

The effects of climate change on natural and human systems.

Global Set of Climate Change Statistics and Indicators		FDES	CPES
Total (Including repeating indicators)	39	57	41
Statistics and Indicators*	Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population	4.1.2.a People affected by natural extreme events and disasters	Table 4.3 Number of Deaths due to Natural Extreme Events and Disasters by Type, 2010-2019 Table 4.9 Number of Injured due to Natural Extreme Events by Type 2010-2019 Table 4.7 Major Natural Extreme Events and Disasters, 2010-2019
	Frequency of hazardous events and disasters	4.1.1.a Occurrence of hazardous events and disasters	Table 4.1 Occurrence of Natural Extreme Events and Disasters by Type for Minor Incidents, 2010 to 2019 Table 4.2 Occurrence of Human Induced Disasters by Type for Minor Incidents, 2010 to 2019 Table 4.7 Major Natural Extreme Events and Disasters, 2010 to 2019



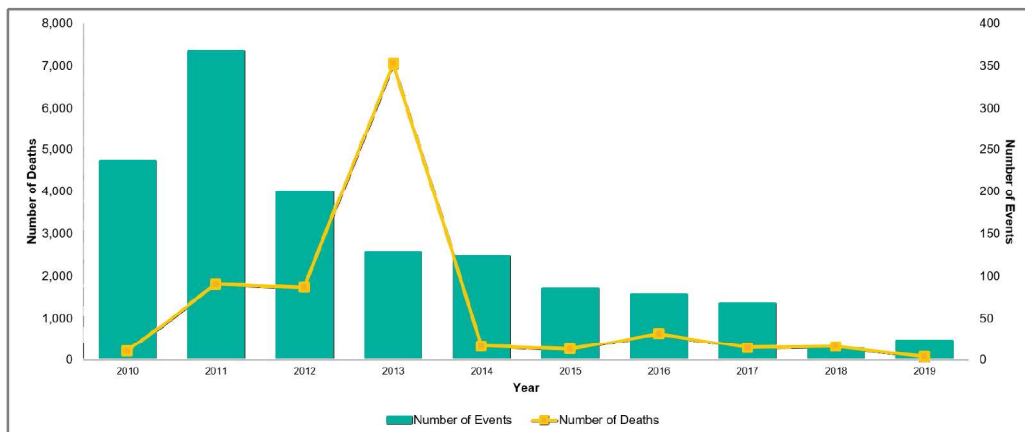
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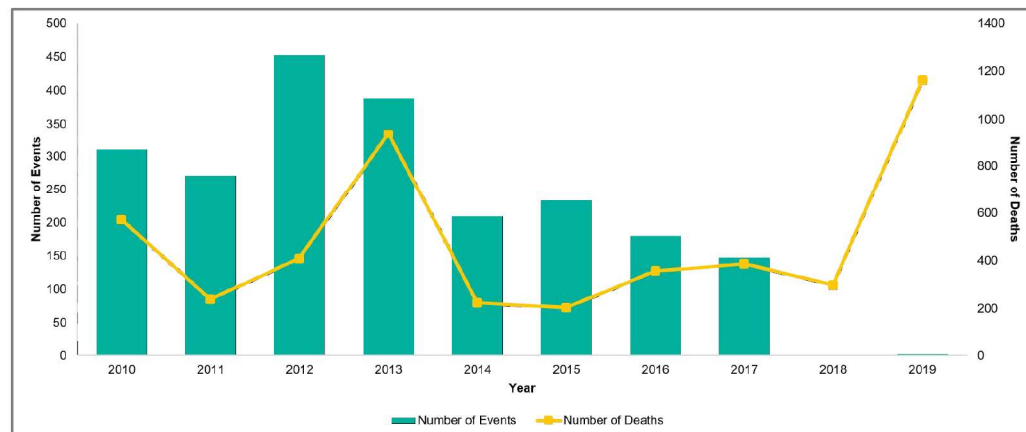
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Impacts



Number of Incidents and Deaths due to Natural Extreme Events and Disasters from 2010 to 2019



Number of Incidents and Deaths due to Human Induced Disasters from 2010 to 2019

Source: Office of Civil Defense



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Vulnerability

The degree to which a system is sensitive to, or unable to cope with, the detrimental consequences of climate change, especially climatic variability and extremes.

Global Set of Climate Change Statistics and Indicators		FDES	CPES
Total (Including repeating indicators)	15	22	5
Statistics and Indicators*	Proportion of population using safely managed drinking water services (SDG 6.1.1)	5.1.2.a Population using an improved drinking water source	Tables 5.3.1 to 5.3.10 Number of Households with Access to Improved Water Supply by Region and by Level, 2010 to 2019



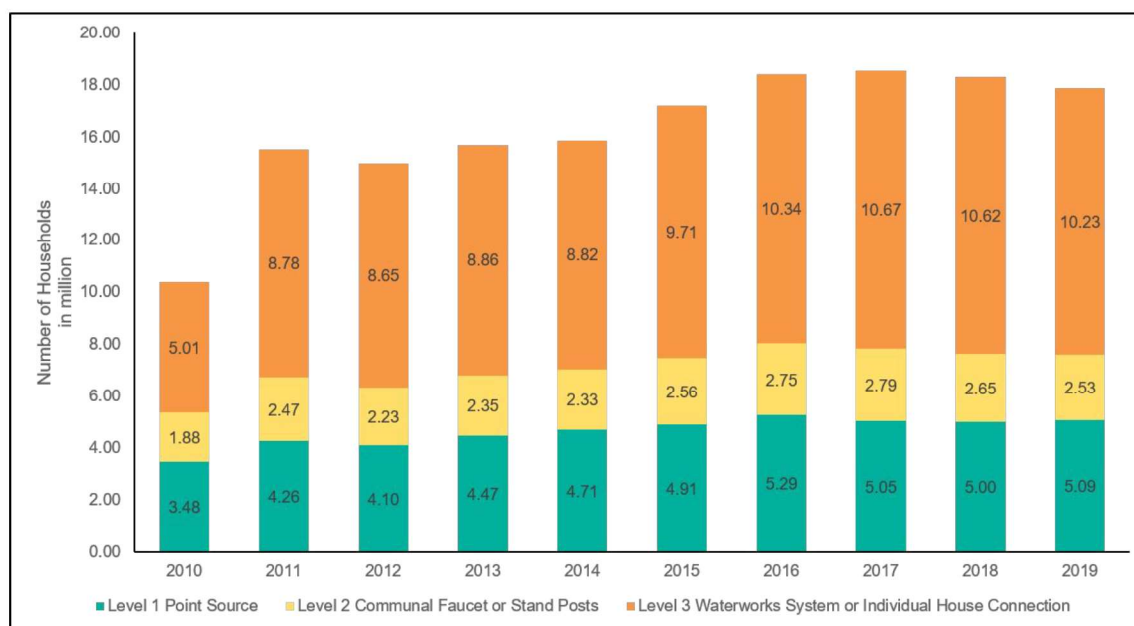
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Vulnerability



**Number of Households with Access to Improved
Water Supply by Level, 2010 to 2019**

Source: Department of Health



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Mitigation

An anthropogenic intervention to reduce the sources or enhance the sinks of greenhouse gases.

Global Set of Climate Change Statistics and Indicators		FDES	CPES
Total (Including repeating indicators)	6	7	5
Statistics and Indicators*	Production of renewable energy as a proportion of total energy production	2.2.2.a.3 Production from renewable sources 2.2.2.a.1 Production of energy: total production	Tables 2.5.1 to 2.5.10 Energy Balance Table, 2010 to 2019
	Share of climate change mitigation expenditure in relation to gross domestic product	6.1.1.a Government environmental protection and resource management expenditure	Table 6.1.1 Climate Change (CC) Expenditures by Department and Special Purpose Fund Table 6.1.2 Climate Change (CC) Expenditures by National Climate Change Action Plan (NCCAP) Table 6.2 Details of Sectoral Allocation of National Government Expenditures



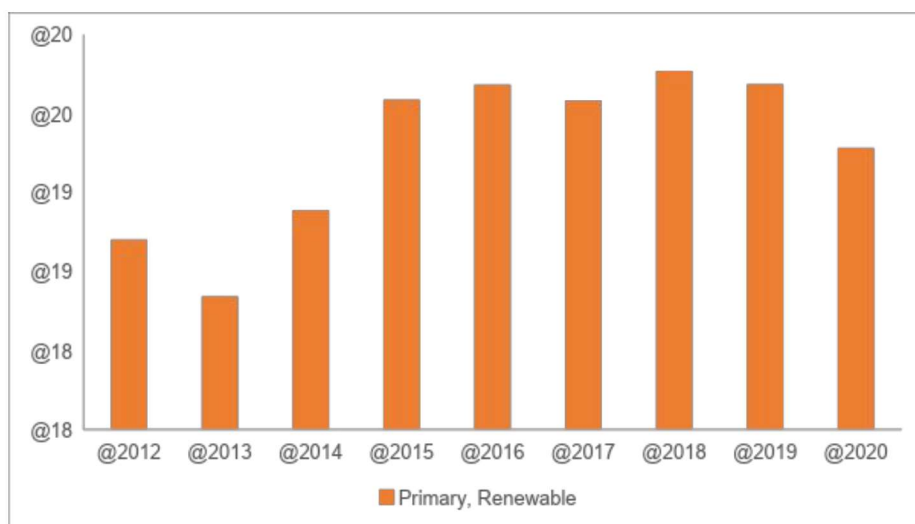
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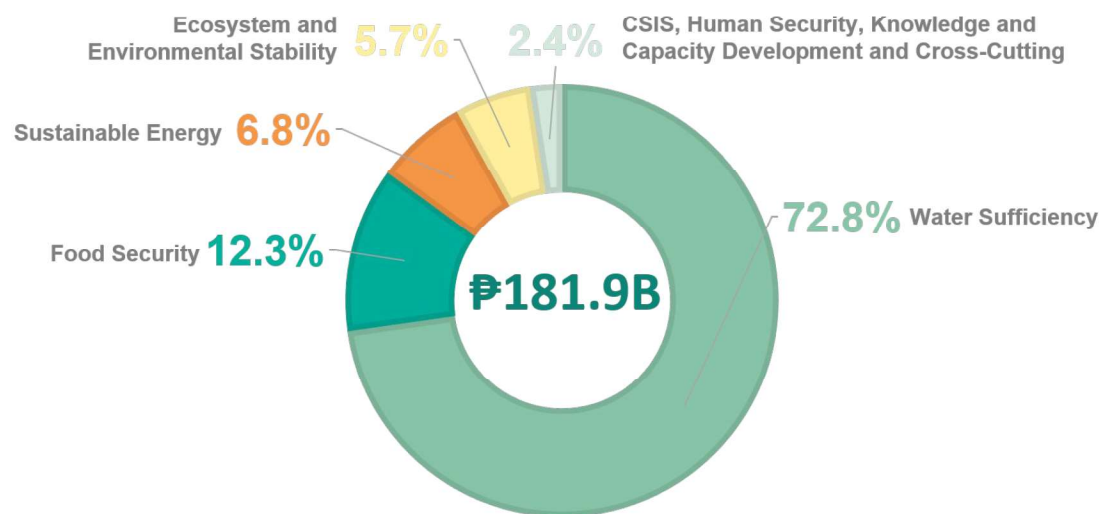


Mitigation



Total Renewable Energy Supply
2012 to 2020, in million Tons of Oil Equivalent (mTOE)

Source: Department of Energy



Government Climate Change (CC)
Expenditures, 2021

Source: Climate Change Commission



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Adaptation

There are several forms of adaptation, such as anticipatory and reactive adaptation, private and public adaptation, and autonomous and planned adaptation.

Global Set of Climate Change Statistics and Indicators		FDES	CPES
Total (Including repeating indicators)	21	27	13
Statistics and Indicators*	Share of government adaptation expenditure in relation to gross domestic product	6.1.1.a Government environmental protection and resource management expenditure	Table 6.1.1 Climate Change (CC) Expenditures by Department and Special Purpose Fund Table 6.1.2 Climate Change (CC) Expenditures by National Climate Change Action Plan (NCCAP) Table 6.2 Details of Sectoral Allocation of National Government Expenditures
	Number of units dedicated to climate change in government structures	6.2.1.a Government environmental institutions and their resources	Table 6.3.1 to 6.3.3 Environmental Institutions and its Resources
	Extent to which (i) global citizenship education and (ii) education for sustainable development are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment (SDG 13.3.1)	6.4.2.a.2 Number and description of environmental education programs in schools	Table 6.13 Number of Students Pursuing Environment-Related Higher Education, AY 2012-2013 to 2020-2021



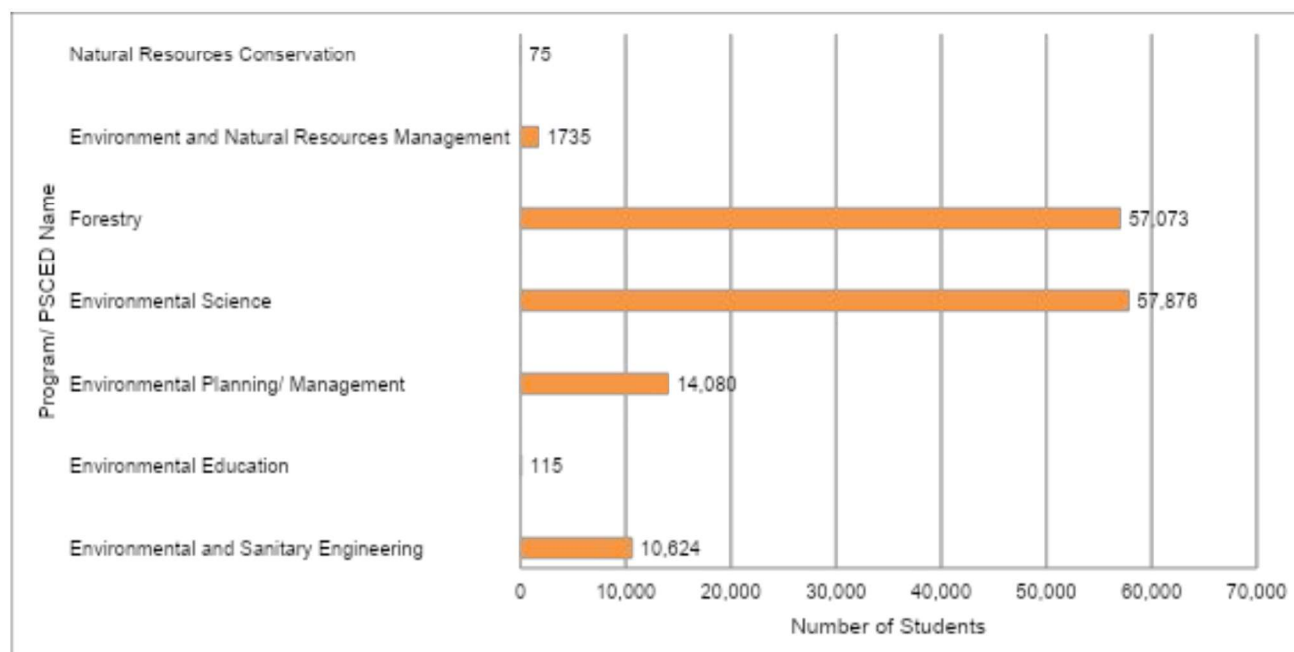
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Adaptation



Number of Students Pursuing Environment-Related Higher Education, 2012 to 2021

Source: Commission on Higher Education



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Data Gaps and Challenges

- a) Capacity building of the Global Set of Climate Change Statistics and Indicators from the UNSD and creating a basic assessment tool for country's compilation by offering continuous support in e.g., eLearning platform, development of training materials such as modules and best practices, and or regional workshops;
- b) Alignment of definitions and methodologies with existing compilations by strengthening environment statistics using FDES;
- c) Provision of data for thematic areas particularly those data not captured in the CPES compilations; and
- d) Strengthening coordinative mechanism for the institutionalization of the compilation and frequency of data collections.



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Thank you!



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