06a Total CO2 intensity of energy used in production activities of the national economy

Indicator type **Core indicator**   *Published*

Versioning

First publication | 1/26/2018 | Latest update | 9/17/2019

Area and sub-area

Area and sub-area | Drivers | Production

Presentation

Tier | 2

Indicator definition and description | CO2 emissions per unit of energy used in production activities (total ISIC industries) of national economy.

Unit of measure | Kilotonnes (kt) of CO2/Terajoule (TJ)

Coverage | Production activities

Spatial aggregation | National economy

Reference period | Calendar year

Update frequency | Annual

Base period |

Disaggregation (operational indicators)

Disaggregation (operational indicators)	Comments
Economic sector (ISIC) and households	Carbon intensity of energy by industry (ISIC classification); Here only a disaggregation by economic sectors is possible (households not included in the indicator)
Spatial	
Energy product (SIEC)	

Other related -indicators (e.g.contextual, proxy, other core indicators)

ID	Subindicator	Type
06b	Carbon intensity of TPES	Proxy indicator
29a	Renewable energy share in total energy use by the national economy	Core indicator

Relevance

Policy context and rationale | One possible mechanism to reduce the CO2 emissions is to change the energy mix of production processes. Relevant to climate change mitigation policies and measures implemented under the UNFCCC, its Kyoto Protocol and the Paris Agreement under the UNFCCC

Related SDG indicator (SDG I.) | Not applicable

Relation w SDG-I.

Related Sendai Framework I. | Not applicable

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Policy references

Document title	Link
Paris Agreement (United Nations, 2015)	https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement

Methodology

Methodology for indicator calculation

This indicator is calculated as CO2 emissions (without emissions from biomass used as a fuel) from total ISIC Industries (01-99) in kilotonnes divided by the intermediate consumption of energy products of total ISIC Industries (01-99) in TJ.

Methodology references

Document title	Link
Manual for air emission accounts (Eurostat, 2015)	https://ec.europa.eu/eurostat/web/products-manuals-and-guidelines/-/KS-GQ-15-009
System of Environmental Economic Accounting: Air Emission Accounts (United Nations Statistics Division, 2016)	https://seea.un.org/content/air-emissions-accounts
Physical Flow Accounts for Energy (PEFA Manual) (Eurostat, 2014)	http://ec.europa.eu/eurostat/web/environment/methodology
System of Environmental-Economic Accounting for Energy (SEEA-Energy) (United Nations Statistics Division, 2019)	https://seea.un.org/seea-energy

Classification syst.   Standard International Energy Product Classification (SIEC)

Data sources

Main source   Official statistics: SEEA and/or SNA

Explanation   SEEA air emission accounts and SEEA energy accounts

SEEA Accounts that can serve as data sources

SEEA Account	Comments
Physical flow accounts for energy	
Air emission accounts	

UN-FDES   3.1.1: Emissions of greenhouse gases

2.2.2: Production, trade and consumption of energy

International databases containing this indicator

Comments

Comments   This indicator differs from similar indicators produced by the World Bank and the International Energy Agency as it excludes households.