### 10b CO2 emissions from fuel combustion within the national territory

Indicator type Core indicator

**Published** 

versioning				
First publication	1/26/2017 Latest update 8/27/2021			
Area and sub-area				
Area and sub-area	Emissions National total			
Presentation				
Tier				
Indicator definition and	CO2 emissions from all reported energy use of fuels in the national territory. It excludes emissions from non-energy use of fuels, fugitive emissions, and industrial process emissions.			
description				
Unit of measure	Kilotonnes (kt) of CO2			
Coverage	Total economy; industries, governments, institutions and households - excluding sources and sinks from LULUCF activities			
Spatial aggregation	National territory			
Reference period	Calendar year			
Update frequency	Annual			
Base period	Not applicable			
Disaggregation (operational indicators)				
Disaggregation (operational indicators)		Comments		
Spatial				
Energy product (SIEC)				
Temporal (by month, by season)				
Other related -indicators (e.g.contextual, proxy, other core indicators)				
ID	Subindicator	Type		

ID	Subindicator	Туре
09b	Total greenhouse gas emissions (excluding LULUCF) from the national territory	Core indicator
55	Passenger transport mode (person kilometers per mode/capita)	Contextual indicator
56	Freight transport mode (ton kilometers per mode)	Contextual indicator

#### Relevance

Policy context and rationale

CO2 emissions from fuel combustion represent a very large share of total GHG emissions. Specfic targets for this indicator do not exist, but limiting emissions from fuel combustion will significantly help to reduce overall GHG emissions.

For some Annex I Parties (developed countries), emission limitation or reduction targets exist under the Kyoto Protocol; non-binding targets or pledges for action exist in various forms under the UNFCCC and, since recently, under the Paris Agreement.

The EU allocates certain targets to individual EU member States in addition to the definition of the EU-wide emission reduction target under the Kyoto Protocol; EU and some other countries also use targets as part of its emissions trading scheme. Indirect links to SDG 7, 9, 12 and 13.

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Related SDG indicator (SDG I.)	Not applicable	
Relation w SDG-I.		
Related Sendai Framework I.	Not applicable	

Policy references

Document title	Link
Transforming our world: the 2030 Agenda for Sustainable Development (General Assembly of the United Nations, 2015)	https://sustainabledevelopment.un.org/post2015/transformingourworld
Kyoto Protocol (United Nations Climate Change, 1997)	https://unfccc.int/process-and-meetings/the-kyoto-protocol/what-is-the-kyoto-protocol/kyoto-protocol-targets-for-the-first-commitment-period
Paris Agreement (United Nations, 2015)	https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement
United Nations Framework Convention on Climate Change (United Nations Climate Change, 1994)	https://unfccc.int/process-and-meetings/the- convention/what-is-the-united-nations-framework- convention-on-climate-change

### Methodology

Methodology for indicator calculation

This indicator is calculated as the sum of emissions from the combustion of fuels, where for each fuel: CO2 emissions = fuel consumption related to energy use in the territory \* CO2 emission factor. CO2 emissions from fuel combustion can be calculated using national or default methods, national or IEA energy data and country-specific emission factors or emission factors from the 2006 IPCC guidelines.

#### Methodology references

Document title	Link
CO2 Emissions from Fuel Combustion (data and metadata) (International Energy Agency, 2018)	https://www.iea.org/data-and-statistics/data- product/co2-emissions-from-fuel-combustion- highlights
2006 IPCC Guidelines for National Greenhouse Gas Inventories Volume 2: Energy (Intergovermental Panel on Climate Change (IPCC), 2006)	https://www.ipcc- nggip.iges.or.jp/public/2006gl/vol2.html
Decision 17/CP.8 Guidelines for the preparation of national communications from Parties not included in Annex I to the Convention (United Nations Climate Change, 2002)	https://unfccc.int/process-and- meetings/transparency-and-reporting/support-for- developing-countries/guidelines-and-manuals-for-the- preparation-of-non-annex-i-national-reports-and- international - eq-5
Decision 24/CP.19 Revision of the UNFCCC reporting guidelines on annual inventories for Parties included in Annex I to the Convention (United Nations Climate Change, 2013)	https://unfccc.int/process-and- meetings/transparency-and-reporting/reporting-and- review-under-the-convention/greenhouse-gas- inventories-annex-i-parties/reporting-requirements

Classification syst.

By fuel and by sectors: Electricity and heat production. Manufacturing industries and construction. Transport (of which: road). Other sectors (of which: residential)

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#### **Data sources**

Main source Other than official statistics

Explanation National GHG inventories submitted under the UNFCCC (in some countries part of official statistics)

or national energy statistics in combination with (default or national) emission coefficients.

SEEA Accounts that can serve as data sources

UN-FDES 3.1.1: Emissions of greenhouse gases

International databases containing this indicator

International databases containing this indicator		
Eurostat database	https://ec.europa.eu/eurostat/data/database	
International Energy Agency	http://www.iea.org/statistics/	
UNFCCC GHG data portal	https://unfccc.int/process/transparency-and- reporting/greenhouse-gas-data/ghg-data- unfccc/ghg-data-from-unfccc	
UNFCCC database	https://unfccc.int/process-and- meetings/transparency-and- reporting/greenhouse-gas-data/ghg-data- unfccc/ghg-data-from-unfccc	
UNFCCC website for National Inventory Submissions for Annex I Parties	https://unfccc.int/ghg-inventories-annex-i- parties/2021	
UNFCCC website for National Communication submissions from Non-Annex I Parties	https://unfccc.int/process-and-meetings/transparency-and-reporting/reporting-and-review-under-the-convention/national-communications-and-biennial-update-reports-non-annex-i-parties/national-communication-submissions-from-non-annex-i-parties	
UNFCCC website for Biennial Update Report submissions from	https://unfccc.int/BURs	
EEA greenhouse gas - data viewer	https://www.eea.europa.eu/data-and- maps/data/data-viewers/greenhouse-gases- viewer	

#### Comments

Comments

The value reported for indicator "10b - CO2 emissions from fuel combustion in the national territory" should be different from the value reported for indicator "10a - CO2 emissions from fuel combustion by national economy".