

PEOPLE'S DEMOCRATIC REPUBLIC OF ALGERIA
MINISTRY OF THE ENVIRONMENT AND QUALITY OF LIFE



National Inventory Document (NID) of Algeria 2024

ANNEX

**Submission under the
United Nations Framework Convention on Climate
Change (UNFCCC)
and
Paris Agreement**

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Annex I: Key categories

Annex I-1 Description of the approach used for identifying key categories, if different from the IPCC tier 1 approach

Pursuant to para 25 of the MPGs¹ each Party shall identify key categories for the starting year and the latest reporting year [...], including and excluding land use, land-use change and forestry (LULUCF) categories, using approach 1, for both level and trend assessment, by implementing a key category analysis consistent with the IPCC guidelines.

Chapter 4 of Volume 1 of the 2006 IPCC Guidelines presents the definition and purpose and describes the methods to be applied for identifying key categories.

Definition²

A *key category* is one that is prioritised within the national inventory system because its estimate has a significant influence on a country's total inventory of greenhouse gases in terms of the absolute level, the trend, or the uncertainty in emissions and removals. Whenever the term key category is used, it includes both source and sink categories.

Purpose of the key category analysis³

As far as possible, key categories should receive special consideration in terms of three important inventory aspects.

- (1) Identification of key categories in national inventories enables limited resources available for preparing inventories to be prioritized. It is *good practice* to focus the available resources for the improvement in data and methods onto categories identified as key.
- (2) In general, more detailed higher tier methods should be selected for key categories. Inventory compilers should use the category-specific methods presented in sectoral decision trees in Volumes 2-5 of 2006 IPCC Guidelines. For most sources/sinks, higher tier (Tier 2 and 3) methods are suggested for key categories in 2006 IPCC Guidelines, although this is not always the case. For guidance on the specific application of this principle to key categories, it is *good practice* to refer to the decision trees and sector-specific guidance for the respective category and additional good practice guidance in chapters in sectoral volumes. [...] Any key categories where the good practice method cannot be used should have priority for future improvements.
- (3) It is good practice to give additional attention to key categories with respect to quality assurance and quality control (QA/QC) as described in Chapter 6⁴, Quality Assurance/Quality Control and Verification, and in the sectoral volumes of 2006 IPCC Guidelines.

Parties to the UN Framework Convention on Climate Change and to the Paris Agreement are required to estimate and publish GHG emissions data biennially which are compliant with

Transparency The GHG emissions inventories must be comprehensible. (MPG para 3.b and 3.d)

Consistency The GHG emissions inventories must be estimate in a consistent manner in the time series since 1990. (MPG para 57-58)

¹ Decision 18/CMA.1, FCCC/PA/CMA/2018/3/Add.2. Available (8 April 2024) on <https://unfccc.int/documents/193408>

² Chapter 4.1.1, Volume 1, 2006 IPCC Guidelines

³ Chapter 4.1.2, Volume 1, 2006 IPCC Guidelines

⁴ https://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/1_Volume1/V1_6_Ch6_QA_QC.pdf

- Comparability** The GHG emissions inventories must be assessed uniformly at the international level by applying of the prescribed calculation methods as outlined in the MPGs. (MPG section VII and VIII)
- Completeness** The GHG emissions inventories must contain all the relevant emission sources and sinks in the country. (MPG section II.E)
- Accuracy** The GHG emissions inventories must be evaluated with regard to error; and must undergo ongoing internal and external quality management. (MPG section II.D and para 3.d)

Methodological approaches to identify key categories⁵

It is *good practice* for each country to identify its national key categories in a systematic and objective manner, by performing a quantitative analysis of the relationships between the level and the trend of each category's emissions and removals and total national emissions and removals.

Two Approaches for performing the key category analysis have been developed. Both Approaches identify key categories in terms of their contribution to the absolute level of national emissions and removals and to the trend of emissions and removals.

Approach 1 Key categories are identified using a pre-determined cumulative emissions threshold. Key categories are those that, when summed together in descending order of magnitude, add up to 95 percent of the total level.

Assessment of qualitative criteria

Approach 2

		Approach 1		Approach 2		
		without LULUCF	with LULUCF	without LULUCF	with LULUCF	
Level Assessment	Key categories are identified using a pre-determined cumulative emissions threshold. Key categories are those that, when summed together in descending order of magnitude, add up to 95 percent of the total level.	inventory analysis for separately year 1990 and last inventory year		<i>categories are sorted according to their</i>		Uncertainty analysis
Trend Assessment		time-series analysis of inventory data		<i>contribution to uncertainty</i> detailed analysis of inventory data with error evaluation		
Assessment of qualitative criteria		X		X		

For identified key categories, the Parties are then required to use highly detailed calculation methods (Tier 2 or higher; the relevant methods are also specified in the 2006 IPCC GL). Should direct use of such methods prove impossible, for whatever reason (e.g. data are not available for the required input variables, etc.), Parties are required to prove that the methods applied nationally achieve at least a comparable degree of accuracy in the calculation result. Such proof, as well as the key-category analysis performed overall, must be outlined in the national inventory report to be prepared annually.

⁵ Chapter 4.3, Volume 1, 2006 IPCC Guidelines

Annex I-2 Information on the level of disaggregation

IPCC Category Code	IPCC Category	Gas	Unit
1 A 1 a gaseous	Public Electricity and Heat Production	CO2	Gg
1 A 1 a gaseous	Public Electricity and Heat Production	CH4	Gg CO2 eq
1 A 1 a gaseous	Public Electricity and Heat Production	N2O	Gg CO2 eq
1 A 1 a liquid	Public Electricity and Heat Production	CO2	Gg
1 A 1 a liquid	Public Electricity and Heat Production	CH4	Gg CO2 eq
1 A 1 a liquid	Public Electricity and Heat Production	N2O	Gg CO2 eq
1 A 1 a other	Public Electricity and Heat Production	CO2	Gg
1 A 1 a other	Public Electricity and Heat Production	CH4	Gg CO2 eq
1 A 1 a other	Public Electricity and Heat Production	N2O	Gg CO2 eq
1 A 1 a solid	Public Electricity and Heat Production	CO2	Gg
1 A 1 a solid	Public Electricity and Heat Production	CH4	Gg CO2 eq
1 A 1 a solid	Public Electricity and Heat Production	N2O	Gg CO2 eq
1 A 1 b gaseous	Petroleum Refining	CO2	Gg
1 A 1 b gaseous	Petroleum Refining	CH4	Gg CO2 eq
1 A 1 b gaseous	Petroleum Refining	N2O	Gg CO2 eq
1 A 1 b liquid	Petroleum Refining	CO2	Gg
1 A 1 b liquid	Petroleum Refining	CH4	Gg CO2 eq
1 A 1 b liquid	Petroleum Refining	N2O	Gg CO2 eq
1 A 1 b other	Petroleum Refining	CO2	Gg
1 A 1 b other	Petroleum Refining	CH4	Gg CO2 eq
1 A 1 b other	Petroleum Refining	N2O	Gg CO2 eq
1 A 1 b solid	Petroleum Refining	CO2	Gg
1 A 1 b solid	Petroleum Refining	CH4	Gg CO2 eq
1 A 1 b solid	Petroleum Refining	N2O	Gg CO2 eq
1 A 1 c 1 gaseous	Manufacture of solid fuels	CO2	Gg
1 A 1 c 1 gaseous	Manufacture of solid fuels	CH4	Gg CO2 eq
1 A 1 c 1 gaseous	Manufacture of solid fuels	N2O	Gg CO2 eq
1 A 1 c 1 liquid	Manufacture of solid fuels	CO2	Gg
1 A 1 c 1 liquid	Manufacture of solid fuels	CH4	Gg CO2 eq
1 A 1 c 1 liquid	Manufacture of solid fuels	N2O	Gg CO2 eq
1 A 1 c 1 other	Manufacture of solid fuels	CO2	Gg
1 A 1 c 1 other	Manufacture of solid fuels	CH4	Gg CO2 eq
1 A 1 c 1 other	Manufacture of solid fuels	N2O	Gg CO2 eq
1 A 1 c 1 solid	Manufacture of solid fuels	CO2	Gg
1 A 1 c 1 solid	Manufacture of solid fuels	CH4	Gg CO2 eq
1 A 1 c 1 solid	Manufacture of solid fuels	N2O	Gg CO2 eq
1 A 1 c 2 gaseous	Oil and gas extraction	CO2	Gg
1 A 1 c 2 gaseous	Oil and gas extraction	CH4	Gg CO2 eq
1 A 1 c 2 gaseous	Oil and gas extraction	N2O	Gg CO2 eq
1 A 1 c 2 liquid	Oil and gas extraction	CO2	Gg
1 A 1 c 2 liquid	Oil and gas extraction	CH4	Gg CO2 eq

IPCC Category Code	IPCC Category	Gas	Unit
1 A 1 c 2 liquid	Oil and gas extraction	N2O	Gg CO2 eq
1 A 1 c 2 other	Oil and gas extraction	CO2	Gg
1 A 1 c 2 other	Oil and gas extraction	CH4	Gg CO2 eq
1 A 1 c 2 other	Oil and gas extraction	N2O	Gg CO2 eq
1 A 1 c 2 solid	Oil and gas extraction	CO2	Gg
1 A 1 c 2 solid	Oil and gas extraction	CH4	Gg CO2 eq
1 A 1 c 2 solid	Oil and gas extraction	N2O	Gg CO2 eq
1 A 1 c 3 gaseous	Other energy industries	CO2	Gg
1 A 1 c 3 gaseous	Other energy industries	CH4	Gg CO2 eq
1 A 1 c 3 gaseous	Other energy industries	N2O	Gg CO2 eq
1 A 1 c 3 liquid	Other energy industries	CO2	Gg
1 A 1 c 3 liquid	Other energy industries	CH4	Gg CO2 eq
1 A 1 c 3 liquid	Other energy industries	N2O	Gg CO2 eq
1 A 1 c 3 other	Other energy industries	CO2	Gg
1 A 1 c 3 other	Other energy industries	CH4	Gg CO2 eq
1 A 1 c 3 other	Other energy industries	N2O	Gg CO2 eq
1 A 1 c 3 solid	Other energy industries	CO2	Gg
1 A 1 c 3 solid	Other energy industries	CH4	Gg CO2 eq
1 A 1 c 3 solid	Other energy industries	N2O	Gg CO2 eq
1 A 2 a gaseous	Iron and Steel	CO2	Gg
1 A 2 a gaseous	Iron and Steel	CH4	Gg CO2 eq
1 A 2 a gaseous	Iron and Steel	N2O	Gg CO2 eq
1 A 2 a liquid	Iron and Steel	CO2	Gg
1 A 2 a liquid	Iron and Steel	CH4	Gg CO2 eq
1 A 2 a liquid	Iron and Steel	N2O	Gg CO2 eq
1 A 2 a other	Iron and Steel	CO2	Gg
1 A 2 a other	Iron and Steel	CH4	Gg CO2 eq
1 A 2 a other	Iron and Steel	N2O	Gg CO2 eq
1 A 2 a solid	Iron and Steel	CO2	Gg
1 A 2 a solid	Iron and Steel	CH4	Gg CO2 eq
1 A 2 a solid	Iron and Steel	N2O	Gg CO2 eq
1 A 2 b gaseous	Non-ferrous metals	CO2	Gg
1 A 2 b gaseous	Non-ferrous metals	CH4	Gg CO2 eq
1 A 2 b gaseous	Non-ferrous metals	N2O	Gg CO2 eq
1 A 2 b liquid	Non-ferrous metals	CO2	Gg
1 A 2 b liquid	Non-ferrous metals	CH4	Gg CO2 eq
1 A 2 b liquid	Non-ferrous metals	N2O	Gg CO2 eq
1 A 2 b other	Non-ferrous metals	CO2	Gg
1 A 2 b other	Non-ferrous metals	CH4	Gg CO2 eq
1 A 2 b other	Non-ferrous metals	N2O	Gg CO2 eq
1 A 2 b solid	Non-ferrous metals	CO2	Gg
1 A 2 b solid	Non-ferrous metals	CH4	Gg CO2 eq
1 A 2 b solid	Non-ferrous metals	N2O	Gg CO2 eq

IPCC Category Code	IPCC Category	Gas	Unit
1 A 2 c gaseous	Chemicals	CO ₂	Gg
1 A 2 c gaseous	Chemicals	CH ₄	Gg CO ₂ eq
1 A 2 c gaseous	Chemicals	N ₂ O	Gg CO ₂ eq
1 A 2 c liquid	Chemicals	CO ₂	Gg
1 A 2 c liquid	Chemicals	CH ₄	Gg CO ₂ eq
1 A 2 c liquid	Chemicals	N ₂ O	Gg CO ₂ eq
1 A 2 c other	Chemicals	CO ₂	Gg
1 A 2 c other	Chemicals	CH ₄	Gg CO ₂ eq
1 A 2 c other	Chemicals	N ₂ O	Gg CO ₂ eq
1 A 2 c solid	Chemicals	CO ₂	Gg
1 A 2 c solid	Chemicals	CH ₄	Gg CO ₂ eq
1 A 2 c solid	Chemicals	N ₂ O	Gg CO ₂ eq
1 A 2 d gaseous	Pulp, paper and print	CO ₂	Gg
1 A 2 d gaseous	Pulp, paper and print	CH ₄	Gg CO ₂ eq
1 A 2 d gaseous	Pulp, paper and print	N ₂ O	Gg CO ₂ eq
1 A 2 d liquid	Pulp, paper and print	CO ₂	Gg
1 A 2 d liquid	Pulp, paper and print	CH ₄	Gg CO ₂ eq
1 A 2 d liquid	Pulp, paper and print	N ₂ O	Gg CO ₂ eq
1 A 2 d other	Pulp, paper and print	CO ₂	Gg
1 A 2 d other	Pulp, paper and print	CH ₄	Gg CO ₂ eq
1 A 2 d other	Pulp, paper and print	N ₂ O	Gg CO ₂ eq
1 A 2 d solid	Pulp, paper and print	CO ₂	Gg
1 A 2 d solid	Pulp, paper and print	CH ₄	Gg CO ₂ eq
1 A 2 d solid	Pulp, paper and print	N ₂ O	Gg CO ₂ eq
1 A 2 e gaseous	Food processing, beverages and tobacco	CO ₂	Gg
1 A 2 e gaseous	Food processing, beverages and tobacco	CH ₄	Gg CO ₂ eq
1 A 2 e gaseous	Food processing, beverages and tobacco	N ₂ O	Gg CO ₂ eq
1 A 2 e liquid	Food processing, beverages and tobacco	CO ₂	Gg
1 A 2 e liquid	Food processing, beverages and tobacco	CH ₄	Gg CO ₂ eq
1 A 2 e liquid	Food processing, beverages and tobacco	N ₂ O	Gg CO ₂ eq
1 A 2 e other	Food processing, beverages and tobacco	CO ₂	Gg
1 A 2 e other	Food processing, beverages and tobacco	CH ₄	Gg CO ₂ eq
1 A 2 e other	Food processing, beverages and tobacco	N ₂ O	Gg CO ₂ eq
1 A 2 e solid	Food processing, beverages and tobacco	CO ₂	Gg
1 A 2 e solid	Food processing, beverages and tobacco	CH ₄	Gg CO ₂ eq
1 A 2 e solid	Food processing, beverages and tobacco	N ₂ O	Gg CO ₂ eq
1 A 2 f gaseous	Non-metallic minerals	CO ₂	Gg
1 A 2 f gaseous	Non-metallic minerals	CH ₄	Gg CO ₂ eq
1 A 2 f gaseous	Non-metallic minerals	N ₂ O	Gg CO ₂ eq
1 A 2 f liquid	Non-metallic minerals	CO ₂	Gg
1 A 2 f liquid	Non-metallic minerals	CH ₄	Gg CO ₂ eq
1 A 2 f liquid	Non-metallic minerals	N ₂ O	Gg CO ₂ eq
1 A 2 f other	Non-metallic minerals	CO ₂	Gg

IPCC Category Code	IPCC Category	Gas	Unit
1 A 2 f other	Non-metallic minerals	CH ₄	Gg CO ₂ eq
1 A 2 f other	Non-metallic minerals	N ₂ O	Gg CO ₂ eq
1 A 2 f solid	Non-metallic minerals	CO ₂	Gg
1 A 2 f solid	Non-metallic minerals	CH ₄	Gg CO ₂ eq
1 A 2 f solid	Non-metallic minerals	N ₂ O	Gg CO ₂ eq
1 A 2 g 1 gaseous	Manufacturing of machinery	CO ₂	Gg
1 A 2 g 1 gaseous	Manufacturing of machinery	CH ₄	Gg CO ₂ eq
1 A 2 g 1 gaseous	Manufacturing of machinery	N ₂ O	Gg CO ₂ eq
1 A 2 g 1 liquid	Manufacturing of machinery	CO ₂	Gg
1 A 2 g 1 liquid	Manufacturing of machinery	CH ₄	Gg CO ₂ eq
1 A 2 g 1 liquid	Manufacturing of machinery	N ₂ O	Gg CO ₂ eq
1 A 2 g 1 other	Manufacturing of machinery	CO ₂	Gg
1 A 2 g 1 other	Manufacturing of machinery	CH ₄	Gg CO ₂ eq
1 A 2 g 1 other	Manufacturing of machinery	N ₂ O	Gg CO ₂ eq
1 A 2 g 1 solid	Manufacturing of machinery	CO ₂	Gg
1 A 2 g 1 solid	Manufacturing of machinery	CH ₄	Gg CO ₂ eq
1 A 2 g 1 solid	Manufacturing of machinery	N ₂ O	Gg CO ₂ eq
1 A 2 g 2 gaseous	Manufacturing of transport equipment	CO ₂	Gg
1 A 2 g 2 gaseous	Manufacturing of transport equipment	CH ₄	Gg CO ₂ eq
1 A 2 g 2 gaseous	Manufacturing of transport equipment	N ₂ O	Gg CO ₂ eq
1 A 2 g 2 liquid	Manufacturing of transport equipment	CO ₂	Gg
1 A 2 g 2 liquid	Manufacturing of transport equipment	CH ₄	Gg CO ₂ eq
1 A 2 g 2 liquid	Manufacturing of transport equipment	N ₂ O	Gg CO ₂ eq
1 A 2 g 2 other	Manufacturing of transport equipment	CO ₂	Gg
1 A 2 g 2 other	Manufacturing of transport equipment	CH ₄	Gg CO ₂ eq
1 A 2 g 2 other	Manufacturing of transport equipment	N ₂ O	Gg CO ₂ eq
1 A 2 g 2 solid	Manufacturing of transport equipment	CO ₂	Gg
1 A 2 g 2 solid	Manufacturing of transport equipment	CH ₄	Gg CO ₂ eq
1 A 2 g 2 solid	Manufacturing of transport equipment	N ₂ O	Gg CO ₂ eq
1 A 2 g 3 gaseous	Mining (excluding fuels) and quarrying	CO ₂	Gg
1 A 2 g 3 gaseous	Mining (excluding fuels) and quarrying	CH ₄	Gg CO ₂ eq
1 A 2 g 3 gaseous	Mining (excluding fuels) and quarrying	N ₂ O	Gg CO ₂ eq
1 A 2 g 3 liquid	Mining (excluding fuels) and quarrying	CO ₂	Gg
1 A 2 g 3 liquid	Mining (excluding fuels) and quarrying	CH ₄	Gg CO ₂ eq
1 A 2 g 3 liquid	Mining (excluding fuels) and quarrying	N ₂ O	Gg CO ₂ eq
1 A 2 g 3 other	Mining (excluding fuels) and quarrying	CO ₂	Gg
1 A 2 g 3 other	Mining (excluding fuels) and quarrying	CH ₄	Gg CO ₂ eq
1 A 2 g 3 other	Mining (excluding fuels) and quarrying	N ₂ O	Gg CO ₂ eq
1 A 2 g 3 solid	Mining (excluding fuels) and quarrying	CO ₂	Gg
1 A 2 g 3 solid	Mining (excluding fuels) and quarrying	CH ₄	Gg CO ₂ eq
1 A 2 g 3 solid	Mining (excluding fuels) and quarrying	N ₂ O	Gg CO ₂ eq
1 A 2 g 4 gaseous	Wood and wood products	CO ₂	Gg
1 A 2 g 4 gaseous	Wood and wood products	CH ₄	Gg CO ₂ eq

IPCC Category Code	IPCC Category	Gas	Unit
1 A 2 g 4 gaseous	Wood and wood products	N2O	Gg CO2 eq
1 A 2 g 4 liquid	Wood and wood products	CO2	Gg
1 A 2 g 4 liquid	Wood and wood products	CH4	Gg CO2 eq
1 A 2 g 4 liquid	Wood and wood products	N2O	Gg CO2 eq
1 A 2 g 4 other	Wood and wood products	CO2	Gg
1 A 2 g 4 other	Wood and wood products	CH4	Gg CO2 eq
1 A 2 g 4 other	Wood and wood products	N2O	Gg CO2 eq
1 A 2 g 4 solid	Wood and wood products	CO2	Gg
1 A 2 g 4 solid	Wood and wood products	CH4	Gg CO2 eq
1 A 2 g 4 solid	Wood and wood products	N2O	Gg CO2 eq
1 A 2 g 5 gaseous	Construction	CO2	Gg
1 A 2 g 5 gaseous	Construction	CH4	Gg CO2 eq
1 A 2 g 5 gaseous	Construction	N2O	Gg CO2 eq
1 A 2 g 5 liquid	Construction	CO2	Gg
1 A 2 g 5 liquid	Construction	CH4	Gg CO2 eq
1 A 2 g 5 liquid	Construction	N2O	Gg CO2 eq
1 A 2 g 5 other	Construction	CO2	Gg
1 A 2 g 5 other	Construction	CH4	Gg CO2 eq
1 A 2 g 5 other	Construction	N2O	Gg CO2 eq
1 A 2 g 5 solid	Construction	CO2	Gg
1 A 2 g 5 solid	Construction	CH4	Gg CO2 eq
1 A 2 g 5 solid	Construction	N2O	Gg CO2 eq
1 A 2 g 6 gaseous	Textile and leather	CO2	Gg
1 A 2 g 6 gaseous	Textile and leather	CH4	Gg CO2 eq
1 A 2 g 6 gaseous	Textile and leather	N2O	Gg CO2 eq
1 A 2 g 6 liquid	Textile and leather	CO2	Gg
1 A 2 g 6 liquid	Textile and leather	CH4	Gg CO2 eq
1 A 2 g 6 liquid	Textile and leather	N2O	Gg CO2 eq
1 A 2 g 6 other	Textile and leather	CO2	Gg
1 A 2 g 6 other	Textile and leather	CH4	Gg CO2 eq
1 A 2 g 6 other	Textile and leather	N2O	Gg CO2 eq
1 A 2 g 6 solid	Textile and leather	CO2	Gg
1 A 2 g 6 solid	Textile and leather	CH4	Gg CO2 eq
1 A 2 g 6 solid	Textile and leather	N2O	Gg CO2 eq
1 A 2 g 7 diesel oil	Off-road vehicles and other machinery	CO2	Gg
1 A 2 g 7 diesel oil	Off-road vehicles and other machinery	CH4	Gg CO2 eq
1 A 2 g 7 diesel oil	Off-road vehicles and other machinery	N2O	Gg CO2 eq
1 A 2 g 7 gaseous	Off-road vehicles and other machinery	CO2	Gg
1 A 2 g 7 gaseous	Off-road vehicles and other machinery	CH4	Gg CO2 eq
1 A 2 g 7 gaseous	Off-road vehicles and other machinery	N2O	Gg CO2 eq
1 A 2 g 7 gasoline	Off-road vehicles and other machinery	CO2	Gg
1 A 2 g 7 gasoline	Off-road vehicles and other machinery	CH4	Gg CO2 eq
1 A 2 g 7 gasoline	Off-road vehicles and other machinery	N2O	Gg CO2 eq

IPCC Category Code	IPCC Category	Gas	Unit
1 A 2 g 7 LPG	Off-road vehicles and other machinery	CO2	Gg
1 A 2 g 7 LPG	Off-road vehicles and other machinery	CH4	Gg CO2 eq
1 A 2 g 7 LPG	Off-road vehicles and other machinery	N2O	Gg CO2 eq
1 A 2 g 7 other fossil	Off-road vehicles and other machinery	CO2	Gg
1 A 2 g 7 other fossil	Off-road vehicles and other machinery	CH4	Gg CO2 eq
1 A 2 g 7 other fossil	Off-road vehicles and other machinery	N2O	Gg CO2 eq
1 A 2 g 7 other liquid	Off-road vehicles and other machinery	CO2	Gg
1 A 2 g 7 other liquid	Off-road vehicles and other machinery	CH4	Gg CO2 eq
1 A 2 g 7 other liquid	Off-road vehicles and other machinery	N2O	Gg CO2 eq
1 A 2 g 8 gaseous	Other	CO2	Gg
1 A 2 g 8 gaseous	Other	CH4	Gg CO2 eq
1 A 2 g 8 gaseous	Other	N2O	Gg CO2 eq
1 A 2 g 8 liquid	Other	CO2	Gg
1 A 2 g 8 liquid	Other	CH4	Gg CO2 eq
1 A 2 g 8 liquid	Other	N2O	Gg CO2 eq
1 A 2 g 8 other	Other	CO2	Gg
1 A 2 g 8 other	Other	CH4	Gg CO2 eq
1 A 2 g 8 other	Other	N2O	Gg CO2 eq
1 A 2 g 8 solid	Other	CO2	Gg
1 A 2 g 8 solid	Other	CH4	Gg CO2 eq
1 A 2 g 8 solid	Other	N2O	Gg CO2 eq
1 A 3 a aviation gasoline	Domestic aviation	CO2	Gg
1 A 3 a aviation gasoline	Domestic aviation	CH4	Gg CO2 eq
1 A 3 a aviation gasoline	Domestic aviation	N2O	Gg CO2 eq
1 A 3 a jet kerosene	Domestic aviation	CO2	Gg
1 A 3 a jet kerosene	Domestic aviation	CH4	Gg CO2 eq
1 A 3 a jet kerosene	Domestic aviation	N2O	Gg CO2 eq
1 A 3 b diesel oil	Road transportation	CO2	Gg
1 A 3 b diesel oil	Road transportation	CH4	Gg CO2 eq
1 A 3 b diesel oil	Road transportation	N2O	Gg CO2 eq
1 A 3 b gaseous	Road transportation	CO2	Gg
1 A 3 b gaseous	Road transportation	CH4	Gg CO2 eq
1 A 3 b gaseous	Road transportation	N2O	Gg CO2 eq
1 A 3 b gasoline	Road transportation	CO2	Gg
1 A 3 b gasoline	Road transportation	CH4	Gg CO2 eq
1 A 3 b gasoline	Road transportation	N2O	Gg CO2 eq
1 A 3 b LPG	Road transportation	CO2	Gg
1 A 3 b LPG	Road transportation	CH4	Gg CO2 eq
1 A 3 b LPG	Road transportation	N2O	Gg CO2 eq
1 A 3 b other fossil	Road transportation	CO2	Gg
1 A 3 b other fossil	Road transportation	CH4	Gg CO2 eq
1 A 3 b other fossil	Road transportation	N2O	Gg CO2 eq
1 A 3 b other liquid	Road transportation	CO2	Gg

IPCC Category Code	IPCC Category	Gas	Unit
1 A 3 b other liquid	Road transportation	CH4	Gg CO2 eq
1 A 3 b other liquid	Road transportation	N2O	Gg CO2 eq
1 A 3 c gaseous	Railways	CO2	Gg
1 A 3 c gaseous	Railways	CH4	Gg CO2 eq
1 A 3 c gaseous	Railways	N2O	Gg CO2 eq
1 A 3 c liquid	Railways	CO2	Gg
1 A 3 c liquid	Railways	CH4	Gg CO2 eq
1 A 3 c liquid	Railways	N2O	Gg CO2 eq
1 A 3 c other fossil	Railways	CO2	Gg
1 A 3 c other fossil	Railways	CH4	Gg CO2 eq
1 A 3 c other fossil	Railways	N2O	Gg CO2 eq
1 A 3 c solid	Railways	CO2	Gg
1 A 3 c solid	Railways	CH4	Gg CO2 eq
1 A 3 c solid	Railways	N2O	Gg CO2 eq
1 A 3 d diesel oil	Domestic Navigation	CO2	Gg
1 A 3 d diesel oil	Domestic Navigation	CH4	Gg CO2 eq
1 A 3 d diesel oil	Domestic Navigation	N2O	Gg CO2 eq
1 A 3 d gaseous	Domestic Navigation	CO2	Gg
1 A 3 d gaseous	Domestic Navigation	CH4	Gg CO2 eq
1 A 3 d gaseous	Domestic Navigation	N2O	Gg CO2 eq
1 A 3 d gasoline	Domestic Navigation	CO2	Gg
1 A 3 d gasoline	Domestic Navigation	CH4	Gg CO2 eq
1 A 3 d gasoline	Domestic Navigation	N2O	Gg CO2 eq
1 A 3 d other fossil	Domestic Navigation	CO2	Gg
1 A 3 d other fossil	Domestic Navigation	CH4	Gg CO2 eq
1 A 3 d other fossil	Domestic Navigation	N2O	Gg CO2 eq
1 A 3 d other liquid	Domestic Navigation	CO2	Gg
1 A 3 d other liquid	Domestic Navigation	CH4	Gg CO2 eq
1 A 3 d other liquid	Domestic Navigation	N2O	Gg CO2 eq
1 A 3 d Residual fuel oil	Domestic Navigation	CO2	Gg
1 A 3 d Residual fuel oil	Domestic Navigation	CH4	Gg CO2 eq
1 A 3 d Residual fuel oil	Domestic Navigation	N2O	Gg CO2 eq
1 A 3 e gaseous	Other transportation	CO2	Gg
1 A 3 e gaseous	Other transportation	CH4	Gg CO2 eq
1 A 3 e gaseous	Other transportation	N2O	Gg CO2 eq
1 A 3 e liquid	Other transportation	CO2	Gg
1 A 3 e liquid	Other transportation	CH4	Gg CO2 eq
1 A 3 e liquid	Other transportation	N2O	Gg CO2 eq
1 A 3 e other fossil	Other transportation	CO2	Gg
1 A 3 e other fossil	Other transportation	CH4	Gg CO2 eq
1 A 3 e other fossil	Other transportation	N2O	Gg CO2 eq
1 A 3 e solid	Other transportation	CO2	Gg
1 A 3 e solid	Other transportation	CH4	Gg CO2 eq

IPCC Category Code	IPCC Category	Gas	Unit
1 A 3 e solid	Other transportation	N2O	Gg CO2 eq
1 A 4 a biomass	Commercial/institutional	CH4	Gg CO2 eq
1 A 4 a biomass	Commercial/institutional	N2O	Gg CO2 eq
1 A 4 a gaseous	Commercial/institutional	CO2	Gg
1 A 4 a gaseous	Commercial/institutional	CH4	Gg CO2 eq
1 A 4 a gaseous	Commercial/institutional	N2O	Gg CO2 eq
1 A 4 a liquid	Commercial/institutional	CO2	Gg
1 A 4 a liquid	Commercial/institutional	CH4	Gg CO2 eq
1 A 4 a liquid	Commercial/institutional	N2O	Gg CO2 eq
1 A 4 a other	Commercial/institutional	CO2	Gg
1 A 4 a other	Commercial/institutional	CH4	Gg CO2 eq
1 A 4 a other	Commercial/institutional	N2O	Gg CO2 eq
1 A 4 a solid	Commercial/institutional	CO2	Gg
1 A 4 a solid	Commercial/institutional	CH4	Gg CO2 eq
1 A 4 a solid	Commercial/institutional	N2O	Gg CO2 eq
1 A 4 b biomass	Commercial/institutional	CH4	Gg CO2 eq
1 A 4 b biomass	Residential	N2O	Gg CO2 eq
1 A 4 b gaseous	Residential	CO2	Gg
1 A 4 b gaseous	Residential	CH4	Gg CO2 eq
1 A 4 b gaseous	Residential	N2O	Gg CO2 eq
1 A 4 b liquid	Residential	CO2	Gg
1 A 4 b liquid	Residential	CH4	Gg CO2 eq
1 A 4 b liquid	Residential	N2O	Gg CO2 eq
1 A 4 b other	Residential	CO2	Gg
1 A 4 b other	Residential	CH4	Gg CO2 eq
1 A 4 b other	Residential	N2O	Gg CO2 eq
1 A 4 b solid	Residential	CO2	Gg
1 A 4 b solid	Residential	CH4	Gg CO2 eq
1 A 4 b solid	Residential	N2O	Gg CO2 eq
1 A 4 c biomass	Commercial/institutional	CH4	Gg CO2 eq
1 A 4 c biomass	Agriculture/forestry/fishing	N2O	Gg CO2 eq
1 A 4 c gaseous	Agriculture/forestry/fishing	CO2	Gg
1 A 4 c gaseous	Agriculture/forestry/fishing	CH4	Gg CO2 eq
1 A 4 c gaseous	Agriculture/forestry/fishing	N2O	Gg CO2 eq
1 A 4 c liquid	Agriculture/forestry/fishing	CO2	Gg
1 A 4 c liquid	Agriculture/forestry/fishing	CH4	Gg CO2 eq
1 A 4 c liquid	Agriculture/forestry/fishing	N2O	Gg CO2 eq
1 A 4 c other	Agriculture/forestry/fishing	CO2	Gg
1 A 4 c other	Agriculture/forestry/fishing	CH4	Gg CO2 eq
1 A 4 c other	Agriculture/forestry/fishing	N2O	Gg CO2 eq
1 A 4 c solid	Agriculture/forestry/fishing	CO2	Gg
1 A 4 c solid	Agriculture/forestry/fishing	CH4	Gg CO2 eq
1 A 4 c solid	Agriculture/forestry/fishing	N2O	Gg CO2 eq

IPCC Category Code	IPCC Category	Gas	Unit
1 A 5 gaseous	Other	CO2	Gg
1 A 5 gaseous	Other	CH4	Gg CO2 eq
1 A 5 gaseous	Other	N2O	Gg CO2 eq
1 A 5 liquid	Other	CO2	Gg
1 A 5 liquid	Other	CH4	Gg CO2 eq
1 A 5 liquid	Other	N2O	Gg CO2 eq
1 A 5 other	Other	CO2	Gg
1 A 5 other	Other	CH4	Gg CO2 eq
1 A 5 other	Other	N2O	Gg CO2 eq
1 A 5 solid	Other	CO2	Gg
1 A 5 solid	Other	CH4	Gg CO2 eq
1 A 5 solid	Other	N2O	Gg CO2 eq
1 B 1	Coal mining and handling	CO2	Gg
1 B 1	Coal mining and handling	CH4	Gg CO2 eq
1 B 1	Coal mining and handling	N2O	Gg CO2 eq
1 B 1 b	Fuel transformation	CO2	Gg
1 B 1 b	Fuel transformation	CH4	Gg CO2 eq
1 B 1 b	Fuel transformation	N2O	Gg CO2 eq
1 B 2 a	Oil	CO2	Gg
1 B 2 a	Oil	CH4	Gg CO2 eq
1 B 2 a	Oil	N2O	Gg CO2 eq
1 B 2 b	Natural gas	CO2	Gg
1 B 2 b	Natural gas	CH4	Gg CO2 eq
1 B 2 b	Natural gas	N2O	Gg CO2 eq
1 B 2 c	Venting and flaring	CO2	Gg
1 B 2 c	Venting and flaring	CH4	Gg CO2 eq
1 B 2 c	Venting and flaring	N2O	Gg CO2 eq
1 C	CO2 Transport and storage	CO2	Gg
1 C	CO2 Transport and storage	CH4	Gg CO2 eq
1 C	CO2 Transport and storage	N2O	Gg CO2 eq
2 A 1	Cement production	CO2	Gg
2 A 2	Lime production	CO2	Gg
2 A 3	Glass Production	CO2	Gg
2 A 4	Other Process Uses of Carbonates	CO2	Gg
2 B 1	Ammonia Production	CO2	Gg
2 B 1	Ammonia Production	CH4	Gg CO2 eq
2 B 1	Ammonia Production	N2O	Gg CO2 eq
2 B 10	Other	CO2	Gg
2 B 10	Other	CH4	Gg CO2 eq
2 B 10	Other	N2O	Gg CO2 eq
2 B 2	Nitric Acid Production	CO2	Gg
2 B 2	Nitric Acid Production	CH4	Gg CO2 eq
2 B 2	Nitric Acid Production	N2O	Gg CO2 eq

IPCC Category Code	IPCC Category	Gas	Unit
2 B 3	Adipic Acid Production	CO ₂	Gg
2 B 3	Adipic Acid Production	CH ₄	Gg CO ₂ eq
2 B 3	Adipic Acid Production	N ₂ O	Gg CO ₂ eq
2 B 4	Caprolactam, Glyoxal and Glyoxylic Acid Production	CO ₂	Gg
2 B 4	Caprolactam, Glyoxal and Glyoxylic Acid Production	CH ₄	Gg CO ₂ eq
2 B 4	Caprolactam, Glyoxal and Glyoxylic Acid Production	N ₂ O	Gg CO ₂ eq
2 B 5	Carbide Production	CO ₂	Gg
2 B 5	Carbide Production	CH ₄	Gg CO ₂ eq
2 B 5	Carbide Production	N ₂ O	Gg CO ₂ eq
2 B 6	Titanium Dioxide Production	CO ₂	Gg
2 B 6	Titanium Dioxide Production	CH ₄	Gg CO ₂ eq
2 B 6	Titanium Dioxide Production	N ₂ O	Gg CO ₂ eq
2 B 7	Soda Ash Production	CO ₂	Gg
2 B 7	Soda Ash Production	CH ₄	Gg CO ₂ eq
2 B 7	Soda Ash Production	N ₂ O	Gg CO ₂ eq
2 B 8	Petrochemical and Carbon Black Production	CO ₂	Gg
2 B 8	Petrochemical and Carbon Black Production	CH ₄	Gg CO ₂ eq
2 B 8	Petrochemical and Carbon Black Production	N ₂ O	Gg CO ₂ eq
2 C 1	Iron and Steel Production	CO ₂	Gg
2 C 1	Iron and Steel Production	CH ₄	Gg CO ₂ eq
2 C 1	Iron and Steel Production	N ₂ O	Gg CO ₂ eq
2 C 2	Ferroalloys Production	CO ₂	Gg
2 C 2	Ferroalloys Production	CH ₄	Gg CO ₂ eq
2 C 2	Ferroalloys Production	N ₂ O	Gg CO ₂ eq
2 C 3	Aluminium production	CO ₂	Gg
2 C 3	Aluminium production	CH ₄	Gg CO ₂ eq
2 C 3	Aluminium production	N ₂ O	Gg CO ₂ eq
2 C 4	Magnesium production	CO ₂	Gg
2 C 4	Magnesium production	CH ₄	Gg CO ₂ eq
2 C 4	Magnesium production	N ₂ O	Gg CO ₂ eq
2 C 5	Lead Production	CO ₂	Gg
2 C 5	Lead Production	CH ₄	Gg CO ₂ eq
2 C 5	Lead Production	N ₂ O	Gg CO ₂ eq
2 C 6	Zinc Production	CO ₂	Gg
2 C 6	Zinc Production	CH ₄	Gg CO ₂ eq
2 C 6	Zinc Production	N ₂ O	Gg CO ₂ eq
2 C 7	Other	CO ₂	Gg
2 C 7	Other	CH ₄	Gg CO ₂ eq
2 C 7	Other	N ₂ O	Gg CO ₂ eq
2 D 1	Lubricant Use	CO ₂	Gg
2 D 1	Lubricant Use	CH ₄	Gg CO ₂ eq
2 D 1	Lubricant Use	N ₂ O	Gg CO ₂ eq
2 D 2	Paraffin Wax Use	CO ₂	Gg

IPCC Category Code	IPCC Category	Gas	Unit
2 D 2	Paraffin Wax Use	CH ₄	Gg CO ₂ eq
2 D 2	Paraffin Wax Use	N ₂ O	Gg CO ₂ eq
2 D 3	Other	CO ₂	Gg
2 D 3	Other	CH ₄	Gg CO ₂ eq
2 D 3	Other	N ₂ O	Gg CO ₂ eq
2 E 1	Integrated Circuit or Semiconductor	CO ₂	Gg
2 E 1	Integrated Circuit or Semiconductor	CH ₄	Gg CO ₂ eq
2 E 1	Integrated Circuit or Semiconductor	N ₂ O	Gg CO ₂ eq
2 E 2	TFT Flat Panel Display	CO ₂	Gg
2 E 2	TFT Flat Panel Display	CH ₄	Gg CO ₂ eq
2 E 2	TFT Flat Panel Display	N ₂ O	Gg CO ₂ eq
2 E 5	Other	CO ₂	Gg
2 E 5	Other	CH ₄	Gg CO ₂ eq
2 E 5	Other	N ₂ O	Gg CO ₂ eq
2 F 1	Refrigeration and air conditioning	HFC	kt CO ₂ eq
2 G 1	Electrical equipment	SF ₆	kt CO ₂ eq
2 G 3	N ₂ O from Product Uses	CO ₂	Gg
2 G 3	N ₂ O from Product Uses	CH ₄	Gg CO ₂ eq
2 G 3	N ₂ O from Product Uses	N ₂ O	Gg CO ₂ eq
2 G 4	Other	CO ₂	Gg
2 G 4	Other	CH ₄	Gg CO ₂ eq
2 G 4	Other	N ₂ O	Gg CO ₂ eq
2 H 1	Pulp and Paper Industry	CO ₂	Gg
2 H 1	Pulp and Paper Industry	CH ₄	Gg CO ₂ eq
2 H 1	Pulp and Paper Industry	N ₂ O	Gg CO ₂ eq
2 H 2	Food and Beverages Industry	CO ₂	Gg
2 H 2	Food and Beverages Industry	CH ₄	Gg CO ₂ eq
2 H 2	Food and Beverages Industry	N ₂ O	Gg CO ₂ eq
2 H 3	Other	CO ₂	Gg
2 H 3	Other	CH ₄	Gg CO ₂ eq
2 H 3	Other	N ₂ O	Gg CO ₂ eq
3 A 1	Dairy cattle	CH ₄	kt CO ₂ eq
3 A 2	Sheep	CH ₄	kt CO ₂ eq
3 A 3	Swine	CH ₄	kt CO ₂ eq
3 A 4 a	Buffalo	CH ₄	kt CO ₂ eq
3 A 4 b	Camels	CH ₄	kt CO ₂ eq
3 A 4 c	Deer	CH ₄	kt CO ₂ eq
3 A 4 d	Goats	CH ₄	kt CO ₂ eq
3 A 4 e	Horses	CH ₄	kt CO ₂ eq
3 A 4 f	Mules and asses	CH ₄	kt CO ₂ eq
3 A 4 g	Poultry	CH ₄	kt CO ₂ eq
3 A 4 h	Other	CH ₄	kt CO ₂ eq
3 B 1	Cattle	CH ₄	kt CO ₂ eq

IPCC Category Code	IPCC Category	Gas	Unit
3 B 1	Cattle	N2O	kt CO2 eq
3 B 2	Sheep	CH4	kt CO2 eq
3 B 2	Sheep	N2O	kt CO2 eq
3 B 3	Swine	CH4	kt CO2 eq
3 B 3	Swine	N2O	kt CO2 eq
3 B 4 a	Buffalo	CH4	kt CO2 eq
3 B 4 a	Buffalo	N2O	kt CO2 eq
3 B 4 b	Camels	CH4	kt CO2 eq
3 B 4 b	Camels	N2O	kt CO2 eq
3 B 4 c	Deer	CH4	kt CO2 eq
3 B 4 c	Deer	N2O	kt CO2 eq
3 B 4 d	Goats	CH4	kt CO2 eq
3 B 4 d	Goats	N2O	kt CO2 eq
3 B 4 e	Horses	CH4	kt CO2 eq
3 B 4 e	Horses	N2O	kt CO2 eq
3 B 4 f	Mules and Asses	CH4	kt CO2 eq
3 B 4 f	Mules and Asses	N2O	kt CO2 eq
3 B 4 g	Poultry	CH4	kt CO2 eq
3 B 4 g	Poultry	N2O	kt CO2 eq
3 B 4 h	Other	CH4	kt CO2 eq
3 B 4 h	Other	N2O	kt CO2 eq
3 C 1	Irrigated	CH4	kt CO2 eq
3 C 1	Irrigated	N2O	kt CO2 eq
3 C 2	Rain-fed	CH4	kt CO2 eq
3 C 2	Rain-fed	N2O	kt CO2 eq
3 C 3	Deep water	CH4	kt CO2 eq
3 C 3	Deep water	N2O	kt CO2 eq
3 C 4	Other	CH4	kt CO2 eq
3 C 4	Other	N2O	kt CO2 eq
3 D 1 a	Inorganic N fertilizers	CH4	kt CO2 eq
3 D 1 a	Inorganic N fertilizers	N2O	kt CO2 eq
3 D 1 b	Organic N fertilizers	CH4	kt CO2 eq
3 D 1 b	Organic N fertilizers	N2O	kt CO2 eq
3 D 1 c	Urine and dung deposited by grazing animals	CH4	kt CO2 eq
3 D 1 c	Urine and dung deposited by grazing animals	N2O	kt CO2 eq
3 D 1 d	Crop residues	CH4	kt CO2 eq
3 D 1 d	Crop residues	N2O	kt CO2 eq
3 D 1 e	Mineralization/immobilization	CH4	kt CO2 eq
3 D 1 e	Mineralization/immobilization	N2O	kt CO2 eq
3 D 1 f	Cultivation of organic soils	CH4	kt CO2 eq
3 D 1 f	Cultivation of organic soils	N2O	kt CO2 eq
3 D 1 g	Other	CH4	kt CO2 eq
3 D 1 g	Other	N2O	kt CO2 eq

IPCC Category Code	IPCC Category	Gas	Unit
3 D 2	Indirect N ₂ O Emissions from managed soils	CH ₄	kt CO ₂ eq
3 E 1	Forest land	CH ₄	kt CO ₂ eq
3 E 1	Forest land	N ₂ O	kt CO ₂ eq
3 E 2	Grassland	CH ₄	kt CO ₂ eq
3 E 2	Grassland	N ₂ O	kt CO ₂ eq
3 F	Field burning of agricultural residues	CH ₄	kt CO ₂ eq
3 F	Field burning of agricultural residues	N ₂ O	kt CO ₂ eq
3 G	Liming	CO ₂	Gg
3 G	Liming	CH ₄	kt CO ₂ eq
3 G	Liming	N ₂ O	kt CO ₂ eq
3 H	Urea application	CO ₂	Gg
3 H	Urea application	CH ₄	kt CO ₂ eq
3 H	Urea application	N ₂ O	kt CO ₂ eq
3 I	Other carbon-containing fertilizers	CO ₂	Gg
3 I	Other carbon-containing fertilizers	CH ₄	kt CO ₂ eq
3 I	Other carbon-containing fertilizers	N ₂ O	kt CO ₂ eq
3 J	Other	CO ₂	Gg
3 J	Other	CH ₄	kt CO ₂ eq
3 J	Other	N ₂ O	kt CO ₂ eq
5 A	Solid waste disposal	CH ₄	kt CO ₂ eq
5 B	Biological treatment of solid waste	CH ₄	kt CO ₂ eq
5 B	Biological treatment of solid waste	N ₂ O	kt CO ₂ eq
5 C	Incineration and open burning of waste	CO ₂	Gg
5 C	Incineration and open burning of waste	CH ₄	kt CO ₂ eq
5 C	Incineration and open burning of waste	N ₂ O	kt CO ₂ eq
5 D	Wastewater treatment and discharge	CH ₄	kt CO ₂ eq
5 D	Wastewater treatment and discharge	N ₂ O	kt CO ₂ eq
5 E	Other	CH ₄	kt CO ₂ eq
5 E	Other	N ₂ O	kt CO ₂ eq
5 E	Other	CH ₄	kt CO ₂ eq
5 E	Other	N ₂ O	kt CO ₂ eq
4 A 1	Forest land remaining forest land	CO ₂	Gg
4 A 1	Forest land remaining forest land	CH ₄	kt CO ₂ eq
4 A 1	Forest land remaining forest land	N ₂ O	kt CO ₂ eq
4 B 1	Cropland remaining cropland	CO ₂	Gg
4 B 1	Cropland remaining cropland	CH ₄	kt CO ₂ eq
4 B 1	Cropland remaining cropland	N ₂ O	kt CO ₂ eq

Annex I-3 Tables 4.2–4.3 of volume 1 of the 2006 IPCC Guidelines for National Greenhouse Gas Inventories, including and excluding LULUCF

In the following table, the results of the Key Categories Analysis (KCA) without LULUCF for 1990 and 2022 as well as the Trend assessment for the period 1990 – 2022 are provided.

Table 0-1 Level Assessment: Key categories without LULUCF 1990

Level Assessment - 1990		GHG	Year 1990 Estimate	Level Assessment L _{x,t}	Cumulative Total of L _{x,t}
IPCC Code	IPCC Category		Ex _t kt CO ₂ -equivalent		
1 B 2 b	Natural gas	CH ₄	10,726.42	13.28%	13.3%
1 A 1 a gaseous	Public Electricity and Heat Production	CO ₂	9,266.35	11.47%	24.8%
1 A 1 c 3 gaseous	Other energy industries	CO ₂	8,184.46	10.13%	34.9%
1 A 3 b diesel oil	Road transportation	CO ₂	6,956.41	8.61%	43.5%
1 A 3 b gasoline	Road transportation	CO ₂	6,413.70	7.94%	51.4%
1 B 2 c	Venting and flaring	CO ₂	5,869.55	7.27%	58.7%
1 A 4 b liquid	Residential	CO ₂	3,392.04	4.20%	62.9%
2 C 1	Iron and Steel Production	CO ₂	3,316.24	4.11%	67.0%
3 A 2	Sheep	CH ₄	2,667.72	3.30%	70.3%
1 A 4 b gaseous	Residential	CO ₂	2,454.98	3.04%	73.4%
2 A 1	Cement production	CO ₂	2,143.12	2.65%	76.0%
1 A 2 f gaseous	Non-metallic minerals	CO ₂	2,128.77	2.64%	78.7%
1 A 2 g 8 liquid	Other	CO ₂	2,002.49	2.48%	81.1%
3 A 1	Cattle	CH ₄	1,946.10	2.41%	83.5%
5 A	Solid waste disposal	CH ₄	1,493.63	1.85%	85.4%
3 D 1 b	Organic N fertilizers	N ₂ O	1,238.65	1.53%	86.9%
1 A 1 b gaseous	Petroleum Refining	CO ₂	1,139.10	1.41%	88.3%
5 D	Wastewater treatment and discharge	CH ₄	1,111.11	1.38%	89.7%
1 B 2 c	Venting and flaring	CH ₄	986.03	1.22%	90.9%
2 B 1	Ammonia Production	CO ₂	621.93	0.77%	91.7%
1 A 1 c 1 solid	Manufacture of solid fuels	CO ₂	565.26	0.70%	92.4%
1 A 3 a jet kerosene	Domestic aviation	CO ₂	477.32	0.59%	93.0%
3 A 4 d	Goats	CH ₄	450.68	0.56%	93.6%
3 B 1	Cattle	CH ₄	440.62	0.55%	94.1%
1 A 2 a gaseous	Iron and Steel	CO ₂	418.18	0.52%	94.6%
1 A 1 a liquid	Public Electricity and Heat Production	CO ₂	412.65	0.51%	95.1%
2 B 2	Nitric Acid Production	N ₂ O	380.59	0.47%	95.6%
5 C	Incineration and open burning of waste	CO ₂	358.57	0.44%	96.0%
1 B 2 a	Oil	CH ₄	355.66	0.44%	96.5%
1 A 2 a solid	Iron and Steel	CO ₂	312.00	0.39%	96.9%
3 D 1 a	Inorganic N fertilizers	N ₂ O	262.35	0.32%	97.2%
5 D	Wastewater treatment and discharge	N ₂ O	229.24	0.28%	97.5%
1 A 3 b gasoline	Road transportation	N ₂ O	173.15	0.21%	97.7%
2 B 8	Petrochemical and Carbon Black Production	CO ₂	159.46	0.20%	97.9%
3 A 4 b	Camels	CH ₄	157.72	0.20%	98.1%
1 A 4 c liquid	Agriculture/forestry/fishing	CO ₂	127.47	0.16%	98.2%
1 B 2 b	Natural gas	CO ₂	106.85	0.13%	98.4%

Level Assessment - 1990		GHG	Year 1990 Estimate	Level Assessment	Cumulative Total of
IPCC Code	IPCC Category		Ex,t kt CO ₂ -equivalent		
1 A 2 g 8 gaseous	Other (1 A 2 m)	CO2	101.18	0.13%	98.5%
1 A 3 b diesel oil	Road transportation	N2O	97.02	0.12%	98.6%
3 B 4 g	Poultry	CH4	89.02	0.11%	98.7%
3 A 4 f	Mules and asses	CH4	83.89	0.10%	98.8%
3 D 1 c	Urine and dung deposited by grazing animals	N2O	80.89	0.10%	98.9%
1 B 2 a	Oil	CO2	73.15	0.09%	99.0%
3 F	Field burning of agricultural residues	CH4	71.53	0.09%	99.1%
3 B 1	Cattle	N2O	69.63	0.09%	99.2%
3 B 4 g	Poultry	N2O	65.77	0.08%	99.3%
1 A 3 b gasoline	Road transportation	CH4	55.87	0.07%	99.4%
3 B 2	Sheep	N2O	55.37	0.07%	99.4%
1 A 2 c gaseous	Chemicals	CO2	51.12	0.06%	99.5%
3 H	Urea application	CO2	44.53	0.06%	99.5%
3 A 4 e	Horses	CH4	40.83	0.05%	99.6%
3 D 1 d	Crop residues	N2O	40.70	0.05%	99.6%
2 G 3	N2O from Product Uses	N2O	28.67	0.04%	99.7%
5 B	Biological treatment of solid waste	CH4	26.19	0.03%	99.7%
2 B 8	Petrochemical and Carbon Black Production	CH4	19.21	0.02%	99.7%
2 A 2	Lime production	CO2	18.89	0.02%	99.8%
5 C	Incineration and open burning of waste	N2O	18.29	0.02%	99.8%
1 B 2 c	Venting and flaring	N2O	17.89	0.02%	99.8%
3 B 2	Sheep	CH4	17.67	0.02%	99.8%
3 F	Field burning of agricultural residues	N2O	17.55	0.02%	99.8%
5 B	Biological treatment of solid waste	N2O	14.87	0.02%	99.9%
1 A 3 b diesel oil	Road transportation	CH4	10.25	0.013%	99.9%
1 A 4 b liquid	Residential	CH4	9.83	0.012%	99.9%
3 B 4 d	Goats	N2O	6.86	0.008%	99.9%
1 A 4 b gaseous	Residential	CH4	6.13	0.008%	99.9%
2 A 3	Glass Production	CO2	5.87	0.007%	99.9%
3 B 4 b	Camels	N2O	5.12	0.006%	99.9%
3 B 4 b	Camels	CH4	4.82	0.006%	99.9%
1 A 1 a gaseous	Public Electricity and Heat Production	CH4	4.62	0.006%	99.9%
1 A 4 b biomass	Commercial/institutional	CH4	4.46	0.006%	99.9%
1 A 1 a gaseous	Public Electricity and Heat Production	N2O	4.38	0.005%	99.9%
1 A 2 g 8 liquid	Other	N2O	4.25	0.005%	99.9%
1 A 1 c 3 gaseous	Other energy industries	CH4	4.01	0.005%	99.95%
1 A 4 b liquid	Residential	N2O	3.97	0.005%	99.96%
1 A 1 c 3 gaseous	Other energy industries	N2O	3.80	0.005%	99.96%
2 C 1	Iron and Steel Production	CH4	3.64	0.005%	99.97%
2 C 5	Lead Production	CO2	3.54	0.004%	99.97%
1 A 3 a jet kerosene	Domestic aviation	N2O	3.54	0.004%	99.97%
1 A 2 g 8 liquid	Other	CH4	2.24	0.003%	99.98%
3 B 4 h	Other	N2O	2.00	0.002%	99.98%

Level Assessment - 1990		GHG	Year 1990 Estimate	Level Assessment L _{x,t}	Cumulative Total of L _{x,t}
IPCC Code	IPCC Category		Ex,t kt CO ₂ -equivalent		
3 B 4 d	Goats	CH ₄	1.86	0.002%	99.98%
1 A 1 c 1 solid	Manufacture of solid fuels	CH ₄	1.80	0.002%	99.98%
1 A 4 b gaseous	Residential	N ₂ O	1.16	0.0014%	99.99%
1 A 2 f gaseous	Non-metallic minerals	CH ₄	1.06	0.0013%	99.99%
3 B 4 f	Mules and Asses	N ₂ O	1.05	0.0013%	99.99%
1 A 2 f gaseous	Non-metallic minerals	N ₂ O	1.01	0.0012%	99.99%
1 B 1 b	Fuel transformation	CH ₄	0.99	0.0012%	99.99%
1 A 1 a liquid	Public Electricity and Heat Production	N ₂ O	0.89	0.0011%	99.99%
2 F 1	Refrigeration and air conditioning	HFC	0.80	0.0010%	99.99%
3 B 4 f	Mules and Asses	CH ₄	0.77	0.0010%	99.99%
1 A 1 b gaseous	Petroleum Refining	CH ₄	0.57	0.0007%	99.99%
3 B 4 e	Horses	N ₂ O	0.57	0.0007%	99.995%
1 A 4 b biomass	Residential	N ₂ O	0.56	0.0007%	99.996%
1 A 1 b gaseous	Petroleum Refining	N ₂ O	0.54	0.0007%	99.997%
1 A 4 c liquid	Agriculture/forestry/fishing	CH ₄	0.48	0.0006%	99.997%
1 A 1 a liquid	Public Electricity and Heat Production	CH ₄	0.47	0.0006%	99.998%
3 B 4 e	Horses	CH ₄	0.42	0.0005%	99.998%
1 A 4 c liquid	Agriculture/forestry/fishing	N ₂ O	0.27	0.0003%	99.999%
1 A 2 a gaseous	Iron and Steel	CH ₄	0.21	0.0003%	99.999%
5 C	Incineration and open burning of waste	CH ₄	0.20	0.0002%	99.999%
1 A 2 a gaseous	Iron and Steel	N ₂ O	0.20	0.0002%	99.9996%
1 A 3 a jet kerosene	Domestic aviation	CH ₄	0.09	0.0001%	99.9997%
1 A 2 g 8 gaseous	Other (1 A 2 m)	CH ₄	0.05	0.0001%	99.9997%
1 A 2 g 8 gaseous	Other (1 A 2 m)	N ₂ O	0.05	0.0001%	99.9998%
1 B 1 b	Fuel transformation	CO ₂	0.04	<0.0001%	99.9998%
1 A 2 a solid	Iron and Steel	CH ₄	0.03	<0.0001%	99.9999%
1 A 2 a solid	Iron and Steel	N ₂ O	0.03	<0.0001%	99.9999%
1 A 2 c gaseous	Chemicals	CH ₄	0.03	<0.0001%	99.99996%
1 A 2 c gaseous	Chemicals	N ₂ O	0.02	<0.0001%	99.99999%
1 B 2 a	Oil	N ₂ O	0.01	<0.0001%	99.9999998%
3 B 4 h	Other	CH ₄	0.00001	<0.0001%	100.0 %

Table 0-2 Level Assessment: Key categories without LULUCF 2022

Level Assessment - 2022		GHG	Year 2022 Estimate	Level Assessment L _{x,t}	Cumulative Total of L _{x,t}
IPCC Code	IPCC Category		Ex,t kt CO ₂ -equivalent		
1 A 1 a gaseous	Public Electricity and Heat Production	CO ₂	41,552.99	17.28%	17.3%
1 A 3 b diesel oil	Road transportation	CO ₂	26,382.91	10.97%	28.3%
1 B 2 b	Natural gas	CH ₄	24,985.69	10.39%	38.7%
1 A 4 b gaseous	Residential	CO ₂	24,101.38	10.03%	48.7%
1 A 1 c 2 gaseous	Oil and gas extraction	CO ₂	18,061.20	7.51%	56.2%
2 A 1	Cement production	CO ₂	12,836.50	5.34%	61.5%

Level Assessment - 2022		GHG	Year 2022 Estimate	Level Assessment	Cumulative Total of
IPCC Code	IPCC Category		Ex,t kt CO ₂ -equivalent		
1 A 3 b gasoline	Road transportation	CO2	9,732.48	4.05%	65.6%
1 A 2 f gaseous	Non-metallic minerals	CO2	8,356.10	3.48%	69.1%
5 A	Solid waste disposal	CH4	8,013.87	3.33%	72.4%
1 B 2 c	Venting and flaring	CO2	6,283.94	2.61%	75.0%
1 A 1 c 3 gaseous	Other energy industries	CO2	5,887.59	2.45%	77.5%
1 A 2 g 8 gaseous	Other	CO2	4,550.94	1.89%	79.3%
2 B 1	Ammonia Production	CO2	4,320.79	1.80%	81.1%
2 C 1	Iron and Steel Production	CO2	4,071.17	1.69%	82.8%
1 A 3 b LPG	Road transportation	CO2	3,821.21	1.59%	84.4%
1 A 4 b liquid	Residential	CO2	3,648.03	1.52%	85.9%
1 A 4 a gaseous	Commercial/institutional	CO2	3,275.29	1.36%	87.3%
3 A 2	Sheep	CH4	3,242.64	1.35%	88.7%
1 A 1 b gaseous	Petroleum Refining	CO2	3,109.74	1.29%	89.9%
1 A 2 a gaseous	Iron and Steel	CO2	3,079.96	1.28%	91.2%
3 A 1	Cattle	CH4	1,876.29	0.78%	92.0%
3 D 1 b	Organic N fertilizers	N2O	1,673.31	0.70%	92.7%
1 A 4 a liquid	Commercial/institutional	CO2	1,572.31	0.65%	93.4%
1 A 2 g 5 liquid	Construction	CO2	1,385.70	0.58%	93.9%
1 A 2 e gaseous	Food processing, beverages and tobacco	CO2	1,366.47	0.57%	94.5%
1 A 3 e gaseous	Other transportation	CO2	1,275.13	0.53%	95.0%
5 D	Wastewater treatment and discharge	CH4	1,084.25	0.45%	95.5%
1 B 2 c	Venting and flaring	CH4	1,055.64	0.44%	95.9%
1 A 3 a jet kerosene	Domestic aviation	CO2	752.45	0.31%	96.2%
5 D	Wastewater treatment and discharge	N2O	725.55	0.30%	96.5%
3 A 4 d	Goats	CH4	642.72	0.27%	96.8%
1 A 1 a liquid	Public Electricity and Heat Production	CO2	640.24	0.27%	97.1%
3 B 1	Cattle	CH4	543.62	0.23%	97.3%
1 B 2 a	Oil	CH4	514.92	0.21%	97.5%
3 A 4 b	Camels	CH4	404.85	0.17%	97.7%
1 A 3 b diesel oil	Road transportation	N2O	367.97	0.15%	97.8%
1 B 2 b	Natural gas	CO2	314.08	0.13%	98.0%
1 A 3 b gasoline	Road transportation	N2O	308.34	0.13%	98.1%
3 D 1 a	Inorganic N fertilizers	N2O	292.33	0.12%	98.2%
1 B 2 b	Natural gas	CO2	289.22	0.12%	98.3%
5 C	Incineration and open burning of waste	CO2	233.58	0.10%	98.4%
1 A 2 a solid	Iron and Steel	CO2	232.51	0.10%	98.5%
3 B 4 g	Poultry	CH4	229.45	0.10%	98.6%
3 B 4 g	Poultry	N2O	160.87	0.07%	98.7%
3 D 1 d	Crop residues	N2O	154.57	0.06%	98.8%
3 B 2	Sheep	N2O	135.28	0.06%	98.8%
2 B 2	Nitric Acid Production	N2O	135.18	0.06%	98.9%
2 G 1	Electrical equipment	SF6	133.12	0.06%	98.9%
1 A 2 c gaseous	Chemicals	CO2	132.78	0.06%	99.0%
2 A 2	Lime production	CO2	123.49	0.05%	99.0%

Level Assessment - 2022		GHG	Year 2022 Estimate	Level Assessment	Cumulative Total of
IPCC Code	IPCC Category		Ex,t kt CO ₂ -equivalent		
1 A 3 c liquid	Railways	CO2	115.42	0.05%	99.1%
1 B 2 a	Oil	CO2	103.23	0.04%	99.1%
2 F 1	Refrigeration and air conditioning	HFC	101.33	0.04%	99.2%
3 D 1 c	Urine and dung deposited by grazing animals	N2O	101.02	0.04%	99.2%
1 A 4 c liquid	Agriculture/forestry/fishing	CO2	99.77	0.04%	99.2%
1 A 3 b gasoline	Road transportation	CH4	99.49	0.04%	99.3%
3 F	Field burning of agricultural residues	CH4	93.97	0.04%	99.3%
3 B 1	Cattle	N2O	92.51	0.04%	99.4%
1 A 4 c gaseous	Agriculture/forestry/fishing	CO2	75.45	0.03%	99.4%
1 A 2 g 3 gaseous	Mining (excluding fuels) and quarrying	CO2	75.12	0.03%	99.4%
1 A 2 c liquid	Chemicals	CO2	74.58	0.03%	99.5%
1 A 2 g 6 gaseous	Textile and leather	CO2	73.82	0.03%	99.5%
3 H	Urea application	CO2	67.47	0.03%	99.5%
2 D 1	Lubricant Use	CO2	61.91	0.03%	99.5%
1 A 2 f liquid	Non-metallic minerals	CO2	54.35	0.02%	99.6%
1 A 4 b gaseous	Residential	CH4	52.95	0.02%	99.6%
1 A 3 b LPG	Road transportation	CH4	49.53	0.02%	99.6%
2 G 3	N2O from Product Uses	N2O	48.94	0.02%	99.6%
3 B 2	Sheep	CH4	48.10	0.02%	99.6%
1 A 2 d gaseous	Pulp, paper and print	CO2	47.76	0.02%	99.7%
1 A 3 d Residual fuel oil	Domestic Navigation	CO2	46.31	0.02%	99.7%
2 B 8	Petrochemical and Carbon Black Production	CO2	44.54	0.02%	99.7%
1 A 3 b diesel oil	Road transportation	CH4	40.46	0.02%	99.7%
3 B 4 d	Goats	N2O	31.25	0.013%	99.7%
3 A 4 f	Mules and asses	CH4	28.24	0.012%	99.7%
5 B	Biological treatment of solid waste	CH4	23.56	0.010%	99.8%
3 A 4 e	Horses	CH4	23.36	0.010%	99.8%
3 B 4 b	Camels	N2O	23.26	0.010%	99.8%
3 F	Field burning of agricultural residues	N2O	23.06	0.010%	99.8%
3 B 4 b	Camels	CH4	21.89	0.009%	99.8%
1 B 2 c	Venting and flaring	N2O	21.65	0.009%	99.8%
5 C	Incineration and open burning of waste	N2O	18.47	0.008%	99.8%
1 A 1 a gaseous	Public Electricity and Heat Production	CH4	18.04	0.008%	99.8%
1 A 1 a gaseous	Public Electricity and Heat Production	N2O	17.07	0.007%	99.8%
5 B	Biological treatment of solid waste	N2O	13.38	0.006%	99.8%
1 A 3 c liquid	Railways	N2O	11.81	0.005%	99.8%
1 A 2 g 5 gaseous	Construction	CO2	11.63	0.005%	99.8%
3 B 4 d	Goats	CH4	11.06	0.005%	99.8%
1 A 4 b gaseous	Residential	N2O	10.02	0.004%	99.85%
1 A 4 a liquid	Commercial/institutional	CH4	8.72	0.004%	99.86%
1 A 4 b liquid	Residential	CH4	8.67	0.004%	99.86%
1 A 1 c 2 gaseous	Oil and gas extraction	CH4	8.26	0.003%	99.86%
1 A 1 c 2 gaseous	Oil and gas extraction	N2O	7.81	0.003%	99.87%

Level Assessment - 2022		GHG	Year 2022 Estimate	Level Assessment L _{x,t}	Cumulative Total of L _{x,t}
IPCC Code	IPCC Category		Ex,t kt CO ₂ -equivalent		
1 A 4 a gaseous	Commercial/institutional	CH ₄	5.95	0.002%	99.87%
1 A 2 e liquid	Food processing, beverages and tobacco	CO ₂	5.63	0.002%	99.87%
1 A 3 a jet kerosene	Domestic aviation	N ₂ O	5.48	0.002%	99.87%
1 A 4 a liquid	Commercial/institutional	N ₂ O	4.85	0.002%	99.88%
2 B 8	Petrochemical and Carbon Black Production	CH ₄	4.28	0.002%	99.88%
1 A 2 f gaseous	Non-metallic minerals	CH ₄	3.78	0.002%	99.88%
1 A 2 f gaseous	Non-metallic minerals	N ₂ O	3.58	0.001%	99.88%
1 A 4 b biomass	Commercial/institutional	CH ₄	3.36	0.001%	99.88%
1 A 1 c 3 gaseous	Other energy industries	CH ₄	3.01	0.001%	99.88%
1 A 1 c 3 gaseous	Other energy industries	N ₂ O	2.84	0.001%	99.88%
2 C 1	Iron and Steel Production	CH ₄	2.69	0.001%	99.88%
1 A 2 g 5 liquid	Construction	N ₂ O	2.48	0.001%	99.89%
3 B 4 h	Other	N ₂ O	2.46	0.001%	99.89%
1 A 2 a liquid	Iron and Steel	CO ₂	2.11	0.001%	99.89%
1 A 4 b liquid	Residential	N ₂ O	1.64	0.001%	99.89%
2 A 3	Glass Production	CO ₂	1.54	0.001%	99.89%
1 A 3 b LPG	Road transportation	N ₂ O	1.51	0.001%	99.89%
1 A 1 a liquid	Public Electricity and Heat Production	N ₂ O	1.43	0.001%	99.89%
1 A 2 g 5 liquid	Construction	CH ₄	1.31	0.001%	99.89%
1 A 1 b gaseous	Petroleum Refining	CH ₄	1.15	0.0005%	99.89%
1 A 4 a gaseous	Commercial/institutional	N ₂ O	1.13	0.0005%	99.89%
1 A 1 b gaseous	Petroleum Refining	N ₂ O	1.09	0.0005%	99.89%
1 A 3 e gaseous	Other transportation	CH ₄	0.79	0.0003%	99.89%
1 A 1 a liquid	Public Electricity and Heat Production	CH ₄	0.76	0.0003%	99.89%
1 A 3 e gaseous	Other transportation	N ₂ O	0.74	0.0003%	99.89%
1 A 2 g 8 liquid	Other	N ₂ O	0.63	0.0003%	99.89%
1 A 2 g 8 gaseous	Other	CH ₄	0.60	0.0003%	99.89%
1 A 2 g 8 gaseous	Other	N ₂ O	0.57	0.0002%	99.89%
1 A 2 e gaseous	Food processing, beverages and tobacco	CH ₄	0.55	0.0002%	99.89%
1 A 2 e gaseous	Food processing, beverages and tobacco	N ₂ O	0.52	0.0002%	99.89%
1 A 2 a gaseous	Iron and Steel	CH ₄	0.48	0.0002%	99.89%
1 A 2 a gaseous	Iron and Steel	N ₂ O	0.45	0.0002%	99.89%
1 A 4 b biomass	Residential	N ₂ O	0.42	0.0002%	99.90%
1 A 2 g 8 liquid	Other	CH ₄	0.36	0.0002%	99.90%
3 B 4 f	Mules and Asses	N ₂ O	0.35	0.0001%	99.90%
3 B 4 e	Horses	N ₂ O	0.32	0.0001%	99.90%
1 A 4 c liquid	Agriculture/forestry/fishing	CH ₄	0.30	0.0001%	99.90%
3 B 4 f	Mules and Asses	CH ₄	0.26	0.0001%	99.90%
3 B 4 e	Horses	CH ₄	0.24	0.0001%	99.90%
1 A 4 c gaseous	Agriculture/forestry/fishing	CH ₄	0.19	0.0001%	99.90%
1 A 3 c liquid	Railways	CH ₄	0.18	0.0001%	99.90%
1 A 3 d Residual fuel oil	Domestic Navigation	CH ₄	0.17	0.0001%	99.90%
1 A 2 c liquid	Chemicals	N ₂ O	0.16	0.0001%	99.90%

Level Assessment - 2022		GHG	Year 2022 Estimate	Level Assessment	Cumulative Total of L _{x,t}
IPCC Code	IPCC Category		Ex,t kt CO ₂ -equivalent		
5 C	Incineration and open burning of waste	CH ₄	0.16	0.0001%	99.90%
1 A 3 a jet kerosene	Domestic aviation	CH ₄	0.14	0.0001%	99.90%
1 A 4 c liquid	Agriculture/forestry/fishing	N ₂ O	0.13	0.0001%	99.90%
1 A 3 d Residual fuel oil	Domestic Navigation	N ₂ O	0.10	0.00004%	99.90%
1 A 2 c liquid	Chemicals	CH ₄	0.09	0.00004%	99.90%
1 A 2 f liquid	Non-metallic minerals	N ₂ O	0.08	0.00003%	99.90%
1 A 2 c gaseous	Chemicals	CH ₄	0.07	0.00003%	99.90%
1 A 2 c gaseous	Chemicals	N ₂ O	0.06	0.00003%	99.90%
1 A 2 f liquid	Non-metallic minerals	CH ₄	0.05	0.00002%	99.90%
1 A 2 g 3 gaseous	Mining (excluding fuels) and quarrying	CH ₄	0.04	0.00002%	99.90%
1 A 2 g 6 gaseous	Textile and leather	CH ₄	0.04	0.00002%	99.90%
1 A 4 c gaseous	Agriculture/forestry/fishing	N ₂ O	0.04	0.00001%	99.90%
1 A 2 g 3 gaseous	Mining (excluding fuels) and quarrying	N ₂ O	0.04	0.00001%	99.90%
1 A 2 g 6 gaseous	Textile and leather	N ₂ O	0.03	0.00001%	99.90%
1 A 2 a solid	Iron and Steel	CH ₄	0.03	0.00001%	99.90%
1 A 2 d gaseous	Pulp, paper and print	CH ₄	0.02	0.00001%	99.90%
1 A 2 a solid	Iron and Steel	N ₂ O	0.02	0.00001%	99.90%
1 A 2 d gaseous	Pulp, paper and print	N ₂ O	0.02	0.00001%	99.90%
2 B 10	Other	CO ₂	0.02	0.00001%	99.90%
1 B 2 a	Oil	N ₂ O	0.01	0.00000%	99.90%
1 A 2 g 5 gaseous	Construction	CH ₄	0.01	0.00000%	99.90%
1 A 2 g 5 gaseous	Construction	N ₂ O	0.01	0.00000%	99.90%
1 A 2 e liquid	Food processing, beverages and tobacco	CH ₄	0.002	0.00000%	99.90%
1 A 2 e liquid	Food processing, beverages and tobacco	N ₂ O	0.002	0.00000%	99.90%
1 A 2 a liquid	Iron and Steel	CH ₄	0.001	0.00000%	99.90%
1 A 2 a liquid	Iron and Steel	N ₂ O	0.001	0.00000%	99.90%
1 A 4 a biomass	Commercial/institutional	CH ₄	0.001	0.00000%	99.90%
1 A 4 a biomass	Commercial/institutional	N ₂ O	0.00010	0.00000%	99.90%
3 B 4 h	Other	CH ₄	0.00002	0.00000%	99.90%
1 B 1 b	Fuel transformation	CO ₂	0.00001	0.00000%	99.90%
1 B 1 b	Fuel transformation	CH ₄	0.000005	0.00000%	99.99%

Table 0-3 Trend Assessment: Key categories without LULUCF 2022

Trend Assessment		GHG	Base Year (1990) Estimate E _{x,0}	Latest Year (2022) Estimate E _{x,t}	Trend Assessment L _{x,t}	% Contribution to the trend	Cumulative Total of L _{x,t}
IPCC Code	IPCC Category		kt CO ₂ -equivalent		L _{x,t}		
1 A 2 g 8 liquid	Other	CO ₂	2,002.49	222.32	0.2003	29.44%	29.4%
1 A 1 a gaseous	Public Electricity and Heat Production	CO ₂	9,266.35	41,552.99	0.0892	13.10%	42.5%
1 B 2 b	Natural gas	CH ₄	10,726.42	24,985.69	0.0758	11.14%	53.7%
1 A 3 b diesel oil	Road transportation	CO ₂	6,956.41	26,382.91	0.0634	9.32%	63.0%

Trend Assessment		GHG	Base Year (1990) Estimate E _{x,0}	Latest Year (2022) Estimate E _{x,t}	Trend Assessment L _{x,t}	% Contribution to the trend	Cumulative Total of L _{x,t}
IPCC Code	IPCC Category		kt CO ₂ -equivalent		L _{x,t}		
1 A 1 c 3 gaseous	Other energy industries	CO2	8,184.46	5,887.59	0.0396	5.81%	68.8%
1 A 4 b gaseous	Residential	CO2	2,454.98	24,101.38	0.0273	4.01%	72.8%
1 A 3 b gasoline	Road transportation	CO2	6,413.70	9,732.48	0.0271	3.98%	76.8%
2 A 1	Cement production	CO2	2,143.12	12,836.50	0.0221	3.25%	80.1%
1 A 2 f gaseous	Non-metallic minerals	CO2	2,128.77	8,356.10	0.0196	2.89%	83.0%
5 A	Solid waste disposal	CH4	1,493.63	8,013.87	0.0151	2.21%	85.2%
2 B 2	Nitric Acid Production	N2O	380.59	96.06	0.0143	2.09%	87.3%
1 A 1 b gaseous	Petroleum Refining	CO2	1,139.10	3,109.74	0.0089	1.31%	88.6%
2 C 1	Iron and Steel Production	CO2	3,316.24	4,071.17	0.0076	1.12%	89.7%
2 B 1	Ammonia Production	CO2	621.93	4,320.79	0.0066	0.97%	90.7%
5 C	Incineration and open burning of waste	CO2	358.57	154.95	0.0059	0.87%	91.5%
3 A 2	Sheep	CH4	2,667.72	3,242.64	0.0059	0.86%	92.4%
1 B 2 c	Venting and flaring	CO2	5,869.55	6,283.94	0.0048	0.70%	93.1%
1 A 2 a gaseous	Iron and Steel	CO2	418.18	3,079.96	0.0045	0.66%	93.8%
3 D 1 b	Organic N fertilizers	N2O	1,238.65	1,673.31	0.0040	0.59%	94.3%
2 B 8	Petrochemical and Carbon Black Production	CO2	159.46	54.57	0.0039	0.58%	94.9%
3 A 4 f	Mules and asses	CH4	83.89	22.38	0.0031	0.46%	95.4%
1 A 4 b liquid	Residential	CO2	3,392.04	3,648.03	0.0029	0.43%	95.8%
1 A 3 a jet kerosene	Domestic aviation	CO2	477.32	752.45	0.0022	0.32%	96.1%
5 D	Wastewater treatment and discharge	N2O	229.24	725.55	0.0019	0.29%	96.4%
1 A 1 a liquid	Public Electricity and Heat Production	CO2	412.65	640.24	0.0018	0.27%	96.7%
1 A 4 b liquid	Residential	N2O	3.97	2.03	0.0018	0.26%	96.9%
3 A 4 d	Goats	CH4	450.68	642.72	0.0017	0.25%	97.2%
2 A 3	Glass Production	CO2	5.87	1.78	0.0015	0.22%	97.4%
1 B 2 a	Oil	CH4	355.66	514.92	0.0014	0.20%	97.6%
1 A 2 g 8 gaseous	Other	CO2	101.18	4,550.94	0.0012	0.18%	97.8%
3 A 4 b	Camels	CH4	157.72	404.85	0.0012	0.18%	98.0%
3 B 1	Cattle	CH4	440.62	543.62	0.0010	0.15%	98.1%
2 B 8	Petrochemical and Carbon Black Production	CH4	19.21	5.25	0.0010	0.15%	98.3%
1 A 2 a solid	Iron and Steel	CO2	312.00	253.15	0.0009	0.13%	98.4%
3 A 1	Cattle	CH4	1,946.10	1,876.29	0.0009	0.13%	98.5%
1 A 3 b diesel oil	Road transportation	N2O	97.02	367.97	0.0009	0.13%	98.7%
1 B 2 b	Natural gas	CO2	106.85	314.08	0.0009	0.13%	98.8%
1 B 2 c	Venting and flaring	CH4	986.03	1,055.64	0.0008	0.12%	98.9%

Trend Assessment		GHG	Base Year (1990) Estimate E _{x,0}	Latest Year (2022) Estimate E _{x,t}	Trend Assessment L _{x,t}	% Contribution to the trend	Cumulative Total of L _{x,t}
IPCC Code	IPCC Category		kt CO ₂ -equivalent		L _{x,t}		
1 A 3 b gasoline	Road transportation	N2O	173.15	262.75	0.0007	0.11%	99.0%
1 A 2 c gaseous	Chemicals	CO2	51.12	303.60	0.0005	0.08%	99.1%
3 B 4 g	Poultry	CH4	89.02	156.61	0.0005	0.07%	99.2%
2 C 1	Iron and Steel Production	CH4	3.64	2.16	0.0004	0.05%	99.2%
5 D	Wastewater treatment and discharge	CH4	1,111.11	1,084.25	0.0003	0.05%	99.3%
1 A 4 c liquid	Agriculture/forestry /fishing	CO2	127.47	105.31	0.0003	0.05%	99.3%
3 D 1 a	Inorganic N fertilizers	N2O	262.35	292.33	0.0003	0.05%	99.4%
3 D 1 d	Crop residues	N2O	40.70	106.60	0.0003	0.05%	99.4%
3 A 4 e	Horses	CH4	40.83	26.17	0.0003	0.05%	99.5%
3 B 4 g	Poultry	N2O	65.77	98.79	0.0003	0.04%	99.5%
3 B 2	Sheep	N2O	55.37	91.67	0.0003	0.04%	99.6%
1 B 2 a	Oil	CO2	73.15	102.08	0.0003	0.04%	99.6%
1 A 3 b gasoline	Road transportation	CH4	55.87	84.78	0.0002	0.04%	99.6%
2 A 2	Lime production	CO2	18.89	298.00	0.0002	0.03%	99.7%
3 H	Urea application	CO2	44.53	67.47	0.0002	0.03%	99.7%
3 D 1 c	Urine and dung deposited by grazing animals	N2O	80.89	68.57	0.0002	0.03%	99.7%
3 F	Field burning of agricultural residues	CH4	71.53	88.58	0.0002	0.03%	99.7%
2 G 3	N2O from Product Uses	N2O	28.67	52.60	0.0002	0.02%	99.8%
1 A 4 b biomass	Commercial/instituti onal	CH4	4.46	0.00	0.0001	0.02%	99.8%
1 A 2 g 8 liquid	Other	N2O	4.25	0.21	0.0001	0.02%	99.8%
3 B 2	Sheep	CH4	17.67	36.57	0.0001	0.02%	99.8%
5 C	Incineration and open burning of waste	N2O	18.29	12.89	0.0001	0.02%	99.8%
5 B	Biological treatment of solid waste	CH4	26.19	20.31	0.0001	0.02%	99.8%
1 A 3 b diesel oil	Road transportation	CH4	10.25	38.88	0.0001	0.014%	99.86%
3 B 1	Cattle	N2O	69.63	64.09	0.0001	0.011%	99.87%
1 A 4 b gaseous	Residential	CH4	6.13	60.15	0.0001	0.010%	99.88%
3 B 4 d	Goats	N2O	6.86	23.79	0.0001	0.010%	99.89%
5 B	Biological treatment of solid waste	N2O	14.87	11.53	0.0001	0.009%	99.90%
1 A 1 c 3 gaseous	Other energy industries	N2O	3.80	2.78	0.0001	0.009%	99.91%
1 A 1 c 3 gaseous	Other energy industries	CH4	4.01	2.94	0.0001	0.008%	99.92%
3 B 4 b	Camels	N2O	5.12	17.52	0.0001	0.007%	99.93%
1 A 1 a gaseous	Public Electricity and Heat Production	CH4	4.62	20.74	0.0000	0.007%	99.94%
3 B 4 b	Camels	CH4	4.82	16.49	0.0000	0.007%	99.94%

Trend Assessment		GHG	Base Year (1990) Estimate E _{x,0}	Latest Year (2022) Estimate E _{x,t}	Trend Assessment L _{x,t}	% Contribution to the trend	Cumulative Total of L _{x,t}
IPCC Code	IPCC Category		kt CO ₂ -equivalent		L _{x,t}		
1 A 1 a gaseous	Public Electricity and Heat Production	N2O	4.38	19.63	0.0000	0.007%	99.95%
3 F	Field burning of agricultural residues	N2O	17.55	21.74	0.0000	0.007%	99.96%
1 A 2 g 8 liquid	Other	CH4	2.24	0.14	0.0000	0.005%	99.96%
3 B 4 h	Other	N2O	2.00	1.87	0.0000	0.005%	99.97%
1 A 3 a jet kerosene	Domestic aviation	N2O	3.54	5.58	0.0000	0.004%	99.97%
1 A 4 b liquid	Residential	CH4	9.83	8.55	0.0000	0.004%	99.97%
3 B 4 d	Goats	CH4	1.86	7.88	0.0000	0.003%	99.98%
1 A 2 f gaseous	Non-metallic minerals	CH4	1.06	4.17	0.0000	0.003%	99.98%
1 A 2 f gaseous	Non-metallic minerals	N2O	1.01	3.95	0.0000	0.003%	99.98%
1 A 1 b gaseous	Petroleum Refining	CH4	0.57	1.55	0.0000	0.002%	99.98%
1 B 2 c	Venting and flaring	N2O	17.89	19.15	0.0000	0.002%	99.986%
1 A 4 b gaseous	Residential	N2O	1.16	11.38	0.0000	0.002%	99.989%
1 A 1 b gaseous	Petroleum Refining	N2O	0.54	1.47	0.0000	0.002%	99.990%
2 F 1	Refrigeration and air conditioning	HFC	0.80	132.83	0.0000	0.0015%	99.992%
1 A 1 a liquid	Public Electricity and Heat Production	N2O	0.89	1.37	0.0000	0.0013%	99.993%
1 A 2 a gaseous	Iron and Steel	CH4	0.21	1.54	0.0000	0.0011%	99.994%
1 A 2 g 8 gaseous	Other	N2O	0.05	2.15	0.0000	0.0011%	99.995%
1 B 1 b	Fuel transformation	CH4	0.99	0.00	0.0000	0.0009%	99.996%
1 A 2 a gaseous	Iron and Steel	N2O	0.20	1.45	0.0000	0.0009%	99.997%
3 B 4 f	Mules and Asses	N2O	1.05	0.28	0.0000	0.0009%	99.998%
1 A 2 g 8 gaseous	Other	CH4	0.05	2.27	0.0000	0.0007%	99.999%
3 B 4 f	Mules and Asses	CH4	0.77	0.21	0.0000	0.0004%	99.999%
1 A 4 b biomass	Residential	N2O	0.56	0.00	0.0000	0.0003%	99.999%
1 A 1 a liquid	Public Electricity and Heat Production	CH4	0.47	0.73	0.0000	0.0002%	99.9996%
3 B 4 e	Horses	N2O	0.57	0.36	0.0000	0.00013%	99.9998%
1 A 4 c liquid	Agriculture/forestry/fishing	CH4	0.48	0.31	0.0000	0.00009%	99.9999%
3 B 4 e	Horses	CH4	0.42	0.27	0.0000	0.00007%	99.9999%
1 A 4 c liquid	Agriculture/forestry/fishing	N2O	0.27	0.13	0.0000	0.00004%	99.99997%
5 C	Incineration and open burning of waste	CH4	0.20	0.11	0.0000	0.00002%	99.99999%
1 A 3 a jet kerosene	Domestic aviation	CH4	0.09	0.15	0.0000	0.000005%	99.99999%
1 A 2 c gaseous	Chemicals	CH4	0.03	0.15	0.0000	0.000003%	99.999996%
1 A 2 c gaseous	Chemicals	N2O	0.02	0.14	0.0000	0.000003%	99.999998%
1 B 1 b	Fuel transformation	CO2	0.04	0.00	0.0000	0.000001%	99.9999996%
1 A 2 a solid	Iron and Steel	CH4	0.03	0.03	0.0000	0.000000%	99.9999998%
1 A 2 a solid	Iron and Steel	N2O	0.03	0.03	0.0000	0.000000%	99.99999998%

Trend Assessment		GHG	Base Year (1990) Estimate E _{x,0}	Latest Year (2022) Estimate E _{x,t}	Trend Assessment L _{x,t}	% Contribution to the trend	Cumulative Total of L _{x,t}
IPCC Code	IPCC Category		kt CO ₂ -equivalent		L _{x,t}		
1 B 2 a	Oil	N ₂ O	0.01	0.01	0.0000	0.000000%	100%

In the following table, the results of the Key Categories Analysis (KCA) with LULUCF for 1990 and 2022 as well as the Trend assessment for the period 1990 – 2022 are provided.

Table 0-4 Level Assessment: Key categories with LULUCF 1990

Level Assessment - 1990		GHG	Year 1990 Estimate	Absolute value	Level Assessment	Cumulative
IPCC Code	IPCC Category		Ex,t	of Year 2022 Estimate Ex,t		
			kt CO ₂ -equivalent			
1 B 2 b	Natural gas	CH4	10,726.42	10,726.42	12.0%	12.0%
1 A 1 a gaseous	Public Electricity and Heat Production	CO2	9,266.35	9,266.35	10.3%	22.3%
1 A 1 c 3 gaseous	Other energy industries	CO2	8,184.46	8,184.46	9.1%	31.5%
4 A 1	Forest land remaining forest land	CO2	8,079.05	8,079.05	9.0%	40.5%
1 A 3 b diesel oil	Road transportation	CO2	6,956.41	6,956.41	7.8%	48.2%
1 A 3 b gasoline	Road transportation	CO2	6,413.70	6,413.70	7.2%	55.4%
1 B 2 c	Venting and flaring	CO2	5,869.55	5,869.55	6.6%	62.0%
1 A 4 b liquid	Residential	CO2	3,392.04	3,392.04	3.8%	65.7%
2 C 1	Iron and Steel Production	CO2	3,316.24	3,316.24	3.7%	69.4%
3 A 2	Sheep	CH4	2,667.72	2,667.72	3.0%	72.4%
1 A 4 b gaseous	Residential	CO2	2,454.98	2,454.98	2.7%	75.2%
2 A 1	Cement production	CO2	2,143.12	2,143.12	2.4%	77.6%
1 A 2 f gaseous	Non-metallic minerals	CO2	2,128.77	2,128.77	2.4%	79.9%
1 A 2 g 8 liquid	Other	CO2	2,002.49	2,002.49	2.2%	82.2%
3 A 1	Cattle	CH4	1,946.10	1,946.10	2.2%	84.3%
5 A	Solid waste disposal	CH4	1,493.63	1,493.63	1.7%	86.0%
3 D 1 b	Organic N fertilizers	N2O	1,238.65	1,238.65	1.4%	87.4%
1 A 1 b gaseous	Petroleum Refining	CO2	1,139.10	1,139.10	1.3%	88.7%
5 D	Wastewater treatment and discharge	CH4	1,111.11	1,111.11	1.2%	89.9%
1 B 2 c	Venting and flaring	CH4	986.03	986.03	1.1%	91.0%
4 B 1	Cropland remaining cropland	CO2	661.74	661.74	0.7%	91.7%
2 B 1	Ammonia Production	CO2	621.93	621.93	0.7%	92.4%
1 A 1 c 1 solid	Manufacture of solid fuels	CO2	565.26	565.26	0.6%	93.1%
1 A 3 a jet kerosene	Domestic aviation	CO2	477.32	477.32	0.5%	93.6%
3 A 4 d	Goats	CH4	450.68	450.68	0.5%	94.1%
3 B 1	Cattle	CH4	440.62	440.62	0.5%	94.6%
1 A 2 a gaseous	Iron and Steel	CO2	418.18	418.18	0.5%	95.1%
1 A 1 a liquid	Public Electricity and Heat Production	CO2	412.65	412.65	0.5%	95.5%
2 B 2	Nitric Acid Production	N2O	380.59	380.59	0.4%	95.9%

Level Assessment - 1990		GHG	Year 1990 Estimate	Absolute value	Level Assessment	Cumulative Total of
IPCC Code	IPCC Category		Ex,t	of Year 2022 Estimate Ex,t		
			kt CO ₂ -equivalent			
5 C	Incineration and open burning of waste	CO2	358.57	358.57	0.4%	96.3%
1 B 2 a	Oil	CH4	355.66	355.66	0.4%	96.7%
1 A 2 a solid	Iron and Steel	CO2	312.00	312.00	0.3%	97.1%
3 D 1 a	Inorganic N fertilizers	N2O	262.35	262.35	0.3%	97.4%
5 D	Wastewater treatment and discharge	N2O	229.24	229.24	0.3%	97.6%
1 A 3 b gasoline	Road transportation	N2O	173.15	173.15	0.2%	97.8%
2 B 8	Petrochemical and Carbon Black Production	CO2	159.46	159.46	0.2%	98.0%
3 A 4 b	Camels	CH4	157.72	157.72	0.2%	98.2%
1 A 4 c liquid	Agriculture/forestry/fishing	CO2	127.47	127.47	0.14%	98.3%
1 B 2 b	Natural gas	CO2	106.85	106.85	0.12%	98.4%
1 A 2 g 8 gaseous	Other	CO2	101.18	101.18	0.11%	98.6%
1 A 3 b diesel oil	Road transportation	N2O	97.02	97.02	0.11%	98.7%
3 B 4 g	Poultry	CH4	89.02	89.02	0.10%	98.8%
3 A 4 f	Mules and asses	CH4	83.89	83.89	0.09%	98.9%
3 D 1 c	Urine and dung deposited by grazing animals	N2O	80.89	80.89	0.09%	99.0%
1 B 2 a	Oil	CO2	73.15	73.15	0.08%	99.0%
3 F	Field burning of agricultural residues	CH4	71.53	71.53	0.08%	99.1%
3 B 1	Cattle	N2O	69.63	69.63	0.08%	99.2%
3 B 4 g	Poultry	N2O	65.77	65.77	0.07%	99.3%
1 A 3 b gasoline	Road transportation	CH4	55.87	55.87	0.06%	99.3%
3 B 2	Sheep	N2O	55.37	55.37	0.06%	99.4%
4 A 1	Forest land remaining forest land	CH4	52.50	52.50	0.06%	99.4%
1 A 2 c gaseous	Chemicals	CO2	51.12	51.12	0.06%	99.5%
3 H	Urea application	CO2	44.53	44.53	0.05%	99.6%
3 A 4 e	Horses	CH4	40.83	40.83	0.05%	99.6%
3 D 1 d	Crop residues	N2O	40.70	40.70	0.05%	99.6%
2 G 3	N2O from Product Uses	N2O	28.67	28.67	0.03%	99.7%
4 A 1	Forest land remaining forest land	N2O	27.49	27.49	0.03%	99.7%
5 B	Biological treatment of solid waste	CH4	26.19	26.19	0.03%	99.7%
2 B 8	Petrochemical and Carbon Black Production	CH4	19.21	19.21	0.02%	99.8%
2 A 2	Lime production	CO2	18.89	18.89	0.02%	99.8%
5 C	Incineration and open burning of waste	N2O	18.29	18.29	0.02%	99.8%
1 B 2 c	Venting and flaring	N2O	17.89	17.89	0.02%	99.8%
3 B 2	Sheep	CH4	17.67	17.67	0.02%	99.8%
3 F	Field burning of agricultural residues	N2O	17.55	17.55	0.02%	99.9%
5 B	Biological treatment of solid waste	N2O	14.87	14.87	0.02%	99.9%

Level Assessment - 1990		GHG	Year 1990 Estimate	Absolute value	Level Assessment	Cumulative
IPCC Code	IPCC Category		Ex,t	of Year 2022 Estimate Ex,t		
			kt CO ₂ -equivalent			
1 A 3 b diesel oil	Road transportation	CH4	10.25	10.25	0.011%	99.9%
1 A 4 b liquid	Residential	CH4	9.83	9.83	0.011%	99.9%
3 B 4 d	Goats	N2O	6.86	6.86	0.008%	99.9%
1 A 4 b gaseous	Residential	CH4	6.13	6.13	0.007%	99.9%
2 A 3	Glass Production	CO2	5.87	5.87	0.007%	99.9%
3 B 4 b	Camels	N2O	5.12	5.12	0.006%	99.9%
3 B 4 b	Camels	CH4	4.82	4.82	0.005%	99.9%
1 A 1 a gaseous	Public Electricity and Heat Production	CH4	4.62	4.62	0.005%	99.9%
1 A 4 b biomass	Commercial/institutional	CH4	4.46	4.46	0.005%	99.9%
1 A 1 a gaseous	Public Electricity and Heat Production	N2O	4.38	4.38	0.005%	99.9%
1 A 2 g 8 liquid	Other	N2O	4.25	4.25	0.005%	99.95%
1 A 1 c 3 gaseous	Other energy industries	CH4	4.01	4.01	0.004%	99.96%
1 A 4 b liquid	Residential	N2O	3.97	3.97	0.004%	99.96%
1 A 1 c 3 gaseous	Other energy industries	N2O	3.80	3.80	0.004%	99.97%
2 C 1	Iron and Steel Production	CH4	3.64	3.64	0.004%	99.97%
2 C 5	Lead Production	CO2	3.54	3.54	0.004%	99.97%
1 A 3 a jet kerosene	Domestic aviation	N2O	3.54	3.54	0.004%	99.98%
1 A 2 g 8 liquid	Other	CH4	2.24	2.24	0.003%	99.98%
3 B 4 h	Other	N2O	2.00	2.00	0.002%	99.98%
3 B 4 d	Goats	CH4	1.86	1.86	0.002%	99.98%
1 A 1 c 1 solid	Manufacture of solid fuels	CH4	1.80	1.80	0.002%	99.99%
1 A 4 b gaseous	Residential	N2O	1.16	1.16	0.001%	99.99%
1 A 2 f gaseous	Non-metallic minerals	CH4	1.06	1.06	0.001%	99.99%
3 B 4 f	Mules and Asses	N2O	1.05	1.05	0.001%	99.99%
1 A 2 f gaseous	Non-metallic minerals	N2O	1.01	1.01	0.001%	99.99%
1 B 1 b	Fuel transformation	CH4	0.99	0.99	0.001%	99.99%
1 A 1 a liquid	Public Electricity and Heat Production	N2O	0.89	0.89	0.001%	99.99%
2 F 1	Refrigeration and air conditioning	HFC	0.80	0.80	0.001%	99.99%
3 B 4 f	Mules and Asses	CH4	0.77	0.77	0.001%	99.99%
1 A 1 b gaseous	Petroleum Refining	CH4	0.57	0.57	0.001%	99.995%
3 B 4 e	Horses	N2O	0.57	0.57	0.001%	99.996%
1 A 4 b biomass	Residential	N2O	0.56	0.56	0.001%	99.996%
1 A 1 b gaseous	Petroleum Refining	N2O	0.54	0.54	0.001%	99.997%
1 A 4 c liquid	Agriculture/forestry/fishing	CH4	0.48	0.48	0.001%	99.998%
1 A 1 a liquid	Public Electricity and Heat Production	CH4	0.47	0.47	0.001%	99.998%
3 B 4 e	Horses	CH4	0.42	0.42	0.0005%	99.999%
1 A 4 c liquid	Agriculture/forestry/fishing	N2O	0.27	0.27	0.0003%	99.999%
1 A 2 a gaseous	Iron and Steel	CH4	0.21	0.21	0.0002%	99.999%
5 C	Incineration and open burning of waste	CH4	0.20	0.20	0.0002%	99.999%
1 A 2 a gaseous	Iron and Steel	N2O	0.20	0.20	0.0002%	99.9996%

Level Assessment - 1990		GHG	Year 1990 Estimate	Absolute value	Level Assessment	Cumulative Total of
IPCC Code	IPCC Category		Ex,t	of Year 2022 Estimate Ex,t		
			kt CO ₂ -equivalent			
1 A 3 a jet kerosene	Domestic aviation	CH4	0.09	0.09	0.0001%	99.9997%
1 A 2 g 8 gaseous	Other	CH4	0.05	0.05	0.0001%	99.9998%
1 A 2 g 8 gaseous	Other	N2O	0.05	0.05	0.0001%	99.9998%
1 B 1 b	Fuel transformation	CO2	0.036	0.036	0.0000%	99.9999%
1 A 2 a solid	Iron and Steel	CH4	0.034	0.034	0.0000%	99.9999%
1 A 2 a solid	Iron and Steel	N2O	0.032	0.032	0.0000%	99.9999%
1 A 2 c gaseous	Chemicals	CH4	0.026	0.026	0.0000%	99.99997%
1 A 2 c gaseous	Chemicals	N2O	0.024	0.024	0.0000%	99.99999%
1 B 2 a	Oil	N2O	0.006	0.006	0.0000%	100.00000 %
3 B 4 h	Other	CH4	0.000	0.000	0.0000%	100.00000 %
1 B 2 b	Natural gas	CH4	10,726.42	10,726.42	12.0%	12.0%
1 A 1 a gaseous	Public Electricity and Heat Production	CO2	9,266.35	9,266.35	10.3%	22.3%
1 A 1 c 3 gaseous	Other energy industries	CO2	8,184.46	8,184.46	9.1%	31.5%
4 A 1	Forest land remaining forest land	CO2	8,079.05	8,079.05	9.0%	40.5%
1 A 3 b diesel oil	Road transportation	CO2	6,956.41	6,956.41	7.8%	48.2%
1 A 3 b gasoline	Road transportation	CO2	6,413.70	6,413.70	7.2%	55.4%
1 B 2 c	Venting and flaring	CO2	5,869.55	5,869.55	6.6%	62.0%
1 A 4 b liquid	Residential	CO2	3,392.04	3,392.04	3.8%	65.7%
2 C 1	Iron and Steel Production	CO2	3,316.24	3,316.24	3.7%	69.4%
3 A 2	Sheep	CH4	2,667.72	2,667.72	3.0%	72.4%
1 A 4 b gaseous	Residential	CO2	2,454.98	2,454.98	2.7%	75.2%
2 A 1	Cement production	CO2	2,143.12	2,143.12	2.4%	77.6%
1 A 2 f gaseous	Non-metallic minerals	CO2	2,128.77	2,128.77	2.4%	79.9%
1 A 2 g 8 liquid	Other	CO2	2,002.49	2,002.49	2.2%	82.2%
3 A 1	Cattle	CH4	1,946.10	1,946.10	2.2%	84.3%
5 A	Solid waste disposal	CH4	1,493.63	1,493.63	1.7%	86.0%
3 D 1 b	Organic N fertilizers	N2O	1,238.65	1,238.65	1.4%	87.4%
1 A 1 b gaseous	Petroleum Refining	CO2	1,139.10	1,139.10	1.3%	88.7%
5 D	Wastewater treatment and discharge	CH4	1,111.11	1,111.11	1.2%	89.9%
1 B 2 c	Venting and flaring	CH4	986.03	986.03	1.1%	91.0%
4 B 1	Cropland remaining cropland	CO2	661.74	661.74	0.7%	91.7%
2 B 1	Ammonia Production	CO2	621.93	621.93	0.7%	92.4%
1 A 1 c 1 solid	Manufacture of solid fuels	CO2	565.26	565.26	0.6%	93.1%
1 A 3 a jet kerosene	Domestic aviation	CO2	477.32	477.32	0.5%	93.6%
3 A 4 d	Goats	CH4	450.68	450.68	0.5%	94.1%
3 B 1	Cattle	CH4	440.62	440.62	0.5%	94.6%
1 A 2 a gaseous	Iron and Steel	CO2	418.18	418.18	0.5%	95.1%
1 A 1 a liquid	Public Electricity and Heat Production	CO2	412.65	412.65	0.5%	95.5%
2 B 2	Nitric Acid Production	N2O	380.59	380.59	0.4%	95.9%

Level Assessment - 1990		GHG	Year 1990 Estimate	Absolute value	Level Assessment	Cumulative Total of
IPCC Code	IPCC Category		Ex,t	of Year 2022 Estimate Ex,t		
			kt CO ₂ -equivalent			
5 C	Incineration and open burning of waste	CO2	358.57	358.57	0.4%	96.3%
1 B 2 a	Oil	CH4	355.66	355.66	0.4%	96.7%
1 A 2 a solid	Iron and Steel	CO2	312.00	312.00	0.3%	97.1%
3 D 1 a	Inorganic N fertilizers	N2O	262.35	262.35	0.3%	97.4%
5 D	Wastewater treatment and discharge	N2O	229.24	229.24	0.3%	97.6%
1 A 3 b gasoline	Road transportation	N2O	173.15	173.15	0.2%	97.8%
2 B 8	Petrochemical and Carbon Black Production	CO2	159.46	159.46	0.2%	98.0%
3 A 4 b	Camels	CH4	157.72	157.72	0.2%	98.2%
1 A 4 c liquid	Agriculture/forestry/fishing	CO2	127.47	127.47	0.14%	98.3%
1 B 2 b	Natural gas	CO2	106.85	106.85	0.12%	98.4%
1 A 2 g 8 gaseous	Other	CO2	101.18	101.18	0.11%	98.6%
1 A 3 b diesel oil	Road transportation	N2O	97.02	97.02	0.11%	98.7%
3 B 4 g	Poultry	CH4	89.02	89.02	0.10%	98.8%
3 A 4 f	Mules and asses	CH4	83.89	83.89	0.09%	98.9%
3 D 1 c	Urine and dung deposited by grazing animals	N2O	80.89	80.89	0.09%	99.0%
1 B 2 a	Oil	CO2	73.15	73.15	0.08%	99.0%
3 F	Field burning of agricultural residues	CH4	71.53	71.53	0.08%	99.1%
3 B 1	Cattle	N2O	69.63	69.63	0.08%	99.2%
3 B 4 g	Poultry	N2O	65.77	65.77	0.07%	99.3%
1 A 3 b gasoline	Road transportation	CH4	55.87	55.87	0.06%	99.3%
3 B 2	Sheep	N2O	55.37	55.37	0.06%	99.4%
4 A 1	Forest land remaining forest land	CH4	52.50	52.50	0.06%	99.4%
1 A 2 c gaseous	Chemicals	CO2	51.12	51.12	0.06%	99.5%
3 H	Urea application	CO2	44.53	44.53	0.05%	99.6%
3 A 4 e	Horses	CH4	40.83	40.83	0.05%	99.6%
3 D 1 d	Crop residues	N2O	40.70	40.70	0.05%	99.6%
2 G 3	N2O from Product Uses	N2O	28.67	28.67	0.03%	99.7%
4 A 1	Forest land remaining forest land	N2O	27.49	27.49	0.03%	99.7%
5 B	Biological treatment of solid waste	CH4	26.19	26.19	0.03%	99.7%
2 B 8	Petrochemical and Carbon Black Production	CH4	19.21	19.21	0.02%	99.8%
2 A 2	Lime production	CO2	18.89	18.89	0.02%	99.8%
5 C	Incineration and open burning of waste	N2O	18.29	18.29	0.02%	99.8%
1 B 2 c	Venting and flaring	N2O	17.89	17.89	0.02%	99.8%
3 B 2	Sheep	CH4	17.67	17.67	0.02%	99.8%
3 F	Field burning of agricultural residues	N2O	17.55	17.55	0.02%	99.9%
5 B	Biological treatment of solid waste	N2O	14.87	14.87	0.02%	99.9%

Level Assessment - 1990		GHG	Year 1990 Estimate	Absolute value	Level Assessment	Cumulative
IPCC Code	IPCC Category		Ex,t	of Year 2022 Estimate Ex,t		
			kt CO ₂ -equivalent			
1 A 3 b diesel oil	Road transportation	CH4	10.25	10.25	0.011%	99.9%
1 A 4 b liquid	Residential	CH4	9.83	9.83	0.011%	99.9%
3 B 4 d	Goats	N2O	6.86	6.86	0.008%	99.9%
1 A 4 b gaseous	Residential	CH4	6.13	6.13	0.007%	99.9%
2 A 3	Glass Production	CO2	5.87	5.87	0.007%	99.9%
3 B 4 b	Camels	N2O	5.12	5.12	0.006%	99.9%
3 B 4 b	Camels	CH4	4.82	4.82	0.005%	99.9%
1 A 1 a gaseous	Public Electricity and Heat Production	CH4	4.62	4.62	0.005%	99.9%
1 A 4 b biomass	Commercial/institutional	CH4	4.46	4.46	0.005%	99.9%
1 A 1 a gaseous	Public Electricity and Heat Production	N2O	4.38	4.38	0.005%	99.9%
1 A 2 g 8 liquid	Other	N2O	4.25	4.25	0.005%	99.95%
1 A 1 c 3 gaseous	Other energy industries	CH4	4.01	4.01	0.004%	99.96%
1 A 4 b liquid	Residential	N2O	3.97	3.97	0.004%	99.96%
1 A 1 c 3 gaseous	Other energy industries	N2O	3.80	3.80	0.004%	99.97%
2 C 1	Iron and Steel Production	CH4	3.64	3.64	0.004%	99.97%
2 C 5	Lead Production	CO2	3.54	3.54	0.004%	99.97%
1 A 3 a jet kerosene	Domestic aviation	N2O	3.54	3.54	0.004%	99.98%
1 A 2 g 8 liquid	Other	CH4	2.24	2.24	0.003%	99.98%
3 B 4 h	Other	N2O	2.00	2.00	0.002%	99.98%
3 B 4 d	Goats	CH4	1.86	1.86	0.002%	99.98%
1 A 1 c 1 solid	Manufacture of solid fuels	CH4	1.80	1.80	0.002%	99.99%
1 A 4 b gaseous	Residential	N2O	1.16	1.16	0.001%	99.99%
1 A 2 f gaseous	Non-metallic minerals	CH4	1.06	1.06	0.001%	99.99%
3 B 4 f	Mules and Asses	N2O	1.05	1.05	0.001%	99.99%
1 A 2 f gaseous	Non-metallic minerals	N2O	1.01	1.01	0.001%	99.99%
1 B 1 b	Fuel transformation	CH4	0.99	0.99	0.001%	99.99%
1 A 1 a liquid	Public Electricity and Heat Production	N2O	0.89	0.89	0.001%	99.99%
2 F 1	Refrigeration and air conditioning	HFC	0.80	0.80	0.001%	99.99%
3 B 4 f	Mules and Asses	CH4	0.77	0.77	0.001%	99.99%
1 A 1 b gaseous	Petroleum Refining	CH4	0.57	0.57	0.001%	99.995%
3 B 4 e	Horses	N2O	0.57	0.57	0.001%	99.996%
1 A 4 b biomass	Residential	N2O	0.56	0.56	0.001%	99.996%
1 A 1 b gaseous	Petroleum Refining	N2O	0.54	0.54	0.001%	99.997%
1 A 4 c liquid	Agriculture/forestry/fishing	CH4	0.48	0.48	0.001%	99.998%
1 A 1 a liquid	Public Electricity and Heat Production	CH4	0.47	0.47	0.001%	99.998%
3 B 4 e	Horses	CH4	0.42	0.42	0.0005%	99.999%
1 A 4 c liquid	Agriculture/forestry/fishing	N2O	0.27	0.27	0.0003%	99.999%
1 A 2 a gaseous	Iron and Steel	CH4	0.21	0.21	0.0002%	99.999%
5 C	Incineration and open burning of waste	CH4	0.20	0.20	0.0002%	99.999%
1 A 2 a gaseous	Iron and Steel	N2O	0.20	0.20	0.0002%	99.9996%

Level Assessment - 1990		GHG	Year 1990 Estimate Ex,t	Absolute value of Year 2022 Estimate Ex,t	Level Assessment L _{x,t}	Cumulative Total of L _{x,t}
IPCC Code	IPCC Category					
			kt CO ₂ -equivalent			
1 A 3 a jet kerosene	Domestic aviation	CH4	0.09	0.09	0.0001%	99.9997%
1 A 2 g 8 gaseous	Other	CH4	0.05	0.05	0.0001%	99.9998%
1 A 2 g 8 gaseous	Other	N2O	0.05	0.05	0.0001%	99.9998%
1 B 1 b	Fuel transformation	CO2	0.036	0.036	0.0000%	99.9999%
1 A 2 a solid	Iron and Steel	CH4	0.034	0.034	0.0000%	99.9999%
1 A 2 a solid	Iron and Steel	N2O	0.032	0.032	0.0000%	99.9999%
1 A 2 c gaseous	Chemicals	CH4	0.026	0.026	0.0000%	99.99997%
1 A 2 c gaseous	Chemicals	N2O	0.024	0.024	0.0000%	99.99999%
1 B 2 a	Oil	N2O	0.006	0.006	0.0000%	100.00000 %
3 B 4 h	Other	CH4	0.000	0.000	0.0000%	100.00000 %

Table 0-5 Level Assessment: Key categories with LULUCF 2022

Level Assessment - 2022		GHG	Year 2022 Estimate	Absolute value of Year 2022 Estimate	Level Assessment	Cumulative Total of
IPCC Code	IPCC Category		Ex,t	Ex,t		
			kt CO ₂ -equivalent			
1 A 1 a gaseous	Public Electricity and Heat Production	CO2	41,552.99	41,552.99	16.5%	16.5%
1 A 3 b diesel oil	Road transportation	CO2	26,382.91	26,382.91	10.5%	27.0%
1 B 2 b	Natural gas	CH4	24,985.69	24,985.69	9.9%	36.9%
1 A 4 b gaseous	Residential	CO2	24,101.38	24,101.38	9.6%	46.4%
1 A 1 c 2 gaseous	Oil and gas extraction	CO2	18,061.20	18,061.20	7.2%	53.6%
2 A 1	Cement production	CO2	12,836.50	12,836.50	5.1%	58.7%
4 A 1	Forest land remaining forest land	CO2	10,149.47	10,149.47	4.0%	62.7%
1 A 3 b gasoline	Road transportation	CO2	9,732.48	9,732.48	3.9%	66.6%
1 A 2 f gaseous	Non-metallic minerals	CO2	8,356.10	8,356.10	3.3%	69.9%
5 A	Solid waste disposal	CH4	8,013.87	8,013.87	3.2%	73.1%
1 B 2 c	Venting and flaring	CO2	6,283.94	6,283.94	2.5%	75.6%
1 A 1 c 3 gaseous	Other energy industries	CO2	5,887.59	5,887.59	2.3%	77.9%
1 A 2 g 8 gaseous	Other	CO2	4,550.94	4,550.94	1.8%	79.7%
2 B 1	Ammonia Production	CO2	4,320.79	4,320.79	1.7%	81.4%
2 C 1	Iron and Steel Production	CO2	4,071.17	4,071.17	1.6%	83.0%
1 A 3 b LPG	Road transportation	CO2	3,821.21	3,821.21	1.5%	84.6%
1 A 4 b liquid	Residential	CO2	3,648.03	3,648.03	1.4%	86.0%
1 A 4 a gaseous	Commercial/institutional	CO2	3,275.29	3,275.29	1.3%	87.3%
3 A 2	Sheep	CH4	3,242.64	3,242.64	1.3%	88.6%
1 A 1 b gaseous	Petroleum Refining	CO2	3,109.74	3,109.74	1.2%	89.8%
1 A 2 a gaseous	Iron and Steel	CO2	3,079.96	3,079.96	1.2%	91.1%
3 A 1	Cattle	CH4	1,876.29	1,876.29	0.7%	91.8%
3 D 1 b	Organic N fertilizers	N2O	1,673.31	1,673.31	0.7%	92.5%
1 A 4 a liquid	Commercial/institutional	CO2	1,572.31	1,572.31	0.6%	93.1%
1 A 2 g 5 liquid	Construction	CO2	1,385.70	1,385.70	0.5%	93.6%
4 B 1	Cropland remaining cropland	CO2	1,378.68	1,378.68	0.5%	94.2%
1 A 2 e gaseous	Food processing, beverages and tobacco	CO2	1,366.47	1,366.47	0.5%	94.7%
1 A 3 e gaseous	Other transportation	CO2	1,275.13	1,275.13	0.5%	95.2%
5 D	Wastewater treatment and discharge	CH4	1,084.25	1,084.25	0.4%	95.7%
1 B 2 c	Venting and flaring	CH4	1,055.64	1,055.64	0.4%	96.1%
1 A 3 a jet kerosene	Domestic aviation	CO2	752.45	752.45	0.3%	96.4%
5 D	Wastewater treatment and discharge	N2O	725.55	725.55	0.3%	96.7%
3 A 4 d	Goats	CH4	642.72	642.72	0.3%	96.9%
1 A 1 a liquid	Public Electricity and Heat Production	CO2	640.24	640.24	0.3%	97.2%
3 B 1	Cattle	CH4	543.62	543.62	0.2%	97.4%
1 B 2 a	Oil	CH4	514.92	514.92	0.2%	97.6%
3 A 4 b	Camels	CH4	404.85	404.85	0.2%	97.8%
1 A 3 b diesel oil	Road transportation	N2O	367.97	367.97	0.1%	97.9%
1 B 2 b	Natural gas	CO2	314.08	314.08	0.1%	98.0%

Level Assessment - 2022		GHG	Year 2022 Estimate Ex,t	Absolute value of Year 2022 Estimate Ex,t	Level Assessment Lx,t	Cumulative Total of Lx,t
IPCC Code	IPCC Category		kt CO2-equivalent			
			1 A 2 c gaseous	Chemicals	CO2	303.60
2 A 2	Lime production	CO2	298.00	298.00	0.1%	98.3%
3 D 1 a	Inorganic N fertilizers	N2O	292.33	292.33	0.1%	98.4%
1 A 3 b gasoline	Road transportation	N2O	262.75	262.75	0.1%	98.5%
1 A 2 a solid	Iron and Steel	CO2	253.15	253.15	0.1%	98.6%
1 A 2 g 8 liquid	Other	CO2	222.32	222.32	0.1%	98.7%
1 A 2 a liquid	Iron and Steel	CO2	167.59	167.59	0.1%	98.7%
2 G 1	Electrical equipment	SF6	166.29	166.29	0.1%	98.8%
3 B 4 g	Poultry	CH4	156.61	156.61	0.1%	98.9%
5 C	Incineration and open burning of waste	CO2	154.95	154.95	0.1%	98.9%
2 F 1	Refrigeration and air conditioning	HFC	132.83	132.83	0.1%	99.0%
1 A 2 g 6 gaseous	Textile and leather	CO2	125.03	125.03	0.0%	99.0%
1 A 3 b LPG	Road transportation	CH4	118.25	118.25	0.0%	99.1%
1 A 3 c liquid	Railways	CO2	114.55	114.55	0.0%	99.1%
3 D 1 d	Crop residues	N2O	106.60	106.60	0.0%	99.2%
1 A 4 c liquid	Agriculture/forestry/fishing	CO2	105.31	105.31	0.0%	99.2%
1 B 2 a	Oil	CO2	102.08	102.08	0.0%	99.2%
3 B 4 g	Poultry	N2O	98.79	98.79	0.0%	99.3%
2 B 2	Nitric Acid Production	N2O	96.06	96.06	0.0%	99.3%
3 B 2	Sheep	N2O	91.67	91.67	0.0%	99.4%
3 F	Field burning of agricultural residues	CH4	88.58	88.58	0.0%	99.4%
1 A 2 d gaseous	Pulp, paper and print	CO2	87.18	87.18	0.0%	99.4%
1 A 2 g 3 gaseous	Mining (excluding fuels) and quarrying	CO2	86.33	86.33	0.0%	99.5%
1 A 3 b gasoline	Road transportation	CH4	84.78	84.78	0.0%	99.5%
1 A 4 c gaseous	Agriculture/forestry/fishing	CO2	71.66	71.66	0.0%	99.5%
1 A 3 d diesel oil	Domestic Navigation	CO2	71.09	71.09	0.0%	99.6%
3 D 1 c	Urine and dung deposited by grazing animals	N2O	68.57	68.57	0.0%	99.6%
3 H	Urea application	CO2	67.47	67.47	0.0%	99.6%
3 B 1	Cattle	N2O	64.09	64.09	0.0%	99.6%
1 A 2 g 5 gaseous	Construction	CO2	61.71	61.71	0.0%	99.7%
1 A 4 b gaseous	Residential	CH4	60.15	60.15	0.0%	99.7%
2 D 1	Lubricant Use	CO2	56.96	56.96	0.0%	99.7%
2 B 8	Petrochemical and Carbon Black Production	CO2	54.57	54.57	0.0%	99.7%
4 A 1	Forest land remaining forest land	CH4	53.59	53.59	0.0%	99.8%
2 G 3	N2O from Product Uses	N2O	52.60	52.60	0.0%	99.8%
1 A 2 f liquid	Non-metallic minerals	CO2	44.70	44.70	0.0%	99.8%
1 A 3 b diesel oil	Road transportation	CH4	38.88	38.88	0.0%	99.8%
1 A 3 d Residual fuel oil	Domestic Navigation	CO2	37.52	37.52	0.0%	99.8%
3 B 2	Sheep	CH4	36.57	36.57	0.0%	99.8%
4 A 1	Forest land remaining forest land	N2O	28.06	28.06	0.0%	99.8%
3 A 4 e	Horses	CH4	26.17	26.17	0.0%	99.9%

Level Assessment - 2022		GHG	Year 2022 Estimate	Absolute value of Year 2022 Estimate	Level Assessment L _{x,t}	Cumulative Total of L _{x,t}
IPCC Code	IPCC Category		Ex,t	Ex,t		
			kt CO ₂ -equivalent			
3 B 4 d	Goats	N2O	23.79	23.79	0.0%	99.9%
3 A 4 f	Mules and asses	CH4	22.38	22.38	0.0%	99.9%
3 F	Field burning of agricultural residues	N2O	21.74	21.74	0.0%	99.9%
1 A 1 a gaseous	Public Electricity and Heat Production	CH4	20.74	20.74	0.0%	99.9%
5 B	Biological treatment of solid waste	CH4	20.31	20.31	0.0%	99.9%
1 A 1 a gaseous	Public Electricity and Heat Production	N2O	19.63	19.63	0.0%	99.9%
1 B 2 c	Venting and flaring	N2O	19.15	19.15	0.0%	99.9%
3 B 4 b	Camels	N2O	17.52	17.52	0.0%	99.9%
3 B 4 b	Camels	CH4	16.49	16.49	0.0%	99.9%
1 A 2 c liquid	Chemicals	CO2	13.37	13.37	0.0%	99.9%
5 C	Incineration and open burning of waste	N2O	12.89	12.89	0.0%	99.9%
1 A 3 c liquid	Railways	N2O	11.72	11.72	0.0%	99.9%
5 B	Biological treatment of solid waste	N2O	11.53	11.53	0.0%	99.9%
1 A 4 b gaseous	Residential	N2O	11.38	11.38	0.00%	99.95%
1 A 1 c 2 gaseous	Oil and gas extraction	CH4	9.01	9.01	0.00%	99.96%
1 A 4 b liquid	Residential	CH4	8.55	8.55	0.00%	99.96%
1 A 1 c 2 gaseous	Oil and gas extraction	N2O	8.53	8.53	0.00%	99.96%
1 A 4 a gaseous	Commercial/institutional	CH4	8.17	8.17	0.00%	99.97%
3 B 4 d	Goats	CH4	7.88	7.88	0.00%	99.97%
1 A 3 d diesel oil	Domestic Navigation	N2O	7.27	7.27	0.00%	99.97%
1 A 4 a liquid	Commercial/institutional	CH4	5.77	5.77	0.00%	99.97%
1 A 3 a jet kerosene	Domestic aviation	N2O	5.58	5.58	0.00%	99.98%
2 B 8	Petrochemical and Carbon Black Production	CH4	5.25	5.25	0.00%	99.98%
1 A 2 f gaseous	Non-metallic minerals	CH4	4.17	4.17	0.00%	99.98%
1 A 2 f gaseous	Non-metallic minerals	N2O	3.95	3.95	0.00%	99.98%
1 A 3 b LPG	Road transportation	N2O	3.61	3.61	0.00%	99.98%
1 A 4 a liquid	Commercial/institutional	N2O	3.17	3.17	0.00%	99.98%
1 A 2 g 5 liquid	Construction	N2O	2.98	2.98	0.00%	99.99%
1 A 1 c 3 gaseous	Other energy industries	CH4	2.94	2.94	0.00%	99.99%
1 A 1 c 3 gaseous	Other energy industries	N2O	2.78	2.78	0.00%	99.99%
1 A 2 g 8 gaseous	Other	CH4	2.27	2.27	0.00%	99.99%
2 C 1	Iron and Steel Production	CH4	2.16	2.16	0.00%	99.99%
1 A 2 g 8 gaseous	Other	N2O	2.15	2.15	0.00%	99.99%
1 A 4 b liquid	Residential	N2O	2.03	2.03	0.00%	99.99%
3 B 4 h	Other	N2O	1.87	1.87	0.00%	99.99%
2 A 3	Glass Production	CO2	1.78	1.78	0.00%	99.99%
1 A 2 g 5 liquid	Construction	CH4	1.57	1.57	0.00%	99.99%
1 A 1 b gaseous	Petroleum Refining	CH4	1.55	1.55	0.00%	99.99%
1 A 4 a gaseous	Commercial/institutional	N2O	1.55	1.55	0.00%	99.99%
1 A 2 a gaseous	Iron and Steel	CH4	1.54	1.54	0.00%	99.99%
1 A 1 b gaseous	Petroleum Refining	N2O	1.47	1.47	0.001%	99.995%

Level Assessment - 2022		GHG	Year 2022 Estimate Ex,t	Absolute value of Year 2022 Estimate Ex,t	Level Assessment L _{x,t}	Cumulative Total of L _{x,t}
IPCC Code	IPCC Category		kt CO ₂ -equivalent			
1 A 2 a gaseous	Iron and Steel	N2O	1.45	1.45	0.001%	99.996%
1 A 1 a liquid	Public Electricity and Heat Production	N2O	1.37	1.37	0.001%	99.997%
1 A 2 e liquid	Food processing, beverages and tobacco	CO2	1.18	1.18	0.000%	99.997%
1 A 1 a liquid	Public Electricity and Heat Production	CH4	0.73	0.73	0.000%	99.997%
1 A 2 e gaseous	Food processing, beverages and tobacco	CH4	0.68	0.68	0.000%	99.998%
1 A 2 e gaseous	Food processing, beverages and tobacco	N2O	0.65	0.65	0.000%	99.998%
1 A 3 e gaseous	Other transportation	CH4	0.64	0.64	0.000%	99.998%
1 A 3 e gaseous	Other transportation	N2O	0.60	0.60	0.000%	99.998%
3 B 4 e	Horses	N2O	0.36	0.36	0.000%	99.998%
1 A 2 a liquid	Iron and Steel	N2O	0.36	0.36	0.000%	99.999%
1 A 4 c liquid	Agriculture/forestry/fishing	CH4	0.31	0.31	0.000%	99.999%
3 B 4 f	Mules and Asses	N2O	0.28	0.28	0.000%	99.999%
3 B 4 e	Horses	CH4	0.27	0.27	0.000%	99.999%
1 A 2 g 8 liquid	Other	N2O	0.21	0.21	0.000%	99.999%
3 B 4 f	Mules and Asses	CH4	0.21	0.21	0.000%	99.999%
1 A 2 a liquid	Iron and Steel	CH4	0.19	0.19	0.000%	99.999%
1 A 3 c liquid	Railways	CH4	0.18	0.18	0.000%	99.999%
1 A 4 c gaseous	Agriculture/forestry/fishing	CH4	0.18	0.18	0.000%	99.999%
1 A 2 c gaseous	Chemicals	CH4	0.15	0.15	0.000%	99.999%
1 A 3 a jet kerosene	Domestic aviation	CH4	0.15	0.15	0.000%	99.999%
1 A 2 g 8 liquid	Other	CH4	0.14	0.14	0.000%	99.999%
1 A 2 c gaseous	Chemicals	N2O	0.14	0.14	0.0001%	99.9995%
1 A 3 d Residual fuel oil	Domestic Navigation	CH4	0.14	0.14	0.0001%	99.9996%
1 A 4 c liquid	Agriculture/forestry/fishing	N2O	0.13	0.13	0.0001%	99.9996%
1 A 3 d diesel oil	Domestic Navigation	CH4	0.11	0.11	0.0000%	99.9997%
5 C	Incineration and open burning of waste	CH4	0.11	0.11	0.0000%	99.9997%
1 A 3 d Residual fuel oil	Domestic Navigation	N2O	0.08	0.08	0.0000%	99.9998%
1 A 2 f liquid	Non-metallic minerals	N2O	0.07	0.07	0.0000%	99.9998%
1 A 2 g 6 gaseous	Textile and leather	CH4	0.06	0.06	0.0000%	99.9998%
1 A 2 g 6 gaseous	Textile and leather	N2O	0.06	0.06	0.0000%	99.9998%
1 A 2 d gaseous	Pulp, paper and print	CH4	0.04	0.04	0.0000%	99.9998%
1 A 2 g 3 gaseous	Mining (excluding fuels) and quarrying	CH4	0.04	0.04	0.0000%	99.9999%
1 A 2 f liquid	Non-metallic minerals	CH4	0.04	0.04	0.0000%	99.9999%
1 A 2 d gaseous	Pulp, paper and print	N2O	0.04	0.04	0.0000%	99.9999%
1 A 2 g 3 gaseous	Mining (excluding fuels) and quarrying	N2O	0.04	0.04	0.0000%	99.9999%
1 A 4 c gaseous	Agriculture/forestry/fishing	N2O	0.03	0.03	0.0000%	99.9999%
1 A 2 g 5 gaseous	Construction	CH4	0.03	0.03	0.0000%	99.9999%
1 A 2 g 5 gaseous	Construction	N2O	0.03	0.03	0.00001%	99.99995%
1 A 2 c liquid	Chemicals	N2O	0.03	0.03	0.00001%	99.99996%

Level Assessment - 2022		GHG	Year 2022 Estimate Ex,t	Absolute value of Year 2022 Estimate Ex,t	Level Assessment L _{x,t}	Cumulative Total of L _{x,t}
IPCC Code	IPCC Category		kt CO ₂ -equivalent			
			1 A 2 a solid	Iron and Steel	CH4	0.03
1 A 2 a solid	Iron and Steel	N2O	0.03	0.03	0.00001%	99.99998%
1 A 2 c liquid	Chemicals	CH4	0.02	0.02	0.00001%	99.99999%
2 B 10	Other	CO2	0.014	0.014	0.00001%	99.99999%
1 B 2 a	Oil	N2O	0.009	0.009	0.00000%	99.999998%
1 A 4 b biomass	Commercial/institutional	CH4	0.004	0.004	0.00000%	99.999999%
1 A 2 e liquid	Food processing, beverages and tobacco	CH4	0.001	0.001	0.00000%	<100.0000%
1 A 2 e liquid	Food processing, beverages and tobacco	N2O	0.000	0.000	0.00000%	<100.0000%
1 A 4 b biomass	Residential	N2O	0.000	0.000	0.00000%	<100.0000%
1 B 1 b	Fuel transformation	CO2	0.000	0.000	0.00000%	<100.0000%
3 B 4 h	Other	CH4	0.000	0.000	0.00000%	<100.0000%
1 B 1 b	Fuel transformation	CH4	0.000	0.000	0.00000%	<100.0000%
1 A 4 a biomass	Commercial/institutional	CH4	0.000	0.000	0.00000%	<100.0000%
1 A 4 a biomass	Commercial/institutional	N2O	0.000	0.000	0.00000%	100%

Table 0-6 Trend Assessment: Key categories with LULUCF 2022

Trend Assessment		GHG	Base Year (1990) Estimate E _{x,0}	Latest Year (2022) Estimate E _{x,t}	Trend Assessment L _{x,t}	% Contribution to the trend	Cumulative Total of L _{x,t}
IPCC Code	IPCC Category		kt CO ₂ -equivalent		L _{x,t}		
1 A 2 g 8 liquid	Other	CO ₂	2,002.49	222.32	0.180	28.1%	28.14%
1 A 1 a gaseous	Public Electricity and Heat Production	CO ₂	9,266.35	41,552.99	0.080	12.5%	40.67%
1 B 2 b	Natural gas	CH ₄	10,726.42	24,985.69	0.068	10.7%	51.33%
1 A 3 b diesel oil	Road transportation	CO ₂	6,956.41	26,382.91	0.057	8.9%	60.24%
1 A 1 c 3 gaseous	Other energy industries	CO ₂	8,184.46	5,887.59	0.036	5.6%	65.80%
1 A 4 b gaseous	Residential	CO ₂	2,454.98	24,101.38	0.025	3.8%	69.64%
1 A 3 b gasoline	Road transportation	CO ₂	6,413.70	9,732.48	0.024	3.8%	73.45%
2 A 1	Cement production	CO ₂	2,143.12	12,836.50	0.020	3.1%	76.55%
4 A 1	Forest land remaining forest land	CO ₂	8,079.05	10,149.47	0.018	2.9%	79.42%
1 A 2 f gaseous	Non-metallic minerals	CO ₂	2,128.77	8,356.10	0.018	2.8%	82.18%
5 A	Solid waste disposal	CH ₄	1,493.63	8,013.87	0.014	2.1%	84.30%
2 B 2	Nitric Acid Production	N ₂ O	380.59	96.06	0.013	2.0%	86.30%
2 A 3	Glass Production	CO ₂	5.87	1.78	0.009	1.3%	87.65%
1 A 1 b gaseous	Petroleum Refining	CO ₂	1,139.10	3,109.74	0.008	1.3%	88.90%
2 C 1	Iron and Steel Production	CO ₂	3,316.24	4,071.17	0.007	1.1%	89.97%
2 B 1	Ammonia Production	CO ₂	621.93	4,320.79	0.006	0.9%	90.90%
5 C	Incineration and open burning of waste	CO ₂	358.57	154.95	0.005	0.8%	91.73%
3 A 2	Sheep	CH ₄	2,667.72	3,242.64	0.005	0.8%	92.56%

Trend Assessment		GHG	Base Year (1990) Estimate $E_{x,0}$	Latest Year (2022) Estimate $E_{x,t}$	Trend Assessment $L_{x,t}$	% Contribution to the trend	Cumulative Total of $L_{x,t}$
IPCC Code	IPCC Category		kt CO ₂ -equivalent		$L_{x,t}$		
1 B 2 c	Venting and flaring	CO2	5,869.55	6,283.94	0.004	0.7%	93.23%
1 A 2 a gaseous	Iron and Steel	CO2	418.18	3,079.96	0.004	0.6%	93.86%
4 B 1	Cropland remaining cropland	CO2	661.74	1,378.68	0.004	0.6%	94.46%
3 D 1 b	Organic N fertilizers	N2O	1,238.65	1,673.31	0.004	0.6%	95.02%
2 B 8	Petrochemical and Carbon Black Production	CO2	159.46	54.57	0.004	0.6%	95.57%
3 A 4 f	Mules and asses	CH4	83.89	22.38	0.003	0.4%	96.01%
1 A 4 b liquid	Residential	CO2	3,392.04	3,648.03	0.003	0.4%	96.42%
1 A 3 a jet kerosene	Domestic aviation	CO2	477.32	752.45	0.002	0.3%	96.73%
5 D	Wastewater treatment and discharge	N2O	229.24	725.55	0.002	0.3%	97.00%
1 A 1 a liquid	Public Electricity and Heat Production	CO2	412.65	640.24	0.002	0.3%	97.26%
3 A 4 d	Goats	CH4	450.68	642.72	0.002	0.2%	97.49%
1 B 2 a	Oil	CH4	355.66	514.92	0.001	0.2%	97.68%
1 A 2 g 8 gaseous	Other	CO2	101.18	4,550.94	0.001	0.2%	97.86%
3 A 4 b	Camels	CH4	157.72	404.85	0.001	0.2%	98.02%
3 B 1	Cattle	CH4	440.62	543.62	0.001	0.1%	98.17%
2 B 8	Petrochemical and Carbon Black Production	CH4	19.21	5.25	0.001	0.1%	98.31%
1 A 2 a solid	Iron and Steel	CO2	312.00	253.15	0.001	0.1%	98.43%
3 A 1	Cattle	CH4	1,946.10	1,876.29	0.001	0.1%	98.56%
1 A 3 b diesel oil	Road transportation	N2O	97.02	367.97	0.001	0.1%	98.68%
1 B 2 b	Natural gas	CO2	106.85	314.08	0.001	0.1%	98.81%
1 B 2 c	Venting and flaring	CH4	986.03	1,055.64	0.001	0.1%	98.92%
1 A 3 b gasoline	Road transportation	N2O	173.15	262.75	0.001	0.1%	99.02%
1 A 2 c gaseous	Chemicals	CO2	51.12	303.60	0.000	0.1%	99.10%
3 B 4 g	Poultry	CH4	89.02	156.61	0.000	0.1%	99.17%
1 A 4 b liquid	Residential	N2O	3.97	2.03	0.000	0.1%	99.23%
5 D	Wastewater treatment and discharge	CH4	1,111.11	1,084.25	0.000	0.0%	99.28%
1 A 4 c liquid	Agriculture/forestry/fishing	CO2	127.47	105.31	0.000	0.0%	99.32%
3 D 1 a	Inorganic N fertilizers	N2O	262.35	292.33	0.000	0.0%	99.37%
3 D 1 d	Crop residues	N2O	40.70	106.60	0.000	0.0%	99.41%
3 A 4 e	Horses	CH4	40.83	26.17	0.000	0.0%	99.46%
3 B 4 g	Poultry	N2O	65.77	98.79	0.000	0.0%	99.50%
3 B 2	Sheep	N2O	55.37	91.67	0.000	0.0%	99.54%
1 B 2 a	Oil	CO2	73.15	102.08	0.000	0.0%	99.57%
1 A 3 b gasoline	Road transportation	CH4	55.87	84.78	0.000	0.0%	99.61%
2 A 2	Lime production	CO2	18.89	298.00	0.000	0.0%	99.64%
3 H	Urea application	CO2	44.53	67.47	0.000	0.0%	99.66%
2 C 1	Iron and Steel Production	CH4	3.64	2.16	0.000	0.0%	99.69%

Trend Assessment		GHG	Base Year (1990) Estimate $E_{x,0}$	Latest Year (2022) Estimate $E_{x,t}$	Trend Assessment $L_{x,t}$	% Contribution to the trend	Cumulative Total of $L_{x,t}$
IPCC Code	IPCC Category		kt CO ₂ -equivalent		$L_{x,t}$		
3 D 1 c	Urine and dung deposited by grazing animals	N2O	80.89	68.57	0.000	0.0%	99.72%
3 F	Field burning of agricultural residues	CH4	71.53	88.58	0.000	0.0%	99.74%
2 G 3	N2O from Product Uses	N2O	28.67	52.60	0.000	0.0%	99.76%
1 A 4 b biomass	Commercial/institutional	CH4	4.46	0.00	0.000	0.0%	99.78%
1 A 2 g 8 liquid	Other	N2O	4.25	0.21	0.000	0.0%	99.80%
3 B 2	Sheep	CH4	17.67	36.57	0.000	0.0%	99.82%
5 C	Incineration and open burning of waste	N2O	18.29	12.89	0.000	0.0%	99.83%
5 B	Biological treatment of solid waste	CH4	26.19	20.31	0.000	0.0%	99.85%
1 A 3 b diesel oil	Road transportation	CH4	10.25	38.88	0.000	0.0%	99.86%
3 B 1	Cattle	N2O	69.63	64.09	0.000	0.0%	99.87%
1 A 4 b gaseous	Residential	CH4	6.13	60.15	0.000	0.0%	99.88%
3 B 4 d	Goats	N2O	6.86	23.79	0.000	0.0%	99.89%
5 B	Biological treatment of solid waste	N2O	14.87	11.53	0.000	0.0%	99.90%
3 B 4 h	Other	N2O	2.00	1.87	0.000	0.0%	99.91%
3 B 4 b	Camels	N2O	5.12	17.52	0.000	0.0%	99.92%
1 A 1 c 3 gaseous	Other energy industries	N2O	3.80	2.78	0.000	0.0%	99.92%
1 A 1 a gaseous	Public Electricity and Heat Production	CH4	4.62	20.74	0.000	0.0%	99.93%
3 B 4 b	Camels	CH4	4.82	16.49	0.000	0.0%	99.94%
1 A 1 c 3 gaseous	Other energy industries	CH4	4.01	2.94	0.000	0.0%	99.94%
1 A 1 a gaseous	Public Electricity and Heat Production	N2O	4.38	19.63	0.000	0.0%	99.95%
3 F	Field burning of agricultural residues	N2O	17.55	21.74	0.000	0.0%	99.96%
1 A 2 g 8 liquid	Other	CH4	2.24	0.14	0.000	0.0%	99.96%
1 A 1 b gaseous	Petroleum Refining	CH4	0.57	1.55	0.000	0.0%	99.97%
1 A 3 a jet kerosene	Domestic aviation	N2O	3.54	5.58	0.000	0.0%	99.97%
1 A 4 b liquid	Residential	CH4	9.83	8.55	0.000	0.0%	99.97%
3 B 4 d	Goats	CH4	1.86	7.88	0.000	0.0%	99.98%
1 A 1 b gaseous	Petroleum Refining	N2O	0.54	1.47	0.000	0.0%	99.98%
1 A 2 f gaseous	Non-metallic minerals	CH4	1.06	4.17	0.000	0.0%	99.98%
1 A 2 f gaseous	Non-metallic minerals	N2O	1.01	3.95	0.000	0.0%	99.98%
1 B 2 c	Venting and flaring	N2O	17.89	19.15	0.000	0.0%	99.98%
1 A 4 b gaseous	Residential	N2O	1.16	11.38	0.000	0.0%	99.987%
4 A 1	Forest land remaining forest land	CH4	52.50	53.59	0.000	0.0%	99.989%
1 A 2 a gaseous	Iron and Steel	CH4	0.21	1.54	0.000	0.0%	99.990%
1 A 1 a liquid	Public Electricity and Heat Production	N2O	0.89	1.37	0.000	0.0%	99.992%
2 F 1	Refrigeration and air conditioning	HFC	0.80	132.83	0.000	0.0%	99.994%

Trend Assessment		GHG	Base Year (1990) Estimate $E_{x,0}$	Latest Year (2022) Estimate $E_{x,t}$	Trend Assessment $L_{x,t}$	% Contribution to the trend	Cumulative Total of $L_{x,t}$
IPCC Code	IPCC Category		kt CO ₂ -equivalent		$L_{x,t}$		
1 A 2 a gaseous	Iron and Steel	N2O	0.20	1.45	0.000	0.0%	99.995%
4 A 1	Forest land remaining forest land	N2O	27.49	28.06	0.000	0.0%	99.996%
1 B 1 b	Fuel transformation	CH4	0.99	0.00	0.000	0.0%	99.997%
3 B 4 f	Mules and Asses	N2O	1.05	0.28	0.000	0.0%	99.998%
1 A 2 g 8 gaseous	Other	N2O	0.05	2.15	0.000	0.0%	99.998%
3 B 4 f	Mules and Asses	CH4	0.77	0.21	0.000	0.0%	99.999%
1 A 2 g 8 gaseous	Other	CH4	0.05	2.27	0.000	0.0%	99.999%
1 A 4 b biomass	Residential	N2O	0.56	0.00	0.000	0.0%	99.9994%
1 A 1 a liquid	Public Electricity and Heat Production	CH4	0.47	0.73	0.000	0.0%	99.9996%
3 B 4 e	Horses	N2O	0.57	0.36	0.000	0.0%	99.9998%
1 A 4 c liquid	Agriculture/forestry/fishing	CH4	0.48	0.31	0.000	0.0%	99.9999%
3 B 4 e	Horses	CH4	0.42	0.27	0.000	0.0%	99.9999%
1 A 4 c liquid	Agriculture/forestry/fishing	N2O	0.27	0.13	0.000	0.0%	99.99997%
5 C	Incineration and open burning of waste	CH4	0.20	0.11	0.000	0.0%	99.99999%
1 A 3 a jet kerosene	Domestic aviation	CH4	0.09	0.15	0.000	0.0%	99.99999%
1 A 2 c gaseous	Chemicals	CH4	0.03	0.15	0.000	0.0%	100.00000%
1 A 2 c gaseous	Chemicals	N2O	0.02	0.14	0.000	0.0%	100.00000%
1 B 1 b	Fuel transformation	CO2	0.04	0.00	0.000	0.0%	100.00000%
1 A 2 a solid	Iron and Steel	CH4	0.03	0.03	0.000	0.0%	100.00000%
1 A 2 a solid	Iron and Steel	N2O	0.03	0.03	0.000	0.0%	100.00000%
1 B 2 a	Oil	N2O	0.01	0.01	0.000	0.0%	100 %

Annex II: Uncertainty assessment

Table 3.3 of volume 1 of the 2006 IPCC Guidelines for National Greenhouse Gas Inventories

Table 0-7 General reporting table for uncertainty

Inventory sector	IPCC category code	IPCC category name	Gas	Base year emissions /removals	Year t emissions /removals	Activity data uncertainty		Emission factor/ estimation parameter uncertainty (combined if more than one estimation parameter is used)		Combined uncertainty		Contribution to variance in year t	Inventory trend in national emissions for year t increase with respect to base year	Uncertainty introduced into the trend in total national emissions with respect to base year	
				Gg CO ₂ equivalent		(-) %	(+) %	(-) %	(+) %	(-) %	(+) %	(fraction)	% of base year	(-) %	(+) %
Energy	1 A 1 a gaseous	Public Electricity and Heat Production	CO ₂	9,266.35	41,552.99	1.0	1.0	2.0	2.0	2.2	2.2	0.149	348.43	1.63	1.6
Energy	1 A 1 a gaseous	Public Electricity and Heat Production	CH ₄	4.62	20.74	1.0	1.0	100.0	100.0	100.0	100.0	0.000	348.43	0.04	0.0
Energy	1 A 1 a gaseous	Public Electricity and Heat Production	N ₂ O	4.38	19.63	1.0	1.0	192.0	192.0	192.0	192.0	0.000	348.43	0.07	0.1
Energy	1 A 1 a liquid	Public Electricity and Heat Production	CO ₂	412.65	640.24	1.0	1.0	2.0	2.0	2.2	2.2	0.000	55.15	0.03	0.0
Energy	1 A 1 a liquid	Public Electricity and Heat Production	N ₂ O	0.89	1.37	1.0	1.0	100.0	100.0	100.0	100.0	0.000	55.15	0.00	0.0
Energy	1 A 1 a liquid	Public Electricity and Heat Production	CH ₄	0.47	0.73	1.0	1.0	192.0	192.0	192.0	192.0	0.000	55.15	0.00	0.0
Energy	1 A 1 b gaseous	Petroleum Refining	CO ₂	1,139.10	3,109.74	2.0	2.0	2.0	2.0	2.8	2.8	0.001	173.00	0.15	0.2
Energy	1 A 1 b gaseous	Petroleum Refining	CH ₄	0.57	1.55	2.0	2.0	100.0	100.0	100.0	100.0	0.000	173.00	0.00	0.0
Energy	1 A 1 b gaseous	Petroleum Refining	N ₂ O	0.54	1.47	2.0	2.0	192.0	192.0	192.0	192.0	0.000	173.00	0.00	0.0
Energy	1 A 1 c 1 solid	Manufacture of solid fuels	CO ₂	565.26	0.00	10.0	10.0	10.0	10.0	14.1	14.1	0.000	-100.00	0.00	0.0
Energy	1 A 1 c 1 solid	Manufacture of solid fuels	CH ₄	1.80	0.00	10.0	10.0	400.0	400.0	400.1	400.1	0.000	-100.00	0.00	0.0
Energy	1 A 1 c 2 gaseous	Oil and gas extraction	CO ₂	0.00	18,061.20	2.0	2.0	1.0	1.0	2.2	2.2	0.028	NA	0.71	0.7
Energy	1 A 1 c 2 gaseous	Oil and gas extraction	CH ₄	0.00	9.01	2.0	2.0	100.0	100.0	100.0	100.0	0.000	NA	0.02	0.0

Inventory sector	IPCC category code	IPCC category name	Gas	Base year emissions /removals	Year t emissions /removals	Activity data uncertainty		Emission factor/ estimation parameter uncertainty (combined if more than one estimation parameter is used)		Combined uncertainty		Contribution to variance in year t	Inventory trend in national emissions for year t increase with respect to base year	Uncertainty introduced into the trend in total national emissions with respect to base year	
				Gg CO ₂ equivalent		(-) %	(+) %	(-) %	(+) %	(-) %	(+) %	(fraction)	% of base year	(-) %	(+) %
Energy	1 A 1 c 2 gaseous	Oil and gas extraction	N2O	0.00	8.53	2.0	2.0	192.0	192.0	192.0	192.0	0.000	NA	0.03	0.0
Energy	1 A 1 c 3 gaseous	Other energy industries	CO2	8,184.46	5,887.59	2.0	2.0	1.0	1.0	2.2	2.2	0.003	-28.06	0.23	0.2
Energy	1 A 1 c 3 gaseous	Other energy industries	CH4	4.01	2.94	2.0	2.0	100.0	100.0	100.0	100.0	0.000	-26.76	0.01	0.0
Energy	1 A 1 c 3 gaseous	Other energy industries	N2O	3.80	2.78	2.0	2.0	192.0	192.0	192.0	192.0	0.000	-26.76	0.01	0.0
Energy	1 A 2 a gaseous	Iron and Steel	CO2	418.18	3,079.96	2.0	2.0	1.0	1.0	2.2	2.2	0.001	636.51	0.12	0.1
Energy	1 A 2 a gaseous	Iron and Steel	CH4	0.21	1.54	2.0	2.0	100.0	100.0	100.0	100.0	0.000	636.51	0.00	0.0
Energy	1 A 2 a gaseous	Iron and Steel	N2O	0.20	1.45	2.0	2.0	192.0	192.0	192.0	192.0	0.000	636.51	0.00	0.0
Energy	1 A 2 a liquid	Iron and Steel	CO2	0.00	167.59	2.0	2.0	2.0	2.0	2.8	2.8	0.000	NA	0.01	0.0
Energy	1 A 2 a liquid	Iron and Steel	N2O	0.00	0.36	2.0	2.0	100.0	100.0	100.0	100.0	0.000	NA	0.00	0.0
Energy	1 A 2 a liquid	Iron and Steel	CH4	0.00	0.19	2.0	2.0	192.0	192.0	192.0	192.0	0.000	NA	0.00	0.0
Energy	1 A 2 a solid	Iron and Steel	CO2	312.00	253.15	2.0	2.0	2.0	2.0	2.8	2.8	0.000	-18.86	0.01	0.0
Energy	1 A 2 a solid	Iron and Steel	CH4	0.03	0.03	2.0	2.0	100.0	100.0	100.0	100.0	0.000	-18.86	0.00	0.0
Energy	1 A 2 a solid	Iron and Steel	N2O	0.03	0.03	2.0	2.0	192.0	192.0	192.0	192.0	0.000	-18.86	0.00	0.0
Energy	1 A 2 c gaseous	Chemicals	CO2	51.12	303.60	2.0	2.0	1.0	1.0	2.2	2.2	0.000	493.91	0.01	0.0
Energy	1 A 2 c gaseous	Chemicals	CH4	0.03	0.15	2.0	2.0	100.0	100.0	100.0	100.0	0.000	493.91	0.00	0.0
Energy	1 A 2 c gaseous	Chemicals	N2O	0.02	0.14	2.0	2.0	192.0	192.0	192.0	192.0	0.000	493.91	0.00	0.0
Energy	1 A 2 c liquid	Chemicals	CO2	0.00	13.37	2.0	2.0	2.0	2.0	2.8	2.8	0.000	NA	0.00	0.0

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				Gg CO ₂ equivalent		(-) %	(+) %	(-) %	(+) %	(-) %	(+) %	(fraction)	% of base year	(-) %	(+) %
Energy	1 A 2 c liquid	Chemicals	N ₂ O	0.00	0.03	2.0	2.0	100.0	100.0	100.0	100.0	0.000	NA	0.00	0.0
Energy	1 A 2 c liquid	Chemicals	CH ₄	0.00	0.02	2.0	2.0	192.0	192.0	192.0	192.0	0.000	NA	0.00	0.0
Energy	1 A 2 d gaseous	Pulp, paper and print	CO ₂	0.00	87.18	2.0	2.0	1.0	1.0	2.2	2.2	0.000	NA	0.00	0.0
Energy	1 A 2 d gaseous	Pulp, paper and print	CH ₄	0.00	0.04	2.0	2.0	100.0	100.0	100.0	100.0	0.000	NA	0.00	0.0
Energy	1 A 2 d gaseous	Pulp, paper and print	N ₂ O	0.00	0.04	2.0	2.0	192.0	192.0	192.0	192.0	0.000	NA	0.00	0.0
Energy	1 A 2 e gaseous	Food processing, beverages and tobacco	CO ₂	0.00	1,366.47	2.0	2.0	1.0	1.0	2.2	2.2	0.000	NA	0.05	0.1
Energy	1 A 2 e gaseous	Food processing, beverages and tobacco	CH ₄	0.00	0.68	2.0	2.0	100.0	100.0	100.0	100.0	0.000	NA	0.00	0.0
Energy	1 A 2 e gaseous	Food processing, beverages and tobacco	N ₂ O	0.00	0.65	2.0	2.0	192.0	192.0	192.0	192.0	0.000	NA	0.00	0.0
Energy	1 A 2 e liquid	Food processing, beverages and tobacco	CO ₂	0.00	1.18	2.0	2.0	2.0	2.0	2.8	2.8	0.000	NA	0.00	0.0
Energy	1 A 2 e liquid	Food processing, beverages and tobacco	CH ₄	0.00	0.00	2.0	2.0	100.0	100.0	100.0	100.0	0.000	NA	0.00	0.0
Energy	1 A 2 e liquid	Food processing, beverages and tobacco	N ₂ O	0.00	0.00	2.0	2.0	192.0	192.0	192.0	192.0	0.000	NA	0.00	0.0
Energy	1 A 2 f gaseous	Non-metallic minerals	CO ₂	2,128.77	8,356.10	2.0	2.0	1.0	1.0	2.2	2.2	0.006	292.53	0.33	0.3
Energy	1 A 2 f gaseous	Non-metallic minerals	CH ₄	1.06	4.17	2.0	2.0	100.0	100.0	100.0	100.0	0.000	292.53	0.01	0.0
Energy	1 A 2 f gaseous	Non-metallic minerals	N ₂ O	1.01	3.95	2.0	2.0	192.0	192.0	192.0	192.0	0.000	292.53	0.01	0.0
Energy	1 A 2 f liquid	Non-metallic minerals	CO ₂	0.00	44.70	2.0	2.0	2.0	2.0	2.8	2.8	0.000	NA	0.00	0.0
Energy	1 A 2 f liquid	Non-metallic minerals	N ₂ O	0.00	0.07	2.0	2.0	100.0	100.0	100.0	100.0	0.000	NA	0.00	0.0
Energy	1 A 2 f liquid	Non-metallic minerals	CH ₄	0.00	0.04	2.0	2.0	192.0	192.0	192.0	192.0	0.000	NA	0.00	0.0

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				Gg CO ₂ equivalent		(-) %	(+) %	(-) %	(+) %	(-) %	(+) %	(fraction)	% of base year	(-) %	(+) %
Energy	1 A 2 g 3 gaseous	Mining (excluding fuels) and quarrying	CO2	0.00	86.33	2.0	2.0	1.0	1.0	2.2	2.2	0.000	NA	0.00	0.0
Energy	1 A 2 g 3 gaseous	Mining (excluding fuels) and quarrying	CH4	0.00	0.04	2.0	2.0	100.0	100.0	100.0	100.0	0.000	NA	0.00	0.0
Energy	1 A 2 g 3 gaseous	Mining (excluding fuels) and quarrying	N2O	0.00	0.04	2.0	2.0	192.0	192.0	192.0	192.0	0.000	NA	0.00	0.0
Energy	1 A 2 g 5 gaseous	Construction	CO2	0.00	61.71	2.0	2.0	1.0	1.0	2.2	2.2	0.000	NA	0.00	0.0
Energy	1 A 2 g 5 gaseous	Construction	CH4	0.00	0.03	2.0	2.0	100.0	100.0	100.0	100.0	0.000	NA	0.00	0.0
Energy	1 A 2 g 5 gaseous	Construction	N2O	0.00	0.03	2.0	2.0	192.0	192.0	192.0	192.0	0.000	NA	0.00	0.0
Energy	1 A 2 g 5 liquid	Construction	CO2	0.00	1,385.70	2.0	2.0	2.0	2.0	2.8	2.8	0.000	NA	0.07	0.1
Energy	1 A 2 g 5 liquid	Construction	N2O	0.00	2.98	2.0	2.0	100.0	100.0	100.0	100.0	0.000	NA	0.01	0.0
Energy	1 A 2 g 5 liquid	Construction	CH4	0.00	1.57	2.0	2.0	192.0	192.0	192.0	192.0	0.000	NA	0.01	0.0
Energy	1 A 2 g 6 gaseous	Textile and leather	CO2	0.00	125.03	2.0	2.0	1.0	1.0	2.2	2.2	0.000	NA	0.00	0.0
Energy	1 A 2 g 6 gaseous	Textile and leather	CH4	0.00	0.06	2.0	2.0	100.0	100.0	100.0	100.0	0.000	NA	0.00	0.0
Energy	1 A 2 g 6 gaseous	Textile and leather	N2O	0.00	0.06	2.0	2.0	192.0	192.0	192.0	192.0	0.000	NA	0.00	0.0
Energy	1 A 2 g 8 gaseous	Other	CO2	101.18	4,550.94	2.0	2.0	1.0	1.0	2.2	2.2	0.002	4398.02	0.18	0.2
Energy	1 A 2 g 8 gaseous	Other	CH4	0.05	2.27	2.0	2.0	100.0	100.0	100.0	100.0	0.000	4398.02	0.00	0.0
Energy	1 A 2 g 8 gaseous	Other	N2O	0.05	2.15	2.0	2.0	192.0	192.0	192.0	192.0	0.000	4398.02	0.01	0.0
Energy	1 A 2 g 8 liquid	Other	CO2	2,002.49	222.32	2.0	2.0	2.0	2.0	2.8	2.8	0.000	-88.90	0.01	0.0

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				Gg CO ₂ equivalent		(-) %	(+) %	(-) %	(+) %	(-) %	(+) %	(fraction)	% of base year	(-) %	(+) %
Energy	1 A 2 g 8 liquid	Other	N2O	4.25	0.21	2.0	2.0	100.0	100.0	100.0	100.0	0.000	-95.12	0.00	0.0
Energy	1 A 2 g 8 liquid	Other	CH4	2.24	0.14	2.0	2.0	192.0	192.0	192.0	192.0	0.000	-93.55	0.00	0.0
Energy	1 A 3 a jet kerosene	Domestic aviation	CO2	477.32	752.45	10.0	10.0	5.0	5.0	11.2	11.2	0.001	57.64	0.15	0.1
Energy	1 A 3 a jet kerosene	Domestic aviation	N2O	3.54	5.58	10.0	10.0	82.0	82.0	82.6	82.6	0.000	57.64	0.01	0.0
Energy	1 A 3 a jet kerosene	Domestic aviation	CH4	0.09	0.15	10.0	10.0	133.0	133.0	133.4	133.4	0.000	57.64	0.00	0.0
Energy	1 A 3 b diesel oil	Road transportation	CO2	6,956.41	26,382.91	7.0	7.0	3.0	3.0	7.6	7.6	0.699	279.26	3.52	3.5
Energy	1 A 3 b diesel oil	Road transportation	N2O	97.02	367.97	7.0	7.0	131.0	131.0	131.2	131.2	0.040	279.26	0.85	0.8
Energy	1 A 3 b diesel oil	Road transportation	CH4	10.25	38.88	7.0	7.0	197.0	197.0	197.1	197.1	0.001	279.26	0.13	0.1
Energy	1 A 3 b gasoline	Road transportation	CO2	6,413.70	9,732.48	7.0	7.0	3.0	3.0	7.6	7.6	0.095	51.75	1.30	1.3
Energy	1 A 3 b gasoline	Road transportation	N2O	173.15	262.75	7.0	7.0	229.0	229.0	229.1	229.1	0.063	51.75	1.05	1.1
Energy	1 A 3 b gasoline	Road transportation	CH4	55.87	84.78	7.0	7.0	203.0	203.0	203.1	203.1	0.005	51.75	0.30	0.3
Energy	1 A 3 b LPG	Road transportation	CO2	0.00	3,821.21	7.0	7.0	3.0	3.0	7.6	7.6	0.015	NA	0.51	0.5
Energy	1 A 3 b LPG	Road transportation	CH4	0.00	118.25	7.0	7.0	150.0	150.0	150.2	150.2	0.005	NA	0.31	0.3
Energy	1 A 3 b LPG	Road transportation	N2O	0.00	3.61	7.0	7.0	200.0	200.0	200.1	200.1	0.000	NA	0.01	0.0
Energy	1 A 3 c liquid	Railways	CO2	0.00	114.55	7.0	7.0	2.0	2.0	7.3	7.3	0.000	NA	0.01	0.0
Energy	1 A 3 c liquid	Railways	N2O	0.00	11.72	7.0	7.0	162.0	162.0	162.2	162.2	0.000	NA	0.03	0.0
Energy	1 A 3 c liquid	Railways	CH4	0.00	0.18	7.0	7.0	206.0	206.0	206.1	206.1	0.000	NA	0.00	0.0

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				Gg CO ₂ equivalent		(-) %	(+) %	(-) %	(+) %	(-) %	(+) %	(fraction)	% of base year	(-) %	(+) %
Energy	1 A 3 d diesel oil	Domestic Navigation	CO2	0.00	71.09	7.0	7.0	1.5	1.5	7.2	7.2	0.000	NA	0.01	0.0
Energy	1 A 3 d diesel oil	Domestic Navigation	N2O	0.00	7.27	7.0	7.0	50.0	50.0	50.5	50.5	0.000	NA	0.01	0.0
Energy	1 A 3 d diesel oil	Domestic Navigation	CH4	0.00	0.11	7.0	7.0	100.0	100.0	100.2	100.2	0.000	NA	0.00	0.0
Energy	1 A 3 d Residual fuel oil	Domestic Navigation	CO2	0.00	37.52	7.0	7.0	3.0	3.0	7.6	7.6	0.000	NA	0.01	0.0
Energy	1 A 3 d Residual fuel oil	Domestic Navigation	CH4	0.00	0.14	7.0	7.0	50.0	50.0	50.5	50.5	0.000	NA	0.00	0.0
Energy	1 A 3 d Residual fuel oil	Domestic Navigation	N2O	0.00	0.08	7.0	7.0	100.0	100.0	100.2	100.2	0.000	NA	0.00	0.0
Energy	1 A 3 e gaseous	Other transportation	CO2	0.00	1,275.13	2.0	2.0	1.0	1.0	2.2	2.2	0.000	NA	0.05	0.0
Energy	1 A 3 e gaseous	Other transportation	CH4	0.00	0.64	2.0	2.0	100.0	100.0	100.0	100.0	0.000	NA	0.00	0.0
Energy	1 A 3 e gaseous	Other transportation	N2O	0.00	0.60	2.0	2.0	192.0	192.0	192.0	192.0	0.000	NA	0.00	0.0
Energy	1 A 4 a biomass	Commercial/ institutional	CH4	0.00	0.00	20.0	20.0	189.0	189.0	190.1	190.1	0.000	NA	0.00	0.0
Energy	1 A 4 a biomass	Commercial/ institutional	N2O	0.00	0.00	20.0	20.0	268.0	268.0	268.7	268.7	0.000	NA	0.00	0.0
Energy	1 A 4 a gaseous	Commercial/ institutional	CO2	0.00	3,275.29	2.0	2.0	1.0	1.0	2.2	2.2	0.001	NA	0.13	0.1
Energy	1 A 4 a gaseous	Commercial/ institutional	CH4	0.00	8.17	2.0	2.0	100.0	100.0	100.0	100.0	0.000	NA	0.01	0.0
Energy	1 A 4 a gaseous	Commercial/ institutional	N2O	0.00	1.55	2.0	2.0	192.0	192.0	192.0	192.0	0.000	NA	0.01	0.0

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				Gg CO ₂ equivalent		(-) %	(+) %	(-) %	(+) %	(-) %	(+) %	(fraction)	% of base year	(-) %	(+) %
Energy	1 A 4 a liquid	Commercial/ institutional	CO ₂	0.00	1,572.31	2.0	2.0	2.0	2.0	2.8	2.8	0.000	NA	0.08	0.1
Energy	1 A 4 a liquid	Commercial/ institutional	CH ₄	0.00	5.77	2.0	2.0	100.0	100.0	100.0	100.0	0.000	NA	0.01	0.0
Energy	1 A 4 a liquid	Commercial/ institutional	N ₂ O	0.00	3.17	2.0	2.0	192.0	192.0	192.0	192.0	0.000	NA	0.01	0.0
Energy	1 A 4 b biomass	Commercial/ institutional	CH ₄	4.46	0.00	20.0	20.0	189.0	189.0	190.1	190.1	0.000	-99.91	0.00	0.0
Energy	1 A 4 b biomass	Residential	N ₂ O	0.56	0.00	20.0	20.0	268.0	268.0	268.7	268.7	0.000	-99.91	0.00	0.0
Energy	1 A 4 b gaseous	Residential	CO ₂	2,454.98	24,101.38	2.0	2.0	1.0	1.0	2.2	2.2	0.050	881.74	0.94	0.9
Energy	1 A 4 b gaseous	Residential	CH ₄	6.13	60.15	2.0	2.0	100.0	100.0	100.0	100.0	0.001	881.74	0.11	0.1
Energy	1 A 4 b gaseous	Residential	N ₂ O	1.16	11.38	2.0	2.0	192.0	192.0	192.0	192.0	0.000	881.74	0.04	0.0
Energy	1 A 4 b liquid	Residential	CO ₂	3,392.04	3,648.03	2.0	2.0	2.0	2.0	2.8	2.8	0.002	7.55	0.18	0.2
Energy	1 A 4 b liquid	Residential	CH ₄	9.83	8.55	2.0	2.0	100.0	100.0	100.0	100.0	0.000	-13.08	0.01	0.0
Energy	1 A 4 b liquid	Residential	N ₂ O	3.97	2.03	2.0	2.0	192.0	192.0	192.0	192.0	0.000	-48.89	0.01	0.0
Energy	1 A 4 c gaseous	Agriculture/forestry/ fishing	CO ₂	0.00	71.66	2.0	2.0	1.0	1.0	2.2	2.2	0.000	NA	0.00	0.0
Energy	1 A 4 c gaseous	Agriculture/forestry/ fishing	CH ₄	0.00	0.18	2.0	2.0	100.0	100.0	100.0	100.0	0.000	NA	0.00	0.0
Energy	1 A 4 c gaseous	Agriculture/forestry/ fishing	N ₂ O	0.00	0.03	2.0	2.0	192.0	192.0	192.0	192.0	0.000	NA	0.00	0.0
Energy	1 A 4 c liquid	Agriculture/forestry/ fishing	CO ₂	127.47	105.31	2.0	2.0	2.0	2.0	2.8	2.8	0.000	-17.38	0.01	0.0
Energy	1 A 4 c liquid	Agriculture/forestry/ fishing	CH ₄	0.48	0.31	2.0	2.0	100.0	100.0	100.0	100.0	0.000	-35.97	0.00	0.0

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				Gg CO ₂ equivalent		(-) %	(+) %	(-) %	(+) %	(-) %	(+) %	(fraction)	% of base year	(-) %	(+) %
Energy	1 A 4 c liquid	Agriculture/forestry/ fishing	N2O	0.27	0.13	2.0	2.0	192.0	192.0	192.0	192.0	0.000	-53.61	0.00	0.0
Energy	1 B 1 b	Fuel transformation	CH4	0.99	0.00	10.0	10.0	250.0	250.0	250.2	250.2	0.000	-100.00	0.00	0.0
Energy	1 B 1 b	Fuel transformation	CO2	0.04	0.00	10.0	10.0	20.0	20.0	22.4	22.4	0.000	-99.96	0.00	0.0
Energy	1 B 2 a	Oil	CH4	355.66	514.92	10.0	10.0	300.0	300.0	300.2	300.2	0.413	44.78	2.71	2.7
Energy	1 B 2 a	Oil	CO2	73.15	102.08	10.0	10.0	100.0	100.0	100.5	100.5	0.002	39.55	0.18	0.2
Energy	1 B 2 a	Oil	N2O	0.01	0.01	10.0	10.0	500.0	500.0	500.1	500.1	0.000	39.55	0.00	0.0
Energy	1 B 2 b	Natural gas	CH4	10,726.42	24,985.69	10.0	10.0	300.0	300.0	300.2	300.2	973.265	132.94	131.34	131.3
Energy	1 B 2 b	Natural gas	CO2	106.85	314.08	10.0	10.0	20.0	20.0	22.4	22.4	0.001	193.95	0.12	0.1
Energy	1 B 2 c	Venting and flaring	CO2	5,869.55	6,283.94	10.0	10.0	20.0	20.0	22.4	22.4	0.342	7.06	2.46	2.5
Energy	1 B 2 c	Venting and flaring	CH4	986.03	1,055.64	10.0	10.0	300.0	300.0	300.2	300.2	1.737	7.06	5.55	5.5
Energy	1 B 2 c	Venting and flaring	N2O	17.89	19.15	10.0	10.0	500.0	500.0	500.1	500.1	0.002	7.06	0.17	0.2
IPPU	2 A 1	Cement production	CO2	2,143.12	12,836.50	2.0	2.0	2.0	2.0	2.8	2.8	0.023	498.96	0.64	0.6
IPPU	2 A 2	Lime production	CO2	18.89	298.00	2.0	2.0	15.0	15.0	15.1	15.1	0.000	1477.88	0.08	0.1
IPPU	2 A 3	Glass Production	CO2	5.87	1.78	5.0	5.0	60.0	60.0	60.2	60.2	0.000	-69.65	0.00	0.0
IPPU	2 B 1	Ammonia Production	CO2	621.93	4,320.79	2.0	2.0	7.0	7.0	7.3	7.3	0.017	594.74	0.55	0.6
IPPU	2 B 10	Other	CO2	0.00	0.01	10.0	10.0	7.0	7.0	12.2	12.2	0.000	NA	0.00	0.0
IPPU	2 B 2	Nitric Acid Production	N2O	380.59	96.06	2.0	2.0	40.0	40.0	40.0	40.0	0.000	-74.76	0.07	0.1
IPPU	2 B 8	Petrochemical and Carbon Black Production	CO2	159.46	54.57	7.0	7.0	30.0	30.0	30.8	30.8	0.000	-65.78	0.03	0.0
IPPU	2 B 8	Petrochemical and Carbon Black Production	CH4	19.21	5.25	7.0	7.0	10.0	10.0	12.2	12.2	0.000	-72.69	0.00	0.0
IPPU	2 C 1	Iron and Steel Production	CO2	3,316.24	4,071.17	1.0	1.0	60.0	60.0	60.0	60.0	1.033	22.76	4.28	4.3
IPPU	2 C 1	Iron and Steel Production	CH4	3.64	2.16	1.0	1.0	567.0	567.0	567.0	567.0	0.000	-40.59	0.02	0.0

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				Gg CO ₂ equivalent		(-) %	(+) %	(-) %	(+) %	(-) %	(+) %	(fraction)	% of base year	(-) %	(+) %
IPPU	2 C 5	Lead Production	CO2	3.54	0.00	10.0	10.0	20.0	20.0	22.4	22.4	0.000	-100.00	0.00	0.0
IPPU	2 D 1	Lubricant Use	CO2	0.00	56.96	10.0	10.0	50.0	50.0	51.0	51.0	0.000	NA	0.05	0.1
IPPU	2 F 1	Refrigeration and air conditioning	HFC	0.80	132.83	1.0	1.0	148.0	148.0	148.0	148.0	0.007	16423.97	0.34	0.3
IPPU	2 G 1	Electrical equipment	SF6	0.00	166.29	1.0	1.0	110.0	110.0	110.0	110.0	0.006	NA	0.32	0.3
IPPU	2 G 3	N2O from Product Uses	N2O	28.67	52.60	30.0	30.0	1.0	1.0	30.0	30.0	0.000	83.46	0.03	0.0
Agriculture	3 A 1	Cattle	CH4	1,946.10	1,876.29	1.0	1.0	35.0	35.0	35.0	35.0	0.075	-3.59	1.15	1.2
Agriculture	3 A 2	Sheep	CH4	2,667.72	3,242.64	1.0	1.0	40.0	40.0	40.0	40.0	0.291	21.55	2.27	2.3
Agriculture	3 A 4 b	Camels	CH4	157.72	404.85	1.0	1.0	40.0	40.0	40.0	40.0	0.005	156.69	0.28	0.3
Agriculture	3 A 4 d	Goats	CH4	450.68	642.72	1.0	1.0	40.0	40.0	40.0	40.0	0.011	42.61	0.45	0.5
Agriculture	3 A 4 e	Horses	CH4	40.83	26.17	1.0	1.0	40.0	40.0	40.0	40.0	0.000	-35.92	0.02	0.0
Agriculture	3 A 4 f	Mules and asses	CH4	83.89	22.38	1.0	1.0	40.0	40.0	40.0	40.0	0.000	-73.32	0.02	0.0
Agriculture	3 B 1	Cattle	CH4	440.62	543.62	1.0	1.0	44.0	44.0	44.0	44.0	0.010	23.38	0.42	0.4
Agriculture	3 B 1	Cattle	N2O	69.63	64.09	1.0	1.0	37.0	37.0	37.0	37.0	0.000	-7.96	0.04	0.0
Agriculture	3 B 2	Sheep	N2O	55.37	91.67	1.0	1.0	37.0	37.0	37.0	37.0	0.000	65.56	0.06	0.1
Agriculture	3 B 2	Sheep	CH4	17.67	36.57	1.0	1.0	55.0	55.0	55.0	55.0	0.000	107.03	0.04	0.0
Agriculture	3 B 4 b	Camels	N2O	5.12	17.52	1.0	1.0	37.0	37.0	37.0	37.0	0.000	242.26	0.01	0.0
Agriculture	3 B 4 b	Camels	CH4	4.82	16.49	1.0	1.0	55.0	55.0	55.0	55.0	0.000	242.26	0.02	0.0
Agriculture	3 B 4 d	Goats	N2O	6.86	23.79	1.0	1.0	37.0	37.0	37.0	37.0	0.000	246.84	0.02	0.0
Agriculture	3 B 4 d	Goats	CH4	1.86	7.88	1.0	1.0	55.0	55.0	55.0	55.0	0.000	324.27	0.01	0.0
Agriculture	3 B 4 e	Horses	N2O	0.57	0.36	1.0	1.0	37.0	37.0	37.0	37.0	0.000	-35.92	0.00	0.0
Agriculture	3 B 4 e	Horses	CH4	0.42	0.27	1.0	1.0	55.0	55.0	55.0	55.0	0.000	-35.92	0.00	0.0
Agriculture	3 B 4 f	Mules and Asses	N2O	1.05	0.28	1.0	1.0	37.0	37.0	37.0	37.0	0.000	-73.32	0.00	0.0
Agriculture	3 B 4 f	Mules and Asses	CH4	0.77	0.21	1.0	1.0	55.0	55.0	55.0	55.0	0.000	-73.32	0.00	0.0
Agriculture	3 B 4 g	Poultry	CH4	89.02	156.61	1.0	1.0	100.0	100.0	100.0	100.0	0.004	75.92	0.27	0.3
Agriculture	3 B 4 g	Poultry	N2O	65.77	98.79	1.0	1.0	150.0	150.0	150.0	150.0	0.004	50.21	0.26	0.3

Inventory sector	IPCC category code	IPCC category name	Gas	Base year emissions /removals	Year t emissions /removals	Activity data uncertainty		Emission factor/ estimation parameter uncertainty (combined if more than one estimation parameter is used)		Combined uncertainty		Contribution to variance in year t	Inventory trend in national emissions for year t increase with respect to base year	Uncertainty introduced into the trend in total national emissions with respect to base year	
				Gg CO ₂ equivalent		(-) %	(+) %	(-) %	(+) %	(-) %	(+) %	(fraction)	% of base year	(-) %	(+) %
Agriculture	3 B 4 h	Other	N ₂ O	2.00	1.87	1.0	1.0	150.0	150.0	150.0	150.0	0.000	-6.50	0.00	0.0
Agriculture	3 B 4 h	Other	CH ₄	0.00	0.00	1.0	1.0	150.0	150.0	150.0	150.0	0.000	-6.50	0.00	0.0
Agriculture	3 D 1 a	Inorganic N fertilizers	N ₂ O	262.35	292.33	20.0	20.0	250.0	250.0	250.8	250.8	0.093	11.43	1.28	1.3
Agriculture	3 D 1 b	Organic N fertilizers	N ₂ O	1,238.65	1,673.31	20.0	20.0	250.0	250.0	250.8	250.8	3.047	35.09	7.35	7.3
Agriculture	3 D 1 c	Urine and dung deposited by grazing animals	N ₂ O	80.89	68.57	20.0	20.0	250.0	250.0	250.8	250.8	0.005	-15.23	0.30	0.3
Agriculture	3 D 1 d	Crop residues	N ₂ O	40.70	106.60	20.0	20.0	250.0	250.0	250.8	250.8	0.012	161.91	0.47	0.5
Agriculture	3 F	Field burning of agricultural residues	CH ₄	71.53	88.58	20.0	20.0	180.0	180.0	181.1	181.1	0.004	23.84	0.28	0.3
Agriculture	3 F	Field burning of agricultural residues	N ₂ O	17.55	21.74	20.0	20.0	180.0	180.0	181.1	181.1	0.000	23.84	0.07	0.1
Agriculture	3 H	Urea application	CO ₂	44.53	67.47	50.0	50.0	50.0	50.0	70.7	70.7	0.000	51.49	0.08	0.1
Waste	5 A	Solid waste disposal	CH ₄	1,493.63	8,013.87	87.0	87.0	52.0	52.0	101.4	101.4	11.416	436.54	14.22	14.2
Waste	5 B	Biological treatment of solid waste	CH ₄	26.19	20.31	87.0	87.0	50.0	50.0	100.3	100.3	0.000	-22.43	0.04	0.0
Waste	5 B	Biological treatment of solid waste	N ₂ O	14.87	11.53	87.0	87.0	50.0	50.0	100.3	100.3	0.000	-22.43	0.02	0.0
Waste	5 C	Incineration and open burning of waste	CO ₂	358.57	154.95	87.0	87.0	25.0	25.0	90.5	90.5	0.003	-56.79	0.25	0.2
Waste	5 C	Incineration and open burning of waste	N ₂ O	18.29	12.89	87.0	87.0	100.0	100.0	132.5	132.5	0.000	-29.55	0.03	0.0
Waste	5 C	Incineration and open burning of waste	CH ₄	0.20	0.11	87.0	87.0	100.0	100.0	132.5	132.5	0.000	-46.69	0.00	0.0
Waste	5 D	Wastewater treatment and discharge	CH ₄	1,111.11	1,084.25	71.0	71.0	129.0	129.0	147.2	147.2	0.441	-2.42	2.80	2.8
Waste	5 D	Wastewater treatment and discharge	N ₂ O	229.24	725.55	71.0	71.0	261.0	261.0	270.5	270.5	0.666	216.51	3.44	3.4
	Total			80.755.83	240.402.04					18,955.75	18,955.75	994.11	197.69		

Inventory sector	IPCC category code	IPCC category name	Gas	Base year emissions /removals	Year t emissions /removals	Activity data uncertainty		Emission factor/ estimation parameter uncertainty (combined if more than one estimation parameter is used)		Combined uncertainty		Contribution to variance in year t	Inventory trend in national emissions for year t increase with respect to base year	Uncertainty introduced into the trend in total national emissions with respect to base year	
				Gg CO ₂ equivalent		(-) %	(+) %	(-) %	(+) %	(-) %	(+) %	(fraction)	% of base year	(-) %	(+) %
	Results							Percentage uncertainty in total inventory:				31.53	Trend uncertainty	132.74	132.74

Annex III: Detailed description of the reference approach and the results of the comparison of national estimates of emissions with those obtained using the reference approach

See chapter 3.2.1 of the NID for Comparison of the Sectoral Approach (SA) with the Reference Approach

Annex IV: QA/QC plan

Related information will be provided in the next inventory cycle.

Annex V: Any additional information including detailed methodological descriptions of source or sink categories and the national emission balance

Table 0-8 Energy balance 1990 – 2022: Natural Gas

Natural Gas											
Natural Gas - UNIT: Mm ³	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Production	47,002.1	50,683.6	52,774.6	53,452.9	49,143.9	55,950.2	59,371.4	68,113.2	72,938.6	81,987.3	83,608.4
Import											
Export	11,876.1	14,383.0	15,707.9	14,780.9	13,388.3	19,473.0	20,969.3	23,976.7	27,668.7	33,694.1	34,520.6
Bunkers											
Change in inventories Production											
Availability Internal											
Change in inventories Consumption											
Gross consumption	19,988.1	19,741.7	16,404.8	18,543.6	19,206.2	24,259.2	25,977.8	20,039.2	28,070.3	26,159.9	19,796.8
Transformation	4,541.62	4,860.68	5,062.24	6,007.56	6,384.08	6,545.87	6,581.63	6,936.34	7,784.18	8,249.28	7,589.46
Coking plants											
Blast Furnaces											
Deliquification units	20,741.8	20,995.7	21,311.1	22,086.7	19,696.3	19,691.0	21,681.4	26,689.9	26,919.5	28,754.5	29,496.3
Refineries											
Power stations	4,638.07	4,854.60	5,028.93	5,371.74	5,720.94	5,891.95	5,918.05	6,026.11	7,004.41	7,422.92	7,589.46
Autoproducer Power Stations											
Other											
Consumption Non Energy	1,021.76	1,044.02	1,310.13	1,339.85	1,140.69	1,014.46		1,315.74	1,263.10	1,728.91	1,461.46
Net consumption	3,947.23	4,504.17	4,966.57	5,383.14	5,190.93	5,073.59	4,273.59	5,918.15	6,103.21	6,898.16	7,105.48
Indus Energy consumption	5,401.21	5,644.55	5,402.20	6,581.78	6,581.78	6,581.78	6,581.78	6,581.78	6,259.89	6,329.01	10,958.0
Consumption in the fields											
Gas and oil pipelines	833.56	862.27	850.48	1,031.73	1,031.73	1,031.73	1,031.73	1,031.73	945.02	958.43	926.02
Liquefaction Units	4,023.68	4,162.26	4,105.35	4,980.28	4,980.28	4,980.28	4,980.28	4,980.28	4,561.72	4,626.44	4,469.99
Refineries	570.15	647.11	473.09	602.17	602.17	602.17	602.17	602.17	533.97	548.22	529.64
Other									248.88	226.03	232.17
Final consumption	2,925.47	3,460.15	3,656.43	4,043.29	4,050.24	4,059.14	4,273.59	5,918.15	6,103.21	6,898.16	5,644.02
Industry	1,351.05	1,484.56	1,528.33	1,331.84	1,331.84	1,331.84	1,331.84	1,633.11	1,664.83	2,394.90	1,627.85
I.S.M.M.E.	209.31	23	236.78	206.34	206.34	206.34	206.34	269.65	261.16	273.01	247.15
Non-ferrous metals	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE

Natural Gas											
Natural Gas - UNIT: Mm ³	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Chemicals, Rubber and Plastics	25.59	28.12	28.94	25.22	25.22	25.22	25.22	31.62	30.38	41.37	30.16
Wood/Paper/Cork	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	15.13
Food processing industries	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	41.12
Deconstruction Materials	1,065.51	1,170.80	1,205.32	1,050.36	1,050.36	1,050.36	1,050.36	1,308.99	1,257.59	1,712.41	1,201.71
Transport Equipment	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
Machinery	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Mining and Quarrying	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	2.41
Wood and Wood Products	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
Public buildings(Np)	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
Textile Industries/Leather Industries	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	30.71
Various industries	50.64	55.65	57.29	49.92	49.92	49.92	49.92	22.85	115.70	368.11	59.45
Transport	345.64	382.28	486.28	527.85	534.80	543.69	758.15	792.44	762.93	925.83	1,642.91
Rail											
Road											
Aerien											
Maritime											
Other							758.15	792.44	762.93	925.83	864.77
Households and Others	1,228.78	1,593.30	1,641.82	2,183.60	2,183.60	2,183.60	2,183.60	2,183.60	2,417.87	2,601.24	2,403.11
Residential	1,228.78	1,593.30	1,641.82	2,183.60	2,183.60	2,183.60	2,183.60	2,183.60	2,417.87	2,601.24	2,403.11
Farming											
Tertiary and Other											
Losses	133.41	168.36	159.06	205.41	205.41	205.41	205.41	205.41	243.44	235.18	167.90
Statistical Differences											

Natural Gas									
UNIT: Mm ³	2001	2002	2003	2004	2005	2006	2007	2008	2009
Production	78,680.4	80,926.9	85,400	83,759.7	89,968.2	88,520.63	85,276.19	87,777.78	84,430.69
Import									
Export	30,403.1	30,767.2	31,443.3	35,000	39,449.7	38,022.22	35,648.68	38,582.01	33,551.32
Bunkers									
Change in inventories Production									
Availability Internal									
Change in inventories Consumption									
Gross consumption	21,078.0	22,939.0	22,618.0	21,170.20	31,445.56	25,329.14	26,238.44	26,482.87	28,20
Transformation	7,996.69	8,374.63	8,499.75	9,636.69	9,993.76	10,650.37	10,809.70	11,709.50	12,062.17
Coking plants									
Blast Furnaces									
Deliquefaction units	28,133.3	29,275.1	30,988.3	26,244.4	26,613.7	25,374.60	26,391.53	22,710.05	22,969.31
Refineries									
Power stations	7,990.58	8,493.27	9,065.00	9,569.30	10,266.4	10,603.80	10,906.10	11,687.35	11,936.65
Autoproducer Power Stations									
Other									
Consumption Non Energy	1,665.62	1,721.24	1,720.32		1,642.66	1,488.65	1,467.55	1,346.88	1,480.82
Net consumption	6,783.09	7,291.74	8,092.75	6,030.58	8,197.95	9,430.17	10,099.72	9,748.90	10,452.49
Indus Energy consumption	6,352.01	6,286.45	6,554.26	5,957.37	5,550.52	5,035.91	4,814.86	4,382.34	4,830.40
Consumption in the fields									
Gas and oil pipelines	966.21	969.25	984.20	897.10	794.77	800.05	750.80	678.73	710.79
Liquefaction Units	4,664.03	4,678.70	4,750.83	4,330.40	3,836.46	3,861.93	3,624.21	3,276.30	3,431.05
Refineries	474.37	494.16	665.53	523.30	635.68	399.06	463.43	448.62	534.93
Other	277.74	174.78	184.61	234.75	308.57				175.97
Final consumption	6,783.09	7,291.74	8,092.75	6,030.58	6,555.29	7,941.52	8,632.17	8,402.02	8,971.67
Industry	1,632.82	1,666.36	1,686.14	1,917.92	2,115.28	2,736.65	2,930.43	3,117.82	3,154.42
I.S.M.M.E.	281.41	275.89	295.70	301.07	307.82	397.72	412.71	353.13	306.47
Non-ferrous metals	IE	IE	IE	IE	IE	IE	IE	IE	IE
Chemicals, Rubber and Plastics	34.64	37.67	38.07	33.93	30.16	44.07	43.05	41.63	46.20

Natural Gas									
UNIT: Mm ³	2001	2002	2003	2004	2005	2006	2007	2008	2009
Wood/Paper/Cork	12.99	12.26	8.60	8.45	7.00	18.43	21.38	20.41	20.11
Food processing industries	43.77	57.09	111.40	108.87	105.95	253.26	253.57	269.08	314.43
Deconstruction Materials	1,171.62	1,191.59	1,134.41	1,374.68	1,574.06	1,916.96	2,091.14	2,322.97	2,362.62
Transport Equipment	IE	IE	IE	IE	IE	IE	IE	IE	IE
Machinery	NO	NO	NO	NO	NO	NO	NO	NO	NO
Mining and Quarrying	2.67	2.77	8.33	12.18	13.83	34.90	39.66	36.66	31.35
Wood and Wood Products	IE	IE	IE	IE	IE	IE	IE	IE	IE
Public buildings(Np)	IE	IE	IE	IE	IE	3.40	3.19	2.85	3.08
Textile Industries/Leather Industries	28.38	27.97	22.56	19.77	23.27	30.94	32.96	33.85	34.09
Various industries	57.35	61.13	67.07	58.97	53.20	36.97	32.76	37.25	36.06
Transport	691.53	781.78	1,694.41	887.04	1,389.94	1,606.90	1,361.94	1,020.70	908.90
Rail									
Road									
Aerien									
Maritime									
Other	691.53	781.78	1,694.41	887.04	1,389.94				
Households and Others	2,652.87	2,983.75	2,860.15	3,256.71	3,790.75	3,458.70	3,855.12	4,323.04	5,087.16
Residential	2,652.87	2,983.75	2,860.15	3,256.71	3,790.75	2,995.36	3,124.81	3,737.76	4,421.01
Farming						13.66	20.87	23.04	27.57
Tertiary and Other						449.68	709.44	562.23	638.59
Losses	367.93	189.89	323.35	393.05	375.84	207.81	551.88	489.79	231.72
Statistical Differences									

Natural Gas													
UNIT: Mm ³	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Production	85,464.31	82,703.59	86,055.83	82,429.88	83,295.85	84,583.32	94,953.49	96,598.68	97,467.14	89,982.87	84,823.23	105,037.40	101,436.37
Import													
Export	37,847.00	35,718.80	37,329.99	32,236.03	27,076.41	27,035.21	38,439.63	37,594.19	37,952.03	26,304.80	25,236.57	38,970.34	35,486.84
Bunkers													
Change in inventories Production													
Availability Internal	47,617.31	46,984.80	48,725.85	50,193.86	56,219.44	57,548.11	56,513.86	59,004.49	59,515.11	63,678.07	59,586.66	66,067.06	65,949.53
Change in inventories Consumption													
Gross consumption	47,617.31	46,984.80	48,725.85	50,193.86	56,219.44	57,548.11	56,513.86	59,004.49	59,515.11	63,678.07	59,586.66	66,067.06	65,949.53
Transformation	32,272.80	31,026.91	30,039.95	30,487.28	34,474.66	34,960.58	33,517.12	35,693.38	33,079.17	36,948.19	33,286.34	37,971.18	37,017.13
Coking plants													
Blast Furnaces													
Deliquescence units	20,207.00	17,988.61	15,930.75	16,037.21	18,721.61	17,245.49	16,065.11	17,165.81	14,092.04	16,869.53	14,320.97	16,504.54	14,129.97
Refineries													
Power stations	11,967.00	12,948.73	14,109.22	13,606.21	14,789.75	16,482.05	16,459.28	17,838.69	18,087.75	18,317.74	17,606.40	19,234.41	20,798.45
Autoproducer Power Stations				887.16	188.45	313.78	314.38	245.36	497.87	545.57	2,179.94	2,241.08	2,207.76
Other													
Consumption Non Energy	1,499.00	1,477.52	2,060.57	1,822.15	2,830.67	3,659.51	4,002.19	3,182.22	4,750.63	3,940.97	3,597.46	4,087.41	3,963.59
Net consumption	13,845.51	14,480.37	16,625.33	17,884.42	18,914.11	18,928.02	18,994.55	20,128.88	21,685.32	22,788.92	22,702.86	24,008.47	24,968.81
Indus Energy consumption	5,112.00	4,985.76	5,764.03	5,964.66	6,766.29	5,661.82	5,298.39	4,824.60	4,446.38	4,381.00	4,419.09	4,387.36	4,102.44
Consumption in the fields													
Gas and oil pipelines	726.00	792.55	715.80	564.37	625.45	713.56	813.68	886.19	807.34	617.48	572.55	761.16	622.68
Liquefaction Units	3,649.00	3,501.71	3,567.29	4,463.39	5,233.09	4,017.45	3,517.67	3,066.65	2,840.03	2,938.54	3,041.04	2,788.56	2,672.30
Refineries	553.00	487.77	614.17	729.30	698.15	723.25	764.87	679.18	634.70	667.11	654.36	673.24	641.29
Other	184.00	203.73	866.77	207.60	209.60	207.56	202.16	192.59	164.30	157.87	151.14	164.40	166.17
Final consumption	8,533.51	9,294.61	10,274.91	11,177.16	11,859.73	12,961.06	13,390.11	14,449.39	16,956.40	17,991.55	18,049.37	18,973.75	20,551.55
Industry	3,405.85	3,430.68	3,495.60	3,628.90	3,878.51	4,094.92	4,262.54	4,617.26	5,104.25	5,793.12	5,799.07	6,326.19	6,810.42
I.S.M.M.E.	381.60	332.30	308.32	254.95	255.09	240.94	156.25	280.98	479.87	889.73	1,013.22	1,393.54	1,541.61
Non-ferrous metals	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
Chemicals, Rubber and Plastics	52.85	45.20	54.23	51.11	50.11	54.10	57.76	72.91	66.46	70.18	49.68	71.61	151.96

Natural Gas													
UNIT: Mm ³	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Wood/Paper/Cork	21.54	18.90	18.04	17.31	16.25	38.49	43.29	27.78	23.90	24.98	25.73	34.88	43.64
Food processing industries	356.23	377.27	432.13	457.47	487.86	527.91	535.33	543.51	556.09	639.59	663.48	663.75	683.96
Deconstruction Materials	2,482.32	2,546.19	2,574.22	2,729.69	2,942.78	3,056.96	3,303.16	3,521.18	3,791.13	3,994.32	3,901.10	3,998.53	4,182.46
Transport Equipment	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
Machinery	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Mining and Quarrying	37.47	34.90	30.73	30.59	37.52	47.44	42.45	34.10	37.60	36.73	32.10	43.66	43.21
Wood and Wood Products	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
Public buildings(Np)	3.30	4.02	4.23	4.88	4.40	5.99	6.61	3.64	5.82	5.34	5.30	11.67	30.89
Textile Industries/Leather Industries	29.36	29.08	28.38	32.25	33.34	38.77	36.30	36.32	36.95	46.48	47.45	58.31	62.58
Various industries	41.19	42.82	45.32	50.65	51.15	84.33	81.38	96.85	106.44	85.76	61.02	50.24	70.12
Transport	5.70	6.40	7.40	8.14	7.72	8.78	9.04	9.75	11.85	12.32	22.40	85.82	254.84
Rail	5.70	6.40	7.40										
Road													
Aerien													
Maritime													
Other				8.14	7.72	8.78	9.04	9.75	11.85	12.32	22.40	85.82	254.84
Households and Others	5,010.31	5,749.93	6,797.48	7,540.85	7,979.82	8,864.56	9,125.97	9,830.39	11,850.29	12,196.28	12,021.94	12,645.28	13,738.66
Residential	4,373.67	5,038.16	5,989.58	6,627.23	7,086.11	7,415.04	7,633.01	8,706.86	10,619.53	10,926.42	10,884.16	11,362.75	12,063.42
Farming	31.92	32.64	40.24	54.43	41.66	57.45	53.56	33.75	37.77	36.81	23.72	28.12	35.87
Tertiary and Other	604.72	679.13	767.67	859.19	852.05	1,392.07	1,439.40	1,089.78	1,192.99	1,233.05	1,114.06	1,254.42	1,639.37
Losses	20	20	586.39	742.60	288.08	305.14	306.05	854.90	282.54	416.37	234.40	647.37	314.83
Statistical Differences	51.68												

Table 0-9 Energy balance 1990 – 2022: Fuelwood

Fuelwood											
Fuelwood – UNIT: 10 ³ m3	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Production	48.17	93.05	102.68	173.29	173.29	173.29	173.29	230.98	245.43	245.43	245.43
Import											
Export											
Bunkers											
Change in inventories Production											
Availability Internal											
Change in inventories Consumption											
Gross consumption	48.17	93.05	102.68	173.29	173.29	173.29	173.29	230.98	245.43	245.43	245.43
Transformation											
Coking plants											
Blast Furnaces											
Deliquification units											
Refineries											
Power stations											
Autoproducer Power Stations											
Other											
Consumption Non Energy											
Net consumption	48.17	93.05	102.68	173.29	173.29	173.29	173.29	230.98	245.43	245.43	245.43
Indus Energy consumption											
Consumption in the fields											
Gas and oil pipelines											
Liquefaction Units											
Refineries											
Other											
Final consumption	48.17	93.05	102.68	173.29	173.29	173.29	173.29	230.98	245.43	245.43	245.43
Industry		61.96	68.31	115.27	115.27	115.27	115.27	153.69	163.33	163.33	163.33
I.S.M.M.E.											
Non-ferrous metals											

Fuelwood											
Fuelwood – UNIT: 10 ³ m3	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Chemicals, Rubber and Plastics											
Wood/Paper/Cork											
Food processing industries											
Deconstruction Materials		61.96	68.31	115.27	115.27	115.27	115.27	153.69	163.33	163.33	163.33
Transport Equipment											
Machinery											
Mining and Quarrying											
Wood and Wood Products											
Public buildings(Np)		61.96	68.31	115.27	115.27	115.27	115.27	153.69	163.33	163.33	163.33
Textile Industries/Leather Industries											
Various industries											
Transport											
Rail											
Road											
Aerien											
Maritime	48.17	31.09	34.37	58.02	58.02	58.02	58.02	77.29	82.10	82.10	82.10
Other	48.17	31.09	34.37	58.02	58.02	58.02	58.02	77.29	82.10	82.10	82.10
Households and Others											
Residential											
Farming											
Tertiary and Other											
Losses											
Statistical Differences											

Fuelwood													
Fuelwood – UNIT: 10 ³ m3	2001	2002	2003	2004	2005	2006	2007	2008	2009	2006	2007	2008	2009
Production	245.43	330.49	269.51	269.51	327.20	295.46	327.20	213.36	245.87	295.46	327.20	213.36	245.87
Import													
Export													
Bunkers													
Change in inventories Production													
Availability Internal													
Change in inventories Consumption													
Gross consumption	245.43	330.49	269.51	269.51	327.20	295.46	327.20	213.36	245.87	295.46	327.20	213.36	245.87
Transformation													
Coking plants													
Blast Furnaces													
Deliquefaction units													
Refineries													
Power stations													
Autoproducer Power Stations													
Other													
Consumption Non Energy													
Net consumption	245.43	330.49	269.51	269.51	327.20	295.46	327.20	213.36	245.87	295.46	327.20	213.36	245.87
Indus Energy consumption													
Consumption in the fields													
Gas and oil pipelines													
Liquefaction Units													
Refineries													
Other													
Final consumption	245.43	330.49	269.51	269.51	327.20	295.46	327.20	213.36	245.87	295.46	327.20	213.36	245.87
Industry	163.33	219.92	179.31	179.31	217.73	196.61	217.73	141.98	163.55	196.61	217.73	141.98	163.55
I.S.M.M.E.													
Non-ferrous metals													
Chemicals, Rubber and Plastics													
Wood/Paper/Cork													

Fuelwood													
Fuelwood – UNIT: 10 ³ m ³	2001	2002	2003	2004	2005	2006	2007	2008	2009	2006	2007	2008	2009
Food processing industries													
Deconstruction Materials	163.33	219.92	179.31	179.31	217.73	196.61	217.73	141.98	163.55	196.61	217.73	141.98	163.55
Transport Equipment													
Machinery													
Mining and Quarrying													
Wood and Wood Products													
Public buildings(Np)	163.33	219.92	179.31	179.31	217.73	196.61	217.73	141.98	163.55	196.61	217.73	141.98	163.55
Textile Industries/Leather Industries													
Various industries													
Transport													
Rail													
Road													
Aerien													
Maritime	82.10	110.56	90.20	90.20	109.47	98.85	109.47	71.37	82.32	98.85	109.47	71.37	82.32
Other	82.10	110.56	90.20	90.20	109.47	98.85	109.47	71.37	82.32	98.85	109.47	71.37	82.32
Households and Others													
Residential													
Farming													
Tertiary and Other													
Losses													
Statistical Differences													

Fuelwood													
UNIT: 10 ³ m ³	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Production	135.38	41.52	22.26	112.15	31.47	31.54	30.57	52.64	113.40	52.74	51.88	12.50	90.58
Import													
Export													
Bunkers													
Change in inventories Production													
Availability Internal	246.14	41.52	22.26	112.15	31.47	31.54	30.57	52.64	113.40	52.74	51.88	12.50	90.58
Change in inventories Consumption													
Gross consumption	246.14	41.52	22.26	112.15	31.47	31.54	30.57	52.64	113.40	52.74	51.88	12.50	90.58
Transformation				0.05	0.21	0.21	0.55	0.32	0.01	3.37	2.54	0.21	0.02
Coking plants													
Blast Furnaces													
Deliquescence units													
Refineries													
Power stations													
Autoproducer Power Stations													
Other				0.05	0.21	0.21	0.55	0.32	0.01	3.37	2.54	0.21	0.02
Consumption Non Energy													
Net consumption	135.38	41.52	22.26	112.15	31.68	31.75	31.13	52.96	113.41	56.12	54.42	12.71	90.60
Indus Energy consumption													
Consumption in the fields													
Gas and oil pipelines													
Liquefaction Units													
Refineries													
Other													
Final consumption	135.38	41.52	22.26	112.14	31.68	31.75	31.13	52.96	113.41	56.12	54.42	12.71	90.60
Industry	92.06			84.14	21.40	21.45	20.79	35.80	77.11	35.86	35.28	8.50	61.59
I.S.M.M.E.													
Non-ferrous metals													
Chemicals, Rubber and Plastics													

Fuelwood													
UNIT: 10 ³ m ³	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Wood/Paper/Cork													
Food processing industries													
Deconstruction Materials													
Transport Equipment													
Machinery													
Mining and Quarrying													
Wood and Wood Products													
Public buildings(Np)	92.06				21.40	21.45	20.79	35.80	77.11	35.86	35.28	8.50	61.59
Textile Industries/Leather Industries													
Various industries													
Transport													
Rail													
Road													
Aerien													
Maritime	43.32	41.52	22.26	28.00	10.28	10.31	10.34	17.16	36.30	20.25	19.14	4.21	29.01
Other	43.32	8.30	4.45	27.96	10.11	10.13	9.89	16.91	36.29	17.55	17.11	4.04	28.99
Households and Others													
Residential		33.21	17.81	0.04	0.17	0.17	0.44	0.25	0.01	2.70	2.03	0.17	0.02
Farming													
Tertiary and Other				0.01	-0.21	-0.21		-		-	-	-	-
Losses													
Statistical Differences													

Table 0-10 Energy balance 1990 – 2022: Coal

Coal																
UNIT: kt	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Production																
Import											593.00					
Export																
Bunkers																
Change in inventories Production											96.00					
Availability Internal																
Change in inventories Consumption																
Gross consumption											689.00					
Transformation											689.00					
Coking plants											689.00					
Blast Furnaces																
Deliquification units																
Refineries																
Power stations																
Autoproducer Power Stations																
Other																
Consumption Non Energy																
Net consumption																
Indus Energy consumption																
Consumption in the fields																
Gas and oil pipelines																
Liquefaction Units																
Refineries																
Other																
Final consumption																
Industry																
I.S.M.M.E.																

Coal																
UNIT: kt	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Non-ferrous metals																
Chemicals, Rubber and Plastics																
Wood/Paper/Cork																
Food processing industries																
Deconstruction Materials																
Transport Equipment																
Machinery																
Mining and Quarrying																
Wood and Wood Products																
Public buildings(Np)																
Textile Industries/Leather Industries																
Various industries																
Transport																
Rail																
Road																
Aerien																
Maritime																
Other																
Households and Others																
Residential																
Farming																
Tertiary and Other																
Losses																
Statistical Differences																

Coal																	
UNIT: kt	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Production																	
Import	992.00	826.00	825.00	166.00					16.42				12.45	7.52	6.65	11.89	5.87
Export																	
Bunkers																	
Change in inventories Production	35.00	-113.00	-114.00	-147.00													
Availability Internal									16.42				12.45	7.52	6.65	11.89	5.87
Change in inventories Consumption									1.03	9.38	0.13	4.90	4.21	9.34	0.04	3.40	0.16
Gross consumption	957.00	939.00	939.00	313.00					17.44	9.38	0.13	4.90	8.25	16.86	6.61	15.29	5.71
Transformation	957.00	939.00	939.00	313.00					17.00	9.93		4.73	8.07	17.66	6.61	15.45	5.71
Coking plants	957.00	939.00	939.00	313.00													
Blast Furnaces																	
Deliquescence units																	
Refineries																	
Power stations																	
Autoproducer Power Stations																	
Other									17.00	9.93		4.73	8.07	17.66	6.61	15.45	5.71
Consumption Non Energy																	
Net consumption									0.44	0.56	0.13	0.17	0.18	0.80			
Indus Energy consumption																	
Consumption in the fields																	
Gas and oil pipelines																	
Liquefaction Units																	
Refineries																	
Other																	
Final consumption																	
Industry																	
I.S.M.M.E.																	
Non-ferrous metals																	
Chemicals, Rubber and Plastics																	
Wood/Paper/Cork																	

Coal																	
UNIT: kt	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Food processing industries																	
Deconstruction Materials																	
Transport Equipment																	
Machinery																	
Mining and Quarrying																	
Wood and Wood Products																	
Public buildings(Np)																	
Textile Industries/Leather Industries																	
Various industries																	
Transport																	
Rail																	
Road																	
Aerien																	
Maritime																	
Other																	
Households and Others																	
Residential																	
Farming																	
Tertiary and Other									0.44	0.56	0.13	0.17	0.18	0.80			
Losses																	
Statistical Differences																	

Table 0-11 Energy balance 1990 – 2022: Coke oven coke

Coke oven coke																
UNIT: kt	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Production	758.00	775.00	791.00	718.00	618.00	394.00	26	409.00	59	578.00	455.00	509.00	663.00	662.00	585.00	531.00
Import	125.00					39.00	99.00	68.00		55.00	63.00	113.00	97.00	14.00	51.00	6
Export	3.00				7.00											
Bunkers																
Change in inventories Production	109.00	99.00	138.00	76.00	-69.00	-235.00	-137.00	69.00	-18.00	-7	-21.00	3	46.00	-112.00	-97.00	-97.00
Availability Internal																
Change in inventories Consumption																
Gross consumption	771.00	676.00	653.00	642.00	68	668.00	496.00	408.00	608.00	703.00	539.00	592.00	714.00	788.00	733.00	688.00
Transformation	362.00	338.00	358.00	382.00	272.00	275.00	254.00	326.00	474.00	546.00	506.00	562.00	691.00	676.00	636.00	591.00
Coking plants																
Blast Furnaces	362.00	338.00	358.00	382.00	272.00	275.00	254.00	326.00	474.00	546.00	506.00	562.00	691.00	676.00	636.00	591.00
Deliquification units																
Refineries																
Power stations																
Autoproducer Power Stations																
Other																
Consumption Non Energy																
Net consumption	331.00	344.00	358.00	29	391.00	388.00	257.00	82.00	134.00	157.00	33.00	3	23.00	112.00	97.00	97.00
Indus Energy consumption																
Consumption in the fields																

Coke oven coke																
UNIT: kt	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Gas and oil pipelines																
Liquefaction Units																
Refineries																
Other																
Final consumption	331.00	344.00	358.00	29	391.00	388.00	257.00	82.00	134.00	157.00	33.00	3	23.00	112.00	97.00	97.00
Industry	331.00	344.00	358.00	29	391.00	388.00	257.00	82.00	134.00	157.00	33.00	3	23.00	112.00	97.00	97.00
I.S.M.M.E.																
Non-ferrous metals																
Chemicals, Rubber and Plastics	318.00	331.00	35	281.00	391.00	388.00	257.00	82.00	134.00	157.00	33.00	3	23.00	112.00	97.00	97.00
Wood/Paper/Cork																
Food processing industries																
Deconstruction Materials	13.00	13.00	8.00	9.00												
Transport Equipment																
Machinery																
Mining and Quarrying																
Wood and Wood Products																
Public buildings(Np)	13.00	13.00	8.00	9.00												
Textile Industries/Leather Industries																
Various industries																
Transport																
Rail																

Coke oven coke																
UNIT: kt	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Road																
Aerien																
Maritime																
Other																
Households and Others																
Residential																
Farming																
Tertiary and Other																

Coke oven coke																	
UNIT: kt	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Production	628.00	621.00	621.00	206.00													
Import	71.00	275.00	274.00	229.00	500.37	437.30	420.02	269.12	235.77	211.42	77.87	300.98	499.64	436.90	200.55	417.98	288.30
Export																	
Bunkers																	
Change in inventories Production	-37.00	18.00	18.00	-104.00	-7.77	-0.72	-12.66	-34.38	29.71	12.39	77.87	-25.86	-47.28	-3.54	-0.11	11.10	-1.79
Availability Internal					508.14	438.02	432.68	303.49	206.05	199.03	-	326.83	546.92	440.45	200.65	406.88	290.09
Change in inventories Consumption																	
Gross consumption	736.00	878.00	877.00	539.00	508.14	438.02	432.68	303.49	206.05	199.03	-	326.83	546.92	440.45	200.65	406.88	290.09
Transformation	575.00	686.00	685.00	421.00		-354.42	-358.48	-222.92	-181.10	-165.52		-268.52	-438.30	-351.64	-184.82	-330.93	-246.66
Coking plants																	
Blast Furnaces	575.00	686.00	685.00	421.00		-354.42	-358.48	-222.92	-181.10	-165.52		-268.52	-438.30	-351.64	-184.82	-330.93	-246.66
Deliquescence units																	
Refineries																	
Power stations																	

Coke oven coke																	
UNIT: kt	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Autoproducer Power Stations																	
Other																	
Consumption Non Energy																	
Net consumption	161.00	192.00	192.00	118.00	508.14	83.59	74.20	80.57	24.96	33.51	-	58.31	108.62	88.80	15.83	75.95	43.43
Indus Energy consumption																	
Consumption in the fields																	
Gas and oil pipelines																	
Liquefaction Units																	
Refineries																	
Other																	
Final consumption	161.00	192.00	192.00	118.00	476.07	83.05	74.20	64.31	22.73	36.74		60.04	108.25	88.80	15.78	75.39	43.43
Industry	161.00	192.00	192.00	118.00	476.07	83.05	74.20	64.31	22.73	36.74		60.04	108.25	88.80	15.78	75.39	43.43
I.S.M.M.E.																	
Non-ferrous metals																	
Chemicals, Rubber and Plastics	161.00	192.00	192.00	118.00	476.07	83.05	74.20	64.31	22.73	36.74		60.04	108.25	88.80	15.78	75.39	43.43
Wood/Paper/Cork					476.07	83.05	74.20	64.31	22.73	36.74		60.04	108.25	88.80	15.78	75.39	43.43
Food processing industries																	
Deconstruction Materials																	
Transport Equipment																	
Machinery																	
Mining and Quarrying																	
Wood and Wood Products																	
Public buildings(Np)																	
Textile Industries/Leather Industries																	

Coke oven coke																	
UNIT: kt	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Various industries																	
Transport																	
Rail																	
Road																	
Aerien																	
Maritime																	
Other																	
Households and Others																	
Residential																	
Farming					24.30	0.72	0.72	16.67	2.00								
Tertiary and Other					7.77	-0.17	-0.72	-0.40	0.22	-3.23	-	-1.73	0.37		0.06	0.57	-

Table 0-12 Energy balance 1990 – 2022: Gasoil-Diesel

Gasoil-Diesel										
UNIT: kt	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
PRODUCTION										
IMPORTATION										
EXPORTATION	4,06	4,165.00	3,684.00	3,983.00	3,363.00	3,647.00	2,969.00	3,515.00	3,006.00	2,886.00
SOUTAGES	75.00	10	11	86.00	10	125.00	105.00	85.00	76.00	69.00
VARIATIONSTOCKProduction	7	-5	4	104.00	43.00	6	132.00	-43.00	-114.00	131.00
DISPONIBILITESINTERNAL										
VARIATIONSTOCKCONSOMATION										
CONSOMMATIONBRUTE	3,847.00	3,585.00	4,126.00	3,365.00	3,039.00	3,032.00	2,937.00	2,966.00	3,23	3,366.00
TRANSFORMATION	8,218.00	7,946.00	8,122.00	7,672.00	6,728.00	7,066.00	6,36	6,857.00	6,445.00	6,68
COKERIES										
HAUTSFOURNEAUX										
UNITESDELIQUEFACTION										
RAFFINERIES	8,052.00	7,80	7,96	7,538.00	6,545.00	6,864.00	6,143.00	6,523.00	6,198.00	6,452.00
CENTRALELECTRIQUES	125.00	117.00	131.00	106.00	117.00	147.00	16	274.00	20	153.00
CENTRALELECTRIQUESDES AUTOPRODUCTEURS	41.00	29.00	31.00	28.00	66.00	55.00	57.00	6	47.00	75.00
AUTRES										
CONSOMMATIONNONENERGY										
CONSOMMATIONNETTE	3,722.00	3,468.00	3,995.00	3,259.00	2,922.00	2,885.00	2,777.00	2,692.00	2,931.00	3,124.00
CONSOMMATIONINDUSENERGY										
CONSOMMATIONAUXCHAMPS										
GAZODUCSETOLEODUCS										
UNITESDELIQUEFACTION										
RAFFINERIES										
AUTRES										
CONSOMMATIONFINALE	3,722.00	3,468.00	3,995.00	3,259.00	2,922.00	2,885.00	2,777.00	2,692.00	2,931.00	3,124.00
INDUSTRIE	436.00	436.00	436.00	436.00	436.00	436.00	436.00	436.00	517.00	551.00
MATERIAUX_DE_CONSTRUCTION										

Gasoi-Diesel										
UNIT: kt	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
MATERIAUX_A-CIMENTRIES										
I.S.M.M.E.									67.00	71.00
SIDERURGIE_DE_BASE										
CHIMIE									14.00	14.00
INDUSTRIES_MANUFACTURIERES	436.00	436.00	436.00	436.00	436.00	436.00	436.00	436.00	436.00	466.00
AGRO-ALIMENTAIRE										
TEXTILES,UIR_ET_HABILLEMENT										
VERRERIES										
BTP										
AUTRES_INDUSTRIES	436.00	436.00	436.00	436.00	436.00	436.00	436.00	436.00	436.00	466.00
TRANSPORTS	2,278.00	2,024.00	2,551.00	1,815.00	1,478.00	1,441.00	1,333.00	1,248.00	1,406.00	1,492.00
RAIL										
ROUTIER	2,278.00	2,024.00	2,551.00	1,815.00	1,478.00	1,441.00	1,333.00	1,248.00	1,406.00	1,492.00
AERIEN										
MARITIME										
AUTRES										
MENAGES_ET_AUTRES	1,008.00	1,008.00	1,008.00	1,008.00	1,008.00	1,008.00	1,008.00	1,008.00	1,008.00	1,081.00
RESIDENTIEL	1,008.00	1,008.00	1,008.00	1,008.00	1,008.00	1,008.00	1,008.00	1,008.00	1,008.00	1,081.00
AGRICULTURES										
TERTIARE_ET_AUTRES										
PERTES										
ECART_STATISTIQUE										

Gasoi-Diesel										
UNIT: kt	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
PRODUCTION										
IMPORTATION										577.00

Gasoil-Diesel										
UNIT: kt	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
EXPORTATION	2,37	2,637.00	1,438.00	1,156.00	486.00	179.00	159.00	86.00		
SOUTAGES	68.00	52.00	65.00	66.00	66.00	66.00	55.00	56.00	52.00	54.00
VARIATIONSTOCKProduction	-97.00	-144.00	117.00	204.00			-38	-474.00	274.00	81.00
DISPONIBILITESINTERNAL										
VARIATIONSTOCKCONSOMATION										
CONSOMMATIONBRUTE	3,667.00	3,896.00	4,424.00	4,76	5,788.00	5,701.00	6,164.00	6,72	7,077.00	7,975.00
TRANSFORMATION	6,32	6,61	6,221.00	6,314.00	6,493.00	6,107.00	6,325.00	6,712.00	7,713.00	7,809.00
COKERIES										
HAUTSFOURNEAUX										
UNITESDELIQUEFACTION										
RAFFINERIES	6,008.00	6,441.00	6,044.00	6,186.00	6,34	5,946.00	5,998.00	6,388.00	7,403.00	7,533.00
CENTRALESELECTRIQUES	21	107.00	112.00	81.00	93.00	10	227.00	229.00	227.00	179.00
CENTRALESELECTRIQUESDES AUTO PRODUCTEURS	102.00	62.00	65.00	47.00	6	61.00	10	95.00	83.00	97.00
AUTRES										
CONSOMMATIONNONENERGY										
CONSOMMATIONNETTE	4,533.00	3,702.00	4,242.00	4,542.00	4,609.00	5,996.00	5,937.00	6,491.00	6,85	7,796.00
CONSOMMATIONINDUSENERGY										
CONSOMMATIONAUXCHAMPS										
GAZODUCSETOLEODUCS										
UNITESDELIQUEFACTION										
RAFFINERIES										
AUTRES										
CONSOMMATIONFINALE	4,533.00	3,702.00	4,242.00	4,542.00	4,609.00	5,996.00	5,937.00	6,491.00	6,85	7,796.00
INDUSTRIE	644.00	686.00	742.00	778.00	80	887.00	92	1,035.00	994.00	813.00
MATERIAUX_DE_CONSTRUCTION	68.00						109.00	121.00	123.00	535.00
MATERIAUX_A-CIMENTRIES										
I.S.M.M.E.	83.00	88.00	103.00	112.00	114.00	124.00	132.00	147.00	15	
SIDERURGIE_DE_BASE										

Gasoi-Diesel										
UNIT: kt	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
CHIMIE	17.00	18.00	21.00	23.00	27.00	25.00	27.00	3	31.00	
INDUSTRIES_MANUFACTURIERES	544.00	58	618.00	643.00	659.00	738.00	761.00	858.00	813.00	813.00
AGRO-ALIMENTAIRE										
TEXTILES, CUIR_ET_HABILLEMENT										
VERRERIES										
BTP										
AUTRES_INDUSTRIES	476.00	58	618.00	643.00	659.00	738.00	652.00	737.00	69	278.00
TRANSPORTS	2,813.00	1,842.00	2,163.00	2,349.00	2,386.00	2,609.00	5,017.00	5,456.00	5,856.00	6,331.00
RAIL										37.00
ROUTIER	2,813.00	1,842.00	2,163.00	2,349.00	2,386.00	2,609.00	5,017.00	5,456.00	5,856.00	6,294.00
AERIEN										
MARITIME										
AUTRES										
MENAGES_ET_AUTRES	1,076.00	1,174.00	1,337.00	1,415.00	1,423.00	2,50				652.00
RESIDENTIEL	1,076.00	1,174.00	1,337.00	1,415.00	1,423.00	2,50				
AGRICULTURES										27.00
TERTIAIRE_ET_AUTRES										
PERTES										
ECART_STATISTIQUE										

Gasoil-Diesel													
UNIT: kt	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
PRODUCTION													
IMPORTATION	379.84	1,229.67	2,762.17	2,728.12	1,088.38	1,737.39	1,458.92	1,413.49	247.03	912.58	284.89		
EXPORTATION											619.75		
SOUTAGES	52.20	44.93	52.97	64.42	56.47	59.82	56.74	63.68	57.84	9.66	15.46	47.69	35.21
VARIATIONSTOCKProduction			67.13	-110.37	196.84	-165.12	51.77	-133.80	222.63	-88.31	-59.80	87.62	-306.97
DISPONIBILITESINTERNAL	327.64	1,184.74	2,642.08	2,774.07	835.07	1,842.69	1,350.41	1,483.61	-33.44	991.23	-290.52	-135.31	271.76
VARIATIONSTOCKCONSOMATION	-56.79	-33.73	135.64	-2.27	-35.34	31.53	48.31	-52.02	-35.43	65.15	-43.42	78.80	72.18
PRODUCTION	384.43	1,218.47	2,506.44	2,776.34	870.41	1,811.16	1,302.10	1,535.63	1.99	926.08	-247.11	-214.11	199.58
IMPORTATION	7,660.11	7,425.44	6,696.53	6,599.39	8,661.15	8,405.17	8,483.43	8,310.81	9,968.84	9,374.93	9,303.08	9,526.35	9,551.14
EXPORTATION													
SOUTAGES													
VARIATIONSTOCKProduction													
DISPONIBILITESINTERNAL	7,805.84	7,573.08	6,867.31	7,042.33	9,026.62	8,825.84	8,892.08	8,537.45	10,188.88	9,590.29	9,503.29	9,730.24	9,767.35
VARIATIONSTOCKCONSOMATION	-145.72	-147.64	-170.79	-166.00	-256.20	-243.85	-215.20	-224.77	-218.85	-214.73	-199.91	-202.79	-215.72
CONSOMMATIONBRUTE				-276.94	-109.28	-176.82	-193.45	-1.88	-1.19	-0.63	-0.30	-1.10	-0.50
TRANSFORMATION													
COKERIES													
HAUTSFOURNEAUX	8,044.54	8,643.91	9,202.97	9,375.73	9,531.55	10,216.33	9,785.52	9,846.43	9,970.83	10,301.01	9,055.97	9,312.24	9,750.72
UNITESDELIQUEFACTION												155.76	186.80
RAFFINERIES												155.76	186.80
CENTRALELECTRIQUES													
CENTRALELECTRIQUESDESAUTOPR ODUCTEURS													
AUTRES													
CONSOMMATIONNONENERGY													
CONSOMMATIONNETTE	7,964.55	8,797.89	9,450.93	9,340.24	9,612.77	10,195.58	9,914.04	9,855.95	10,128.36	10,333.91	9,076.77	9,373.04	9,728.36
CONSOMMATIONINDUSEENERGY	740.30	817.32	574.32	549.53	625.46	670.99	690.09	629.42	447.80	424.99	230.68	539.81	517.14
CONSOMMATIONAUXCHAMPS	12.88	14.08	4.36		4.71	6.60	7.21	8.55	10.28	11.77	9.40	9.35	9.97

Gasoi-Diesel													
UNIT: kt	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
GAZODUCSETOLEODUCS	7.04	7.92	4.36										
UNITESDELIQUEFACTION										54.49	51.38	58.14	54.81
RAFFINERIES													
AUTRES	1.67	1.76	1.91		2.07	2.90	3.17	3.75	4.52	5.17	4.13	4.11	4.38
CONSOMMATIONFINALE													
INDUSTRIE													
MATERIAUX_DE_CONSTRUCTION													
MATERIAUX_A-CIMENTRIES													
I.S.M.M.E.	483.51	534.03	304.19	277.66	322.33	362.85	358.19	328.61	362.91	345.33	267.92	460.57	439.84
SIDERURGIE_DE_BASE	242.24	267.46	263.85	271.87	296.35	298.65	321.53	288.51	70.10	8.24	102.15	7.64	8.14
CHIMIE	6,632.48	7,326.88	8,343.95	8,413.16	8,759.49	9,283.72	8,954.98	8,795.71	9,028.88	8,891.65	7,847.07	8,348.53	8,700.34
INDUSTRIES_MANUFACTURIERES	37.80						30.17		37.80	35.08	18.46		37.51
AGRO-ALIMENTAIRE	6,594.68	7,326.88	8,343.34	8,413.16	8,759.49	9,283.72	8,924.82	8,795.71	8,991.08	8,804.53	7,777.32	8,320.13	8,639.56
TEXTILES,UIR_ET_HABILLEMENT													
VERRERIES										52.03	51.29	28.41	23.28
BTP			0.60										
AUTRES_INDUSTRIES	591.76	653.68	532.67	377.55	227.82	240.87	268.96	430.81	651.69	1,017.27	999.02	484.70	510.88
TRANSPORTS												96.71	94.77
RAIL	22.65	24.63	19.06	19.12	20.16	21.82	15.94	15.06	15.86	15.54	14.66	13.72	15.41
ROUTIER	569.12	629.05	513.61	358.43	207.65	219.05	253.03	415.75	635.83	1,001.72	984.36	374.28	400.70
AERIEN		43.99	47.25		38.08		42.63	42.38	50.64	51.67	53.82	53.12	53.12
MARITIME	79.99	-197.97	-295.22	35.49	-119.29	20.76	-171.14	-51.89	-208.17	-84.57	-74.62	-269.69	-217.57

Table 0-13 Energy balance 1990 – 2022: Gasoline

Gasoline										
UNIT: kt	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
PRODUCTION										
IMPORTATION										
EXPORTATION	98.00	734.00	475.00	324.00	102.00	35.00	365.00	283.00	173.00	63.00
SOUTAGES										
VARIATIONSTOCKProduction	51.00	-41.00	11.00	-11.00	-76.00	69.00	125.00	-79.00	24.00	32.00
DISPONIBILITESINTERNAL										
VARIATIONSTOCKCONSOMATION										
CONSOMMATIONBRUTE	2,328.00	2,21	2,06	2,023.00	1,963.00	1,933.00	1,982.00	1,902.00	1,842.00	1,844.00
TRANSFORMATION										
COKERIES										
HAUTSFOURNEAUX										
UNITESDELIQUEFACTION										
RAFFINERIES	2,477.00	2,903.00	2,546.00	2,336.00	1,989.00	2,037.00	2,472.00	2,106.00	2,039.00	1,939.00
CENTRALESELECTRIQUES										
CENTRALESELECTRIQUESDESAUTOPRODUCTEURS										
AUTRES										
CONSOMMATIONNONENERGY										
CONSOMMATIONNETTE	2,328.00	2,21	2,06	2,023.00	1,963.00	1,933.00	1,982.00	1,902.00	1,861.00	1,844.00
CONSOMMATIONINDUSENERGY										
CONSOMMATIONAUXCHAMPS										
GAZODUCSETOLEODUCS										
UNITESDELIQUEFACTION										
RAFFINERIES										
AUTRES										
CONSOMMATIONFINALE	2,328.00	2,21	2,06	2,023.00	1,963.00	1,933.00	1,982.00	1,902.00	1,861.00	1,844.00
INDUSTRIE										
MATERIAUX_DE_CONSTRUCTION										

Gasoline										
UNIT: kt	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
MATERIAUX_A-CIMENTRIES										
I.S.M.M.E.										
SIDERURGIE_DE_BASE										
CHIMIE										
INDUSTRIES_MANUFACTURIERES										
AGRO-ALIMENTAIRE										
TEXTILES,UIR_ET_HABILLEMENT										
VERRERIES										
BTP										
AUTRES_INDUSTRIES										
TRANSPORTS	2,328.00	2,21	2,06	2,023.00	1,963.00	1,933.00	1,982.00	1,902.00	1,861.00	1,844.00
RAIL										
ROUTIER	2,328.00	2,21	2,06	2,023.00	1,963.00	1,933.00	1,982.00	1,902.00	1,861.00	1,844.00
AERIEN										
MARITIME										
AUTRES										
MENAGES_ET_AUTRES										
RESIDENTIEL										
AGRICULTURES										
TERTIARE_ET_AUTRES										
PERTES										
ECART_STATISTIQUE										

Gasoline										
UNIT: kt	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
PRODUCTION										
IMPORTATION										37.00
EXPORTATION	12.00		77.00	98.00	734.00	475.00	357.00		308.00	97.00
SOUTAGES										
VARIATIONSTOCKProduction	-3.00	49.00	203.00	51.00	-41.00	11.00	245.00	4	315.00	6.00
DISPONIBILITESINTERNAL										
VARIATIONSTOCKCONSOMATION										
CONSOMMATIONBRUTE	1,884.00	1,876.00	1,779.00	2,328.00	2,21	2,06	1,718.00	2,06	2,157.00	2,351.00
TRANSFORMATION										
COKERIES										
HAUTSFOURNEAUX										
UNITESDELIQUEFACTION										
RAFFINERIES	1,893.00	1,925.00	2,059.00	2,477.00	2,903.00	2,546.00	2,32	2,10	2,78	2,417.00
CENTRALESELECTRIQUES										
CENTRALESELECTRIQUESDESAUTOPRODUCTEURS										
AUTRES										
CONSOMMATIONNONENERGY										
CONSOMMATIONNETTE	1,877.00	1,925.00	1,982.00	2,328.00	2,21	2,06	1,718.00	2,06	2,157.00	2,34
CONSOMMATIONINDUSEENERGY										
CONSOMMATIONAUXCHAMPS										
GAZODUCSETOLEODUCS										
UNITESDELIQUEFACTION										
RAFFINERIES										
AUTRES										
CONSOMMATIONFINALE	1,877.00	1,925.00	1,982.00	2,328.00	2,21	2,06	1,718.00	2,06	2,157.00	2,34
INDUSTRIE										13.00
MATERIAUX_DE_CONSTRUCTION										2.00

Gasoline										
UNIT: kt	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
MATERIAUX_A-CIMENTRIES										
I.S.M.M.E.										
SIDERURGIE_DE_BASE										
CHIMIE										
INDUSTRIES_MANUFACTURIERES										13.00
AGRO-ALIMENTAIRE										
TEXTILES,UIR_ET_HABILLEMENT										
VERRERIES										
BTP										
AUTRES_INDUSTRIES										11.00
TRANSPORTS	1,877.00	1,925.00	1,982.00	2,328.00	2,21	2,06	1,718.00	2,06	2,157.00	2,198.00
RAIL										1.00
ROUTIER	1,877.00	1,925.00	1,982.00	2,328.00	2,21	2,06	1,718.00	2,06	2,157.00	2,197.00
AERIEN										
MARITIME										
AUTRES										
MENAGES_ET_AUTRES										129.00
RESIDENTIEL										
AGRICULTURES										
TERTIAIRE_ET_AUTRES										
PERTES										
ECART_STATISTIQUE										

Gasoline													
UNIT: kt	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
PRODUCTION													
IMPORTATION		394.96	1,180.70	1,591.54	1,032.91	1,601.32	1,608.25	1,554.00	124.41	577.74	391.84		
EXPORTATION	28.03										93.27		72.86
SOUTAGES													
VARIATIONSTOCKProduction			-3.16	79.36	-17.58	21.18	4.95	13.63	361.70	-40.23	13.33	38.02	10.85
DISPONIBILITESINTERNAL	-28.03	394.96	1,183.86	1,512.18	1,050.49	1,580.14	1,603.30	1,540.38	-237.29	617.97	285.23	-38.02	-83.71
VARIATIONSTOCKCONSOMATION	11.17	-35.54	27.56	27.98	0.33	39.44	-17.96	4.56	-26.30	8.43	14.95	-29.10	-13.99
CONSOMMATIONBRUTE	-39.19	430.50	1,156.30	1,484.20	1,050.16	1,540.70	1,621.26	1,535.82	-211.00	609.54	270.28	-8.92	-69.72
TRANSFORMATION	2,666.60	2,567.71	2,272.93	2,299.61	3,007.07	2,798.04	2,612.97	2,546.58	3,749.35	3,253.28	3,104.84	3,405.68	3,430.52
COKERIES													
HAUTSFOURNEAUX													
UNITESDELIQUEFACTION													
RAFFINERIES	2,666.60	2,567.71	2,272.93	2,299.61	3,007.07	2,798.04	2,612.97	2,546.58	3,749.35	3,253.28	3,104.84	3,405.68	3,430.52
CENTRALELECTRIQUES													
CENTRALELECTRIQUESDESAUTOPR ODUCTEURS													
AUTRES													
CONSOMMATIONNONENERGY													
CONSOMMATIONNETTE	2,627.41	2,998.21	3,429.23	3,783.80	4,057.23	4,338.74	4,234.24	4,082.40	3,538.35	3,862.82	3,375.12	3,396.76	3,360.80
CONSOMMATIONINDUSEENERGY													
CONSOMMATIONAUXCHAMPS													
GAZODUCSETOLEODUCS													
UNITESDELIQUEFACTION													
RAFFINERIES													
AUTRES													
CONSOMMATIONFINALE	2,696.68	3,023.72	3,416.20	3,822.93	4,122.86	4,428.27	4,268.62	4,147.03	3,935.04	3,916.30	3,362.43	3,421.80	3,344.36
INDUSTRIE	5.02	5.75	0.66	0.46	0.58	0.67	0.87	0.90	0.74	1.26	0.72	0.29	0.23
MATERIAUX_DE_CONSTRUCTION	0.01												
MATERIAUX_A-CIMENTRIES	0.01												

Gasoline													
UNIT: kt	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
I.S.M.M.E.										1.02	0.53	0.10	0.07
SIDERURGIE_DE_BASE													
CHIMIE													
INDUSTRIES_MANUFACTURIERES													
AGRO-ALIMENTAIRE													
TEXTILES,CUIR_ET_HABILLEMENT													
VERRERIES													
BTP	0.81	0.91	0.35	0.25	0.36	0.35	0.29	0.28	0.26	0.24	0.19	0.18	0.16
AUTRES_INDUSTRIES	4.19	4.84	0.30	0.21	0.22	0.32	0.58	0.61	0.48				
TRANSPORTS	2,604.51	2,920.31	3,381.64	3,788.60	4,084.81	4,390.91	4,223.50	4,092.50	3,876.65	3,874.18	3,325.02	3,382.56	3,303.49
RAIL	0.22	0.30											
ROUTIER	2,604.29	2,920.01	3,381.64	3,788.60	4,084.81	4,390.91	4,223.50	4,092.50	3,876.65	3,874.18	3,325.02	3,382.56	3,303.49
AERIEN													
MARITIME													
AUTRES													
MENAGES_ET_AUTRES	87.16	97.67	33.91	33.87	37.47	36.68	44.25	53.64	57.65	40.86	36.69	38.95	40.64
RESIDENTIEL													
AGRICULTURES	0.01		0.02	0.01	0.01	0.01							
TERTIAIRE_ET_AUTRES	87.15	97.67	33.90	33.86	37.47	36.68	44.24	53.64	57.65	40.86	36.69	38.95	40.64
PERTES		15.12	17.08		15.32		18.36	17.83	19.68	19.58	4.58	3.32	3.32
ECART_STATISTIQUE	-69.27	-40.63	-4.05	-39.13	-80.94	-89.53	-52.74	-82.47	-416.37	-73.06	8.12	-28.36	13.12

Table 0-14 Energy balance 1990 – 2022: LPG

LPG										
UNIT: kt	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
PRODUCTION	4,983.00	5,130.00	5,060.00	5,178.00	5,030.00	5,074.00	5,505.00	6,663.00	7,555.00	9,348.00
IMPORTATION										
EXPORTATION	4,289.00	3,500.00	3,700.00	3,590.00	3,562.00	3,572.00	4,005.00	5,163.00	6,025.00	6,937.00
SOUTAGES										
VARIATIONSTOCKProduction										
DISPONIBILITESINTERNAL										
VARIATIONSTOCKCONSOMATION										
CONSOMMATIONBRUTE	694.00	1,630.00	1,360.00	1,588.00	1,468.00	1,502.00	1,500.00	1,500.00	1,530.00	2,411.00
TRANSFORMATION										
COKERIES										
HAUTSFOURNEAUX										
UNITESDELIQUEFACTION										
RAFFINERIES										
CENTRALESELECTRIQUES										
CENTRALESELECTRIQUESDES AUTOPRODUCTEURS										
AUTRES										
CONSOMMATIONNONENERGY										
CONSOMMATIONNETTE	694.00	1,630.00	1,360.00	1,559.00	1,467.00	1,394.00	1,423.00	1,446.00	1,613.00	1,704.00
CONSOMMATIONINDUSENERGY										
CONSOMMATIONAUXCHAMPS										
GAZODUCSETOLEODUCS										
UNITESDELIQUEFACTION										
RAFFINERIES										
AUTRES										
CONSOMMATIONFINALE	694.00	1,630.00	1,360.00	1,559.00	1,467.00	1,394.00	1,423.00	1,446.00	1,613.00	1,704.00
INDUSTRIE				25.00	24.00	13.00	14.00	18.00	103.00	147.00
MATERIAUX_DE_CONSTRUCTION										

LPG										
UNIT: kt	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
MATERIAUX_A-CIMENTRIES										
I.S.M.M.E.										
SIDERURGIE_DE_BASE										
CHIMIE									84.00	127.00
INDUSTRIES_MANUFACTURIERES				25.00	24.00	13.00	14.00	18.00	19.00	20.00
AGRO-ALIMENTAIRE										
TEXTILES,UIR_ET_HABILLEMENT										
VERRERIES										
BTP										
AUTRES_INDUSTRIES				25.00	24.00	13.00	14.00	18.00	19.00	20.00
TRANSPORTS				40.00	35.00	45.00	72.00	106.00	112.00	116.00
RAIL										
ROUTIER				40.00	35.00	45.00	72.00	106.00	112.00	116.00
AERIEN										
MARITIME										
AUTRES										
MENAGES_ET_AUTRES	694.00	1,630.00	1,360.00	1,494.00	1,408.00	1,336.00	1,337.00	1,322.00	1,398.00	1,441.00
RESIDENTIEL	694.00	1,630.00	1,360.00	1,494.00	1,408.00	1,336.00	1,337.00	1,322.00	1,398.00	1,441.00
AGRICULTURES										
TERTIARE_ET_AUTRES										
PERTES										
ECART_STATISTIQUE										

LPG										
UNIT: kt	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
PRODUCTION	9,473.00	9,047.00	9,956.00	9,756.00	9,223.00	9,337.00	8,679.00	9,115.00	9,183.00	8,819.00
IMPORTATION										

LPG										
UNIT: kt	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
EXPORTATION	7,894.00	7,398.00	8,067.00	7,947.00	7,296.00	7,482.00	7,010.00	7,447.00	7,485.00	6,818.00
SOUTAGES										
VARIATIONSTOCKProduction										19.00
DISPONIBILITESINTERNAL										
VARIATIONSTOCKCONSOMATION										
CONSOMMATIONBRUTE	1,579.00	1,649.00	1,889.00	1,809.00	1,927.00	1,855.00	1,669.00	1,668.00	1,698.00	1,982.00
TRANSFORMATION										
COKERIES										
HAUTSFOURNEAUX										
UNITESDELIQUEFACTION										
RAFFINERIES										
CENTRALELECTRIQUES										
CENTRALELECTRIQUESDESAUTO PRODUCTEURS										
AUTRES										
CONSOMMATIONNONENERGY										
CONSOMMATIONNETTE	1,720.00	1,712.00	1,780.00	1,749.00	1,942.00	1,810.00	1,669.00	1,669.00	1,699.00	2,001.00
CONSOMMATIONINDUSENERGY										
CONSOMMATIONAUXCHAMPS										
GAZODUCSETOLEODUCS										
UNITESDELIQUEFACTION										
RAFFINERIES										
AUTRES										
CONSOMMATIONFINALE	1,720.00	1,712.00	1,780.00	1,749.00	1,942.00	1,810.00	1,669.00	1,669.00	1,699.00	2,001.00
INDUSTRIE	161.00	142.00	154.00	108.00	45.00	48.00	51.00	56.00	112.00	138.00
MATERIAUX_DE_CONSTRUCTION										75.00
MATERIAUX_A-CIMENTRIES										
I.S.M.M.E.										
SIDERURGIE_DE_BASE										

LPG										
UNIT: kt	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
CHIMIE	141.00	128.00	140.00	94.00						
INDUSTRIES_MANUFACTURIERES	20.00	14.00	14.00	14.00	45.00	48.00	51.00	56.00	112.00	138.00
AGRO-ALIMENTAIRE										
TEXTILES,CUIR_ET_HABILLEMENT										
VERRERIES										
BTP										
AUTRES_INDUSTRIES	20.00	14.00	14.00	14.00	45.00	48.00	51.00	56.00	112.00	63.00
TRANSPORTS	116.00	217.00	254.00	282.00	300.00	312.00	316.00	314.00	315.00	342.00
RAIL										
ROUTIER	116.00	217.00	254.00	282.00	300.00	312.00	316.00	314.00	315.00	342.00
AERIEN										
MARITIME										
AUTRES										
MENAGES_ET_AUTRES	1,443.00	1,353.00	1,372.00	1,359.00	1,597.00	1,450.00	1,302.00	1,299.00	1,272.00	1,521.00
RESIDENTIEL	1,443.00	1,353.00	1,372.00	1,359.00	1,597.00	1,450.00	1,302.00	1,299.00	1,272.00	1,481.00
AGRICULTURES										6.00
TERTIAIRE_ET_AUTRES										
PERTES										
ECART_STATISTIQUE										

LPG													
UNIT: kt	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
PRODUCTION	7,186.00	7,044.17	6,601.06	6,612.08	7,999.27	8,265.35	8,242.17	7,979.81	7,917.64	7,784.67	7,360.94	7,815.56	8,333.20
IMPORTATION													
EXPORTATION	5,921.66	6,018.75	5,504.62	5,346.30	7,191.15	7,563.55	7,310.40	6,931.83	6,616.63	6,259.93	5,573.83	5,895.56	6,103.75
SOUTAGES													
VARIATIONSTOCKProduction	1.70		5.01	-1.17	-0.91	-4.84	-1.47	-0.45	-0.67	1.30	0.55	-0.25	-0.43
DISPONIBILITESINTERNAL	1,262.64	1,025.42	1,091.44	1,266.95	809.03	706.64	933.23	1,048.43	1,301.69	1,523.44	1,786.56	1,920.25	2,229.87
VARIATIONSTOCKCONSOMATION	-7.41		22.59	-2.88	-11.22	-104.68	9.56	23.78	27.77	-18.46	-28.94	23.87	-11.31
CONSOMMATIONBRUTE	1,270.05	1,025.42	1,068.84	1,269.83	820.25	811.32	923.67	1,024.65	1,273.92	1,541.90	1,815.50	1,896.37	2,241.19
TRANSFORMATION	976.00	970.38	827.38	872.00	1,177.11	1,086.53	1,115.38	1,174.91	1,053.96	1,131.21	1,052.39	1,173.72	1,121.60
COKERIES													
HAUTSFOURNEAUX													
UNITESDELIQUEFACTION	407.00	452.89	357.79	274.57	372.74	346.35	350.76	431.95	396.32	473.61	380.28	468.61	394.91
RAFFINERIES	569.00	517.49	469.60	597.44	804.37	740.18	764.62	742.96	657.64	657.60	672.11	705.12	726.69
CENTRALESELECTRIQUES													
CENTRALESELECTRIQUESDESAUTOPR ODUCTEURS													
AUTRES													
CONSOMMATIONNONENERGY													
CONSOMMATIONNETTE	2,246.05	1,995.80	1,896.23	2,141.83	1,997.36	1,897.85	2,039.05	2,199.56	2,327.88	2,673.11	2,867.89	3,070.10	3,362.78
CONSOMMATIONINDUSEENERGY				18.56	47.57	21.45	15.04	13.19	30.88	6.91	7.12	5.55	4.23
CONSOMMATIONAUXCHAMPS													
GAZODUCSETOLEODUCS													
UNITESDELIQUEFACTION													
RAFFINERIES													
AUTRES				18.56	47.57	21.45	15.04	13.19	30.88	6.91	7.12	5.55	4.23
CONSOMMATIONFINALE	1,972.65	1,997.95	2,111.04	2,046.22	1,895.21	1,897.33	1,881.41	1,978.86	2,193.43	2,404.94	2,417.71	2,675.01	2,900.16
INDUSTRIE	132.45	122.24	158.76	137.59	79.09	61.44	46.98	50.82	63.15	69.33	66.05	51.83	62.88
MATERIAUX_DE_CONSTRUCTION	70.15	59.94	35.56	23.91	14.24	12.52	11.65	8.61	8.11	7.19	6.66	4.92	4.98
MATERIAUX_A-CIMENTRIES		59.94											

LPG													
UNIT: kt	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
I.S.M.M.E.			0.07	0.09	0.15	0.22	0.52	0.39	0.77	0.34	0.05	0.07	0.07
SIDERURGIE_DE_BASE			0.07	0.09	0.15	0.22	0.52	0.39	0.77	0.34	0.05	0.07	0.07
CHIMIE								0.00					
INDUSTRIES_MANUFACTURIERES	0.05	0.05	0.10	0.05	0.12	0.16	0.40	0.50	2.04	2.13	1.53	0.65	0.43
AGRO-ALIMENTAIRE	0.05	0.05	0.10	0.05	0.12	0.16	0.40	0.50	2.04	2.13	1.53	0.65	0.43
TEXTILES,UIR_ET_HABILLEMENT													
VERRERIES													
BTP													
AUTRES_INDUSTRIES	62.24	62.25	123.03	113.54	64.58	48.53	34.42	41.32	52.23	59.68	57.83	46.19	57.40
TRANSPORTS	327.67	349.39	342.89	333.34	310.70	290.58	351.50	456.98	649.98	858.87	953.65	1,295.52	1,551.60
RAIL													
ROUTIER	327.67	349.39	342.89	333.34	310.70	290.58	351.50	456.98	649.98	858.87	953.65	1,295.52	1,551.60
AERIEN													
MARITIME													
AUTRES													
MENAGES_ET_AUTRES	1,512.53	1,526.31	1,609.40	1,575.29	1,505.42	1,545.32	1,482.93	1,471.06	1,480.30	1,476.74	1,398.01	1,327.66	1,285.68
RESIDENTIEL	1,472.25	1,484.95	1,565.77	1,530.03	1,457.30	1,493.72	1,427.98	1,413.65	1,417.31	1,411.14	1,331.76	1,260.62	1,217.48
AGRICULTURES	7.08	5.78	5.65	7.80	8.77	9.45	13.29	13.90	17.82	19.13	20.47	20.56	20.82
TERTIAIRE_ET_AUTRES	33.20	35.58	37.97	37.46	39.36	42.15	41.66	43.51	45.17	46.47	45.79	46.49	47.39
PERTES	0.68			40.92	1.27		8.09	8.51	10.97	12.02	12.09	-48.26	-48.26
ECART_STATISTIQUE	272.73	-2.14	-214.82	36.13	53.31	-20.93	134.51	199.00	92.60	249.23	430.97	437.81	506.65

Table 0-15 Energy balance 1990 – 2022: Jet kerosene

Jet kerosene										
UNIT: kt	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
PRODUCTION										
IMPORTATION		200.00	260.00							
EXPORTATION	210.00	200.00	210.00	250.00	779.00	630.00	745.00	813.00	706.00	887.00
SOUTAGES	160.00	160.00	160.00	160.00	200.00	250.00	260.00	260.00	270.00	270.00
VARIATIONSTOCKProduction									-122.00	
DISPONIBILITESINTERNAL										
VARIATIONSTOCKCONSOMATION										
CONSOMMATIONBRUTE	160.00	140.00	240.00	149.00	101.00	97.00	99.00	124.00	116.00	158.00
TRANSFORMATION										
COKERIES										
HAUTSFOURNEAUX										
UNITESDELIQUEFACTION										
RAFFINERIES	530.00	300.00	350.00	559.00	1,080.00	977.00	1,104.00	1,197.00	970.00	1,315.00
CENTRALESELECTRIQUES										
CENTRALESELECTRIQUESDESAUT OPRODUCTEURS										
AUTRES										
CONSOMMATIONNONENERGY										
CONSOMMATIONNETTE	160.00	140.00	240.00	149.00	101.00	97.00	99.00	124.00	116.00	117.00
CONSOMMATIONINDUSEENERGY										
CONSOMMATIONAUXCHAMPS										
GAZODUCSETOLEODUCS										
UNITESDELIQUEFACTION										
RAFFINERIES										
AUTRES										
CONSOMMATIONFINALE	160.00	140.00	240.00	149.00	101.00	97.00	99.00	124.00	116.00	117.00
INDUSTRIE										

Jet kerosene										
UNIT: kt	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
MATERIAUX_DE_CONSTRUCTION										
MATERIAUX_A-CIMENTRIES										
I.S.M.M.E.										
SIDERURGIE_DE_BASE										
CHIMIE										
INDUSTRIES_MANUFACTURIERES										
AGRO-ALIMENTAIRE										
TEXTILES,UIR_ET_HABILLEMENT										
VERRERIES										
BTP										
AUTRES_INDUSTRIES										
TRANSPORTS	160.00	140.00	240.00	149.00	101.00	97.00	99.00	124.00	116.00	117.00
RAIL										
ROUTIER										
AERIEN	160.00	140.00	240.00	149.00	101.00	97.00	99.00	124.00	116.00	117.00
MARITIME										
AUTRES										
MENAGES_ET_AUTRES										
RESIDENTIEL										
AGRICULTURES										
TERTIARE_ET_AUTRES										
PERTES										
ECART_STATISTIQUE										

Jet kerosene										
UNIT: kt	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
PRODUCTION										
IMPORTATION										
EXPORTATION	1,228.00	1,020.00	876.00	916.00	632.00	709.00	494.00	680.00	193.02	140.50
SOUTAGES	370.00	302.00	441.00	379.00	212.00	308.00	361.00	354.00	183.98	216.50
VARIATIONSTOCKProduction			46.00	5.00						7.00
DISPONIBILITESINTERNAL										
VARIATIONSTOCKCONSOMATION										
CONSOMMATIONBRUTE		130.00	30.00	15.00	142.00	52.00			215.00	155.00
TRANSFORMATION										
COKERIES										
HAUTSFOURNEAUX										
UNITESDELIQUEFACTION										
RAFFINERIES	1,598.00	1,452.00	1,393.00	1,315.00	986.00	1,069.00	855.00	1,034.00	988.00	969.00
CENTRALESELECTRIQUES										
CENTRALESELECTRIQUESDESAUTO OPRODUCTEURS										
AUTRES										
CONSOMMATIONNONENERGY										
CONSOMMATIONNETTE	103.00	130.00	30.00	15.00	128.00	52.00			215.00	155.00
CONSOMMATIONINDUSENERGY										
CONSOMMATIONAUXCHAMPS										
GAZODUCSETOLEODUCS										
UNITESDELIQUEFACTION										
RAFFINERIES										
AUTRES										
CONSOMMATIONFINALE	103.00	130.00	30.00	15.00	128.00	52.00			215.00	155.00
INDUSTRIE										
MATERIAUX_DE_CONSTRUCTION										
MATERIAUX_A-CIMENTRIES										

Jet kerosene										
UNIT: kt	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
I.S.M.M.E.										
SIDERURGIE_DE_BASE										
CHIMIE										
INDUSTRIES_MANUFACTURIERES										
AGRO-ALIMENTAIRE										
TEXTILES,CUIR_ET_HABILLEMENT										
VERRERIES										
BTP										
AUTRES_INDUSTRIES										
TRANSPORTS	103.00	130.00	30.00	15.00	128.00	52.00			215.00	155.00
RAIL										
ROUTIER										
AERIEN	103.00	130.00	122.00	115.00	128.00	148.89	169.79	190.68	211.57	226.29
MARITIME										
AUTRES										
MENAGES_ET_AUTRES										
RESIDENTIEL										
AGRICULTURES										
TERTIAIRE_ET_AUTRES										
PERTES										
ECART_STATISTIQUE										

Jet kerosene													
UNIT: kt	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
PRODUCTION													

Jet kerosene													
UNIT: kt	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
IMPORTATION				0.50				0.33	0.50	0.41	0.42	0.40	0.32
EXPORTATION	690.39	503.34	430.23	836.33	1,165.80	780.11	805.65	789.29	621.13	344.47	630.75	371.64	65.53
SOUTAGES	236.28	246.88	252.72	287.19	315.68	281.13	294.49	312.44	332.16	337.50	84.63	62.78	215.65
VARIATIONSTOCKProduction			-3.42	6.27	-4.72	-3.37	51.20	-39.43	29.76	-2.27	-15.01	-21.77	-64.52
DISPONIBILITESINTERNAL	-926.67	-750.22	-679.53	-1,264.54	-1,601.84	-1,139.65	-1,151.34	-1,061.97	-982.55	-679.28	-699.95	-475.03	-432.00
VARIATIONSTOCKCONSOMATION	-2.05	2.44	3.53	1.80	-9.36	4.22	1.70	-0.72	0.89	0.54	4.70	2.83	-2.27
CONSOMMATIONBRUTE	-924.62	-752.66	-683.06	-1,266.34	-1,592.49	-1,143.87	-1,153.04	-1,061.26	-983.44	-679.82	-704.65	-477.86	-429.73
TRANSFORMATION	1,409.32	1,209.25	1,204.11	1,713.11	2,001.32	1,631.14	1,655.90	1,560.72	1,514.69	1,220.71	1,014.20	849.25	1,012.52
COKERIES													
HAUTSFOURNEAUX													
UNITESDELIQUEFACTION													
RAFFINERIES	1,409.32	1,209.25	1,204.11	1,713.11	2,001.32	1,631.14	1,655.90	1,560.72	1,514.69	1,220.71	1,014.20	849.25	1,012.52
CENTRALESELECTRIQUES													
CENTRALESELECTRIQUESDESAUTOPR ODUCTEURS													
AUTRES													
CONSOMMATIONNONENERGY													
CONSOMMATIONNETTE	484.71	456.59	521.05	446.77	408.83	487.28	502.87	499.47	531.25	540.89	309.55	371.39	582.79
CONSOMMATIONINDUSENERGY													
CONSOMMATIONAUXCHAMPS													
GAZODUCSETOLEODUCS													
UNITESDELIQUEFACTION													
RAFFINERIES													
AUTRES													
CONSOMMATIONFINALE	449.51	454.47	505.91	387.39	415.00	453.86	459.62	472.86	579.32	471.93	255.02	234.34	249.02
INDUSTRIE													
MATERIAUX_DE_CONSTRUCTION													
MATERIAUX_A-CIMENTRIES													
I.S.M.M.E.													

Jet kerosene													
UNIT: kt	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
SIDERURGIE_DE_BASE													
CHIMIE													
INDUSTRIES_MANUFACTURIERES													
AGRO-ALIMENTAIRE													
TEXTILES,UIR_ET_HABILLEMENT													
VERRERIES													
BTP													
AUTRES_INDUSTRIES													
TRANSPORTS	449.51	454.47	505.91	387.39	415.00	453.86	459.62	472.86	579.32	471.93	255.02	234.34	249.02
RAIL													
ROUTIER													
AERIEN	212.98	207.35	236.10	235.22	224.22	254.35	252.65	267.75	247.64	263.55	203.15	233.96	252.22
MARITIME													
AUTRES													
MENAGES_ET_AUTRES													
RESIDENTIEL													
AGRICULTURES													
TERTIAIRE_ET_AUTRES													
PERTES		2.27	2.53				1.98	2.03	2.90	2.36	1.28	0.06	0.06
ECART_STATISTIQUE	35.20	-0.16	12.61	59.37	-6.17	33.42	41.27	24.58	-50.97	66.60	53.26	136.98	333.71

Table 0-16 Energy balance 1990 – 2022: Other kerosene

Other kerosene										
UNIT: kt	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
PRODUCTION										
IMPORTATION										
EXPORTATION	97.00	40.00	42.00							
SOUTAGES										
VARIATIONSTOCKProduction										
DISPONIBILITESINTERNAL										
VARIATIONSTOCKCONSOMATION										
CONSOMMATIONBRUTE	12.00	10.00	10.00	11.00	12.00	16.00	10.00	8.00	9.00	8.00
TRANSFORMATION										
COKERIES										
HAUTSFOURNEAUX										
UNITESDELIQUEFACTION										
RAFFINERIES	109.00	50.00	52.00	11.00	12.00	16.00	10.00	8.00	9.00	8.00
CENTRALESELECTRIQUES										
CENTRALESELECTRIQUESDESAUTO OPRODUCTEURS										
AUTRES										
CONSOMMATIONNONENERGY										
CONSOMMATIONNETTE	12.00	10.00	10.00	11.00	12.00	16.00	10.00	8.00	9.00	8.00
CONSOMMATIONINDUSENERGY										
CONSOMMATIONAUXCHAMPS										
GAZODUCSETOLEODUCS										
UNITESDELIQUEFACTION										
RAFFINERIES										
AUTRES										
CONSOMMATIONFINALE	12.00	10.00	10.00	11.00	12.00	16.00	10.00	8.00	9.00	8.00
INDUSTRIE										

Other kerosene										
UNIT: kt	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
MATERIAUX_DE_CONSTRUCTION										
MATERIAUX_A-CIMENTRIES										
I.S.M.M.E.										
SIDERURGIE_DE_BASE										
CHIMIE										
INDUSTRIES_MANUFACTURIERES										
AGRO-ALIMENTAIRE										
TEXTILES,CUIR_ET_HABILLEMENT										
VERRERIES										
BTP										
AUTRES_INDUSTRIES										
TRANSPORTS										
RAIL										
ROUTIER										
AERIEN										
MARITIME										
AUTRES										
MENAGES_ET_AUTRES	12.00	10.00	10.00	11.00	12.00	16.00	10.00	8.00	9.00	8.00
RESIDENTIEL	12.00	10.00	10.00	11.00	12.00	16.00	10.00	8.00	9.00	8.00
AGRICULTURES										
TERTIARE_ET_AUTRES										
PERTES										
ECART_STATISTIQUE										

Other kerosene										
UNIT: kt	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
PRODUCTION										
IMPORTATION										
EXPORTATION										
SOUTAGES										
VARIATIONSTOCKProduction										
DISPONIBILITESINTERNAL										
VARIATIONSTOCKCONSOMATION										
CONSOMMATIONBRUTE	9.00	9.00	13.00	12.00	14.00	11.00	9.00	6.00	2.00	1.00
TRANSFORMATION										
COKERIES										
HAUTSFOURNEAUX										
UNITESDELIQUEFACTION										
RAFFINERIES	9.00	9.00	13.00	12.00	14.00	11.00	9.00	6.00	2.00	1.00
CENTRALESELECTRIQUES										
CENTRALESELECTRIQUESDES AUT OPRODUCTEURS										
AUTRES										
CONSOMMATIONNONENERGY										
CONSOMMATIONNETTE	9.00	9.00	13.00	12.00	13.00	11.00	9.00	6.00	2.00	1.00
CONSOMMATIONINDUSENERGY										
CONSOMMATIONAUXCHAMPS										
GAZODUCSETOLEODUCS										
UNITESDELIQUEFACTION										
RAFFINERIES										
AUTRES										
CONSOMMATIONFINALE	9.00	9.00	13.00	12.00	13.00	11.00	9.00	6.00	2.00	1.00
INDUSTRIE										
MATERIAUX_DE_CONSTRUCTION										
MATERIAUX_A-CIMENTRIES										

Other kerosene										
UNIT: kt	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
I.S.M.M.E.										
SIDERURGIE_DE_BASE										
CHIMIE										
INDUSTRIES_MANUFACTURIERES										
AGRO-ALIMENTAIRE										
TEXTILES,CUIR_ET_HABILLEMENT										
VERRERIES										
BTP										
AUTRES_INDUSTRIES										
TRANSPORTS										
RAIL										
ROUTIER										
AERIEN										
MARITIME										
AUTRES										
MENAGES_ET_AUTRES	9.00	9.00	13.00	12.00	13.00	11.00	9.00	6.00	2.00	1.00
RESIDENTIEL	9.00	9.00	13.00	12.00	13.00	11.00	9.00	6.00	2.00	1.00
AGRICULTURES										
TERTIAIRE_ET_AUTRES										
PERTES										
ECART_STATISTIQUE										

Other kerosenes													
UNIT: kt	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
PRODUCTION													
IMPORTATION													
EXPORTATION													
SOUTAGES													
VARIATIONSTOCKProduction													
DISPONIBILITESINTERNAL													
VARIATIONSTOCKCONSOMATION													
CONSOMMATIONBRUTE													
TRANSFORMATION												11.27	25.72
COKERIES													
HAUTSFOURNEAUX													
UNITESDELIQUEFACTION													
RAFFINERIES												11.27	25.72
CENTRALESELECTRIQUES													
CENTRALESELECTRIQUESDESAUTOP RODUCTEURS													
AUTRES													
CONSOMMATIONNONENERGY												2.15	3.38
CONSOMMATIONNETTE												9.12	22.34
CONSOMMATIONINDUSEENERGY													
CONSOMMATIONAUXCHAMPS													
GAZODUCSETOLEODUCS													
UNITESDELIQUEFACTION													
RAFFINERIES													
AUTRES													
CONSOMMATIONFINALE	15.06	16.06			16.00	20.63	19.26	19.56	18.44	16.12	22.12	11.27	22.34
INDUSTRIE	14.85	15.84			16.00	20.63	19.26	19.56	18.44	16.12	22.12	11.27	22.16
MATERIAUX_DE_CONSTRUCTION													
MATERIAUX_A-CIMENTRIES													

Other kerosenes													
UNIT: kt	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
I.S.M.M.E.													
SIDERURGIE_DE_BASE													
CHIMIE								2.76	0.82	0.62			
INDUSTRIES_MANUFACTURIERES													
AGRO-ALIMENTAIRE													
TEXTILES,UIR_ET_HABILLEMENT													
VERRERIES													
BTP	4.13	4.41			4.45	5.74	5.36	4.68	4.91	4.32	6.16	3.14	6.17
AUTRES_INDUSTRIES	10.72	11.43			11.55	14.89	13.90	12.12	12.72	11.19	15.96	8.13	15.99
TRANSPORTS													
RAIL													
ROUTIER													
AERIEN													
MARITIME													
AUTRES													
MENAGES_ET_AUTRES	0.21	0.22											0.18
RESIDENTIEL													
AGRICULTURES													
TERTIARE_ET_AUTRES	0.21	0.22											0.18
PERTES		0.08					0.08	0.08	0.09	0.08	0.11		
ECART_STATISTIQUE	-15.06	-16.14			-16.00	-20.63	-19.35	-19.64	-18.53	-16.20	-22.23	-2.15	

Table 0-17 Energy balance 1990 – 2022: Naphta

Naphta										
UNIT: kt	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
PRODUCTION										
IMPORTATION										
EXPORTATION	4,100.00	4,100.00	3,837.00	3,611.00	3,009.00	3,481.00	3,785.00	4,304.00	4,170.00	3,746.00
SOUTAGES										
VARIATIONSTOCKProduction				3.00	-196.00	-151.00	-321.00	-261.00	-315.00	-60.00
DISPONIBILITESINTERNAL										
VARIATIONSTOCKCONSOMATION										
CONSOMMATIONBRUTE	100.00	150.00								
TRANSFORMATION										
COKERIES										
HAUTSFOURNEAUX										
UNITESDELIQUEFACTION										
RAFFINERIES	4,200.00	4,250.00	3,837.00	3,614.00	2,813.00	3,330.00	3,464.00	4,043.00	3,855.00	3,686.00
CENTRALESELECTRIQUES										
CENTRALESELECTRIQUESDESAUT OPRODUCTEURS										
AUTRES										
CONSOMMATIONNONENERGY	100.00	150.00								
CONSOMMATIONNETTE	100.00	150.00								
CONSOMMATIONINDUSEENERGY										
CONSOMMATIONAUXCHAMPS										
GAZODUCSETOLEODUCS										
UNITESDELIQUEFACTION										
RAFFINERIES										
AUTRES										
CONSOMMATIONFINALE										
INDUSTRIE										
MATERIAUX_DE_CONSTRUCTION										

Naphta										
UNIT: kt	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
MATERIAUX_A-CIMENTRIES										
I.S.M.M.E.										
SIDERURGIE_DE_BASE										
CHIMIE										
INDUSTRIES_MANUFACTURIERES										
AGRO-ALIMENTAIRE										
TEXTILES,UIR_ET_HABILLEMENT										
VERRERIES										
BTP										
AUTRES_INDUSTRIES										
TRANSPORTS										
RAIL										
ROUTIER										
AERIEN										
MARITIME										
AUTRES										
MENAGES_ET_AUTRES										
RESIDENTIEL										
AGRICULTURES										
TERTIARE_ET_AUTRES										
PERTES										
ECART_STATISTIQUE										

Naphta										
UNIT: kt	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
PRODUCTION										
IMPORTATION										

Naphta										
UNIT: kt	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
EXPORTATION	3,949.00	4,366.00	4,163.00	4,212.00	3,056.00	3,323.00	3,274.00	3,645.00	3,453.00	4,705.00
SOUTAGES										
VARIATIONSTOCKProduction	40.00	-185.00				-74.00				
DISPONIBILITESINTERNAL										
VARIATIONSTOCKCONSOMATION										
CONSOMMATIONBRUTE	274.00		277.00	280.00	300.00			53.00	188.00	208.00
TRANSFORMATION										
COKERIES										
HAUTSFOURNEAUX										
UNITESDELIQUEFACTION										
RAFFINERIES	4,263.00	4,181.00	4,440.00	4,492.00	3,356.00	3,249.00	3,274.00	3,698.00	3,641.00	4,913.00
CENTRALESELECTRIQUES										
CENTRALESELECTRIQUESDESAUTO PRODUCTEURS										
AUTRES										
CONSOMMATIONNONENERGY	314.00		277.00	280.00	300.00			53.00	188.00	208.00
CONSOMMATIONNETTE	314.00		277.00	280.00	300.00			53.00	188.00	208.00
CONSOMMATIONINDUSENERGY										
CONSOMMATIONAUXCHAMPS										
GAZODUCSETOLEODUCS										
UNITESDELIQUEFACTION										
RAFFINERIES										
AUTRES										
CONSOMMATIONFINALE										
INDUSTRIE										
MATERIAUX_DE_CONSTRUCTION										
MATERIAUX_A-CIMENTRIES										
I.S.M.M.E.										
SIDERURGIE_DE_BASE										

Naphta										
UNIT: kt	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
CHIMIE										
INDUSTRIES_MANUFACTURIERES										
AGRO-ALIMENTAIRE										
TEXTILES, CUIR_ET_HABILLEMENT										
VERRERIES										
BTP										
AUTRES_INDUSTRIES										
TRANSPORTS										
RAIL										
ROUTIER										
AERIEN										
MARITIME										
AUTRES										
MENAGES_ET_AUTRES										
RESIDENTIEL										
AGRICULTURES										
TERTIAIRE_ET_AUTRES										
PERTES										
ECART_STATISTIQUE										

Naphta													
UNIT: kt	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
PRODUCTION													
IMPORTATION													
EXPORTATION	7,497.00	7,041.81	6,548.63	6,402.74	8,641.74	8,526.45	7,924.13	8,183.37	7,640.74	7,401.72	7,376.98	7,711.28	7,925.10
SOUTAGES													
VARIATIONSTOCKProduction			3.92	59.19	-47.60	-58.68	29.81	16.76	7.70	-64.97	59.71	-61.54	47.54
DISPONIBILITESINTERNAL	-7,497.00	-7,041.81	-6,552.54	-6,461.93	-8,594.14	-8,467.77	-7,953.94	-8,200.14	-7,648.44	-7,336.75	-7,436.68	-7,649.74	-7,972.63
VARIATIONSTOCKCONSOMATION													
CONSOMMATIONBRUTE	-7,497.00	-7,041.81	-6,552.54	-6,461.93	-8,594.14	-8,467.77	-7,953.94	-8,200.14	-7,648.44	-7,336.75	-7,436.68	-7,649.74	-7,972.63
TRANSFORMATION	7,669.20	7,134.35	6,598.36	6,507.16	8,888.96	8,492.15	8,030.43	8,256.23	7,714.52	7,375.58	7,436.74	7,666.47	8,045.83
COKERIES													
HAUTSFOURNEAUX													
UNITESDELIQUEFACTION	229.00	195.75	166.02	170.93	168.25	120.28	101.32	113.45	80.87	107.11	95.73	94.60	100.02
RAFFINERIES	7,440.20	6,938.61	6,432.35	6,336.23	8,720.72	8,371.87	7,929.11	8,142.79	7,633.65	7,268.47	7,341.01	7,571.87	7,945.82
CENTRALELECTRIQUES													
CENTRALELECTRIQUESDESAUTOPR ODUCTEURS													
AUTRES													
CONSOMMATIONNONENERGY	172.20	92.54	45.82	45.23	294.82	24.39	76.50	56.09	66.08	38.82	0.06	16.73	73.20
CONSOMMATIONNETTE													
CONSOMMATIONINDUSENERGY													
CONSOMMATIONAUXCHAMPS													
GAZODUCSETOLEODUCS													
UNITESDELIQUEFACTION													
RAFFINERIES													
AUTRES													
CONSOMMATIONFINALE													
INDUSTRIE													
MATERIAUX_DE_CONSTRUCTION													
MATERIAUX_A-CIMENTRIES													
I.S.M.M.E.													

Naphta													
UNIT: kt	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
SIDERURGIE_DE_BASE													
CHIMIE													
INDUSTRIES_MANUFACTURIERES													
AGRO-ALIMENTAIRE													
TEXTILES,CUIR_ET_HABILLEMENT													
VERRERIES													
BTP													
AUTRES_INDUSTRIES													
TRANSPORTS													
RAIL													
ROUTIER													
AERIEN													
MARITIME													
AUTRES													
MENAGES_ET_AUTRES													
RESIDENTIEL													
AGRICULTURES													
TERTIAIRE_ET_AUTRES													
PERTES													
ECART_STATISTIQUE	172.20	92.54	45.82	45.23	294.82	24.39	76.50	56.09	66.08	38.82	0.06	16.73	73.20

Table 0-18 Energy balance 1990 – 2022: Other liquid fuels

Other liquid fuels																
UNIT: kt	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
PRODUCTION																
IMPORTATION																
EXPORTATION																
SOUTAGES																
VARIATIONSTOCKProduction																
DISPONIBILITESINTERNAL																
VARIATIONSTOCKCONSOMATION																
CONSOMMATIONBRUTE																
TRANSFORMATION																
COKERIES																
HAUTSFOURNEAUX																
UNITESDELIQUEFACTION																
RAFFINERIES																
CENTRALESELECTRIQUES																
CENTRALESELECTRIQUESDESAUT OPRODUCTEURS																
AUTRES																
CONSOMMATIONNONENERGY																
CONSOMMATIONNETTE																
CONSOMMATIONINDUSENERGY																
CONSOMMATIONAUXCHAMPS																
GAZODUCSETOLEODUCS																
UNITESDELIQUEFACTION																
RAFFINERIES																
AUTRES																
CONSOMMATIONFINALE																
INDUSTRIE																
MATERIAUX_DE_CONSTRUCTION																

Other liquid fuels																
UNIT: kt	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
MATERIAUX_A-CIMENTRIES																
I.S.M.M.E.																
SIDERURGIE_DE_BASE																
CHIMIE																
INDUSTRIES_MANUFACTURIERES																
AGRO-ALIMENTAIRE																
TEXTILES,UIR_ET_HABILLEMENT																
VERRERIES																
BTP																
AUTRES_INDUSTRIES																
TRANSPORTS																
RAIL																
ROUTIER																
AERIEN																
MARITIME																
AUTRES																
MENAGES_ET_AUTRES																
RESIDENTIEL																
AGRICULTURES																
TERTIAIRE_ET_AUTRES																
PERTES																
ECART_STATISTIQUE																

Other liquid fuels																	
UNIT: kt	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
PRODUCTION																	
IMPORTATION				16.00	383.52	297.13	345.81	713.76	867.07	436.52	360.06	299.29	327.95	801.18	966.79	940.12	664.90
EXPORTATION			113.00	64.00	67.81	17.10			115.09	108.63	72.27	40.84	30.74	48.08	77.79	36.80	182.57
SOUTAGES										0.04	0.03	0.03	0.03	0.05	0.04	3.83	10.74
VARIATIONSTOCKProduction			-42.00	8.00			350.11	20.78	9.99	-23.84	9.32	-8.52	5.43	-1.54	-15.37	-0.71	-12.20
DISPONIBILITESINTERNAL					315.72	280.03	-4.29	692.98	741.99	351.69	278.46	266.95	291.75	754.59	904.33	900.20	483.78
VARIATIONSTOCKCONSUMATION					47.65	0.92	-12.75	60.48	-38.18	-11.49	-7.95	9.78	-7.80	21.72	31.91	-9.98	-18.00
CONSOMMATIONBRUTE			402.00	82.00	268.06	279.11	8.46	632.50	780.17	363.19	286.41	257.17	299.55	732.87	872.42	910.19	501.79
TRANSFORMATION					449.31	362.65	372.70	373.13	544.66	424.28	435.49	384.44	347.40	334.93	260.19	268.27	387.68
COKERIES																	
HAUTSFOURNEAUX																	
UNITESDELIQUEFACTION					2.00	1.06		0.48	0.64								
RAFFINERIES			473.00	138.00	447.31	361.58	372.70	372.65	544.03	424.28	435.49	384.44	347.40	334.93	260.19	264.92	376.99
CENTRALELECTRIQUES																	
CENTRALELECTRIQUESDESAUTOPR ODUCTEURS																	
AUTRES																3.35	10.69
CONSOMMATIONNONENERGY			285.00		679.12	577.31	968.49	1,036.3 5	1,016.2 3	586.62	519.97	454.03	487.14	473.96	390.60	871.20	710.16
CONSOMMATIONNETTE			343.00	25.00	38.25	64.45	-587.33	-30.72	308.60	200.84	201.93	187.57	159.80	593.84	742.01	307.25	179.30
CONSOMMATIONINDUSENERGY								31.90								3.90	35.10
CONSOMMATIONAUXCHAMPS																3.90	35.10
GAZODUCSETOLEODUCS																	
UNITESDELIQUEFACTION																	
RAFFINERIES								31.90									
AUTRES																	
CONSOMMATIONFINALE			58.00	25.00	29.99	24.03	22.47	19.82	161.77	171.58	180.49	168.77	182.24	585.05	620.25	44.84	46.07
INDUSTRIE			24.00	24.00	25.18	24.03	22.47	19.82	23.13	20.67	36.81	34.98	33.03	439.96	501.18	12.44	11.77
MATERIAUX_DE_CONSTRUCTION										0.17	0.16	0.16	0.20	0.28	0.25	0.22	0.18
MATERIAUX_A-CIMENTRIES							0.14	0.14									

Other liquid fuels																	
UNIT: kt	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
I.S.M.M.E.																	
SIDERURGIE_DE_BASE																	
CHIMIE							22.47	19.77	23.13	20.50	20.58	22.28	19.76	21.56	15.44		
INDUSTRIES_MANUFACTURIERES			24.00	24.00													
AGRO-ALIMENTAIRE																	
TEXTILES,CUIR_ET_HABILLEMENT																	
VERRERIES																	
BTP											10.78	9.84	10.80	413.35	480.81	7.91	7.85
AUTRES_INDUSTRIES			24.00	24.00	25.18	24.03		0.05			5.30	2.69	2.27	4.77	4.67	4.31	3.75
TRANSPORTS			1.00	1.00	4.81				88.72	117.47	111.57	106.11	111.23	106.69	86.74	0.29	0.62
RAIL									0.81	0.78			0.06				
ROUTIER					4.25				87.91	116.70	111.57	106.11	110.73	106.21	86.18		
AERIEN					0.16								0.28	0.29	0.33	0.16	0.51
MARITIME					0.40								0.16	0.19	0.24	0.13	0.12
AUTRES			1.00	1.00													
MENAGES_ET_AUTRES			33.00						49.92	33.44	32.11	27.69	37.99	38.40	32.33	32.12	33.68
RESIDENTIEL			33.00						0.04	0.04	0.03	0.03	0.05	0.03	0.04	0.06	0.07
AGRICULTURES									0.49	0.50	0.40	0.29	0.74	0.29	0.31	0.27	0.29
TERTIAIRE_ET_AUTRES									49.39	32.90	31.68	27.36	37.20	38.09	31.98	31.78	33.33
PERTES					0.50	0.12	0.11		0.10		0.78	0.73	0.91	2.93	3.10	-0.15	-0.15
ECART_STATISTIQUE					7.76	40.30	-609.92	-82.45	146.72	29.26	20.66	18.08	-23.35	5.86	118.66	258.66	98.28

Table 0-19 Energy balance 1990 – 2022: Ethane

Ethane																
UNIT: kt	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
PRODUCTION											135.00					
IMPORTATION																
EXPORTATION																
SOUTAGES																
VARIATIONSTOCKProduction																
DISPONIBILITESINTERNAL																
VARIATIONSTOCKCONSOMATION																
CONSOMMATIONBRUTE											135.00					
TRANSFORMATION																
COKERIES																
HAUTSFOURNEAUX																
UNITESDELIQUEFACTION																
RAFFINERIES																
CENTRALELECTRIQUES																
CENTRALELECTRIQUESDES AUT OPRODUCTEURS																
AUTRES																
CONSOMMATIONNONENERGY											135.00					
CONSOMMATIONNETTE											135.00					
CONSOMMATIONINDUSENERGY																
CONSOMMATIONAUXCHAMPS																
GAZODUCSETOLEODUCS																
UNITESDELIQUEFACTION																
RAFFINERIES																
AUTRES																
CONSOMMATIONFINALE																
INDUSTRIE																
MATERIAUX_DE_CONSTRUCTION																

Ethane																
UNIT: kt	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
MATERIAUX_A-CIMENTRIES																
I.S.M.M.E.																
SIDERURGIE_DE_BASE																
CHIMIE																
INDUSTRIES_MANUFACTURIERES																
AGRO-ALIMENTAIRE																
TEXTILES,UIR_ET_HABILLEMENT																
VERRERIES																
BTP																
AUTRES_INDUSTRIES																
TRANSPORTS																
RAIL																
ROUTIER																
AERIEN																
MARITIME																
AUTRES																
MENAGES_ET_AUTRES																
RESIDENTIEL																
AGRICULTURES																
TERTIARE_ET_AUTRES																
PERTES																
ECART_STATISTIQUE																

Ethane																	
UNIT: kt	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Production	68.00	68.00	57.00	50.00													

Ethane																	
UNIT: kt	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Import																	
Export																	
Bunkers																	
Change in inventories Production																	
Availability Internal																	
Change in inventories Consumption																	
Gross consumption	68.00	68.00	57.00	50.00													
Transformation					18.00		27.15										
Coking plants																	
Blast Furnaces																	
Deliquefaction units					18.00												
Refineries																	
Power stations																	
Autoproducer Power Stations																	
Other							27.15										
Consumption Non Energy	68.00	68.00	57.00	50.00	18.00		27.15										
Net consumption	68.00	68.00	57.00	50.00													
Indus Energy consumption																	
Consumption in the fields																	
Gas and oil pipelines																	
Liquefaction Units																	
Refineries																	
Other																	
Final consumption																	
Industry																	
I.S.M.M.E.																	
Non-ferrous metals																	
Chemicals, Rubber and Plastics																	
Wood/Paper/Cork																	

Ethane																	
UNIT: kt	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Food processing industries																	
Deconstruction Materials																	
Transport Equipment																	
Machinery																	
Mining and Quarrying																	
Wood and Wood Products																	
Public buildings(Np)																	
Textile Industries/Leather Industries																	
Various industries																	
Transport																	
Rail																	
Road																	
Aerien																	
Maritime																	
Other																	
Households and Others																	
Residential																	
Farming																	
Tertiary and Other																	

Table 0-20 Energy balance 1990 – 2022: Fuel oil

Fuel oil										
UNIT: kt	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
PRODUCTION										
IMPORTATION				139.00	118.00	116.00	120.00	83.00	100.00	
EXPORTATION	5,672.00	5,429.00	5,518.00	5,307.00	5,060.00	5,081.00	4,822.00	5,637.00	4,859.00	5,420.00
SOUTAGES	100.00	100.00	50.00	248.00	258.00	250.00	229.00	181.00	163.00	169.00
VARIATIONSTOCKProduction					-151.00	60.00	29.00	-195.00	122.00	79.00
DISPONIBILITESINTERNAL										
VARIATIONSTOCKCONSOMATION										
CONSOMMATIONBRUTE	176.00	116.00	132.00	106.00	36.00	29.00	23.00	16.00	17.00	15.00
TRANSFORMATION										
COKERIES										
HAUTSFOURNEAUX										
UNITESDELIQUEFACTION										
RAFFINERIES	5,948.00	5,645.00	5,700.00	5,522.00	5,085.00	5,304.00	4,983.00	5,556.00	5,061.00	5,683.00
CENTRALESELECTRIQUES										
CENTRALESELECTRIQUESDESAUTO PRODUCTEURS										
AUTRES										
CONSOMMATIONNONENERGY										
CONSOMMATIONNETTE	176.00	116.00	131.00	106.00	36.00	29.00	23.00	16.00	17.00	15.00
CONSOMMATIONINDUSENERGY										
CONSOMMATIONAUXCHAMPS										
GAZODUCSETOLEODUCS										
UNITESDELIQUEFACTION										
RAFFINERIES										
AUTRES										
CONSOMMATIONFINALE	176.00	116.00	131.00	106.00	36.00	29.00	23.00	16.00	17.00	15.00
INDUSTRIE	176.00	116.00	131.00	106.00	36.00	29.00	23.00	16.00	17.00	15.00

Fuel oil										
UNIT: kt	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
MATERIAUX_DE_CONSTRUCTION										
MATERIAUX_A-CIMENTRIES										
I.S.M.M.E.										
SIDERURGIE_DE_BASE										
CHIMIE										
INDUSTRIES_MANUFACTURIERES	176.00	116.00	131.00	106.00	36.00	29.00	23.00	16.00	17.00	15.00
AGRO-ALIMENTAIRE										
TEXTILES,CUIR_ET_HABILLEMENT										
VERRERIES										
BTP										
AUTRES_INDUSTRIES	176.00	116.00	131.00	106.00	36.00	29.00	23.00	16.00	17.00	15.00
TRANSPORTS										
RAIL										
ROUTIER										
AERIEN										
MARITIME										
AUTRES										
MENAGES_ET_AUTRES										
RESIDENTIEL										
AGRICULTURES										
TERTIAIRE_ET_AUTRES										
PERTES										
ECART_STATISTIQUE										

Fuel oil										
UNIT: kt	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
PRODUCTION										
IMPORTATION		99.00	95.00	157.00	234.00	269.00	253.00	217.00	217.00	238.00
EXPORTATION	5,464.00	5,646.00	5,731.00	6,012.00	5,563.00	4,971.00	5,241.00	5,436.00	6,072.00	5,585.00
SOUTAGES	179.00	140.00	179.00	151.00	267.00	266.00	290.00	295.00	266.05	228.91
VARIATIONSTOCKProduction	-132.00	55.00	8.00	79.00	-44.00	-24.00	58.00	2.00	-121.00	-7.00
DISPONIBILITESINTERNAL										
VARIATIONSTOCKCONSOMATION										
CONSOMMATIONBRUTE	15.00	13.00	10.00	8.00	8.00	111.00	4.00	2.00	1.00	1.00
TRANSFORMATION										
COKERIES										
HAUTSFOURNEAUX										
UNITESDELIQUEFACTION										
RAFFINERIES	5,526.00	5,755.00	5,833.00	6,093.00	5,560.00	5,055.00	5,340.00	5,518.00	6,009.00	5,581.00
CENTRALELECTRIQUES										
CENTRALELECTRIQUESDESAUT OPRODUCTEURS										
AUTRES										
CONSOMMATIONNONENERGY										
CONSOMMATIONNETTE	15.00	13.00	10.00	8.00	4.00	5.00	4.00	2.00	1.00	1.00
CONSOMMATIONINDUSENERGY										
CONSOMMATIONAUXCHAMPS										
GAZODUCSETLEODUCS										
UNITESDELIQUEFACTION										
RAFFINERIES										
AUTRES										
CONSOMMATIONFINALE	15.00	13.00	10.00	8.00	4.00	5.00	4.00	2.00	8.81	11.67
INDUSTRIE	15.00	13.00	10.00	8.00	4.00	5.00	4.00	2.00	1.00	1.00
MATERIAUX_DE_CONSTRUCTION										
MATERIAUX_A-CIMENTRIES										

Fuel oil										
UNIT: kt	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
I.S.M.M.E.										
SIDERURGIE_DE_BASE										
CHIMIE										
INDUSTRIES_MANUFACTURIERES	15.00	13.00	10.00	8.00	4.00	5.00	4.00	2.00	1.00	1.00
AGRO-ALIMENTAIRE										
TEXTILES,CUIR_ET_HABILLEMENT										
VERRERIES										
BTP										
AUTRES_INDUSTRIES	15.00	13.00	10.00	8.00	4.00	5.00	4.00	2.00	1.00	1.00
TRANSPORTS									7.81	10.67
RAIL										
ROUTIER										
AERIEN										
MARITIME									7.81	10.67
AUTRES										
MENAGES_ET_AUTRES										
RESIDENTIEL										
AGRICULTURES										
TERTIAIRE_ET_AUTRES										
PERTES										
ECART_STATISTIQUE										

Fuel oil													
UNIT: kt	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
PRODUCTION													
IMPORTATION	226.56	193.06	201.16	204.27	180.14	196.11	146.28	186.25	140.95	78.53			
EXPORTATION	5,611.00	5,694.39	5,126.81	5,307.69	6,464.21	6,631.44	6,940.17	6,378.66	5,809.56	5,686.69	5,792.67	5,413.97	5,554.23
SOUTAGES	262.71	199.56	200.20	202.83	199.46	201.29	174.30	162.48	152.93	139.89	189.30	179.05	148.97
VARIATIONSTOCKProduction			-89.22	-1.62	82.84	20.09	-90.82	-0.99	11.54	99.30	-72.02	-66.99	6.55
DISPONIBILITESINTERNAL	-5,657.32	-5,713.91	-5,047.82	-5,317.30	-6,576.41	-6,672.71	-6,884.73	-6,363.79	-5,836.27	-5,724.06	-5,801.02	-5,526.04	-5,709.75
VARIATIONSTOCKCONSUMATION	6.14	1.34	21.00	-1.43	-3.60	-21.32	-6.03	26.03	-33.24	30.39	19.92	-25.00	6.25
CONSOMMATIONBRUTE	-5,663.46	-5,715.25	-5,068.82	-5,315.87	-6,572.80	-6,651.38	-6,878.70	-6,389.82	-5,803.04	-5,754.45	-5,820.93	-5,501.04	-5,715.99
TRANSFORMATION	5,749.32	5,847.10	5,114.80	5,358.24	6,593.70	6,617.28	6,869.83	6,402.48	5,821.99	5,914.70	5,919.58	5,447.22	5,811.03
COKERIES													
HAUTSFOURNEAUX													
UNITESDELIQUEFACTION													
RAFFINERIES	5,749.32	5,848.33	5,114.80	5,358.24	6,593.70	6,617.28	6,869.83	6,402.48	5,821.99	5,914.70	5,919.58	5,447.22	5,811.03
CENTRALELECTRIQUES		-1.22											
CENTRALELECTRIQUESDESAUTOPRODUCTEURS													
AUTRES													
CONSOMMATIONNONENERGY													
CONSOMMATIONNETTE	85.86	131.85	45.98	42.37	20.89	-34.11	-8.87	12.65	18.95	160.25	98.65	-53.82	95.04
CONSOMMATIONINDUSENERGY													
CONSOMMATIONAUXCHAMPS													
GAZODUCSETOLEODUCS													
UNITESDELIQUEFACTION													
RAFFINERIES													
AUTRES													
CONSOMMATIONFINALE	10.29	13.02	11.19	12.67	16.03	15.99	16.74	17.42	14.93	11.81	12.50	13.31	12.10
INDUSTRIE													
MATERIAUX_DE_CONSTRUCTION													
MATERIAUX_A-CIMENTRIES													

Fuel oil													
UNIT: kt	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
I.S.M.M.E.													
SIDERURGIE_DE_BASE													
CHIMIE													
INDUSTRIES_MANUFACTURIERES													
AGRO-ALIMENTAIRE													
TEXTILES,CUIR_ET_HABILLEMENT													
VERRERIES													
BTP													
AUTRES_INDUSTRIES													
TRANSPORTS	10.17	13.02	11.19	12.67	16.03	15.99	16.74	17.42	14.93	11.81	12.50	13.31	12.10
RAIL													
ROUTIER													
AERIEN													
MARITIME	10.17	13.02	11.19	12.67	16.03	15.99	16.74	17.42	14.93	11.81	12.50	13.31	12.10
AUTRES													
MENAGES_ET_AUTRES	0.12	0.00											
RESIDENTIEL													
AGRICULTURES													
TERTIAIRE_ET_AUTRES	0.12	0.00											
PERTES		0.00			2.89					0.68	0.10	-0.37	-0.37
ECART_STATISTIQUE	85.74	131.85	45.98	42.37	18.01	-34.11	-8.87	12.65	18.95	24.47	-22.87	-66.76	83.31

Table 0-21 Energy balance 1990 – 2022: Blast Furnance Gas

Blast Furnance Gas										
UNIT: million m ³	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
PRODUCTION	4,083.00	3,812.00	4,038.00	4,309.00	3,068.00	3,102.00	2,865.00	3,677.00	5,275.00	6,071.00
IMPORTATION										
EXPORTATION										
SOUTAGES										
VARIATIONSTOCKProduction										
DISPONIBILITESINTERNAL										
VARIATIONSTOCKCONSOMATIO N										
CONSOMMATIONBRUTE	4,083.00	3,812.00	4,038.00	4,309.00	3,068.00	3,102.00	2,865.00	3,677.00	5,275.00	6,071.00
TRANSFORMATION										
COKERIES										
HAUTSFOURNEAUX										
UNITESDELIQUEFACTION										
RAFFINERIES										
CENTRALESELECTRIQUES										
CENTRALESELECTRIQUESDESAUT OPRODUCTEURS										
AUTRES										
CONSOMMATIONNONENERGY										
CONSOMMATIONNETTE	1,200.00	1,200.00	1,250.00	1,300.00	900.00	900.00	800.00	1,100.00	1,348.00	2,550.00
CONSOMMATIONINDUSENERGY										
CONSOMMATIONAUXCHAMPS										
GAZODUCSETOLEODUCS										
UNITESDELIQUEFACTION										
RAFFINERIES										
AUTRES										
CONSOMMATIONFINALE	1,200.00	1,200.00	1,250.00	1,300.00	900.00	900.00	800.00	1,100.00	1,348.00	2,550.00
INDUSTRIE	1,200.00	1,200.00	1,250.00	1,300.00	900.00	900.00	800.00	1,100.00	1,348.00	2,550.00

Blast Furnance Gas										
UNIT: million m ³	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
MATERIAUX_DE_CONSTRUCTION										
MATERIAUX_A-CIMENTRIES										
I.S.M.M.E.	1,200.00	1,200.00	1,250.00	1,300.00	900.00	900.00	800.00	1,100.00	1,348.00	2,550.00
SIDERURGIE_DE_BASE										
CHIMIE										
INDUSTRIES_MANUFACTURIERES										
AGRO-ALIMENTAIRE										
TEXTILES,CUIR_ET_HABILLEMENT										
VERRERIES										
BTP										
AUTRES_INDUSTRIES										
TRANSPORTS										
RAIL										
ROUTIER										
AERIEN										
MARITIME										
AUTRES										
MENAGES_ET_AUTRES										
RESIDENTIEL										
AGRICULTURES										
TERTIARE_ET_AUTRES										
PERTES	2,883.00	2,612.00	2,788.00	3,009.00	2,168.00	2,202.00	2,065.00	2,577.00	3,927.00	3,521.00
ECART_STATISTIQUE										

Blast Furnance Gas										
UNIT: million m ³	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
PRODUCTION	5,828.00	6,230.00	7,653.00	7,494.00	7,746.00	7,076.00	6,624.00	7,891.00	7,879.00	4,860.00
IMPORTATION										
EXPORTATION										
SOUTAGES										
VARIATIONSTOCKProduction										
DISPONIBILITESINTERNAL										
VARIATIONSTOCKCONSOMATION										
CONSOMMATIONBRUTE	5,828.00	6,230.00	7,653.00	7,494.00	7,746.00	7,076.00	6,624.00	7,891.00	7,879.00	4,860.00
TRANSFORMATION										
COKERIES										
HAUTSFOURNEAUX										
UNITESDELIQUEFACTION										
RAFFINERIES										
CENTRALESELECTRIQUES										
CENTRALESELECTRIQUESDESAUT OPRODUCTEURS										
AUTRES										
CONSOMMATIONNONENERGY										
CONSOMMATIONNETTE	2,324.00	2,550.00	2,692.00	2,554.00	2,554.00	2,219.00	2,077.00	2,474.00	2,470.00	1,524.00
CONSOMMATIONINDUSENERGY										
CONSOMMATIONAUXCHAMPS										
GAZODUCSETOLEODUCS										
UNITESDELIQUEFACTION										
RAFFINERIES										
AUTRES										
CONSOMMATIONFINALE	2,324.00	2,550.00	2,692.00	2,554.00	2,554.00	2,219.00	2,077.00	2,474.00	2,470.00	1,524.00
INDUSTRIE	2,324.00	2,550.00	2,692.00	2,554.00	2,554.00	2,219.00	2,077.00	2,474.00	2,470.00	1,524.00
MATERIAUX_DE_CONSTRUCTION										
MATERIAUX_A-CIMENTRIES										

Blast Furnance Gas										
UNIT: million m ³	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
I.S.M.M.E.	2,324.00	2,550.00	2,692.00	2,554.00	2,554.00	2,219.00	2,077.00	2,474.00	2,470.00	1,524.00
SIDERURGIE_DE_BASE										
CHIMIE										
INDUSTRIES_MANUFACTURIERES										
AGRO-ALIMENTAIRE										
TEXTILES,CUIR_ET_HABILLEMENT										
VERRERIES										
BTP										
AUTRES_INDUSTRIES										
TRANSPORTS										
RAIL										
ROUTIER										
AERIEN										
MARITIME										
AUTRES										
MENAGES_ET_AUTRES										
RESIDENTIEL										
AGRICULTURES										
TERTIARE_ET_AUTRES										
PERTES	3,504.00	3,680.00	4,961.00	4,940.00	5,192.00	4,857.00	4,547.00	5,417.00	5,409.00	3,336.00
ECART_STATISTIQUE										

Blast Furnance Gas													
UNIT: million m ³	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
PRODUCTION													
IMPORTATION													
EXPORTATION													
SOUTAGES													
VARIATIONSTOCKProduction													
DISPONIBILITESINTERNAL													
VARIATIONSTOCKCONSOMATION													
CONSOMMATIONBRUTE													
TRANSFORMATION	343.68	305.48	343.01	71.56	74.63	61.20		89.79	1,460.82	1,277.00	641.00	1,156.00	731.00
COKERIES													
HAUTSFOURNEAUX	343.68	305.48	343.01	71.56	74.63	61.20		89.79	1,460.82	1,277.00	641.00	1,156.00	731.00
UNITESDELIQUEFACTION													
RAFFINERIES													
CENTRALESELECTRIQUES													
CENTRALESELECTRIQUESDESAUTOPR ODUCTEURS													
AUTRES													
CONSOMMATIONNONENERGY													
CONSOMMATIONNETTE	343.68	305.48	343.01	71.56	74.63	61.20		89.79	1,460.82	1,277.00	641.00	1,156.00	731.00
CONSOMMATIONINDUSENERGY	50.96	115.83	123.33	1.65	21.68	17.77			457.52	271.00	144.00	463.00	321.00
CONSOMMATIONAUXCHAMPS													
GAZODUCSETOLEODUCS													
UNITESDELIQUEFACTION													
RAFFINERIES													
AUTRES	50.96	115.83	123.33	1.65	21.68	17.77			457.52	271.00	144.00	463.00	321.00
CONSOMMATIONFINALE	74.66												
INDUSTRIE	74.66												
MATERIAUX_DE_CONSTRUCTION													
MATERIAUX_A-CIMENTRIES													

Blast Furnance Gas													
UNIT: million m ³	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
I.S.M.M.E.	74.66												
SIDERURGIE_DE_BASE	74.66												
CHIMIE													
INDUSTRIES_MANUFACTURIERES													
AGRO-ALIMENTAIRE													
TEXTILES,CUIR_ET_HABILLEMENT													
VERRERIES													
BTP													
AUTRES_INDUSTRIES													
TRANSPORTS													
RAIL													
ROUTIER													
AERIEN													
MARITIME													
AUTRES													
MENAGES_ET_AUTRES													
RESIDENTIEL													
AGRICULTURES													
TERTIAIRE_ET_AUTRES													
PERTES	218.03	189.62	219.66	69.91	52.95	43.42		59.50	1,003.30	1,007.00	496.00	693.00	410.00
ECART_STATISTIQUE	0.03	0.03	0.03		-0.00	0.00		30.30	0.00	-1.00	1.00		

Table 0-22 Energy balance 1990 – 2022: Crude oil without condensate

Crude oil without condensate										
UNIT: kt	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
PRODUCTION	37,021.00	37,698.00	36,333.00	35,184.00	35,455.00	35,907.00	38,009.00	38,194.00	39,103.00	35,592.00
IMPORTATION				345.00	319.00	462.00	346.00	263.00	232.00	266.00
EXPORTATION	14,007.00	16,182.00	15,634.00	14,289.00	15,469.00	15,417.00	18,171.00	17,280.00	19,294.00	19,289.00
SOUTAGES										
VARIATIONSTOCKProduction	814.00	-19.00	-541.00	49.00			13.00	-31.00		
DISPONIBILITESINTERNAL										
VARIATIONSTOCKCONSOMATION										
CONSOMMATIONBRUTE	22,200.00	21,535.00	21,240.00	21,191.00	20,305.00	20,952.00	20,171.00	21,208.00	20,041.00	16,569.00
TRANSFORMATION	22,200.00	21,535.00	21,240.00	21,191.00	20,200.00	20,727.00	20,819.00	19,950.00	19,800.00	17,573.00
COKERIES										
HAUTSFOURNEAUX										
UNITESDELIQUEFACTION										
RAFFINERIES	22,200.00	21,535.00	21,240.00	21,191.00	20,200.00	20,727.00	20,819.00	19,950.00	19,800.00	17,573.00
CENTRALESELECTRIQUES										
CENTRALESELECTRIQUESDESAUTOPR ODUCTEURS										
AUTRES										
CONSOMMATIONNONENERGY										
CONSOMMATIONNETTE										
CONSOMMATIONINDUSENERGY									262.00	482.00
CONSOMMATIONAUXCHAMPS										
GAZODUCSETOLEODUCS									23.00	23.00
UNITESDELIQUEFACTION										
RAFFINERIES									239.00	459.00
AUTRES										
CONSOMMATIONFINALE										
INDUSTRIE										
MATERIAUX_DE_CONSTRUCTION										
MATERIAUX_A-CIMENTRIES										

Crude oil without condensate										
UNIT: kt	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
I.S.M.M.E.										
SIDERURGIE_DE_BASE										
CHIMIE										
INDUSTRIES_MANUFACTURIERES										
AGRO-ALIMENTAIRE										
TEXTILES,UIR_ET_HABILLEMENT										
VERRERIES										
BTP										
AUTRES_INDUSTRIES										
TRANSPORTS										
RAIL										
ROUTIER										
AERIEN										
MARITIME										
AUTRES										
MENAGES_ET_AUTRES										
RESIDENTIEL										
AGRICULTURES										
TERTIARE_ET_AUTRES										
PERTES										
ECART_STATISTIQUE										

Crude oil without condensate										
UNIT: kt	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
PRODUCTION	42,315.00	40,609.00	45,601.00	54,869.00	59,340.00	62,545.00	63,865.00	64,085.00	61,585.00	57,112.00
IMPORTATION	309.00	209.00	373.00	366.00	316.00	310.00	331.00	359.00	445.00	366.00
EXPORTATION	21,412.00	19,583.00	25,420.00	33,725.00	41,280.00	44,940.00	43,954.00	43,248.00	39,179.00	34,731.00
SOUTAGES										

Crude oil without condensate										
UNIT: kt	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
VARIATIONSTOCKProduction		-293.00					-24.00	-264.00	32.00	51.00
DISPONIBILITESINTERNAL										
VARIATIONSTOCKCONSOMATION										
CONSOMMATIONBRUTE	21,212.00	21,528.00	20,554.00	21,510.00	18,376.00	17,915.00	20,266.00	21,460.00	22,819.00	22,696.00
TRANSFORMATION	20,168.00	20,111.00	19,571.00	21,085.00	17,229.00	18,756.00	18,938.00	19,778.00	22,139.00	22,217.00
COKERIES										
HAUTSFOURNEAUX										
UNITESDELIQUEFACTION										
RAFFINERIES	20,168.00	20,111.00	19,571.00	21,085.00	17,229.00	18,756.00	18,938.00	19,778.00	22,139.00	22,217.00
CENTRALESELECTRIQUES										
CENTRALESELECTRIQUESDESAUTO PRODUCTEURS										
AUTRES										
CONSOMMATIONNONENERGY										
CONSOMMATIONNETTE	28.00									
CONSOMMATIONINDUSENERGY	435.00	422.00	437.00	366.00	388.00	378.00	454.00	392.00	488.00	470.00
CONSOMMATIONAUXCHAMPS										
GAZODUCSETOLEODUCS	23.00	26.00	24.00	22.00	32.00	33.00	49.00	58.00	33.00	37.00
UNITESDELIQUEFACTION										
RAFFINERIES	412.00	396.00	413.00	344.00	356.00	345.00	405.00	334.00	455.00	433.00
AUTRES										
CONSOMMATIONFINALE	28.00									
INDUSTRIE	28.00									
MATERIAUX_DE_CONSTRUCTION										
MATERIAUX_A-CIMENTRIES										
I.S.M.M.E.										
SIDERURGIE_DE_BASE										
CHIMIE										
INDUSTRIES_MANUFACTURIERES	28.00									

Crude oil without condensate										
UNIT: kt	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
AGRO-ALIMENTAIRE										
TEXTILES, CUIR_ET_HABILLEMENT										
VERRERIES										
BTP										
AUTRES_INDUSTRIES	28.00									
TRANSPORTS										
RAIL										
ROUTIER										
AERIEN										
MARITIME										
AUTRES										
MENAGES_ET_AUTRES										
RESIDENTIEL										
AGRICULTURES										
TERTIAIRE_ET_AUTRES										
PERTES	614.00						165.00	142.00	172.00	169.00
ECART_STATISTIQUE										

Crude oil without condensate													
UNIT: kt	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
PRODUCTION	66,589.24	64,591.24	60,385.52	58,171.41	60,583.33	58,799.14	60,175.48	58,687.41	57,412.74	56,544.94	50,174.16	50,383.90	53,732.82
IMPORTATION	319.70	206.42	294.73	146.19	293.92	266.90	233.24	221.84	203.65	160.27			
EXPORTATION	39,053.6 UNIT: kt 9	38,369.50	36,985.88	33,546.18	28,355.63	29,196.73	30,435.80	28,877.05	25,966.14	26,554.73	19,988.24	20,271.83	21,752.16
SOUTAGES													
VARIATIONSTOCKProduction	170.64	37.95	-314.41	-5.62	832.45	-656.06	-205.21	384.06	-168.74	-5.15	149.21	-236.87	147.48
DISPONIBILITESINTERNAL	27,684.61	26,390.22	24,008.78	24,777.04	31,689.17	30,525.37	30,178.14	29,648.13	31,818.99	30,155.63	30,036.70	30,348.94	31,833.18
VARIATIONSTOCKCONSOMATION				33.26	67.78	57.73	5.66	34.37	165.00	29.05	133.59	23.71	5.50

Crude oil without condensate													
UNIT: kt	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
CONSOMMATIONBRUTE	27,684.61	26,390.22	24,008.78	24,743.78	31,621.39	30,583.10	30,172.48	29,682.50	31,983.98	30,126.58	29,903.11	30,325.23	31,838.68
TRANSFORMATION	27,291.86	25,994.40	23,709.57	24,326.32	31,335.95	29,903.70	29,915.87	29,017.98	31,328.36	29,090.74	28,942.78	29,580.49	30,979.97
COKERIES													
HAUTSFOURNEAUX													
UNITESDELIQUEFACTION													
RAFFINERIES	27,291.86	25,994.40	23,709.57	24,326.32	31,335.95	29,903.70	29,915.87	29,017.98	31,328.36	29,090.74	28,942.78	29,580.49	30,979.97
CENTRALELECTRIQUES													
CENTRALELECTRIQUESDESAUT OPRODUCTEURS													
AUTRES													
CONSOMMATIONNONENERGY													
CONSOMMATIONNETTE	392.74	395.82	299.21	417.46	285.43	679.39	256.61	664.53	655.63	1,035.85	960.33	744.74	858.71
CONSOMMATIONINDUSENERGY	503.38	493.31	485.39	355.17	508.38	614.85	506.12	451.41	507.10	390.34	598.81	591.81	618.96
CONSOMMATIONAUXCHAMPS	28.82	22.55	103.37	25.00	26.63	28.29	22.82	27.66	26.65	21.46	20.62	19.49	20.22
GAZODUCSETOLEODUCS				22.69		6.45			56.70	4.36	20.11	1.75	
UNITESDELIQUEFACTION													
RAFFINERIES	474.56	470.76	382.02	307.48	481.75	580.11	483.30	423.75	423.75	364.53	558.08	570.57	598.74
AUTRES													
CONSOMMATIONFINALE													
INDUSTRIE													
MATERIAUX_DE_CONSTRUCTION													
MATERIAUX_A-CIMENTRIES													
I.S.M.M.E.													
SIDERURGIE_DE_BASE													
CHIMIE													
INDUSTRIES_MANUFACTURIERES													
AGRO-ALIMENTAIRE													
TEXTILES,UIR_ET_HABILLEMENT													
VERRERIES													

Crude oil without condensate													
UNIT: kt	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
BTP													
AUTRES_INDUSTRIES													
TRANSPORTS													
RAIL													
ROUTIER													
AERIEN													
MARITIME													
AUTRES													
MENAGES_ET_AUTRES													
RESIDENTIEL													
AGRICULTURES													
TERTIARE_ET_AUTRES													
PERTES	217.18	199.52	153.00	380.95	426.06	573.00	449.46	553.12	561.06	603.73	645.06	251.77	256.63
ECART_STATISTIQUE	-327.81	-297.01	-339.18	-318.66	-649.01	-508.45	-698.97	-340.00	-412.54	41.78	-283.54	-98.83	-16.88

Table 0-23 Energy balance 1990 – 2022: Condensate

Condensate																				
UNIT: kt	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
PRODUCTION																				
IMPORTATION																				
EXPORTATION																				
SOUTAGES																				
VARIATIONSTOCKProduction																				
DISPONIBILITESINTERNAL																				
VARIATIONSTOCKCONSOMATION																				
CONSOMMATIONBRUTE																				
TRANSFORMATION																				
COKERIES																				
HAUTSFOURNEAUX																				
UNITESDELIQUEFACTION																				
RAFFINERIES																				
CENTRALESELECTRIQUES																				
CENTRALESELECTRIQUESDES AUTO PRODUCTEURS																				
AUTRES																				
CONSOMMATIONNONENERGY																				
CONSOMMATIONNETTE																				
CONSOMMATIONINDUSEENERGY																				
CONSOMMATIONAUXCHAMPS																				
GAZODUCSETOLEODUCS																				
UNITESDELIQUEFACTION																				
RAFFINERIES																				
AUTRES																				
CONSOMMATIONFINALE																				
INDUSTRIE																				
MATERIAUX_DE_CONSTRUCTION																				

Condensate																				
UNIT: kt	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
MATERIAUX_A-CIMENTRIES																				
I.S.M.M.E.																				
SIDERURGIE_DE_BASE																				
CHIMIE																				
INDUSTRIES_MANUFACTURIERES																				
AGRO-ALIMENTAIRE																				
TEXTILES,UIR_ET_HABILLEMENT																				
VERRERIES																				
BTP																				
AUTRES_INDUSTRIES																				
TRANSPORTS																				
RAIL																				
ROUTIER																				
AERIEN																				
MARITIME																				
AUTRES																				
MENAGES_ET_AUTRES																				
RESIDENTIEL																				
AGRICULTURES																				
TERTIARE_ET_AUTRES																				
PERTES																				
ECART_STATISTIQUE																				

Condensate													
UNIT: kt	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
PRODUCTION	10,895.45	10,053.20	9,322.49	8,597.81	9,778.46	9,615.39	9,230.13	9,218.97	8,824.89	8,150.57	7,606.78	7,696.34	8,005.79
IMPORTATION													
EXPORTATION	6,079.69	5,945.88	5,105.08	5,416.18	4,805.50	5,015.87	5,208.68	4,199.69	4,289.71	4,373.67	3,252.52	3,145.16	2,988.97
SOUTAGES													
VARIATION STOCK Production	128.48	-190.78	83.11	-81.00	161.71	-116.98	-87.43	83.29	-14.68	5.03	-47.06	91.06	-31.31
DISPONIBILITESINTERNAL	4,687.28	4,298.10	4,134.30	3,262.63	4,811.25	4,716.50	4,108.89	4,935.99	4,549.85	3,771.87	4,401.31	4,460.13	5,048.13
VARIATIONSTOCKCONSOMATION				-0.21	-8.51	-18.74	-7.57	6.41	-2.06	-9.87	0.91	11.34	-6.33
CONSOMMATIONBRUTE	4,687.28	4,298.10	4,134.30	3,262.84	4,819.76	4,735.24	4,116.46	4,929.58	4,551.91	3,781.74	4,400.40	4,448.78	5,054.46
TRANSFORMATION	-4,656.87	-4,145.77	-4,117.55	-3,115.38	-5,067.24	-4,797.10	-4,097.29	-4,813.02	-4,574.36	-3,650.06	-4,230.83	-4,304.81	-4,899.35
COKERIES													
HAUTSFOURNEAUX													
UNITESDELIQUEFACTION													
RAFFINERIES	-4,656.87	-4,145.77	-4,117.55	-3,115.38	-5,067.24	-4,797.10	-4,097.29	-4,813.02	-4,574.36	-3,650.06	-4,230.83	-4,304.81	-4,899.35
CENTRALESELECTRIQUES													
CENTRALESELECTRIQUESDESAUTOP RODUCTEURS													
AUTRES													
CONSOMMATIONNONENERGY													
CONSOMMATIONNETTE	30.41	152.34	16.75	147.46	-247.47	-61.86	19.17	116.56	-22.44	131.68	169.57	143.98	155.11
CONSOMMATIONINDUSEENERGY													
CONSOMMATIONAUXCHAMPS													
GAZODUCSETOLEODUCS													
UNITESDELIQUEFACTION													
RAFFINERIES													
AUTRES													
CONSOMMATIONFINALE													
INDUSTRIE													
MATERIAUX_DE_CONSTRUCTION													
MATERIAUX_A-CIMENTRIES													

Condensate													
UNIT: kt	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
I.S.M.M.E.													
SIDERURGIE_DE_BASE													
CHIMIE													
INDUSTRIES_MANUFACTURIERES													
AGRO-ALIMENTAIRE													
TEXTILES,CUIR_ET_HABILLEMENT													
VERRERIES													
BTP													
AUTRES_INDUSTRIES													
TRANSPORTS													
RAIL													
ROUTIER													
AERIEN													
MARITIME													
AUTRES													
MENAGES_ET_AUTRES													
RESIDENTIEL													
AGRICULTURES													
TERTIARE_ET_AUTRES													
PERTES	5.00			6.59	14.69	20.50	16.71	20.49	24.49	24.03	28.43	21.42	28.23
ECART_STATISTIQUE	25.41	152.34	16.75	140.86	-262.16	-82.37	2.46	96.07	-46.94	107.65	141.14	122.55	126.88

Table 0-24 Energy balance 1990 – 2022: Refinery Feedstock

Refinery Feedstock																
UNIT: kt	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
PRODUCTION																
IMPORTATION																
EXPORTATION																
SOUTAGES																
VARIATIONSTOCKProduction																
DISPONIBILITESINTERNAL																
VARIATIONSTOCKCONSOMATION																
CONSOMMATIONBRUTE																
TRANSFORMATION																
COKERIES																
HAUTSFOURNEAUX																
UNITESDELIQUEFACTION																
RAFFINERIES																
CENTRALESELECTRIQUES																
CENTRALESELECTRIQUESDESAUT OPRODUCTEURS																
AUTRES																
CONSOMMATIONNONENERGY																
CONSOMMATIONNETTE																
CONSOMMATIONINDUSENERGY																
CONSOMMATIONAUXCHAMPS																
GAZODUCSETOLEODUCS																
UNITESDELIQUEFACTION																
RAFFINERIES																
AUTRES																
CONSOMMATIONFINALE																
INDUSTRIE																
MATERIAUX_DE_CONSTRUCTION																

Refinery Feedstock																
UNIT: kt	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
MATERIAUX_A-CIMENTRIES																
I.S.M.M.E.																
SIDERURGIE_DE_BASE																
CHIMIE																
INDUSTRIES_MANUFACTURIERES																
AGRO-ALIMENTAIRE																
TEXTILES,CUIR_ET_HABILLEMENT																
VERRERIES																
BTP																
AUTRES_INDUSTRIES																
TRANSPORTS																
RAIL																
ROUTIER																
AERIEN																
MARITIME																
AUTRES																
MENAGES_ET_AUTRES																
RESIDENTIEL																
AGRICULTURES																
TERTIAIRE_ET_AUTRES																
PERTES																
ECART_STATISTIQUE																

Refinery Feedstock																	
UNIT: kt	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
PRODUCTION																	
IMPORTATION					319.70	206.42	294.73	146.19	293.92	266.90	233.24	221.84	203.65	160.27			
EXPORTATION																	
SOUTAGES																	
VARIATIONSTOCKProduction																	
DISPONIBILITESINTERNAL					319.70	206.42	294.73	146.19	293.92	266.90	233.24	221.84	203.65	160.27			
VARIATIONSTOCKCONSOMATION								-25.91	32.00	26.51	-22.68	-27.51	-70.12	-2.93	-2.22		
CONSOMMATIONBRUTE					319.70	206.42	294.73	172.10	261.92	240.39	255.92	249.34	273.77	163.21	2.22		
TRANSFORMATION					-299.50	-235.07	-285.34	-172.10	-489.79	-536.22	-560.71	-504.77	-543.68	-462.53	-292.30	-294.51	-599.58
COKERIES																	
HAUTSFOURNEAUX																	
UNITESDELIQUEFACTION																	
RAFFINERIES					-299.50	-235.07	-285.34	-172.10	-489.79	-536.22	-560.71	-504.77	-543.68	-462.53	-292.30	-294.51	-599.58
CENTRALESELECTRIQUES																	
CENTRALESELECTRIQUESDESAUTOPRODUCTEURS																	
AUTRES																	
CONSOMMATIONNONENERGY																	
CONSOMMATIONNETTE					20.20	-28.65	9.39		-227.87	-295.83	-304.79	-255.43	-269.91	-299.33	-290.08	-294.51	-599.58
CONSOMMATIONINDUSENERGY																	
CONSOMMATIONAUXCHAMPS																	
GAZODUCSETOLEODUCS																	
UNITESDELIQUEFACTION																	
RAFFINERIES																	
AUTRES																	
CONSOMMATIONFINALE																	
INDUSTRIE																	
MATERIAUX_DE_CONSTRUCTION																	
MATERIAUX_A-CIMENTRIES																	
I.S.M.M.E.																	

Refinery Feedstock																	
UNIT: kt	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
SIDERURGIE_DE_BASE																	
CHIMIE																	
INDUSTRIES_MANUFACTURIERES																	
AGRO-ALIMENTAIRE																	
TEXTILES,CUIR_ET_HABILLEMENT																	
VERRERIES																	
BTP																	
AUTRES_INDUSTRIES																	
TRANSPORTS																	
RAIL																	
ROUTIER																	
AERIEN																	
MARITIME																	
AUTRES																	
MENAGES_ET_AUTRES																	
RESIDENTIEL																	
AGRICULTURES																	
TERTIARE_ET_AUTRES																	
PERTES					20.20												
ECART_STATISTIQUE						-28.65	9.39		-227.87	-295.83	-304.79	-255.43	-269.91	-299.33	-290.08	-294.51	-599.58

Annex V-1 Système Statistiques Agricoles et Méthodologie de collecte et d'élaboration des statistiques agricoles

Système Statistiques Agricoles--et Méthodologie de collecte et d'élaboration des statistiques agricoles

Ministère de l'Agriculture et du Développement Rural Direction des Statistiques, de la Numérisation et de la Prospective

Ministère de l'Agriculture et du Développement Rural
Direction des Statistiques, de la Numérisation et de la Prospective

-Système Statistiques Agricoles-

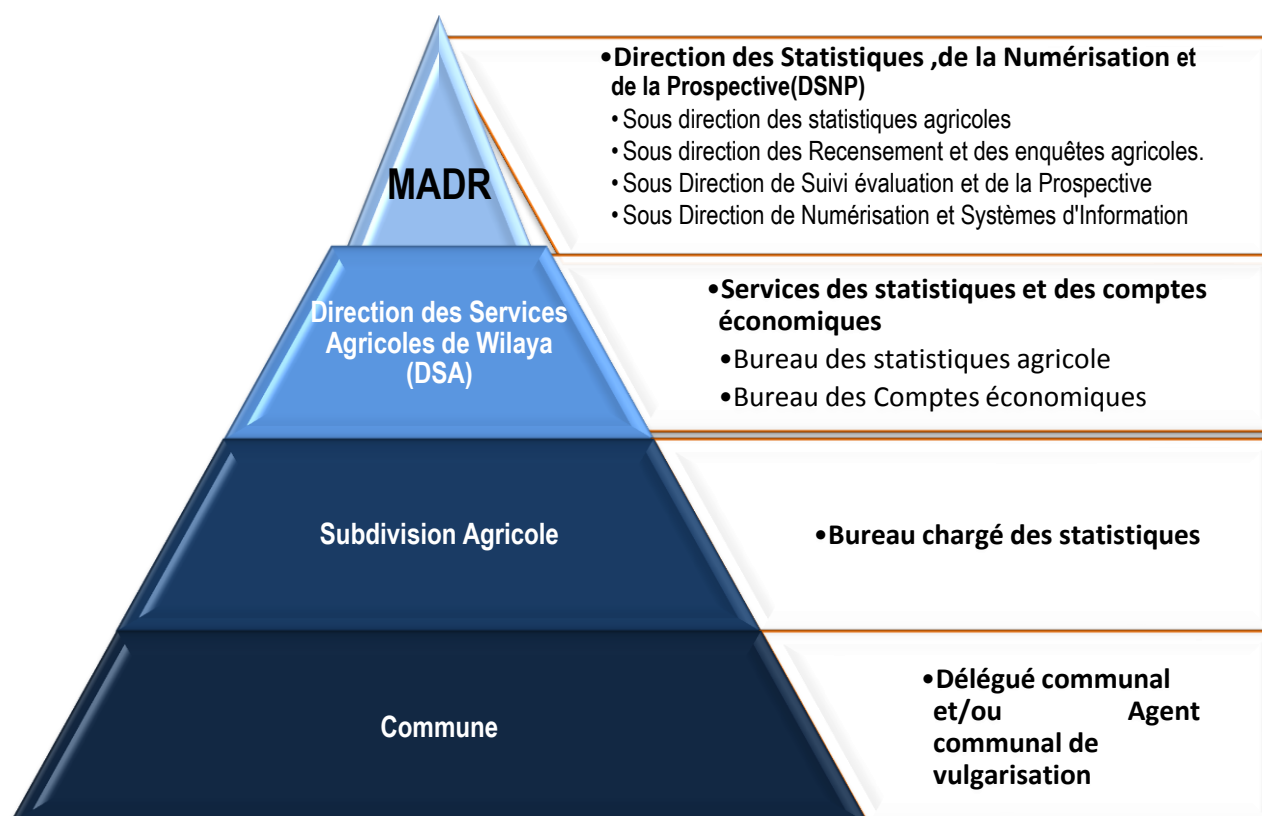
-et Méthodologie de collecte et d'élaboration des statistiques agricoles -

1. L'Organigramme de la fonction statistique du MADR

Le Ministère de l'Agriculture et du Développement Rural est l'organisme chargé de l'élaboration et la diffusion de l'information statistique agricole, par le biais de la Direction des Statistiques, de la Numérisation et de la Prospective (DSNP), dont ces missions sont citées dans le Décret exécutif n°22-322 du 18 Safar 1444 correspondant au 15 septembre 2022 portant organisation de l'administration centrale du Ministère de l'Agriculture et du Développement Rural.

2. Flux d'information

Le schéma ci-dessous présente les flux et la circulation de l'information de la cellule communale à l'organe central (MADR).



3. Source d'information :

Le système statistique agricole est composé de deux réseaux d'information celle recueillie par voie administrative et les enquêtes agricoles et recensement.

3.1. Informations collectées par voie administrative :

La Direction des Statistiques, de la Numérisation et de la Prospective a élaboré un certains nombre de canevas relatifs à la collecte d'information statistique qui comprend des données sur l'utilisation du sol, les niveaux de production des différentes filières, les superficies, les rendements, les prix des produits agricoles et les moyens et facteurs de production.

Les canevas sont renseignés à partir des structures statistiques locales (Commune, subdivision et Wilaya) et par les organismes concernés, selon la périodicité fixée pour chaque type d'information.

Les données sur la production végétale sont obtenues à partir de deux canevas qui sont :

Série A1 : Concerne les informations sur les emblavures des céréales d'hiver, de la production et superficie des cultures maraîchères de primeur, des agrumes, de l'oléiculture et de la phoéniculture. Ces informations sont obtenues à la fin des trois trimestres de la campagne agricole qui s'étale du 1er octobre à la fin de mois de Juin de l'année suivante.

Série B : Ce type de canevas renseigne sur les superficies et productions des autres cultures dont la période de récolte correspondent au dernier trimestre de la campagne agricole et qui sont :

- **Les céréales d'hiver et d'été**
- **Les cultures maraîchères**
- **Les cultures arboricoles fruitières**
- **Les Cultures fourragères**
- **Les superficies laissées en jachère.**

➤ *2. Pour l'établissement du bilan de la production animale, un canevas spécifique a été élaborée qui renseigne sur les effectifs des animaux par type (Bovins, ovins, caprins, camelins, équins) et par catégorie d'âge ainsi que les informations sur les produits de l'élevage (Viande rouge et blanche, le lait, les œufs, le miel d'abeille, la laine).*

➤ *L'évaluation trimestrielle des contrats de performance :*

Une évaluation des objectifs des contrats de performance se fait chaque trimestre en fonction du Taux de réalisation en matière de production pour chaque wilaya et chaque filière par rapport aux objectifs fixés dans le contrat de performance ainsi que le taux de croissance par rapport aux réalisations durant la même période de l'année précédente.

Une application est en cours d'élaboration dédiée à la collecte d'information statistiques des filières animales et végétales (Série B, Série E et Contrat de Performance) sur trois niveaux : Subdivision-DSA-MADR.

Accueil
Les Données
Les formulaires
Les contrats
Les series
Profile

Wilaya : 14 - TIARET Subdivision : 1401 - TIARET Commune : 1401 - TIARET Filière : Céréales d'hiver Annuler Filtre

Campagne : 2021 - 2022 Période : Juillet

☒ Blé Dur Du Consommation ☐ Blé Dur Du Semence ☐ Blé Tendre Du Consommation ☐ Blé Tendre Du Semence
☐ Orge Du Consommation ☐ Orge Du Semence ☐ Avoine Du Consommation ☐ Avoine Du Semence
☐ Triticale Du Consommation ☐ Triticale Du Semence

#1 - Blé Dur Du Consommation

Objectif superficie : Objectif production : Superficie ensemencée : Superficie collectée :

Objectif superficie ... Ha Objectif production ... Qx Superficie ensemencée ... Qx Superficie collectée ... Ha

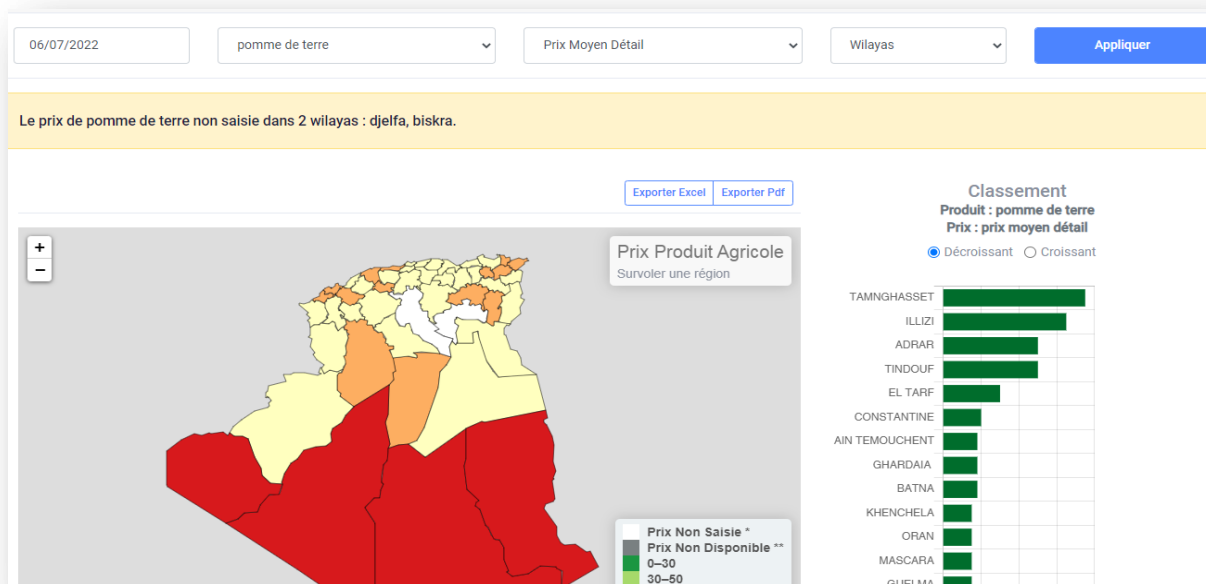
Production collectée : Superficie sinistrée :

Production collectée ... Qx Superficie sinistrée ... Ha

- Les ventes de facteurs et moyens de production aux agriculteurs à travers le territoire national sont relevées au niveau locale et consolidées au niveau national et cela par type de produits (Engrais, produits phytosanitaire, semences et autres) et par type de matériel (Tracteurs, charrues et autres engins)
- L'évolution des prix des produits agricole frais est observée chaque jour au niveau des marchés de gros et de détail et cela à travers le territoire national.

Les données collectées au niveau local sont saisies en ligne à travers le Portail d'Information Statistique Agricole « stat.madr.gov.dz ».

Cette application permet de faire un traitement instantané des prix des produits agricoles (traitement par wilayas, par régions, évolution sur une période, classement des wilayas selon les niveaux des prix)



Quant au prix international des produits de large consommation (Blé, oléagineux, poudre de lait, pomme de terre, sucre, riz, maïs et thé) les informations nous parviennent du Ministère du commerce.

- Les données du commerce extérieur des produits agricoles, alimentaires et non alimentaire sont recueillies chaque mois auprès de la Direction Générale des Douanes sur support numérique, elles sont classées selon le code du tarif douanier (Nomenclature internationale) et qui sont traitées à travers une application en ligne. « stat.madr.gov.dz » et qui permet d'avoir les échanges commerciaux

par position tarifaire, par chapitre, par groupe de produits, par pays, par continents et selon les accords préférentiels en quantités et en valeur.

Commerce extérieur

Section

Toutes

Chapitre

Aucun

Sous Chapitre

Aucun

Produit

Aucun

☐ Région ☒ Pays

Année

2022

2021

Type

Importations

Par

Pays

Afficher

Valeur USD

Appliquer

Réinitialiser

Unité : Dollar Américain

Excel PDF

Rechercher :

Liste des pays fournisseurs pour un produit importer par l'Algerie

Produit : Total des produits

Pays	2021	2022	Evolution en valeur \$ 2021/2022
Total	11 629 248 387	4 284 137 179	-63%
Afghanistan	132 076	268 720	103%
Afrique du Sud	9 567 009	2 739 124	-71%
Albanie	0	0	
Algérie	2 781 640	0	
Allemagne	808 478 673	168 163 908	-79%
Angola	0	0	
Antilles et Barbade	0	0	

3.2. Enquêtes Céréale& Recensement Agricole :

a. Enquête céréales :

Cette enquête a été préparée et conduite en conformité avec les principes usuels des enquêtes par échantillonnage, elle est réalisée en deux étapes :

- Une première enquête, dite “à dires d’expert”, qui intervient à une période où le stade de maturation de la plus grande partie des céréales ne permet pas encore d’effectuer des coupes et pesées d’épis pour pouvoir en évaluer les rendements par mesure directe. Cette première enquête a été réalisée entre le 24 avril et 15 mai 2012 ;
- Une seconde enquête, qui se déroulera à la maturité des grains, soit courant juin, au cours de laquelle des mesures précises seront effectuées (coupes et pesées). .

b. Recensement Général de l’Agriculture (RGA) :

- Le premier recensement agricole en Algérie remonte à 1973.
- Le Ministère de l’Agriculture et du Développement Rural (MADR) a conçu et réalisé le deuxième RGA 2001, avec l’assistance technique de l’Office National des Statistiques (ONS) et de la FAO.
- **Un troisième Recensement Général de l’Agriculture est en cours de réalisation**, s’étendra du 19 Mai 2024 jusqu’à 17 Juillet 2024, C’est une opération statistique de grande envergure de collecte, de traitement et de diffusion de données structurelles sur l’agriculture, couvrant l’ensemble du territoire national.

Méthodologie d'élaboration des statistiques agricoles.

Filière végétale :

Superficie	-Déclaration des agriculteurs		
	-Quantité de semences ou de plants utilisée par l'agriculteur	Dose de semis ou plantation / m ² ou /ha	Quantités de semence utilisée / dose de semis ou plantation.
Rendement des cultures	-Céréales	A dire d'expert	
		-Méthode de prélèvement des épis sur échantillon représentatif des parcelles. - chaque parcelle on prélève des épis sur deux points séparés. Le prélèvement d'épis concerne une surface d' un mètre carré (1 M²) pour chaque point. Le second point se situera à environ 20 mètres (ou 20 pas) du premier en direction du centre de la parcelle. -Ensuite le battage et la pesé des grains pour avoir le poids et le rendement dans 1 m².	
	Pomme de terre	A dire d'expert	
		En évitant les bordures de la parcelle, ou 5 plants en diagonale Espacés de façon suivante : A partir de la diagonale de l'entrée de la parcelle, on prélève systématiquement 5 plants selon la longueur de la parcelle. On aura ainsi un plant sur un certain nombre de billion (calculée en fonction de la longueur de la parcelle) Ensuite la pesé des différents lots de tubercules <u>séparément</u> (selon les cinq calibre) et on obtient le poids (en grammes) de <u>chaque</u> lot et le poids total de l'échantillon (ou des échantillons quand il y a plusieurs parcelles).	

Effectifs animaux	La première méthodologie est l'utilisation des fichiers de référence notamment, le fichier élaboré par les services vétérinaires relatif au cheptel vacciné, dont le cheptel non vacciné est estimé par déléguée communal connaisseur de la région, ce qui permet par la suite d'avoir le nombre total du cheptel existant. D'autres fichiers sont utilisés pour confirmer et vérifier les statistiques obtenues à savoir le fichier des éleveurs bénéficiaires du dispositif du son et de l'orge, le fichier d'identification sanitaire et le fichier du programme de soutien du lait qui permet d'avoir une visibilité sur le nombre de vaches laitières. Deuxième méthode est celle de l'estimation selon les paramètres zootechniques et paramètres spécifiques aux variations du nombre du cheptel notamment : ➤ Le taux de mortalité ; ➤ Le taux de naissance ; ➤ Le taux de réforme ; ➤ Le taux de renouvellement pour chaque catégorie ; ➤ Le taux des effectifs gardés ; ➤ Taux de prolificité ; ➤ Taux de fertilité des femelles ; ➤ Le nombre de béliers et taureaux par troupeaux ; ➤ Le mouvement du cheptel (achat –ventes) ; ➤ La transhumance..... etc. Ce sont des paramètres qui sont identifiés à travers des enquêtes périodiques au prés d'un échantillon d'éleveurs qui sont actualisés chaque période tout dépend des wilayas et les moyens dont elles disposent.
Viandes rouges	Pour les viandes contrôlées, l'estimation se fait par les services vétérinaires pour tout ce qui concerne l'abattage contrôlé et l'estimation de la production se fait selon le poids moyen de la carcasse et le nombre de têtes abattus. La viande non contrôlés ou l'abattage exceptionnel qui s'effectue au cours des fêtes religieuses telque l'Aïd, Ramadan ainsi que les événements familiaux (Mariages, circoncisions ...etc.), qui est estimés dans certaines wilayas en fonction du nombre des ménages au niveau de chaque commune. Aussi une autre méthode adoptée par les wilayas en faisant l'estimation sur une partie des effectifs animaux avec des taux préétablies qui sont multiplié

	par le poids moyen de la carcasse.
Viandes blanches	Les paramètres utilisés sont : -Identification du nombre de mise en place dans une commune. - Estimation du nombre de mortalité pour avoir le nombre des effectifs commercialisés. -Estimation du poids moyen. -durée de production Donc l'effectif commercialisé x le poids moyen =production de viandes blanches

2. Recensement du cheptel 2022 :

En exécution des hautes instructions de Monsieur le Président de la République portant sur le lancement d'une opération de recensement national du cheptel, et ce, dans le but d'accroître la connaissance précise du cheptel des grands ruminants ainsi que celui du camelin et de l'équin, un dispositif a été mis en place, conduit par un groupe de travail chargé du suivi de cette opération, regroupant les représentants du MICLAT et ce du MADR.

Ce groupe a eu à établir une note de cadrage du recensement, instaurant une forme d'organisation locale, présidée par les Walis, pour conduire les opérations de collecte des données en réquisitionnant l'ensemble des capacités matérielles et humaines pour le bon déroulement de ce recensement, dont les opérations sur terrain ont débuté le 29 novembre 2022.

Les opérations de terrain ont duré trois semaines, du 29 novembre au 19 décembre, et ont été prolongées jusqu'au 31 janvier 2023, et ce, au vu de plusieurs raisons valables, relatives au fait de l'étendu des territoires à enquêter, de la dispersion des élevages ainsi qu'aux difficultés liées aux modes d'élevage notamment transhumant.

Annex VI: Common reporting tables

All tables (CRT) are reported in an electronic format

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