



CRUDE OIL IMPORTS AND SUPPLY MONTHLY QUESTIONNAIRE

REPORTING INSTRUCTIONS

These are the reporting instructions for the monthly Crude oil imports and supply (COIR) questionnaire, for the submission of monthly crude oil imports and production data. Under the [Consolidated text of Regulation \(EC\) No 1099/2008 of the European Parliament and of the Council of 22 October 2008 on energy statistics](#) (Energy Statistics Regulation), the data transmission deadline for the EU Member States, the European Economic Area and the candidate countries reporting to the European Commission (Eurostat) is **within one calendar month following the reported month**.

This is a joint questionnaire to be used for reporting data to Eurostat and the IEA.

The completed questionnaire must be transmitted to Eurostat via the Single Entry Point (SEP) following the implementing procedures of EDAMIS (Electronic Data files Administration and Management Information System), selecting the electronic data collection **ENERGY_COIR_M** and indicating the submission year and month.

Please send all questions or comments regarding the questionnaire, to:

MOS@iea.org

estat-energy-monthly@ec.europa.eu

Last updated: 04 August 2023

A. CONVERSION TO METRIC TONS

Barrels are to be converted to metric tons by using conversion factors based on actual density. Where conversion from barrels per day is necessary, units should be multiplied by the actual number of days in the reported month.

B. DEFINITIONS

- 1. Crude oil:** is a mineral oil of natural origin comprising a mixture of hydrocarbons and associated impurities, such as sulphur. It exists in a liquid state under normal surface temperature and pressure and its physical characteristics (density, viscosity, etc.) are highly variable. This category includes field or lease condensate recovered from associated and non-associated gas where it is commingled with the commercial crude oil stream. Report quantities independent from the extraction method (conventional and non-conventional). Crude oil excludes NGL.
- 2. Imports:** cover every quantity of crude oil which either enters the customs territory of a country or comes from another country for purposes other than transit. Crude oil used for stock building shall be included. Oil extracted from the seabed over which a country exercises exclusive rights for the purposes of exploitation and entering the customs territory of the Community shall be excluded from imports.
- 3. Supply:** covers the crude oil imported and the crude oil produced in the country during the reference period. The provision of crude oil from previously built stocks is excluded.
- 4. CIF price:** The CIF (cost, insurance, and freight) price includes the FOB (free on board) price, which is the price actually invoiced at the port/place of loading in addition to the cost of transport, insurance and charges linked to crude oil transfer operations. The CIF price of the crude oil produced in a country is to be calculated free at port of discharge or free at frontier, i.e., at the moment when the crude oil falls under the customs jurisdiction of the importing country.
- 5. Production price:** Crude oil may be produced in a country and be sold to the country's refineries: in this case, crude oil price would be the price paid by the refineries to buy the produced crude oil. However, it can be the case that the same unit is simultaneously the producer of crude oil as well as its consumer. In this latter case, production cost should be the cost of extracting and producing the crude oil. If the crude oil produced is partly sold to country's refineries and partly used by the same unit, the crude oil price is calculated as a weighted average of the respective prices.
 - a.** In the Energy Statistics Regulation, no distinction is made between net production and production used for exports. Hence, countries should report the average price for all their monthly production.
- 6. API gravity:** is a measure of how heavy/light crude oil is, compared to water. The API gravity is to be reported according to the following formula, with respect to the specific gravity (SG):

$$API = \frac{141,5}{SG} - 131,5$$

The API of crude oils typically varies between 10 and 50, with most crude oils falling within the range of 20-45. The higher the degrees of API gravity, the lighter the crude oil is considered.

C. DESCRIPTION OF THE QUESTIONNAIRE AND SPECIFIC INSTRUCTIONS FOR FILLING IN EACH TABLE

The questionnaire includes the following sheets:

1. Menu

The cover sheet contains the main MENU of the questionnaire, organized in five sections: Basic Functions, Tables, Time Series, Data Transfer and Validation.

1.1. Basic Functions

1.2. In the MENU sheet, select language and reporting country from the drop-down lists, at the top left.

1.3. In the **Periods to load** button, select the periods (months and/or years) to be uploaded to the database. If a country modifies data in a timeseries spreadsheet that is outside the 'periods to load', a warning message will appear when the reporting template is saved. The data will be saved in the reporting template but will not be included in the exported data and will not, therefore, be uploaded to the database. The selection of the periods to load is also used for running the checks included in the questionnaire.

1.4. Data can be entered using either the "TABLES" section or the "TIMES SERIES" section described below. If a country selects the "TABLES" option, data can be entered for only one period and all columns (Number of reporting companies, API Gravity, Sulphur content, Total volume, Total price), while, if the "TIME SERIES" option is selected, data can be entered for one or multiple time periods, but for only one of the selectable data series (Number of reporting companies, API Gravity, Sulphur content, Total volume, Total price).

1.5. **For all tables: Please remember to save each table with the save button (top left) before closing the worksheet.**

1.6. In both TABLES and TIME SERIES options, cells with 'questionable' values will be shown in a red font (errors are displayed in bold red, while warnings are displayed in light red), helping countries to check their data and correct any missing elements or any mistakes/typos. Cells highlighted in yellow indicate a revision when compared to the prefilled data.

1.7. In both TABLES and TIME SERIES, there is a list of options in the top left of the sheets: **Show new data** is the working view to be used to fill-in data for the current cycle, **Prefilled data** switches to the base data, **Clear** removes all the data from the worksheet, **Save** saves the data in the current worksheet (every table/worksheet must be saved separately, in addition of saving the whole file) and **Close** closes the worksheet.

1.8. Use the **Remarks** (or **TS Remarks**) button to comment on reported data: Countries are invited to note in the Remarks sheet any information that they regard as important, and which will facilitate the validation of their data and shed light on the reporting process. Information on changes in methodology, delays in the customs control concerning the imports from specific countries or any other reasons there could be differences in a country's reporting, compared to the monthly oil questionnaire (MOS OIL), could be marked down in the Remarks sheet. This

information will be part of the uploaded data and will be stored under the period to load.

2. TABLES Section

2.1. The reporting period must be selected from the drop-down box. Only one period at a time can be filled in using 'TABLES' option, the month is selected from the drop-down selection list.

2.2. Table 1

This table/list of crude oil origins has been simplified and updated, based on input of experts. Please consult the new code list and select the most appropriate origin from the new list. Countries importing crude oil need to indicate for each crude oil type they import, the number of reporting companies, its API gravity (in degrees), its sulphur content (%), its total imported volume (in thousands of barrels) and its total price (in thousands of American dollars). Countries must report the net¹ unloaded quantity and the corresponding API gravity and sulphur content of crude oil imported in metric tons of normal air (atmospheric) pressure. According to the data reported, the average price is automatically calculated. A new option has been added to the last column of the table, where countries can use a filter to display rows (Data/No data/all). For each datapoint, or selection of cells, countries are given the option to use/remove a flag from the available list at the top left of the sheet. The complete list of flags with descriptions can be found in the 'Instructions' sheet. If a country wishes to see only numerical data, the flags can be hidden in the worksheet by unticking the 'See flags' box. If a country inputs flags and then ticks/unticks the 'See flags', 'See checks' or 'See revisions' boxes, the flags which were not saved will be lost."

Countries are asked to report only those crude oil types that they import, and leave the rest of the lines of Table 1, corresponding to crude oil types that they do not import, empty.

In case a country knows only the country of origin and the exact crude oil type is not known or is not included in the questionnaire, the country should report under the corresponding "miscellaneous" type. For example, if countries know that they import crude oil from Tunisia, but they do not know the exact type of crude oil, they should report under the type "Tunisia miscellaneous" (consider adding a note in the TS Remarks).

Countries should only report under "Other Africa", "Other Asia", "Other Australia and Oceania", "Other Europe", "Other Latin America", "Other Middle East" and "Other North America" if they do not know the country of origin or if the country of origin is not listed in the questionnaire (consider adding a note in the TS Remarks).

Countries must indicate in cell T389 the total number of companies importing crude oil from all origins. The other cells in this row, average API gravity and sulphur content, as well as the total volume and the total price of the imported crude oil, are automatically calculated, as indicated by the dark grey background of the cells.

For countries' convenience, "Total Weight" is automatically calculated in column Z (the total weight in Ktonnes of each crude oil type, based on the reported API gravity and volume). The formula used to convert barrels into tonnes is the following:

¹ The difference between net and gross quantity of crude oil is defined as the water and the mechanical impurities/sediment contained in the oil.

$$weight_in_tonnes = \frac{141,5 * 0,159}{API_gravity * 131,5} * volume_in_barrels$$

2.3. Table 2

In this sheet Table 2.1 is filled in automatically, based on input provided in Table 1 and countries are not able to overwrite the existing formulas. Countries must add any flags that might be required – and these must match the flags chosen for the same cells in Table 1.

Countries producing crude oil need to fill in Table 2.2.: both production quantity and price must be reported in both barrels and tonnes. Countries are given the option to use flags, as above.

For reference year 2020 (the first year of reporting), it was decided² during the Energy Statistics Working Group meeting, that countries, whose crude oil production represents less than 15% of the annual crude oil supply, are given the option to report their production volume as negligible and thus their exact production price as not applicable. If you wish to flag production as “Negligible”, use the **N flag** in cells L29 and M29 in Table 2.2 (will appear as “N not significant” in Eurostat’s database). Cells N29 and O29 should then be marked with **M flags** (will appear as “Z not applicable” in Eurostat’s database). Empty cells have a value of zero.

		Table 2.2: Crude oil production price - 2023M06			
		Total Crude Production		Average CIF price	
		1000 barrels	1000 tonnes	per barrel	per tonne
17					
27					
28					
29	Crude oil production price	n 0.000	n 0.000	m	m

3. TIMES SERIES Section

3.1. A specific flow should be selected from the drop-down list (Number of reporting companies, API Gravity, Sulphur content, Total volume). Each button opens a table containing the table-specific products and flows for 12 months of one year. That is, for the year that was selected in the drop-down box in the TABLES section above.

3.2. Instructions shown in 2.2 above, also apply for TIME SERIES TS1 set of tables.

3.3. Instructions shown in 2.3 above, also apply for TS2 table.

4. VALIDATION

The period for which the checks need to be launched can be selected via the **Periods to load** button. Before clicking the **Run all checks** button, all worksheets must be saved and closed. If there are worksheets open, a pop-up message will ask the country if open worksheets can be closed without saving. The country has the possibility to select cancel and then save any open worksheets.

The checks can then be relaunched. When launched, a separate worksheet will be generated (“CheckReport”), listing all errors from the selected periods. A filtering option is available in order to filter the results.

5. DATA TRANSFER

Data can be imported from (or exported to) the reporting template via a CSV file. Before clicking the import or export button, the country must select (left of the button) the method

² This follows the principle established in the previous legal act for reporting until reference year 2019. For reporting reference years beyond 2020, the Energy Statistics Working Group will re-discuss the 15% threshold and these reporting instructions will be updated.

of import/export, using either the CSV E-VO (IEA codes) or the SDMX-CSV (Eurostat codes) option.

All data tables will be saved and closed after the **Run all checks** option from point 4 above. Now, use the **File submission preparation** button on the menu page and save the file, before starting data transfer.

Detailed instructions for the DATA TRANSFER functions are provided in the “Instructions” sheet of the reporting template.

6. Instructions

For detailed instructions for completing the questionnaire, please refer to the dedicated “Instructions” sheet in the questionnaire.

7. Important notes

When work is complete and all individual worksheets are saved, the reporting template itself has to be saved before closing it.

Do not forget the option **Prepare file for transmission**, before closing the file and before transmission via the SEP.

Before beginning your next transmission do not forget to click the button **Copy new data to prefilled data**, thus saving the previous period’s data to “prefilled”. Cells which match “prefilled data” have no formatting, new data (that which does not match “prefilled data”) will have a yellow background. This makes it easier for countries to see in which periods modifications have been made and also for the IEA and Eurostat to see changes.

D. LINKS BETWEEN OIL AND CRUDE OIL REPORTING

- The definitions of crude oil imports slightly differ in the MOS OIL and the COIR collections, hence it is possible to have some discrepancies on a monthly basis. However, it is expected that in the long run the total of the monthly imports as reported in the two questionnaires should coincide.
- It is expected that countries report imports of crude oil from the same countries in both the COIR and the MOS OIL questionnaires for the same month. In case a country reports crude oil imports from a non-specified origin in only one of the two monthly questionnaires in a specific month, explanations will be requested and the country should provide information on the exact origin of its imports.
- If a country reports having a production of crude oil in the MOS OIL questionnaire, it needs to do so in the COIR questionnaire (and vice versa).
- Values marked as confidential in the COIR questionnaire, are expected to be treated as confidential in the MOS OIL questionnaire (and vice versa). (See provisions on confidentiality in Regulation (EC) No 223/2009 on European statistics). If this is not the case, countries will be contacted by Eurostat, to provide information on their data and on the status of confidentiality.
- The total number of importing companies has to be reported correctly. It is a number of different importing companies and it is not the sum of all the rows of Table 1 of the questionnaire. If the value Total in row 389 of Table 1 is “less than maximum in all rows” or “bigger or equal to the sum of all rows” Eurostat will ask for explanations and likely corrections.
- If API, sulphur content or average price significantly differs from values reported by other countries for the same crude stream, countries will be asked for confirmation.
- If a country spots one of the issues above in their data, they are free to add an explanatory note in the TS Remarks, thereby avoiding questions from the IEA or Eurostat.