



# OIL

## ANNUAL QUESTIONNAIRE

### 2016

#### Excel User Documentation

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#### **Important note to users of Excel 2007 and above**

Please note that the Questionnaire was developed and optimized for the Excel 2003 edition. Although Excel 2007 edition will automatically open the questionnaire in “Compatibility mode”, please always save your data using the “**Save as**” option and the “**Excel 97-2003 Workbook**” format. Otherwise, the functionalities of the questionnaire may be lost.

## Introduction

The two main objectives of the electronic questionnaire are first to **facilitate data entry** for administrations, and second to **minimise the risk of data entry inconsistencies**, which would require substantial time investment from the IEA and the national administrations to correct.

### Facilitate data entry

The electronic questionnaire provides three options:

#### 1) ASCII Data Transfers

- Using the new “ASCII Data Transfers” buttons on the “Data Entry Menu” page of the Excel questionnaires, the user can Import or Export ASCII data files (comma separated values - CSV).
- **Import:** Using the questionnaire’s embedded “data dictionary” (naming convention of the different dimension - products, flows, time...), data files previously downloaded from your databases in CSV format can be uploaded directly into the Excel questionnaires.
- **Export:** Similarly, the questionnaire can generate data files in CSV format for transfer to other databases or uploading to the Energy Data Center: <https://www.energydatacenter.org>. The user can choose to generate these data files containing either IEA country codes or ISO country codes.
- To use this new feature, please contact us for the “data dictionary” and assistance.

E-MAIL: [oilqa@iea.org](mailto:oilqa@iea.org)

#### 2) Data Entry through Time Series (1990 onwards)

- Using the time series viewing format for data entry provides the benefit of having at hand the historical time series back to 1990. It therefore provides reference points for the new data entries, and the capacity to do multiple years’ revisions/updates to the historical time series all at once.
- In the time series format, the user selects the product table they wish to update/revise. The data for the selected product are then presented in a table format by flows (e.g. production, imports and exports) and for all years from 1990 onwards.
- Data entry through time series should minimize the risk of breaks in time series and misreported data.

#### 3) Data Entry through Forms

- Using the forms viewing format, the user enters the data for one year at a time and data are organised based on lists of products over various lists of flows.
- Data entry with forms requires the user to select in the appropriate menu both the year and the table they wish to update/revise.
- As the user moves between individual forms, the data will be automatically transferred to and from the time series sheets where all the data is stored.

### Minimise the risk of data entry inconsistencies

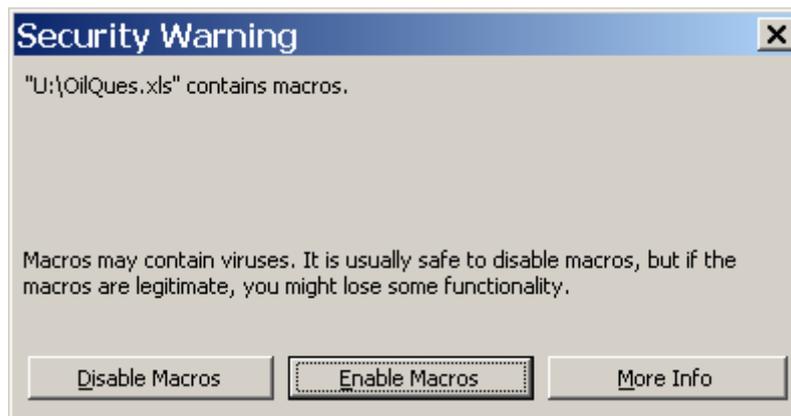
To minimize the risk of data entry inconsistencies or errors, the user is strongly advised to run the **Data Coherence Checks** option. This option alerts the user of inconsistencies in data entry through messages on the Error Sheets which are created.

## 1. Opening and Saving the Questionnaire

### Opening the questionnaire

You have received a compressed ZIP file that contains the Excel version of the questionnaire, which was developed in Excel 2003. Users of the Excel 2007 edition should refer to the note on page 1.

- First, decompress the file, and save the questionnaire on your system.
- Open the extracted Excel workbook “OilQues.xls”.
- Excel may first prompt you with a message similar to the one below regarding the enabling of macros. If so, please select “Enable Macros” which will provide you the full benefit of the questionnaire’s functionalities.



- The questionnaire will then open the "Start" sheet automatically.
- Please note that the questionnaire will not work if the macros are not enabled. The macros in the questionnaire are safe and virus-free.

### Before you start, please note:

#### a) Data entry

- The workbook is protected. Only cells available for data entry can be modified. Other cells are locked and cannot be updated: bold cells are automatically calculated and data cannot be entered in grey shaded cells, which always remain empty.
- Multiple-data entry is possible, but only if the selection does not contain locked cells.
- **The entry of decimal numbers is not allowed.**
- Data Imports via the “ASCII Data Transfers” feature will automatically respect the above constraints on data entry and decimals will automatically be rounded off.

#### b) Saving your work

- Please save your work frequently.
  - a) Users of Excel 2003: simply click on the save button on the Excel toolbar, or choose FILE and then SAVE.
  - b) For users of the Excel 2007 edition, in order to maintain the compatibility mode, it is important that you use the “Save as” option and select “Excel 97-2003 workbook”.
- When you try to exit the application, a message will first appear asking you “Do you wish to run the checks to control the integrity and coherence of your entries?” If all data entries are completed, it is advisable to run the **Data Coherence Checks** option to minimize the risk of

data entry inconsistencies or errors. If data entries are not completed, or if you already ran the **Data Coherence Checks** click NO.

- Then, as you exit the application, a message will appear asking “Do you want to save?” Click on the YES button to save your work.

## 2. Menu, Sub-menus, and Structure of the Workbook

Once you have opened up the Excel workbook, and selected the language of work (which the questionnaire will keep in memory), you will need to click on the “**Start**” button of the following “START” sheet to gain access to the “Menu” and the other sheets of the questionnaire.

**IEA - Eurostat - UNECE**  
**Energy Questionnaire - Oil**  
**Questionnaire annuel - Pétrole**  
**AIE - Eurostat - UNECE**

Click on the "Start" button to begin:  
 Cliquez sur le bouton "Start" pour commencer :

If it does not work, please:

- 1) Close this file
- 2) Reopen it and click "[Enable Macros](#)" if a security warning appears.

The macros in this file are virus free.

Si cela ne fonctionne pas, veuillez :

- 1) Fermer ce fichier
- 2) Le réouvrir et cliquer sur "[Activer les macros](#)" si un message de sécurité apparaît.

Les macros de ce fichier sont sans virus.

As indicated in section one, this requires that you have enabled the macros. Once you have clicked on the “Start” button, you will access the “Cover” sheet, where you can select the language in which you will work (English or French). The “Menu” button takes you to the “Data Entry Menu” sheet, where you can access either:

- the “Data Entry in Time Series” section
- the “Forms” section
- the “ASCII Data Transfers” options
- the “Check Data” button, once your data entries are completed. This will allow you to select a year for which a series of checks will be run to capture potential inconsistencies in the data. The program would then create an “Error Sheet” for that year. Please note that you can run the checks for all the years by leaving the selection field blank.

At any time, you can also change the language of work from the “Cover” sheet or by pressing Ctrl + L. Please note that the questionnaire will “remember” the language selected on the first time; therefore, you do not have to select the language every time you open the questionnaire.

DATA ENTRY MENU				
Control the integrity and coherence of your entries: Run the "Check data" program.		<input type="button" value="Check data"/>	Tips : press Ctrl+M to come back to that page from anywhere	
DATA ENTRY IN TIME SERIES				FORMS
<input type="button" value="Crude oil"/>	<input type="button" value="Natural gas liquids"/>	<input type="button" value="Refinery feedstocks"/>	<input type="button" value="Additives/oxygenates"/>	Please select the year and click on the form  2011 <input type="button" value="v"/>  <input type="button" value="Table 1"/> <input type="button" value="Table 2a"/> <input type="button" value="Table 2b"/> <input type="button" value="Table 3a"/> <input type="button" value="Table 3b"/> <input type="button" value="Table 3"/> <input type="button" value="Table 4"/> <input type="button" value="Table 5"/>  <input type="button" value="Remarks"/>
<input type="button" value="Biofuels"/>	<input type="button" value="Other hydrocarbons"/>	<input type="button" value="Total - crngfeed"/>	<input type="button" value="Refinery gas"/>	
<input type="button" value="Ethane"/>	<input type="button" value="LPG"/>	<input type="button" value="Naphtha"/>	<input type="button" value="Total motor gasoline"/>	
<input type="button" value="Biogasoline"/>	<input type="button" value="Non-biogasoline"/>	<input type="button" value="Aviation gasoline"/>	<input type="button" value="Gasoline type&lt;br/&gt;jet fuel"/>	
<input type="button" value="Other kerosene"/>	<input type="button" value="Total kerosene type&lt;br/&gt;jet fuel"/>	<input type="button" value="Bio jet kerosene"/>	<input type="button" value="Non-bio jet kerosene"/>	
<input type="button" value="Road diesel"/>	<input type="button" value="Heating and other gas&lt;br/&gt;oil"/>	<input type="button" value="Total gas/diesel oil"/>	<input type="button" value="Biodiesels"/>	
<input type="button" value="Non-bio gas/diesel oil"/>	<input type="button" value="Total fuel oil"/>	<input type="button" value="Fuel oil -&lt;br/&gt;low sulphur"/>	<input type="button" value="Fuel oil -&lt;br/&gt;high sulphur"/>	
<input type="button" value="White spirit SPB"/>	<input type="button" value="Lubricants"/>	<input type="button" value="Bitumen"/>	<input type="button" value="Paraffin waxes"/>	
<input type="button" value="Petroleum coke"/>	<input type="button" value="Other oil products"/>	<input type="button" value="Total products"/>		
ASCII DATA TRANSFERS				
<input type="button" value="Import"/>	<input type="button" value="Export"/>			

### “Data Entry in Time Series” section

- As mentioned in the Introduction, using the time series viewing format for data entry provides the benefit of having at hand the historical time series back to 1990. This option therefore provides reference points for the new data entries, and the capacity to do multiple years’ revisions/updates to the historical time series all at once.
- To use the time series format, select the product you wish to update/revise. The data for the selected product will then be presented in a table format by flows (e.g. production, imports and exports) and for all years from 1990 onwards.
- It is expected that data entry through time series would minimize the risk of breaks in time series and misreported data.

### “Forms” section

- If you prefer to use the forms viewing format, the data can only be viewed and/or entered for one year at a time. In this format, you select the year for which you want all relevant products to be presented over various lists of flows.
- To use “Data Entry through Forms” you are required to select the year and then the table that you wish to update/revise.
- As the user moves between individual forms, the data will be automatically transferred to and from the time series format where all the data is stored. Please note that clicking the save button when a forms sheet is selected also triggers the transfer of data to the time series.

### “ASCII Data Transfers” section

- This section allows the user to Import data files (in comma separated values – CSV) directly into the Excel questionnaire or to Export the full data content of the questionnaire into a CSV file.

You can switch between Time Series and Forms at any time through the “Menu” sheet.

You can return to the “Menu” sheet from the Time Series or Form sheets by pressing Ctrl + M or clicking on the “Menu” button (in the top left corner of each sheet). If the “Menu” button is not visible, you may need to scroll up and/or to the left until it is visible.

Alternatively, you can navigate from sheet to sheet by clicking directly on the tab (near the bottom of the screen) indicating the name of the required sheet.

Comments on the data submission should be made in the "Remarks" sheet.

### 3. Data Entry

This section provides information and alerts you to specific requirements regarding some flows or products.

#### a) Data Entry through ASCII Data Transfers

Data submission and revisions can be loaded as data files directly in the time series of the annual questionnaire using the Import option. The Import feature provides for two options:

Full Import:

Each year present in the data file will be treated as a complete dataset. Therefore, all datapoints present in the questionnaire for the specified years will first be erased before the values from the CSV data file are loaded into the questionnaire.

Partial Import:

Only datapoints present in the data file will be loaded into the questionnaire. This is useful when multiple data files are required to generate a complete dataset for any given year. This option is also to be used when only a few datapoints need to be changed/updated.

Data files need to be in CSV format and to follow the embedded “data dictionary” (naming convention of the different dimensions - products, flows, time...) of the questionnaire. To receive the documentation regarding the “data dictionary”, please contact us by e-mail: [oilqa@iea.org](mailto:oilqa@iea.org)

#### b) Data Entry through Time Series

The time series contains historical data for your country. For each product, a spreadsheet features the data of Tables 1 to 5 from 1990 to 2016.

#### c) Data Entry through Forms

You will find the following forms for each year:

- Table 1: SUPPLY OF CRUDE OIL, NGL, REFINERY FEEDSTOCKS, ADDITIVES AND OTHER HYDROCARBONS
- Table 2A: SUPPLY OF FINISHED PRODUCTS
- Table 2B: DELIVERIES TO THE PETROCHEMICAL SECTOR
- Table 3A: GROSS DELIVERIES BY SECTOR – ENERGY USE
- Table 3B: GROSS DELIVERIES BY SECTOR – NON-ENERGY USE
- Table 3: GROSS DELIVERIES BY SECTOR – ENERGY USE and NON-ENERGY USE
- Table 4: IMPORTS BY ORIGIN
- Table 5: EXPORTS BY DESTINATION

## 4. Checks and Controls

As indicated in the Introduction, to minimize the risk of data entry inconsistencies or errors, we strongly advise that you run the **Data Coherence Checks**. For this, you need to go back to the main “Menu” sheet and click on the following button:



A pop-up window will ask you which year you wish to run the check for:



The Check will then create an Error sheet (e.g. “**2016-Errors**”) with messages alerting you to potential inconsistencies in data entry for that year.

Please note that you can run the checks for all the years by leaving the field on the pop-up window blank.

**PLEASE MAKE SURE YOU RUN THE DATA COHERENCE CHECK FOR EACH YEAR IN WHICH YOU HAVE CHANGED DATA (e.g. create an Error sheet for each year).**

The list of checks that are produced is presented in the Annex.

## 5. Remarks

This sheet has an entry zone that allows you to note any remarks pertaining to incomplete data, exceptions, or explanations. For example, please enter any partner countries not shown on the trade tables together with their corresponding amounts here.

You can navigate to the “Remarks” sheet using the tabs (near the bottom of the screen). The “Remarks” sheet is the furthest one to the right of the workbook.

## Annex: List of checks

If data appear inconsistent, an error sheet for the year selected will be created, with the list of errors and inconsistencies, and the corresponding cells in the time series will show the inconsistent numbers in red. To assist you in your work, the inconsistencies are also rated by their importance (high, medium, low).

When coherent figures are entered, the red colour disappears once control checks have been run again for the same year.

- Opening Stock should = Closing Stock of previous year (on Table 1 and Table 2A)
- Stock Change National Territory (on Table 1 and 2A) should = Op Stock Level - Cl Stock Level (on Table 1 and Table 2A)
- Imports (Balance) (on Table 1) should = Total Imports (Trade) (on Table 4)
- Exports (Balance) (on Table 1) should = Total Exports (Trade) (on Table 5)
- For Total – crngfeed, Backflows to Refineries (on Table 1) should = Backflows to Refineries of Total Products (on Table 2B)
- For Total – crngfeed, Products Transferred (on Table 1) should = Products Transferred of Total Products (on Table 2A)
- For Total – crngfeed, Direct use (on Table 1) should = Primary Product Receipts of Total Products (on Table 2A)
- For Biofuels, Direct use (on Table 1) should = Primary Product Receipts of the sum of Biogasoline, Bio jet kerosene and Biodiesels (on Table 2A)
- For Total – crngfeed, Refinery Intake (Observed) - Refinery Losses (on Table 1) should = Refinery Gross Output of Total products (on Table 2A)
- For Biofuels, Refinery Intake (Observed) - Refinery Losses (on Table 1) should = Refinery Gross Output of the sum of Biogasoline, Bio jet kerosene and Biodiesels (on Table 2A)
- For Crude Oil and NGL, Gross Inland Deliveries (Calc) should = Gross Inland Deliveries (Obs) (on Table 2A)
- For Total products, Interproduct Transfers (on Table 2A) should = 0
- Chemical and Petrochemical (on Table 3) should  $\geq$  Energy use in Petchem industry + Non-Energy use in Petchem industry (on Table 2B)
- Non-Energy use in Petchem industry (on Table 3B) should  $\geq$  Non-Energy use in Petchem industry (on Table 2B)
- For Total products, Net Deliveries (on Table 2B) should = Gross Inland Deliveries (Obs.) - Backflows to Refineries (on Table 2B)
- For Total products, Net Deliveries Petchem industry (on Table 2B) should = Gross Deliveries Petchem industry - Backflows to Refineries (on Table 2B)
- For Total products, Gross Deliveries to Petchem industry (on Table 2B) should  $\leq$  Gross Inland Deliveries (Obs.) (on Table 2B)
- For Total products, Net Deliveries to Petchem industry (on Table 2B) should  $\leq$  Net Deliveries (on Table 2B)
- For Total products, Gross Deliveries Petchem industry (on Table 2B) should = Energy Use in Petchem. Sector + Non-Energy Use in Petchem industry + Backflows to Refineries (on Table 2B)
- Additives/Oxygenates  $\geq$  Biofuels should be for any positive flow

- When breakdowns of Total motor gasoline (Biogasoline and Non-biogasoline), Total kerosene type jet fuel (Bio jet kerosene and Non-bio jet kerosene), Total gas/diesel oil (Road diesel and Heating and other gas oil AND/OR Biodiesels and Non-bio gas/diesel oil) and Total fuel oil (High and Low sulphur fuel oil) are available, the sum of the breakdown fuels should correspond to the aggregated fuel for any flow