

Exercise JODI Oil 1

Open the file “**JODI_Oil_Exercises.xls**”.

Please use the information below to fill in the Maxi-JODI table.

- In March 2017 the following was observed in your country:
 - 2248 kilo tonnes (kt) of crude oil production;
 - 450kt of crude oil imports;
 - closing stocks of crude oil on national territory stood at 1260kt
 - opening stocks of crude on national territory oil stood at 1227kt
 Please note that in the monthly statistics:

$$\text{Stock Change} = \text{Closing stocks level} - \text{Opening stocks level}$$

- the crude oil refinery intake was equal to 2650kt
 - the inputs of biofuels **from non-conventional oil sources** (renewables) amounted to 26kt
- Now look at the signs on the left-hand side of the table.

+	Production
+	From Other sources
+	Imports
-	Exports
	Products
+	Transferred /Backflows
-	Direct Use
-	Stock Change
-	Statistical Difference
=	Refinery Intake
	Closing stocks

Please note that contrary to the impression you might get from this formula, the Refinery Intake row is not calculated value, instead it is **an observed value**.

The statistical difference represents the difference between the calculated refinery intake and the observed refinery intake. The formula for the **calculated refinery intake** and the statistical difference for crude oil look as follows:

$$\text{Cal. Refinery Intake} = \text{Production} + \text{Imports} - \text{Exports} - \text{Direct Use} - \text{Stock Change}$$

$$\text{Statistical Difference} = \text{Calculated Refinery Intake} - \text{Observed Refinery Intake}$$

Look at the **Automatic Checks** below the table:

The automatic check states: "Statistical Difference above 10% of Refinery Intake, please investigate".

1. Can you identify why there is a **statistical difference above 10%**?
2. Can you identify which **flows might be missing**?
(Hint: Who would you try to contact to find out more?)
3. **Please, contact one of the trainers before moving on to exercise 2.**

Exercise JODI Oil2

Please fill in the following information in the Maxi-JODI table.

1. In March 2017 the following figures for Refinery Gross Output by product were observed in your country:
 - a. LPG: 199kt
 - b. Naphtha: 356kt
 - c. Gasoline: 576kt
 - d. Kerosene (Type Jet Fuel): 391kt
 - e. Gas/Diesel Oil: 524kt
 - f. Fuel oil: 633kt
 - g. Refinery Gas: 5kt
 - h. Ethane: 4kt

Please, check the definition of "Other Products" in the sheet called "Definitions" for further information on how to report amounts of **refinery gas and ethane** in Maxi-JODI.

Look at the **Automatic Checks** below the table:

The automatic check shows the following message: "*Reported figures imply a refinery gain. Losses should not be negative*".

In your opinion, what might be the reason for negative refinery losses?

2. In March 2017 the following trade figures were observed in your country:
 - a. Import of 150kt of naphtha
 - b. Import of 100kt of other kerosene
 - c. Export of 91kt of jet kerosene.

The 91kt of jet kerosene exports appears in red. Can you explain why? Hint: Please, keep in mind that jet kerosene is included in total kerosene.

Total Kerosene = Jet Kerosene + Other Kerosene

3. Please, fill in the amounts of observed demand for the following products:
 - a. LPG: 200kt
 - b. Naphtha: 355kt
 - c. Gasoline: 596kt
 - d. Total Kerosene: 400kt
 - e. Kerosene (Type Jet Fuel): 300kt
 - f. Gas/Diesel Oil: 524kt
 - g. Fuel oil: 633kt
 - h. Other Products: 9kt

Do you see **any figures that could be of concern**? If so, please explain.

Exercise JODI Oil3

Please report the following information in the table:

1. The naphtha that was imported to your country was reclassified as feedstocks and processed at the refinery.
2. Please, keep in mind that this process has to be reported on both sides of the table since it includes secondary products (naphtha) as well as primary products (feedstocks of naphtha).
 - a. Start with filling in the amounts of naphtha being sent to the refinery.
Hint: Check the definitions of the flow “Products Transferred” in the “Definitions” tab.
 - b. Please, adjust the refinery figures accordingly on the left-hand side of the table.
Hint: The amounts of naphtha sent to the refinery are used as a feedstock at the refinery. They are processed in the same month and not stored at the refinery. Check the definition of the product “Other” in the “Definitions” tab.
3. Have a final look at the refinery losses. Do you see any change to your earlier observation?