Exercise GAS.1: Indigenous production

Open the file AQ_Gas_Exercises.xls.

Select the first worksheet (GAS.1). The top table provides information about two sites of natural gas production. The Gross Calorific values are given for the two sites in a second table.

Part 1: Calculate the production of marketable gas (in Mm³ and TJ) and fill in the yellow cells.

Part 2: Fill in the table “Supply of Natural Gas” using the results from Part 1.

Hints:
* What is marketable production?
* What is associated and non-associated gas?
* How do I calculate the weighted average of a calorific value?

Exercise GAS.2: Trade (I)

Select sheet GAS.2

Complete the tables “Imports by origin” and “Exports by destination” using the information given.

Hints:
* What is the ultimate country of origin or destination?
* What is transit gas?

Exercise GAS.3: Final consumption

Select sheet GAS.3.

Fill in the table “Total Final Consumption by Sector” using the consumption figures given in the top table.

Hints:
* What is the difference between energy and non-energy use?
* If you have questions on industry classifications, please refer to Page 10 of the Natural Gas Annual Questionnaire, VI. Industry Sector
Exercise GAS.4: Consumption by sector

Select sheet GAS.4.

Fill in the table “Consumption by Sector” using the consumption figures given in the top table.

Hints:
* What is the difference between a main activity electricity producer and an autoproducer?

Exercise GAS.5: Weighted cal. values

Select sheet GAS.5.

At the top you will find some information about production, trade and stock change of natural gas.

Part 1: Calculate the total non associated gas production and total gas production, and the respective weighted gross calorific values.

Part 2: Fill the “Supply of Natural Gas” table with the information you have.

Hints:
* What is LNG?
* What is the ratio between net and gross calorific values?
* How does the IEA calculate stock changes in the annual questionnaires?

Exercise GAS.6: Trade (II)

Select sheet GAS.6.

Complete the tables “Imports by origin” and “Exports by destination” for Belgium, using the information given:

Hints:
* What are the physical conditions for reporting natural gas?

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<th>(20 °C, 1 atm)</th>
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