

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?**

To:	Standard cm	Normal cm	(20 °C, 1 atm)
From:	Multiply by:		
Standard cm	1	0.948	1.017
Normal cm	1.055	1	1.073
(20 °C, 1 atm)	0.98284	0.932	1