Energy Prices and Taxes: Exercises

Info:

Open the file Prices_Exercises.xlsb.

Your boss has given you an assignment. He needs you to prepare a comparison of prices in your country versus other countries.

To do this he has asked you to calculate average prices according to the IEA methodology, using the IEA energy prices and taxes questionnaire. He has given you the data that are available in your department and your task is to use this data to fill out the IEA questionnaire correctly.

Fill in the cells that are highlighted in orange. If you put the correct number - or equation that gives the correct number - into a cell, the cell will be highlighted in green and in red otherwise.

Exercise PRICES.1:

Click on the worksheet labelled Exercise PRICES.1

Some data from the energy regulatory office are given. These data can be used to complete the table with electricity prices and taxes for 3Q2011 for both industry and households.

Here are some clues to start your investigation:

* What are the differences between total prices for households and for industry?

* What is included in the ex-tax price?

* Which units should be used?

Exercise PRICES.2:

Click on the worksheet labelled Exercise PRICES.2

Some data for the two major companies that sell electricity in STATISLAND are given, together with the taxes applying in that year. You should use these data to complete the table with the average electricity prices and taxes for 2011.

Here are some clues to start your investigation:

* Calculate the average prices of the two companies.

* Calculate a weighted average of the VAT rate to account for the rate change during the year.
Exercise PRICES.3:

Click on the worksheet labelled Exercise PRICES.3

At the top you will find some information about petrol pump prices, as well as taxes and consumption data. You should use this to complete the table with prices and taxes for 4Q2011 and 2011.

Here are some clues to start your investigation:

* Start with the total price for non-commercial users and work backwards to get the ex-tax price (follow the “road map” if you need extra help).
* Consider rebates when calculating taxes for commercial users.
* The customs data will allow you to calculate a weighted average price for 2011 for commercial users. Remember that weights should have the same units.
* Use the hints!

Exercise PRICES.4:

Click on the worksheet labelled Exercise PRICES.4

In this sheet you will find information about natural gas consumption and spending by households, industry and power plants. You should use this information to complete the table with prices and taxes for the four quarters of 2011 for households and for the year 2011 for households, industry and electricity generation.

Here are some clues to start your investigation:

* For natural gas it is important to consider the units and gross/net calorific values.
* Use rows 27 to 35 for your workings to convert everything to the standard units.
* Follow the road map if you need extra help.
* Use the hints!