

THE ANNUAL SIZE OF TURKISH ENERGY SECTOR

SUMMARY:

Finding the size of the Turkish Energy sector is more challenging than one might expect. The total value of all investments, the energy consumption, the invoices paid, the taxes and constantly changing prices makes it very difficult to determine this number. Nevertheless, it will not be a mistake to try to derive the sector size from imports, net imports and final sales. In this Q report, the annual sales volume of the Turkish energy sector will be calculated from the annual quantity sales and price reports.

METHOD:

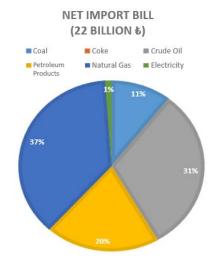
This study uses the Ministry of Energy and Natural Resources' 2016 energy balance table, EMRA sector reports, and the fuel price information database of DOSİDER (Natural Gas Devices Industrialists and Businessmen Association) and - for international prices - WorldBank commodity data and reports.

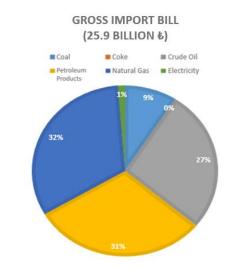
The average crude oil price for 2016 was accepted as 43.7\$/barrel, the petroleum product price as 50\$/barrel, the average coal price as 65\$/ton, and the average natural gas price as 180\$/1000m3 as derived from the World Bank commodity report.

Consumption data is based on the import and total final energy consumption lines in the 2016 balance sheet. Assuming that the current demand will remain at least as 2016 level, the current market volume was calculated via current prices.

ANALYSIS:

Studying the 2016 balance sheet and the prices in 2016; our imports are divided into two as net imports and gross imports. The fundamental reason is the petroleum products balance.



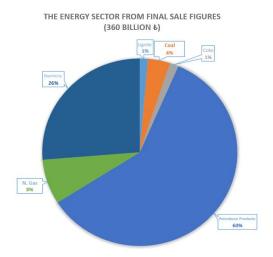


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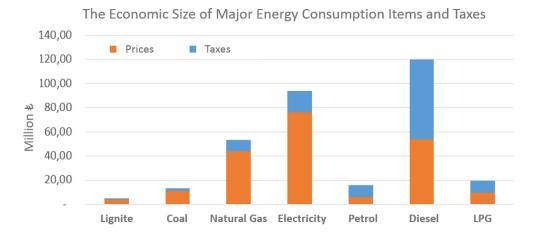


Looking at the balance sheet, we can see that out of 25 million tons of petroleum products imported, 10.5 million tons were used as bunker or export. The technical details are intricate. Taking the safe route, only imports and net imports (import – export) are used. As demonstrated in the previous graph, while crude oil and petroleum products' share is 58% in the gross energy imports and 50% in net imports; petroleum products account for 31% of gross imports and 20% of net imports.

In order to find the current market volume, the latest prices from the DOSİDER bulletin was multiplied by the main items of consumption in the 2016 equilibrium table. So, it was assumed that the current demand was at least the demand of 2016. In final consumption, the sales volume of the sector was calculated as 360 billion $\$(\sim 92 \text{ billion USD})$.



If sales were calculated only from the consumption figures of lignite, coal, gasoline, diesel, LPG, electricity and natural gas, the total sales volume gets revealed as 320 billion \$(82 billion USD), with 115.6 billion \$(29.28 billion USD) of it being taxes paid to the state.



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