

# ELECTRICITY AND GAS PRICES BASED ON PURCHASING POWER PARITY

## SUMMARY:

It is widely accepted that Turkey numerically has the lowest energy prices in Europe. However, it is still claimed that energy prices in Turkey are one of the most expensive when purchasing power is taken into account. In fact, what is considered expensive is still a matter of debate. In this Q report, OECD data for purchasing power parity and open source data are used to calculate Turkey's natural gas and electricity prices ranking among European countries.

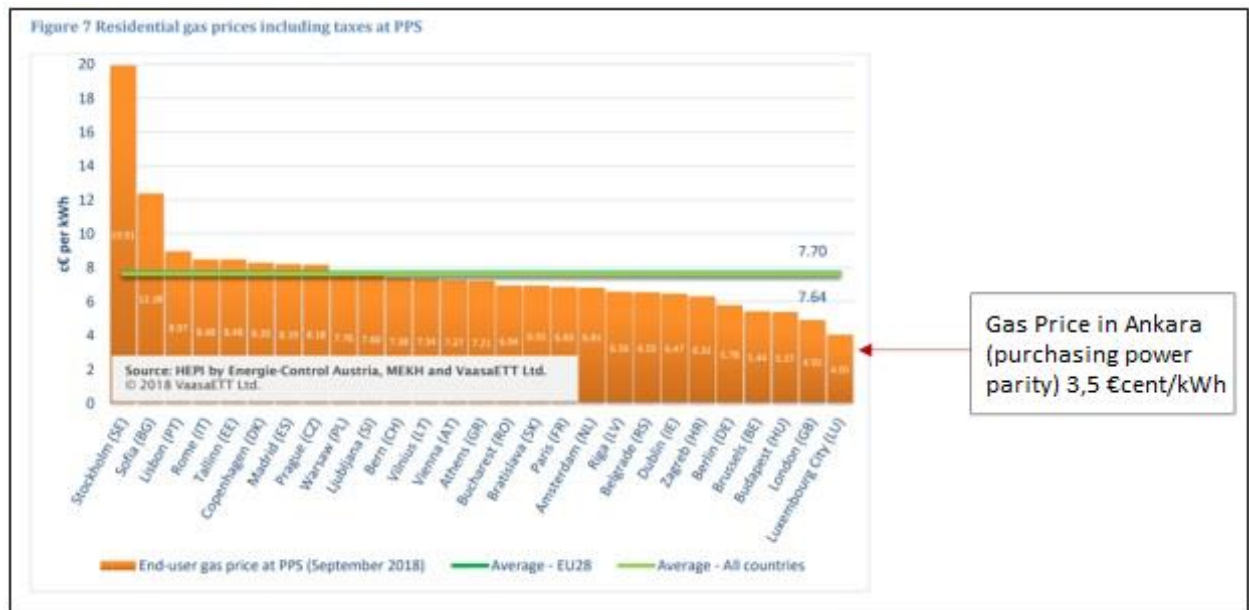
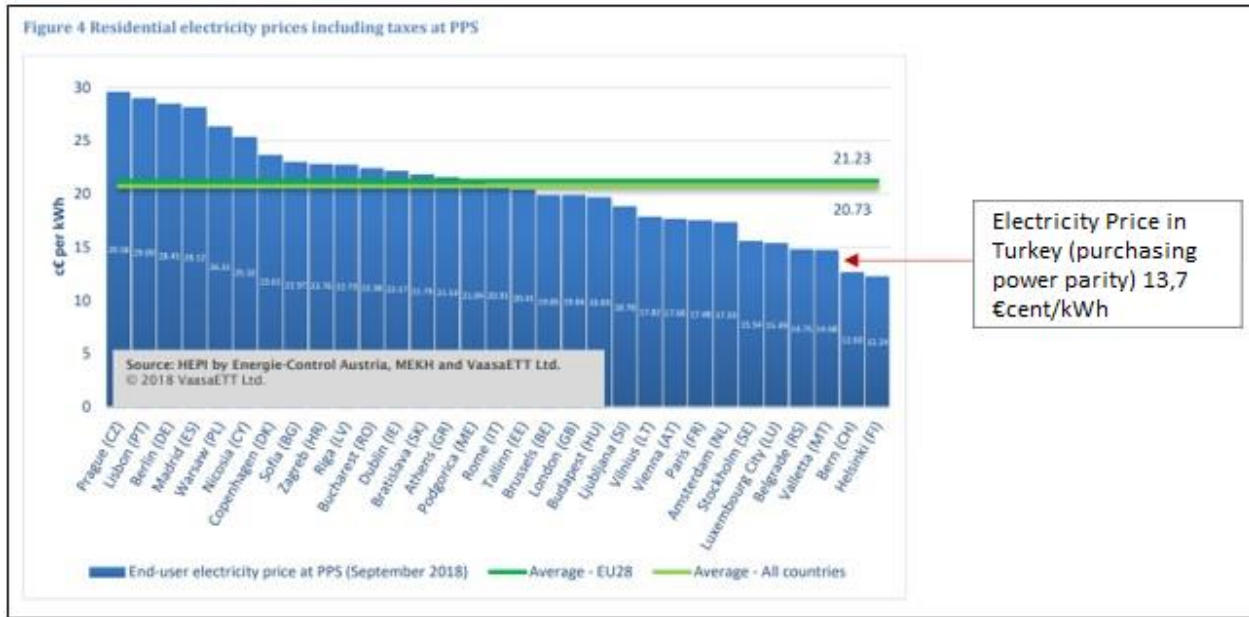
## METHOD:

In international data comparisons, the monthly updated "Energy Price Index Price" [website](#) was used. In addition, [the relevant figures of OECD](#) are used for purchasing power parity. No additional mathematical calculation was applied to the data. "Energy Price Index", prepared by Austrian and Hungarian Energy Regulators, includes electricity and gas prices of European capitals. Household electricity and natural gas prices for Turkey are acquired from related company websites and real invoices.

## ANALYSIS:

The third chart of the Energy Price Index report shows electricity prices in European capitals (including non-EU members). Natural gas prices in these capitals are in kWh and Euro. The figures that are taken from Başkent Gas website for Ankara includes VAT rate. Charts 4 and 7 also have electricity and natural gas prices adjusted for purchase parity in Energy Price Index (Figure 1 and 2).

On the OECD's statistical page, which is considered as a reliable source for purchasing parity, 1.45 is announced as purchasing parity for Turkey (for 2017). Therefore, we can obtain a purchasing power adjusted graph by multiplying electricity and natural gas prices by 1.45. The adjusted numbers show that, the ranking of Turkey doesn't change even when purchasing power parity is considered.



**CONCLUSION:**

The expression “Turkey has the most expensive energy” may remain as a cliché saying. However, if the data is evaluated by adding purchasing power, energy prices in Turkey are by far lower than all other European countries. This is also reflected in energy demand.

Nevertheless, in discussions over purchasing power, when we increase OECD data by an additional 24% and multiply it by an exaggerated purchase parity rate, Turkey still remain as one of the cheapest countries for natural gas. Also, Turkey remains 7<sup>th</sup> cheapest country (out of 32 countries including Turkey) for electricity.

According to data calculated taking Euro/TL exchange rate as 6.25 (currency rate dated November 30, 2018);

	Household price (With taxes)	Eurocent/kWh	<a href="#">OECD</a> purchasing power parity (1.45)	With the additional 24% increase of purchasing power parity ( <a href="#">OECD data</a> )
Electricity	0.59 Turkish cents/kWh	9.44	13.7 (3 <sup>rd</sup> cheapest)	17 (cheapest 7.)
Natural Gas	0.15 Turkish cents/kWh	2.4	3.48 (cheapest)	4.3 (2 <sup>nd</sup> cheapest)

Even if the purchasing power parity published by OECD is increased by 40%, Turkey remains far below the European average.

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