

Household Energy Price Index for Europe

MARCH 31, 2023

March Prices Just Released

The most up-to-date picture of European household electricity and gas prices: VaasaETT and two leading European energy market authorities collaborate to track monthly energy prices in 33 European countries.

Energie-Control Austria, the Hungarian Energy and Public Utility Regulatory Authority (MEKH) and VaasaETT are delighted to publish the results of our study of residential electricity and gas prices covering 33 European countries. Our price survey now includes every EU Member State in addition to selected members of the European Energy Community (Montenegro, Norway, Serbia and Ukraine), plus Great Britain and Switzerland.

We would like to use this opportunity to thank the energy market authorities, energy suppliers and distributors for their time and cooperation to ensure the quality of our data.

If you would like to know more about the latest developments in residential energy prices, visit our project webpage at www.energypriceindex.com and subscribe to the free monthly update of the HEPI index for Europe.

IN THIS MONTH'S EDITION

Significant electricity price increase in Helsinki

Electricity price increases in Brussels, Nicosia and Paris

Significant electricity price decrease in Rome

Electricity price decreases in Athens, Berlin, Copenhagen, Dublin, London, Madrid, Oslo, Riga, Stockholm, Tallinn and Vienna

Natural gas price increase in Vienna

Significant natural gas price decreases in Athens, Bern, Rome and Sofia

Natural gas price decreases in Berlin, Brussels, Copenhagen, London, Madrid and Tallinn

Fixed vs variable tariff analysis: fixed prices are typically higher than variable

European Energy Price Development

Figure 1 shows the evolution of residential energy and distribution prices excluding taxes between January 2009 and March 2023 in 15 European capital cities. The index is calculated by weighing prices in each of the capital cities by the respective national electricity or gas residential consumption.

Residential electricity prices steadily decreased over the first half of 2009 and reached a trough at 96 index points in June 2009 as the economic crisis took its toll on demand and wholesale prices plummeted. Prices started to recover in the second half of 2009 together with (temporary) green shoots in economic activity and a general feeling that the worst of the crisis was behind us. They have been on an upward trend since then. The index for electricity reached as high as 116 index points in October 2014. Since then, it faltered and remained around 108 index points in 2016 and 2017. During 2019, the index was fluctuating around 115 and 119 points. However, the recent developments on the wholesale markets due to COVID-19 restrictions dropped the index rate down to 112 points in 2020. During 2021, the index followed an increasing trend as people and businesses were resuming their activities, hence there was higher demand, and the energy crisis was gradually developing. The extraordinary weather conditions, the record high wholesale natural gas prices and the lack of storage materials to cover demand led to repetitive record high prices in most of the European capitals by the end of 2021. The increasing trend became more extreme during the second half of the year, reaching 170 points in December 2021. After climbing the sharpest step in its historical data in January 2022 and its largest peak in October 2022, the HEPI electricity index currently stands at 223 points (EUR-15).

The economic downturn which impacted energy demand and wholesale prices in 2009 is much more visible in the development of residential gas prices. The gas price index dropped significantly in 2009 and reached its lowest value only in February 2010 at 81 index points (nine months after the lowest value in the electricity price index). Retail prices started to recover in the winter of 2010 when a cold wave hit many parts of Europe. The index steadily increased until the beginning of 2013. It remained between 105 and 110 index points ever since despite a significant drop in natural gas prices on international markets during the year 2015. In 2016 however, gas prices plummeted reaching a 6-year low in September 2016 at 93 points. After a small hike up to 96 points in March 2017, a bigger one followed to 103 points in November 2018. There was a decreasing trend for two years, up until the gas price index started increasing, surpassing November 2018 levels for the first time in August 2021. The ongoing energy crisis greatly affected the gas price index, which was almost doubled within 2021, going from 87 points in January 2021 to 163 points in November 2021. Since then, its value was doubled again in October 2022, reaching 351 points; it currently stands at 233 index points.

When examining the averages of the end-user prices for both electricity and gas, the following changes can be observed; from a year ago, March 2022, the electricity bills in all EU capitals have increased by 9% while the gas bills have increased by 6%.

Figure 1: Evolution of residential energy and distribution prices excluding taxes in the EUR-15

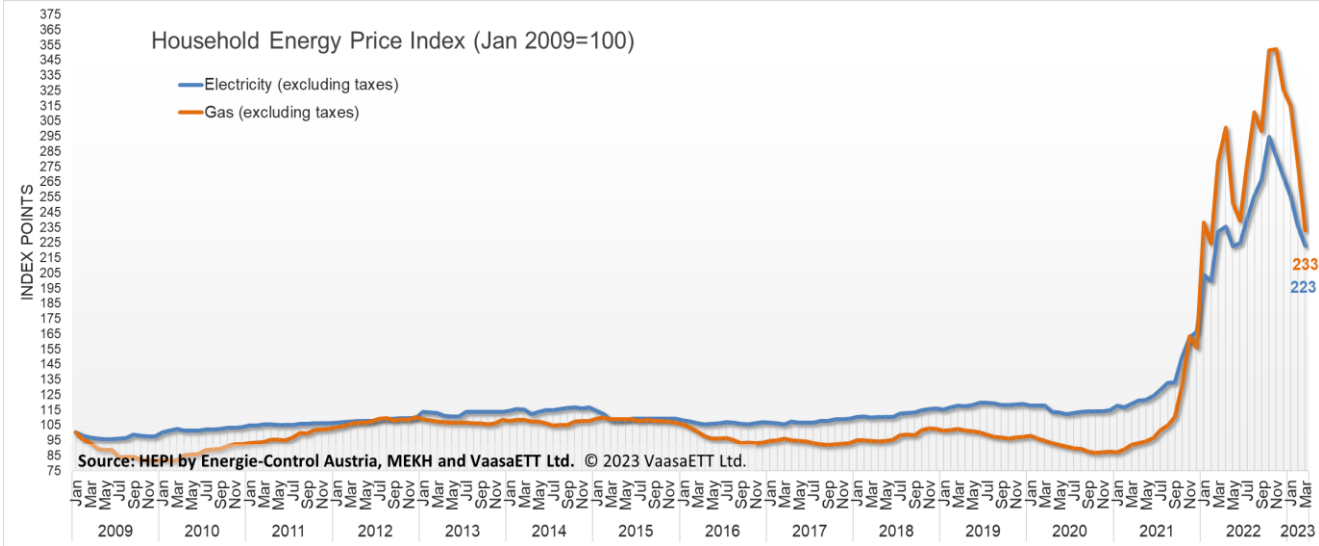
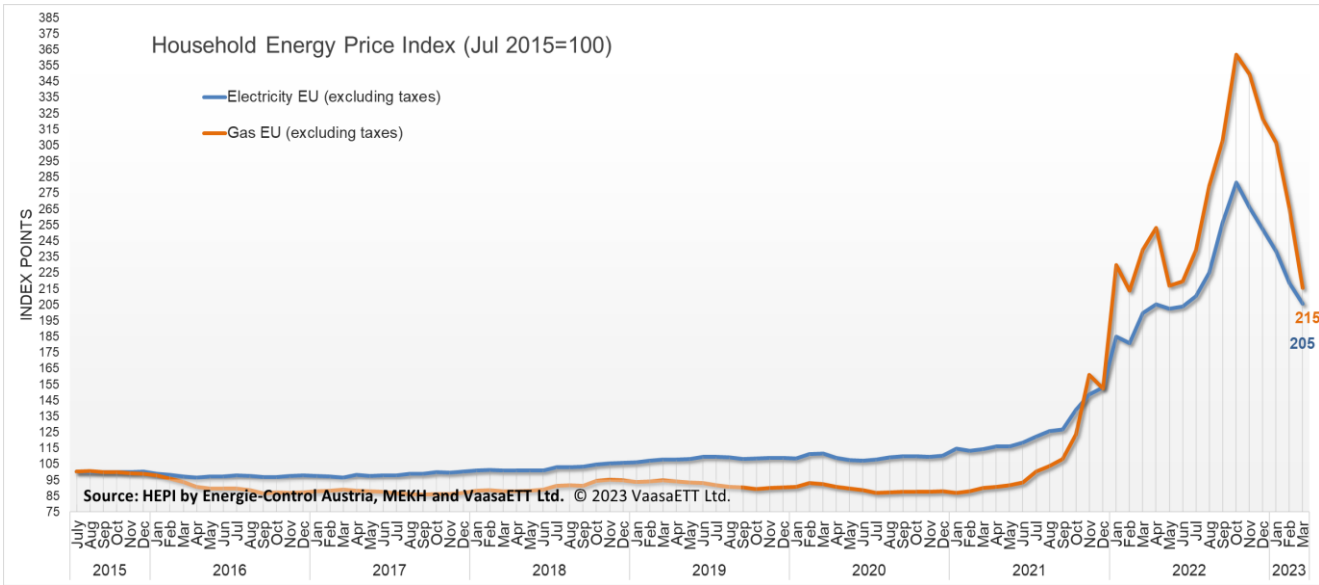


Figure 2: Evolution of residential energy and distribution prices excluding taxes in the EU¹



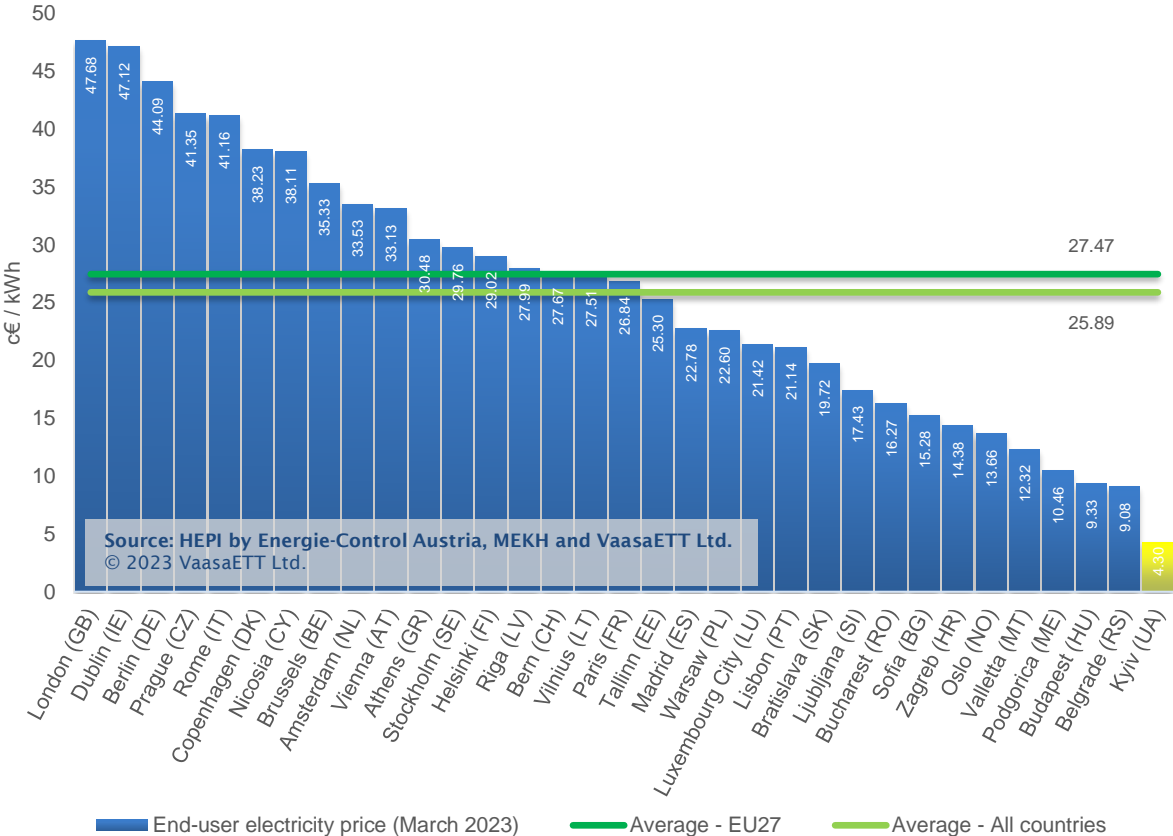
¹ EU-28 values were used between July 2015 - January 2020. EU-27 values are used from February 2020 onwards.

Residential Electricity Prices

Figure 3 shows the end-user price of electricity in the 33 European capital cities as of March 1st, 2023. It shows that depending on where a customer lives in Europe, the electricity price can vary by a ratio of over 5. If we include Kyiv, the price varies by a ratio of over 11. London and Dublin are the most expensive cities for household customers in Europe, followed by Berlin, Prague and Rome.

Kyiv¹ appears to have the least expensive electricity price, followed by Belgrade, Budapest and Podgorica. In nominal terms, prices in the capital cities of Central and Eastern Europe (CEE) tend to be lower than average; Prague, Riga and Vilnius are the only capital cities among the CEE countries in which the price of electricity is above the European average.

Figure 3: Residential electricity prices including taxes



¹ As long as the Ukrainian crisis continues, the price of Kyiv will be kept stable and will be represented in different colour in the HEPI graphs.

The most significant changes that took place in the electricity market this month were as follows²:

- A 14% price increase in Helsinki, due to an increase in the energy component;
- A 2% price increase in Nicosia, due to an increase in the energy component;
- A 1% price increase in Brussels, due to an increase in the energy component;
- A 1% price increase in Paris, due to an increase in the distribution component;
- A 14% price decrease in Rome, due to a decrease in the energy component;
- An 8% price decrease in Vienna, due to decreases in the distribution and distribution taxes components;
- A 7% price decrease in Tallinn, due to a decrease in the energy component;
- A 5% price decrease in Copenhagen, due to decreases in the energy and distribution components;
- A 5% price decrease in Dublin and Madrid, due to decreases in the energy and energy taxes components;
- A 5% price decrease in Riga and Stockholm, due to decreases in their energy components;
- A 1% price decrease in Athens due to decreases in the energy and energy taxes components;
- A 1% price decrease in London;
- A 1% price decrease in Berlin and Oslo, due to decreases in their energy components.

In March, an overall slight downward trend was observed in retail electricity prices. This was the fifth consecutive month that households experienced this tendency and comes in contrast to the continuous increase in prices that was in place from February to October 2022. The only city that saw a considerable increase in its household electricity prices was Helsinki, whereas only a few cities saw marginal increases, more precisely Brussels, Nicosia and Paris. For more than half of the capital cities, however, stability was reported in their price levels, while the rest of them faced a price drop in the retail electricity market. The fall happened for a variety of reasons, depending on the country. The main reason was a response to the rapid fall of electricity prices on the wholesale market, especially in the international markets, such as Nord Pool and TTF. This trend can mainly be attributed to the extraordinarily good weather conditions combined with the overall reduced consumption. Another reason was the extensive support measures that have been implemented by the European governments to compensate for the impact of the energy crisis on retail prices and household bills. Examples include the price brake initiated by the German government and the negative PSO levy set by the Irish government.

² The change in each capital city is calculated using the prices in their local currency to exclude the impact of exchange rate fluctuations.

In Helsinki, households witnessed a price increase which can be mainly accredited to the rise of the exchange price in the Nord Pool market. This happened primarily due to an increase in demand, as Finland compensated for the reduction of electricity flows coming from Sweden towards the Baltic states³.

In Rome, the electricity price fall in households can predominantly be ascribed to ARERA's response on the price signals coming from the European electricity exchange markets, as variable offered tariffs are initially being estimated based on the forward electricity market⁴.

In Vienna and Madrid, electricity prices saw a decrease predominantly due to the fall that was observed on the wholesale price of electricity, which directly affects the retail price as well^{5,6,7}.

In Stockholm, households benefitted from a fall in electricity retail prices, chiefly due to the fall of the wholesale price on the Nord Pool market, which can be attributed to good weather conditions favouring wind production, but also to the overall reduced consumption⁸.

In Copenhagen, the price reduction in retail prices is mainly because of the reduction in the network tariff, as the network companies Cerius and Radius decided to lower their prices from 1 March⁹.

In Dublin, the price fall in household electricity prices is attributed to the substantial reduction of the PSO government levy below zero, which results in a refund that consumers will receive retrospectively from March to September 2023¹⁰. The negative PSO levy will act as an additional relief to electricity consumers' bills.

In Tallinn and Riga, the price fall comes in contrast with the initial hike of the Nord Pool price in the beginning of the month, as it was followed by a plummet on the exchange market, which mirrored the overall trend of the European wholesale market. As a result of that, electricity retailers provided lower prices to households^{11,12}.

Finally, households in Berlin experienced a significant price decrease due to the price brake that went into effect from March 1st. However, the decrease is not clearly observed in this month's price change,

³ Delfi.lt: "[Wholesale price of electricity up by 13% on March](#)", 07.03.23

⁴ News Italy 24: "[Next quarter electricity price drop by more than 20%](#)", 09.03.23

⁵ Vienna.at: "[Stromnetzentgelte sinken ab 1. März: Strom wird billiger](#)", 27.02.23

⁶ Die Presse: "[Strompreise im Großhandel sinken weiter](#)". 08.03.23

⁷ Diario Vasco: "[Fuerte descenso del precio de la luz: las horas más baratas](#)", 07.03.23

⁸ Boras Elhandel: "[Elpriser idag](#)", 08.03.23

⁹ Andel Energi: "[Sådan er prisen for transport af el](#)"

¹⁰ The Irish Times: "[Electricity bills to see EUR90 reduction as state levy cut to zero](#)", 09.02.23

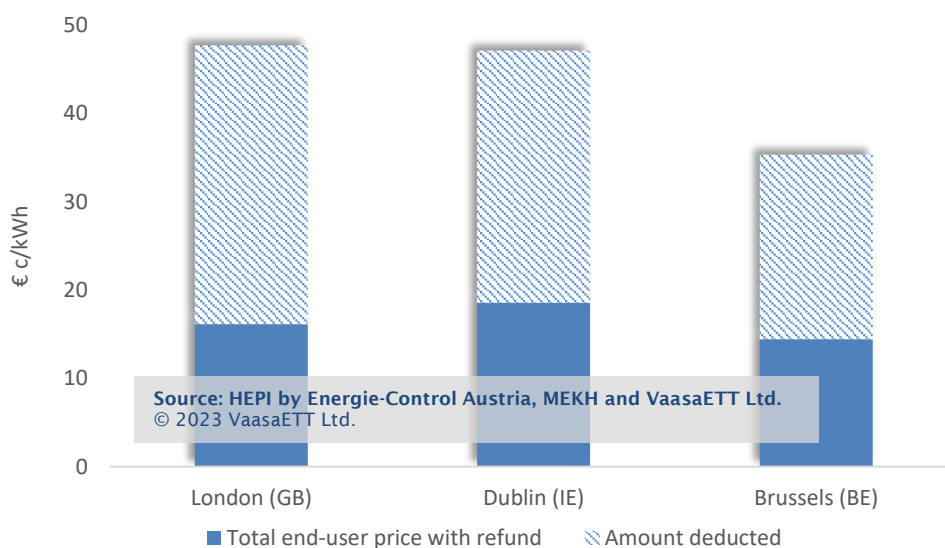
¹¹ TV3.lv: "[The pace of price growth is slowing down in February](#)", 10.03.23

¹² The Consumer: "[On Saturday, the stock market price of electricity will drop by more than 50 percent](#)". 17.03.23

which reflects the fact that the support measure has been also implemented retrospectively, covering the months of January and February, as well¹³.

In an effort to shield consumers from continuous soaring energy prices, European governments have adopted multiple measures during the energy crisis, which are incorporated in the prices shown in the HEPI methodology. Nevertheless, in some cases, occasional or seasonal energy schemes are introduced to end users as one-time refunds and compensations, that in fact correspond to a longer period of consecutive high prices. The impact of such measures is compared separately, in Figure 4.

Figure 4: Comparison of electricity end-user price with and without energy refund incorporated



To begin with, in Great Britain¹⁴, households will receive a £400 discount in their electricity bill, divided into 6 equal priced instalments for a 6-month period, starting from October 2022, via direct credit from their supplier. Similarly, in Ireland, residential consumers are eligible for a €600 credit¹⁵, applied in 3 instalments of €200, starting from November 2022. The credit will be transferred directly through suppliers to their customers' electricity bill. Finally, in Belgium, the government's compensation¹⁶ for additional support to households has been extended for January to March 2023, totalling the amount of €183 for this 3-month period.

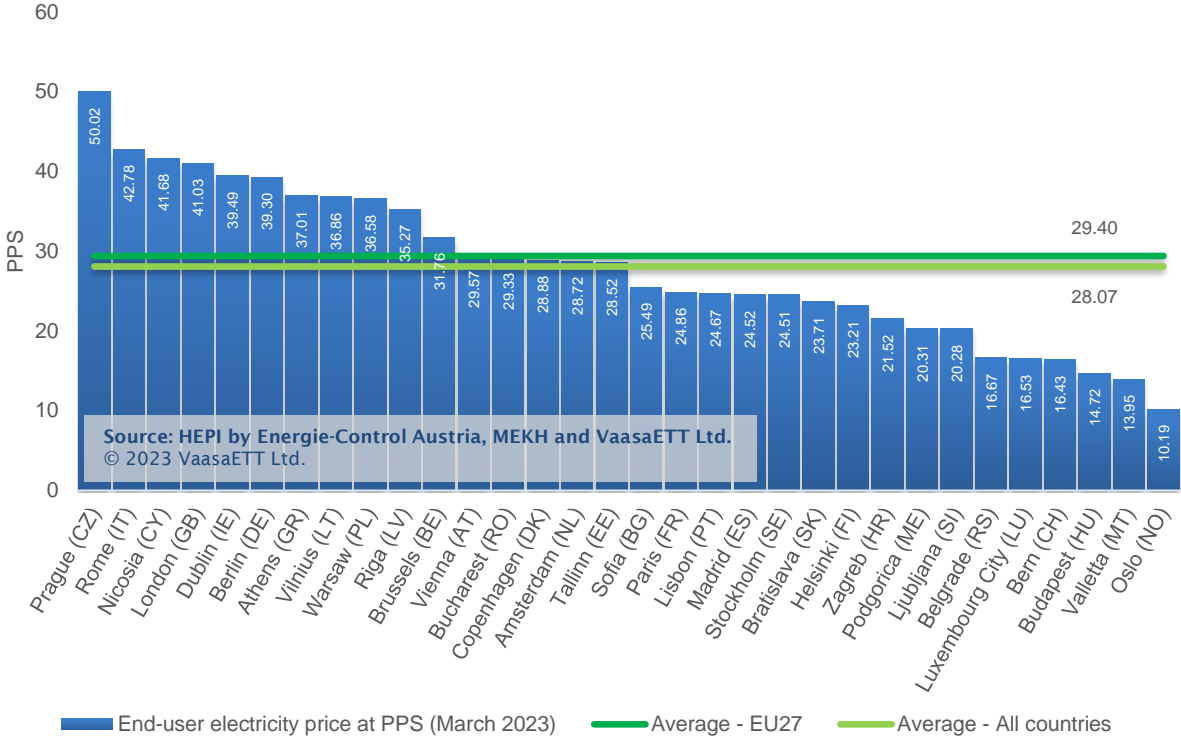
¹³ Die Bundesregierung: "[Electricity and gas price brake](#)", 14.03.23

¹⁴ UK Government: "[£400 energy bills discount to support households this winter](#)", 29.07.2022

¹⁵ Citizens Information: "[Electricity account credit](#)", 21.10.2022

¹⁶ Economie: "[Forfait de base pour l'électricité](#)", 30.01.2023

Figure 5: Residential electricity prices including taxes at PPS



When adjusted to purchasing power standards (PPS) in each country, the picture changes dramatically. PPS is an artificial common reference currency that eliminates general price level differences between countries¹⁷. When expressed in PPS, energy prices are thus shown in relation to the cost of other goods and services. The lowest adjusted household electricity prices are found in Oslo, Valletta, Budapest and Bern, while the highest are currently in Prague, Rome and Nicosia. Most of the CEE countries end up with electricity prices which are relatively low compared to the general level of prices in the country and below the European average (Figure 5); Prague, Riga, Vilnius and Warsaw are the only capital cities among the CEE countries in which the price of electricity is above the European average.

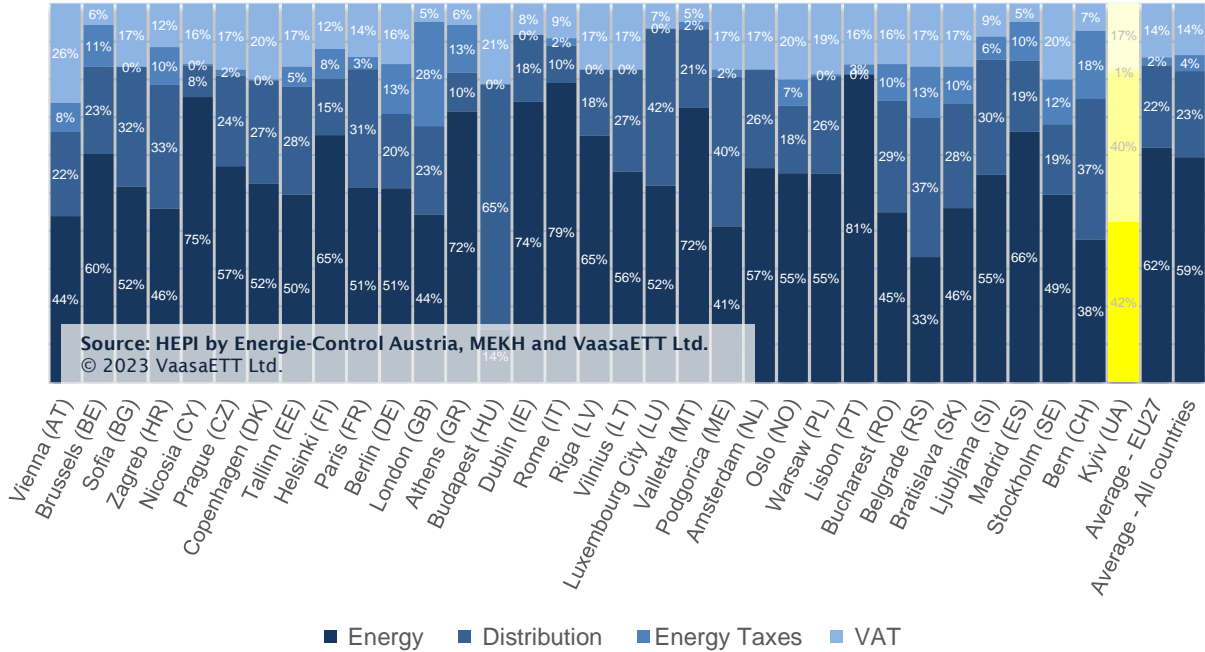
Figure 6 shows the breakdown of the electricity price in the 33 analysed capitals, into energy, distribution, energy taxes¹⁸ and VAT. Our survey shows that on average, energy (the contestable component of the price) represents 62% of the end-user price of electricity bill, distribution 22%, energy taxes 2% and VAT 14% for the European capitals.

¹⁷ Eurostat: [Purchasing power parities - Overview](#)

¹⁸ Energy taxes component is the sum of all the taxes, fees and levies.

If we focus on the cost of energy as a commodity, in Budapest it currently represents just 14% of the end-user electricity price, which is the lowest among all surveyed cities. On the contrary, Lisbon has the greatest energy percentage, reaching 81% of the end-user price in March 2023.

Figure 6: Residential electricity price breakdown¹⁹



Additionally, starting from January 2020, a typical consumer in Amsterdam pays zero energy tax due to the increased amount of tax credit, which exceeds the indicated energy tax amount. On the contrary, they receive a refund on the exceeding tax credit amount. The aim of this refund is to encourage consumers towards electrification and switching away from gas heating and appliances.

¹⁹ Please note that proportions appearing in the graph are rounded, and due to this may not add up to 100%. Additionally, for Amsterdam (NL), the typical household considered in HEPI research receives a tax refund on their energy tax. When considering this, the end-consumer's bill breakdown is as follows: Energy component 68%, distribution 31%, energy taxes -16%, and VAT 17%. For Vilnius (LT), the typical household considered in HEPI research receives a tax refund on their energy tax. When considering this, the end-consumer's bill breakdown is as follows: Energy component 58%, distribution 28%, energy taxes -3%, and VAT 17%. For Luxembourg City (LU), the typical household considered in HEPI research receives a tax refund on their energy tax. When considering this, the end-consumer's bill breakdown is as follows: Energy component 81%, distribution 65%, energy taxes -53%, and VAT 7%. For Lisbon (PT) the typical household considered in HEPI research receives a refund for the use of energy infrastructure, following the reduction in network access tariffs. When considering this, the end-consumer's bill breakdown is as follows: Energy component 119%, distribution -39%, energy taxes 4%, and VAT 16%. For Dublin (IE), the typical household considered in HEPI research receives a tax refund on their energy tax. When considering this, the end-consumer's bill breakdown is as follows: Energy component 78%, distribution 19%, energy taxes -5%, and VAT 8%.

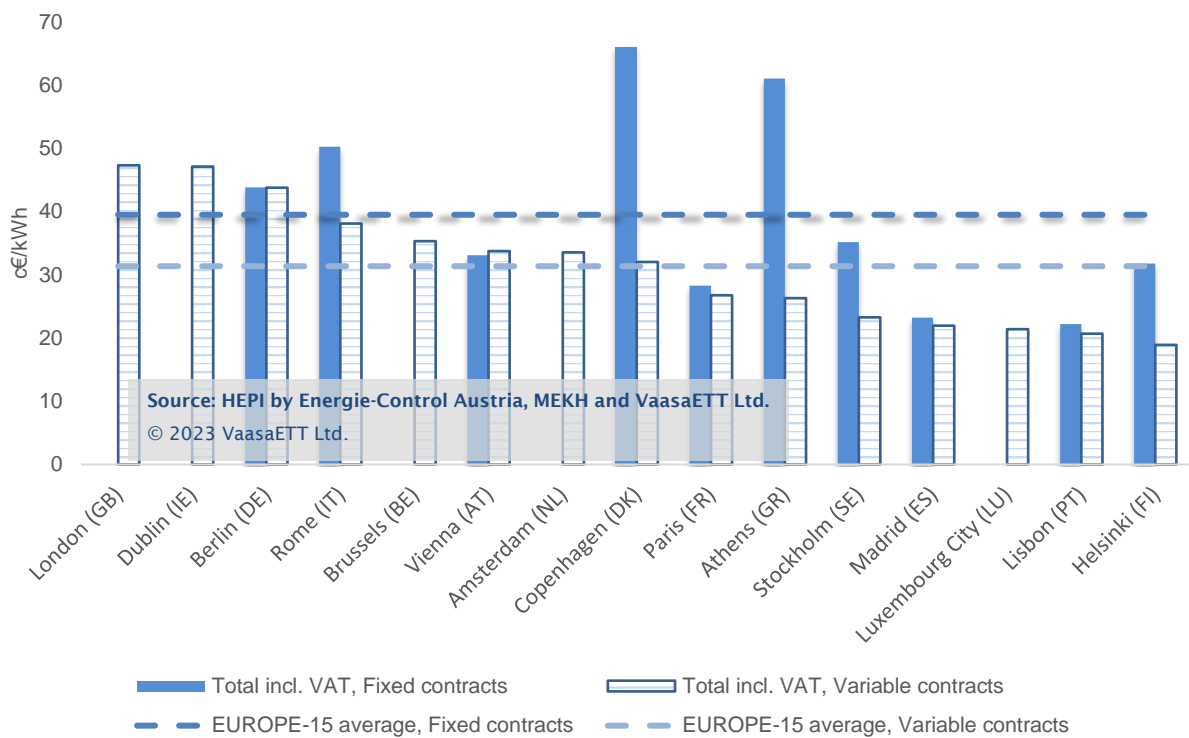
In the same manner, in Luxemburg City²⁰, the typical customer is paying negative energy taxes as a result of the compensation mechanism that is currently in force, intended to offset the increase in the energy component and stabilise prices to 2022 levels.

Likewise, in Vilnius, starting from January 2023, a typical customer appears to receive compensation through the energy taxes, to partly offset the increase, since the State Regulatory Authority set a higher minimum limit above which prices are being compensated.

Moreover, starting also from January 2023, a typical consumer in Lisbon²¹ will be paid for using the electricity infrastructure, following a noticeable reduction in network access tariffs, which aims at eliminating the significant energy component increases.

Finally, starting from March 2023, a typical customer in Dublin²² is paying negative energy taxes, due to the increased amount of tax credit (PSO Payments), which will come as an additional relief to the electricity customers.

Figure 7: All-in electricity end-user price including VAT (c€/kWh) for EUR-15, average fixed vs variable contracts



²⁰ ILR: [“Règlement ILR/E22/58 du 28 décembre 2022 fixant la contribution au mécanisme de compensation de la catégorie A pour l’année 2023 - Secteur Électricité.”](#), 28.12.2022

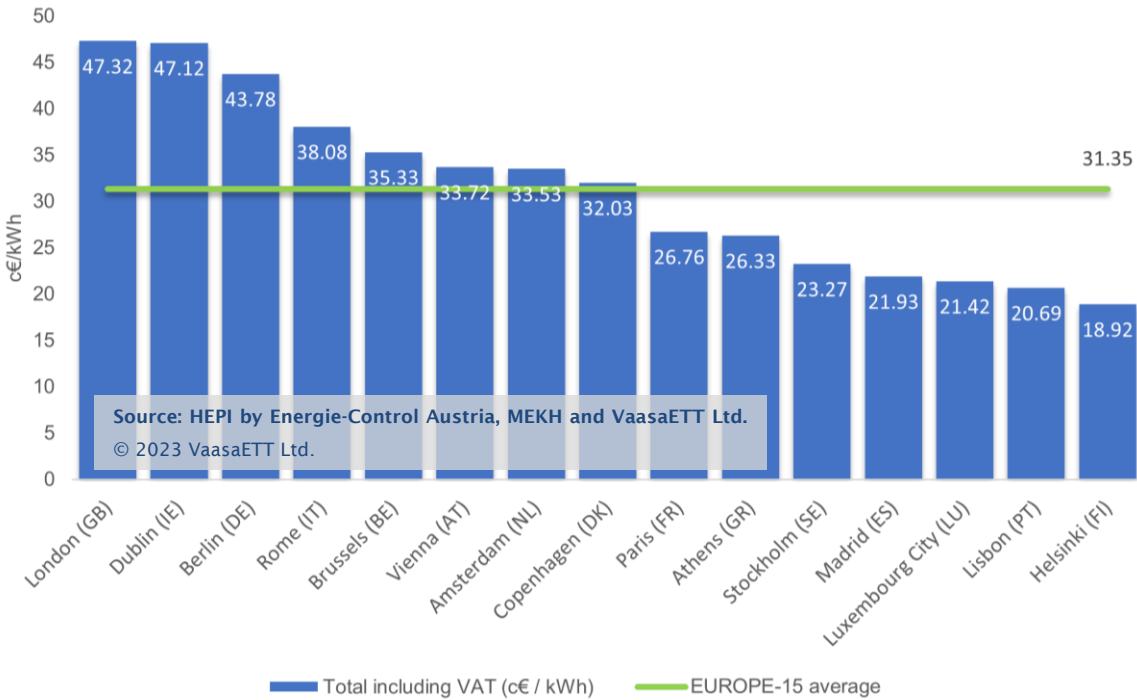
²¹ Echoboomer: [“O que muda na fatura da energia em 2023”](#), 31.12.2022

²² CRU: [“Direct PSO Payments Mechanism”](#) /

Before the energy crisis fixed (price and term) and variable prices were relatively similar. A fixed price was often cheaper since it afforded the supplier lower loyalty and procurement risk. Though customers essentially gambled a little on the direction of the market, it was not a particularly significant choice for most customers. In the more mature markets at least, active customers nevertheless tended to choose fixed prices. Since the crisis, the situation has mostly reversed. Fixed prices, where available (in some markets they have been unavailable since early or mid crisis), now tend to be higher than variable prices, in some cases by a very large margin.

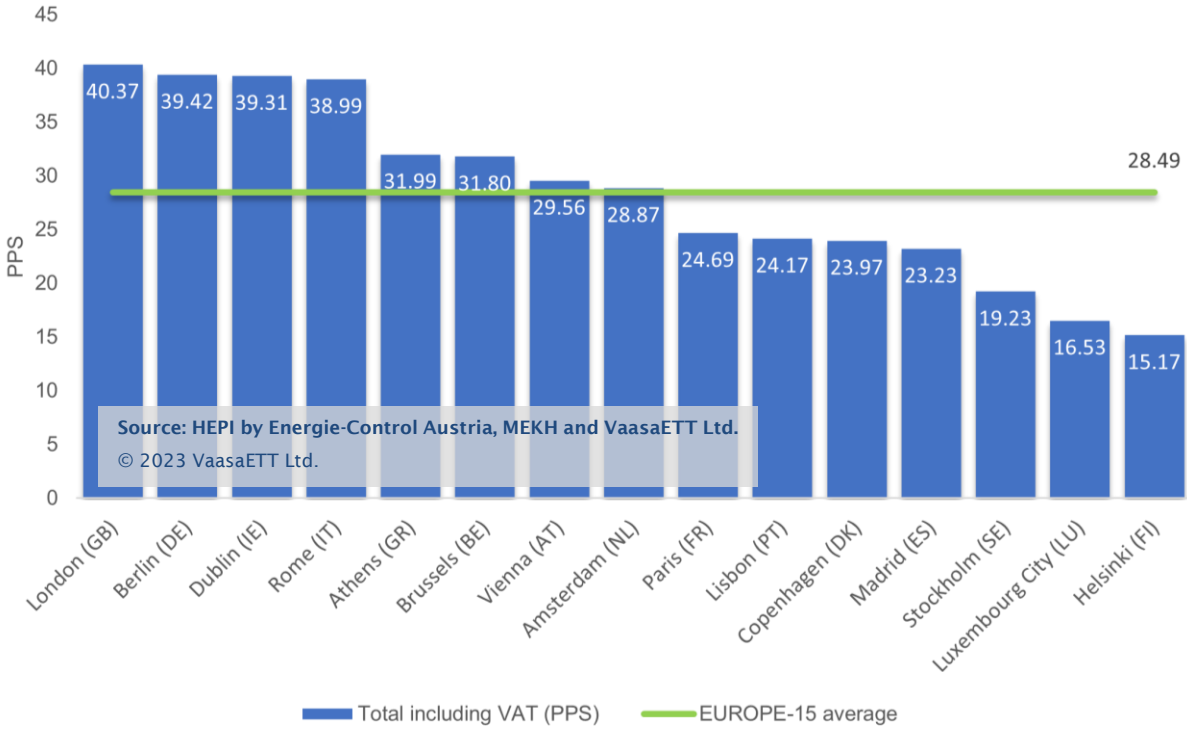
Figure 7 and Figure 8 show the situation as of March 2023 for a selection of markets, the EUR-15 markets. Across all the markets shown, the average price for fixed prices was 39.49 c€/kWh. For variable prices it was 31.35 c€/kWh. Naturally, for those markets where fixed prices are both available and very different from variable prices, the average of the two is less representative than in other markets. This is especially the case in Copenhagen and Athens. For instance, in Athens most customers have variable contracts and therefore the variable price is more representative of the typical price paid.

Figure 8: All-in electricity end-user price including VAT (c€/kWh) for EUR-15, variable contracts only



If we adjust the variable prices for purchasing parity (Figure 9), we arguably gain a clearer picture of the relative significance of the most popular prices in March 2023.

Figure 9: All-in electricity end-user price including VAT (PPS) for EUR-15, variable contracts only



Residential Gas Prices

Figure 10 shows the price of natural gas paid typically by residential customers in 28 European capital cities as of March 1st, 2023²³. The highest price is paid by inhabitants of Stockholm who pay over 2 times the European average end-user price, followed by Vienna, which is the second most expensive capital city. This can be explained by the nature of the Swedish gas market; the small size of only 92,000 household gas customers in the whole of Sweden of which 58,000 in the isolated gas network in Stockholm.²⁴ Amsterdam is currently the third most expensive capital city.

The price in Stockholm is almost 12 times as high as in Budapest, which is the cheapest city for gas in EU, and almost 15 times as high if we include Kyiv²⁵. Even more pronounced than for electricity,

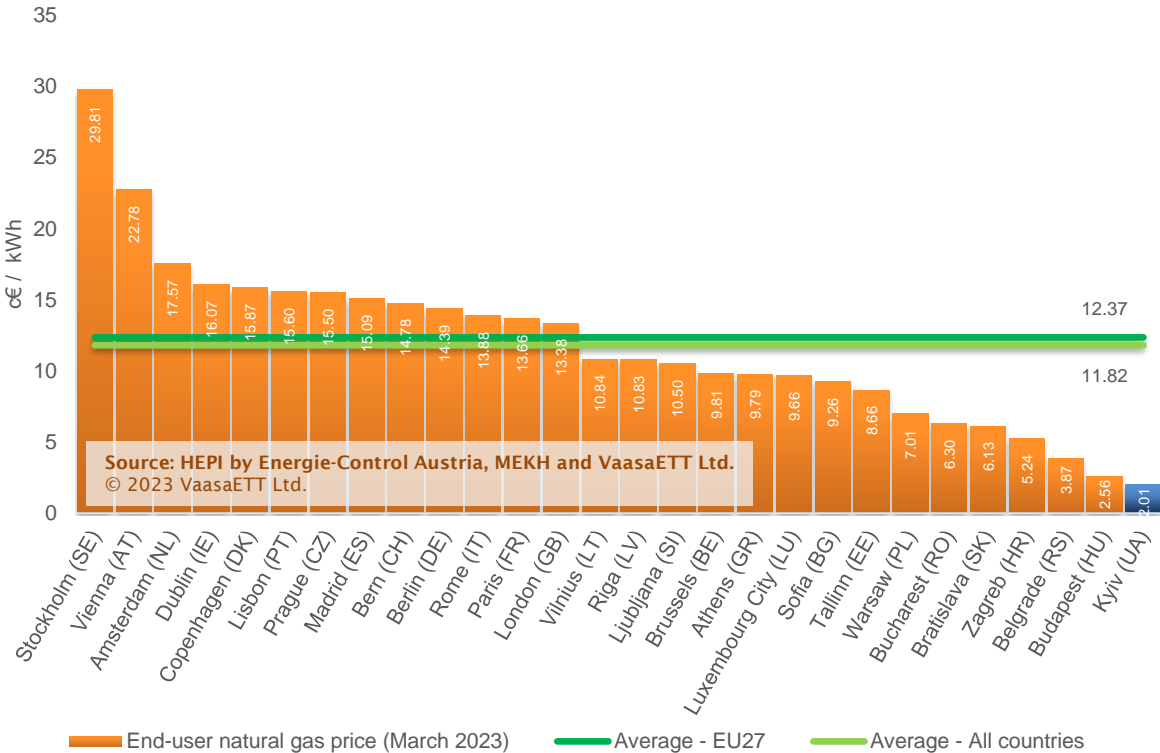
²³ Please note that Helsinki, Nicosia, Oslo, Podgorica and Valletta have been left out of this analysis on gas prices as there is virtually no residential gas market in these cities.

²⁴ The Swedish electricity and natural gas market 2021 Ei (Ei R2022:07)

²⁵ As long as the Ukrainian crisis continues, the price of Kyiv will be kept stable and will be represented in different colour in the HEPI graphs.

household natural gas is usually cheaper in the CEE countries; Prague is the only capital city among the CEE countries in which the price of natural gas is above the European average.

Figure 10: Residential gas prices including taxes



The most significant changes that took place in the natural gas market this month were as follows ²⁶:

- A 9% price increase in Vienna, due to increases in the energy and energy taxes components;
- A 14% price decrease in Bern, due to a decrease in the energy component;
- An 11% price decrease in Rome, due to a decrease in the energy component;
- A 10% price decrease in Athens and Sofia, due to a decrease in the energy component;
- A 9% price decrease in Brussels and Tallinn, due to a decrease in the energy component;
- An 8% price decrease in Copenhagen, due to a decrease in the energy component;
- A 6% price decrease in Madrid;
- A 1% price decrease in Berlin, due to a decrease in the energy component;
- A 1% price decrease in London.

Household gas prices resumed their modest downward trend, building up on a situation that has characterized the gas market since October. Vienna was the sole capital city which reported an increase on gas household bills, while the majority of the capital cities saw their retail gas prices

²⁶ The change in each capital city is calculated using the prices in their local currency to exclude the impact of exchange rate fluctuations.

remain at previous month's levels. About 1/3 of capital cities studied, however, enjoyed a drop in their gas bills. The chief reason for the fall was the remarkable drop on the wholesale market, with the main benchmark index, TTF, consolidating for the first time since early 2022 below the 50 €/MWh mark. Subsequently, the natural gas retail price of many European markets saw a decrease to the levels of prior to the war in Ukraine, that has previously led to the general natural gas supply crisis.

In Vienna, the retail gas price hike for households can be explained by the fact that current prices are a result of procurement processes by energy companies that took place several months ago, hence they reflect a higher level of wholesale gas prices than the existing one²⁷.

In Bern, lower retail gas prices are predominantly because of EWB's decision, together with the Bern municipal council, to lower its tariffs for consumers, as a result of the considerably lower purchase prices for gas on the procurement markets²⁸.

In Rome, households benefitted from a gas price fall, which is mainly due to the response from ARERA to the European trade market tendency. More specifically, the PSV virtual trading market, to which the price set by ARERA is pegged, recorded a new drop, which led to lower retail prices²⁹.

In Sofia, price reduction in retail gas trade is essentially mirroring the decision by Bulgaria's utilities regulator to approve a 14.2% decrease in the regulated gas price for the month of March, which can be attributed to the overall wholesale gas price downward trend in Europe, in combination with the recent LNG cargo purchases that facilitate the increase in supply³⁰.

Correspondingly, in Brussels, Madrid and Copenhagen, the lower gas prices in households reflect the wholesale gas price reduction on the TTF market which has been observed in February and March^{31, 32, 33}.

In Tallinn, the Estonian regulator, followed by the gas suppliers, reduced the retail price of gas, in response to the fallen prices on the TTF market, but also due to the new shipment of LNG in Klaipeda, which further increased supply³⁴.

²⁷ Kurier.at: "[Österreicher werden fallende Gaspreise erst in "einigen Monaten" spüren](#)", 01.03.23

²⁸ Messenger.ch: "[EWB lowers gas prices](#)". 03.03.23

²⁹ SOSTariffe.it: "[Bollette gas Marzo 2023: netto calo del prezzo, le stime del mese](#)", 14.03.23

³⁰ Sofia Globe: "[Bulgaria utilities regulator cuts gas prices by 14.2% for March 2023](#)", 02.03.23

³¹ Mijnergie.be: "[Gasprijs zet daling verder](#)", 03.03.23

³² DI Business: "[Trods snestorm: Gasprisen falder og falder](#)", 06.03.23

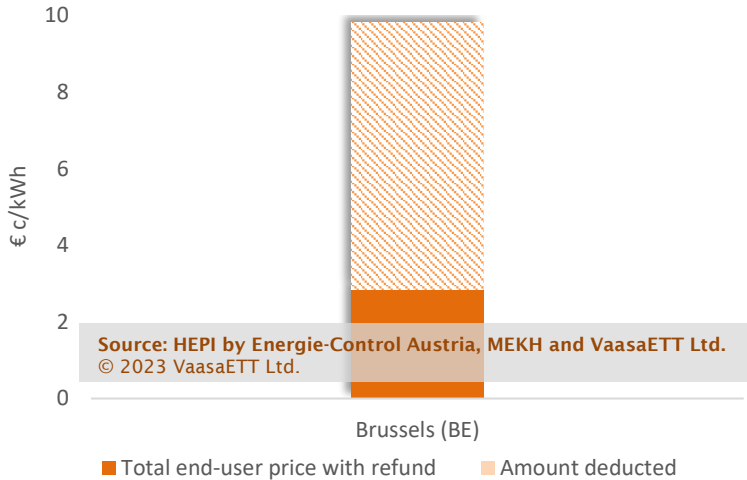
³³ PV-Magazine: "[La luz baja un 22% en la primera quincena en España y su precio se reacopla al gas](#)". 17.03.23

³⁴ ERR.ee: "[Eesti Gaas langetab aprillist hinda](#)", 06.03.23

Finally, households in Berlin experienced a significant gas price decrease due to the price brake that went into effect from March 1st. The gas price brake, that was initially announced at the end of 2022, has set the price for 80% of the forecast consumption at 12ct/kWh³⁵. However, for the exact same reason as for the electricity market, the decrease is not clearly observed in this month's price change, which reflects the fact that the support measure has been also implemented retrospectively, covering the months of January and February, as well. The price drop accounts for a significant 37%, if prices are being compared to December 2022, prior to the implementation of the measure.

In an effort to shield consumers from continuous soaring energy prices, European governments have adopted multiple measures during the energy crisis, which are incorporated in the prices shown in the HEPI methodology. Nevertheless, in some cases occasional or seasonal energy schemes are introduced to end users as one-time refunds and compensations, that in fact correspond to a longer period of consecutive high prices. The impact of such measures is compared separately, in Figure 11.

Figure 11: Comparison of natural gas end-user price with and without energy refund incorporated.



In Belgium, the government's compensation³⁶ for additional support to households initially included a package of €270 cash back for natural gas, provided in 2 instalments of €135 per month, starting from November 2022. In January 2023, the measure was extended for 3 more months, automatically providing a total amount of €405 to all consumers.

In the same vein as of electricity, gas prices at PPS have a very different outcome from the actual prices. This month, Budapest, Belgrade and Bratislava were the cheapest cities when adjusted to PPS (Figure 12).

³⁵ ENBW.com: "[Important information on the gas/heat and electricity price brake for our customers](#)"
³⁶ Economie: "[Forfait de base pour l'électricité](#)", 22.11.2022

Figure 12: Residential gas prices including taxes at PPS

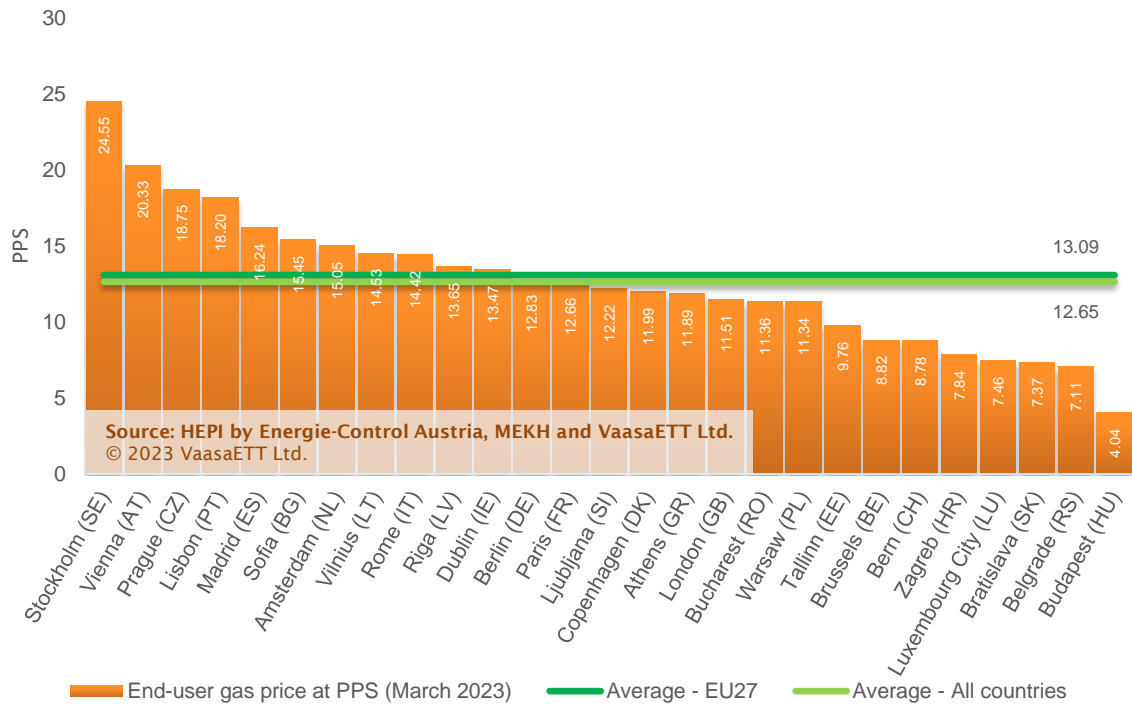
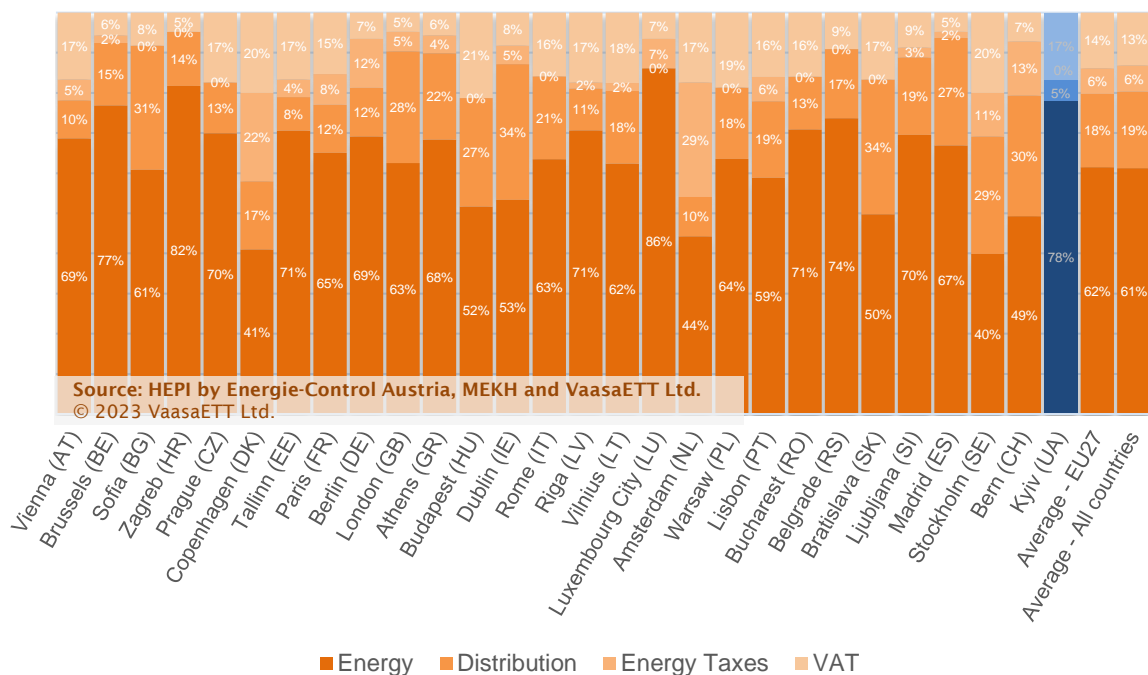


Figure 13: Residential gas price breakdown³⁷



³⁷ Please note that proportions appearing in the graph are rounded, and due to this may not add up to 100%. Additionally, please note that for Rome (IT), the typical household considered in HEPI research receives a tax refund on their energy tax. When considering this, the end-consumer's bill breakdown is as follows: Energy component 70%, distribution 23%, energy taxes -8%, and VAT 16%. ARERA, "[Delibera 30 giugno 2022 296/2022/R/gas](#)", 30.06.2022

Our survey shows that on average, energy (the contestable component of the price) represents 62% of the end-user price of natural gas, distribution 18%, energy taxes 6% and VAT 14% for the European capitals. In the Netherlands, energy taxes are used for nudging the consumers' behaviour and energy use. Even more so starting from January 2020, the energy tax for residential natural gas user is typically 29%. The aim is to encourage the use of electric heating and appliances instead of gas.

Overall, results show that market forces represent about 62% of the end-user price both for electricity and gas, whereas national fiscal and regulatory elements are responsible for the remaining 38% through distribution tariffs, energy taxes and VAT. The current energy crisis has led to significant increase of the average energy component in EU capitals. The energy share of end-user price of electricity used to be 41% back in March 2021, then climbed at 61% a year later and is currently standing at 62%. Likewise, in the natural gas market, the energy percentage of the end-user price used to be 42% back in March 2021 before reaching 60% in March 2022 and 62% this month.

In places where the energy component is lower, so is the incentive for customers to look for more competitive offers³⁸. Similarly, the sharp increase of energy prices drives customers to seek for more competitive offers in the market. To their disappointment, since the energy crisis started, the number of competitive offer alternatives has significantly decreased³⁹, especially for new customers.

³⁸ Latest utility customer switching data can be accessed in the most recent version of Capgemini's [World Energy Markets Observatory](#), created with partnership with VaasaETT, De Pardieu Brocas Maffei and Enerdata. VaasaETT contributes with data on the retail markets sections.

³⁹ VaasaETT: "[European retail energy prices reach record levels](#)", 20.12.2021

HEPI Data Attributes

All prices and other statistics relate to:

- The prices being offered to customers actively searching for an offer at the time of data collection
- The first day of the month
- Residential customers with a typical consumption for the national capital city
- Standing fees are added to the price per kWh so that the entire end-user cost is taken into account.
- In case of spot-based tariffs the previous month's average price is considered in the calculations to smooth day-to-day extreme changes

HEPI prices do not relate to:

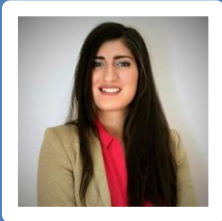
- The prices paid by customers on fixed price contracts agreed prior to the time of data collection
- The price paid by customers on tariff contracts set at a level no longer available at the time of data collection
- Sign in and other temporary bonuses and other forms of non-monetary benefits are not taken into account since they can distort the overall tariff offered, especially in cases where they are offered on a "one-off" basis
- Contracts with extra services (e.g. insurance, maintenance, etc.) and prepaid contracts are also omitted from the analysis.

Note on retrospective price adjustments:

In cases of retrospective adjustments to previous months' price (i.e. application of support measures or review of regulated price where applicable) changes are integrated retrospectively in the prices of the month(s) for which the adjustments apply. This might create a difference between the HEPI price and the actual bill amount for a given month.

Visit our project webpage at <http://www.energypriceindex.com> and subscribe to the free monthly update of the HEPI index for Europe.

For More Information



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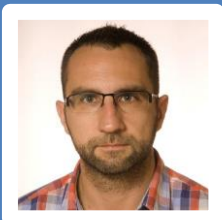


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Energie-Control Austria

Energie-Control Austria was set up by the legislator on the basis of the new Energy Liberalisation Act and commenced operation on 1 March 2001. Energie-Control is headed by Mr. Wolfgang Urbantschitsch and Mr. Andreas Eigenbauer as managing directors and is entrusted with monitoring, supporting and, where necessary, regulating the implementation of the liberalisation of the Austrian electricity and natural gas markets.

More at: www.e-control.at



The Hungarian Energy and Public Utility Regulatory Authority

The main responsibilities of the Hungarian Energy and Public Utility Regulatory Authority are consumer protection, providing regulated access to networks and systems, carrying out regulatory competencies in order to maintain security of supply and fostering competition. The scope of the infrastructures, which have to be overseen by the Hungarian Energy and Public Utility Regulatory Authority, has been extended in 2011 with the complete regulation of district heating and in 2012 with the water public utilities. As market progresses are becoming more widespread, we put emphasis on our market monitoring task and we pay specific attention to regional market integration both in electricity and natural gas. **More at:** www.mekh.hu



VaasaETT

VaasaETT is a research and advisory consultancy dedicated to customer related issues in the energy industry. VaasaETT advises its clients based on empirical evidence brought about from extensive research in the area of customer behaviour and competitive market behaviour (including smart energy offerings, demand response, energy efficiency, smart home, smart grid). VaasaETT's unique collaborative approach enables it to draw on an extensive network of several thousand energy practitioners around the world who can contribute to its research activities or take part in industry events it organises allowing VaasaETT to integrate global knowledge and global best practice into its areas of expertise. VaasaETT's truly global focus is reflected by research and strategic support having been provided to a diverse array of organisations on 5 continents including for instance 28 of the Fortune Global 500 companies, the European Commission, Government and public research bodies in Europe, Japan, the UAE, the Middle East and Australia. **More at:** www.vaasaett.com