



Household
Energy
Price
Index

Household Energy Price Index for Europe

NOVEMBER 4, 2022

October 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 increases in Dublin, Rome and Vienna

Electricity price increases in Athens, Berlin, Brussels, Copenhagen and London

Significant electricity price decreases in Riga and Tallinn

Electricity price decreases in Helsinki, Madrid, Oslo, Paris and Zagreb

Significant natural gas price increases in Dublin, Lisbon, Luxembourg City, Paris and Rome

Natural gas price increases in Brussels, London and Vienna

Significant natural gas price decreases in Athens, Sofia and Tallinn

Natural gas price decreases in Berlin, Madrid and Riga.

European Energy Price Development

Figure 1 shows the evolution of residential energy and distribution prices excluding taxes between January 2009 and October 2022 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, the HEPI electricity index currently stands at a new high of 301 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 164 points in December 2021. It currently stands at 354 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, October 2021, the electricity bills in all EU capitals have increased by 69% while the gas bills have increased by a staggering 111%.

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

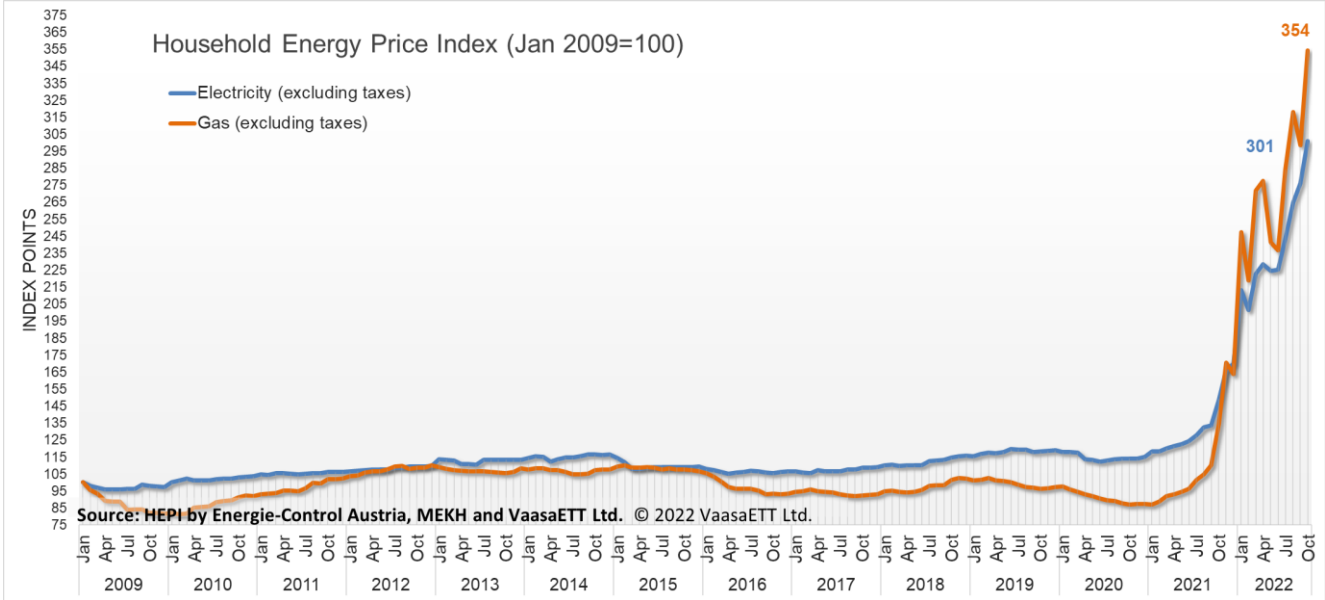
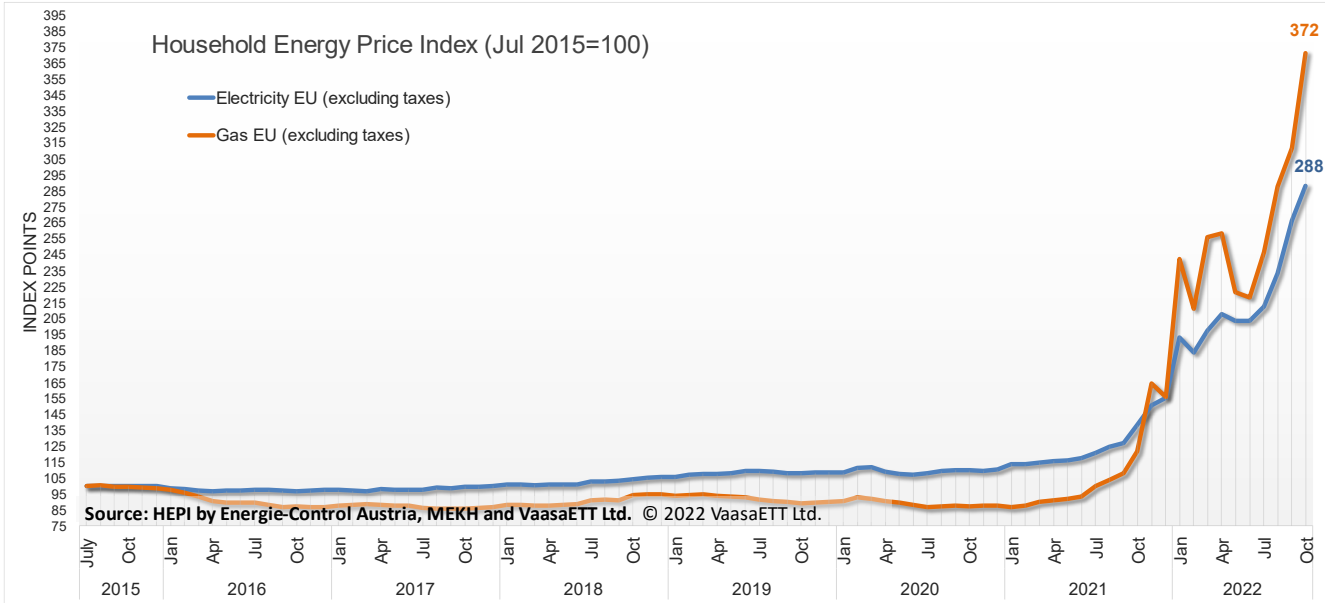


Figure 2: Evolution of residential energy and distribution prices excluding taxes in the EU¹



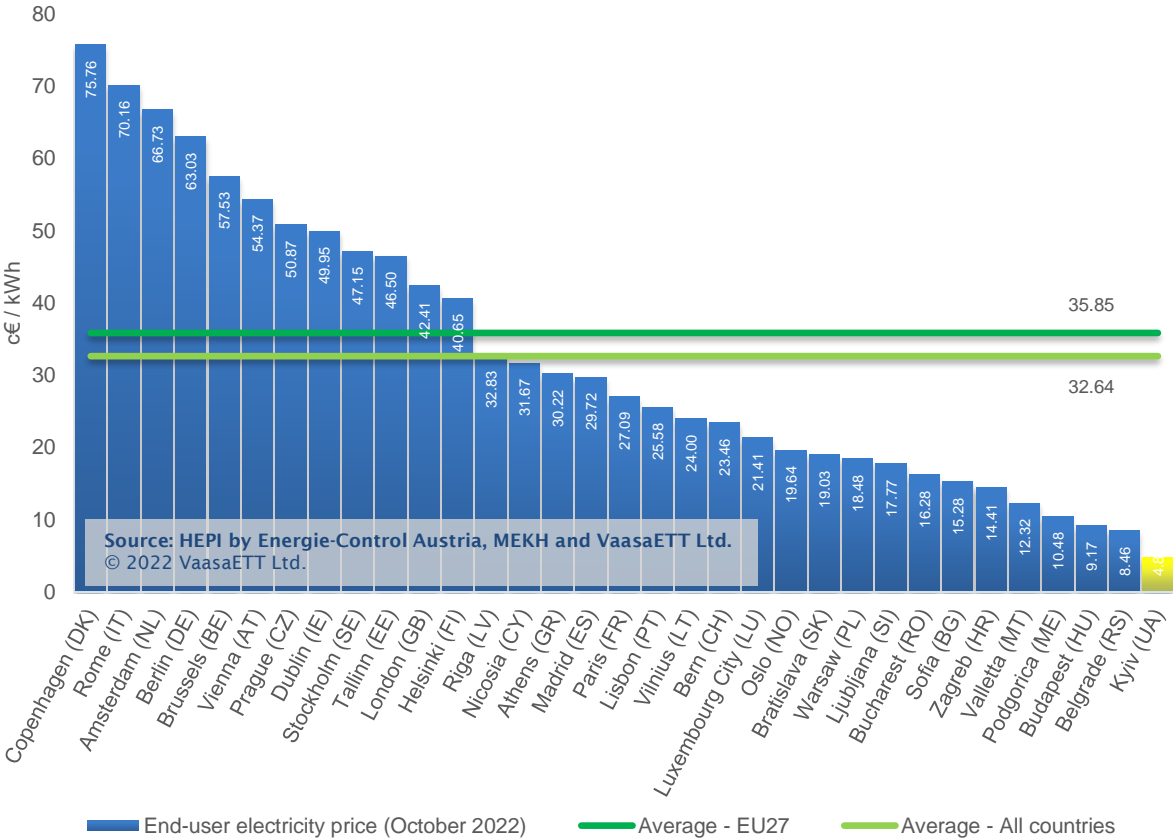
¹ EU-28 values were used between July 2015 - January 2020. EU-27 values are used from February 2020 onwards.

Residential Electricity Prices

Figure 3 shows the end-user price of electricity in the 33 European capital cities as of October 3rd, 2022¹. It shows that depending on where a customer lives in Europe, the electricity price can vary by a ratio of 9. If we include Kyiv, the price varies by a ratio of almost 16. Copenhagen and Rome are the most expensive cities for household customers in Europe, followed by Amsterdam, Berlin and Brussels.

Kyiv² 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 and Tallinn 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 A more detailed analysis on prices, focusing on variable offers can be found at the HEPI website: "[Top Stories](#)".

² 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 follows³:

- A 44% price increase in Dublin;
- A 30% price increase in Rome, due to an increase in the energy component;
- A 24% price increase in Vienna, due to increases in the energy and energy taxes components;
- A 15% price increase in Berlin, due to an increase in the energy component;
- A 15% price increase in Copenhagen, due to increases in the energy and distribution components;
- An 8% price increase in London⁴;
- A 7% price increase in Brussels, due to an increase in the energy component;
- A 2% price increase in Athens, due to increases in the energy and energy taxes components;
- A 29% price decrease in Riga, due to a decrease in the energy component, following the government's price compensation scheme;
- A 22% price decrease in Tallinn, due to a decrease in the energy component, following the government's price compensation scheme;
- A 10% price decrease in Oslo, due to a decrease in the energy component;
- A 9% price decrease in Madrid, due to decreases in the energy component and energy taxes;
- A 6% price decrease in Helsinki, due to a decrease in the energy component;
- A 3% price decrease in Zagreb, due to a decrease in the energy taxes component;
- A 2% price decrease in Paris, due to a decrease in the energy component.

Residential electricity prices continue their upward trend in October, however on a much smaller scale, compared to the previous month, with some of the capital cities studied (namely Dublin, Rome, Vienna, Berlin, Copenhagen, Brussels, Athens, and Prague) reaching new record-highs. On the other hand, some of the capitals saw a decrease in electricity prices, mainly due to the extensive measures that have been applied by the European governments to mitigate the impact of the energy crisis on household bills. Nevertheless, the prices remain significantly higher compared to the ones a year ago, which can be attributed to a combination of factors, such as increased demand connected to post-pandemic economic recovery and extraordinary weather conditions, the record-high prices for natural gas, and high CO2 emissions allowances. High energy prices have been further affected by the Russian invasion of Ukraine in late February 2022, the subsequent uncertainty over energy security

³ The change in each capital city is calculated using the prices in their local currency to exclude the impact of exchange rate fluctuations.

⁴ Starting from October 2022, households in the UK are receiving £400 off their energy bills, with the discount made in 6 instalments to help families throughout the winter period. This discount has not been included in our price analysis yet. GOV.UK, "[£400 energy bills discount to support households this winter](#)", published 29.07.2022.

and the ongoing reduced deliveries of Russian natural gas or complete termination of supply in multiple European capitals.

A remarkable price increase is observed in Dublin, since the updated higher rates that had been announced⁵⁶ by suppliers came into effect this month, claiming unprecedented continuous rising wholesale prices, particularly for gas, impacting residential electricity bills. Under current circumstances, payment support plans and funding programs for vulnerable households become available by suppliers in order to support their customers. Energy regulator's decision⁷ to set the public service obligation (PSO) levy to zero from October 1st, had a small impact to the total amount to be paid by consumers, while the government decided⁸ that the VAT reduction from 13.5% to 9% will be extended until February 28, 2023.

In Rome, residential prices rose significantly this month reflecting energy regulator's announcement⁹ that electricity prices for households are expected to rise over 59% on average in the upcoming months, due to serious abnormal levels of wholesale prices and despite efforts by both the government and the regulator to restrain them.

In Vienna, rising prices result from the limited availability of offers in the market under current energy crisis levels and increased¹⁰ rates that have been adjusted to such circumstances, applied by suppliers as of October 1st. The federal government decided¹¹ on multiple support measures, with latest being the "electricity price brake" coming into effect from December 1st, expected to tackle current increased electricity cost for households, through an electricity subsidy.

In Berlin, rising prices are related to tariff increases announced¹² by suppliers, because of high procurement costs. In some cases, suppliers offer even higher prices to new customers than to existing ones, under contract renewals. In an effort to ease surging prices, the government is planning¹³ to introduce a price cap on electricity prices by skimming off windfall profits from energy companies.

⁵ Bord Gáis: "[Record wholesale energy costs force price rise for customers](#)", 02.09.2022

⁶ Electric Ireland: "[Electric Ireland announces energy price increases effective from 1st October 2022](#)", 01.09.2022

⁷ CRU: "[CRU publishes public service obligation levy for 2022/23](#)", 29.07.2022

⁸ Ministry of Finance: "[Minister Donohoe publishes Finance Bill 2022](#)", 20.10.2022

⁹ ARERA: "[Energy: ARERA's extraordinary intervention avoids the doubling of prices, limited electricity increase to + 59%](#)", 29.09.2022

¹⁰ Wiener Zeitung: "[Noch höhere Preise bei der Wien Energie](#)", 13.10.2022

¹¹ Oesterreich: "[Das Entlastungspaket bringt's: Mehr fürs Leben – fair für alle](#)", updated 21.10.2022

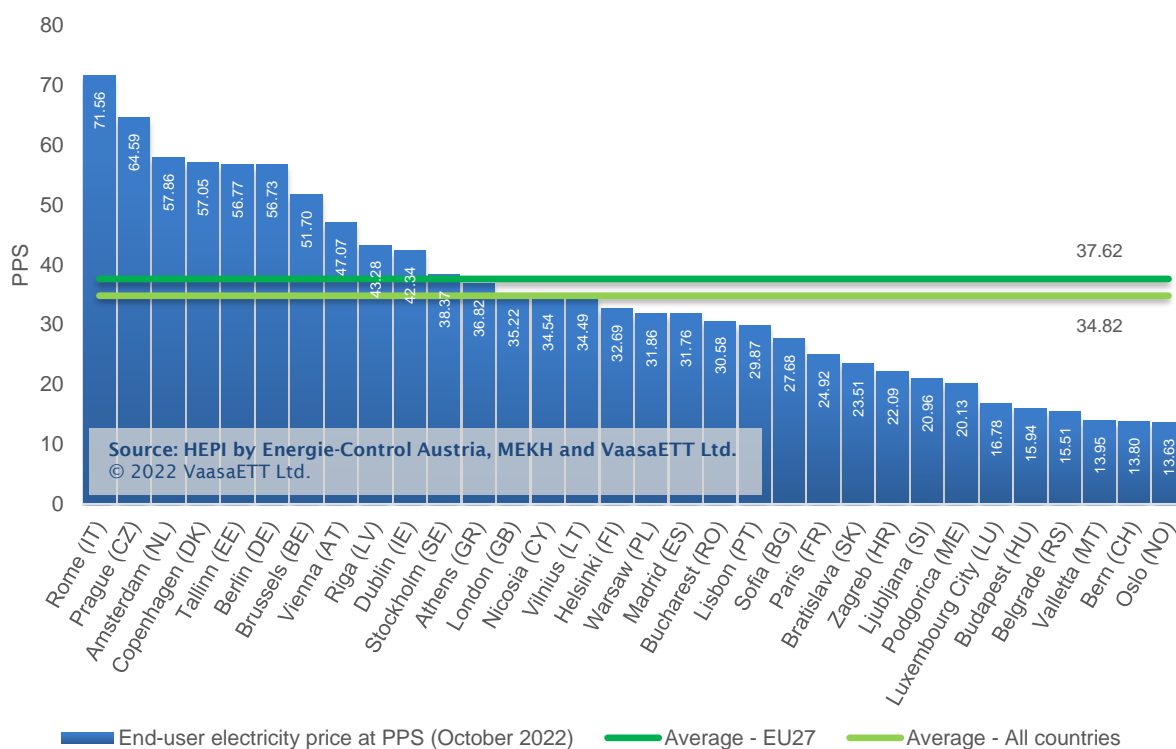
¹² Berliner Morgenpost: "[Strompreise steigen: Diese Anbieter erhöhen Preise deutlich](#)", 11.10.2022

¹³ Reuters: "[Germany to cap electricity prices by taxing excess profits](#)", 19.10.2022

On the other hand, the significant price decrease in Riga this month, reflects the drastic government support measures¹⁴ and their immediate impact on prices for all households, in the form of compensations provided by the state, absorbing a large proportion of the price increase from recent months. Similarly, in Tallinn, the government adopted¹⁵ a new energy support package, including the new lower universal service tariff, resulting in a general price decrease this month.

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 countries¹⁶. 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, Bern, Valletta and Belgrade, while the highest are currently in Rome, Prague and Amsterdam. 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 4); Prague, Riga and Tallinn are the only capital cities among the CEE countries in which the price of electricity is above the European average.

Figure 4: Residential electricity prices including taxes at PPS



¹⁴ Baltic News Network: [“Latvian government approves additional support measures for households and businesses”](#), 27.09.2022

¹⁵ ERR: [“Minister: Energy support measures will exert downward pressure on inflation”](#), 30.09.2022

¹⁶ Eurostat: [Purchasing power parities - Overview](#)

Figure 5: Residential electricity price breakdown¹⁷

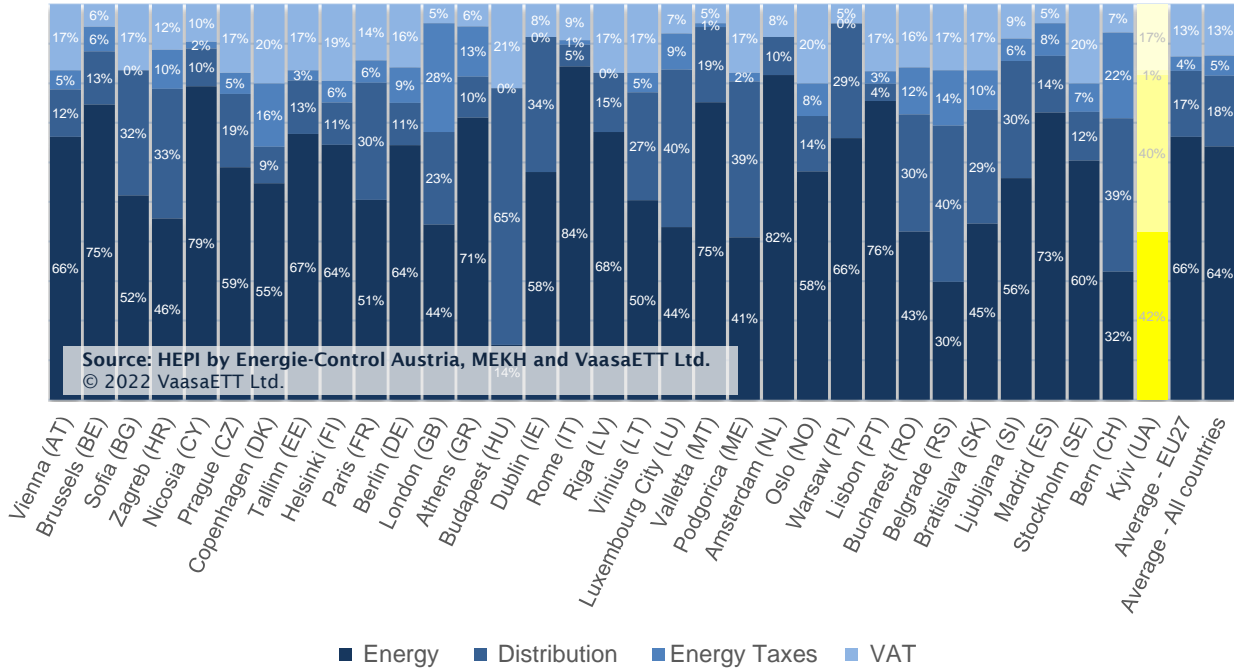


Figure 5 shows the breakdown of the electricity price in the 33 analysed capitals, into energy, distribution, energy taxes¹⁸ and VAT. Our survey shows that on average, energy (the contestable component of the price) represents 66% of the end-user price of electricity bill, distribution 17%, energy taxes 4% and VAT 13% for the European capitals.

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, Rome has the greatest energy percentage, reaching 84% of the end-user price in October 2022.

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.

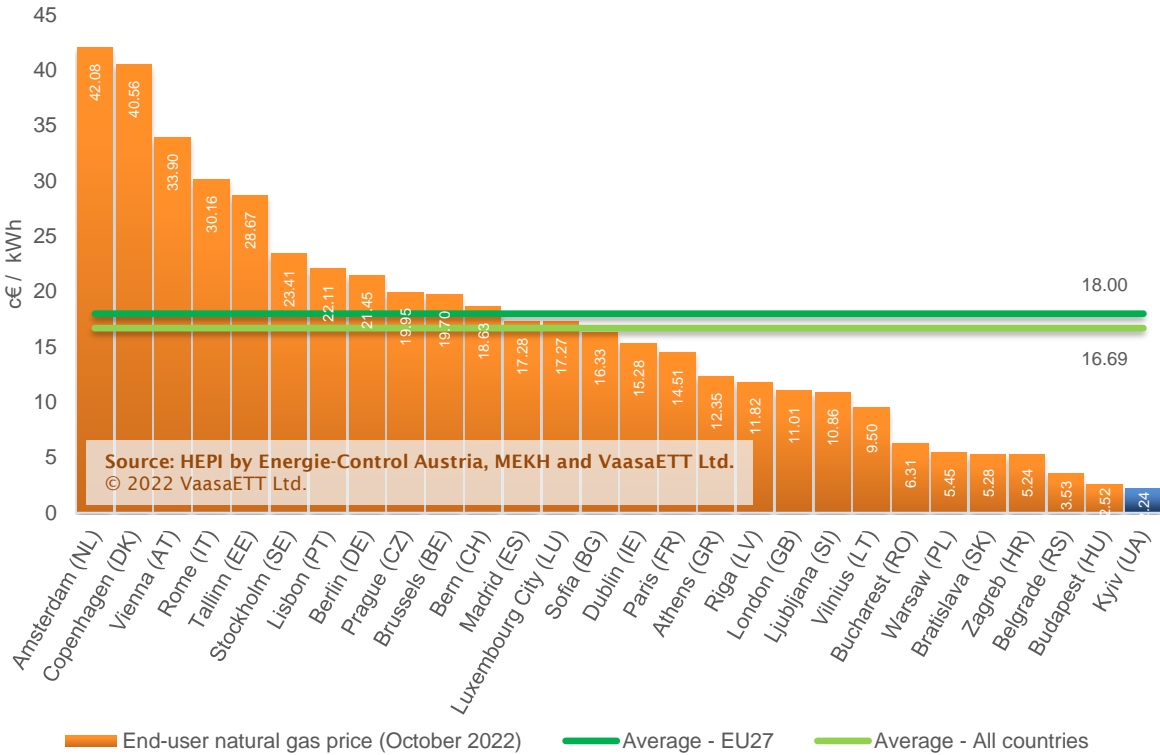
¹⁷ Please note that proportions appearing in the graph are rounded, and due to this may not add up to 100%. Additionally, please note that for Amsterdam, NL, the typical household considered in HEPI research receives a tax refund on their energy tax. When considering this, the end-consumer's bill breakdown is as follows: Energy component 107%, distribution 13%, energy taxes -27%, and VAT 8%.
¹⁸ Energy taxes component is the sum of all the taxes, fees and levies.

Residential Gas Prices

Figure 6 shows the price of natural gas paid typically by residential customers in 28 European capital cities as of October 3rd, 2022¹⁹. The highest price is paid by inhabitants of Amsterdam who pay over 2 times the European average end-user price, followed by Copenhagen, which is the second most expensive capital city. Vienna is currently the third most expensive capital city.

The prices in Amsterdam are almost 17 times as high as in Budapest, which is the cheapest city for gas in EU, and almost 19 times as high if we include Kyiv²⁰. Even more pronounced than for electricity, household natural gas is usually cheaper in the CEE countries; Prague and Tallinn are the only capital cities among the CEE countries in which the price of natural gas is above the European average

Figure 6: Residential gas prices including taxes



¹⁹ 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.

²⁰ 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 natural gas market this month were as follows ²¹:

- A 97% price increase in Rome, due to increases in the energy and distribution components;
- A 64% price increase in Luxembourg City, due to an increase in the energy component;
- A 58% price increase in Lisbon, due increases in the energy and distribution components;
- A 34% price increase in Dublin;
- A 28% price increase in Paris, due to an increase in the energy component;
- A 24% price increase in Vienna, due to increases in the energy and energy taxes components;
- A 21% price increase in Brussels, due to an increase in the energy component;
- A 10% price increase in London;
- A 55% price decrease in Athens, due to decreases in the energy and energy taxes components, following the government's price compensation scheme;
- A 29% price decrease in Sofia, due to decreases in the energy and distribution components;
- A 25% price decrease in Tallinn, due to a decrease in the energy component, following the government's compensation scheme;
- A 12% price decrease in Madrid, due to decreases in the energy component and the VAT cut;
- An 11% price decrease in Berlin, due to a decrease in the energy component and the VAT cut;
- A 5% price decrease in Riga, due to a decrease in the energy component.

Natural gas retail market prices follow a slight increase this month across Europe, continuing the ongoing upward trend that has been observed since the start of the year. Rome, Luxembourg, Lisbon, Dublin, Paris, Vienna, Brussels, Bern, Copenhagen, and Stockholm reached new record-highs, while gas prices declined in some of the capital cities studied, because of several government interventions adopted to stop the price spike. However, the current prices remain incredibly high compared to the ones a year ago. The high retail gas prices reflect the extreme wholesale prices driven by shortfalls in supply adequacy, increased natural gas demand in effort to fill gas storages before winter, under the constant fear of supply cuts, while the Russian invasion of Ukraine impacted the markets further.

The astonishing price increase observed in Rome, which is 97% compared to the previous month and more than 170% when compared to one year ago, is related to the temporary gas supply suspension of Russian gas through pipeline earlier this month²², which created instant anxiety of gas adequacy

²¹ The change in each capital city is calculated using the prices in their local currency to exclude the impact of exchange rate fluctuations.

²² Reuters: "[Gazprom resumes gas exports to Italy via Austria](#)", 05.10.2022

in the market, but imports resumed briefly. Additionally, the Italian energy regulator introduced²³ a new methodology in calculating the cost of gas component based on procurement costs of raw materials, with a monthly revision instead of three months due to high volatility in gas prices, affecting gas prices further.

In Luxembourg, rising prices are related to new tariff rates by suppliers²⁴, indicating continuous wholesale gas market unpredictability and volatility, strongly advising consumers in energy savings and constant pricing revisions depending on current situation while adapting prices accordingly.

In Lisbon, suppliers announced²⁵ their inability to withhold prices to the previous levels, affected heavily by surging international wholesale prices, resulting in increased rates for households this month. The government suggests that consumers switch to the regulated tariff, which is currently the lowest rate available in the market, something that was not possible for consumers until now, due to incentivising strategy in the growth of the liberalised market. According to sources, the regulated tariff is subject to increases of about 4%, compared to some utilities that announced free market tariffs increases of up to 200%.

In Dublin, households face increasing gas rates by suppliers²⁶, citing international energy crisis, while wholesale gas prices remain at exceptional high levels, especially during last months, however the aim is to establish support measures for consumers to help them cope with high energy costs.

In Paris, rising prices are affected by the price update²⁷ of fixed price contracts in the market, which are more expensive compared to the regulated tariff that most households currently choose.

In Vienna, a price rise is observed for a third consecutive month, which is 24% higher compared to the previous month and more than 210% when compared to one year ago.

On the other hand, decreasing prices are observed in multiple capital cities due to energy support measures introduced by federal governments, amid the beginning of the heating season for households.

In Athens, the remarkable decrease in gas prices this month is related to government's reintroduction²⁸ of the gas subsidies for households, absorbing more than 50% of the increased rates.

²³ La Repubblica: "[Bollette, ecco che cosa cambia per le tariffe di luce e gas dal primo ottobre](#)", 28.09.2022

²⁴ Leo Energy: "[Augmentation des tarifs du gaz naturel](#)", 31.08.2022

²⁵ Reuters: "[Portugal to let households move to cheaper regulated gas tariffs](#)", 25.08.2022

²⁶ The journal: "[Electric Ireland, SSE Airtricity and Bord Gáis price hikes kick in this weekend](#)", 01.10.2022

²⁷ Fournisseurs electricite: "[EDF Gas: l'offre Avantage Gaz d'EDF est-elle attractive?](#)", updated 19.10.2022

²⁸ Odigos tou politis: "[Η επιδότηση φυσικού αερίου Οκτωβρίου 2022](#)", 21.09.2022

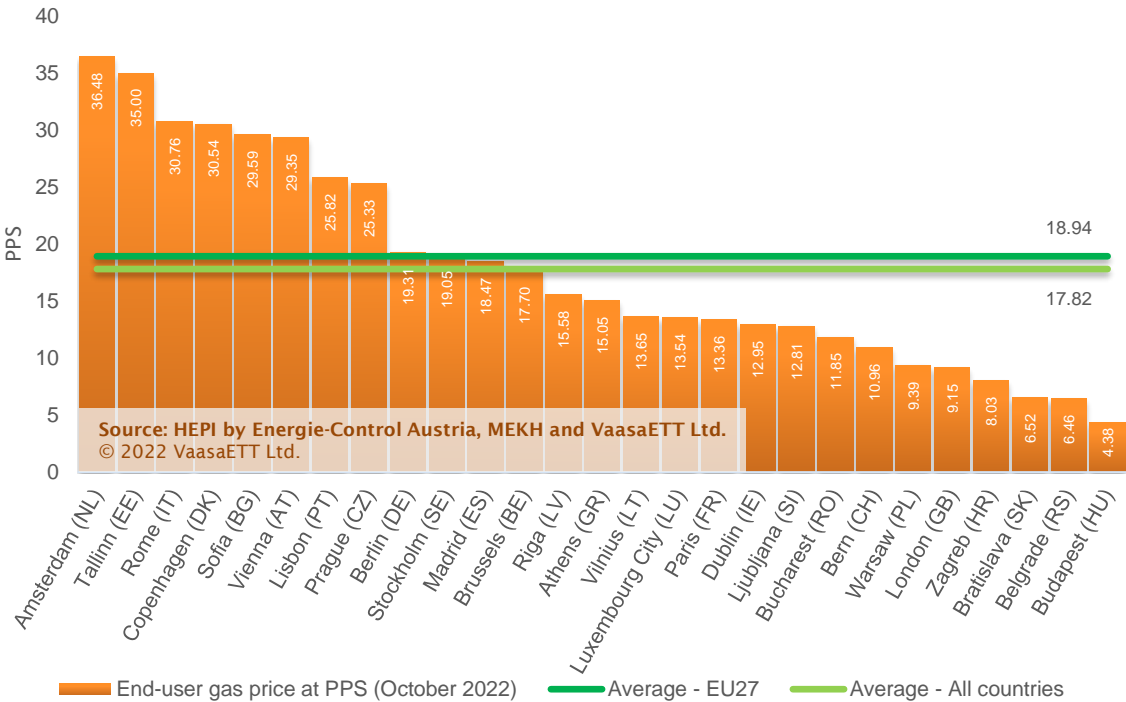
In Sofia, the energy regulator announced reduced rates this month, stating²⁹ that the official launch of the new Greece-Bulgaria gas pipeline in the beginning of the month, established gas supply security in the country, diversification of supplies and de-escalation of wholesale gas prices.

In Tallinn, gas prices decreased this month, similarly as in electricity, due to the government’s gas compensation³⁰ of 80% on the gas price over 80 €/MWh, for consumption levels up to 2.6MWh per month. As of October, the subsidy, which is included in the heating season energy support package, is provided by the state for all households

Finally in Madrid, the Spanish government decided³¹ on a VAT reduction from 21% to 5% on natural gas bills, until December 2022, resulting in decreased prices this month. Similarly, in Berlin, the price reduction is attributed to the government’s support measures³², including the implementation of a reduced VAT of 7%. However, price levels remain significantly higher than a year ago in both cases.

In the same vein as for electricity, gas prices at PPS offer a very different outcome from the actual prices. This month, Budapest, Belgrade and Bratislava were the cheapest cities when adjusted to PPS (Figure 7).

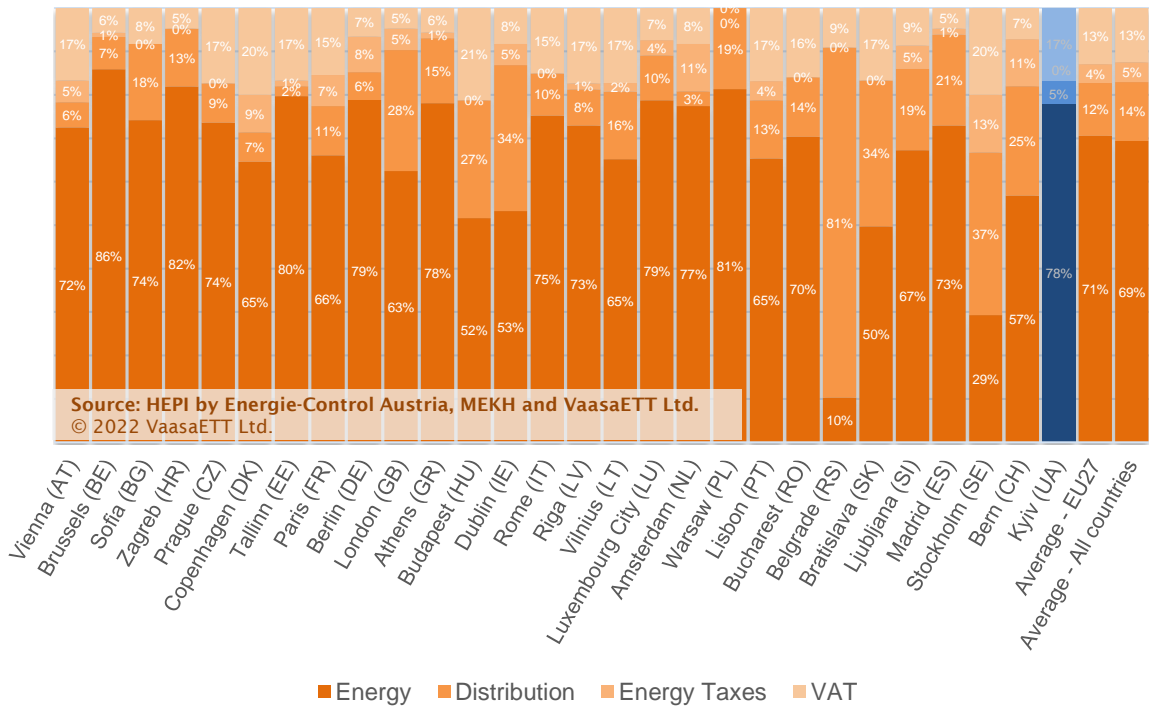
Figure 7: Residential gas prices including taxes at PPS



²⁹ See News: “[Bulgarian regulator okays 34% cut in Oct gas price as link to Greece goes live](#)”, 02.10.2022
³⁰ ERR: “[Natural gas prices set to fall to lowest levels since June](#)”, 24.10.2022
³¹ La Moncloa: “[Government of Spain cuts VAT on gas from 21% to 5% from October](#)”, 20.09.2022
³² Reuters: “[Germany agrees 200 bln euro package to shield against surging energy prices](#)”, 29.09.2022

Our survey shows that on average, energy (the contestable component of the price) represents 71% of the end-user price of natural gas, distribution 12%, energy taxes 4% and VAT 13% 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 11%. The aim is to encourage the use of electric heating and appliances instead of gas. Additionally, starting from July 2022, a typical consumer in Rome pays zero energy tax, due to the reduction of the system charges as a form of compensation for the increased natural gas costs. In particular, the UG2 component (which is linked to compensation of costs) got reduced even more, leading to this result.

Figure 8: Residential gas price breakdown³³



Overall, results show that market forces represent more than 65% of the end-user price both for electricity and gas, whereas national fiscal and regulatory elements are responsible for the remaining

³³ 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 79%, distribution 10%, energy taxes -4%, and VAT 15%.
<https://www.arera.it/it/docs/22/296-22.htm>
<https://www.arera.it/allegati/docs/22/296-22.pdf>

less than 35% through distribution tariffs, energy taxes and VAT. The current energy crisis has led to significant increase of the average energy component in EU capitals which used to represent about 50% of the end-user price a year back, in October 2021.

In places where the energy component is lower, so is the incentive for customers to look for more competitive offers³⁴. 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 decreased³⁵, especially for new customers.

³⁴ 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.

³⁵ 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:

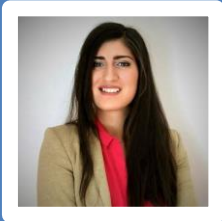
- The prices paid by customers on fixed price contracts agreed prior to the time of data collection
- The price paid by customers on tariff contracts set at a level no longer available at the time of data collection
- Sign in and other temporary bonuses and other forms of non-monetary benefits are not 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



Rafaila Grigoriou

HEPI Project Manager

Office: +30 6980 036815

Email: rafaila.grigoriou@vaasaett.com (English / Greek)

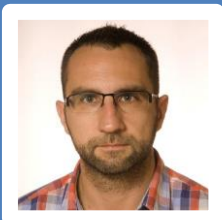


Markus Lechner

Regulation and Competition

Office: +43 (1) 24724 715

Email: markus.lechner@e-control.at (English / German)



János Palicska

Analyst, Department of Analysis and Modelling

Office: + 36 1 459 7809

Email: palicskaj@mekh.hu (English / Hungarian)

About the Authors



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