Rising power prices

Eurelectric's monitoring of mitigation measures taken across the EU and the impact on the power sector

*This document incudes inputs from Eurelectric's members before **10/12/2021**. Due to the rapidly evolving situation, some information might be obsolete. However, this table will be regularly revised with the most up-to-date information.*

Overview

Drivers behind price surge

- **Rising prices of fossil fuels commodities** – expensive natural gas and coal due to (i) high energy demand because of global economy recovery, (ii) lower EU imports from Russia, the USA and the Nordic compared to the last 2 years as well as (iii) very high Chinese demand in LNG stemming from both the transition away from coal and a strong domestic power demand.
- **Limited availability of RES** – lack of wind over the summer (notably in North-Western Europe), low level in water reservoirs, long & cold Winter 20/21 and low temperatures during the summer.
- **Security of supply constraints in some regions** due to limitation in cross-border capacity allocations in some key interconnectors
- **EU ETS carbon price increase** (account for approx. 15% of recent increase). However, this value can be much higher for countries that are more dependent on fossil fuels, accounting for up to 80% of the price increase, where the cost of allowances accounts for 50% of the wholesale energy price).
- **Higher energy demand** – important economic growth world-wide linked to the ending COVID-19 pandemic, combining a strong demand recovery in OECD countries and a lack of availability of production units in regions still facing some lockdown constraints.
- **Additional & exceptional factors** – maintenance of gas infrastructure in the Nordic countries, fire at the French-UK interconnector IFA site in Sellinge, maintenance of higher number of nuclear plants catching up from COVID-19, etc.

Political mitigation measures taken

- **So far measures focused on the retail markets, with limited interventions on wholesale market,** except in the Iberian Peninsula. EU governments aren't adopting measures to correct wholesale electricity prices. The lack of similar intervention in Spain's neighboring countries worsen the relative positioning of Spain's regulatory framework.
- **Most of the interventions aim at protecting vulnerable consumers** with direct and indirect measures, protective or supportive - e.g. reduction of taxes, dedicated aids/"cheques" for low-income households, extension of the social tariff, etc.. This is the case of France, Belgium, Cyprus, Ireland, Estonia UK, Spain, Portugal, Norway, Italy, The Netherlands, etc.
- **Isolated cases of measures applying to industrial customers** (e.g. Bulgaria)

Distortive impact on the market

- **Differentiated impact depending on the country.**
- **Differentiated impact on consumers depending on their profiles and contractual arrangements:**
    - No immediate 'bill shock' for most of small consumers engaged in a fixed contract.
    - High impact for Large and/or energy-intensives consumers – some are already in a critical situation.
    - Potential impact at the renegotiation of contracts
- **Increase of production costs** for fossil fuel-fired power plants, due to the increase of EU ETS carbon and commodity prices.
- **The power generation sector is more protected as it applies a high level of hedging** to mitigate risks linked to power generation and supply, thus less affected than customers.
- **Risk of bankruptcy for (small) electricity retailers** – the risk will increase if high prices continue over 2022, especially when they offer fixed price contracts exposed to high volume and profile risks.

Country	Austria
Key drivers of price increase	• Commodity prices (electricity) are heavily influenced by gas prices. • Market coupling with central European market and particularly with German market. • Low-level and volatility of the production from PV and wind power. • High imports dependency from Russian gas. • Shortages of generation from hydropower due to the Water Framework Directive.
Most impacted customers?	• Industrial and commercial customers usually have individual contracts for one year or longer. Many contracts are based on the calendar year. Currently, there are a lot of these contract under ongoing negotiations. How and to which extent the current price situation will have an impact can't be foreseen in detail. • Many households have contracts with price guarantees but only for a limited period of time; for most of them, massive price adjustments are expected in the near future (e.g. the effects on the ÖSPI/Austrian Electricity Price Index). Floater products and dynamic pricing only plays a marginal role in Austria.
Mitigation measures?	In order to protect and support vulnerable customers, a number of legislative measures and financial support are already in place: • Application of regulations to protect vulnerable customers (point of contact, levies exemptions, heating allowances). • Disconnection protection for electricity and gas customers. • Prepayment of electricity and gas meters for indebted households. • Heating allowance Energy bill support by the regional governments for low-income households. The financial support covers costs of heating but eligibility requirements and the amount differ from region to region. • Out of the Oil & Gas Premium Heating System and renovation check, households can receive grants by the national Government if they live in semi-detached or detached houses and extra budget for low-income households to finance up to 100% of the costs of the change of the heating system. • Many suppliers are participating/holding electricity help funds for low-income households in cooperation with NGOs in order to offer energy consultations, household appliances and energy bill support. • Green electricity subsidy will be cancelled in 2022 due to rising energy prices. This saves an average household 67 Euros.
Impact on power sector (producers, suppliers)	• Smaller gas suppliers already announced price increases (up to 60 % of the energy component, which makes up around half of the household price (approx.. 51 % energy, approx. 30 % Taxes and levies, approx. 20 % network charges) • Shifting of green electricity costs to the energy part.
Industry reaction	• Industry and power industry call for improved framework conditions for the deployment of renewables, in particular approval conditions and the availability of land/space for the deployment of renewables
Any other relevant info / data	• Stable electricity prices since electricity market liberalisation in 2001.

	• Austrian households spend around 2 % of their spending on electricity (2,2 % on fuels, 2,6 % on heating).

Country	Belgium
Key drivers of price increase	• Increased price of gas (x6 for month-ahead prices over the last 12 months) and CO2 (x100). • 1/3rd of electricity generated by gas-fired power plants. • Lower overall wind over the summer.
Most impacted customers?	
Mitigation measures?	• Extension of the social tariff into Q1 2022 for vulnerable households (1 out of 5, amounting 1 million households). • Belgian government working on an Energy Law to limit prices increase compared to neighboring countries through a flexible excise duty on gas and power.
Impact on power sector (producers, suppliers)	• Negligible short-term impact for small consumers with a fixed contract (potential impact at the end of the contract). • Financial impact for suppliers supplying 20% of the market at a non-cost reflective social tariff. • Potential 'bill shock' for small consumers with a variable contract (30% of the market), and consumers subscribing at new fixed contracts since September 2021. • Belgium is among the only countries without contract cancellation fees for fixed contracts. Consumers drawn to fixed contracts in Q3/Q4 2021 due to more attractive prices will be able to break these contracts as soon as prices go down leaving the suppliers with the hedged volumes at high prices. The financial risks on suppliers are hence gradually increasing to worrying levels
Industry reaction	
Any other relevant info / data	

Country	Bulgaria
Key drivers of price increase	• Price increase of CO2 allowances (marginal prices on DA market determined by lignite and gas). • Higher price of energy imports from EU. • Rising price of natural gas price (but secondary, as Bulgaria has no significant gas capacities for electricity generation).
Most impacted customers?	• **Household consumers**: Despite the announcements of the regulator (Energy and Water Regulatory Commission/EWRC), Bulgarian household consumers are currently not directly affected by rising electricity prices – the entire segment of household consumers is supplied on a regulated electricity market, with prices determined yearly by the regulator based on estimated market price and valid from July 1 for a 12-month period. • **Large/Industrial Consumers**: Energy-intensive & large-scale industry is affected by rising energy prices, but rather by the natural gas prices than the electricity; they also have available several market channels to secure their supplies – under bilateral agreements, through imports, on a DAM. • **Medium & small-size business consumers**: The most affected by the unfavorable developments in energy prices are the small and medium-sized business consumers in the country, which have recently (and administratively) been brought to the free market. The risks for these customers stem once from their inexperience in the free electricity market, lack of interest and insufficient information about the changes in their consumer status, rights and obligations on the free market; and, secondly, the risks for them are increased by the lack of sufficient number, experience and interest of traders in the particular segment.
Mitigation measures?	• **Direct reduction of the electricity bill of all business consumers**: A two-months (with probable prolongation up to March 2022) compensatory measure consisting in using the state budget to cover BGN 110 per MWh from the electricity bills of each business/industrial customer for October and November 2021. The measure is foreseen for only two months, having in mind that the new BG Parliament is expected to be convened in December, to most probably reaffirm, and elaborate further the support measures. Under the compensation program, the bills of about 630 thousand companies will be reduced by BGN 110 per MWh. Therefore, the Ministry of Energy enters into contracts with electricity traders, suppliers of last resort, producers who sell electricity directly to final non-household customers, as well as with the operator of IBEX. The actual payments under the program has started after the approval of this state aid by the European Commission which was given on November 11th. • **Reduction of SLR price for small business consumers**: The second support measure applied concerns small business customers, which are on the free electricity market but have not chosen a supplier (they were obliged by changes in the Energy law to do so), respectively are supplied by a supplier of last resort (SLR). To date, 41% of small companies in BG that had to enter the free market from July 1st† 2021 have not chosen their supplier. As the SLR prices are usually much higher in order to render a disciplinary effect on getting consumers to contract with a trader (i.e. it's not a long-term solution), for small

Country	Bulgaria
	business consumers being at SLR the effect of the high electricity prices is aggravated. The average selling price of SLR electricity is tied to the Day-ahead market segment on IBEX, which in recent months has reached extreme price levels. Therefore, a change in the SLR's price formation methodology was adopted, which reduces the business bills by about BGN 30 per MWh, by reducing for the 3-month period the component for the activity "electricity supply from SLR" to '*5 percent, but not more than BGN 10 per MWh*'. The measure is temporary, for three months, started from November 1st and is expected to support 256,000 companies in Bulgaria. • **Direct sales of the cheapest BG power (i.e. nuclear) to the small and medium-sized companies**: Earlier in September, more than 30 companies took the opportunity to buy long-term products from Kozloduy NPP. 300 megawatts of electricity were sold at the organized special auctions. • The **rules** for operation of an organized electricity exchange market (IBEX) and the Electricity trading rules were changed. • **New (stronger) licensing requirements** for electricity traders are expected to be introduced and a Clearing House to start operating: the ordinance on licensing of energy activities is currently being reviewed in order to find opportunities to further alleviate the pressure on business caused by high electricity prices. • Notification to the EC is being prepared demanding **a lower CO2 weight** in the final electricity price. • **Rising electricity prices for households** as of January 1, 2022 has been announced.
Impact on power sector (producers, suppliers)	• **DSOs**: Under the Bulgarian legislation, DSOs (and TSO) should purchase from the IBEX (DAM platform) the energy necessary to cover the technological costs of energy transmission and distribution. The costs for losses approved by the regulator for the current regulatory period (July 2021 – June 2022) are based on the fixed (for these 12 months) purchase price of BGN 131.27 per MWh, while the network companies - from the autumn 2021 - pay 2-4 times higher price for energy trough the IBEX. Thus the costs to cover the technological costs of DSOs companies in Bulgaria were increasing dramatically – the prices are expected to reach BGN 500-600 per MWh. Now, no compensatory measures are commented for the network companies (the standard way for regulatory recognition and coverage of these costs is through regulated network tariffs for end consumers). Meantime, the activated financial risk can compromise not only DSOs investment programs, but even could undermine the operational maintenance of the network on the threshold of the winter season and leads to a liquidity crisis that may make impossible to buy energy for losses in the short term. • **SLRs**: The motives of the institutions to change the methodology for determining the SLR price were to alleviate the financial burden for small business customers. At the same time, the financial situation of SLR for LV & MV (which are the three End suppliers in Bulgaria), is significantly

Country	Bulgaria
	damaged, as no reference compensations are discussed/provided for the SLR's reduced profit margins. Eventually, amendments to the methodology will not achieve the set goals for supporting small and medium-sized companies paying SLR prices in a tangible way, but will lead to further deterioration of the financial condition of End suppliers. • Traders: The stricter licensing requirements will not affect existing players but aims to limit the risks for potential customers and will protect traders from bankruptcy. • DHCs: There is a critical financial situation for district heating companies (and coal-fired power plants which do not have PPAs) due to CO2 prices and forthcoming rise in gas prices which will indirectly be reflected in increased bills of district heating customers, as was recently announced by the regulator.
Industry reaction	The energy-intensive industry in Bulgaria has called for support measures for business due to the high prices of electricity and natural gas in Bulgaria and in Europe. Some of their proposals were: → to organize separate tenders for electricity for the energy-intensive industry, → to introduce a mechanism to compensate for indirect costs of carbon dioxide emissions, → relief from any other burdens in the final value of energy, according to EC guidelines, to relieve business from high energy prices As early as the beginning of autumn the business offered also concrete compensation for the consumed electricity for the period October 1, 2021 – March 31, 2022 by each non-household business consumer, excluding those for technological costs, in the amount of BGN 70 / MWh. Also, the industry noted that there is a need to ensure the stability of energy markets and to limit the negative impact of energy prices on the competitiveness and viability of Bulgarian and European industry (e.g. power prices in Turkey EUR50/MWh compared to EUR150/MWh in the EU market), because the price of electricity on the free market in the DAM has increased three times compared to last year, and natural gas - nearly five times. In addition, the price of carbon allowances is at a record high and now exceeds € 60 per ton. Also, there is a lack of stability and predictability on the energy exchange in Bulgaria. The industry is worried that high prices will again force large companies to close down as they lose competitiveness.
Any other relevant info / data	

Country	Cyprus
Key drivers of price increase	• Rising fuel cost, rising cost of greenhouse gas emission allowances (ETS)
Most impacted customers?	• All customers are equally impacted
Mitigation measures?	• Reduction of TUoS and DUoS by 65%. Impact on final bill, about 10% for LV customers, 6.2% for MV customers and 1.8% for HV customers
Impact on power sector (producers, suppliers)	• No impact on dominant participant (pass through costs for both generation and supplier) • Positive impact on independent producers (all RES) and suppliers
Industry reaction	• Mitigation measures were welcomed but were not deemed adequate.
Any other relevant info / data	• Although electricity price of Cyprus has not increased as much as in the rest of Europe, there was a strong public reaction when comparing prices with last year's prices. Last year a 10% discount was in effect due to COVID measures. Comparison showed a 38% increase, whereas, without last year's discount, increase was 26%.

Country	Czech Republic
Key drivers of price increase	
Most impacted customers?	
Mitigation measures?	• Government does not plan any short-term or long-term interventions in the price formation (or regulated prices that have been explicitly rejected), they see solution in construction of new stable power plants (=nuclear and gas in the short term, especially for heating). • For vulnerable households (which are however not yet defined in our legislation – probably a threshold for their income will be set for this purpose), the government is searching for possible solutions in the form of e.g. coupons for electricity. General elections took place on 8th and 9th October 2021, so the probability of introducing new measures was rather low. In Czechia there is to be a reduction in VAT in November and December 2021 on energy to zero. Other measures considered: • Reduction of the contribution to RES for the low voltage level (households) • Reduction of the contribution to RES for other voltage levels • Energy vouchers for low-income households
Impact on power sector (producers, suppliers)	
Industry reaction	
Any other relevant info / data	

Country	Denmark
Key drivers of price increase	• Rising fossil fuel prices. • Low reservoir levels in Scandinavia. • Rising ETS price and lesser power production from wind turbines than normal.
Most impacted customers?	
Mitigation measures?	
Impact on power sector (producers, suppliers)	• As most of Denmark's power production come from RE-sources like wind, solar and biomass, most Danish producers are experiencing higher margins on their production.
Industry reaction	• Both consumer and producer organisations have called for more and faster deployment of wind and solar to mitigate future price peaks.
Any other relevant info / data	• + 30% yoy in Danish household electricity price in September 2021. • Share of the different electricity bill components for Danish households in Q3 2021 is: 50% Tax and VAT, 35% wholesale electricity and 15% transport and system security tariffs.

Country	Estonia
Key drivers of price increase	• Increase of natural gas price • Increase of CO2 price • Reduced production volumes from RES • Impact of the Industrial Emission Directive requirements (600 MW of dispatchable capacities have been closed but not replaced by new generation capacities)
Most impacted customers?	• Energy intensive industry and vulnerable retail customers who have concluded spot-price supply agreements.
Mitigation measures?	• Postponement of already planned tax increases (including on energy); • Compensations to vulnerable families on high electricity and gas prices (funds will be taken from the sales revenues of CO2 quotas); • Partial compensation of power grid tariff to electricity consumers (funds will be taken from state budget) *In addition to already implemented measures, the government is currently discussing complementary measures, including lowering of value added tax for electricity consumption etc.*
Impact on power sector (producers, suppliers)	• Energy intensive industry is impacted by most. Some suppliers continue to renegotiate their fixed-price supply contracts in order to increase the sales price or terminate respective fixed-price supply contracts.

Industry reaction	• Expressions of concern about imminent need to pass the impact of higher prices to consumers. Several food producers etc have already made public notices about increasing the prices for their products. High prices are expected to remain until at least springtime. Views have been expressed among government and parliament officials regarding:
	  • amending functioning of EU ETS (introduction of price cap on CO2 price, increasing flexibility of MSR, strengthening price control mechanism of EU ETS);
	  • amending power market model (bringing upper price cap of 3000 €/MWh lower etc);
	  • increasing the speed of developing new renewable capacities.
	  • Discussions continue and most probably concrete proposals will be formulated regarding given subject matters if high prices persist. These discussions will definitely impact also Estonia's negotiating positions in the framework of FF 55 package

Any other relevant info / data	• About 60% of consumers have fixed-price supply agreements and 40% spot-price supply agreements hence, not all consumers are exposed to high prices.

Country	Finland
Key drivers of price increase	• Low levels of Scandic reservoirs, exporting power to (importing prices from) Continental Europe and Baltic countries. • A significant increase in the price of coal and gas, which has kept the production of coal and gas power (incl. CHP) in Finland low despite the increase in the market price of electricity. • In addition, the rising CO2 prices have impacted on peat production costs. • Furthermore, we have a situation in Scandinavia where Swedish TSO Svenska Kraftnät (SvK) is limiting the transmission capacity on the borders of the bidding zone SE3 thus limiting the free flow of electricity and thus differentiating prices within Nordic bidding zones. For example, there have been situations where the flow of electricity is limited from Sweden SE3 to Norway NO1 (and thus Continental Europe will not benefit fully from lower prices in Scandinavia). Nordenergi sent a letter to NordREG on this issue during the summer and Swedish national energy authority (Energimarknadsinspektionen) is investigating Svk's actions. • Ei's report was finalized on 10th Nov. Ei has concluded that SvK did not fully comply with the 70% rule during the monitoring period and that SvK did not have an exemption during that period, meaning SvK has breached the 70% minimum requirement in that regard. Therefore, Ei will continue the investigation and request further clarification from SvK. • Statnett has announced that as a response to SvK's actions, they will reduce transmission capacity from NO1 to SE3 which may restrict free flow of electricity also from Norway to Finland. • Lately there have been some exceptionally high prices in Finland. In the Finnish and Baltic region, the price of electricity rose higher than in the rest of Europe due to increased consumption in cold weather, so much that power plants with very expensive operating costs were needed, leading to sharp price changes. The prices were also affected by the fact that the Baltic countries have not imported electricity from Russia as earlier and there had been operational disruptions in the power plants in Baltics leading to electricity been transferred from Finland to the Baltics.
Most impacted customers?	• Energy-intensive industry (depending on the level of hedged). • Households with direct electricity-based heating (depending on the type of electricity contract, less than 10% of domestic customers have spot-price contract)
Mitigation measures?	• There are ongoing discussions on the price situation in the media and with the politicians. However, the discussions have been moderate and the politicians understand how the market is functioning. • On energy poverty: In Finland there is a social welfare system that supports household consumers not able to pay e.g. their electricity bill. Consumer rights are well taken into consideration in the Finnish law. Energy poverty in Finland is considered to be one of the lowest in the Europe. Therefore, there has not been a need for additional mitigation measures.
Impact on power sector	• The most impacted customers are energy-intensive industry (depending on the level of hedged), households with direct electricity-based heating

(producers, suppliers)	(depending on the type of electricity contract, less than 10% of domestic customers have spot-price contract) • Both producers and suppliers in the power sector apply a rather high level of hedging. Hedging possibilities have deteriorated due to the increased collateral requirements. • Increased collateral demands also have an impact on electricity retailers' liquidity.
Industry reaction	• Energy industry participates in the public discussions and provides analysis on the underlying fundamentals. Energy intensive industry follows the situation and has mainly concentrated on ETS practices.
Any other relevant info / data	• The derivatives markets expect quite high-priced winter and lower prices as of Q2/2022. Lower prices in Finland (area price) are expected when nuclear power plant Olkiluoto 3 is in operation. • Electricity prices in Finland can be found from Statistic Finland's database. • Electricity bill components for household consumers (see graph in Finnish contribution)

Country	France
Key drivers of price increase	• Gas price increases, impacting the variable cost of gas power plants. The price of gas has increased fivefold in the last year and continues to rise due to: - Increase in demand, especially in Asia, in a context of economic recovery. - Limited supply in Europe due to Asian demand for LNG, lower gas imports from Russia, and maintenance of gas infrastructures in Norway. - Limited stocks in Europe due to a relatively cold and long winter, which boosted gas and power consumption. • EU ETS carbon price increase, increasing the total variable cost of gas, coal, fuel power plants (accounting for 20% of the increase according to Frans Timmermans, First Vice-President of the European Commission). • Coal price increase, increasing the variable cost of coal power plants. • Unfavorable weather conditions for some renewable energies (notably wind). • Winter 2021-2022: particular vigilance on the security of the electricity supply in France for the upcoming winter period, in case of a cold wave and unfavorable conditions for the French production fleet (November 2021, source French TSO RTE). Such projections and uncertainties affect electricity forward prices.
Most impacted customers?	<u>Household customers:</u> Most customers have a contract with a regulated electricity price (TRV[1]) or TRV-indexed offers. This tariff is designed to limit the volatility of market prices with the use of smoothed sourcing and a share of regulated fixed price due to the ARENH mechanism. The French government estimates that, in the absence of action on taxes, the future increase could be around 12% in February 2022 Consumers who are on non-indexed TRV offers may be more impacted. The few suppliers offering dynamic pricing contracts have suspended them, with one supplier advising its customers to switch supplier. <u>Non-household customers (industry, tertiary, SMEs…):</u> They benefit, through their energy supplier, from a part of the regulated fixed price of nuclear energy share from the ARENH, in proportions that depend on their load curve. Exposure to the current price increase varies greatly among consumers, depending on whether they have a pluriannual fixed price contract, or a contract indexed to the forward or spot markets, and on the expiry date of their contract. Price increases are expected to be very significant for all consumers who have to renegotiate their contracts on the date of expiry (many contracts are renewed on January 1st). As these customers have a lower tax share than private customers, the size of the increase is more significant.
Mitigation Measures	• <u>Increase of the energy cheque:</u> the government has introduced an additional aid of 100 euros for the 5.8 million households already

[1] TRV (tarifs réglementés de vente) : regulated electricity prices

	benefiting from the energy cheque. This sum will be paid in December 2021 and can be used to pay electricity, gas, and fuel bills. • Decreasing the domestic tax on final electricity consumption (TICFE[2]): this tax decrease is calibrated to limit the increase of electricity TRVs to 4% for one year, but will actually apply to all electricity retail prices. However, its impact will be lower for the biggest non-residential customers who already benefit from reduced TICFE tax rates (electricity intensive consumers). Should it be proven in early 2022 that the tax reduction is insufficient to meet the target of a 4% increase given a persistent bullish trend in the wholesale market, the government will mobilize other tools to cap the increase at 4%. The government has thus tabled an amendment to the 2022 budget to be able to set a lower tariff level than that resulting from the application of the usual TRV formula. The increase would be made up in 2023 via a gradual increase in tariffs over twelve months. • An additional 100€ inflation premium will be sent to all household consumers earning less than 2000€/month (~38 million people). That premium will be directly added to salaries and can be spent without restriction (the premium was decided to reduce the overall burden of inflation, not specifically to reduce house energy consumption bills). • For energy intensive consumers deemed to be exposed to a genuine risk of carbon leakage due to significant indirect emission costs, an advance on the aid to compensate for increases in electricity prices resulting from the inclusion of the costs of GHG emissions due to the EU ETS was adopted.
Impact on power sector (producers, suppliers)	• Producer: the increase of wholesale electricity market prices has an impact on the part of the electricity production which is exposed to them. This excludes the volumes already hedged and the production sold through the ARENH mechanism in France. As producers hedge their production volumes in advance, market prices have a moderate impact in the short term. This may be different in the long run. The increase is likely to generate more benefits for the part of the production exposed to market prices, yet depending on the type of production assets, this may be mitigated by the increase of production costs (e.g. commodity prices and impact of the EU ETS price increase on fossil fuel-fired power plants). • Supplier: customers could switch suppliers to get TRV or market offers indexed on the regulated TRV. This could be costly for suppliers who did not anticipate the coverage of these unforeseen volumes.
Industry reaction	UFE is currently analysing the situation. In the short term: target immediate effort to low-income and vulnerable households. In the long term: - Electricity Taxation: at EU level, reduce taxes and levies via the Energy Taxation Directive review. - Develop energy efficiency.

[2] Taxe Intérieure sur la Consommation Finale d'Électricité

	- Hedge against fossil fuels' price volatility by accelerating the deployment of storage and renewable and low carbon production sources in Europe. - Call for an improvement of the market design, looking for an efficient and comprehensive framework for long term arrangements that would complement the wholesale market and its short run optimization price signals, and give visibility on generators' revenues and end-users' bills.
Any other relevant info / data	French Minister of the Economy called for a profound reform of the European electricity market (letter to Eurogroup, September 2021) Non-paper from France on Energy prices (ECOFIN, 8 November 2021). French government reaffirm its "*support for a fully integrated internal wholesale market for electricity*" but nonetheless stress that "*it can fail to bring market operators enough visibility [which] is critical for consumers and for investors*". (1) promote a "stronger link between the price paid by consumers and the costs of the underlying low-carbon component of the national energy mix [...] by allowing ex-post regulated compensatory transfers between producers and suppliers" (2) support "long term contracts based on low-carbon energies, as mentioned in the EU Toolbox" (3) provide consumers a better access to electricity contracts with price stability and better inform them of the risks associated with contracts based on the spot market (4) support a "better coordination of national gas storage regulations" (5) ask to focus on achieving EU "energy independence by boosting public and private investment in energy efficiency and all decarbonized means of energy production". Non-paper on energy and electricity & gas markets from France (French Minister of the Energy) with Spain, Italy, Romania and Greece (30 November 2021): It has been presented at the EU Energy council (2 December 2021). Amendments to the Electricity Directive are proposed (1) to cushion the impacts for end consumers of situations where prices on the wholesale markets are high and (2) to facilitate investment in low carbon assets, in particular by reducing the risk for investors and expanding the possibilities of long-term contracts, without affecting the functioning of the wholesale markets. European Commissioner on Energy Kadri Simson said the EU Commission was willing to "explore solutions to mitigate price volatility, particularly in the retail market".

Country	Germany
Key drivers of price increase	The main drivers behind the power prices may differ from one country to another. In Germany, the following reasons play a role: - On the supply side - increase of the price of raw materials due to the ending COVID-19 pandemic, linked with a world-wide shortage of raw materials; Lower renewable energy production compared to 2020 due to less sun and wind. - On the demand side -higher energy demand due to the important parallel economic growth world-wide linked to the ending COVID-19 pandemic.
Most impacted customers?	The impact differs largely, depending on the type of customers and the type of energy supply contracts: Household customers: - The long-term procurement strategy of most energy supply companies has buffered a direct spillover of the high wholesale prices to the end customer prices. Price drivers are primarily increased wholesale prices. This leads to price increases that are perceived particularly strongly by customers in comparison with the comparatively low energy prices last year and in connection with the sales tax, which was temporarily lowered in 2020. - Some companies that have not yet procured sufficient quantities of energy for 2021 currently have to procure at high prices. This may result in these companies having to raise their prices far above the average level, terminate contracts or even cease supply. In the latter two cases, customers will look for new tariffs with other utilities or fall into the substitute supply of their responsible basic supplier. In the event that companies supply far more new customers than forecasted as a result of these circumstances, energy at the current high prices will have to be procured. This can have an impact on the current offer prices or lead to prices having to be adjusted in the substitute/basic supply. Similarly, a temporary "lull" in competition can be the result, because an above-average number of new customers makes the subsequent procurement of currently very expensive energy necessary and thus influences the profitability of the portfolios. Industrial customers: - The high wholesale prices also have a strong impact on non-household customers. This leads to considerable burdens on businesses. Depending on the energy supply contracts that a company concluded, it is more or less impacted. A certain share of industrial customers is risk-averse with regard to energy prices and procures energy well in advance. However, if energy is procured on the spot market or the short-term forward market, some industrial customers might have to consider the reduction of their production. However, these have been exceptions so far.
Mitigation measures?	There is no need for a political intervention in the market. The current evolution of wholesale market prices does not call for a change of the market design as they are the result of supply and demand which is reflected in the

	recent increase of wholesale market prices (c.f. reasons mentioned above). In a market system, price signals are the decisive mechanism to induce adjustments of capacity (in this case investments). Price interventions would damage the trust of investors and, in the long run, lead to higher, not lower prices. In contrast to that, price peaks or periods of higher prices lead to investments in new capacities and demand-side flexibilities that, in the long run, lead to lower prices. Moreover, for this objective, it is necessary to strengthen the internal energy market, not to weaken it through diverging regulation in different Member States. As energy trading is performed at European level (day-ahead and intraday market coupling), it is crucial to apply the same rules in the internal energy market. Mitigation measures could be the decrease of energy taxation, the decrease of levies (in Germany in particular the „EEG-Umlage“ related to the deployment of renewable energies) as well as targeted social policies by Member States for vulnerable customers (e.g. increase of the support for energy expenses etc.).
Impact on power sector (producers, suppliers)	The impact on the power sector is high, see reasons listed under the key drivers.
Industry reaction	Currently, BDEW is continuing to analyse the situation and advising its members with regard to possible questions of customers and/or media. BDEW also issued a press releases on the Commission's Toolbox and the recent debates on energy prices at meetings of the European Council and the Council of the EU. As regards guiding messages, see comments above regarding mitigation measures.
Any other relevant info / data	It is very important to call for an acceleration of the deployment of renewables. In addition to that, in several Member States, depending on the chosen decarbonisation path, gas-fired power plants play an important complementary role to cover the base load. In more general terms, renewable and decarbonised gases will play a crucial role toward climate neutrality.

Country	Greece
Key drivers of price increase	
Most impacted customers?	
Mitigation measures?	• €150m fund to compensate price rise through the end of the year
Impact on power sector (producers, suppliers)	
Industry reaction	
Any other relevant info / data	

Country	Ireland
Key drivers of price increase	• Prices rising due to rising price of gas (22c/tm in Aug 2020 vs 150c/tm in Aug/September 2021); Carbon price increase; low renewable output (lowest wind year since 1960's); system tightness in both SEM and UK. • Wholesale cost=40% of final bill (Ref 2019 EC study). • Natural Gas as the marginal fuel and dominant fuel sources.
Most impacted customers?	• Regulator estimates €500 increase to average annual bill for domestic bill for electricity and gas. • Price increases confirmed across all 14 suppliers in ROI. • Regulated tariff increases approved in NI.
Mitigation measures?	• No new mitigation measures in ROI as of yet. • Increase to fuel allowance this winter confirmed in recent budget. • Existing Regulatory Measures; Switching; 500k customers with Smart Meter/prepayment. • Suppliers' Energy Engage Code available here. • Additional protection for vulnerable customers available in ROI here. • Additional protection for vulnerable customers available in NI here. • In NI the Regulator has approved a reduction in network gas costs, which will reduce the impact of wholesale gas price rises to an average household by £20 a year. • NI Regulator is also increasing the levels of contracts, known as directed contracts, directly accessible to smaller suppliers to help during this period of high wholesale prices.
Impact on power sector (producers, suppliers)	• Price increases confirmed across all 14 suppliers in ROI. • Regulated tariff increases approved in NI. • Note ongoing system tightness factor and significant increase in peak demand in ROI. • Upward pressure on prices, but impact limited by effective price caps in markets. • e.g. €500 strike price for Reliability Option holders • Note this strike price has been increased temporarily based on expectation of future gas prices and will be reviewed again on 01/11
Industry reaction	• See Electrification Alliance Statement • Suppliers engaging with Regulators and Consumer Stakeholder Groups
Any other relevant info / data	• No retail price caps in ROI • Statement from NI Utility Regulator here

Country	Italy
Key drivers of price increase	• Lower-than-average renewable energy production. • Higher consumption in Italy (just like in the EU and elsewhere in the world) driven by economic recovery. • Increase in the CO2 price. • Gas price increase is also due to reduced LNG and piped gas supply. • Limited additions of upstream/liquefaction gas capacity and increased absorption by international (namely Asian) buyers played a role in restricting gas supply. This should ease in the next months.
Most impacted customers?	• The most impacted are regulated customers, households, and SMEs, because these are supplied through a single buyer (public owned) who buys only on spot basis. Also, customers who choose a free market offer which does not include a fixed price for commodity had a similar impact. These impacts would have been higher without adoption of the mitigation measures (see the next point).
Mitigation measures?	The Italian government intervened with three main measures applying on Q4/2021 • Reduction of VAT for gas customers to 5%. • Reduction of levies (renewables incentives and other system costs) for electricity and gas customers (both households and non-households). In depth, only for households and SMEs (<16,5kW) of the power sector the levies have been set to zero. • For more than 3 million nuclear families who have the right to discount bonuses for electricity and 2.5 million who take advantage of the income-based gas bonus the price increase has been offset. The Energy Regulatory Authority (ARERA) finds that the relevance and exceptionality of the interventions adopted to face a price situation without precedent require, in any case, identifying structural interventions to deal with the current energy market changes that could, at least partly, turn out not to be transitory. In particular, Stefano Besseghini, President of ARERA, advocated for a law moving at least part of levies away from the energy bill to general taxes. • Roberto Cingolani, Minister for the Ecological Transition calls for a faster increase in renewable energy stations. • Italy's Ecological Transition Ministry said Sept. 10 it will make available around 38 TWh of renewable generated energy from 2020 to other EU member states that missed their renewable generation targets for the year.
Impact on power sector (producers, suppliers)	• **Suppliers** were not heavily impacted as part of the mitigation measures (temporary reduction of levies) had already been adopted to relief customers at the beginning of the COVID-19 emergency, thus most of the operational and IT activities to implement them had already been developed. Furthermore, government measures only intervened on taxes/levies and not on the commodity, thus avoiding any distortion of price signals.

Country	Italy
	• The most impacted are **regulated customers, households, and SMEs,** because these are supplied through a single buyer (public owned) who buys only on spot basis. Also, customers who choose a free market offer which does not include a fixed price for commodity had a similar impact. These impacts would have been higher without adoption of the mitigation measures. • In a country like Italy, where a large share of electricity is produced by natural gas (around 45%), gas prices together with high C02 prices, influence electricity prices in the spot market in the hours when CCGTs fix the prices. Most part of the energy supplied in 2021 has been traded in the previous years at lower prices than the current ones. Moreover, renewable power plants under incentive schemes (i.e., CfDs) did not incur any impact from this situation.
Industry reaction	• Industry, which consumes large volumes of electricity and/or gas, has strong concerns. Reflections in support of the role of long-term gas contracts have begun, highlighting their potential contribution to supply security and affordability (competitive procurement). Finally, this situation of increased prices could impact the discussion on EU reforms of the ETS.
Any other relevant info / data	• In Italy, the development of a "Single Buyers Platform" is under consideration, but the precise goal and operating modes are not yet clear. • Electricity bills have risen by 20% in the last quarter and are expected to rise by 40% from October. • Italian day-ahead power averaged Eur112.40/ MWh in August, up nearly 200% on year and a record for August. • in November the Day-ahead average price has been 226 € / MWh (with hourly peaks reaching 400 € / MWh).

Country	Latvia
Key drivers of price increase	• Increase in Nordpool day-ahead prices, driven by reduced production volumes from RES (low levels of Scandinavian hydro, lower wind output) • Increase of natural gas price • Increase of CO2 price • curtailment of available transmission capacity with third countries imposed by Lithuania TSO, reducing available capacity for Baltic imports
Most impacted customers?	• The first to be impacted - clients with dynamic pricing (indexed to day ahead hourly pricing), approx. 10-20% of consumption • Due to low hedging opportunities in region, the wholesale price increase is gradually increased in customers' contracts. Most customers have already experienced a price increase
Mitigation measures?	• Reduction of renewable energy support fee collected from electricity end-users by 65% • Doubled to tripled support to vulnerable customers depending on income status • the annual inflation increase of the system service tariff has been postponed
Impact on power sector (producers, suppliers)	• Smaller retailers face liquidity problems • one retailer, mostly with municipal supply contracts (fixed price contracts), has ceased operations • Basically all traders are executing the contractual option to renegotiate the contracts
Industry reaction	• industry calls for the possibility, if not improved, of at least not worsening the situation with imports from third countries • industry calls for the urgent introduction of liquid hedging instruments, such as FTR on the most congested price zones • industry welcomes the measures to lower environmental taxes and increase of support to vulnerable customers
Any other relevant info / data	• Market expect quite high-priced winter and a bit lower, but still high 2022.

Country	Luxembourg
Key drivers of price increase	Luxembourg imports most of its electricity from Germany. Therefore, the factors and elements impacting the market prices (commodity price) are similar to those of the German market (see remarks made for Germany). For information, the elements mentioned for electricity prices in Luxembourg are not applicable to the natural gas market. Indeed, the Belgian and Luxembourg gas markets were integrated on 1 October 2015 in one market zone, the integrated market area BeLux. Therefore, for natural gas in Luxembourg, the remarks mentioned for Belgium have to be considered.
Most impacted customers?	
Mitigation measures?	As of today, no other aid than the increase (200€) in the 2022 cost of living allowance ("augmentation de l'allocation de vie chère") has been planned to compensate for the increase in energy prices in Luxembourg. This allowance increase will be effective as of 1st January 2022 ("Règlement du Gouvernement en Conseil, Memorial A 828", published on 26 Nov. 2021). Ministries announced they will continue to monitor the evolution of prices closely and inform the Council of Government. Measures for SME or industrial consumers are currently not foreseen.
Impact on power sector (producers, suppliers)	
Industry reaction	
Any other relevant info / data	

Country	The Netherlands
Key drivers of price increase	• High wholesale market gas prices combined with more gas fired production of electricity
Most impacted customers?	• Household and SME customers with variable price contracts and those who now start a new contract with fixed price and fixed period • Industry customers whose prices are linked to the wholesale market
Mitigation measures?	• Temporary energy tax reduction of 3.2 billion in 2022. • Extra 150 million insulation subsidy on top of existing scheme
Impact on power sector (producers, suppliers)	• Household and SME customers with variable price contracts and those who now start a new contract with fixed price and fixed period. • Industry customers whose prices are linked to the wholesale market. • Suppliers with high dependency on short term markets are at risk.
Industry reaction	• No market intervention – this is how a market works – low prices and high prices the same
Any other relevant info / data	

Country	Poland
Key drivers of price increase	• Sharp price increase of CO2 allowances • Increase in wholesale natural gas price
Most impacted customers?	• Leading power companies has officially demanded significantly higher tariffs to cover their expenses caused by higher carbon prices, therefore also a vulnerable customers will be impacted by the current energy crisis. • Industrial and business customers, whom will be forced to increase their product prices or to reduce production capacities. • Specific impact for the largest buyers who buy directly from the power exchange, unless they benefited from long-term instruments. • Consumers in smaller companies were less affected if they had long-term contracts with a fixed energy price. However, the effect is postponed by one or two years.
Mitigation measures?	• A new law protecting low-income customers that are energy vulnerable is being prepared and on the EU level there is proposed by Poland financing by EU funds in this area and for the flexibility to introduce quick, temporary measures to protect consumers and ensure fair treatment of businesses. • Polish government proposed to reform EU ETS rules (due to alleged market speculations). • Due to socio-economic cost for the most vulnerable households especially social aspect needs to be carefully considered.
Impact on power sector (producers, suppliers)	• Polish power demand in August rose 3.1% year on year to 13.857 TWh while net generation increased 16% to 14.049 TWh on the back of higher coal burn. • Gas is not a substantial part of the power mix in Poland, but has quite huge part in the energy mix (for industrial use and heating purposes).
Industry reaction	
Any other relevant info / data	• Poland has filled its gas storage facilities. • Record high power prices boosted coal-fired production in the month. Hard coal-fired and lignite-fired generation rose 21% and 22% respectively and accounted for 80.9% of Poland's energy mix in August, up 3 percent points year on year. • The average spot price on the Polish Power Exchange in August was Zloty 383.42/MWh, an all-time high, and up Zloty 5.42 on July.

Country	Portugal
Key drivers of price increase	The main driver is the gas price evolution with strong increase in European indexes due to a combination of factors: • Storage reservoirs in minimum historical values. • Exports restrictions from Russia, Norway and USA. • Strong LNG competition with Asia. • Uncertainties on Nordstream2 pipeline COD. A second factor is the price of CO_2 licenses: • Steady increase in the past years as a result of regulatory policies aiming at the reduction of supply to foster decarbonisation. • To a lower extent, since August, some speculative positions from investment funds, may have some impact in prices in a context of less liquidity. • More recently (and also related with gas prices), the inversion in the technological merit order on behalf of more efficient coal also led to an increase in demand for licenses pushing also for higher prices. On a much lower extent some factors regarding generation and interconnectors: • Restrictions and unavailability in the interconnections and nuclear powerplants In the Iberian Peninsula in particular, there were also low levels of wind and hydro generation, with the hydro storage levels in Spain way below the average of the past two decades.
Most impacted customers?	In Portugal, at the moment, this was more directly felt by industrial customers with contracts indexed to the wholesale market, as they are exposed to the spot market volatility. But overall: 1. For households the average increase of the regulated tariff was only 1,6% in 2021, and it is expected also some containment of the tariff evolution for 2022; for the household in the liberalised market, at least in what concerns the most representative suppliers, most of the energy for 2021 was pre-purchased at a lower price so contracts and prices are stable. 2. For industrials the same happens for 2021 (with energy hedged in advance), except for those customers with prices indexed to the pool. Some customers are looking for longer maturity contracts that also help stabilise their prices which will be complemented by the measures announced by the Ministry for Environment and Climate Action to mitigate increases in costs of electricity (eg. reduction in the network tariffs and some additional measures for the energy intensive)
Mitigation measures?	The Portuguese government announced several measures to mitigate price increases namely: A. Regulated tariffs (last resort supplier) and network tariffs: no increases in the electricity price for household consumers in the regulated market for 2022 and a significative reduction in the network tariffs for industrials (see bellow the tariffs proposal from the NRA).

Country	Portugal
	B. Creation of the Energy Intensive Statute: energy intensive consumers may apply to this and benefit from some support mechanisms still to be defined C. Creation of a new capacity "balancing" product, specifically targeting large industrials that will replace the interruptibility mechanism A. **The NRA tariffs proposal for 2022, presented in October 15th, exceeded the expectations from the previous Government's announcement:** 1. The regulated tariff for household consumers will decrease in 3,4% from December to January (which represent about 0,2% increase compared with 2021 average tariff, which is in line with the Government announcement that the regulated tariffs would not increase in 2022) 2. Network tariffs will decrease more than 50% for households and even more for industrials, with an average reduction of 94% for higher voltage levels (previous Government announcement was a reduction of at least 30%). B. **The Government recently launched a public consultation on the revised legal framework for the electricity sector, which sets the rules regarding the Energy Intensive Statute.** This Decree-Law was meanwhile approved on December 2nd and awaits the President of the Republic enactment The Statute for the Energy Intensive considers several support measures such as: 1. Exemption at least for 75% of the CIEG component of the network tariffs (related with policy costs, not with network costs per se); 2. Exemption of proximity criteria established for self-consumption and full exemption of the CIEG component applied to the self-consumed energy. 3. Compensation, where applicable of the CO2 indirect costs for companies under the ETS and subject to a high risk of carbon leakage. 4. Access to a hedging mechanism, supported by the State, in the procurement of RES electricity under long-term contracts, namely with the full exemption of the CIEG component. C. **The NRA approved the Directive 16/2021, from November 18th, that sets the rules for the new capacity balancing product that intends to replace the current interruptibility scheme.** The interruptibility scheme was meanwhile revoked but will remain into force at least by the end of the year (as the new service is dependent on the EC evaluation for compliance with the State Aid Guidelines). The new capacity product: 1. Is only applicable for large industrials (no other consumers or technologies are able to participate); 2. Consists of a yearly auction conducted by the NRA; 3. Consumers under the capacity mechanism are obliged to bid for the energy product as well, with a price cap.

Country	Portugal
	The call for the 1st auction is currently open by December 14th: 1. Applicable for the year of 2022 2. Reserve price of 20€/MW/h 3. Max 47MW/h per physical unit 4. Total capacity of 425MW/h This represents up to 74,5 M€. The NRA also published the Regulation 951/2021, November 2nd, with other extraordinary measures to mitigate the impact of the wholesale prices, in particular for some suppliers that face bankruptcy risks: 1. Exit mechanisms for suppliers with default probability before that occurs. Suppliers may require a massive switching of their customer's portfolio to the Last Resort Supplier, under the best available option in regulated tariffs, for a maximum period of 2 months. Some suppliers already requested the application of this mechanism and several others are expected to follow. 2. Access to hedging mechanisms from smaller suppliers considered more exposed to market fluctuations. Suppliers with a market share below 5% are now granted access to RES auctions, regarding a part of energy from a mechanism initially designed for the Last Resort Supplier. 3. Fast track adaptation on collaterals required, for suppliers with relevant changes in their consumers portfolio.
Impact on power sector (producers, suppliers)	Even with natural hedging from vertical integration, sales overcome the covered electricity generation, which means companies must buy the difference at the market. So this will have a negative impact on the results. The new balancing product will impact suppliers negatively as this now adds to the sourcing costs of energy that was already covered (and contracted with consumers) before by suppliers, not considering that additional cost that will be allocated to consumption through suppliers. This represents up to 74,5M€ for 2022.
Industry reaction	No major reactions so far from the industry. Just some initiatives to create awareness that: • Strong market fluctuations call for long-term solutions, not hasty short-term interventions which will only worsen things and shake confidence of investors. • Disproportionate interventions that create additional distortions must be avoided. This is the case with some of the measures in Spain. • Regardless short-term solutions, it is crucial to keep on the path of renewables and electrification as key factors towards decarbonisation and to reduce exposure to oscillating gas prices.
Any other relevant info / data	With the non-approval of the State Budget (in November), the President dissolved the Parliament and scheduled anticipated elections for January 30th: • Some of the previously expressed views from opposition parties (aiming to reduce the revenues of inframarginal powerplants), are now reemerging.

Country	Portugal
	• The Left Party already announced their elections program which among other refers again to changes in the wholesale market design, higher support to families and reduction of VAT.

Country	Slovak Republic
Key drivers of price increase	High prices on the spot market.
Most impacted customers?	Households and industry
Mitigation measures?	• Government does not plan any short-term or long-term interventions in the price formation. • Recently, the reform of regulated tariffs (i.e. "tariff for system operation") took place through the prolongation of RES support. Tariff for system operation consists of several components, including the RES support. This prolongation means that the RES support will be distributed over several additional years (i.e. annual reduction of the tariff for system operation). The main objective of this measure is to reduce final prices for all consumers. • Politicians are considering the reductions in VAT rates for electricity and gas, the temporary suspension of payments to the National Nuclear Fund, or the use of financial resources from the national Environmental Fund for compensating high energy prices for industry.
Impact on power sector (producers, suppliers)	One of the main suppliers stopped its activity.
Industry reaction	
Any other relevant info / data	

Country	Slovenia
Key drivers of price increase	• General inflation - In September 2021, the annual growth of consumer prices was 2.4%, while at the monthly level a 0.1% deflation was recorded. Annual growth was pushed up the most by higher prices of petroleum products, whereas monthly deflation was mostly due to lower prices of package holidays. • Energy prices - Price increase of CO2 allowances.
Most impacted customers?	• Industrial customers, especially in the energy intensive sector. Industrial electricity consumption is lagging behind 2019 levels due to problems with the supply of materials and the slowdown in production growth. A huge majority of the industrial companies has delayed orders and did not enter into electricity and gas contracts for 2022. • Household customers have usually contracts with price guarantees but only for a limited period of time; for the most part price adjustments are to be expected in the near future (either in autumn 2021 or in beginning of 2022).
Mitigation measures?	• Measures to protect vulnerable customers, most probably in the form of heating allowances (vouchers). • The adoption of the regulation in relation to indirect emission costs. ETS Guidelines aim at reducing the risk of "carbon leakage", and in particular, they enable Member States to compensate companies in at-risk sectors for part of the higher electricity prices resulting from the carbon price signals created by the EU ETS (so-called "indirect emission costs"). Slovenia has not yet transposed the EU rules and should accelerate the process. The regulation is planned to be adopted in the following months (i.e. by the end of 2021 at the latest). • The government reintroduced administered pricing of heating oil by issuing a regulation on the pricing of petroleum products. The distributors' margin has been limited to a maximum of six cents per litre of heating oil.
Impact on power sector (producers, suppliers)	• Some retailers are keeping the prices unchanged for the time being. Some already announced price increases; one retailer defaulted.
Industry reaction	• Industry and power industry called for improved framework conditions for the deployment of renewables, in particular to accelerate permitting processes. • Industry, in particular the energy intensive sector, called for urgent short-term measures (reduced tax rates, lower fees, price cap).
Any other relevant info / data	• Stable gas and electricity prices in the last years. • The average natural gas price for household consumers in Slovenia in the second quarter of 2021 increased by 3%; it was 0.055 EUR/kWh. • The average electricity price for household consumers in Slovenia in the second quarter of 2021 was 0.165 EUR/kWh, which is a 7% increase over the first quarter. • In the second half of 2020, natural gas prices for non-household consumers 13% higher than the EU average.

Country	Slovenia
	• The international comparison of natural gas prices for the second half of 2020 shows that in Slovenia the price with all taxes for household consumers represented 79% of the EU-27 average and for non-household consumers without VAT 113% of the EU-27 average. In the same period the electricity price with all taxes for household consumers represented 79% of the EU-27 average and for non-household consumers without VAT 78% of the EU-27 average.

Country	Spain
Key drivers of price increase	• Record-high gas prices • Economic activity returned to pre-pandemic levels in the first half of 2021. • Unpredictable weather (a chilly spring) • Not enough renewable generation to make up the gap • Higher carbon prices
Most impacted customers?	• Mainly, consumers signed up to the Voluntary Price for the Small Consumer (PVPC) scheme, i.e., subscribed to the regulated tariff, since in this tariff electricity prices are linked to the result of the day-ahead energy market. • At present, there are around 26 million customers in Spain (with less than 10 kW of contracted power), of which around 11 million are subscribed to the PVPC scheme. All vulnerable consumers are required to be under this PVPC scheme.

Mitigation measures?	Market intervention measures[3]:
	• Temporary deduction of market revenues in a proportion of natural gas prices for non-CO2 emitting power plants (hydro and nuclear, and wind and photovoltaic without subsidies) until March 2022: when the gas price is above 20 €/MWh, these generators must pay an amount per MWh produced that is equivalent to the alleged gas price increase in the electricity market . There is an exemption for the energy already subject to a long term fixed-price contract, with physical delivery or financial clearance, if the contract was entered into before the pertinent regulation (RDL 17/2021) came into force, and for subsequent contracts that include a coverage period equal to or greater than one year and with a fixed coverage price.
	• Proposal of a deduction of market revenues in a proportion of CO2 prices for non-CO2 emitting capacity installed before 2003 (hydro and nuclear, and renewables without any regulated scheme): when the CO2 price is above 21 €/tCO2, these generators must pay an amount per MWh produced that is equivalent to the CO2 price increase in the electricity market. Still under debate in the Parliament.
	• Compulsory participation in the auctions of baseload energy (from 2022 onwards) for 4 companies that must offer a 25% of their nuclear and hydro production to retailers and large industrial consumers.
	
	Fiscal measures:
	• Reduction of taxes and levies
	  • Temporary suspension of the Tax on electricity generation (7%) (until the 31st of December of 2021)
	  • Temporary reduction of the excise duty rate on electricity (from 5.11% to 0.5%) (until the 31st of December of 2021)
	  • Temporary reduction (until December 31, 2021) of the Value Added Tax (VAT) rate from 21% to 10% for customers with less than 10 kW of contracted power.

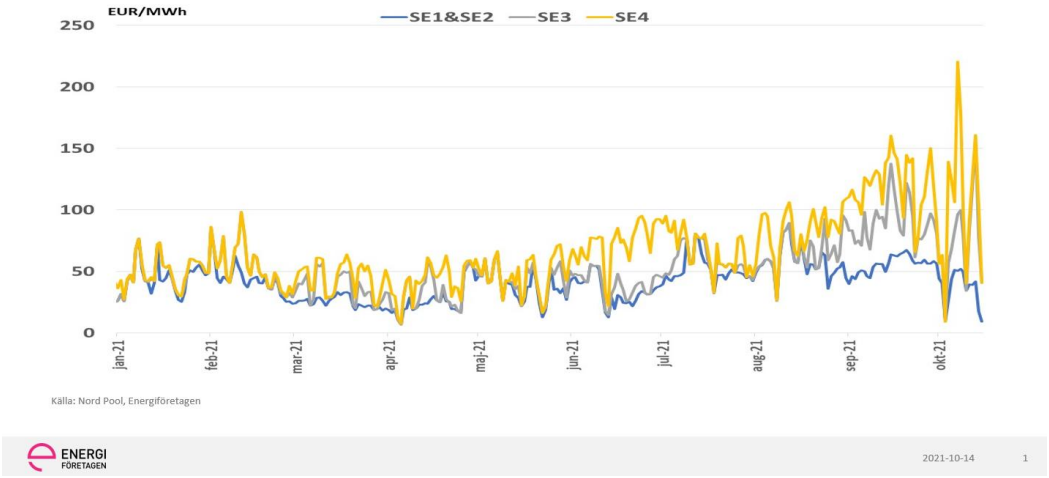
[3] Please note the recent decision of the Spanish government to introduce exemptions to the application of the measures listed.

Country	Spain
	• Increase of the amount of revenues from CO2 emission allowance auctions used to finance levies in the electricity bill: from €1,100M to €2,000M. • Cap on gas price reviews for the regulated tariff of natural gas, known as the "last resort tariff" (TUR) for customers that have annual consumption of less than 50 MWh and are not in the liberalised market, until March 2022. Measures to protect the most vulnerable households: • Four-month extension of bans on electricity shutoffs for vulnerable consumers ; • Vulnerable customers will have access to a discount of 60% on their electricity bill (instead of the usual 25%) until March 2022 • Severe vulnerable customers will have access to a discount of 70% on their electricity bill (instead of the usual 40%) until March 2022

Impact on power sector (producers, suppliers)	• Carbon-free generation that are not backed with long-term contracts may have to supply electricity at loss.
	• Undermine investor confidence by introducing regulatory uncertainty, especially hinder the investment inflow for climate target (e.g., investment companies will be less willing to invest in green energy). As a result, the Spanish energy transition is put at risk: it will be more expensive and slower.
	• Proper market functioning at risk:
	  • Non-emitting generators will be required to bid-in at prices unrelated to costs, then distorting behaviour
	  • Against the "polluters pay principle", it incentivises fossil fuel generation

Industry reaction	Industry reaction on the Market intervention measures: • Spain's industries are requesting the government to put a halt on the charges to non-emitting electricity generation, as their electricity supply contracts are put at risk (upwards adjustments)
Any other relevant info / data	

Country	Sweden
Key drivers of price increase	• Market coupling with central European market and particularly with German market. • Initially low levels in Scandic reservoirs at the end of the summer and low wind power production. • Large deficit in the power balance in the south of Sweden, underscored by the closing of nuclear reactors and increased taxes/duties on refuse-based CHP. • Transmission capacity curtailment between Swedish BZs, internal bottlenecks in SE3 (Stockholm/Gothenburg)
Most impacted customers?	• Customers in Southern Sweden where prices have been more than twice as high than in Northern Sweden. • In general, few industrial customers publicly reveal reductions in production, however, some industries have announced cutbacks and there is one example of permanently closing a facility. • According to latest statistics, the share of dynamic contracts in Sweden as a whole is 54,3%. Although, lately, price comparison websites have announced a steep increase in demand for contracts with fixed price.
Mitigation measures?	• The Swedish TSO did for a short period contract capacity from a CHP plant for operational security reasons. • On 1 Dec 2021, the peak load reserve was put on 2h standby • Other than that, no governmental measures taken.
Impact on power sector (producers, suppliers)	• Prices have been more than twice as high in southern Sweden (SE4) than in northern Sweden. • Risk for bankruptcy – electricity retailers who offer fixed price contracts are exposed to high volume and profile risks, especially if the high prices will continue during autumn and winter. Further, there is a risk that some actors will not manage the higher margin calls. • Insufficient hedging opportunities has led to retailers not offering fixed price contracts. • Loss of market makers for area price hedging at Nasdaq. Due to transmission curtailments, price area differentials can sometimes comprise 50% of the DA-price. • Increased costs for customers, extreme volatility, increased risks (profile, volatility, credits…), both for customers and retailers, increase the risk for customers failing to pay. • Fear of loss of trust for the market, it's participants and maybe politicians • Asymmetries between natural sellers and buyers of hedging products implies low liquidity. Market participants requests the TSO to fulfil the requirement according to article 30 of the FCA-code.
Industry reaction	
Any other relevant info / data	



Daily average price development in Swedish price areas SE1, SE2, SE3 and SE4.

Country	Switzerland
Key drivers of price increase	• Electricity prices in neighboring countries, due to higher gas, coal and CO2 prices and weather-related low level of production from RES.
Most impacted customers?	• Switzerland has a partial liberalisation. Therefore, in Switzerland, only customers with a demand > 100 MWh / a are exposed on the market. As such, industries and energy-intensive customers are particularly affected. • Households and small businesses with a requirement <100 MWh / a are not yet affected due to prices under scrutiny. However, these customers will see rising prices in the next few years (more or less strongly depending on the supplier's procurement strategy). Nevertheless, electricity retail prices in Switzerland are relatively low. • However, gas customers are already affected by the high gas prices.
Mitigation measures?	• No mitigation measures planned so far by the government.
Impact on power sector (producers, suppliers)	• So far, only customers with a demand > 100 MWh are exposed to increase energy prices. • Producers are positively affected as prices are now above long-term marginal costs after prices have been below long-term marginal costs for a very long period (12 years). • Suppliers are affected differently depending on the proportion of in-house production, their purchasing strategies and risk exposure
Industry reaction	• The industry's reaction is limited. The share of energy-intensive industries in Switzerland is comparatively low.
Any other relevant info / data	• The strong electricity and gas prices were a topic in the media.

Country	Turkey
Key drivers of price increase	• Rising fuel cost of NG and imported coal using power plants
Most impacted customers?	• Some of the rise in natural gas prices are reflected to industrial consumers and electricity producers using NG.
Mitigation measures?	• Ministry of Energy and Natural Resources declared that a new agreement was signed with Azerbaijan for natural gas supply.
Impact on power sector (producers, suppliers)	• The renewable energy producers are not affected they have fixed tariffs. Those who are using imported coal for energy production are affected negatively.
Industry reaction	• Industry is asking for state support in terms of tax reductions, special electricity tariffs etc.
Any other relevant info / data	• Existing long term natural gas supply agreements is an advantage for Turkey.

Country	United Kingdom
Key drivers of price increase	• The global upward pressure on natural gas prices is feeding into the UK electricity prices given that 1) the UK imports a significant share of its natural gas and therefore is not protected from these price increases, 2) Over 35% of the UK's electricity supplied is typically generated from natural gas and 3) Gas power plants are often the price setting plants in the merit order. • A bounce back in energy demand after coronavirus lockdown restrictions • Some of the poorest conditions for wind generation in the North Sea for more than two decades • Low gas stocks in Europe after the prolonged cold weather last winter • UK's lower gas production (28%) due to maintenance • High prices for electricity on subsea cables, through which Britain trades power with continental Europe • Rising UK ETS has also supported the power prices.
Most impacted customers?	• Households on default tariffs are to an extent protected from these price increases for the time being as the cap will not change again before April 2022. Other households shopping around have already witnessed significant increases in the fixed tariffs offered currently in the market, many tariffs being hundreds of £s above the October 2021 price cap level of £1,277 for a typical consumer. • Non-domestic users are often under more cost reflective contracts and many will face rising costs already this winter.
Mitigation measures?	• Said 22nd Sept.: The UK government has offered GBP220 million ($300 million) to help the country's largest carbon emitters to cut their emissions and reduce energy bills. • Kwarteng said price increases would not be passed down to consumers and that the government was ready to guarantee that "the energy price cap, which saves 15 million households up to £100 a year, is staying." • On 30th September, the British government announced the creation of a GBP500 million fund, distributed by local Councils, to help vulnerable customers. • The UK government is working on a plan (to be announced in October) to shift surcharges from household electricity bills on to gas bills, to promote the shift towards low-carbon alternatives.
Impact on power sector (producers, suppliers)	• Large industrial users will experience higher energy costs quickly, although many will have hedged their expected consumption in advance to lock in prices. • Many households will be shielded initially, as many are on fixed tariffs – particularly in the UK. But regulator Ofgem has already raised the so-called price cap in August by more than 12% to account for the strength in wholesale prices. That is despite wholesale costs only making up about 40% of an average utility bill. Households on default tariffs are, to an extend, protected from these price increases for the time being as the cap will not change before April 2022. • If the price in the UK remains high throughout the winter, the price cap may rise by an even larger amount

Country	United Kingdom
	• Supplier side: The volatile wholesale market is adding onto already challenging market conditions and has led to several exits in the domestic retail market, as demand shaping costs have increased and some suppliers haven't necessarily hedged themselves properly against the price increases. • Producer side: Tight margins and high gas prices have resulted in coal plants running through extended periods as well, although the UK's coal fleet is limited nowadays.
Industry reaction	
Any other relevant info / data	• Power prices in the £100-200/MWh region throughout most days with peak periods reaching above £200/MWh. • electricity system margins were tight at times which resulted in some very high price periods during peak hours in September (above £4,000/MWh in one period). • Day-ahead power prices hit £540 per megawatt hour on 13th Sept (Highest since 2008) • Day-ahead prices jumped 7 per cent on 14th Sept to more than £1.65 per therm, almost treble their level the start of the year and an increase of 70% since early August alone. • Gas hits record high: reaching £1.31 per therm, more than 4 times higher than this time last year. • Wind was only providing 4.9% of electricity generation on Monday afternoon, compared with an average of 18 per cent over the past year, according to data from National Grid • Coal-fired plants were producing a similar amount – more than double the norm over the past 12 months • Up to date spot electricity data: Drax Electric Insights, Nordpool • Up to date spot gas price data: National Grid