Prospects

No. 22/124 – 20 April 2022

EUROZONE – Russian gas supply vulnerability: what strategies?

- Europe's dependency on Russian gas increased mainly from 2011, to 38% of total European Union gas imports and 33% of Eurozone imports in 2019. Lifting this sword of Damocles is arduous, as the energy situation varies significantly from country to country.
- Our vulnerability indicator confirms France's low dependence on Russian gas due to its nuclear power supply. The substantial use of Russian gas in Italian and German energy consumption is, conversely, an important vulnerability point.
- The chemicals and petrochemicals sector would be the most affected in France, Spain and Germany in the event of a reduction in gas supply. In France, the food industry would be fairly penalised, while in Italy and Spain glass and ceramics would suffer more, as would steel and capital goods.
- The sharp rise in inflation since the end of 2021 has taken on a new scale since the invasion of Ukraine. The annual price growth rate rose sharply in March, to 7.5% after 5.9% in February in the Eurozone, with the rise in energy prices accounting for more than half of the increase in inflation.
- Despite a fairly uniform supply cost, there are differences in the price of retail gas between countries due to higher network costs in France and Spain and higher taxes in Italy and, especially, in the Netherlands.
- Electricity prices, on the other hand, are more heterogeneous and heavily dependent on the energy mix of countries, because the European electricity market, which operates on the *pay-as-clear* model, sets prices on the basis of the cost of the marginal producer, i.e., the most expensive one.
- European institutions urgently tackled rising energy prices in October 2021 when the European Commission advised states to resort to price caps, emergency household income aid, state aid to businesses and targeted tax cuts.
- However, it was not until March 2022 that the Commission adopted a more strategic approach to securing supply. With the REPowerEU plan, it describes an accelerated resilience path that could lead to a two-thirds drop in Russian gas imports in 2022.
- Gas storage is also becoming a critical infrastructure and measures on supply have been announced, including a common gas procurement strategy.
- Decisions on the cap on gas prices or the decoupling of gas and electricity prices are expected in May, after the final opinion of the European energy regulators.
- Meanwhile, the Member States have acted on the basis of the Commission's recommendations with measures amounting to around one percentage point of GDP on average in the major Eurozone countries in 2022 and with an impact on the inflation rate of -1.5 to -2.3 points.

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Dependence: the cause of the problem

European dependence on gas is an old story. It is the story of the desire to reduce oil dependency on OPEC countries after the financial crises of the seventies.

Europe's methanisation was facilitated by the discovery of gas deposits in Siberia and the desire of the USSR to link the countries of the Warsaw Pact economically and to extend its influence on other European countries. Thus, after a gradual reduction during the 1990s and 2000s, dependency on Russian gas increased from 2011 to 38% of total European Union gas imports and to 33% for the Eurozone in 2019.

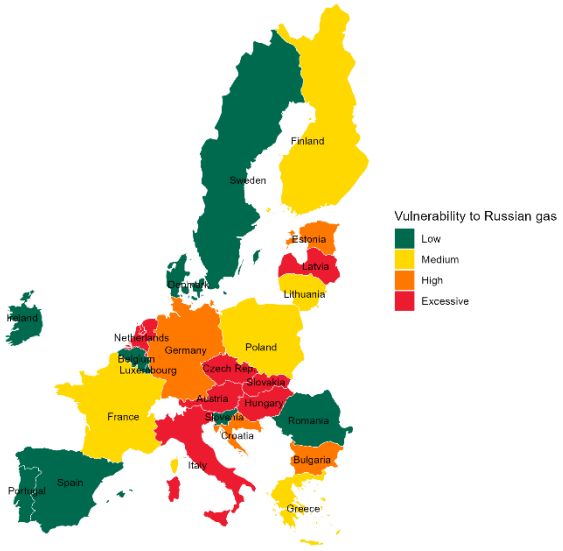
Dependence on Russian gas is a sword of Damocles that the European Union would like to see removed as quickly as possible. However, the task is difficult as the situations are very disparate and the alternatives vary depending on the country.

Vulnerability differentiated by country

Dependency on Russian gas is often illustrated by Russia's share of a country's gas imports, but this indicator only provides a partial picture. Some countries are also gas producers, while others are producers of other energy sources used for their final consumption. In order to assess as best as possible the degree of dependency on Russian gas, we have built a vulnerability indicator taking into account both gas imports from Russia, the amount of imported gas in the country's domestic consumption and the energy mix of the country *(see Box 1).*

This indicator allows us to rank countries from most vulnerable to least vulnerable to the supply of Russian gas (see map). Although, throughout the European Union, vulnerability appears to be medium-high, the breakdown by country nevertheless highlights some countries as particularly vulnerable. This is the case for Italy, the Netherlands, Austria, Hungary and Slovakia, for example, which are among the countries most exposed due to their high share of gas in final consumption as well as the high level of Russian gas imports. Not far behind, Germany appears to be highly vulnerable, but less dependent on imported gas for its final consumption. France would be significantly less impacted in the event of a supply disruption because the share of Russian gas in its gas imports is lower and the share of gas in its energy mix is lower. Finally, countries such as Spain and Portugal would be less vulnerable due to both a less gas-driven energy mix and a much lower exposure to Russian gas imports.

Vulnerability to Russian gas



Box 1 – Russian Gas Vulnerability Indicator

We first calculate the following three individual indicators for all European Union countries:

- ✓ the weight of gas in the energy *mix*;
- ✓ the share of imported gas in total gas consumption;
- ✓ the proportion of Russian gas imported into total gas imports.

These individual indicators are then aggregated by simple multiplication in order to produce our vulnerability indicator by country. Each of these components affects the final indicator equally, so that a high level of imports from Russia and a very low share of gas in the energy *mix* will ultimately have a fairly limited impact on a country's vulnerability to Russian gas. Conversely, a high proportion of gas in the energy *mix* and moderate Russian gas imports can have a significant impact on the vulnerability indicator (the details of these components and the global indicator are detailed in Table 4 in the appendix).

From one dependency to another?

To complete our analysis, we asked how dependent each country is on other exporters. We observed the concentration indices (*Herfindahl-Hirschmann*) of each country for the other gas exporters, which made it possible to identify possible dependencies on countries other than Russia and to verify the degree of diversification in the remaining supply. Germany and Portugal were still not very diversified, excluding Russian supply, and dependent on few suppliers, while France, Spain and Italy had many suppliers they could contact in the event of an untimely shutting off of the Russian gas tap.

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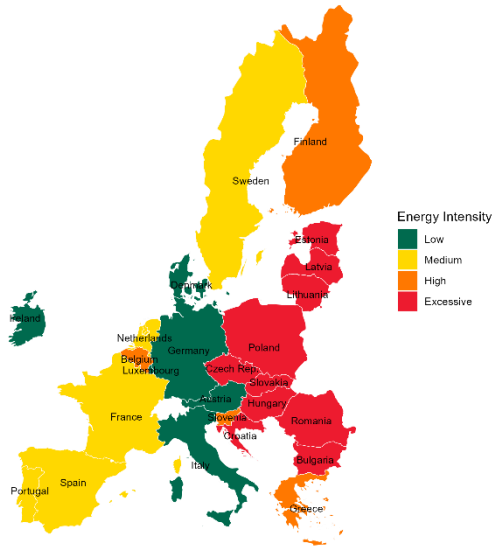
Table 1

Country	Overall concentration index	Concentration index excluding Russia
Germany	0,47	0,24
France	0,20	0,16
Italy	0,29	0,07
Spain	0,19	0,18
Austria	0,53	0,14
Belgium	0,26	0,25
Estonia	1,00	0,00
Greece	0,20	0,09
Finland	1,00	0,00
Ireland	1,00	1,00
Lithuania	0,48	0,29
Luxembourg	0,34	0,27
Latvia	1,00	0,00
Netherlands	0,28	0,21
Portugal	0,35	0,35
Slovenia	0,79	0,77
Slovakia	1,00	0,00
Bulgaria	0,67	0,04
Czech Rep.	1,00	0,00
Denmark	0,77	0,77
Croatia	1,00	0,00
Hungary	1,00	0,00
Poland	0,39	0,08
Romania	1,00	0,00
Sweden	0,59	0,59

An index of "1" represents extreme concentration while "0" reflects no concentration. Estonia, Finland, Latvia, Slovakia, the Czech Republic and Hungary import almost exclusively from Russia, while Ireland imports exclusively from the UK.

Energy intensity by country and sector

The impact of lower imported volumes and higher energy prices will differ depending on the energy intensity of the country. Measuring energy intensity allows us to determine the amount of energy used to produce a unit of GDP per country. Although high gross domestic product countries are more favoured by this indicator, the energy intensity map shows a Europe using more energy per unit of GDP in the East than in the West, with the exception of Belgium.

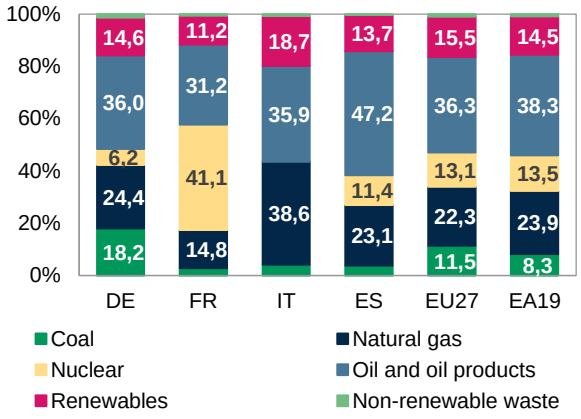


A more detailed analysis of gross available energy[1] and energy consumption by sector gives us a more accurate view of the vulnerability points by country.

[1] Gross available energy takes into account a country's production, imports, exports and energy inventory.

The special case is France, with a significant share of nuclear power available, which makes it easier to reduce its dependence on Russian gas. The high use of gas in Italy and Germany is, conversely, an important vulnerability point.

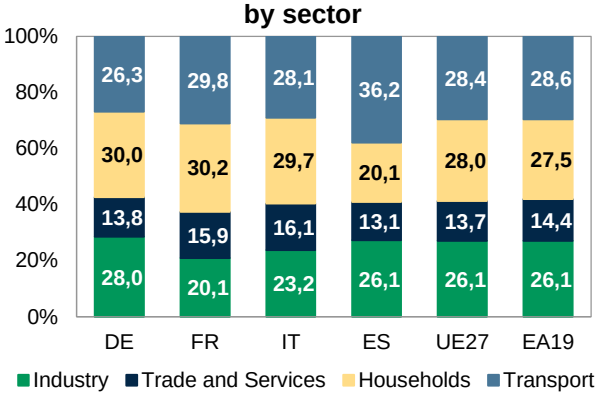
Gross available energy



Sources : Eurostat, Crédit Agricole S.A.

The breakdown by sector of final energy consumption shows that households are the main energy consumers in Germany (30%), France (30%) and Italy (29.7%). In Spain, the transport sector (36%) is number one in energy consumption, but industry is also a heavy consumer. Among the producer sectors in Germany, industry is the second-largest sector (28%) in terms of energy consumption, ahead of transport (26%) and shops and services (14%), which explains the strong fears of a drop in activity linked to a possible rationing of the industrial sector.

Final energy consumption by sector



Sources : Eurostat, Crédit Agricole S.A.

Households would likely be given priority in the event of an orderly rationing plan because most of the gas they use is for heating, particularly in Germany and Italy.

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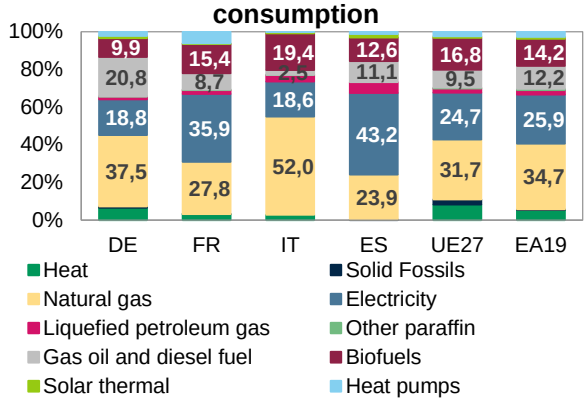
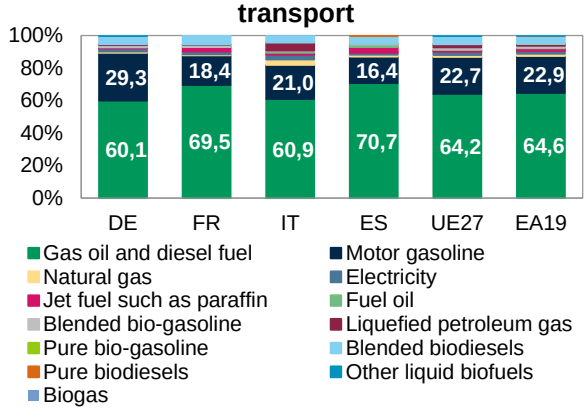
Final household energy consumption



Sources : Eurostat, Crédit Agricole S.A.

In the transport sector, energy consumption is mainly focused on diesel and gasoline. Since the use of gas is virtually non-existent, this is not a major risk as petroleum products could be supplied from other countries.

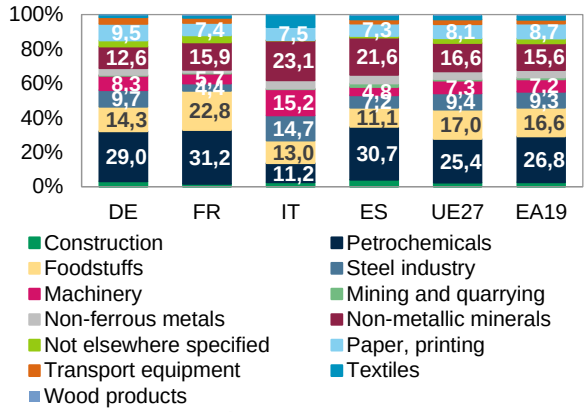
Final energy consumption in transport



Sources : Eurostat, Crédit Agricole S.A.

The intensive use of gas in certain industrial sectors, on the other hand, raises well-founded concerns.

Final gas consumption by industry



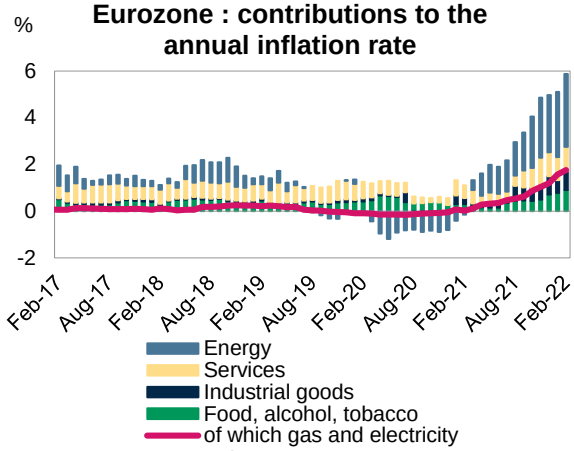
Sources : Eurostat, Crédit Agricole S.A.

The chemicals and petrochemicals sector would be the most affected in France, Spain and Germany, as the use of gas input into the manufacturing process is difficult to reduce. In France, the food industry (22% of industrial gas consumption) would also be penalised, while in Italy and Spain, glass and ceramics activities would be particularly affected. The steel and machinery sectors are also important consumers of gas in Italy and Germany, and could therefore be rationed if necessary.

The explosion in electricity prices: the symptom of the problem

The sharp rise in inflation since the end of 2021 has taken on a new scale since the invasion of Ukraine, with the price growth rate rising sharply in March to 7.5% after 5.9% in February. The rise in energy prices accounts for more than half of the rise in the consumer price index.

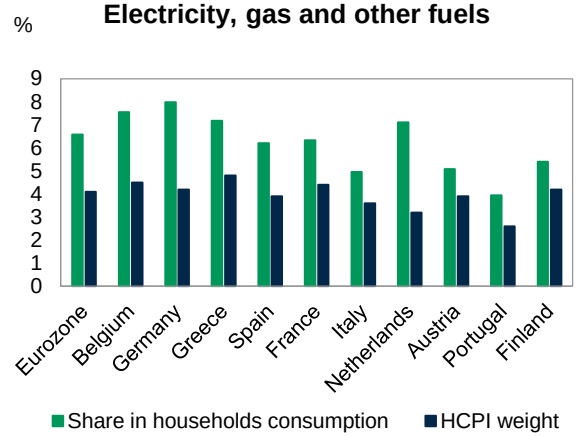
Eurozone : contributions to the annual inflation rate



Sources : Eurostat, Crédit Agricole S.A.

The rise in energy prices, all other things being equal, is reflected differently in the consumer price index according to the share of energy in consumer spending.

Electricity, gas and other fuels



Sources : Eurostat, Crédit Agricole S.A.

The impact of higher energy prices is also very uneven, depending on the consumers, with the share of energy in consumer spending of the least wealthy households being higher, with significant differences between countries in this distribution. Households with the lowest incomes will be more

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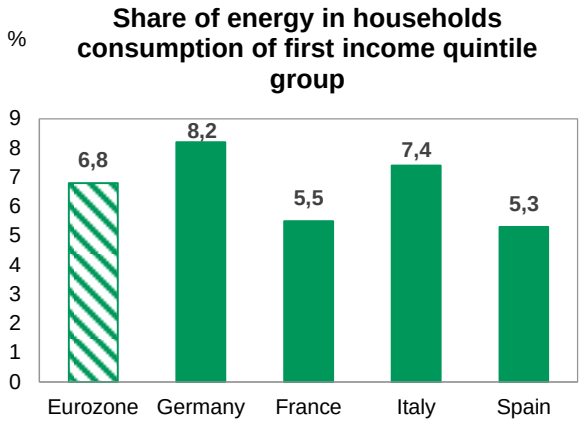
affected by higher energy prices in Germany and Italy.



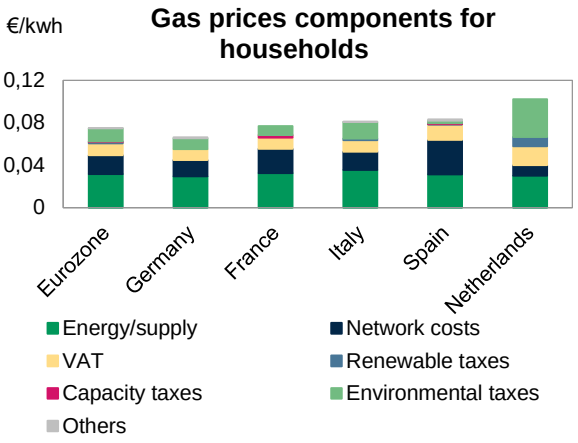
Sources : Eurostat, Crédit Agricole S.A.

Increase in gas prices: significant and rather homogeneous.

The sharp rise in gas prices since 2021 was first linked to the acceleration in demand due to the post-pandemic recovery in the presence of constrained supply, including LNG transport problems. It was also, although more marginally, linked to the increasing cost of emissions. In a second phase, since the end of 2021, other factors have come into play: the lower-than-average storage level, more limited imports by gas pipeline, and the invasion of Ukraine with the risk of a halt in imports from Russia.

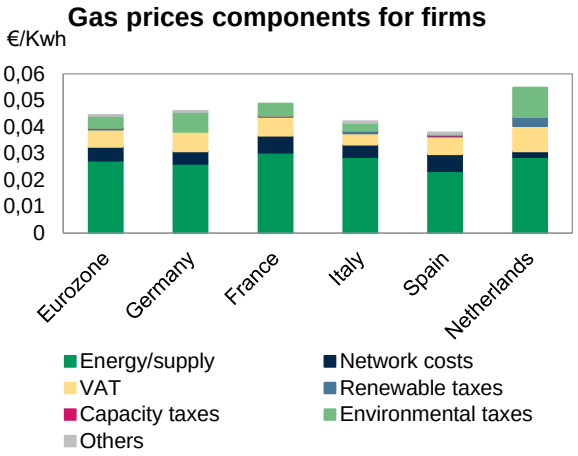
The setting of gas prices in Europe has undergone a gradual transformation by shifting from long-term oil price-linked import contracts to short-term contracts with a price generated on gas *hubs* (physical and notional) as a result of the meeting of supply and demand. While the share of oil-linked contracts has fallen to 35%, they remain in the majority for LNG imports. This transformation had a dampening effect on import prices until 2020. Since 2021, greater tensions on the gas market have, on the other hand, increased import prices, which are set in the shorter term.

Despite a fairly homogeneous supply cost, there are differences in the price of retail gas between countries. Differences in prices for households are mainly due to higher network costs in France and Spain, and higher taxes in Italy and, especially, in the Netherlands.

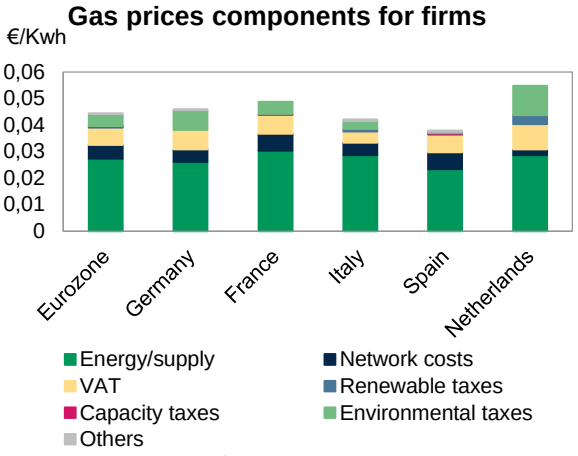


Sources : Eurostat, Crédit Agricole S.A.

The differences in price for companies are mainly due to higher taxes in Germany, France and the Netherlands.



Sources : Eurostat, Crédit Agricole S.A.



Sources : Eurostat, Crédit Agricole S.A.

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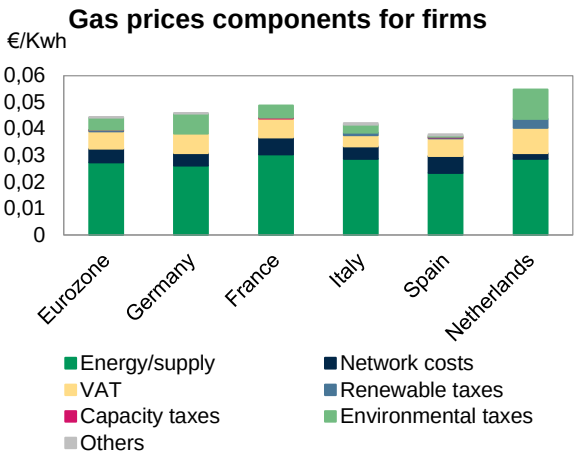
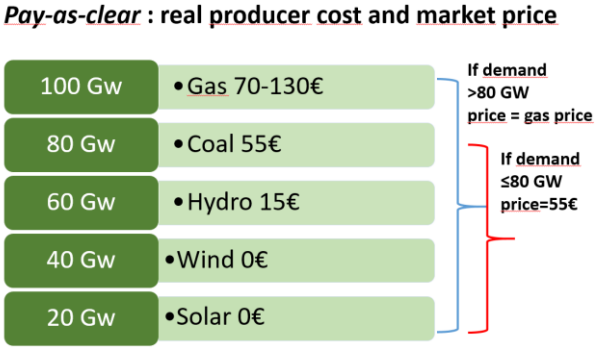


Sources : Eurostat, Crédit Agricole S.A.

Increase in electricity prices: correlated to the price of gas but heterogeneous

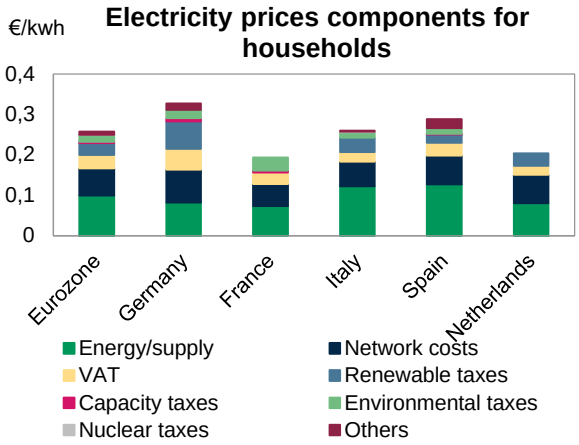
The correlation between the price of gas and the price of electricity reflects past investment decisions in energy generation and technological choices. The interdependence of gas and electricity prices also depends on the configuration of the electricity market. The European electricity market operates on the *pay-as-clear* model with price setting based on the marginal producer cost. Producers enter the market to satisfy demand in a certain order (technology neutral) which defines the price for all producers. In recent years, however, the dependence of electricity prices on gas prices has enabled competitive prices to be maintained and CO_2 emissions to be decreased.

A country's energy *mix* is therefore very important to price setting. This model is the most effective for liberalised electricity markets and is the most appropriate model for promoting efficient electricity exchanges between Member States on the wholesale market. The objective of this model is to provide the relevant price signal for new investments in emerging technologies and to allow for the necessary investment (especially for renewables with a higher initial investment, but lower operating costs).

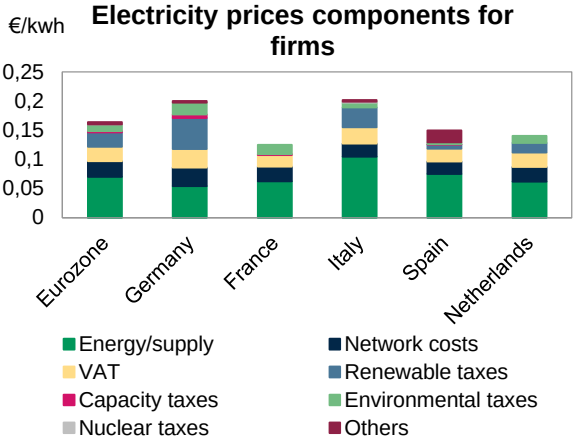


As European demand is increasingly being met by producers of intermittent renewable energy, the needs of peak demand will be increasingly met by gas-powered plants, as the price of gas has a significant impact on electricity prices. The price of gas will be even more volatile in the future as it will serve less to meet basic needs and increasingly peak demand. The issue of capping gas prices is therefore a more structural issue, beyond the current situation.

Despite the relative homogeneity of the price of wholesale gas between countries, there is a greater heterogeneity of electricity prices, which depends on both the different supply costs and the respective burdens of taxation. The share of supply in the cost of electricity for companies can vary from 27% in Germany to 52% in Italy.



Sources : Eurostat, Crédit Agricole S.A.



Sources : Eurostat, Crédit Agricole S.A.

This cost depends on both the degree of gas dependence and the degree of interconnection of national networks with those of neighbouring countries.

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The European strategy: from the lowest cost logic to that of securing supply

For European countries, the logic of the lowest cost is the one that has prevailed. The strategic approach to securing supply was abandoned, including after 2014 and Russia's invasion of Crimea. However, the European treaties set as the objective of the European energy policy the diversification of energy sources and guaranteed energy security, and the reduction of dependency on imports. However, each State retains the right to determine its choice between the different sources of energy and the structure of its supply.

In March 2020, the European Parliament called for a coordinated approach by Member States to deal with energy suppliers, particularly Russia. It nevertheless concluded that, despite the high dependence on Russia, it had always been a reliable supplier. This is still the case today, despite the war in Ukraine, but the threat of an interruption of supply binds the hands of the European Union in its ability to impose substantial sanctions. In order to protect itself from blackmailing (not only Russian), energy policy must become one of the pillars of the Union's strategic autonomy policy, which calls for consistency in its energy, industrial, trade and defence policies.

An initial approach focused solely on reducing the impact of rising prices

However, although as early as September 2021 various European Council formations (energy, transport, economy) decided to tackle rising prices urgently and in concert, no measures on supply were mentioned. The European Commission's communication of 13 October advised states to use price caps, emergency household income aid, state aid to businesses and targeted tax cuts to reduce the impact of higher prices on economic agents.

It also proposed medium-term measures to improve storage capacity and mandated the Agency for the Cooperation of Energy Regulators (ACER) to assess the advantages and disadvantages of the current organisation of the wholesale electricity market, using a pricing methodology based on marginal price and the uniform market.

It is only at the European Council meetings of 21 and 22 October that the Commission was invited to analyse the functioning of the energy market in order to guarantee affordable prices, to verify the resilience of the system and the security of supply.

Two preliminary reports on the functioning of the energy market were issued in November 2021 by ACER and ESMA, but the Council of European Energy Ministers in December showed its support for the current model of the wholesale electricity market and confined itself to supporting national measures to limit the impact of rising prices.

Finally addressing the issue of procurement

It was only on 15 December 2021 that the European Commission's first security of supply proposals were being developed with the aim of improving cooperation and resilience, in particular to ensure a more efficient and more coordinated use of storage and the establishment of solidarity operational arrangements.

Already in 2014, the Commission had analysed the effects of a partial or total breakdown of gas supplies from Russia and had concluded that purely national approaches would not be very effective in the event of serious disruption, and that a more cooperative approach could considerably reduce the effects of major disruption scenarios in the most vulnerable countries. As a result, the directive on security of supply of natural gas established a process of risk analysis and prevention and crisis management through information sharing and solidarity measures between countries.

The Commission is now proposing that Member States explicitly integrate storage in their security of supply risk assessments at regional level, including risks related to the control of storage by third-country entities. The proposal lays down the conditions for the voluntary deployment of joint procurement for strategic gas stocks to be used in the event of an emergency. Measures have also been introduced to facilitate bilateral solidarity agreements between Member States in the event of a crisis.

The Commission could:

- ✓ require storage of a minimum amount of gas in underground storage;
- ✓ establish procurement, auction or equivalent mechanisms that encourage storage capacity reservations;
- ✓ require a transmission system operator to acquire and manage strategic gas stocks.

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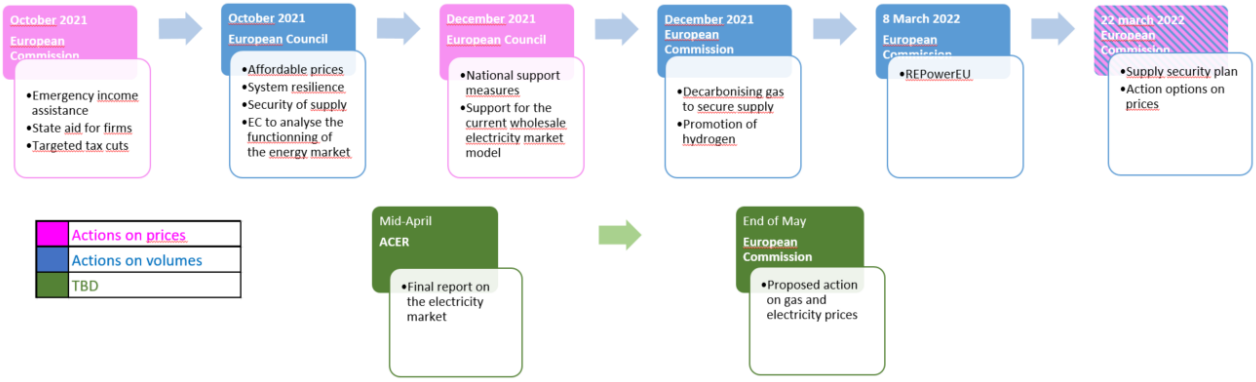
Timetable for European interventions



In early March, the International Energy Agency (IEA) published a ten-point plan to reduce European dependence on Russian gas. The plan is divided into 10 measures, which, if implemented in 2022, could reduce Russian gas imports by one third (or 50 billion m^3 out of a total of 155). The agency suggests allowing long-term contracts to expire and reducing the level of imports to the contractual minimum *(take or pay* contracts), replacing them with non-Russian sources and introducing minimum storage obligations. It proposes accelerating wind and solar projects, promoting electricity generation via bioenergy and nuclear power, and reducing demand (accelerating the installation of heat pumps, energy efficiency of buildings and industry, reduction in heating). The IEA also suggests decarbonising electricity generation to reduce high-cost gas supply peaks. Meanwhile, it suggests focusing on protecting vulnerable consumers whose needs are estimated at €200bn.

REPowerEU: preparing for the near future and resilience in the medium term

Most of the measures were included in the REPowerEU plan presented by the European Commission on 8 March. The plan is part of a new strategic paradigm whose objective is threefold: economic, geopolitical and climate; to maintain affordable energy, secure its supply and accelerate the transformation towards a more sustainable European economy.

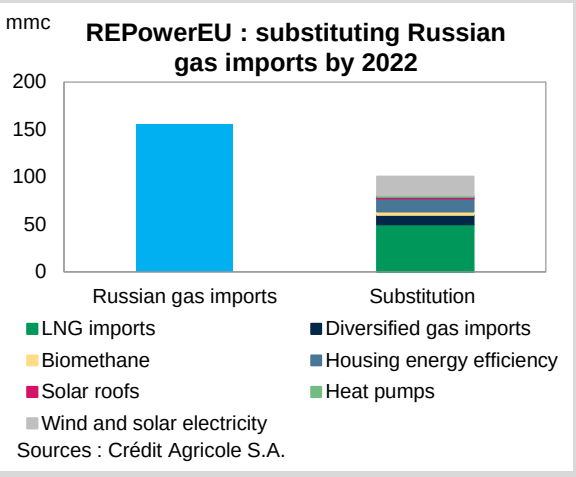
Box 2 – REPowerEU

The plan is based on two pillars: preparing for the near future and accelerating the resilience of the energy system by 2030.

The first area of preparation for the near future targets the emergency situation created by the Russian-Ukrainian conflict.

The plan aims first to **mitigate the impact of higher energy prices** on household purchasing power and business costs.

- ✓ The Commission authorises countries to regulate prices by activating Article 5 of the Electricity Directive. Retail prices for households and micro-enterprises can be capped under exceptional circumstances such as today.



Sources : Crédit Agricole S.A.

With regard to taxation and transfers, the Commission reiterates that several tools are available.

- ✓ Transfers to protect consumers.
- ✓ State aid for short-term support to businesses and farmers. State aid is also available for temporary liquidity support, with particular attention to gas distribution and intermediate trading undertakings, which are seeing their supply costs increase.
- ✓ The Commission also authorises State aid under the ETS (European Emissions Trading System) for companies exposed to the risk of carbon leakage.

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- ✓ A consultation with the Member States is apparently also underway on an independent temporary framework for liquidity support in crisis situations.
- ✓ The Commission also encourages countries to use ETS revenues, which reached €30 billion in 2021.
- ✓ Finally, temporary tax measures on the exceptional profits of non-gas power producers, which could amount to €200 billion.

Secondly, the plan aims to **prepare for next winter.**

The immediate objective is to build up sufficient reserves, including to offset a possible cut in flows by Russia.

The second axis is the elimination of dependence on Russian fossil fuels by 2030. The Commission also presented an accelerated path of resilience that could lead to a two-thirds drop in Russian gas imports by the end of 2022.

This requires a significant and immediate effort (end 2022) to replace 100 billion m^3 (mmc) out of a total of 155 mmc per year from Russia.

The plan suggests a two-pronged diversification of gas imports:

- ✓ The import of an additional 50 mmc of LNG from the United States, Qatar, Egypt and West Africa;
- ✓ Diversification of gas imports by pipeline for an additional 10 mmc from Norway, Algeria and Azerbaijan;
- ✓ More renewable gas thanks to biomethane (3.5 mmc) and renewable hydrogen.

Measures in favour of the electrification of the economy, with the acceleration of the granting of permits for alternative energies becoming a higher public interest strengthened by a future Commission recommendation:

- ✓ Measurements of energy efficiency in homes (14 mmc);
- ✓ Solar roofs (2.5 mmc);
- ✓ Heat pumps (1.5 mmc);
- ✓ Wind turbines and solar capacity (20 mmmc);
- ✓ Measures to transform the industry through more electrification and renewable hydrogen.

The mobilisation of funds from the national recovery plans (funded by the NGEU) and EU cohesion policies is recommended with the prioritisation of cross-border network interconnection projects.

An inventory of Member States' needs for financing these projects has been launched and, after mobilising the available resources, could be funded by a new European *ad hoc* fund.

60% of this plan is based on the search for alternative suppliers. For the remaining 40%, energy savings and the development of alternative energies provide the solution. This is its Achilles heel. The time-frame may be too short and the strategy may have to rely on decreases in industrial demand with contingency plans involving production cuts. The reduction in heating in commercial buildings, offices and homes could also be imposed. The European plan therefore calls on all players, all sectors, to do their share, with the mobilisation of both supply and demand. European states and institutions will have to play an equally active role in the distribution and mitigation of costs.

A more detailed version of the REPowerEU plan will be presented in May after an evaluation of the options to optimise the European electricity market, to be submitted by ACER at the end of April.

Storage as a critical infrastructure

On 23 March, the Commission began to make the REPowerEU plan operational with a legislative proposal introducing an obligation that sets at 80% the minimum level of gas storage for next winter in order to guarantee the security of the energy supply. It would be raised to 90% in subsequent years. In order to encourage the replenishment of EU gas storage facilities, the Commission is proposing a 100% reduction in capacity-based transport rates at the points of entry and exit of storage facilities.

Storage site operators should communicate their filling levels to the national authorities. States should monitor the filling levels on a monthly basis and report to the Commission. A new mandatory certification of all storage facility managers will avoid potential risks arising from external influence on critical storage infrastructures, which means that uncertified operators will have to waive ownership or control of EU gas storage facilities. In addition, in order for a gas storage facility to cease operations, it will have to have an authorisation from the national regulator.

The Commission proposes, above all, agreement on a common strategy with a *task force* at European level for gas purchases. It will be responsible for the coordination of storage operations: it will collect

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orders, coordinate procurement, and match suppliers. The whole will take place via a common platform for bilateral negotiations with producers. The aim is to use the EU's oligopsony power to negotiate the best prices and prevent European countries from outbidding each other.

Treating symptoms with pricing measures

Pending its final decision on the organisation of the European electricity market, on 23 March the Commission agreed on a communication setting out the options for short-term intervention on gas and electricity prices, both at European and national level. These options concern financial compensation for fossil power producers or direct capping of wholesale electricity prices, or regulatory interventions to limit the returns of certain market participants. The pros and cons of each option are illustrated in Table 2.

National measures

Pending a decision at European level on the price cap on wholesale gas and electricity, the State response has been strongly inspired by the guidelines given by the Commission in its communication of 13 October 2021: the cap on retail prices of gas and electricity, emergency aid to household incomes, State aid to businesses and targeted tax cuts.

All in all, these measures will account for about one percentage point of GDP on average in the major Eurozone countries in 2022. Their impact on inflation will be significant: they will lower the inflation rate by 1.5 to 2.3 points depending on the country. The decrease is already visible in France, where the freezing of gas prices has been implemented earlier.

Table 2

Options to limit the impact of rising electricity prices		
Financial compensation measures for the wholesale market	Benefits	Disadvantages
Price compensation for power generators using fossil fuels to reduce their selling price	Decrease and marginal wholesale electricity prices	If at a national level, price distortions between countries; discourages decarbonisation
Wholesale electricity price ceiling with compensation for fossil fuel generators	Decline in wholesale electricity prices	If at a national level, price distortions between countries; discourages decarbonisation, offer security risk
Regulatory measures	Benefits	Disadvantages
Maximum price cap for non-gas producers with a repayment mechanism for public investment subsidies when price exceeds the ceiling	No impact on prices but generates revenues to be redistributed to consumers	Obstacles to competition, discourages investment
Setting of a maximum price for gas trading on the EU market	Immediate decline in gas and electricity prices	Risk to the potential supply, does not concern long-term contracts already stipulated

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APPENDIX

Table 3

	Types of measures	Germany	France	Italy	Spain
Policies to limit price increases	Price cap		4% cap on electricity prices Freezing of gas prices Discount of 15ct/L of fuel		Discount of 20ct/L of fuel
	Lower taxes and excise duties	43% reduction in prices for electricity generated by renewables (early removal of the EEG surcharge) Reduction in fuel taxes (decrease of 30ct/L for gasoline and 14 ct/L for diesel)		Cancellation of the fee VAT reduction Reduction of 30 days on the excise duty for fuels (25 ct/L) and LPG (8.5 ct/L)	Reduction of the tax on the electricity bill (VAT to 10% for consumers, special electricity tax to 0.5% and suspension of the tax on electricity generation).
Purchasing power support policies	Tax cuts or credits	One-off tax reduction of €300 for individuals Flat-rate abatement of €200 on income tax Basic tax allowance of €363 38ct increase in mileage allowances			
	Social security benefits (cheques, bonuses)	Heating cheque of €270 for beneficiaries of the housing allowance and €230 for students) Unlimited public transport pass capped at €9 per month	Energy cheque of €100	Social bonus Extension of the eligibility threshold of the energy social bonus to €12,000	Rent ceiling of 2% 15% revaluation of the Minimum Vital Income (VMI) Electricity social cheque (60%-70% of the invoice) and heating cheque
Policies in support of businesses and state aid	Policies to support businesses (outside the scope of state aid)	Partial activity, extension of SGLs, compensation for losses extended by one year	Partial activity, extension of SGLs	Tax credit of 25% of energy expenditure for energy-intensive companies 20% tax credit on gas expenditures Tax credit of 12% to 20% of expenses for energy-intensive businesses	Partial activity, SGL For the energy industry: 80% toll rebates €500 million For transport: direct aid €400 million
	State aid policies		Half of the additional cost of rising energy prices covered to €25 million Targeted aid by sector (farmers, fishermen) €400 million	Aid for automobiles and microprocessors €900 million Aid for the transport of goods €550 million	Aid for agriculture and livestock (€362 million), fishing (€68 million) and industry (€500 million)
	Impact on consumer prices	**-1,5 point**	**-2 points**	**-1,7 point**	**-2,3 points**
	Budget impact (bn)	**29**	**25**	**20,9**	**16**

Table 4

Country	Weight of gas in the energy mix (in %)	Share of imported gas in gas consumption* (in %)	Share of Russian gas in gas imports (in %)	Vulnerability Indicator vulnerability
EU27	21,23	167,61	37,76	13,43
EA19	22,90	173,60	32,77	13,03
Germany	26,08	135,81	48,79	17,28
France	20,33	166,02	19,60	6,62
Italy	29,21	172,78	47,07	23,76
Spain	17,73	215,58	8,51	3,26
Austria	18,23	228,98	63,00	26,30
Belgium	29,04	183,99	8,18	4,37
Estonia	8,54	166,34	99,03	14,07
Greece	5,82	329,43	32,29	6,19
Finland	2,80	300,93	97,03	8,18
Ireland	17,39	124,91	0,00	0,00
Lithuania	10,70	148,92	43,32	6,90
Luxembourg	16,45	109,74	27,23	4,91
Latvia	8,25	341,06	100,00	28,12
Netherlands	37,25	219,44	27,33	22,34
Portugal	11,10	290,23	1,60	0,52
Slovenia	12,17	122,44	11,77	1,75
Slovakia	25,03	190,70	100,00	47,73
Bulgaria	11,80	181,02	79,40	16,96
Czech Rep.	21,42	148,67	99,73	31,75
Denmark	11,40	63,68	0,00	0,00
Croatia	16,27	109,86	95,00	16,98
Hungary	30,50	265,76	95,00	77,02
Poland	12,97	126,63	55,02	9,04
Romania	23,73	34,78	100,00	8,25
Sweden	1,52	122,93	0,00	0,00

** A percentage higher than 100% is the result of either a storage effect or a re-export effect.*

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