

TRENDS
FOSSILS

The growth of renewables is still not enough to feed the insatiable energy appetite of the economic recovery

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Breaking from the trend of 2020, 2021 and the first months of 2022 present a varied picture for energy production sector. Renewables, fossils and emissions are all on an upward trend. The energy crisis, which began in the second half of 2021, has been intensified by war in Ukraine, and the hike in energy prices in its wake has spared no actor. Europe, pursuing a target of long-term energy autonomy, is obliged to tackle the short term using coal, oil and LNG to secure supplies and move away from Russian gas. In parallel, Asia has turned to fossils – mainly coal – to fuel its recovery. This is the case for India, and to a certain extent China, which is still dealing with Covid-related lockdowns. In the private sector, differences between large and small actors are widening, while concentration and nationalization are intensifying.



DATA OVERVIEW

The energy crisis offers a reprieve for fossils as renewables continue to grow

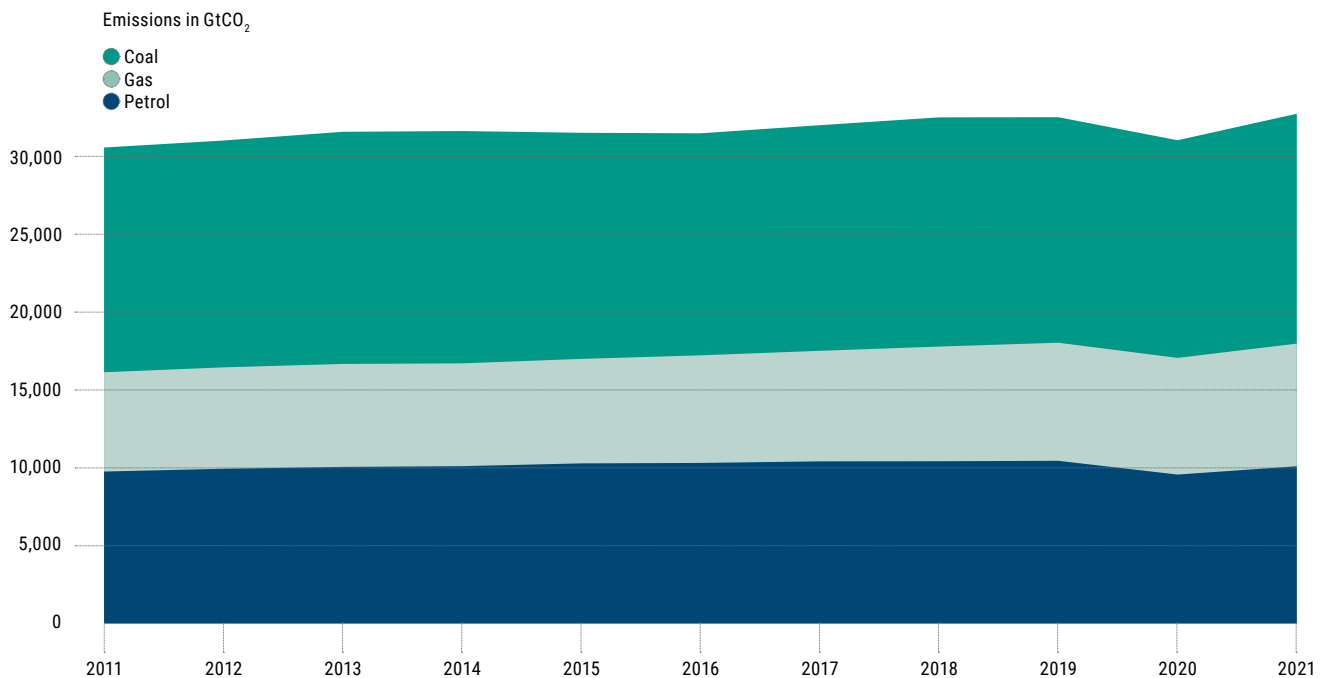
While in 2020 the Covid-19 pandemic saw global CO₂ emissions (apart from land use) take their biggest dive since the second world war (-1,6 GtCO₂, a drop of 4.4%), 2021 kicked off with an economic rebound and a sharp rise in emissions of 5.5% compared to 2020 (+1.9 GtCO₂). According to initial estimations, driven by the economic recovery and adverse weather conditions, these emissions amounted to 37.1 gigatonnes of CO₂ (GtCO₂), and therefore more than made up for the drop in 2020, despite the fact that many countries were still applying movement restrictions in the first quarter of 2021 (FIG. 1).¹

Demand for oil in 2021 remained lower than pre-pandemic levels, at an average 3.7 million barrels a day (Mb/d). This situation was due to the low demand for fuel in transportation, mainly in the aviation sector.² The International Energy Agency (IEA) anticipates that oil demand for vehicles in advanced economies will never return to its pre-2020 levels due to saturated vehicle ownership and demand per capita, while Asian countries continue to drive current growth in demand.³ Nevertheless, demand for oil has grown in 2022 under the impact of the gas-to-oil shift⁴ due to soaring gas prices and a geopolitical situation that has pushed countries to seek energy independence and move away from Russian gas. However, this increase in oil demand is held back to a certain extent by renewed lockdowns in China and sluggish economies in OECD countries.⁵ Oil supply slowly picked up again in 2022, and in July OPEC+ recorded its highest monthly crude oil production rate in five months, led by Saudi Arabia and the other countries of the Middle east, along with

FIGURE 1

EVOLUTION OF CO₂ EMISSIONS BY FUEL, 2011-2021

Source: *Climate Chance, based Enerdata, Global Energy and CO₂ data, 2022*



Kazakhstan. Nevertheless, the objective of increasing production promised by the alliance has not been reached,⁶ and analysts remain doubtful about the oil production potential of OPEC+,^{7,8} including leading producers like Saudi Arabia.⁹

Forty percent of the growth in global CO₂ emissions is due to the consumption of coal, emissions of which reached 14.8 GtCO₂ in 2021, exceeding their 2019 level (FIG. 1).^{10,11} More precisely in the electricity sector, which makes the biggest contribution to CO₂ emissions, coal-fired power plants met half of the increase in global demand for electricity (a total rise of 1,400 TWh), and their emissions reached 10.5 GtCO₂. At the same time, the rise in gas prices also led to a gas-to-coal switch, in particular in Europe and the United States, where competition between coal and gas power plants is highest.¹² Global electricity production from coal reached a record level of 10,042 TWh in 2021, according to analyses by Ember.¹³ The gas-to-coal shift had already increased demand for coal in 2022, also stimulated by economic growth in India.¹⁴

Coal production and consumption in the EU grew in 2021, and anthracite^a production amounted to 57.2 million tonnes (Mt), while consumption totalled 160 Mt. Lignite consumption totalled 277 Mt in 2021, most of it used to produce electricity.¹⁵ In 2022, the German Bundestag authorized the temporary usage of a large number of coal-fired power plants to produce electricity in reaction to restrictions on gas supply from Russia,¹⁶ with coal representing a third of the country's electricity production¹⁷. The same trend can be observed across Europe

– electricity production from coal has grown 20% in France, Germany, Italy, the Netherlands, Spain and the United Kingdom since last year, according to Rystad Energy statistics.¹⁸ In the United States, coal production amounted to 524 Mt in 2021, while consumption was 494 Mt (455 Mt in the electricity sector).¹⁹ In the first quarter of 2022, US consumption of coal was 3.9% lower than during the same period in 2021.²⁰

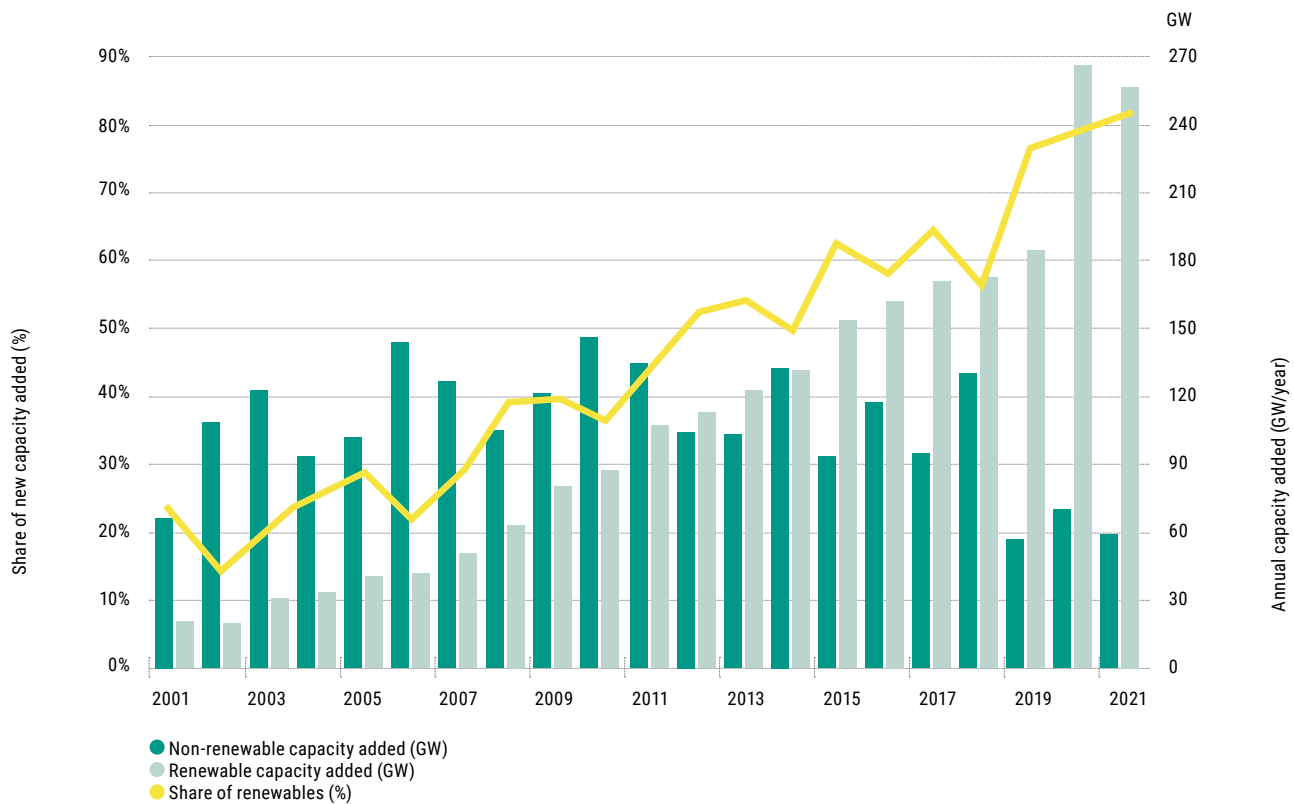
Most of the increase in emissions related to energy in 2021 originated in China, where electricity demand grew by 10% in 2021, 56% of it met by coal.²¹ China's coal production reached a record 4.07 billion tonnes, which is 4.7% more than the previous year.²² In 2022, raw coal production in China shot up between January and May, resulting in domestic production of 1.81 billion tonnes, which is a 10.4% year-on-year increase. However, according to the Global Energy Monitor, additional new electricity production capacities using coal dropped by 35% from 2020 to 2021 (SEE INDICATORS). During the second quarter of 2022, Chinese emissions saw a record decrease of 8% (230 MtCO₂, the largest in a decade), as a result of various factors including factory closures due to strict lockdowns, low growth in electricity demand, and high growth of renewable energy.²³

In second place after China, India's coal production reached 777.31 Mt (+8.55%) and its coal imports amounted to 208.93 Mt in 2021-22 (up to April 2022).²⁴ Additional coal-fired production capacities in the country soared by 234% from 2020 to 2021 (SEE INDICATORS). Japan, South Korea, South Africa, Indonesia,

^a Anthracite is dark black coal with a higher carbon content and energy density than other types of coal. Lignite, however, has a lower carbon content and energy density, meaning that it emits more CO₂.

FIGURE 2
RENEWABLE AND NON-RENEWABLE CAPACITIES ADDED FROM 2001 TO 2021

Source: IRENA, 2021



Russia and Australia were also among the countries that used the most coal in 2021. Record electricity production levels from coal were also reached in other Asian countries like Mongolia (+13%), Pakistan (+8%), the Philippines (+8%) and Kazakhstan (+6%).²⁵

While in 2020 coal succumbed to the low price of gas, in 2021 the trend bucked – the increase in gas prices at the end of the year led to a move to coal, a trend exacerbated by the conflict in Ukraine.²⁶ On the whole, gas prices have remained volatile, but LNG prices have surged as a result of reduced European gas imports from Russia via gas pipelines.²⁷ Nevertheless, gas emissions have exceeded 2019 levels, and demand has increased in all sectors.²⁸ Global natural gas production has reached 4,036.9 billion cubic metres.²⁹ Europe and East Asia remain the biggest importers of LNG, and the European Union’s REPowerEU plan aims to reduce Europe’s dependence on Russian gas by two-thirds before the end of 2022, which increases pressure on LNG supplies,³⁰ as well as on other sources of energy.

Electricity production from gas rose by 1.3%, moving from 6,017 TWh in 2020 to 6,098 TWh in 2021. Gas production therefore plateaued, while other electricity sources increased significantly. The biggest increases in the relative share of gas

in domestic production were recorded in Russia, Turkey, and Brazil, which compensated the lack of hydropower following a year of drought. India and China both produced only 3% of their electricity from gas.³¹

The exceptional growth of renewable energy during the pandemic has slowed down slightly, but additional renewable energy capacities have continued to rise: +260 GW in 2021, for an installed total of 3,068 GW. Renewables represented 81% of new capacities in 2021, compared to 79% in 2020 (FIG. 2).³²

Solar power (133 GW) and wind power (93 GW) are responsible for 88% of this increase in new capacities, most of it in China (53 GW solar, 47 GW wind). Europe and North America have increased their solar capacities by 39 GW and 38 GW respectively. India (+10.3 GW), Japan (+4.4 GW) and South Korea (+3.6 GW) have also added considerable solar capacities.³³ At the same time, “clean energies” provide jobs for more than 50% of all workers in the energy sector^b, according to the IEA, due to the substantial growth of projects being implemented.³⁴

These trends can be found in electricity consumption: in 2021, clean energies (including nuclear) represented 38% of the global energy mix, a one-point drop since 2020.³⁵ While renewable energies continued to grow, although at a slower

^b According to the IEA, “clean energy employment” includes people working in bioenergy supply, nuclear power and renewable energies to produce electricity, storage networks, the manufacture of electric vehicles, and energy efficiency.



pace, the explosion in demand for electricity triggered by the economic recovery, coupled with the current energy crisis, led to the reopening of a number of fossil-fuel power plants. The share of renewables in the global energy mix grew slightly from 2009 (8.7%) to 2019 (11.7%) and 2020 (12.6%).³⁶ Adding to this impetus, the first half of 2022, marked by war in Ukraine, has highlighted the question of energy security due to restricted supplies and rocketing prices – and a shift in the relative shares of fossil and renewable energy sources.



THE OBSERVATORY'S LENS

The renaissance of fossils: A story in three curves

An explosive situation, even before the war in Ukraine

Oil, gas and coal all saw a resurgence in demand in the second half of 2021. At the end of 2021, the IEA estimated that coal demand had risen by 6% in 2021, posing a threat to zero net emission targets.³⁷ This is reflected in coal prices, which have considerably increased since May 2021 (FIG. 3). The price hike is mainly due to the incapacity of supply to meet demand from the biggest market, China, and partly due to the rise in natural gas tariffs. Prices peaked in October 2021, with thermal coal imported to Europe reaching up to \$298 per tonne, before dropping back down in November 2021 following policy intervention by the Chinese government.³⁸ Prices then went up again in January 2022 in reaction to an export prohibition on coal by Indonesia³⁹ and increased tensions in Ukraine.⁴⁰

This price hike is reflected in the profits of mining companies and coal producers (thermal and industrial), whose earnings have rocketed. For example, Peabody, the biggest private coal producer in the world and owner of the world's biggest coal mine, North Antelope Rochelle in Wyoming, which was going bankrupt in 2016, reported its best quarterly results in 20 years, with profits of 513 million dollars in the last half of 2021.⁴¹ The Chinese coal extraction and processing industry saw its profits more than double in 2021,⁴² and mining revenues were multiplied by 1.75 from January to May 2022.⁴³ In 2022, coal profits continued to grow and reached new heights. Glencore Plc increased profits from its coal activity by 900% during the first half of the year. The producer Coal India saw its revenues triple, and Chinese companies doubled their profits during the same period. The value of shares in Thungela Resources, the former coal subsidiary of Anglo American Plc, has grown by 1,000% since the company entered the stock exchange in June 2021.⁴⁴

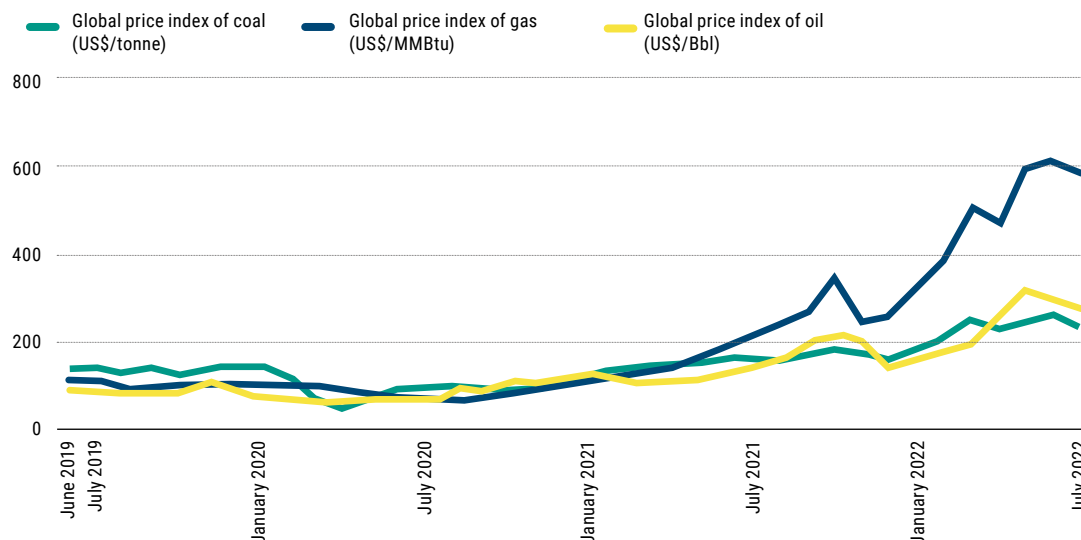
Oil prices were also on the rise in the second half of 2021 (FIG. 3), as a result of increased demand generated by the lifting of lockdowns, perturbations related to weather conditions, the limitation of OPEC+ production, and increased gas prices.⁴⁵ In early 2022, following geopolitical tensions – conflict in Ukraine, drone attacks in the UAE claimed by Houthi rebels in Yemen⁴⁶ – and producers' incapacity to meet demand,⁴⁷ oil prices reached their highest level in seven years, and a new peak at the outbreak of the Ukrainian conflict.

The rise in gas prices, which almost takes centre stage, was fuelled by supply and demand factors on global LNG markets and European regional gas markets. Since the start of 2021,

FIGURE 3

GLOBAL PRICE INDEX FOR COAL, GAS, AND OIL, JUNE 2019 – JULY 2022

Source: [Climate Chance, base on data from the IMF, 2022](#)





and even during the summer, Asian markets have dominated global LNG demand, closely followed by Central and South American markets. This situation, compounded by a colder autumn and winter, the drop in European gas production, low storage levels, and lower than usual imports via gas pipeline from Russia (in particular along the Yamal-Europe route), pushed up prices.⁴⁸

In late 2021, LNG carriers initially destined for Asia were finally rerouted towards Europe, where the shortage of gas has seen FFT contract prices rocket, and where suppliers are ready to pay higher prices. Throughout the year, the Chinese, Japanese and Korean markets had outbid European demand. According to Platts, the spread between European and Asian prices, expressed in \$/mBTU, has never been so high; to the point that Australia sent its first LNG cargo to Europe since 2009.⁴⁹ Whereas 2022 started with questions about Russian supply, the invasion of Ukraine confirmed those fears, taking prices to a new peak. Europe found itself in the eye of the storm, largely dependent on Russian gas until that point (in 2021 over 40% of gas imports on the continent came from Russia),⁵⁰ and obliged to take measures to secure its energy independence.

Due to surging prices, shares in oil and gas companies have increased in value on stock markets since the rise in oil barrel prices and the war in Ukraine. Some of them, like BP, have come a long way: the price of shares in the British company were at their lowest point for 27 years at the height of the pandemic. ExxonMobil had even been ejected from the Dow Jones Industrial Average. Thanks to the superprofits generated by the rise in the price of a barrel, oil and gas companies are able to distribute high dividends and buy back their own shares at a high price. Illustrating this frenzy on the stock exchange, Saudi Aramco, a state-owned company, overtook Apple as the highest valued company in the world.⁵¹ The Russian company Gazprom recorded record profits of 29 billion dollars in 2021.⁵²

Gas is the new coal, with the explosive competition for LNG

According to a Climate Action Tracker⁵³ analysis of the recovery and resilience policies implemented by States to deal with the successive energy crises triggered by the pandemic and the invasion of Ukraine, we are seeing a new “gold rush” for fossil energies. This rush involves numerous investments directed at opening new fossil gas infrastructures (especially LNG) and oil installations (pipelines in East Africa, like the controversial EACOP project).⁵⁴ Measures to compensate energy price increases also contribute to locking consumers into fossil energy systems.⁵⁵

Gas, for a long time presented as a means of transition towards greener energy (i.e., a bridge fuel), still has a large carbon footprint (SEE BOX 1).⁵⁶ In 2022, Global Energy Monitor listed 9,578 gas power plants in the world, of which 7,320 are operational and 226 “mothballed”, in other words, not in service but maintained in a state ready to operate if needed.⁵⁷

BOX 1 • KEYS TO UNDERSTANDING

THE CARBON FOOTPRINT OF GAS

The advantage of natural gas is its relatively low emissions compared to other fossil fuels – it emits 50% less CO₂ than coal, and 30% less than oil per unit of energy produced. However, recent studies have shown that natural gas may not be as green as it seems. Natural gas was the main source behind increased CO₂ emissions from fossil fuels for the period 2010-2019 (42%). It is also responsible for 60% of methane emissions from the production of fossil fuels, including the methane leaked during gas production and transport, and electricity production. The global warming potential of methane over 100 years is 28 to 32 times greater than that of CO₂. Although LNG is increasingly popular, the emissions related to its supply and final usage amounted to 1,25 GtCO₂e/year (~17% of natural gas emissions) in 2020.

Sources: [CZES, n.d.](#); [UNECE, n.d.](#); [Hare et al, 2021](#)

In the case of LNG, 6.9 million tonnes per annum (MTPA) of liquefaction capacities were added in 2021, and 12.5 MTPA in the first four months of 2022, which raised global capacity to 472.4 MTPA. At the other end of the chain, global regasification capacity reached 901.9 MTPA.⁵⁸ Emissions from supply and final usage of LNG reached an estimated 1.25 GtCO₂e/year (~17% of fossil gas emissions) in 2020. LNG represented about 12% of the total use of gas in the world in 2020.⁵⁹ While policies decided on in 2021 are likely to increase this share to 16%, the geopolitical situation in 2022 could push it up further still – Europe gives priority to LNG and storage to replace Russian pipeline gas.⁶⁰ The continent represents 85% of increased demand in 2022 (FIG. 4).⁶¹

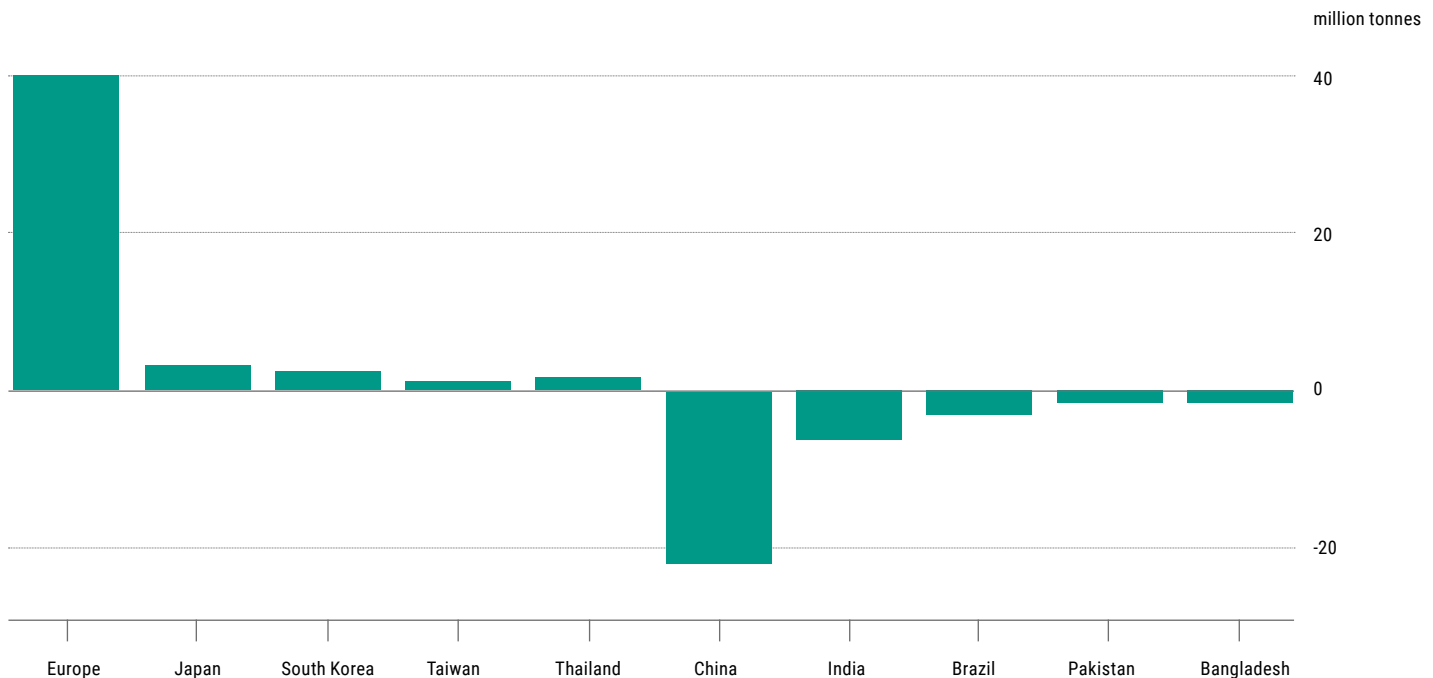
France has not received Russian gas since 15 June 2022 – GRTgaz observed “the interruption of physical flows between France and Germany”, the transit country for Russian gas imported into France. The previous day, Gazprom announced a 40% reduction in its gas deliveries to Germany via the Nord Stream 1 pipeline. In 2020, Russia accounted for 17% of gas deliveries to France, and Norway made up 36%. The storage level in France was 99% in the month of October, much higher than usual.⁶² At the same time, LNG deliveries to four French regasification terminals went up by +66%, or 51 TWh, mostly from the United States.⁶³ In May, Engie signed an agreement to buy gas from the Texan company NextDecade, a turnaround compared to 2020, when a potential agreement with US suppliers was revoked due to environmental concerns.⁶⁴ The law of 16 August 2022 on emergency measures to protect purchasing power establishes the accelerated installation of a floating LNG terminal off Le Havre,⁶⁵ in addition to the existing terminals in Dunkerque, Montoir-de-Bretagne, and two in Fos-sur-Mer.

Germany does not possess an LNG regasification terminal, which can take five years to build, and is looking for alternative solutions to avoid dependence on Russian gas, such as floating terminals and “more adaptable land sites”. The

FIGURE 4

INCREASED DEMAND FOR LNG PER COUNTRY/REGION IN 2022

Source: *Financial Times*, 2022



country is chartering five Floating, Storage and Regasification Units (FSRU) via the government, and two others will be leased by the private sector.⁶⁶ Olaf Lief, minister of energy for Lower Saxony, has announced the installation of an FSRU and a land-based terminal. The first one should be operational in Wilhelmshaven before the end of 2022 to allow imports of 5 bcm/year. A second vessel is due to be operational in early 2023, allowing imports of 10 to 14 bcm, according to RWE. Uniper has announced that it “will charter two other FSRUs for the German government from the Greek company Dynagas”. With these Greek terminals, Germany will have a regasification capacity of 20 bcm/year, which is the equivalent of 50% of its Russian gas imports. The trend to purchase or lease FSRUs could rise significantly during the year, although only 48 terminals of this type currently exist in the world, according to Bloomberg.^{67,68}

Two FSRUs – the Golar Igloo and the Eemshaven LNG – are being installed in the Dutch port of Eemshaven, where they will operate for five years, together creating what has been called the EemsEnergyTerminal, whose capacity of eight billion cubic meters has been sold to Engie SA, Shell plc, and the Czech company CEZ AS. The new terminal has received its first delivery from the United States and is set to receive 18 more by the end of the year, providing gas to not just the Netherlands but also landlocked countries like the Czech Republic.⁶⁹

Spain has been developing its capacities to import LNG for some time. Gas represents the largest share of electricity production in the country.⁷⁰ As a result, and coupled with its weak interconnections with the rest of the continent, Spain is opposed to the target to reduce energy consumption by 15% put forward by the European Commission.⁷¹

In the United Kingdom, while in July 2022 Greenpeace took the British government to court for having authorized the Jackdaw gas field in the North Sea off Aberdeen,⁷² in September Liz Truss’s new government overruled the prohibition on oil and gas fracking as part of measures aimed at curbing the rise in energy bills.⁷³ Fracking was banned in the country in 2019 following several local demonstrations. The Scotch and Welsh governments have always been opposed to fracking on their territories.⁷⁴ The controversial decision was then reversed with the entry into power of Rishi Sunak’s government.

Demand for LNG in Europe shot up so quickly in 2022 that European countries outbid China, India, Brazil, Pakistan and Bangladesh (FIG. 4), and these countries will therefore be confronted with the biggest drop in LNG demand, placing them at risk of energy crisis, according to analytics firm ICIS. LNG traders also seem to be out to take advantage of price differences on global markets, because emerging economies often use the spot market to buy LNG.⁷⁵

A frenzy that has not spared renewables

Since 2010, the cost of solar energy has dropped by 85%, and by about 50% for onshore and offshore wind.⁷⁶ At the same time, renewable installations have benefited from stable costs, relatively unaffected by the geopolitical situation. A study by the association Transition Zero, which has built an index to “follow the carbon price needed to encourage the move from coal to onshore wind or photovoltaic solar energy with battery storage in 25 countries” shows, based on data from 2010 to 2022, that it is more profitable to move from coal to clean energy, than from coal to gas.⁷⁷ In 2022, galloping inflation has also led to disruptions in supply chains, which has temporarily increased the cost of new renewable energy installations – nevertheless leaving them cheaper still than fossil alternatives.⁷⁸

For the final consumer, the price of electricity remains high – as pointed out by analysts, gas remains the key factor in electricity prices across Europe, thanks to the marginal pricing system of the EU’s single electricity market, where all sellers get the same price for electricity.^{79,80} In the United Kingdom, the current energy crisis has pushed up retail prices by 80% and wholesale prices have quadrupled, despite the fact that the country produces over half of its own electricity from non-fossil sources.⁸¹ In August 2022, wholesale prices in Germany and France reached record levels of 850 euros and over 1,000 euros per megawatt hour (MWh) respectively, compared to only about 85 €/MWh in these countries in 2021.⁸² Although prices have been high on the entire continent, reactions have varied from one country to the next. Some, like Spain and Portugal,⁸³ have capped natural gas prices in electric power plants, while the United Kingdom has capped wholesale electricity bills. Several states have offered support or benefits to households, and many have plans to tax energy companies that make superprofits (SEE BELOW).⁸⁴

Another indication of the impact of the renewable energy crisis, the price of power purchase agreements (PPAs), one of the preferred tools of private and local actors^c to obtain supplies of renewable energy, increased dramatically in 2022 (SEE INDICATORS). PPA tariffs went from €52.77 per MWh in September 2021 to €171.4 per MWh in August 2022, before going back down to €105.81 per MWh in September 2022. Insufficient production capacities and regulation requirements up to July 2022 restricted volumes and triggered the price peak.^{85,86}

Superprofits, exceptional taxes and the superconcentration of companies

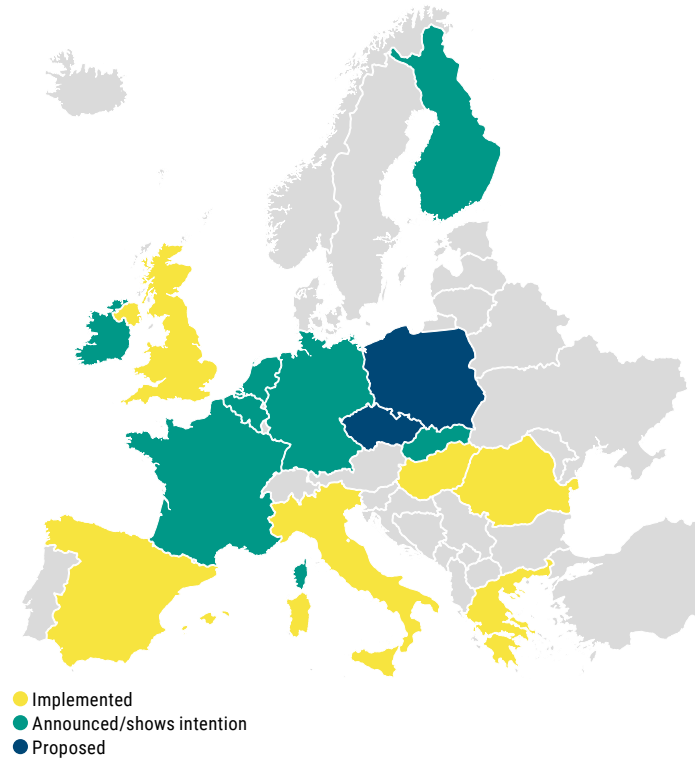
The energy price hike has generated “superprofits” for major energy companies, defined as “profits considered as much larger than normal and due to external events, generating money for companies that have done nothing to modify their way of operating or strategic methods”.⁸⁷ This trend is a point of concern for governments, and Romania and Spain had already implemented temporary mechanisms in late 2021 to limit excessive revenues garnered by energy companies.⁸⁸ In its REPowerEU communication dated March 2022, the European Commission recommended taxing these exceptional profits of energy suppliers, while devising these taxes to avoid affecting long-term wholesale electricity price trends, with tax revenues acting to reduce the burden for final consumers. In late September 2022, Greece, Hungary, Italy, Romania, Spain and the United Kingdom had set up taxes on exceptional profits; the Czech Republic and Poland had published proposals aimed to implement such a tax; while Belgium, Finland, Germany, Ireland, the Netherlands and Slovakia had also expressed their intention to do so (FIG. 5).⁸⁹ Although the idea of a tax on superprofits has been suggested in France (the government added an amendment to the 2023 budget to impose “temporary contributions” of 33% of the income of companies operating in the oil, gas, coal and refining sectors)⁹⁰ and even voted by the National Assembly,⁹¹

its definitive implementation remains questionable after the minister of the economy announced that the amendment would not go through after all.⁹²

FIGURE 5

LEGISLATIVE STATUS OF TAXES ON EXCEPTIONAL REVENUES

Source: [Tax Foundation](#), 2022



The rates and structures of these taxes vary from one country to the next, which has led to different calculation methods and initial revenues. The tax introduced in Italy has raised issues of constitutionality (on its field of application and the distinction between companies) and has only gathered two billion euros out of an expected eleven billion. In Poland, company associations have warned of a wave of bankruptcies – a concern that seems to also apply to other countries.^{93,94} In Romania, the 98% tax on the net revenues of gas and electricity trading companies has worried retailers, with domestic companies preparing for bankruptcy and lawsuits as winter approaches.⁹⁵

Bankruptcy among the smallest and alternative electricity companies marks another trend throughout the continent. In the United Kingdom, 31 energy companies have stopped their activity since early 2021, incapable of dealing with rocketing gas market prices. Many of them went on to be purchased by giants like British Gas, Scottish Power and even EDF.⁹⁶ In France, too, the crisis that started with electricity resellers continues, and the number of gas and electricity producers shrank from 39 in summer 2021 to 14 currently. Several sup-

^c For more information on PPAs, see the Trend “With PPAs, businesses and cities are making the production and supply of low-carbon electricity safer”, p. 24 in Observatory of Non-state Climate Action (2021). [Global Synthesis Report on Climate Action by Sector](#). *Climate Chance*



pliers have opted to make no new offers while retaining their existing clients; others, like Ohm, Mint, Mega and GreenYellow, have had to increase their prices significantly; several clients have been directed towards EDF.⁹⁷

In Germany, municipal electricity companies have been hit by inflation, following on from the crisis that started in 2021 – with the bankruptcy of the midsize electricity company OTIMA and others that used a commercial model supplying energy at fixed tariffs based on “stable, predictable developments” on the market. These small municipal companies feel that they have been ignored, while bigger companies like Uniper and E.ON have been the focus of national attention.⁹⁸

In fact, both Uniper and EDF are the object of nationalization plans by their governments. Along with a concentration of the sector between the hands of the biggest actors which have resisted the crisis better, the other trend is nationalization. In July, France announced its intention to nationalize EDF, with the objectives of more control over price stability and greater independence in the face of Russian gas. EDF currently supplies 70% of the electricity produced in the country, and the State already owned 84% of the company.⁹⁹ As for Uniper, the German State has announced its intention to acquire 99% of the shares in this struggling gas company – the biggest nationalization ever in the country.¹⁰⁰ Nationalization, although generally a “last resort”, has emerged in the German energy sector with discussions on State participation in VNG, a subsidiary of Energie Baden-Wuerttemberg,¹⁰¹ and the State purchase of three refineries previously owned by Rosneft.¹⁰²



KEY TAKEAWAYS

Following an exceptional year in 2020, energy demand and electricity consumption picked up again in 2021, driven by the economic recovery. While renewable energy continued its galloping growth, it is fossil energy that has fed the appetite of demand, taking global energy-related emissions to higher levels than before the pandemic. Added to adverse weather conditions, these factors set the stage for a crisis that went on to be intensified by geopolitical tensions in 2022. Although the war in Ukraine has provided an additional motivation for the energy transition under a banner of energy independence, the current dependence on fossil fuels is a setback for greater ambitions.

The price of coal, oil and gas, all of which have risen since the second half of 2021, have had a number of consequences, in particular for Europe. Individual states have looked more closely at their energy mix, switching from gas imported by pipeline from Russia to LNG, while responding to concerns about superprofits and bankruptcies. On the private side, industry giants have benefitted from historically high prices, while small electricity companies have been forced into bankruptcy – leading to a concentration of the sector in the hands of the major players.



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