

Impact of coronavirus on energy markets

The coronavirus pandemic (COVID-19) has had a strong impact on global energy markets, contributing to a collapse in the oil price as well as lower prices for other fossil fuels. Global shutdowns of economic activity have led to sharply reduced energy consumption and lower greenhouse gas (GHG) emissions. In the short term, coronavirus will negatively affect new energy investments in all sectors, including renewables needed for the clean energy transition. The longer term impact is more uncertain and very much hinges on the nature and speed of the economic recovery, as well as the differing responses of global policy-makers to this challenge.

Coronavirus and oil prices

The most visible impact of coronavirus on energy markets has been the collapse in oil prices. The price of Brent crude fell by two-thirds from US\$69 a barrel (6 January 2020) to under US\$23 (30-31 March 2020), before partially recovering to around US\$32 (13 April 2020) after [deep production cuts](#) were agreed by the OPEC+ alliance. The failure of leading oil producers (including Saudi Arabia and Russia) to extend production curbs in March 2020 was responsible for a supply glut just as consumption was collapsing because of coronavirus. Yet production cuts alone are unlikely to restore the oil price to previous levels because they do not change the demand side of the equation. Much of global transport has ground to a halt, far less oil is being used and more is being [placed into storage](#) where capacity is now close to saturation. According to the International Energy Agency (IEA), oil and gas producers will [lose 50-85 % of their income in 2020](#). Continued low prices would make planned investments uneconomic and lead to the bankruptcy of many oil and gas producers, including some US private companies that exploit [shale reserves](#). Low oil prices will be even more damaging for countries that are heavily reliant on export revenues from oil production and whose public budgets depend on a high oil price (including Iraq, Iran, Venezuela, Nigeria).

Effects on other fossil fuels

The collapse in oil prices and reduced energy demand will have a broader impact on fossil fuel investments. Over [60 % of methane gas exports](#) take the form of long-term contracts (usually 15-25 years) tied to oil prices. These contracts are necessary for pipeline or LNG producers to recover their high investment costs, while providing reliability of supply and pricing for consumers. Sustained low oil prices could seriously damage gas producers that rely on linked contracts. The picture is not much better for the 40 % of gas exports (including most US shale gas) traded on daily markets. Henry Hub prices for US gas had already fallen by half over the course of 2019. The coronavirus caused a further 22 % decline in Henry Hub prices from US\$2.2 per million British thermal units (Mmbtu) (10 January 2020) to only US\$1.72 per Mmbtu (13 April 2020), rendering many planned projects unviable. Yet there may be a silver lining for those gas producers that can survive on lower prices. The coronavirus pandemic has led to a 25 % decline in coal prices, making more of the coal industry unprofitable just as it faces severe criticism for its environmentally damaging effects, including high GHG emissions and damaging air pollution. Methane gas causes fewer GHG emissions and less air pollution than coal, so many policy-makers see it as a valuable bridge fuel in the energy transition. Low gas prices could facilitate switching to this fuel in industrial sectors that are typically reliant on coal use, including steel and cement production, as well as heating and electricity generation. Coal consumption has already [fallen consistently](#) in the EU and is likely to decline further as Member States seek to deliver on their agreed goal of net zero GHG emissions by 2050.

Impact on renewable energy investments

While the coronavirus pandemic has had a visibly negative impact on the prices of fossil fuels, it has also [disrupted the supply](#) of renewable energy equipment and technology. This may affect planned investments and future production levels in the sector. The economic shutdown in China in early 2020 led to disruption in the supply of new solar panels, which are mainly produced in that country and exported globally. While solar panel production in China has since resumed, the economic shutdown across the rest of the world in

March and April has affected the ability to install new solar panels in homes and businesses, posing something of a constraint to future production levels and additional capacity. The market for wind turbines is more reliant on complex global supply chains. These supply chains are being seriously disrupted by the coronavirus pandemic, which will delay additional capacity and future investments in wind power. Because of measures taken to counter the spread of coronavirus, wind-power manufacturing facilities in Spain and Italy have been closed since mid-March 2020, and the same now applies in other producing countries such as India as well as some US states.

The longer term impact of coronavirus on renewable energy is harder to predict and is naturally related to what happens with fossil fuels. There are already indications that coronavirus will affect the pace and effectiveness of the clean energy transition in Europe and beyond. Fatih Birol, Executive Director of the IEA, has outlined his concern that low fossil fuel prices will [discourage investments in energy efficiency](#) that are important for curbing GHG emissions. The combination of low fossil fuel prices and serious economic difficulties could cause countries to review their investments in renewable support schemes, particularly where these are generous and have a significant weight on government budgets. This occurred after the 2009-2010 global economic crisis when several countries (including Spain and Italy) sharply reduced the generosity of their financial incentives for renewable energy production due to deteriorating public finances. Yet if fossil fuels were to become commercially unviable due to sustained low prices then it could lead to many producers going out of business, leading to a permanent reduction in capacity, which could provide something of a future market opening for some renewable energy sources.

An immediate impact of coronavirus has been reduced energy consumption. While the collapse in oil prices is linked to the virtual standstill in the global transport sector, the broader reduction of economic activities has led to reduced electricity consumption, a pattern borne out [across EU Member States](#). If lower consumption becomes an enduring feature of electricity markets (e.g. due to permanently reduced economic activity or more remote working) then it may slow down the pace of investment in renewable energy, especially if low wholesale electricity prices mean that renewable investments require more generous public subsidies. On the other hand, reduced electricity consumption could make it easier for some countries to phase out fossil fuels because retiring capacity no longer needs to be fully replaced.

Prospects for policy-makers in the EU and beyond

The coronavirus pandemic will continue to heavily impact global energy markets, which by their nature are highly interconnected. Yet the broader implications will depend on the nature and pace of the economic recovery, as well as the choices made by policy-makers. A swift economic recovery and a return to business as usual in global trade could lead to a recovery in fossil fuel prices, with surviving oil and gas producers able to restore their profitability and resume their investments. A more muted economic recovery with lower global trade could lead to sustained low prices and more structural market changes. A similar consideration affects investment in renewable energy capacity and technologies. Here much will depend on the response of policy-makers, in particular whether they continue to increase their support for clean energy and energy efficiency measures, or they become unable to afford the additional costs.

The coronavirus pandemic has so far not diverted the EU and its Member States from their [shared goal](#) of a clean energy transition by 2050. Economic stimulus measures in the EU to counter the coronavirus effects are likely to include greater investment in renewable energy projects and technologies. Volatile prices are a further reason for the EU to limit consumption of fossil fuels, as a sharp fall in new investments because of coronavirus could lead to much higher prices in the longer run, a particular concern for the EU as a [net importer of all fossil fuels](#). Renewable energy is more domestically produced and less prone to such import risks. Nevertheless, future EU industrial policy may seek to encourage renewable production and its technological development within the EU, so it is less prone to complex supply chains and the policies of third countries. More urgently, the EU will need to address the [impact of coronavirus on carbon pricing](#). ETS allowances have seen their value [fall sharply](#) during the pandemic with supply far exceeding demand, making the ETS ineffective in discouraging GHG emissions by companies and consumers. The impact of the lockdown on economic activities makes it more likely that the EU and its Member States will deliver on their 2020 targets for energy efficiency, GHG emissions reductions and perhaps even the share of renewables. But this does not guarantee that progress will be sustained when normal levels of economic activity resume.

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