

Lights on at any cost

 Check for updates

The unfolding energy crisis will have dramatic consequences in many parts of the world, for both people and the planet. Governments should keep that in mind when deciding what to do.

Europe is in turmoil. It is in the news worldwide. Some analysts suggest that the current energy crisis fuelled by the war in Ukraine is set to be worse than the energy crisis of the 1970s. Government leaders of European Union member states are rushing to meet early in September to discuss extraordinary reforms with the aim of containing the worst effects of the crisis and keeping their countries going. Decoupling electricity prices from the cost of gas seems to be one of the options to restructure the bloc's energy market¹. Even without much detail, the announcement of imminent energy market reforms in the European Union has calmed markets – the wholesale price of gas has dropped² at the time of writing this Editorial. Still, that price remains much higher than it was at the start of 2021, and realistically will continue to fluctuate dangerously until governments intervene in the energy market. Reducing dependency on Russian gas is proving challenging, and market forces are pushing countries to introduce energy rationing while they look to secure alternative energy sources as quickly as possible. Green hydrogen, liquefied natural gas and coal are now all on the cards. Yes, coal. Against the backdrop of the climate emergency, with unprecedented droughts in parts of the world and flooding events in others, coal is back, despite pledges in the Paris Agreement to phase it out. The UK pledged to phase out coal by 2024, but panic about the tough winter ahead is forcing policymakers to halt decommissioning of coal plants as a measure³ to keep the lights on. In Germany, the top European Union economy, the government is planning for emergency measures⁴ in the short term – including the use of coal if necessary – while promising to invest in a more resilient, sustainable long-term energy system. Outside Europe, coal is also coming back. High temperatures and reduced rainfall in the southwest province of Sichuan in China have caused dried up rivers, leading to a shortage



of hydropower⁵ at a time of growing energy demand as a result of the economic recovery from the COVID-19 pandemic, a situation worsened by geopolitical tensions due to the war in Ukraine. The government has responded by prioritizing energy security (by increasing coal-powered energy) over net-zero targets. As the world is globalized, the energy crisis will ripple into the entire international energy market and other countries will be impacted.

Some would say that extraordinary times call for extraordinary measures. Yet, reinstating fossil fuel energy to help households and businesses in the short term will force them into a misery of larger proportions later on, and particularly if they are already vulnerable in normal times. Governments are confronted with this trade-off as the effects of short-term quick fixes are clear by now; there is mounting research quantifying these effects. Short-term measures will also risk locking us into a less sustainable development path at a time when we need to do better. Looking at the recent combined estimates from the Organisation for Economic Co-operation and Development and the International Energy Agency covering 51 major economies⁶, it appears that support for fossil fuel energy producers went up in 2021, about 17% higher than in 2019. With the effect of the war, support will stay high, likely for a long time. Fixing the energy mess we are currently in will take time and it will be painful,

for people and the planet. Very few will be spared the pain, despite calls from the United Nations to help the most vulnerable⁷ and governments around the globe frantically trying to protect their citizens. And if choosing between heating or eating was not enough, for many the outlook is much more bleak, as in some parts of the world, in addition to no energy access, there is now also a food shortage.

We could look at this confluence of extraordinary events as another experiment, after that of the COVID-19 pandemic, but of course hoping that such experiments will not become the new normal. The high gas price is forcing change for better or for worse – in terms of geopolitics, policy, infrastructure, technology and behaviour. It is happening as fast as it can, given the obvious practical constraints. So here we go again. Change can happen. The mantra that societies are stuck with the status quo, that transitions to new ways of living are too painful or need proper, articulated plans that ensure that all possible costs are contained or compensated for, and that structural reforms take time to materialize seems to have gone out of the window. We at *Nature Sustainability* reiterate once again that if change is possible, and it clearly is, let's make sure that it is for a better future for all.

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