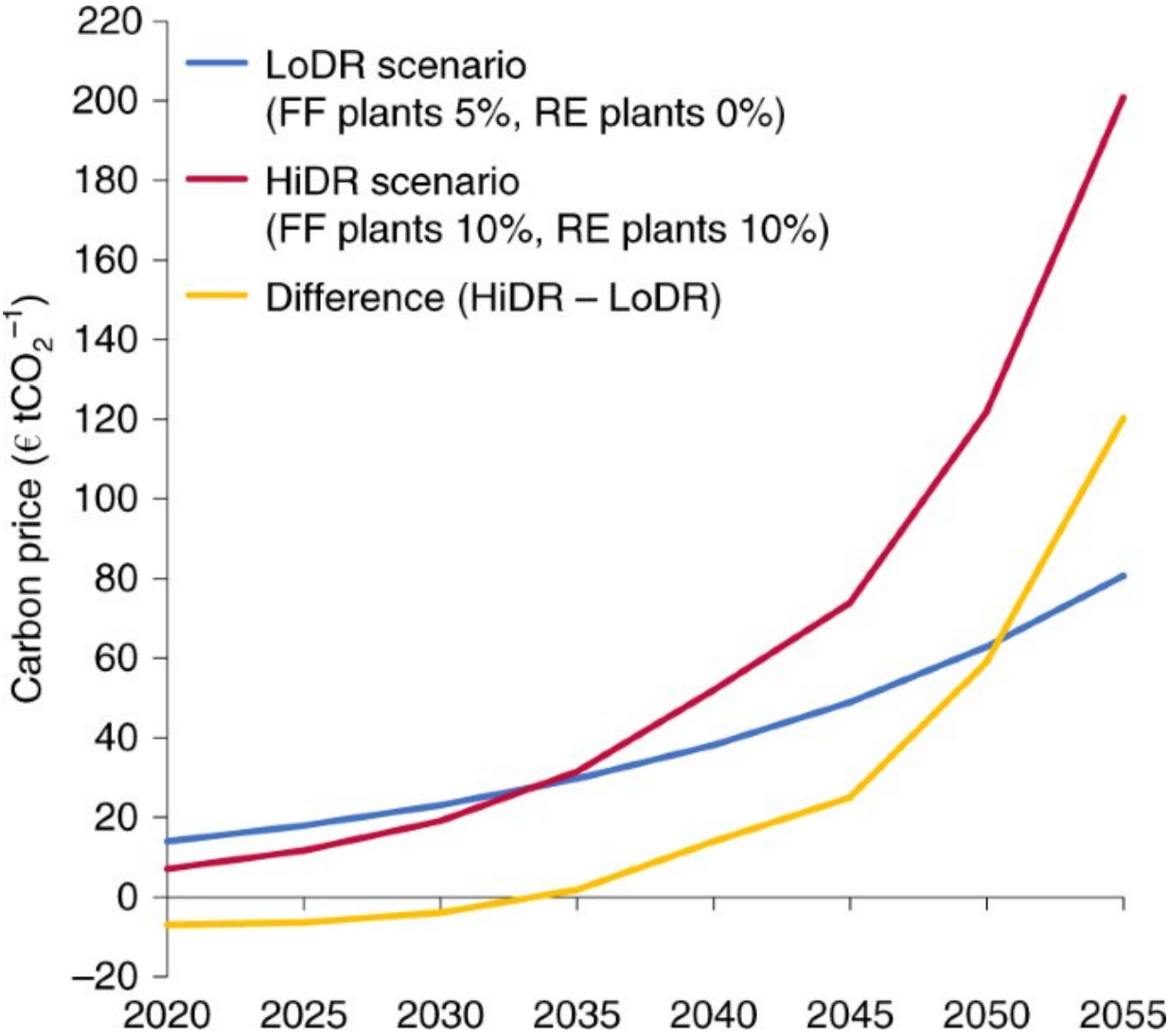


The energy turnaround won't happen on its own

April 7 2022, by Florian Egli



ETS allowance price paths in the two scenarios. Credit: *Nature Energy* (2022). DOI: 10.1038/s41560-022-00984-0

The surge in gas and oil prices triggered by Russia's invasion of Ukraine could help speed the energy transition. But high prices won't be enough to ensure it succeeds; smart policies are still needed, writes Florian Egli.

Governments in the European capitals are fast realizing that Putin is using energy as a strategic tool in foreign policy. In response to the invasion of Ukraine and high energy prices, they're seeking to gain [energy independence](#) from Russia—for example by fast-tracking the construction of new terminals for liquefied gas from Qatar and extending the lifetimes of coal-fired power plants. Burning coal to produce electricity sounds more like last century, but even in 2020, 13 percent of electricity in the EU was generated by coal-fired plants. If the price of gas rises, not only will renewable energies be more attractive; coal-fired electricity will be more economical again too.

Another effect of high energy prices is that they drive up inflation. Indeed, the European Central Bank estimates that energy accounts for over half of the rise in inflation. This is bad news for the [energy transition](#), as [renewable energy sources](#) are more capital-intensive than fossil fuels. If inflation rises, so do financing costs, making renewables disproportionately more expensive. Moreover, European governments have started to consider cutting subsidies for renewables, as costs have decreased enough to make them competitive. Consequently, carbon pricing should become the cornerstone of economic climate policy, a discussion that sounds all too familiar in Switzerland too.

In a recent study published in *Nature Energy*, we analyzed the situation and identified the risks. If climate targets are to be met amid inflation and a phasing out of subsidies for renewables, the CO₂ price will be lower for the time being (as it's expensive to build renewables) but will rise sharply in the future. This means that the profitability of companies

generating coal and gas-based power remains high in the short term—and a tricky political situation arises: the proponents of renewable energy don't gain support fast enough, while their opponents stay strong in the short term. This poses the risk of a political backlash. The fossil fuel lobby is likely to push to cut carbon prices, making it hard to implement an ambitious climate change policy. Indeed, voices are already speaking out in criticism of high CO₂ prices.

Forging ahead with the energy turnaround

What would be a smart response to this predicament? First, we should continue to push ahead with the transition to a renewable energy system. Germany has earmarked 200 billion euros for investments in decarbonization and greater independence from imported fossil fuels over the next four years. Since Russia's invasion of Ukraine, this has become a burning issue in Swiss politics too: in the spring parliamentary session alone, over 100 energy-related motions were submitted. Switzerland must follow suit and clear the way for renewables—adding solar capacity in the Alps, for example, could bring real benefits. And the approval process for such [power plants](#) should be clarified without delay.

Second, we should approach political calls to cut petrol, diesel and fuel prices with caution. Such easing should not be applied randomly, but (if at all) for a limited period and in a targeted way to cushion the social consequences. Because by distorting prices in favor of fossil energy sources, reductions jeopardize the transition to sustainable energy. What's more, they prolong a reliance on [fossil fuels](#) that would persist even if Russian gas were replaced by gas from Qatar.

Third, Switzerland must be more far-sighted in promoting and supporting the conversion of the infrastructure. The cantons of Glarus and Zurich have set a good example, and since they banned oil and gas

heating systems (Zurich from 2040), homeowners are increasingly switching to heat pumps. Yet those looking to purchase a pump must wait up to six months, a direct consequence of the failure of politicians to give timely encouragement to develop this sector.

Soaring oil and gas prices won't miraculously bring about the end of the fossil fuel era—but by addressing energy dependencies, politicians can help set the course for a CO₂-neutral Switzerland. In [energy research](#), we speak of a "trilemma" between affordability, sustainability and security. Renewables are now affordable, and they're key to a sustainable energy supply. Lately, their benefits from a neutrality and security policy angle have become apparent too. So maybe the trilemma can be solved in the end.

More information: M. Pahle et al, Safeguarding the energy transition against political backlash to carbon markets, *Nature Energy* (2022). [DOI: 10.1038/s41560-022-00984-0](https://doi.org/10.1038/s41560-022-00984-0)

Provided by ETH Zurich

Citation: The energy turnaround won't happen on its own (2022, April 7) retrieved 19 April 2024 from <https://techxplore.com/news/2022-04-energy-turnaround-wont.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--