

What would expanding the EU's emissions trading system mean for consumers and climate goals?

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The European Union's Emissions Trading System (ETS) is one of the world's largest carbon markets. A new paper, published today in the

journal *Economics of Energy & Environmental Policy*, considers the benefits, costs, and policy design options of making it even bigger.

The article dives into the feasibility and widespread effects of including road transport and heating fuels, like those used for gas boilers, in the ETS. Putting a [carbon price](#) on these two heavily used fuels, the authors find, would be a cost-effective method of reducing emissions, but doing so may affect consumers—underlining the need for thoughtful policy design and implementation.

The ETS is a cap-and-trade market; it places a limit on overall emissions from the EU's industrial sector, [commercial aviation](#) within the European Economic area, electricity generation, and more. The system was established in 2005 and has continued to evolve since then, and has existed alongside other standards-based policies to keep emissions in check.

While including heating and road transport fuels has not been proposed before by the European Commission, doing so would be an "institutional adjustment of unprecedented scale," the authors write, and would raise the system's coverage from 43 percent to 74 percent of EU greenhouse gas emissions. At present, there are no regulations in the EU that put a cap on emissions from road transport and heating fuels, so the extension could act as a "backstop" to make sure that the EU does not exceed its carbon budget.

"At a time when many nations are struggling to meet, or make plans to meet, their climate goals, the expansion of this system could present a feasible way to pick much needed low-hanging fruits," co-author and Resources for the Future (RFF) Postdoctoral Fellow Geoffroy Dolphin said.

Because the extension would overlap partially with existing EU and

national policies, the value of the extension would primarily lie in its ability to increase cost efficiency and to cap emissions; the authors argue that current regulations are ineffective at ensuring that emissions from heating and road transport [fuel](#) stay within a carbon budget compatible with the Paris Agreement objective.

The paper, which analyzes existing literature on carbon pricing and the EU's ETS, also assesses the distributional implications of such a policy expansion.

While the per capita consumption of road transport fuel is relatively even across the EU, the use of commercial and residential heating fuel differs based on region—as does the ability to shoulder any increases in cost due to the expanded carbon fee. Romania, for example, would have almost 62 percent of its emissions covered under the expansion at an average price of roughly €26/ton of carbon dioxide-equivalent. Germany, on the other hand, would have about 92 percent of its emissions covered under the expansion at a price of almost €35/ton of carbon dioxide-equivalent.

"Extending the EU ETS to heating and [road transport](#) is a great way of adding credibility to European net-zero policy," coauthor and University of Cambridge professor Michael Pollitt said. "Importantly, it forces governments to put complementary policies to decarbonize heat and transport in place to help consumers adjust to the inevitable rises in fossil fuel prices. A high and rising carbon fee can also positively affect people both through their use of income, as well as on their sources of income as the economy adjusts to new prices."

But while the literature suggests that the carbon price may result in uneven growing pains, the authors find that thoughtful policy design can help relieve those burdens and lessen the variation of costs across income categories or geographic regions.

A lower emissions cap, for example, would result in higher carbon prices and higher consumer prices for places that are slow to adjust to the new system. The exact magnitude of the price increase would also depend on the stringency of other policies targeting these sectors. Considering that the EU is likely to implement other strong standards in the coming years, the authors expect that the increase in prices for consumers will be moderate as the new policies would achieve substantial emissions reduction.

The ETS [carbon](#) fees by their nature would raise government revenue, so costs could also be neutralized through a consumer rebate or lower [prices](#) elsewhere.

"There's a lot of potential here," Dolphin said. "Enacting a [policy](#) like this would be difficult—but it's definitely doable."

More information: Michael G. Pollitt et al, Should the EU ETS be Extended to Road Transport and Heating Fuels?, *Economics of Energy & Environmental Policy* (2021). [DOI: 10.5547/2160-5890.11.1.mpol](https://doi.org/10.5547/2160-5890.11.1.mpol)

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