



Should the EU ETS be extended to road transport and heating fuels?

EPRG Working Paper 2119

Cambridge Working Paper in Economics 2152

Michael G. Pollitt and Geoffroy G. Dolphin

To achieve net zero emissions of greenhouse gases by 2050, the European Commission (EU) set out a revised emissions reduction target for 2030 of 55% compared to 1990 levels (EU, 2021). Achieving this target will require a revision and strengthening of existing European Union (EU) and national climate policy instruments.¹ In this context, an extension of the EU Emissions Trading System (ETS) to road transport and heating fuels is being considered. This would be an institutional adjustment of unprecedented scale in the lifetime of the mechanism as it would raise its coverage to 74% of EU GHG emissions (based on 2018 emissions), up from about 43%².

This paper analyses the implications of this proposal. We argue that increased coverage of the EU ETS, together with a binding cap consistent with a net zero trajectory, would provide an EU-wide quantity backstop ensuring that the EU's cumulative emissions budget constraint is satisfied.

As such, working alongside standards-based policies currently enacted in the covered sectors, it has the potential to (i) enhance environmental effectiveness by providing a dynamic incentive for additional emissions reduction and (ii) enhance the (cost) efficiency of EU-wide climate policy by ensuring that no low-cost emissions reduction is left unexploited.

Distributional implications remain a serious challenge to such an extension. The scale and nature of *existing* mechanisms of redistribution between and within EU member states are unlikely to be adequate to address the consequences of raised EU-wide emissions reduction

¹Over the period 1990-2018, the EU has reduced its greenhouse gas emissions (GHG) at an average pace of 1% per year. By contrast, to achieve the 2030 target, the annual rate of reduction should reach about 4.3% (calculations based on Eurostat GHG emissions data, available at https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=env_air_gge&lang=en).

² These figures are for EU-27 (i.e. excluding the UK) and are based on the 2018 EU GHG inventory data available from Eurostat (Eurostat, 2020a).

objectives. However, distributional impacts could be addressed by extending the scale of existing mechanisms to provide more direct compensation to impacted households and introducing countervailing policies which would alleviate the impact of a carbon price on road transport and heating fuels.

We conclude that the EU ETS should be extended to road transport and heating fuels. It represents, perhaps uniquely, a policy which could ensure delivery of the EU's overall carbon budget over the set time horizon. Thus, the extension must be done in a way that is consistent with Europe's climate goals, does not undermine its existing standards-based policies *and* adequately mitigates potentially severe distributional effects. An extension which does not take due account of each of these elements will fail, either to be implemented in the first place, or at some point along the way to 2050.

Contact
Publication
Financial Support

gd396@cam.ac.uk

July 2021

This paper is based on the Centre on Regulation in Europe's report on *Feasibility and impacts of EU ETS scope extension: Road transport and buildings*. Financial support from the European Climate Foundation is acknowledged for the CERRE project.