January 2021

POLICY BRIEF:

COMBINING ETS & CARBON PRICES - LESSONS FROM ABROAD

Our policy briefs offer insight and analysis to help inform ongoing policy development as relates to carbon pricing. This brief was written by Rachel Wolf, Founding Partner at Public First.

The UK's approach to carbon pricing is unusual. The Government has added to its trading scheme – traditionally the EU-ETS, and now the UK-ETS - by imposing large additional carbon taxes on electricity.[1] Meanwhile many sectors – most noticeably domestic heating – pay no price.[2]

This is not the approach of other European countries. Many combine a trading scheme (ETS) in specific sectors with a carbon price (a tax levied on carbon at a fixed price) in others, particularly heating and transport. Canada also has a dual approach – a carbon tax for most of the economy, with a trading scheme for the largest industry.

This dual approach increases the percentage of the economy covered by carbon pricing, and reduces distortions between gas and electricity.[3]

Now the UK has decided to implement a UK-ETS, it needs to decide its complementary approach in other sectors that are not currently subject to carbon pricing (i.e waste incineration, domestic shipping, household heating and agriculture). The table below summarises how other countries manage their carbon pricing.

In Summary:

- All the countries below combine a trading scheme, with a separate carbon pricing scheme on heating and transport (gas and fuel) levied on fuel producers and suppliers;
- The countries in the EU with separate carbon pricing levy the price on different sectors from the ETS (unlike in the UK, where we layer an additional price over the ETS);
- No other countries put as many, or as high, prices on electricity;
- None of the other countries ignore domestic heating.

The UK's approach is both less broad in its coverage, and more distorting. In particular, it drives people away from electricity and towards gas, when electrification is a key part of the UK's net zero roadmap.[4]

Sector	ETS or not?	Other sectors covered by carbon price	Level of price	Use of revenue
Ireland	Yes (EU ETS)	Heating; transport (not aviation).	£30[5]	Carbon transition and cushioning poorer households[6]
France	Yes (EU ETS)	Primarily commercial heating; residential heating; and transport.	£40[7]	Part 'energy transition' (supporting renewable transition and support to low-income people); part general revenue.[8]
Germany	Yes (EU ETS)	Heating, transport.	£25 rising to £55 in 2025[9]	Subsidise renewable energy and limit the cost rises in transport.[10]
Canada (Federal System)	Yes (OBPS)[11]	All sectors are covered by the Federal carbon tax except for much of agriculture. Heavy industry is part of a trading scheme.	£17 (rising to £100 per tonne in 2030)[12]	Almost all revenue returned to households.
Sweden	Yes (EU ETS)	Transport; Industry not covered by ETS; Heating.	£106[13]	General revenue.
UK	Yes (UK-ETS)	Commercial heating (not domestic heating or transport).	Extremely variable. For example a standard commercial business faces two separate additional taxes on electricity, a different additional tax on gas, as well as levies to support renewable fuels and nuclear. A household faces a separate additional tax on electricity,[14] a levy to support renewable electricity and nuclear generation,[15] but no additional tax on gas.	General revenue.

Endnotes

[1] This additional charge is known as the 'Carbon Price Support' (CPS). Combined, the CPS and ETS are known as the 'Carbon Price Floor'. The CPS element was 'capped' in 2014 at £18/tonne, in response to concerns about cost impacts. In 2020, the CPS was again frozen at £18/tonne until 2021/22.

[2] By 'domestic heating' we are referring to the use of gas and heating oil in households. At the moment households face no carbon price on either energy commodity.

[3] Consumer electricity is roughly 3-4 times more expensive than gas. This is partly due to the climate-related policy costs that are attached to the commodity and passed on to the consumer via energy bills (see the UK row in Table 1 for more details).

[4] As outlined in the Climate Change Committee's 6th Carbon Budget. Available here

[5] Citizens Information Ireland. Available here.

[6] Budget 2021: The use of Carbon Tax funds. Available here.

[7] Ecoscope Blog: Carbon tax emissions reduction and employment - some evidence from France. Available here.

[8] OECD: The use of revenues from carbon pricing. Available here.

[9] The Local: Germany rings in 2021 with CO2 tax, coal phase out. Available here.

[10] Reuters: German retail gas prices to rise in 2021 due to new CO2 tax. Available here.

[11] The 'Output-based pricing system' (OBPS) is a form of ETS, but differs from the EU system in that allowances only have to be purchased where intensity-based targets are exceeded (i.e when you produce more emissions in production than prescribed country averages), rather than for every tonne of emissions that you produce.

[12] Norton Rose Fulbright: Canada to increase carbon taxes by 566%. Available here.

[13] The Swedish government website lists the rate as SEK 1190, which translates to £106.58. Source available here.

[14] The Carbon Price Floor.

[15] Via Contracts for Difference, Feed-in-Tariffs and the Renewables Obligation.