

Near-Term Options to Address Low-Priced Emissions

Future Carbon Policy for Clean Growth



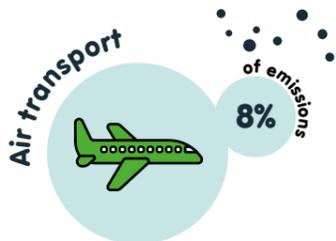
Energy Systems Catapult's 'Rethinking Decarbonisation Incentives' (RDI) is taking a fresh look at how carbon policy could be improved to promote clean growth. In this report, we explore the near-term options to improve the existing framework of policies, with priority placed on currently under incentivised emitters in the UK.

Reaching net zero emissions by 2050 requires sufficient economic drivers and rewards for investment in decarbonisation, as well the reduction of various technological, behavioural, institutional, and market barriers. 'Carbon policy' (including taxes, subsidies, and regulations that create economic incentives to reduce greenhouse gas emissions) has built up over time taking account of circumstances in different sectors. This has the advantage of being able to tailor the policy approach to the needs of the sectors, but has the disadvantage of making it harder to create coherent price signals between sectors. An obvious short-term approach to carbon policy reform would be to take the opportunity to increase and align effective carbon prices through adjusting existing measures.

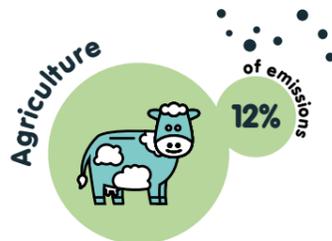
Previous analysis found that the major gaps in current carbon pricing are:



There is no carbon price and a reduced VAT rate (in effect a subsidy).



Air passenger duties fall short of covering forgone tax revenue due to zero-rated VAT on air tickets.



There is no effective carbon price signal and the sector receives significant subsidies (of which only some target environmental outcomes).

As an illustration of the scale of potential carbon incentives in the economy, applying the target carbon price of £80/tCO₂ could generate up to £27 bn/year, which is equivalent to:



This suggests that economic and/or fiscal scale of carbon policy reform is such that it should be seen as an integral consideration in broader fiscal reform options such as setting VAT rates or basic income tax rates.

Summary of Near-Term Policy Reform Options

Sector	Options
EU ETS Traded Sectors	<ul style="list-style-type: none"> Remain in the EU ETS, but this depends on Brexit outcomes. Implement an alternative UK based pricing scheme that has the flexibility to increase coverage and form part of the long-term emissions reduction strategy.
Electricity: Commercial and Industrial Use	<ul style="list-style-type: none"> Current effective carbon prices are broadly in line with target levels, therefore, do nothing is a viable option in the near-term. Improve Climate Change Levy design by making incremental changes to the compensation mechanisms. Rebalance the carbon price signal between electricity and gas to reduce distortion of fuel/energy choices.
Electricity: Residential Use	<ul style="list-style-type: none"> Since households pay an effective carbon price that is broadly in line with target levels, then doing nothing for the time being is a viable option. Phase in normalised VAT rates alongside the natural tapering of legacy policy charged to consumers.
Gas: Commercial and Industrial Use	<ul style="list-style-type: none"> As carbon pricing already exists, then doing nothing is a viable option, but ensure it continues to rise in line with targets. Including gas in future UK upstream pricing mechanisms could streamline policy.
Gas: Residential Use	<ul style="list-style-type: none"> New policy mechanism is required as there is currently no carbon pricing. Consider phasing in a normalised VAT rate, with all or part of the revenue raised used to fund assistance for vulnerable or lower income groups to transition to low carbon heat in their homes.
Road Transport	<ul style="list-style-type: none"> Since current taxation rates are high, then doing nothing is a viable option for the moment. As part of broader reform to motoring taxation, the carbon component of road fuel duties should be made explicit and aligned with the target level. Increase incentives to buy lower carbon vehicles.
Air Transport	<ul style="list-style-type: none"> Increase air passenger duty and improve design to be more reflective of actual emissions. Engage in negotiations to identify and potentially reform international agreements governing aviation emissions.
Agriculture, Forestry and Other Land Use	<ul style="list-style-type: none"> Improving monitoring, reporting, and verification would remove a significant barrier to implementing carbon policy in the sector.

See further policy recommendations in [the agriculture, forestry and other land use sectors](#).