Technical note - Carbon Emissions Tax

Revised 3 September 2019

Chapter 1 - Introduction

This is an updated version of the technical note originally published on 29 October 2018 and amended on 29 March 2019. It sets out further detail on arrangements for carbon pricing in the event that the UK leaves the European Union (EU) on 31 October 2019 without a deal. In particular it sets out how a Carbon Emissions Tax would be implemented.

The UK will be leaving the EU on 31 October whatever the circumstances. We would prefer to leave with a deal, but if this is not possible we will leave without a deal on 31 October.

The UK would be excluded from participating in the EU Emissions Trading System (EU ETS) in a 'no deal' scenario. However, emission monitoring and reporting requirements for 2019 and beyond would continue, allowing the UK to monitor progress towards its ambitious 2050 net zero target. In addition, a Carbon Emissions Tax would be introduced on emissions of carbon dioxide (and other greenhouse gases on a carbon equivalent basis) from UK stationary installations (i.e. excluding the aviation sector) from 4 November 2019.

If the UK secures an implementation period, it would remain a member of the EU ETS during that period. The government is considering long term options for carbon pricing following exit, and undertook a 10-week consultation which closed on 12 July. A consultation response will be published in due course.

Who should read this document

Any permit holder of a UK stationary installation (or their advisers), including:

- power generators;
- certain large industrial installations and manufacturers, including food processing plants;
- offshore installations;
- certain public sector facilities; and
- small emitters and hospitals covered by simplified reporting arrangements.

Further questions

A summary of the impacts of introducing Carbon Emissions Tax is set out in the Tax Information and Impact Note published at Budget 2018, available on the gov.uk website.

If you have any questions about the Carbon Emissions Tax, please contact Michael Lyttle or Andy Jameson on Telephone: 03000 585637 or 03000 586082 or email: carbon.taxation@hmrc.gov.uk

Chapter 2 - Summary

The Carbon Emissions Tax would maintain a carbon price for sectors that participate in the EU ETS (excluding the aviation sector), supporting the UK's strong environmental signals and contributing towards the UK meeting its climate change goals after Brexit. It would also aim to replace the revenue lost from the auctioning of EU Allowances which would result from the UK leaving the EU ETS. It would maintain similar arrangements for industrial installations deemed to be exposed to significant risk of carbon leakage, to support their competitiveness.

The government remains committed to maintaining the Single Electricity Market on the island of Ireland and understands the importance of carbon pricing to this market. In a 'no deal' scenario the UK would aim to ensure that carbon pricing does not hinder the effective operation of the market.

Under the Carbon Emissions Tax, all UK stationary installations covered by the EU Emissions Trading System, i.e. those in the:

a. Greenhouse Gas Emissions Trading Scheme ('installations holding a greenhouse gas emissions permit') or
b. Excluded Installations Emissions (Hospital and Small Emitters opt out) Scheme ('installations holding an excluded installations emissions permit')

would be set a tax emission allowance for each calendar year. For 2019 and 2020 installations holding a greenhouse gas emissions permit would have their tax emission allowances for 2019 and 2020 based on the allocation of free allowances under Phase III of the EU ETS; and for installations holding an excluded emissions permit, the tax emission allowance would be based on the current emissions targets detailed in the permit. For installations in both the greenhouse gas and excluded schemes the tax emission allowance for 2019 would reflect the fact that the tax would apply for only 58 days in 2019.

Permitted installations would continue to report their activities annually in accordance with the existing Monitoring, Reporting and Verification (MRV) requirements and, as at present, this information would establish how many tonnes of greenhouse gases they emitted during the reporting period. Emissions above the tax emission allowance would be taxed on a carbon equivalent basis with permit holders required to make one payment per installation per year to cover the tax due.

The emissions reporting period under the tax would normally cover 12 month periods running from 1 January, aligning with the MRV reporting period. However, as the tax would start towards the end of a calendar year in 2019, the first emissions reporting period for tax purposes would cover nearly 14 months (4 November 2019 to 31 December 2020). The emissions reporting process would be varied during this first period to reflect this (see chapter 3). Tax bills would be sent out by HM Revenue and Customs (HMRC) each May (starting in May 2021) to all installations with a tax liability covering emissions over the previous emissions reporting period.

The tax rate for 2019 would be £16 per tonne. The tax rate for 2020 would be announced at Budget 2019. The arrangements for carbon pricing after 2020 will be announced in due course.

Subject to state aid clearance, an equivalent to the scheme that compensates energy-intensive industries for the indirect emission costs of the EU ETS would be established to compensate them for the indirect emission costs of the new tax.

The main structure of the tax, including the rate, is set out in Finance Act 2019. The tax would be commenced by regulations made by HMRC should the UK leave the EU without a deal. A consultation on the more detailed arrangements would then take place and this technical note would be further updated to reflect the final tax design following the consultation. Some of the details in this note are therefore liable to change following the consultation and any issues that come to light in the drafting of the secondary legislation. This note focuses on the period from the start of the tax to 31 December 2020. If the tax were to continue beyond 2020, details of how the tax would operate, including how the government would set the tax emission allowance from 2021, would be announced at a later date.

Chapter 3 - How the tax would operate in detail

The Carbon Emissions Tax would be introduced on 4 November 2019. Permit holders for stationary installations would pay the tax based on reported emissions of greenhouse gases (on a carbon equivalent basis) that exceeded a tax emission allowance covering each calendar year.

Permit holders

The EU ETS requires installations to obtain permits to carry out regulated activities. Those in the Greenhouse Gas Emissions Trading Scheme require a greenhouse gas emissions permit and those in the Excluded Installations Emissions (Hospital and Small Emitters opt out) Scheme require an excluded installations emissions permit.

Installations must monitor their emissions and submit an annual report of those emissions. The UK will continue to operate both a permitting and a reporting regime after Brexit. Permits will remain in place and would become valid for tax purposes, although minor amendments would be made by regulators to reflect leaving the EU ETS and the introduction of the tax.

Any installation that currently holds a permit would remain subject to the reporting requirements and become liable to pay the tax if they emit above their tax emission allowance in any given period (see below), as would any installation that obtained a permit after the start of the tax.

There would be no requirement for permit holders to register for the tax or send in a tax return – most information needed to establish who would be liable for tax, calculate tax liability and bill the permit holder would be taken by HMRC from the existing data held by regulators.

Emissions reporting periods

Installation permit holders would continue to use the ETSWAP IT system to submit independently verified data to environmental regulators on their activities during the emissions reporting period establishing their greenhouse gas emissions on a carbon equivalent basis. Emissions reporting periods under the tax would normally cover 12 months running from 1 January, aligning with the MRV reporting period. The permit holder at 31 March following the end of the emissions reporting period would be sent a bill by HMRC in May. They would be the liable person even if there were to be a change of permit holder during the emissions reporting period or between the end of that period and 31 March. Payment would be required within 30 days of the bill being issued.

As the tax would start towards the end of calendar year 2019, the normal emissions reporting period and MRV policy would be amended for 2019 and 2020. Installation permit holders would be required to submit the usual verified annual emissions report covering the 12 months of 2019 by 31 March 2020. This data would not be used for the tax but is required to maintain transparency over UK emissions.

Installation permit holders would then be required to submit a single verified emissions report by 31 March 2021 which would include two emission statements covering:

(i) 4 November 2019 to 31 December 2019; and
(ii) 1 January 2020 to 31 December 2020.

At the beginning of this emissions reporting period installation permit holders would need to establish a baseline so that emissions during the period could be accurately reported. They would therefore need to undertake the usual checks for the beginning of a new emissions reporting period.

The March 2021 emissions report would provide a full data set for emissions reporting purposes which would also enable HMRC to calculate the tax on all emissions above the installation's tax emission allowances for 2019 and 2020. For 4 November to 31 December 2019 the tax rate would be £16 per tonne. The 2020 tax rate would be set at Budget 2019. If the 2019 and 2020 tax rates were to differ HMRC would apply separate tax rates to 2019 and 2020 emissions. One tax bill per installation covering the first emissions reporting period, which would add together the 2019 and 2020 tax liabilities, would be sent out by HMRC in May 2021 to the permit holder, with payment required within 30 days.

Tax emission allowances

General

The tax would be based on the amount by which reported emissions (on a carbon equivalent basis) exceeded an emissions allowance set for tax purposes (the tax emission allowance) for each installation for the emissions reporting period.

For Phase III of the EU ETS (which ends on 31 December 2020) the UK developed and agreed their National Implementation Measures (NIMs) which set out the levels of free allocation for allowances to installations in that Phase. An electronic version of the NIMs, known as the national allocation table, is published by the Department for Business, Energy & Industrial Strategy (BEIS) and updated annually – it records the number of free allowances allocated to an installation for each year of the Phase. For Phase III the free allowances will be used to establish the annual tax emission allowance.

The March 2021 emissions report

For installations holding a greenhouse gas permit the national allocation table updated in April 2019 set out the full year free allocation of allowances for both 2019 and 2020. In setting a tax emission allowance for 2019, HMRC would adjust the 2019 allowance figure set out in the table to reflect the fact that the tax would apply for only 58 days in this year. The tax emission allowance for 2020 would be set using the full year allowance figure in the April 2019 table. In both years amendments would then be made where necessary to reflect any capacity changes etc. – see below.

Installations holding an excluded installation emissions permit would continue to operate as they do at present, except that the tax (rather than the civil penalty) would be payable on emissions above the target detailed in their permit. Installations' targets would continue to be detailed here and HMRC would set the 2019 tax emission allowance at 58/365ths of the 2019 target. The tax emission allowances for 2020 would be set using the full year 2020 target. In both years amendments would then be made where necessary to reflect any capacity changes etc. – see below.

Any installation that did not receive an allocation of free allowances in Phase III would be set a tax emission allowance of zero. Stationary installations that became permitted after the UK left the EU ETS ("new entrants") would have no allowances on which to base their tax emission allowance; their tax emission allowance would be set in a comparable way to existing EU ETS processes.

An installation that had either significant in-year increases or decreases in capacity and activities during the year, or a partial cessation at the installation, would have to notify these changes to the regulator (as at present). The regulator would notify HMRC of any approved capacity changes to enable HMRC to adjust the tax emission allowance. HMRC may agree to issue the tax bill outside the usual annual billing cycle to give time for investigations by regulators and/or the tax emission allowance to be amended.

Any installation whose emissions in one emissions reporting period were lower than its tax emission allowance would not be able to carry forward the 'unused' tax emission allowance to a future reporting year. Carbon Emissions Tax would not be credited or repaid where tax emission allowances were unused.

It would not be possible to use EU allowances (whether free, bought at auction or traded) to pay the tax, and any such allowances held at the time of the tax's introduction would have no validity for tax purposes.

Beyond the March 2021 emissions report

As indicated in chapter 1, the government is considering long term options for carbon pricing following Brexit, and undertook a 12-week consultation which closed on 12 July. A consultation response will be published in due course. If the tax were to continue beyond 2020 details of how the tax would operate, including how the government would set the tax emission allowance from 2021, would be announced at a later date.

Penalties and appeals

A penalty, payable to HMRC, would be introduced for a failure to pay the tax due and the existing penalty, payable to regulators, for carrying out a regulated activity without a permit would be amended to account for the introduction of the tax.

A process would be introduced to provide for rights to a review and appeal of decisions made by HMRC relating to the tax. These include:

- whether HMRC has charged the correct person for the tax
- whether the amount of tax in the bill has been calculated correctly
- taxpayer claims for refunds of tax
- taxpayer liability to, or the amount of, any penalty interest

Chapter 4 - Legislation

Current law

The Greenhouse Gas Emissions Trading Scheme Regulations 2012 set out the domestic law relating to free allocation of EU Allowances and permitting requirements, as well as the simplified reporting arrangements for small emitters and certain hospitals. These regulations implement Directive 2003/87/EC which established a system for greenhouse gas emission allowance trading within the EU and set out the framework for the important features of the system, including requirements to obtain a permit to carry out activities within the scope of the Directive and then to monitor, report and verify emissions in each calendar year.

EU subordinate legislation made under Directive 2003/87/EC includes:

- Commission Regulation 601/2012, which sets out detailed rules relating to the monitoring and reporting aspects of MRV; and
- Commission Regulation 2018/2067, which sets out the detailed rules for the verification aspects of MRV.

Proposed legislation

Finance Act 2019 created a new Carbon Emissions Tax, setting the scope, rate and basic structure of the tax and establishing that for any given tax reporting period it would be payable only on emissions above a tax emission allowance set for each installation. The Act also provides for a statutory instrument or instruments which would be laid in 2020 following a consultation after the tax's introduction (see chapter 2). The instrument or instruments would be wide-ranging and would include:

- provision for the level of the tax emission allowance
- amending existing emissions reporting requirements to adapt them for the tax
- the payment and tax collection arrangements
- decisions on which the taxpayer would be able to seek a review and against which they would be able to appeal, and
- record-keeping requirements.

The Finance Act 2019 legislation for this measure would be brought into effect by statutory instrument, and take effect only if the UK leaves the EU without an agreement.

Finance Act 2019 would be amended in Finance Bill 2019-20 to reflect the revised arrangements for dealing with reporting and billing for 2019 and 2020 (necessitated by the change in tax commencement date as a result of the later date of Brexit), the rate for 2020 (if different from 2019) and, if needed, provisions relating to penalty interest.

Chapter 5 - Background

The government currently sets a total carbon price, created by the price of allowances from the EU ETS and the Carbon Price Support (CPS) rate per tonne of carbon dioxide (t/CO_2) which tops up the EU ETS price for electricity generators. The total carbon price is designed to provide an incentive to invest in low-carbon power generation. In a ‘no deal’ Brexit the CPS would remain in place.

EU Emissions Trading System (EU ETS)

The EU ETS (‘the trading system’), which was introduced in 2005, is a ‘cap and trade’ scheme designed to set a price for carbon emissions to encourage their reduction. It applies to large emitters of greenhouse gases in the EU and European Economic Area, including:

- power generators;
- large industrial emitters, including chemical and pharmaceutical companies and food processing plants; and
- aircraft operators.

The trading system operates in phases and includes rules determining how many free allowances installations are allocated each year. Currently the trading system is in Phase III which ends on 31 December 2020.

The EU ETS requires installations to obtain permits to emit and then to submit a report annually providing details of their activities across the previous calendar year, from which emissions across the period are calculated. All greenhouse gas emissions are calculated on a carbon equivalent basis. The data will continue to be collected following Brexit.

Industrial installations, generally subject to international competition, are shielded from the full costs of the trading system through the allocation of a certain quantity of free allowances which cover a proportion of their emissions for the year. Some installations need to purchase allowances to top up their free allocation and others (including power generators) receive no allocation of free allowances and need to buy enough to cover all of their emissions. Installations can trade allowances with other installations as needed. At the end of the year all installations must surrender enough allowances to cover all of their emissions to avoid fines being imposed.

The trading system also provides for a simplified reporting scheme for small emitters and certain hospitals, who are set annual emissions targets rather than being allocated allowances. There is no requirement for verified reports and a civil penalty charge (calculated according to the carbon price) is levied on emissions above the target.

Carbon Price Support

The CPS tax was introduced in Great Britain in 2013. The CPS rate per t/CO2 is used as the basis for setting individual CPS rates for each of the taxable commodities. The CPS rates of Climate Change Levy apply to fossil fuels used in electricity generation that are taxed under the CCL regime (gas, solid fuels and liquefied petroleum gas). The CPS rates of Fuel Duty apply to oils and bioblends used in electricity generation.

As CPS rates do not apply in the Republic of Ireland, introducing them in Northern Ireland would have distorted the Single Electricity Market covering the island of Ireland. The EU ETS, on the other hand, covers the whole of the island of Ireland.
Budget 2018 confirmed that the Carbon Price Support rate would be frozen at £18/tCO_2 until 31 March 2021.