



Department for
Business, Energy
& Industrial Strategy

Review of the schemes to compensate certain energy intensive industries for indirect emission costs in electricity prices

Government Response



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Introduction

On 14th June 2021, BEIS launched a consultation to review the schemes to compensate energy intensive industries for indirect emission costs in electricity prices.

The consultation was part of a wider review to provide an assessment of the risk of carbon leakage due to the indirect emission cost from the UK Emissions Trading Scheme (ETS) and compensation price support (CPS). It also examined whether mitigating this risk provided wider benefits, such as levelling up and supporting jobs, ensuring business viability until the point at which industrial decarbonisation technologies could be deployed and increase productivity.

The consultation was a key component of the review and presented initial proposals. Through it, BEIS sought views and evidence from both existing recipients and non-recipients on:

1. Evidence of carbon leakage, particularly as a result of indirect emissions costs from the UK Emissions Trading Scheme and Carbon Price Support
2. Sectors most at risk of carbon leakage due to indirect emission costs
3. The design of the scheme if there continues to be a rationale for compensation

BEIS sought views from a wide range of audiences, including energy intensive industries (whether currently benefitting or not benefitting from the compensation schemes), other electricity consumers, trade bodies, consumer associations, the devolved administrations and other interested parties. Stakeholders were provided with an opportunity to provide their views and evidence to the questions posed. This consultation ran for 8 weeks and closed on the 9 August 2021.

A total of 34 responses were received from stakeholders, including energy intensive companies, trade associations, and non-governmental organisations, among others. This document provides the full Government response after analysing all the responses.

Executive Summary

Our review assessed the risk of carbon leakage due to the indirect emission cost from the UK ETS and CPS. We also examined whether mitigating this risk provides wider benefits, such as levelling up and supporting jobs, ensuring business viability until the point at which industrial decarbonisation technologies can be deployed and increasing productivity.

Analysis for the Net Zero Review, published in October last year, already suggested that some UK manufacturing sectors have substantially lower emissions intensities compared to some trading partners. Many of these sectors are also relatively open from a trade perspective. When different levels of carbon price are applied to sectoral emissions intensities, the impacts look relatively low for most sectors, but the main exceptions are certain energy intensive industries.

Following a literature review, collation of evidence from the consultation and a sector assessment, we have concluded that there continues to be a risk of carbon leakage due to indirect emission costs for some sectors. There is a risk that the indirect emission costs found in the electricity price could lead to the displacement of production, and associated greenhouse gas emissions that would not have happened if climate rules and policies across jurisdictions were implemented in the same way. The sector assessment considered a wide range of factors to ensure sectors at risk of carbon leakage from indirect emission costs due to carbon pricing are eligible for support.

This Government response sets out the key policy changes of the updated schemes. The accompanying revised scheme guidance, published alongside this response, contains more details.

Scheme Length & Eligibility

As set out in the Energy Security Strategy published on 7 April 2022, The Government has committed to extend the EII Compensation Scheme for a further three years to 31 Mar 2025, with payments backdated to 1 Apr 2022. Government is also increasing the percentage of indirect emission costs which Government is compensating for when compared with the current scheme.

The consultation published last year set out a methodology to assess the risk of carbon leakage due to indirect emissions costs. We have decided to use the methodology set out in the consultation but making minor adjustments due to data availability following consultation responses and an academic peer review.

We have continued to apply this methodology, including both quantitative and qualitative assessments, to identify those sectors most at risk, but we have increased the trade and indirect emission intensity thresholds. The methodology used the most granular data available

across different sectors and academics have peer reviewed the methodology and data to ensure we have used the best evidence available.

Based on outcome of our assessment, we deem the following sectors eligible for compensation for the indirect emission cost in electricity prices due to the UK ETS and carbon price support mechanism:

SIC	Description
13.10	Preparation and spinning of cotton-type fibres
14.11	Manufacture of leather clothes
16.21	Manufacture of veneer sheets and wood-based panels
17.11	Manufacture of pulp
17.12	Manufacture of paper and paperboard
20.13	Manufacture of other inorganic basic chemicals
20.14	Manufacture of other organic basic chemicals
20.15	Manufacture of fertilisers and nitrogen compounds
23.14	Manufacture of glass fibres
24.10	Manufacture of basic iron and steel and of ferro-alloys
24.42	Aluminium production
24.43	Lead, zinc and tin production
24.44	Copper production
27.20	Manufacture of batteries and accumulators

We will retain the business level test with the exemptions and for at least the first year of the scheme use a reference period of the five most recent years for which there are annual accounts available, but companies may exclude FY 20/21 and 21/22 due to the impact of the pandemic. In these cases, companies will have a three-year reference period.

Scheme Design

We have broadly adopted the proposals set out in our consultation, but with some changes based on feedback in the consultation responses.

For FY 22/23 the scheme will operate on a multi-annual baseline period, whereby firms' level of compensation is determined initially using a 5- year period of historic data, where annual accounts are available. Within this firms will have the option to exclude FY 20/21 and 21/22 from their baseline to account for the impacts of the Covid-19 pandemic. After the first year of the scheme, we will explore the option of no longer calculating the level of compensation based on a multi-annual baseline period, but rather calculating it based on the actual level of production or electricity consumption of the preceding quarter.

We will be limiting total indirect emission costs due to the UK ETS and CPS to 1.5% of a company's GVA in a respective year or 75% subsidy intensity, whichever is greater. This means we are increasing the percentage of indirect emission costs which Government is compensating for when compared with the current scheme. This is because we believe the current level of subsidy intensity is not sufficient to fully mitigate the risk of carbon leakage. We have increased the overall budget limit for the scheme accordingly, but as is the case under the current scheme, if there is a risk of budget over-spend, we may choose to reduce the aid intensity

For the emission factor, we will use the latest figure of the estimated carbon dioxide emissions per GWh of electricity supplied for all fossil fuels from the DUKES and update the formula with this figure annually as per the consultation proposal, but review its appropriateness prior to the next Spending Review and second phase of the UK ETS.

We will continue to apply the benchmarks for Phase IV (2021-2030) of the EU ETS in the form of the product-specific electricity consumption efficiency benchmark (E), where available, or the fall-back efficiency benchmark of 80%, where not, to calculate level of compensation in our schemes. The decision to apply EU benchmarks does not mean that the UK is enshrining EU law into the UK, and the Government retains the ability to adopt alternative benchmarks should this be appropriate.

To ensure that the compensation schemes are aligned with the wider decarbonisation goals of the Government, we will require all recipients of compensation to submit a plan by the end of the first year of the scheme (March 2023) setting out their decarbonisation pathway. We are also considering the addition of stricter conditions though these would follow engagement with industry and apply no earlier than the 2023 scheme year.

We will proceed with some of the additional monitoring data requirements referred to in the consultation.

With respect to the proposal to require businesses to reflect compensation received in their company accounts and spend the compensation on its electricity costs, we will not introduce

these at this point in time, but have further discussions with beneficiaries on how we could introduce them at some point in the future.

Rationale

The Department has run compensation schemes for the indirect emission costs due to the EU Emissions Trading System and UK Emission Trading Scheme (ETS) (from 2021 onwards) and carbon price support mechanism (CPS) for certain energy intensive industries since 2013 and 2014 respectively. Indirect emission costs in electricity prices arise from the obligation on electricity generators to buy emission allowances under the UK ETS and pay a tax on the carbon content of the fossil fuels they use to generate electricity. This increases their costs which are passed on in their offer on the wholesale electricity market. This translates to an increase in wholesale electricity prices, subsequently reflected in higher retail electricity prices for energy intensive industries.

This can subsequently lead to an electricity price differential if not all countries apply the same carbon price as the UK does. Such a differential in indirect emissions costs in electricity prices risks putting certain energy intensive industries at a competitive disadvantage compared to their international competitors, creating a risk of carbon leakage.

Carbon leakage is the displacement of production, and associated greenhouse gas emissions, in ways that would not have happened if climate rules and policies across jurisdictions were implemented in an equivalent way.

Climate rules and policies designed to reduce emissions in a given country can increase the costs of production of its businesses (including indirectly because of the impact on the price of inputs, such as energy) relative to international competitors if those competitors are subject to weaker climate change mitigation policies. If such rules and policies (such as carbon pricing, or other emissions reduction policies), are not implemented in an equivalent way across jurisdictions, this can result in production and the associated greenhouse gas emissions being displaced, undermining the original environmental objective of climate mitigation policies.

In general, carbon leakage can be said to occur if all of the following conditions are satisfied:

- Climate mitigation policies differ across jurisdictions;
- Emissions shift to a region with lower climate mitigation obligations; and
- Shifts in production to a firm in a different jurisdiction leads to a sustained increase in emissions intensity, higher than it would have been had production not moved.

Analysis for the Net Zero Review, published in October last year, suggests that some UK manufacturing sectors have substantially lower emissions intensities compared to some trading partners. Many of these sectors are also relatively open from a trade perspective.

When different levels of carbon price are applied to sectoral emissions intensities, the impacts look relatively low for most sectors, but the main exceptions are certain energy intensive industries.

The Government also recognises that UK industrial electricity costs are higher than those of other countries and agreed that it will act to address this by taking steps to reduce costs. Consequently, we have taken steps to protect those manufacturing sectors which are most exposed to the impact of the UK's relatively higher electricity prices due to indirect emission costs by introducing the compensation schemes. They reduce the cost of electricity, which reduces the risk of carbon leakage, supports the competitiveness of key manufacturing industries and helps to keep production and investment in the UK rather than moving overseas to countries with less ambitious climate policies.

Policy Context

There are significant positive changes taking place in the global efforts to mitigate climate change, which will support industry's net zero transition.

The UK became the first major economy in the world to pass laws to end its contribution to global warming by 2050 in 2019. The target will require the UK to bring all greenhouse gas emissions to net zero by 2050.

In 12 December 2020, the UK communicated its new Nationally Determined Contribution (NDC) under the Paris Agreement to the United Nations Framework Convention on Climate Change. The NDC commits the UK to reducing economy-wide greenhouse gas emissions by at least 68% by 2030, compared to 1990 levels.

In November 2020, the Government published the Ten Point Plan for a Green Industrial Revolution, setting out how the UK can make the most of the opportunities presented by the shift to net zero. This announced £12 billion of UK Government investment, and the ambition to leverage three times that amount of private investment by 2030 across key technologies such as hydrogen, offshore wind, nuclear, electric vehicles, heat and buildings.

In March 2021, the Government set out its Industrial Decarbonisation Strategy setting out how industry can decarbonise in line with net zero while remaining competitive and without pushing emissions abroad.

In October 2021, the Government published its Net Zero Strategy, setting out the roadmap for achieving net zero emissions by 2050. The commitments made will unlock up to £90 billion of private investment and support 440,000 jobs in green industries in 2030.

In April 2022, the Government published the Energy Security Strategy (ESS), setting out how the UK will move towards greater energy independence. Within the Strategy, the Government set out what support for industry would be made available by committing to extend the EII

Compensation Scheme for a further three years whilst increasing compensation by limiting the amount of the total indirect emission costs to 1.5% of the GVA and backdating payments to 1 Apr 2022. The ESS also committed the Government to exploring other mechanisms to improve energy competitiveness for British industry.

Auctioning under the UK ETS started in May 2021. The UK ETS will be the world's first net zero carbon cap and trade market, and a crucial step towards achieving the UK's target for net zero carbon emissions by 2050. We published the Developing the UK Emissions Trading Scheme (UK ETS) consultation on 25 March 2022 which includes options to align the scheme with our net zero target.

Whilst it is vital that the compensation schemes are compatible with the UK's domestic and international climate change framework, it is also important that they can also contribute to the delivery of Build Back Better: Our Plan for Growth which aims to boost the productivity and earning power of people throughout the UK.

Additionally, the compensation schemes align with the government's intention to level up the UK economy. The manufacturing sector is a crucial part of local economies across the United Kingdom, often providing well-paid jobs in areas where salaries fall below the UK average. Supporting these sectors to reach net zero carbon emissions by 2050 will provide new opportunities to level up the economy across all nations and regions of the country.

The compensation schemes apply to Great-Britain only and energy intensive industries in Northern Ireland are not eligible. The EU ETS continues to apply in Northern Ireland in respect of the generation of electricity for the single wholesale electricity market. The Protocol on Ireland/Northern Ireland, part of the UK-EU Withdrawal Agreement, applies to any compensation scheme for eligible energy intensive industries in Northern Ireland.

Review and Consultation

We launched a review of the compensation schemes last year, assessing them in light of the changed policy context, determining whether there continues to be a rationale for compensation, and if so, setting the conditions and timeframe under which that need might fall away. It also provided an opportunity to ensure that the compensation schemes are aligned with wider Government goals of energy efficiency and decarbonisation.

Our review assessed the risk of carbon leakage due to the indirect emission cost from the UK ETS and CPS. We also examined whether mitigating this risk provides wider benefits, such as levelling up and supporting jobs, ensuring business viability until the point at which industrial decarbonisation technologies can be deployed and increase productivity.

Following a literature review, collation of evidence from the consultation and a sector assessment, we conclude that there is a risk of carbon leakage due to indirect emission costs for some sectors. There is a risk that the indirect emission costs found in the electricity price could lead to the displacement of production, and associated greenhouse gas emissions that

would not have happened if climate rules and policies across jurisdictions were implemented in the same way. The sector assessment considered a wide range of factors to ensure sectors at risk of carbon leakage from indirect emission costs due to carbon pricing are eligible for support.

The Government responses sets out the key policy changes of the updated schemes. The accompanying guidance, which will be published in due course, contains more details.

The consultation published in June last year formed a key component of the review. The sections below summarise the consultation responses to the 'Review of the schemes to compensate energy intensive industries for indirect emission costs in electricity prices' and set out the Government's decisions for updated compensation schemes from April 2022.

Analytical Approach to Carbon Leakage

Evidence of Carbon Leakage Occurring in the UK

Carbon leakage is the displacement of production, and associated greenhouse gas emissions, in ways that would not have happened if climate rules and policies across jurisdictions were implemented in an equivalent way.

There is little quantitative evidence to suggest carbon leakage is currently taking place, despite very real risks being laid out by theory¹. In part, this is thought to be due to historic low carbon prices in most jurisdictions², however prices have risen recently, and their impact is yet to be quantified. Furthermore, Governments have put in place measures to mitigate the risk of carbon leakage such as allocation of free UK ETS allowances and this compensation scheme.

The literature shows that carbon pricing can impact carbon leakage or competitiveness more explicitly in the future, especially given recent price increases. However, carbon pricing represents a portion of a firm's costs and is not always considered to be the most important factor for carbon leakage, with cost pass-through rates and abatement opportunities having a significant impact. Other factors which affect carbon leakage include capital intensity, trade intensity/exposure, emissions output and other industry associated costs.

Conversely, there are complicated reasons involved in decisions to relocate production and investment from the UK. A high supply of free UK ETS allowances to industrial sectors, and other mitigations or benefits of operating in the UK have and may continue to offset carbon leakage impacts e.g., access to capital, cost pass through rates, and abatement opportunities (see Industrial Decarbonisation Strategy).

¹ BEIS, UK Business Competitiveness and the Role of Carbon Pricing, 2020

² World Bank Group. (2019). State and Trends of Carbon Pricing 2019.

Nevertheless, energy intensive industries (EIIs) are particularly exposed to carbon leakage due to their high proportional energy costs and high exposure to trade. The risk of carbon leakage through indirect emission costs of the UK ETS and CPS are likely to increase if the carbon price continues to rise.

1. To what extent do you agree with the risks and evidence of carbon leakage for UK EIIs?

Consultation Response

The risk of carbon leakage was of concern to most respondents; with many responses highlighting relatively high UK energy prices as impacted by high carbon costs as a potential factor in carbon leakage.

Certain stakeholders also felt more at risk than others, with those industries with the tightest profit margins, most energy intensive and most open to trade arguing they were most at risk of carbon leakage.

Certain stakeholders felt the definition of carbon leakage used by the UK government was too limited, arguing that absence of historic evidence does not equate a lack of carbon leakage – nor does it limit the risk posed by carbon leakage in future years.

Government Response

The Government takes the risk of carbon leakage seriously, this consultation has been designed to identify and address the concerns of stakeholders potentially impacted by this risk. The Government acknowledges that if action to mitigate domestic emissions instead displaces emissions to areas without such action, this undermines the objective of meeting international goals set out under the Paris Agreement. As such BEIS, alongside other governmental departments, will continue to work to develop its understanding of carbon leakage within an international context, and aim to mitigate this risk where it arises.

The chosen definition of carbon leakage was carefully formulated to encapsulate the proposed risk this issue poses to the UK economy going forward. Historic instances of carbon leakage are hard to verify, but our aim with this definition is to identify and as such limit these instances going forward.

Despite a lack of historic evidence of carbon leakage, Government agrees that the risk of carbon leakage from indirect emissions exists. Government also agrees that recent rises in the carbon price and cost exposure are likely to have increased that risk. Therefore, Government will retain the EII Compensation Scheme whilst continuing to monitor the situation of carbon leakage.

2. Is there any evidence of carbon leakage through indirect carbon emissions that you think has been missed in this section?

Consultation Response

Some respondents cited the increased administrative burden associated with new carbon costs in the UK as such they argued the risk of carbon leakage may be increased.

Many respondents brought up the concept of ‘investment leakage’, whereby ahead of carbon leakage firms would either cut domestic investment or increase investment abroad. They argued this was not accounted for within the government definition of Carbon Leakage.

Some cement producers cited an analysis conducted by PWC for CEMBUREAU (the European Cement Association) in 2020 looking at the risk of carbon leakage. This showed that under current free allocation rules and on the current CO2 price trajectory, the entirety of the UK cement industry would be at risk of carbon leakage by 2030 if no changes are made regarding cement production capacity.

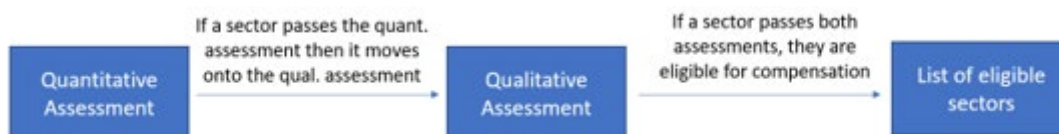
Government Response

The admin cost associated with the scheme will be considered when designing the compensation schemes. The Government will aim to minimise the associated administrative burden for companies, whilst ensuring the proper checks for eligibility are carried out. This will be done by making minor changes to existing forms and providing clear guidance on how the forms should be used.

Sector eligibility has been determined following the methodology set out below.

Sectoral Eligibility

The methodology we set out in our consultation uses a quantitative assessment and qualitative assessment which will be combined to determine which sectors are eligible for compensation. The overall structure of the new methodology is as follows:



The quantitative assessment has been based on an indirect carbon leakage measure (ICLM). The calculation for this measure is set out below:

ICLM³ = trade intensity x indirect emissions intensity, where:

$$\text{Trade Intensity} = \left(\frac{\text{Imports} + \text{Exports}}{\text{Turnover} + \text{Imports}} \right)$$

$$\text{Indirect Emission Intensity} = \left(\frac{\text{Electricity} \times \text{Emissions factor}}{\text{GVA (Indirect)}} \right)$$

$$\text{ICLM} = \left(\frac{\text{Imports} + \text{Exports}}{\text{Turnover} + \text{Imports}} \right) \times \left(\frac{\text{Electricity} \times \text{Emissions factor}}{\text{GVA (Indirect emissions)}} \right)$$

Units

Imports	£	Electricity consumption	kwh
Exports	£	Emissions factor	tCO2/MWh
Turnover	£	GVA	£

Under this methodology a sector would pass the quantitative assessment if any of the following holds:

- The ICLM is above 0.36
- Has a trade intensity of greater than 45%
- An indirect emission intensity greater than 0.8kgCO2 per £ of GVA

The qualitative assessment sees each sector assessed for risk of indirect carbon leakage using a Red Amber Green (RAG) assessment. This assessment looked across four criteria for each sector. A sector will have each criterion characterised as either low, medium or high risk of carbon leakage due to indirect UK ETS and CPS costs and this in turn determines a RAG rating to illustrate carbon leakage risk for the sector.

The criteria are:

- Market characteristics: assesses ability of a sector to pass through indirect emissions costs based on parameters such as bargaining position, price taker position, market concentration and trading patterns.

³ ICLM = ((Imports + Exports)/(Turnover + Imports)) x ((Electricity consumption x Emissions factor)/GVA)

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- Profit margins: assesses parameters such as the current and future demand, output price, costs, investment, business demography of the sector, substitutability with other products and the feasibility of relocation for the sector.
 - Abatement potential: assesses the scope for energy efficiency investments in order to reduce electricity consumption and therefore indirect emission costs in the sector. – Parameters will include current electricity consumption, international benchmarks, and the current and future adoption of future Best Available Technologies.
 - Fuel substitutability: assesses the ability of the sector to shift from fossil fuel energies to electricity and whether there is a risk that difference in treatment between direct and indirect cost compensation hinders the energy-efficient electrification of the sector. This difference in treatment could lead to the unintended consequence of disincentivising electrification or energy efficiency measures more generally.

Each criterion is RAG rated for a sector. The first three criteria (market characteristics, profit margins, abatement potential) are collated to produce an initial RAG rating for a sector. This initial rating determines the risk of indirect carbon leakage.

Fuel substitutability is applied to sectors which have not met the sufficient threshold for risk of carbon leakage in their initial RAG rating. This criterion acts as a fail-safe to ensure marginal sectors are not incentivised by other carbon leakage mitigations such as free allowances to burn fossil fuels rather than use electricity. The fuel substitutability score is then applied to a sector's initial RAG rating to give a final rating. If the sector then meets the threshold for carbon leakage risk, it will receive relief under the scheme.

Each criteria's RAG rating will be formed through analysing underlying parameters.

In the RAG assessment, Red and Amber-Red indicate a high risk of indirect carbon leakage whilst Green indicates a low risk of indirect carbon leakage and Green-Amber represents a low-medium risk.

Sectors with a high trade intensity, indirect emission intensity and ICLM in the quantitative assessment, and sectors rated medium, medium-high or high risk of carbon leakage in the qualitative assessment will be eligible for indirect cost compensation.

3. To what extent do you agree with the proposed methodology to determine sector eligibility?

Consultation Response

Many respondents did not like the inclusion of two-stage testing, with most respondents taking at least some issue. These groups often compared this with how the European Commission has determined eligibility and pointed out that it might raise competitive distortions.

The use of GVA (Gross Value Added) within the quantitative test was raised by several respondents; it was argued it is discriminatory to labour intensive sectors (per unit of energy). This led to the argument it should instead be considered as a percentage of profits.

Many respondents took issue with specific characteristics of the qualitative assessment; some felt that the Market Characteristics should include an assessment on the effects of EU CBAM (Carbon Border Adjustment Mechanism) on specific markets.

The subjectivity of the qualitative method came up several times; some stakeholders were concerned by the pass criteria decided for the RAG classification. While others echoed these concerns surrounding the qualitative assessment.

One respondent argued that within the abatement potential criteria, there should be greater flexibility to assess unique characteristics of each sector and each business, and that this needs a much longer dated historical data-set and future horizon time space to achieve the strategic objectives of UK economic prosperity.

There was some confusion surrounding the quantitative testing, particularly around the pass criteria for the test. Some groups cited a lack of transparency regarding the process and were unconvinced a company could easily navigate the criteria and consider themselves eligible for compensation; they suggest a simplification of the methodology.

There were some concerns surrounding the variables used within the quantitative test with it being highlighted that electricity usage as a measure could cause discrepancies within industries due to technology differences within sub-sectors. There were some arguments that the use of Fuel Substitutability could be problematic as it would only be possible for some sectors to fully engage in becoming carbon neutral.

Some were concerned that if industry data was not being used it may result in compromised quality of assessment. Certain groups offered to provide their own data for their sector to aid with the assessment due to concerns surrounding other sources. This was often followed with expressed concern that the data required for the quantitative test was not readily available and therefore may require a massive increase in learning and data from companies, with a brief period to do it. Several respondents were concerned that the data used by BEIS is not publicly available; they requested the process be open and available to scrutiny.

Some respondents felt that the process should be more forward looking and engage in aiding potentially growing industries with high trade intensity.

Several of the respondents were concerned this could reduce long run investment. They asked the government to confirm there will be low energy prices during the transfer to Net Zero.

The frequency of review came up, with some respondents asking there be more frequent reviews to account for the changes that could occur within the economy in the next 5 years.

One respondent expressed concern that their integrated manufacturing process they have portions of their process that are more electricity intensive than others; and asked how the methodology would account for this.

Government Response

The inclusion of both quantitative and qualitative testing has been decided upon to ensure those sectors which are most at risk of carbon leakage are identified and supported. We are proceeding with both assessments with adjustments made on the quantitative thresholds and qualitative criteria based on feedback from the academic peer review and data availability.

The scheme application process will be designed to minimise confusion and administrative burden.

The implications of the EU CBAM have not yet come to fruition and as such are difficult to quantify, the design of the scheme – considering those businesses that are most engaged in international trade and with the lowest profit margins, should target those areas where the EU CBAM could be most impactful.

The methodology was presented to stakeholders in several different meetings to clarify the approach taken and address concerns on complexity, transparency, and data.

The methodology used the most granular data available across different sectors. Stakeholders were encouraged to provide more granular data if available and this was used to support the assessment when provided. The methodology underwent academic peer review in order to ensure the best data available was being used. Some data used in the assessment is too granular to share due to ONS data sharing rules and issues around commercial sensitivity.

The assessment was done at a sector level due to the infeasibility of looking at specific processes at a product level given data and time constraints.

The quantitative assessment thresholds have been adjusted compared to those originally set out in the consultation. The indirect emission intensity factor has been adjusted down to account for the UK marginal emission factor. The trade intensity factor has also been increased to ensure that sectors with higher exposure to trade reach the qualitative assessment. The ICLM threshold has been adjusted to account for these changes.

The quantitative assessment also now requires sectors to meet all three thresholds rather than just one of any of the thresholds. This is to ensure that eligible sectors have both high trade intensity and high indirect emission intensity. This avoids a sector passing the quantitative assessment based on one metric, such as trade intensity, which would not be a clear enough indicator of a risk of carbon leakage on its own.

The qualitative assessment considered a significant number of criteria as part of the RAG rating. This ensured sectors were considered in a wide context when assessing the risk of carbon leakage. A clustering programme was applied to criteria to reduce the risk of subjectivity in the assessment. The RAG rating score system was also peer reviewed by academics to further reduce the risk of subjectivity and ensure sectors at most risk of carbon leakage passed the assessment.

4. To what extent do you agree with the proposed list of sectors and subsectors that will be assessed under the proposed methodology for sector eligibility?

Consultation Response

Generally, the consultation response supported those sectors already on the list to be assessed. Many respondents offered suggestion for additional sectors or alterations to the way each sector may be assessed.

Several responses argued all UK ETS sectors should be reviewed and that those sectors not included should be allowed to provide evidence to be considered. It was further argued that the eligibility of sectors reassessed over time as the variables involved will most likely change.

One stakeholder argued that a broader group of Metal production/treatments should be assessed together so energy efficiency is encouraged for those companies who are not currently being as energy efficient as possible.

Government Response

The chosen sectors for review were selected to identify most effectively those who need support, based on their likelihood as energy intensive industries and potential risk of carbon leakage. Assessing all sectors would be much more resource intensive and is unlikely to merit the increased levels of resources to do so.

The makeup of the eligible sectors has been decided based on their risk of carbon leakage. Concerns surrounding a skew towards primary production are understandable, however the industries that qualify for assessment tend to be highly exposed to international trade, with thin profit margins and low abatement potential. These industries are those most in need of support to mitigate their risk of carbon leakage and as such are those most likely to be assessed.

The scheme has been designed to incentivise energy efficiency. The compensation schemes have included energy efficiency benchmarks from the beginning with a lower level of compensation for those business that were relatively less energy efficient, where such benchmarks existed. The sections on energy efficiency benchmarks below sets out the Government decisions for its future use.

The assessment of eligibility based on product is utilised to ensure those businesses that produce goods at risk of carbon leakage and are electricity intensive can receive support. An additional requirement of energy efficiency across all products could disincentivise energy efficiency in those eligible products and increase the risk of carbon leakage.

5. Are there any sectors or subsectors that are at risk of carbon leakage and should be considered? Please provide evidence of the risk of carbon leakage.

Consultation Response

A third of respondents chose not to comment on this section. Many of those that did respond would state that their industry should be considered but offering little evidence in support of these statements.

Respondents from the lime sector asked that they be assessed separately from plaster, which has the same SIC code grouping; stating that they are at risk of carbon leakage and that the grouping may reduce their ability to be accurately assessed. They found in their own tests that on average from 2016 to 2018 the Lime sector passed all quantitative tests for being at risk of CL.

Three respondents argued that the SIC code 25500 (Forging, Pressing, Stamping and Roll Forming of Metal; Powder Metallurgy) should be considered arguing this SIC code requires assessment.

Government Response

All sectors that were recommended by stakeholders were assessed. All supporting evidence provided was used to support the assessment and ensure sectors were assessed accurately and robustly.

Some sectors that passed the quantitative assessment were not deemed eligible once the full assessment was complete.

SIC code 25500 (Forging, Pressing, Stamping and Roll Forming of Metal; Powder Metallurgy) has not been included on the list of eligible sectors as it has been deemed not to be at high enough risk of carbon leakage to pass the assessment.

Annex A outlines those sectors we found to be at risk of carbon leakage and therefore eligible for compensation.

Business Level Test

The compensation schemes also apply a business-level test to target compensation at those companies in eligible sectors most at risk of carbon leakage due to the indirect emission cost. In our consultation, we recognised that this test creates a risk that some companies may not pass it by virtue of their company structure, and we have therefore been treating a company as passing the test if it can demonstrate to the satisfaction of the Secretary of State that:

The business only fails the 5% test because of the inclusion of business activity which does not relate to the manufacture of the eligible product(s); or

A business operating in the market, and which manufactures the same product in the UK has passed the 5% test and is eligible for compensation.

The consultation proposed to retain the business-level test and the above exemptions, but to update the reference period and carbon price to use in our guidance for the next financial year.

6. Do you agree with our proposal to retain the business-level test and its exemptions?
Please provide an explanation or information to support your view.

Consultation Response

Respondent overall supported the proposal to retain the business level-test, but some expressed concerns that it may cause intra-sectoral competitive distortions, the threshold is set too high, and the exemptions should be widened to include markets in the EU.

Some respondents also sought for clarification about the reference period to calculate the average GVA and ask for 2020 and 2021 to be excluded from the test.

One respondent pointed out that the test gives companies an incentive to reorganise themselves corporately to pass it and that could lead to energy inefficiencies.

Government Response

We have recognised the risk of intra-sectoral competitive distortions due to the business level test and therefore included the two exemptions set out above. We also recognise the incentives for corporate restructuring to pass the test, but this potential issue only applies to eligible sectors and should be greatly mitigated within an eligible sector by the same exemptions. We have therefore decided to retain the business level test with the exemptions.

For the reference period used, for at least the first year of the scheme, the scheme will operate on a multi-annual baseline period, whereby a firm's level of compensation is determined initially using the most recent 5- year period of historic data, where annual account are available. Firms will have the option to exclude FY 20/21 and 21/22 from their baseline to account for the impacts of the Covid-19 pandemic.

Design of the Compensation Schemes

To calculate the level of compensation per installation, we have been applying the following formula since 2013:

$$A_{max_t} = A_i \times C_t \times P_{t-1} \times E \times AO_t$$

In this formula, A_i is the subsidy intensity at year t , expressed as 100% minus 1.5% of company GVA or 75% - whichever is higher, C_t is the applicable CO₂ emission factor (tCO₂/MWh) (at year t); P_{t-1} is the UK ETS reference price at year $t-1$ (£/tCO₂); E is the applicable product-specific electricity consumption efficiency benchmark; and AO is the

baseline output. Not all products had benchmarks and the schemes have therefore been using a fall-back electricity consumption efficiency benchmark (EF):

$$A_{max_t} = A_i \times C_t \times P_{t-1} \times EF \times AEC_t$$

Having reviewed the schemes and considered the responses to the consultation, we have decided to continue to apply this formula but update the variables as set out below.

Carbon Price

The UK ETS went live on 1 January 2021 and its auctions and the secondary market launched in May 2021. The UK ETS price is set by the market and what participants are willing to pay for carbon emission allowances.

The carbon price support mechanism is a carbon tax levied on fossil fuels used to generate electricity. It was introduced in 2013 to underpin the price of carbon at a level that drives low carbon investment. The revised schemes will use a reference price of UK ETS allowances by using the mean average of the daily one-year forward UK ETS prices (closing offer prices) for delivery in April of the year for which compensation is granted, as observed on the carbon exchange, Intercontinental Exchange (ICE), from 1 April to 31 March of the year preceding the year for which compensation is granted. This reference price will be used to calculate the following year's compensation payments. In case of the level of the carbon price support mechanism, Treasury sets its rates two years ahead of the year in which they will apply, and the CPS is currently set at £18/tCO₂.

Baseline Output

We have been calculating the level of compensation based on an installation's baseline production or its baseline electricity consumption level, as defined in the 2012 EU ETS State Aid Guidelines. This baseline output meant the average production or electricity consumption level at the installation over the reference period 2005- 2011 (with possibly one year excluded).

In the updated compensation scheme, for at least the first year of the scheme, the scheme will operate on a multi-annual baseline period, whereby firms level of compensation is determined initially using the most recent 5- year period of historic data, where annual accounts are available. Firms will have the option to exclude FY 20/21 and 21/22 from their baseline to account for the impacts of the Covid-19 pandemic. After the first year, we will explore the idea of a dynamic baseline, whereby we will calculate the level of compensation based on previous quarters electricity consumption or production tonnage.

Subsidy Intensity

Subsidy intensity is the term which denotes the ratio (as a %) between the amount of subsidy and the eligible costs. It is a criterion designed to avoid the situation where a beneficiary from a subsidy uses any excess subsidy for other purposes which may be detrimental to competition and/or to include a minimum contribution by the beneficiary to ensure that it has an incentive to carry out the subsidised activity efficiently. The compensation formula currently applies a subsidy intensity of 75%. The consultation also asked about alternatives to a flat rate 75%.

In our consultation, we proposed to increase compensation by limiting the amount of the total indirect emission costs to 1.5% of the GVA of the company concerned in a respective year. However, companies that may become eligible for this proposal will be required to apply for certain types of government support to invest in energy efficiency and decarbonisation.

7. Do you agree with our proposals to keep the subsidy at 75%, but also limit the indirect total emission cost due to the UK ETS and CPS to 1.5% of a company's GVA in a respective year? Please provide an explanation or information to support your view.
8. What would be the impact of lowering the aid intensity to 65% rather than 75%? Please provide an explanation or information to support your view.

Consultation Response

Most respondents asked for increasing the subsidy intensity, or at least maximising it similar to the same level as in the 2020 EU ETS state aid guidelines.

Roughly half of the respondents argued not to link a higher subsidy intensity, such as capping the indirect emission cost to 1.5% of a company's GVA, to a successful application to Government energy efficiency schemes, because these schemes have budgetary limits which might prevent eligible companies for such an increase from being successful in obtaining funding. Respondents also questioned whether companies will have to apply annually to Government energy efficiency schemes in able to be eligible for the increase in subsidy intensity and what the implications for larger projects are that take years to commission.

Government Response

We will update the subsidy intensity to limit a company's total indirect emission costs to 1.5% of their GVA or 75%, whichever is greater. We have increased the overall budget limit for the scheme accordingly, but as is the case under the current scheme, if there is a risk of budget over-spend, we may choose to reduce the aid intensity. GVA will be defined as earnings before interest, taxes, depreciation and amortisation (EBITDA) plus staff costs (including employer's pension and national insurance contributions).

CO2 Emission Factor

The CO2 emission factor (tCO2/MWh) refers to the weighted average of the CO2 intensity of electricity produced from fossil fuels in the UK. It assumes that fossil fuels will continue to be the marginal energy source those power plants use to meet marginal demand for electricity in the time period proposed. These power stations will therefore continue to determine the pass-through cost of the carbon price.

The consultation proposed using the latest figure of the estimated carbon dioxide emissions per GWh of electricity supplied for all fossil fuels from the DUKES and update the formula with this figure annually. The annual figure in DUKES provides a more accurate estimate of the actual emission factor compared to a fixed forecast over the rest of the first phase of the UK ETS. Combined with the carbon price, the DUKES figures reflect closer the actual indirect emission costs in electricity prices. An alternative option is to establish a market-based CO2 emission factor for 2022-2030 or per annum. This would provide BEIS with a future estimate and provide more certainty over the level of compensation. However, such a future estimate may not accurately reflect the actual emission factor and a single estimate will not consider annual fluctuations.

We have also been applying the same CO2 emission factor to other sources of electricity than from the grid, such as Combined Heat and Power (CHP) installations. Applying the same factor does not differentiate between the carbon intensity of different electricity supply sources, but does avoid potential manipulations and is easier to administer. We therefore proposed to continue applying the same CO2 emission factor to all sources of electricity supply whether auto-generation, electricity supply contracts or grid supply.

9. Do you agree with our proposal to apply the latest figure of the estimated carbon dioxide emissions per GWh of electricity supplied for all fossil fuels from DUKES and update the formula with this figure annually? Please provide an explanation or information to support your view.

10. Do you agree with our proposal to continue applying the same CO2 emission factor to all sources of electricity supply whether auto-generation, electricity supply contracts or grid supply? Please provide an explanation or information to support your view.

Consultation Response

Some respondents replied that the options are at extreme ends of the spectrum: a factor that is updated annually and a single factor for the phase to 2030, and therefore suggest another option to set the emission factor based on the two allocation periods of UK ETS, 2021-2025 and 2026-2030. This would provide a balance between providing more certainty over the level of compensation for both BEIS and companies, but also ensure that changes in the electricity generation mix are considered.

Other respondents raise the point that, since the UK is pursuing greater interconnection with the rest of Europe, it will increasingly be subject to the marginal cost of power in the EU when the UK's renewable sources are not able to generate. These prices will contain the pass-through cost of the EU's carbon price, but the DUKES emission factor does not take this into account which might result in a lower estimate of the pass-through cost of carbon cost in electricity prices.

Another respondent points out that the proposed approach depends on the assumption that the power price in Great Britain is always set by fossil fuel generation. However, as the generation mix continues to evolve, this assumption is becoming increasingly unreliable as the proportion of periods when the power price is set by low carbon generation continues to increase, this may mean that the emissions factor proposed might significantly overstate the impact of the carbon price on the power price. Nonetheless, as the respondent recognises, this is a complex issue and therefore suggests BEIS to carry out further modelling to test the validity of this approach in the longer term.

Some energy intensive industries raise that applying the proposal must be weighed carefully against the competitive disadvantages of doing so. EU Member States who also provide compensation might have their emission factors fixed until at least 2025 under the updated EU ETS state aid guidelines, meaning that as power systems in the EU decarbonise, there will not be a corresponding reduction to in compensation.

Almost all respondents agree with the proposal to apply the same CO₂ emission factor to other sources of electricity than from the grid, such as Combined Heat and Power (CHP) and some point out that applying different emission factors for different energy source would have complicated the administration of the schemes.

Government Response

There is a difference between the average emission factor and the marginal emission factor. The former is the carbon emissions emitted per electricity generated by all sources and the latter is the carbon emissions emitted by electricity generated by sources on the margin where supply meets demand. These marginal electricity generation sources determine to what extent the carbon price is reflected in the wholesale electricity price. We assume that fossil fuel generators will continue to be the marginal electricity generators for the foreseeable future, though we have brought forward the commitment to phase out unabated coal generation in Great Britain to 1 October 2024.

We have decided to use the latest figure of the estimated carbon dioxide emissions per GWh of electricity supplied for all fossil fuels from the DUKES and update the formula with this figure annually as per the consultation proposal, but to review its appropriateness prior to the next Spending Review.

In practice this means that we will apply the CO₂ emission factor in year t based on a statistic from year $t-2$ published in DUKES $t-1$ for at least the next three years. For example, in the formula to calculate the level of compensation in financial year 2022/23 we would apply the

CO2 emission factor from year 2020 published in DUKES 2021. The emission factors will be set out in the guidance accompanying the schemes.

In case of different electricity sources, we have decided to continue applying the same CO2 emission factor to all sources of electricity supply whether auto-generation, electricity supply contracts or grid supply.

Efficiency Benchmarks

The current formula to calculate the level of compensation includes a product-specific electricity consumption efficiency benchmark (E), where available. These benchmarks (MWh/tonne of output) are product-specific benchmarks achieved by the most electricity-efficient methods of production for the product considered. The aim of including such benchmarks as a variable in the formula is to encourage energy efficiency. The benchmarks are defined at Prodcom 8 level with Prodcoms being EU statistical definitions of production of manufactured goods.

Not all products have benchmarks though and the schemes have therefore been using a fall-back electricity consumption efficiency benchmark (EF). This benchmark is a 80% of actual electricity consumption corresponding to the average reduction effort imposed by the application of the electricity consumption efficiency benchmarks.

The consultation proposed to continue using the benchmarks that apply in Phase IV (2021-2030) of the EU ETS in the form of the product-specific electricity consumption efficiency benchmark (E), where available, or the fall-back efficiency benchmark of 80%, where not, in to calculate level of compensation irrespective of whether data from UK installation is included. This will ensure that benchmarks are based on sufficiently broad sets of data.

11. Do you agree with our proposal to continue using the benchmarks that apply in Phase IV (2021-2030) of the EU ETS in the form of the product-specific electricity consumption efficiency benchmark, where available, or the fall-back efficiency benchmark of 80%, where not available, until having potential bespoke UK benchmarks, following the review of allocation of free allowances under the UK ETS? Please provide an explanation or information to support your view.

Consultation Response

Nearly all respondents agree with the proposal as they find it appropriate and pragmatic and it maintains the competitive position relative to eligible energy intensive industries in the EU. Some reiterated that continued use of established benchmarks, based on a larger pool of data, provides better quality benchmarks instead of benchmarks from a UK only.

A few respondents replied that application of fallback energy efficiency benchmarks does not recognise the challenges to increase energy efficiency further and policies already in place to encourage energy efficiency. The potential to increase energy efficiency further for some

production process is limited and a fallback benchmark therefore only has the effect of limiting the level of compensation. They also point out that, given most of applicants to the compensation scheme are also likely to have climate change agreements, energy efficiency benchmarks can be developed based on information from the latter scheme.

Government Response

Based on the feedback, we have decided to continue applying the benchmarks for Phase IV (2021-2030) of the EU ETS in the form of the product-specific electricity consumption efficiency benchmark (E), where available, or the fall-back efficiency benchmark of 80%, where not, to calculate level of compensation in our schemes. The decision to apply EU benchmarks does not mean that the UK is enshrining EU law into the UK, and the Government retains the ability to adopt alternative benchmarks should this be appropriate.

Net Zero Conditionality

In 2019 the UK became the first major economy in the world to pass laws to end its contribution to global warming by 2050. The target will require the UK to bring all greenhouse gas emissions to net zero by 2050. Reaching net zero will require extensive and systematic changes across all sectors, including energy intensive industries. We must therefore consider how and where the compensation schemes can support and accelerate that transition to net zero.

The consultation asked for views from stakeholders on how net zero might be achieved for their individual businesses.

12. Does your organisation currently have a plan to get to net zero?
13. If so, how do you use compensation you currently receive to deliver on that plan?
14. What conditions do you think would be most effective in incentivising greater energy efficiency or decarbonisation?

Consultation Response

Most of the companies that provided a response to decarbonisation plans have such a plan in place or are putting it in place, either at company-level or as part of a sector roadmap. Some respondents pointed out that their company's or sector's ability to decarbonise depends on infrastructure to electrify or deploy hydrogen or carbon capture utilisation and storage.

Those companies that are eligible for compensation and responded to the question about how the compensation is being used, say that it goes towards their EBITDA or to addressing their competitive disadvantage due to indirect emission costs in electricity prices.

Almost all respondents do not support attaching conditions to the compensation schemes and some question the rationale behind such a proposal as it risks forgetting that the objective of

the schemes is to mitigate the risk of carbon leakage by reducing the electricity price disparity. Some also point out that the schemes already have energy efficiency incentives included in the form of a subsidy intensity and energy efficiency benchmarks, that energy intensive industries are already incentivised via other energy and climate change policies, or that the electricity price itself is a strong incentive enough to increase energy efficiency. Most of respondents call for more Government support instead.

Government Response

We have considered a range of conditions that will be attached to compensation payments to incentivise firms to decarbonise, maximise energy efficiency, and ensure that the compensation schemes are fully aligned to the Government's domestic and international climate change targets, including Net Zero.

To ensure that the compensation schemes are aligned with the wider decarbonisation goals of the Government, we will require all recipients of compensation to submit a plan by the end of the first year of the scheme (March 2023) setting out their decarbonisation pathway and how this supports the UK's Net Zero target.

Given that this is a new condition, we do not propose to require recipients to meet specific targets nor enforce this requirement in a way that would result in a deduction to or recovery of compensation. However, as the Government intends to increase the level of compensation by limiting the indirect total emission cost to 1.5% of a company's GVA in a respective year (subject to budget availability), we deem appropriate to introduce more significant conditions in future years of the scheme. Those could include, for example, the obligation to implement recommendations of audit reports for recipients that are subject to the Energy Savings Opportunity Scheme (ESOS) or reduce the carbon footprint of their electricity consumption. Further alternative conditions could also be considered following engagement with relevant stakeholders.

Any stricter conditions would be applied no earlier than the 2023 scheme year.

Scheme Monitoring and Evaluation

The results from the 2018 evaluation of the compensation schemes provided some qualitative evidence of higher UK investments by recipients of compensation relative to firms which did not receive compensation. However, this benefit was unquantifiable due to data limitations. Therefore, we consulted on additional monitoring data which would enable us to quantify the additional investment benefit as well as other benefits from the compensation schemes.

We proposed the following annual data requirements would need to be provided by recipients in order to receive compensation:

- Total capital expenditure
- Total capital expenditure in the UK

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- Total UK capital expenditure on new assets
 - Total UK capital expenditure on existing assets
 - Total investment into energy efficiency measures
 - Annual earnings before interest, taxes, depreciation and amortization
 - Average wage by role and location

15. Do you agree with our proposal to expand data monitoring of the scheme? Please provide an explanation or information to support your view.

16. Do you agree with the proposed data requirements for quantifying the benefits of the scheme? Please provide an explanation or information to support your view.

17. Do you agree with our proposal to add additional conditions to the schemes requiring businesses to reflect compensation received in their company accounts and to spend the compensation on its electricity costs? Please provide an explanation or information to support your view.

Consultation Response

Over half of the respondents agreed with the proposal to expand the data monitoring of the scheme. They commented that it will strengthen the existing qualitative evidence that the compensation schemes have led to an increase in the investment from companies receiving relief, thereby minimising the risk of carbon leakage. Some respondents also highlighted this evidence of investment benefits as an additional justification for the presence of the scheme. Respondents also mentioned the importance of keeping the data confidential and not publicly disclosed.

However, several respondents raised concerns that the additional monitoring data requested might lead to an extra administrative burden for participants in the scheme.

A few respondents highlighted the importance of the data requested in demonstrating the value for money of the scheme as well as meeting the schemes' objectives. However, around half of the respondents were concerned the additional monitoring data was not in line with levelling the playing field for UK firms competing internationally. With regards to the investment indicator, they highlighted that recipients should not be expected to invest more than non-recipients and that caution should be taken around attributing investment benefits solely to the scheme as EIs comply with many other regulatory schemes.

Several respondents reported the importance of the design of the mechanisms to collect the additional monitoring data to ensure accuracy. They also highlighted the possibility of data availability issues for some of the monitoring indicators. For example, some data will be held by the parent company, but is inaccessible to different eligible sites.

Over half of respondents also raised concerns about the investment into energy efficiency measures indicator relating to the difficulty of achieving further energy efficiency improvements

as well as decarbonisation in some sectors. They also noted energy efficiency investments sometimes do not give the full picture and can be difficult to calculate.

In relation to the proposal to require businesses to reflect compensation received in their company accounts and spend the compensation on its electricity costs, most respondents did not support the proposals. This was based on various reasons such as that it is to the discretion of the business to allocate the compensation according to its needs, potentially publishing commercial confidential information and different accounting jurisdictions for multinationals.

Government Response

We have decided to proceed with some additional monitoring data requirements. It is not our aim to impose an additional administrative burden on participants and as such we will be making amendments to application forms to ensure minimal burden to participants.

The following data requirements will be asked for at the beginning of each financial year:

1. Total capital expenditure in the UK
2. Total Capital Expenditure split on new and existing assets
3. Annual earnings before interest, taxes, depreciation and amortization
4. Average wage by site

The aim of the additional monitoring data is to build on the existing data we collect to strengthen the monitoring and evaluation of the schemes, thereby allowing for a more effective assessment of their value for money. A strong value for money helps to demonstrate the key benefits of having the scheme. The additional data will therefore enable us to estimate with a greater accuracy and validity the quantitative benefits attributed the schemes.

We will introduce the proposed data requirements and update the relevant guidance and forms to clarify these requirements and ensure the data can be collected as effectively and efficiently as possible from all recipients. With respect to the proposal to require businesses to reflect compensation received in their company accounts and spend the compensation on its electricity costs, we will not introduce these at this point in time but will have further discussions with beneficiaries on how we could introduce them at some point in the future.

Administration

We will also make some updates to the administration of the compensation schemes. For the first year of the revised schemes the scheme will operate on a multi-annual baseline period, whereby firms level of compensation is determined initially using the most recent 5- year period of production or electricity consumption data, where annual accounts are available. Firms will have the option to exclude FY 20/21 and 21/22 from their baseline to account for the impacts

of the Covid-19 pandemic. In the following years, we will explore the option of automating the process more to provide compensation for actual indirect emission cost incurred, quarterly in arrears. This may mean no longer using a multi-year baseline of production on electricity consumption to determine consumption and using actual quarterly production or electricity consumption instead.

Subsidy Control

BEIS will award any compensation for the indirect emission cost due to the UK ETS and CPS in accordance with the UK subsidy control regime. Subsidy means financial assistance which is given, directly or indirectly, from public resources by a public authority, confers an economic advantage on one or more enterprises, is specific such that it benefits one or more enterprises over one or more other enterprises with respect to the production of goods or the provision of services, and has, or is capable of having, an effect on competition or investment within the UK; trade between the UK and a country or territory outside the UK, or investment as between the UK and a country or territory outside the UK.

This could include a cash payment, such as compensation for example. Compensation for the indirect emission cost due to UK carbon pricing therefore falls under this definition and subsidy control provisions therefore apply to the compensation schemes.

Since 1 January 2021 the UK has followed the commitments on subsidy control set out in its Trade and Cooperation Agreement (TCA) signed with the EU, in FTAs with other countries and in the World Trade Organisation (WTO) rules on subsidies, as well as in Article 10 of the Northern Ireland Protocol to the Withdrawal Agreement with the EU.

The TCA includes broad principles that shape the design of both sides' subsidy control systems, which are aimed at ensuring that the granting of a subsidy contributes to achieving the objectives outweighing any negative effect on trade or investment between the UK and the EU. The TCA makes clear that it is for the Government to determine how these principles will be implemented in UK domestic law, as long as they are respected when subsidies are granted.

Under the TCA, the UK has a general duty to ensure that energy and environmental subsidies are aimed at delivering, and duly incentivise the beneficiary in delivering, a secure, affordable and sustainable energy system and a well-functioning and competitive energy market or increasing the level of environmental protection compared to the level that would be achieved in absence of the subsidy. One of the UK's specific obligations under the TCA, with respect to subsidies to energy and environmental projects, reads:

“compensation for electricity-intensive users in the event of an increase in electricity cost resulting from climate policy shall be restricted to sectors at significant risk of ‘carbon leakage’ due to the cost increase.”

Firms in Northern Ireland are not eligible for the scheme. The Protocol on Ireland/Northern Ireland, part of the UK-EU Withdrawal Agreement, contains provisions relating to subsidy control. Article 10 of the Protocol provides that the EU State aid rules will continue to apply where subsidies affect trade in goods or electricity between Northern Ireland and the EU, and therefore, aid that is granted to service providers is not covered. In any instance where the Protocol on Ireland/Northern Ireland applies, EU state aid rules will need to be satisfied.

Conclusion and Next Steps

As set out in the Energy Security Strategy published on 7 April 2022, The Government has committed to extend the EII Compensation Scheme for a further three years to 31 Mar 2025, with payments backdated to 1 Apr 2022.

The Government will shortly publish full guidance on how to apply for the scheme, alongside application forms.

Over the coming months, Government will commence engagement with applicable sectors to scope out options for more significant conditions to be applied over future years of the schemes.

Annex A: Eligible Sectors

Sectors remaining eligible:

SIC	Description
13.10	Preparation and spinning of cotton-type fibres
14.11	Manufacture of leather clothes
17.11	Manufacture of pulp
17.12	Manufacture of paper and paperboard
20.13	Manufacture of other inorganic basic chemicals
20.14	Manufacture of other organic basic chemicals
20.15	Manufacture of fertilisers and nitrogen compounds
24.10	Manufacture of basic iron and steel and of ferro-alloys
24.42	Aluminium production
24.43	Lead, zinc and tin production
24.44	Copper production

Sectors omitted vs. current list

SIC	Description
07.10	Mining of Iron Ore
08.91	Mining of chemical and fertiliser minerals
20.16	Manufacture of plastics in primary forms
20.60	Manufacture of man-made fibres

Sectors added vs. current list

SIC	Description
16.21	Manufacture of veneer sheets and wood-based panels
23.14	Manufacture of glass fibres
27.20	Manufacture of batteries and accumulators

This publication is available from: www.gov.uk/government/consultations/review-of-the-schemes-to-compensate-energy-intensive-industries-for-indirect-emission-costs-in-electricity-prices

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