House of Commons

Environmental Audit Committee

Greening imports: a UK carbon border approach

Fifth Report of Session 2021–22

Report, together with formal minutes relating to the report

Ordered by the House of Commons to be printed 23 March 2022

HC 737
Published on 4 April 2022
by authority of the House of Commons

Environmental Audit Committee

The Environmental Audit Committee is appointed by the House of Commons to consider to what extent the policies and programmes of government departments and non-departmental public bodies contribute to environmental protection and sustainable development; to audit their performance against such targets as may be set for them by Her Majesty's Ministers; and to report thereon to the House.

Current membership

Rt Hon Philip Dunne MP (*Conservative, Ludlow*) (Chair)

Duncan Baker MP (*Conservative, North Norfolk*)

Sir Christopher Chope MP (*Conservative, Christchurch*)

Barry Gardiner MP (*Labour, Brent North*)

Rt Hon Sir Robert Goodwill MP (*Conservative, Scarborough and Whitby*)

James Gray MP *(Conservative, North Wiltshire)*

Helen Hayes MP *(Labour, Dulwich and West Norwood)*

Ian Levy MP (*Conservative, Blyth Valley*)

Clive Lewis MP *(Labour, Norwich South)*

Caroline Lucas MP (*Green Party, Brighton, Pavilion*)

Cherilyn Mackrory MP (*Conservative, Truro and Falmouth*)

Jerome Mayhew MP (*Conservative, Broadland*)

John McNally MP (*Scottish National Party, Falkirk*)

Dr Matthew Offord MP (*Conservative, Hendon*)

Rt Hon Valerie Vaz MP (*Labour, Walsall South*)

Claudia Webbe MP (*Independent, Leicester East*)

The following Members were also members of the Committee during this Parliament:

Dan Carden MP *(Labour, Liverpool, Walton),* Feryal Clark MP *(Labour, Enfield North)*, Marco Longhi MP *(Conservative, Dudley North)*, Kerry McCarthy MP *(Labour, Bristol East)*, Alex Sobel MP *(Leeds, North West)*, Mr Shailesh Vara MP *(Conservative, North West Cambridgeshire),* and Nadia Whittome MP *(Labour, Nottingham East)*.

Powers

The constitution and powers are set out in House of Commons Standing Orders, principally in SO No 152A. These are available on the internet via www.parliament.uk.

Publications

Committee reports are published on the Committee's website at www.parliament.uk/eacom and in print by Order of the House.

Committee staff

Dawn Amey (Committee kSpecialist), Martyn Atkins (Clerk), Medha Bhasin (Second Clerk), Amy Brew (Committee Specialist), James Camp (Committee Operations Officer), Nick Davies (Senior Committee Specialist), Marc Geddes (Parliamentary Fellow), Laura Grant (Committee Specialist), Caitlin Lewis (Committee Researcher), Kirsty MacLeod (Committee Researcher), Ben Smith (Committee Support Apprentice) and Jonathan Wright (Committee Operations Manager).

Contacts

All correspondence should be addressed to the Clerk of the Environmental Audit Committee, House of Commons, London SW1A 0AA. The telephone number for general enquiries is 020 7219 8890; the Committee's email address is eacom@parliament.uk.

You can follow the Committee on Twitter using @CommonsEAC.

Contents

Summary

An effective carbon price is a crucial lever to combat climate change, and requires an effective anti-carbon leakage approach to enable this; the Government's current approach, principally the allocation of free emissions trading scheme (ETS) allowances, is insufficient to drive effective decarbonisation. The current situation also means that the UK applies a carbon price to domestic production but not to imports, which make up 43% of the UK's consumption emissions.

A policy response in the form of a UK carbon border approach is needed. This should include a carbon border adjustment mechanism (CBAM) to ensure an equivalent carbon price is applied to imports as is applied to domestic production, as part of a co-ordinated set of policies, including product standards. We recommend that the Government commence work on this UK carbon border approach immediately, to enable its implementation during the 2020s. The EU is currently developing plans for a CBAM, which it intends to have in place by 2023; it is important that the Government articulate how it intends to work with stakeholders on, and communicate progress towards, the actions it is taking to ensure no adverse impacts to the UK.

While multilateral solutions remain the most effective way to address carbon leakage, the process to agree these is lengthy, so unilateral action is essential in the short-term. Unilateral action can also spur co-operation on multilateral measures and incentivise countries to strengthen their own carbon pricing and decarbonisation measures. The Government should continue to pursue multilateral solutions, including commencing action towards linking the UK and EU ETS, at the same time as developing its own carbon border approach.

The UK's carbon border approach must be aligned with the UK's international commitments, and adhere to World Trade Organisation rules and the principle of 'common but differentiated responsibilities and respective capabilities' under the Glasgow Climate Pact in respect of low- and middle-income countries. When designing the UK's carbon border approach, the Government should ensure design choices are led by clearly articulated objectives; engage with trade partners; consult with industry sectors; include a strategy to build public awareness and consensus on the need for the approach; carry out assessments to understand any impact on consumers; ensure the carbon border approach is aligned with existing environmental, trade, development and fiscal policy; and establish a plan for monitoring the impact of the approach once implemented.

1 A UK carbon border approach

Introduction

1. We launched an inquiry into *Carbon border adjustment mechanisms* in September 2021.[1] This inquiry has sought to explore the role that a carbon border adjustment mechanism (CBAM) could play in meeting the UK's environmental objectives, alongside the wider impacts, risks and opportunities which might arise, in order to make recommendations to the Government on the possibility of introducing such a measure.[2] Evidence presented to our inquiries into *Greening the post-Covid recovery*[3] and *Green Jobs*[4] highlighted the risks of carbon leakage to the Government's green recovery and green jobs ambitions.[5] In July 2021 the European Commission published a proposal to introduce its own carbon border adjustment mechanism.[6]

2. We received over 25 submissions of written evidence and heard from 16 witnesses. As the inquiry progressed, promising new multilateral initiatives such as the US and EU-led Global Arrangement on Sustainable Steel and Aluminium[7] were announced, and the United Nations Framework Convention on Climate Change (UNFCCC) COP26 in Glasgow generated momentum and increased global ambition toward combating climate change, including through the signing of the Glasgow Climate Pact.[8]

3. This report sets out our findings and recommendations. In this first Chapter, we review the evidence heard on CBAM and complementary policies, concluding that work should start now on a comprehensive UK carbon border approach to address the risks of carbon leakage; reduce the UK's consumption emissions, and spur international action on multilateral approaches to carbon pricing. In Chapters 2 and 3 we set out particular considerations for the Government in the design of a carbon border approach, including its interaction with the UK's trading partners in low- or middle-income countries and high-income countries; the impact of the CBAM proposed for the EU; approaches to navigating design considerations affecting industry, including small and medium sized enterprises (SMEs); the need to consider any impact to consumers, including vulnerable and low-income households, and cross-Departmental arrangements for overseeing the carbon border approach and monitoring its impacts.

1 Environmental Audit Committee, EAC launches new inquiry weighing up carbon border tax measures, [accessed 21 February 2022]

2 A carbon border adjustment mechanism applies a carbon price at the border to imports of certain products based on their embedded emissions, or carbon footprint, equivalent to the carbon price borne on those products by domestic producers.

3 Environmental Audit Committee, Greening the post-Covid recovery, accessed 21 February 2022

4 Environmental Audit Committee, Green Jobs, accessed 21 February 2022

5 'Carbon leakage' describes the outcome from policies established to reduce emissions in one country leading to increased production or investment in countries with less ambitious climate policies, risking higher overall emissions and a worse outcome for climate change.

6 European Union, European Green Deal: Commission proposes transformation of EU economy and society to meet climate ambitions, accessed 21 February 2022

7 European Union, Questions and Answers: EU-US negotiations on trade on steel and aluminium, accessed 21 February 2022; European Union, Joint EU-US Statement on a Global Arrangement on Sustainable Steel and Aluminium, accessed 21 February 2022

8 United Nations Framework Convention on Climate Change, Glasgow Climate Pact (November 2021)

The operation of a CBAM and of complementary policies

4. A CBAM works by extending the carbon price levied on domestic production to imports of the equivalent products.[9] In this section we consider the evidence we have heard on the role of carbon pricing; the risks of carbon leakage; the potential benefits and risks of a UK CBAM; complementary policies including product standards, and timescales for designing and implementing the required policies.

5. Recent academic literature indicates that 'there is no generic or uniform concept of CBAMs': CBAM is an 'umbrella term encompassing a wide range of measures, which can each achieve different types of purposes depending on their specific legal design'. A 'defined hierarchy of objectives' is required to 'guide the design choices' of a CBAM to ensure its effectiveness.[10]

Carbon pricing

6. Carbon pricing works by applying a cost to an output to reflect the amount of carbon dioxide emitted in its production.[11] As HM Treasury notes, 'carbon pricing directly addresses the core market failure driving climate change: that firms and households do not always face a cost to reflect the impact their actions have on the climate from emitting greenhouse gases.'[12] Carbon pricing can be either

- 'explicit'—where a government levies a charge directly on carbon-emitting activities through a carbon tax or a cap-and-trade system, or
- 'implicit'—where climate policies such as standards or regulation result in indirect costs to carbon emitters.[13]

The UK applies both explicit and implicit carbon pricing.[14] An explicit carbon price levied through the UK Emissions Trading Scheme (ETS), a cap-and-trade scheme covering emissions from energy intensive industries, electricity generation and aviation, and Carbon Price Support, a direct carbon tax, levied on electricity generators, of £18 per tonne of carbon emitted.[15] Implicit carbon prices result from regulation designed to encourage energy efficiency measures, such as the Energy Company Obligation applying to medium and large gas and electricity suppliers.[16]

7. As HM Treasury notes, carbon pricing '[incentivises] firms and consumers to switch away from high carbon options without prescribing a specific low carbon alternative, allowing competitive firms to innovate and reduce costs with new options.'[17]

9 Q1
10 Alice Pirlot, Carbon Border Adjustment Measures: A Straightforward Multi-Purpose Climate Change Instrument?, Journal of Environmental Law, eqab028 (2021), pp1–28
11 Vivid Economics, The Future of Carbon Pricing in the UK: Report prepared for the Committee on Climate Change (August 2019), p.12
12 GOV.UK, Net Zero Review: Analysis exploring the key issues (October 2021), p. 69
13 The World Bank, State and Trends of Carbon Pricing 2021 (May 2021), p. 18–19; High-Level Commission on Carbon Prices, Report of the High-Level Commission on Carbon Prices (2017), p. 1–2, 11; GOV.UK, Net Zero Review: Analysis exploring the key issues (October 2021), p. 29, 72
14 GOV.UK, Net Zero Review: Analysis exploring the key issues (October 2021), p. 29
15 Ibid., p. 74–75. Under the Northern Ireland Protocol to the EU-UK Withdrawal Agreement, electricity generators in Northern Ireland fall under the EU, rather than UK, ETS: Ibid., p. 75. At Budget 2020 the Treasury confirmed that the price support would be held at £18 for 2021–22.
16 The Energy Company Obligation will fund the ECO4 scheme for energy efficiency measures from 2022.
17 GOV.UK, Net Zero Review: Analysis exploring the key issues (October 2021), p. 39

Several contributors told us that carbon pricing was an important mechanism for UK decarbonisation.[18] Fergus McReynolds, of Make UK, told us that carbon pricing was 'very' important for UK manufacturing:

> At the beginning of this year, we published our interim road map to net zero […] setting out how we think the manufacturing sector in the UK can make its contribution as a provider of technology […] and also in addressing our own emissions. The use of carbon pricing appears as our chief and first recommendation to Government for a mechanism that helps us along that road. It provides certainty to the UK's ambition, and carbon price can send a clear market signal. That helps secure the investment in low carbon activities.[19]

8. The UK ETS and Carbon Price Support only apply to carbon emissions arising from production in the UK. The UK's carbon footprint—the UK's contribution to climate change through greenhouse gas emissions[20]—can be measured in two ways:

- in terms of the amount of carbon dioxide equivalent emitted in its territorial boundaries, i.e. **production emissions**, which are the target of domestic net zero policies; or
- by measuring the amount of carbon dioxide equivalent emitted in the production of goods which are consumed in the UK, i.e. **consumption emissions**.[21]

The Climate Change Committee notes that, as for many high-income countries, the UK's consumption emissions exceed its production emissions;[22] the latest available figures show UK consumption emissions in 2018 of 703 million tonnes of carbon dioxide equivalent ($MtCO_2e$),[23] exceeding 2018 production emissions of 452 $MtCO_2e$.[24] Imports accounted for 43% of the UK's consumption emissions in 2018.[25] Sir Dieter Helm CBE, Professor of Economic Policy at the University of Oxford, told us that emissions could not be thought of 'as a purely production activity' as 'in the end everything is produced for us to consume':[26]

> If you unilaterally no longer want to cause climate change, you recognise that climate change is global, that it does not matter where a tonne of carbon is emitted, [and] it really does matter that you do not discriminate between imports and domestic production [as by discriminating] you make things worse.[27]

18 RWE (CBM0001); Chemical Industries Association (CBM0003); International Emissions Trading Association (IETA) (CBM0012); National Grid Ventures (CBM0013); Shell International (CBM0023); Q121

19 Q95

20 The Government's assessment of the UK's carbon footprint 'includes the seven main Greenhouse Gases comprising: [carbon dioxide] CO_2, methane (CH_4), nitrous oxide (N_2O) and Hydro-flourocarbons (HFC), Perflurocarbons (PFC), Nitrogen trifluoride (NF_3) and Sulphur hexafluoride (SF_6).' (GOV.UK, UK's Carbon Footprint 1997 – 2018 (April 2021), p. 1).

21 Climate Change Committee, The Sixth Carbon Budget (December 2020), p. 344

22 *Ibid.*

23 GOV.UK, Official Statistics: UK's carbon footprint, accessed 20 February 2022; GOV.UK, UK's Carbon Footprint 1997 – 2018 (April 2021), p. 3. For context, the 2018 consumption emissions figure of 703 $MtCO_2e$ represents a slight rise from the equivalent figure in the series for 2017, but forms part of an overall pattern of falling consumption emissions since 2004, when they peaked at over 1,000 $MtCO_2e$. (Ibid, p. 3).

24 GOV.UK, 2018 UK Greenhouse Gas Emissions, Final figures (February 2020), p. 1

25 GOV.UK, UK's Carbon Footprint 1997 – 2018 (April 2021), p. 3

26 Q13

27 Q12

Carbon leakage

9. As the UK's carbon pricing applies only to UK production, and not to imports of equivalent products into the UK, contributors told us that there was a risk of carbon leakage,[28] whereby policies to reduce emissions in one country simply lead to increased production or investment in countries with less ambitious climate policies, risking higher overall emissions and a worse outcome for climate change.[29] The Grantham Research Institute has highlighted the need to distinguish between climate-policy-induced carbon leakage and broader emissions offshoring, i.e. increased production or investment in other countries 'that results from broader determinants of international trade and investment', rather than climate policies specifically, reiterating that, effective anti-carbon leakage measures must be targeted at the former.[30] The Mineral Products Association told us that

> Carbon leakage is a significant risk to those industries that are internationally traded and face higher energy and carbon costs compared to their international competitors and substantial costs to decarbonise. In our sector, this includes cement and lime. The risk to the UK is that if these strategic, foundation industries are undermined by carbon leakage and close down, the economy loses high-productivity, high-skill jobs, many of which are in areas of the country that need to be 'Levelled Up' but also an increased risk to security and reliability of supply of essential materials.[31]

HM Treasury notes that exposure to carbon leakage risk varies by sector.[32] These sectoral differences were reflected in contributions to our inquiry; for instance, while the Chemical Industries Association told us that 'carbon leakage is already happening' in the chemicals manufacturing sector,[33] National Grid Ventures told us that 'carbon leakage risk for the [Great Britain] electricity sector is very limited, if at all.'[34] Several contributors told us that there was little empirical evidence of carbon leakage to date,[35] potentially due to lower carbon prices in the past[36] or the effectiveness of current anti-carbon leakage measures.[37]

10. Several contributors warned that the risk could increase with future carbon price rises.[38] Dr Sanna Markkanen, of the Cambridge Institute for Sustainability Leadership, said she did 'not personally necessarily agree with that argument', highlighting the factors other than carbon price which might affect a manufacturer's decisions on location of operations.[39] She told us that, rather than manufacturers physically relocating production or phasing down UK operations in favour of their overseas operations:

28 Chemical Industries Association (CBM0003); Mineral Products Association (CBM0014); Third Generation Environmentalism (E3G) (CBM0018); Dr Dominic Hogg (Director at Equanimator Ltd) (CBM0022); Q38
29 GOV.UK, Industrial Decarbonisation Strategy (March 2021), p. 157
30 Grantham Research Institute, What is carbon leakage? Clarifying misconceptions for a better mitigation effort, accessed 7 February 2022
31 Mineral Products Association (CBM0014)
32 GOV.UK, Net Zero Review: Analysis exploring the key issues (October 2021), p. 27
33 Chemical Industries Association (CBM0003)
34 National Grid Ventures (CBM0013)
35 Zero Carbon Campaign (CBM0002); Institute for Public Policy Research (CBM0009); Third Generation Environmentalism (E3G) (CBM0018); Green Alliance (CBM0025); Q22; Q45
36 Zero Carbon Campaign (CBM0002); Third Generation Environmentalism (E3G) (CBM0018)
37 Zero Carbon Campaign (CBM0002); Institute for Public Policy Research (CBM0009); Third Generation Environmentalism (E3G) (CBM0018); Green Alliance (CBM0025)
38 Zero Carbon Campaign (CBM0002); Chemical Industries Association (CBM0003); International Emissions Trading Association (IETA) (CBM0012); Professor Michael Gasiorek (Professor of Economics at University of Sussex); Dr Camilla Jensen (Senior Research Fellow in International (Economics) at University of Sussex) (CBM0028)
39 Q22

> The third option, which is probably the greatest risk for carbon leakage, is that an industrial operator in the UK would close down its operations in the UK, not relocate its operations elsewhere but its market share would be taken over by another producer that utilises a lot more carbon intensive technology in its production. That would probably be the most severe form of carbon leakage.[40]

11. The UK currently addresses carbon leakage risk by requiring large manufacturers to pay for emissions allowances from the UK's Emissions Trading Scheme (ETS),[41] with free allocations of allowances available to manufacturers at risk of carbon leakage.[42] In the report of its Net Zero Review, the Treasury observed that these free allocations 'are worth several billion pounds a year'.[43] Additionally, the UK provides compensation to energy intensive industries for indirect ETS and Carbon Price Support costs, and exemptions to these industries in respect of the indirect costs of funding Contracts for Difference, the Renewables Obligation, and the small scale Feed in Tariff;[44] in the Industrial Decarbonisation Strategy, the Government notes that these financial reliefs amount to £470m per year.[45]

12. We were told that current anti-carbon leakage measures weaken the incentive for investment in decarbonisation;[46] E3G told us the Government's current approaches 'have been detrimental for climate ambition and go against the polluter-pays-principle'.[47] The Government intends to decrease the number of free allowances throughout the 2020s, and to phase out free allocation for industrial sectors 'less exposed to carbon leakage' by 2030;[48] academics from the UK Trade Policy Observatory at the University of Sussex told us that 'reducing the number of free allowances' would cause the carbon price to ' rise further and increase further the risks of carbon leakage'.[49]

13. The Government has said that to tackle carbon leakage risks, 'as with all global challenges, the best solution [to carbon leakage risks] is international action', citing an OECD proposal for a global emissions price as an example of such an approach.[50] Actions the Government is taking to further multilateral action on carbon leakage include engagement with partners through the UK's G7 Presidency; discussions in the G20 intergovernmental forum, and discussions at the World Trade Organization (WTO) 'including through the Trade, Environment and Sustainability Structured Discussions (TESS-D) grouping, and the Committee on Trade and Environment.'[51] Several contributors agreed that multilateral solutions would be the most effective option,[52] with some supporting a global carbon

40 *Ibid.*
41 Further information on the UK and EU ETS is provided below, under 'UK ETS and EU ETS'
42 Climate Change Committee, Policies for the Sixth Carbon Budget (December 2020), p. 101
43 GOV.UK, Net Zero Review: Analysis exploring the key issues (October 2021), p. 36
44 HM Treasury (CBM0027). Contracts for Difference, the Renewables Obligation, and the small scale Feed in Tariff form part of electricity costs, arising from schemes to support renewable generation.
45 GOV.UK, Industrial Decarbonisation Strategy (March 2021), p. 110
46 Zero Carbon Campaign (CBM0002); Citizens' Climate Lobby UK (CBM0007); Institute for Public Policy Research (CBM0009); Third Generation Environmentalism (E3G) (CBM0018); Dr Dominic Hogg (Director at Equanimator Ltd) (CBM0022); Green Alliance (CBM0025); Q9; Q38; Q40; Q41
47 Third Generation Environmentalism (E3G) (CBM0018)
48 GOV.UK, Net Zero Review: Analysis exploring the key issues (October 2021), p. 36
49 Professor Michael Gasiorek (Professor of Economics at University of Sussex); Dr Camilla Jensen (Senior Research Fellow in International (Economics) at University of Sussex) (CBM0028)
50 GOV.UK, Net Zero Review: Analysis exploring the key issues (October 2021), p. 34–35
51 *Ibid.*
52 RWE (CBM0001); Institute for Public Policy Research (CBM0009); WWF-UK (CBM0015); Trades Union Congress (CBM0024)

price.[53] We also heard that negotiating multilateral solutions was a lengthy process.[54] The Institute for Public Policy Research told us that 'given the diplomatic challenges involved, it is likely that [multilateral] efforts will need to be complemented by unilateral action in the short to medium term.'[55] In a recent letter to the Chair of the European Scrutiny Committee, the Energy Minister said that:

> […] the Government is not naive about the challenges in building an international consensus to address the risks of carbon leakage. We recognise that in parallel to our multilateral approach, it is important to develop our understanding on the scope for further domestic measures. Whilst such measures are not the preference, we are aware they might be needed in the absence of a multilateral approach.[56]

Carbon border adjustment mechanisms

14. One potential domestic measure is a carbon border adjustment mechanism.[57] A CBAM applies a carbon price at the border to imports of certain products based on their embedded emissions, or carbon footprint, which is equivalent to the carbon price borne on those products by domestic producers.[58] No country currently applies a CBAM, although since 2013 California has applied an effective CBAM to imports of electricity from other US states, to combat carbon leakage to neighbouring states.[59] The European Commission has proposed that the EU introduce a CBAM from 2023;[60] under the Commission proposal, EU importers of certain iron and steel, cement, fertiliser, aluminium and electricity products would purchase a sufficient number of CBAM certificates, mirroring the EU Emissions Trading System price, to cover the amount of carbon used in the production of the imports, in order to apply a carbon price on imports in line with the carbon price paid by EU producers.[61] In the United States, the Biden administration included consideration of a CBAM in its most recent Trade Policy Agenda.[62] The Government of Canada announced its intention to consult on CBAM in its 2021 Budget.[63]

15. We sought contributors' views on the impacts which might arise if the UK were to introduce its own CBAM. Several contributors recommended that, rather than pursuing

53 Chemical Industries Association (CBM0003); International Emissions Trading Association (IETA) (CBM0012); Q47; Q96
54 WWF-UK (CBM0015); Deloitte LLP (CBM0021); Q43; Q86
55 Institute for Public Policy Research (CBM0009)
56 Cabinet Office, Letter from the Minister of State for Energy, Clean Growth and Climate Change to the Chair of the European Scrutiny Committee, 16 December 2021
57 Note on terminology: A variety of other terms are also used to describe CBAM, including 'border carbon tariff', 'border carbon adjustment (BCA)' and 'carbon border tax'. As the Climate Change Committee (CCC) notes, some stakeholders use these terms to include product standards for imports (Climate Change Committee, The Sixth Carbon Budget (December 2020), p. 34); for clarity, this report uses 'CBAM' to refer to a carbon price-based measure, to distinguish this type of measure from import product standards, which are discussed separately later in this Chapter under 'Complementary policies'.
58 Climate Change Committee, The Sixth Carbon Budget (December 2020), p. 34
59 GOV.UK, Net Zero Review: Analysis exploring the key issues (October 2021), p. 39
60 European Union, European Green Deal: Commission proposes transformation of EU economy and society to meet climate ambitions, accessed 17 November 2021
61 European Union, Carbon Border Adjustment Mechanism: Questions and Answers, accessed 16 September 2021. The EU's proposal is discussed in greater detail in Chapter 2 below
62 United States Trade Representative, 2021 Trade Policy Agenda and 2020 Annual Report of the President of the United States on the Trade Agreements Programme (March 2021), p. 3
63 Government of Canada, Exploring Border Carbon Adjustments for Canada, accessed 7 February 2022

a CBAM unilaterally as the EU had, the UK pursue a multilateral CBAM agreement.[64] Green Alliance told us the fact that several jurisdictions are considering CBAM currently 'offers the opportunity for the UK to coordinate action'.[65] E3G told us:

> The UK should seek to cooperate with other countries that are exploring CBAMs. This would not only send a strong signal in support of multilateralism, but also avoid multiple, competing CBAMs emerging in different jurisdictions, potentially leading to considerable administrative complexity and additional non-trade barriers. Lastly, cooperating with other countries exploring CBAMs would also strengthen the UK's position vis-à-vis those pushing back against such a mechanism.[66]

Dr Richard Leese, of the Mineral Products Association, told us he was 'fully in agreement with the multilateral approach, particularly where it is with our near neighbour, the EU, but if a multilateral approach is going to delay the introduction of a CBAM, we need to look carefully at the benefits of that multilateral arrangement versus moving now and allowing our energy-intensive industries to invest in decarbonisation'.[67]

16. We heard that a CBAM could contribute positively to the UK's efforts to reduce emissions in three principal ways:

- Supporting a strong carbon price, and therefore investment in decarbonisation, by mitigating the carbon leakage risk for products covered by the CBAM.[68] The Mineral Products Association told us this supports the UK's environmental and levelling up objectives 'by promoting growth in high-productivity jobs in less affluent areas of the UK [supporting] the UK's ambitions to be a global leader on climate change without sacrificing industry.'[69]

- Helping to tackle consumption emissions as a result of this strong carbon price.[70] E3G told us that 'a CBAM would effectively expand the carbon price signal to cover the consumption of the products and goods covered, next to the production of these products and goods', which would 'raise the price for high-carbon goods, increase the cost-competitiveness of lower-carbon production processes, as well as facilitate substitution by lower-carbon alternatives and substitutes, in turn contributing to lowering the UK's carbon footprint.'[71]

- Incentivising other countries to strengthen their decarbonisation ambitions, or spur action towards multilateral solutions.[72] The Trade Justice Movement

64 Zero Carbon Campaign (CBM0002); Citizens' Climate Lobby UK (CBM0007); Institute for Public Policy Research (CBM0009); Trade Justice Movement (CBM0016); Third Generation Environmentalism (E3G) (CBM0018); Trades Union Congress (CBM0024); Q41

65 Green Alliance (CBM0025)

66 Third Generation Environmentalism (E3G) (CBM0018)

67 Q87

68 Zero Carbon Campaign (CBM0002); Citizens' Climate Lobby UK (CBM0007); Mineral Products Association (CBM0014); Third Generation Environmentalism (E3G) (CBM0018); Green Alliance (CBM0025)

69 Mineral Products Association (CBM0014)

70 Chemical Industries Association (CBM0003); Deloitte LLP (CBM0021); Green Alliance (CBM0025); Professor Michael Gasiorek (Professor of Economics at University of Sussex); Dr Camilla Jensen (Senior Research Fellow in International (Economics) at University of Sussex) (CBM0028); CCm Technologies (CBM0030); Q42

71 Third Generation Environmentalism (E3G) (CBM0018)

72 RWE (CBM0001); Zero Carbon Campaign (CBM0002); Citizens' Climate Lobby UK (CBM0007); Mineral Products Association (CBM0014); Trade Justice Movement (CBM0016); Third Generation Environmentalism (E3G) (CBM0018); Q5; Q40; Q42; Q43

> told us that 'a CBAM could potentially reward countries which adopt greener production techniques and incentivise carbon transition.'[73] Michael Mehling, Professor of Practice at the University of Strathclyde School of Law and Deputy Director of the Center for Energy and Environmental Policy Research at the Massachusetts Institute of Technology, observed that 'a surprising effect of just debating and discussing border carbon adjustment measures in the EU and elsewhere, is the impact it has had on climate policy debates in other countries' leading to 'an acceleration of discussions on how to progress carbon pricing and climate policies more generally [where] it had been dormant or stagnated for many years', representing 'a very important development because ultimately the first best alternative is if we can get co-operation across the board and convergence on climate policies, which we will not do in the short term.'[74]

Several contributors said that a CBAM could be a 'transitory'[75] measure, acting as a 'stepping stone'[76] towards multilateral solutions.[77]

17. Contributors also raised a number of risks that would need to be managed if the UK were to introduce its own CBAM. These included the risk of adverse impacts to low- and middle-income countries; legal and retaliatory action from trading partners; uncertainty as to how measures might apply in Northern Ireland, given that, electricity generators in Northern Ireland remain under the EU ETS; the risk that carbon leakage might shift from the products covered by the CBAM to downstream industries using those products; negative impacts on small and medium-sized enterprises (SMEs), and the potential negative impact on consumers, particularly in vulnerable and low-income households. These are each discussed in further detail in Chapters 2 and 3.

18. We were also told that it would be important for any CBAM not to lead to administrative burdens for UK businesses.[78] Contributors expressed a range of views on potential design choices for the CBAM (set out in further detail in Chapter 3), particularly on product coverage. We heard that in order to comply with WTO rules on non-discrimination, the products to be covered by any CBAM would be likely to be a subset of those covered by the UK ETS (discussed further in Chapter 2).[79]

19. Contributors also raised the technical and methodological challenges posed in calculating an import's carbon footprint.[80] E3G told us that

> there [is] a suite of technical risks that need to be taken into consideration, including how the CO2 embedded in products will be measured, reported and verified; how climate policies in third countries can be accounted for;

73 Trade Justice Movement (CBM0016)
74 Q24
75 WWF-UK (CBM0015)
76 Zero Carbon Campaign (CBM0002)
77 Zero Carbon Campaign (CBM0002); Citizens' Climate Lobby UK (CBM0007); International Emissions Trading Association (IETA) (CBM0012); WWF-UK (CBM0015); Third Generation Environmentalism (E3G) (CBM0018)
78 Chemical Industries Association (CBM0003); National Grid Ventures (CBM0013); Q124
79 Green Alliance (CBM0025)
80 RWE (CBM0001); Zero Carbon Campaign (CBM0002); Chemical Industries Association (CBM0003); Citizens' Climate Lobby UK (CBM0007); Council on Geostrategy (CBM0008); Institute for Public Policy Research (CBM0009); CCm Technologies (CBM0011); International Emissions Trading Association (IETA) (CBM0012); Green Alliance (CBM0025); Professor Michael Gasiorek (Professor of Economics at University of Sussex); Dr Camilla Jensen (Senior Research Fellow in International (Economics) at University of Sussex) (CBM0028); Q39; Q47; Q102; Q109

> and how to address the risk of resource shuffling (the situation where foreign producers would allocate or attribute less emissions-intensive materials or production processes towards exports to the UK).[81]

Paul Dawson, of RWE, told us that for electricity, where the 'degree of carbon intensity, specifically the marginal source of generation at any one time on either side of the border […] changes every 30 minutes', a CBAM 'would have to cope with that complexity to maximise the efficiency of the flows and avoid unnecessary imports at times when it would be inefficient to do so.'[82] Professor Sir Dieter Helm suggested that a pragmatic approach to calculating the embedded carbon in imported goods might be to apply default values and offer importers the option to demonstrate lower carbon intensity in order to receive reduction in the CBAM:

> Now, globally, there are precise ways of doing this that I think are beyond practical reach and then there are pragmatic ones. The precise way of doing it, the speed with which digital technologies can map what is happening virtually anywhere without actually having to be in the country, is just a revolution in the making. […] If you start small, you use the digital data that is available so you can double check, you offer the option of dispute […] and you build that into the huge exercise of basically building our carbon database of what is going on, our sequestration database, you will get a long way down the track..[83]

He illustrated the virtues of a pragmatic approach:

> You can always find a very picky technicality that tells you that you are never going to get this perfectly right, and I just tell you, yes, and you will have the nice result that you will be perfectly wrong.[84]

CCm Technologies told us that 'the increased appetite for, and availability of, data relating to emissions reduction', due to demand from corporate net zero business plans and reporting requirements, meant that 'data capture on the scale necessary to accurately assess emissions should not be seen as a significant hurdle to overcome.'[85]

20. Dr Sanna Markkanen told us that, in deciding whether to pursue a CBAM:

> it is a valid question to ask whether this is worth it, whether the benefits in emission savings would be sufficiently high to impose these adverse short-term impacts on consumers and businesses in the UK and on businesses abroad and worth the potential reputational risk on the UK of implementing a CBAM.[86]

81 Citizens' Climate Lobby UK (CBM0007); Institute for Public Policy Research (CBM0009); CCm Technologies (CBM0011); Third Generation Environmentalism (E3G) (CBM0018); British Standards Institution (CBM0020); Green Alliance (CBM0025)

82 Q53

83 Q20

84 *Ibid.*

85 CCm Technologies (CBM0030). CCm Technologies is a cleantech company which optimises resource use through Carbon Capture and Utilisation (CCU) solutions, including the production of net zero carbon fertilisers (CBM0011).

86 Q35

Dr Misato Sato, of the Grantham Research Institute on Climate Change and the Environment at the London School of Economics, told us that while 'in theory, CBAM is very intuitive […] in reality, implementing CBAM faces quite a few limitations' and that 'how effective CBAM is as an alternative to free allocation and preventing leakage, achieving the domestic goals, […] depends on the precise design of the CBAM that can be implemented in practice.'[87] Michael Mehling remarked that it was important to factor in CBAM's ability to spur action globally on climate change:

> While I […] agree that purely focusing on the static environmental benefit may suggest the political, legal and administrative costs of introducing a CBAM seem perhaps not so worthwhile, [the] politics of it, and how it affects the political debate both domestically and internationally, should not be underestimated. [We] have seen direct reaction, even citing the EU's announcement of a CBAM, from officials [from countries neighbouring the EU] saying, "Here is our plan. We're going to come up with a carbon price or we're going to move forward much quicker than we initially intended." Therefore, I think it is also really important to factor in these dynamic bigger-picture implications. That is not to mention, of course, also assuaging domestic constituencies, labour unions, trade associations and so on that you have their back as the country moves forward with decarbonisation.[88]

Professor Sir Dieter Helm told us:

> I think not having a CBAM is to be precisely wrong, and I want to be roughly right and I want to go in the right direction. In my pragmatism, even small steps are helpful. I think there are good reasons for going careful because you want to start relatively low and you want to take some time, because you are trying to get people to change their capital stocks. You are trying to change the structure of economies to be more low carbon otherwise.[89]

Our view

21. The current situation, whereby a carbon price is applied to domestic production but not equivalent imports, is clearly unsatisfactory from the point of view of effectively addressing the risks of climate change; the risk of carbon leakage could result in increased global emissions overall alongside opportunities lost in developing green jobs in low-carbon production and technologies in the UK, while current anti-carbon leakage policies fail to sufficiently incentivise investment in industrial decarbonisation or address the 43% of UK consumption emissions arising from imports. It also risks encouraging the further offshoring of productive capacity away from the UK.

22. We agree that a global solution to carbon leakage would be the most effective, and welcome the Government's actions towards developing multilateral approaches to carbon leakage risk. But these will at best take time to negotiate and implement; and climate change will not wait.

87 Q23
88 Q36
89 Q17

23. Given the potential of a CBAM to incentivise industrial decarbonisation and address consumption emissions while also galvanising international climate change action, a UK CBAM represents a valuable policy to pursue alongside progressing longer-term solutions. This UK CBAM might be implemented multilaterally in co-ordination with like-minded jurisdictions, or unilaterally, and, in light of the range of risks raised above, must be carefully developed to ensure it is able to deliver its environmental objectives while mitigating the risk of adverse impacts. In Chapters 2 and 3 we set out specific considerations for the Government in the design of the CBAM in respect of these risks.

Complementary policies

24. The Zero Carbon Campaign told us that 'CBAMs are not a silver bullet when it comes to driving global ambition on decarbonisation':

> CBAMs are not the only tool required to drive global emissions reductions, and additional mechanisms will be required to ensure that CBAMs do not lead to adverse consequences elsewhere as a result of their focus on emissions-intensity alone […]. Additional 'flanking policies' should include the implementation of product standards […], as well as outright bans where appropriate - for example on goods that don't meet the UK's minimum environmental or animal welfare thresholds in the way they are produced.[90]

Several contributors stressed the need for complementary policies, including product standards, wider regulation and direct support for industries in decarbonisation.[91] WWF told us that a UK CBAM 'would need to be accompanied by an appropriate set of policies so as not to hinder development in the Global South';[92] WWF also considered there to be an important role for environmental product standards in respect of food imports, as, while the UK has food safety standards for imports, 'the standards that are set on the environmental impact of farming only apply to food produced in the UK' and not to imported food.[93] E3G said that there was also a need to 'align current and new trade policies to promote environmentally friendly outcomes'.[94] In this respect, the recent Government commitment that the Secretary of State for International Trade will "work closely with other government departments to assess the environmental impacts of new free trade agreements, and to improve their coverage and approach" is an encouraging sign, as is the explicit inclusion of environmental protection measures in the provisions of the free trade agreement recently negotiated between the UK and New Zealand.[95] Green Alliance told us that it was 'important that further measures […] are implemented to encourage consumers to switch to more sustainable options, ensuring lower income households are also supported in the transition'.[96] Several contributors called for the UK to link its ETS

90 Zero Carbon Campaign (CBM0002)

91 Institute for Public Policy Research (CBM0009); International Emissions Trading Association (IETA) (CBM0012); Trade Justice Movement (CBM0016); Third Generation Environmentalism (E3G) (CBM0018); British Standards Institution (CBM0020); Trades Union Congress (CBM0024); Green Alliance (CBM0025); Q40; Q41; Q47; Q49; Q97; Q105

92 WWF-UK (CBM0015). Complementary standards are discussed further in Chapter 2 below.

93 WWF-UK (CBM0015)

94 Third Generation Environmentalism (E3G) (CBM0018). The alignment required is discussed in Chapter 2.

95 Environmental Audit Committee, *The UK's footprint on global biodiversity: Government Response to the Committee's Second Report*, Fifth Special Report of Session 2021–22, HC 1060, p. 7; Department for International Trade, *Informational Copy of the UK-New Zealand Free Trade Agreement and associated documents, including the Impact Assessment and draft Explanatory Memorandum*, Chapter 22: Environment, 28 February 2022.

96 Green Alliance (CBM0025). This is discussed further in Chapter 3.

with the EU ETS;[97] this is discussed further in Chapter 2.

25. Dr Scott Steedman, of the British Standards Institution, told us that 'both' CBAM and product standards are needed, explaining that:

> You have to have standards to make border adjustments work. […] I think you need to look at industry in the round. You have innovative companies, innovative SMEs […] you have the big group in the middle and then you have the people who are really struggling or are deliberately producing substandard products. What we aspire to do through an intelligent use of standards with regulation to drive behavioural change—and it is all about culture change; you need companies and their employees to want to do this, then you will stimulate the result. […] If you can do that using a combination of better practices, standards, which lead to a competitive advantage in the marketplace, that is win/win, but if you neglect one part, you are not going to make it and if you think you can only do it with standards you cannot. You need a market structure.[98]

Pawel Kisielewski, of CCm Technologies, agreed:

> [I]f I have a CBAM for my domestic marketplace and I have international standards, which means I do not have to navigate multiple regulatory environments, which I will never be able to do, this is clearly the route map to giving us the springboard as an SME. […] Back to the original point, this is about the complementary benefits of having both standards and a CBAM and why it accelerates the business opportunities that we and other green tech will have.[99]

Commencing work on a comprehensive approach

26. In its proposal for the Sixth Carbon Budget, published in December 2020, the CCC said that

> Work should begin immediately to develop the longer-term options of applying either [a CBAM] or minimum standards to imports of selected emissions intense products. This will provide Governments with the option to reduce the proportion of the cost of manufacturing decarbonisation that is borne by the taxpayer. With these options developed, Government will be able to decide on the appropriate mix of instruments, in consultation with the affected industrial sectors. It is particularly crucial to start work now, as many of the barriers could take substantial time to overcome.[100]

Mike Thompson, of the CCC, told us that 'broadly speaking, the current mechanisms do work for addressing carbon leakage where we are now […] but it is not something you can keep doing for ever, realistically':

97 RWE (CBM0001); Institute for Public Policy Research (CBM0009); International Emissions Trading Association (IETA) (CBM0012); Shell International (CBM0023); Cambridge Institute for Sustainability Leadership (CBM0029)
98 Q107, Q108
99 Q125
100 Climate Change Committee, Policies for the Sixth Carbon Budget (December 2020), p. 104

> What we would like to see is a bit more rapid progress in developing these alternative mechanisms, developing the carbon border adjustment or developing the product standards. We know that there is a lot of tricky work to do there in the measurement, reporting and verification. We know that there is a lot of tricky diplomacy and politics to be got through, and we know that there will be a transition period. Even once we have committed to going in this direction, it will take a while to get it implemented. At the same time, we have already a review of the free allocation process that is going on.[101] Other things are moving, and we feel that the CBAM and the product standard could do with catching up a bit with those policies.[102]

27. The final report of the Treasury's Net Zero Review discussed CBAM and imports standards as possible policy options to tackle carbon leakage, concluding that 'further work is required' to understand the risks of carbon leakage, the relative merits of different policy responses and the implications of other jurisdictions' actions to address carbon leakage concerns.[103] The Government says that its current approach, including ETS free allowances, will continue to be its preferred method for mitigating carbon leakage risk in the immediate future, with treatment of imports considered within a range of wider measures 'particularly in the 2030s and 2040s'.[104] Professor Sir Dieter Helm told us that while 'the next two or three years should be about getting this right', measures to bring treatment of imports in line with domestic production should be 'fully up and running' during the 2020s.[105] The Institute for Public Policy Research told us 'before introducing the CBAM, the government should provide a five-year warning to give supply chains time to adapt' and 'to give the UK time to develop low-carbon domestic supply chains.[106]

28. The Financial Secretary to the Treasury, Rt Hon Lucy Frazer QC MP, told us:

> […] we are not just pursuing multilateral approaches, and we are not sitting on our toes. We are looking at a number of options, and we are interested in considering and exploring a CBAM and product standards as options. We are doing our own domestic work—the carbon pricing and the ETS. […] We are exploring all options that are on the table.[107]

On timescales for implementation, she said that:

> We are progressing these things, but they take time to develop and once they are developed, they are quite complicated. I could take CBAMs for instance. […] There are very complicated questions that you have to ask yourself in terms of what would need to be decided. That would include what sectors are covered, how we measure carbon emissions, how we ensure that the international measurement is the same across the globe, how we report

101 BEIS launched a 'Free Allocation Review', with a call for evidence issued during March and April 2021 on how free allowances could 'better incentivise emissions reduction'; as of February 2022, responses to the call for evidence were under analysis (GOV.UK, UK ETS Free Allocation Review: Call for Evidence (March 2021), p. 5; GOV.UK, Closed consultation - UK Emissions Trading Scheme free allocation review: call for evidence, accessed 25 February 2022)

102 Q39

103 GOV.UK, Net Zero Review: Analysis exploring the key issues (October 2021), p. 22, 37–39, 42

104 GOV.UK, Industrial Decarbonisation Strategy (March 2021), p. 35, 36

105 Q18

106 Institute for Public Policy Research (CBM0009)

107 Q156

on the carbon emissions, how we verify what people are saying about their carbon emissions, and how we ensure that we comply with WTO rules.[108]

Our view

29. While we agree that sufficient time is needed to develop and implement effective policies, we consider that the current situation regarding the treatment of carbon-intensive imports represents a policy gap for the UK, which requires addressing much sooner than the 2030s or 2040s as Ministers currently envision. It is encouraging to hear that, alongside the important multilateral action the Government is taking, including in relation to the implementation of agreements made at COP26, exploratory work is taking place on measures such as CBAM and product standards. We consider that work must now commence on developing this into an ambitious policy response; we consider that a comprehensive UK carbon border approach, including a carefully-designed CBAM alongside complementary policies including product standards, is needed to address this policy gap. This approach is necessary to provide certainty to businesses planning for decarbonisation, to provide a clear demand signal for low-carbon products, and to address the 43% of consumption emissions arising from the UK's imports: it will also serve to galvanise international action on climate change.

30. **Effective carbon pricing is crucial to decarbonisation, but cannot be achieved without effective anti-carbon leakage policies in place. The Government's current approach to addressing the risks of carbon leakage, including free allocation of Emissions Trading Scheme (ETS) allowances, is insufficient on its own to incentivise industrial decarbonisation effectively. A clear policy response is needed to address this; we consider that a UK carbon border approach is the most appropriate response.**

31. **Multilateral and global approaches to carbon pricing represent the most appropriate way to support global decarbonisation. Since the process to negotiate and agree these is lengthy, they cannot provide the urgent action necessary in the short term. Pursuing a unilateral carbon border approach does not preclude continuing to push for global action; rather, unilateral action may support these efforts by encouraging other jurisdictions to strengthen their own decarbonisation policies and spurring co-operation on multilateral solutions, while delivering the action needed to address emissions in the meantime. It is important that unilateral action is aligned with the UK's international obligations and commitments.**

32. **While net zero policies address the UK's territorial production emissions, 43% of the UK's consumption emissions arise from imports. The UK's principal carbon pricing mechanism, the ETS, applies to domestic production, but no carbon price is currently applied to imports of the same products. A CBAM could address this, enabling a carbon price to be applied to consumption emissions arising from both domestic production and imports of products covered by the ETS. In particular, CBAM has the potential to help build support for green policies in historic manufacturing areas where opportunities for a renaissance in low-carbon UK-based manufacturing are likely to be greatest.**

108 Q158

33. **Alongside CBAM, the UK's carbon border approach needs to comprise a set of complementary policies, including product standards, to tackle consumption emissions beyond those covered by explicit carbon pricing, and support decarbonisation across the economy. Careful design is needed to ensure the carbon border approach is successful in achieving its environmental objectives while mitigating the risks of adverse impacts.**

34. ***We recommend that the Government commence work immediately on developing a comprehensive UK carbon border approach, in order that this might be implemented during the 2020s. We recommend that this include a CBAM as part of a co-ordinated set of policies including product standards, alongside work to build consensus with trading partners, industry and consumers on the need for this policy response. The Chancellor of the Exchequer should provide an initial report to the House on progress on a CBAM not later than Budget 2023. We recommend that the Government build on its COP26 climate leadership internationally through pursuing long-term multilateral solutions alongside this ambitious UK approach.***

2 Geopolitical considerations

Trade

35. The UK is an open, trading economy. As we noted in our recent report on the UK and global biodiversity, the UK's exit from the EU has provided an opportunity to promote the highest environmental standards in trade.[109] A carbon border approach would allow the UK to capitalise on its leadership in climate action, to influence decarbonisation beyond its borders and to contribute to a positive outcome to climate change globally.

36. This inherent interaction with trade comes with risks to be mitigated. In this section, we highlight four important areas for consideration in the design of a UK carbon border approach:

- impacts on low- and middle-income countries;
- compliance with World Trade Organisation rules;
- the need for transparent and inclusive engagement with trading partners, and
- interaction with Free Trade Agreement negotiations.

Low- and middle-income countries

37. The Glasgow Climate Pact, agreed at COP26 in November 2021, acknowledges the importance of 'showing solidarity particularly with developing country Parties' in the global recovery from covid-19. It reaffirms the principle, expressed in the United Nations Framework Convention on Climate Change and the Paris Agreement, that action to protect the climate should be 'on the basis of equity and in accordance with [the] common but differentiated responsibilities and respective capabilities' of different countries.[110]

38. Contributors told us that it was important any UK CBAM reflected this principle in respect of the impact on low- and middle-income countries.[111] The Institute for Public Policy Research said:

> For many countries, CBAMs are viewed as a potential cover for protectionism. Developing countries are concerned that they could be especially disadvantaged, given they face greater barriers to financing a green transition.[112]

Concern over the potential for adverse impacts on low- and middle-income countries was raised by numerous contributors.[113] Dr Sanna Markkanen, of the Cambridge Institute

109 Environmental Audit Committee, Second Report of Session 2021–22, *The UK's footprint on global biodiversity*, HC 674, para 35

110 United Nations Framework Convention on Climate Change, Glasgow Climate Pact (November 2021), p. 1; United Nations Framework Convention on Climate Change, United Nations Framework Convention on Climate Change (1992), Article 3(1); United Nations Framework Convention on Climate Change, Paris Agreement, p. 1

111 Third Generation Environmentalism (E3G) (CBM0018); Brazilian National Confederation of Industry - CNI (CBM0019); Green Alliance (CBM0025)

112 Institute for Public Policy Research (CBM0009)

113 Zero Carbon Campaign (CBM0002); Council on Geostrategy (CBM0008); Institute for Public Policy Research (CBM0009); WWF-UK (CBM0015); Trade Justice Movement (CBM0016); Third Generation Environmentalism (E3G) (CBM0018); Trades Union Congress (CBM0024); Green Alliance (CBM0025)

for Sustainability Leadership, told us that for low- and middle-income country SMEs producing innovative low-carbon products 'there is a good chance' that the administrative costs to demonstrate for CBAM purposes that their production was low-carbon 'would be too high for them and, therefore, imports from those companies would decline.'[114]

39. Contributors were divided as to how best to ensure that low- and middle-income countries would not be adversely affected by a UK CBAM. Several contributors suggested this could be incorporated into the design of the CBAM itself through exemptions[115] or carbon price reductions[116] for products originating in such countries; however, RWE and the Mineral Products Association expressed concern that exemptions would lead to high-carbon products being re-routed through exempted countries,[117] and E3G told us that it risked leaving low- and middle-income countries 'stranded with carbon intensive production methods'.[118] Dr Alice Pirlot, Research Fellow in Law at the University of Oxford Centre for Business Taxation, told us that it seemed 'contrary to the bottom-up and differentiated approach of the Paris Agreement […] to put a price on the emissions generated in foreign countries, including developing ones' and that a CBAM design in which the CBAM would apply only to 'imports from countries that do not comply with the Paris Agreement' would 'strengthen the Paris Agreement by targeting non-cooperative countries'.[119] Professor Sir Dieter Helm supported an equal carbon price applied to all countries, and said that support for low- and middle-income countries would be better addressed through a separate policy rather than through the design of the CBAM itself.[120]

40. Several contributors told us the revenues generated from the CBAM could be used to provide technical and financial support for industrial decarbonisation in low- and middle-income countries,[121] with Hannah Dillon, of the Zero Carbon Campaign, noting that 'helping developing nations produce products in a more environmentally friendly way […] will have an impact on our consumption emissions too'.[122] Green Alliance told us that these countries should 'be helped with the technical and administrative burden of introducing accounting practices for carbon in supply chains and involved in designing accounting mechanisms from the outset rather than simply taking rules from wealthier nations';[123] further contributors also stressed the importance of close consultation with trading partners in low- and middle-income countries in the design of the CBAM.[124] WWF told us that support for such countries would also be needed in respect of any environmental product standards applied to agriculture, 'to build capacity for a transition to greener farming, and to build the infrastructure needed for the required checks.'[125]

114 Q34
115 Zero Carbon Campaign (CBM0002); Citizens' Climate Lobby UK (CBM0007); Trade Justice Movement (CBM0016); Trades Union Congress (CBM0024); Green Alliance (CBM0025); Q28; Q30
116 Zero Carbon Campaign (CBM0002); Citizens' Climate Lobby UK (CBM0007)
117 RWE (CBM0001); Mineral Products Association (CBM0014)
118 Third Generation Environmentalism (E3G) (CBM0018)
119 Dr Alice Pirlot (Research Fellow at Oxford University Centre for Business Taxation) (CBM0031)
120 Q5, Q16
121 Citizens' Climate Lobby UK (CBM0007); Mineral Products Association (CBM0014); Third Generation Environmentalism (E3G) (CBM0018); Q28; Q30; Q42
122 Q42
123 Green Alliance (CBM0025); Q28
124 Institute for Public Policy Research (CBM0009); Third Generation Environmentalism (E3G) (CBM0018), Q14
125 WWF-UK (CBM0015)

41. Asked whether the Government had considered how adverse impacts to low- and middle-income countries could be mitigated, Lucy Frazer replied that

> [t]here would really be two options if we did bring in a CBAM. One would be to exclude developing countries, and another would be—as I think the EU is proposing—to support developing countries to ensure that they bring their standards up to the standard that we expect. That could be supporting them in technical production or in developing their own industries to our standards. Of course, we will have to look at those things in due course.[126]

Compliance with World Trade Organisation rules and engagement with trading partners

42. Numerous contributors raised the need for any CBAM to be designed to comply with World Trade Organization (WTO) rules,[127] particularly the General Agreement on Tariffs and Trade rules governing non-discrimination of trade measures between different countries[128] or between domestic and imported products,[129] notwithstanding the exceptions specified within this agreement in respect of environmental measures.[130] Contributors told us that CBAM, as a novel measure, was untested under WTO law,[131] leading to uncertainty over whether it might give rise to legal challenges from trading partners, and that ultimately, its compliance with WTO rules would depend on the specific features of its design.[132]

126 Q164

127 RWE (CBM0001); Zero Carbon Campaign (CBM0002); Chemical Industries Association (CBM0003); Citizens' Climate Lobby UK (CBM0007); Mineral Products Association (CBM0014); Third Generation Environmentalism (E3G) (CBM0018); Brazilian National Confederation of Industry - CNI (CBM0019); Deloitte LLP (CBM0021); Dr Dominic Hogg (Director at Equanimator Ltd) (CBM0022); Shell International (CBM0023); Trades Union Congress (CBM0024); Green Alliance (CBM0025); Professor Michael Gasiorek (Professor of Economics at University of Sussex); Dr Camilla Jensen (Senior Research Fellow in International (Economics) at University of Sussex) (CBM0028); Q28

128 World Trade Organization, The General Agreement on Tariffs and Trade (GATT 1947): Text of the General Agreement (1986). For instance, under *Article I: General Most-Favoured-Nation Treatment* (para 1), 'any advantage, favour, privilege or immunity granted by any contracting party to any product originating in or destined for any other country shall be accorded immediately and unconditionally to the like product originating in or destined for the territories of all other contracting parties.'

129 *Ibid*. For instance, under *Article III: National Treatment on Internal Taxation and Regulation* (para 2), 'the products of the territory of any contracting party imported into the territory of any other contracting party shall not be subject, directly or indirectly, to internal taxes or other internal charges of any kind in excess of those applied, directly or indirectly, to like domestic products.'

130 *Ibid*. From *Article XX: General Exceptions*: 'Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures: […] (b) necessary to protect human, animal or plant life or health; […] (g) relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption'.

131 Zero Carbon Campaign (CBM0002); Deloitte LLP (CBM0021)

132 Third Generation Environmentalism (E3G) (CBM0018)

43. Particular design considerations[133] raised with us included:

- the treatment of domestic exports, where Dr Misato Sato, of the Grantham Research Institute on Climate Change and the Environment, told us that 'reimbursing carbon costs for exporters […] might be challenged under the WTO law';[134]
- the treatment of imports from countries with implicit carbon pricing,[135] and
- how the carbon intensity of imports would be measured.[136]

44. Measures suggested by contributors to increase WTO-compliance included:

- designing the CBAM 'first and foremost with the UK's climate objectives in mind, and for the purpose of effectively reducing carbon emissions';[137]
- ensuring that 'the carbon price applied to imports [is] no greater than that applied domestically';[138]
- ensuring that the CBAM 'only be applied to sectors where domestic producers are subject to a carbon price';[139]
- 'limiting the CBAM to the most carbon-intensive goods which are at the highest risk of carbon leakage [to] underline the environmental objective of the tool',[140] and
- allocating revenue generated by the CBAM 'towards schemes that have similar objectives to the mechanism itself […] i.e. decarbonisation'.[141]

45. The European Commission indicates that its proposal for a CBAM 'has been designed to comply with [WTO] rules'.[142] Research by the Cambridge Institute of Sustainability Leadership nevertheless indicates that 'the politics of EU CBAM make a WTO dispute quite possible, perhaps even likely',[143] although 'at the level of remedies, the proposed EU CBAM, even if in breach of trade rules, could be subsequently brought into compliance.':

> The main risk, therefore, is the triggering of retaliation and cross-retaliation, even before the matter is taken to litigation.[144]

133 Design considerations are discussed in further detail in Chapter 3.
134 Q23
135 Institute for Public Policy Research (CBM0009); Q28; Q84
136 Third Generation Environmentalism (E3G) (CBM0018); Q28
137 Zero Carbon Campaign (CBM0002)
138 Zero Carbon Campaign (CBM0002)
139 Green Alliance (CBM0025)
140 Third Generation Environmentalism (E3G) (CBM0018)
141 Zero Carbon Campaign (CBM0002)
142 European Union, Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing a carbon border adjustment mechanism (July 2021), p. 2. In October 2021, Russia circulated questions at the WTO on the EU's CBAM proposal, including querying the 'specific provisions of the WTO Agreements' which the EU took into account to ensure WTO compliance (World Trade Organization, EUROPEAN UNION – PROPOSED CARBON BORDER ADJUSTMENT MECHANISM (CBAM) – QUESTIONS FROM THE RUSSIAN FEDERATION (October 2021), p. 1).
143 Cambridge Institute for Sustainability Leadership, On the Borderline: The EU CBAM and its place in the world of trade (October 2021), p. 15
144 *Ibid.*

Contributors also raised the risk of retaliatory action from trading partners in response to a UK CBAM.[145] Dr Sanna Markkanen told us that this retaliation 'could be symmetrical or asymmetrical' and could occur 'possibly as soon as the UK announced its intention to implement a CBAM.'[146]

46. Michael Mehling, of the University of Strathclyde and Massachusetts Institute of Technology, told us that to mitigate these risks, alongside careful design choices, the 'process in which [the CBAM] is prepared and then implemented' should also be considered:

> I think it is tremendously important that the Government, if they start considering this, reach out to trade partners early on, especially the potentially affected trade partners, to engage them. This was a criticism of the EU to some extent. While the Commission said it was engaging behind the scenes, many representatives […] felt there had not been enough engagement. This is incidentally also quite important in the jurisprudence of the WTO dispute settlement body. Panels and the appellate body have often placed great emphasis on the transparency and inclusiveness of the process in which trade partners are integrated and are involved in any trade-related environmental measure.[147]

The Zero Carbon Campaign agreed that the UK would be 'less likely to face a legal challenge if the CBAM has been developed alongside other international partners'.[148] The Brazilian National Confederation of Industry told us that any CBAM should 'be preceded by transparent and open discussions during all drafting stages so that all stakeholders [including] affected trading partners are able to comment and express their views, including with respect to the measure's implementation and operation.'[149]

47. The Financial Secretary to the Treasury told us that if the UK were to introduce a CBAM, the Government would 'take legal advice on it and ensure that it was in line with our international obligations.'[150] She told us that in negotiating and working 'globally to solve this international issue [of climate change]', the Government would need to 'work very closely' with 'countries that have different perspectives and views on climate change'.[151]

Free Trade Agreements

48. WWF observed that 'as policies to meet net zero and nature restoration accelerate, it becomes increasingly important to ensure […] the UK's position as a major importer is levered to encourage a wider transition in environmental production via our supply chains.'[152] The UK is currently undergoing a substantial programme of Free Trade Agreement (FTA)

145 Chemical Industries Association (CBM0003); Citizens' Climate Lobby UK (CBM0007); Institute for Public Policy Research (CBM0009); Deloitte LLP (CBM0021); Green Alliance (CBM0025)
146 Cambridge Institute for Sustainability Leadership (CBM0029)
147 Q28
148 Zero Carbon Campaign (CBM0002)
149 Brazilian National Confederation of Industry - CNI (CBM0019)
150 Q165
151 Q159
152 WWF-UK (CBM0015)

negotiations following exit from the European Union,[153] including accession to the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP).[154] The Climate Change Committee has said that 'the UK's changing global trade relationships at the present time presents an opportunity to stimulate global decarbonisation through trade arrangements' and that 'the growing spread of mid-century territorial emissions Net Zero targets could form a basis for possible [CBAMs]'.[155]

49. Michael Mehling told us that:

> free trade agreements, such as the CPTPP, for instance, into which UK accession is being negotiated, include chapters […] that deal with environmental impacts of free trade. They could offer an opportunity, if amended in the future or for any newly negotiated free trade agreements, to also incorporate some reference that allows the parties to this agreement to implement border carbon adjustments or even goes beyond that and tries to agree or set the starting point for some co-operation on general principles, maybe minimum standards, methodologies and so on.[156]

He noted that while this could provide 'the germinating point for something such as a coalition of the willing or a carbon club', this was 'a distant prospect' given the timescales needed for negotiation, but 'would be an important option for the future'.[157]

50. Contributors also told us it was important for a CBAM to be consistent with existing trade agreements.[158] Michael Mehling told us that as 'the most likely way the UK would implement [CBAM] would be an adjustment based on the UK ETS', 'it would not be perceived as a tariff […]; it would be considered an adjustment for an internal charge or regulation at the border on imports', which 'would not necessitate a renegotiation of existing agreements'.[159]

51. In response to our recent report on the UK and global biodiversity, the Government confirmed that the Secretary of State for International Trade would 'work closely with other government departments to assess the environmental impacts of new FTAs, and to improve their coverage and approach.'[160] While the introduction of a CBAM would not require existing agreements to be renegotiated, we nonetheless consider that it will be important for the Government to conduct analysis into how the UK's carbon border approach might interact with FTAs, so as to understand where there are opportunities to further bilateral and multilateral decarbonisation ambitions. The Minister told us that:

153 Agreements in principle with Australia and New Zealand were reached in 2021, and negotiations from 2022 include: reviews of existing agreements with Canada, Mexico, Switzerland, South Korea, Turkey and Kenya; new negotiations with India, the Gulf Cooperation Council and the Mercosur trade bloc; and ongoing negotiations with the US, and for accession to the CPTPP (National Audit Office, Progress with trade negotiations (December 2021), p. 51)

154 The CPTPP has 11 member states: Australia, Brunei Darussalam, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore and Vietnam (National Audit Office, Progress with trade negotiations (December 2021), p. 51)

155 Climate Change Committee, The Sixth Carbon Budget (December 2020), p. 347

156 Q29

157 *Ibid.*

158 Third Generation Environmentalism (E3G) (CBM0018); Shell International (CBM0023)

159 Q28, Q31

160 Environmental Audit Committee, Fifth Special Report of Session 2021–22, *The UK's footprint on global biodiversity: Government Response to the Committee's Second Report*, HC 1060, p. 7

> Generally we are keen to ensure that FTAs support our climate ambitions. For example, our recent FTA with Australia has an environment chapter that commits both parties to work together to tackle climate change and uphold our obligations under the Paris agreement. I am sure you will be interested in the international schemes that are considering CBAMs of some sort. If we go down that road internationally, that is probably an international agreement outwith a trade agreement, by which I mean separate from: we are not necessarily going to agree to a CBAM within a trade agreement, but obviously we would ensure that we are continuing to meet our net zero ambitions.

52. **The UK is an open, trading economy, and trade can be a powerful lever to drive environmental outcomes. Careful design, alongside inclusive engagement with trading partners, is needed to ensure that any CBAM and wider carbon border approach are aligned with the UK's international obligations and commitments, including the principle of common but differentiated responsibilities and respective capabilities in respect of low- and middle-income country trading partners, as set out in the Paris Agreement and Glasgow Climate Pact.**

53. **As the UK continues to negotiate its own trade agreements following exit from the European Union, there is an opportunity to align trade policy with the UK's role as a leader in climate change action; further analysis is required to understand how the UK's carbon border approach might interact with these negotiations.**

54. ***Our recommendations to Government on the design of the carbon border approach are as follows:***

a) ***to ensure, from the outset, that the carbon border approach is designed to adhere to the principles of common but differentiated responsibilities and respective capabilities set out in the Paris Agreement and Glasgow Climate Pact in respect of low- and middle-income country trading partners. This might be through the CBAM design itself, or through a complementary policy in parallel to the CBAM;***

b) ***to ensure that the UK CBAM is designed in accordance with WTO rules;***

c) ***to establish forums to enable inclusive engagement with trading partners on the design and implementation of the carbon border approach. These should include forums specifically for engagement with low- and middle-income country trading partners; and***

d) ***to conduct analysis to understand how the carbon border approach might interact with free trade agreements.***

The European Commission proposal for an EU CBAM

55. As noted above, the European Commission has published a proposal to introduce a CBAM from 2023. This measure, if adopted by member states and the European Parliament, would apply initially to imports of certain iron and steel, cement, fertiliser and aluminium products, and electricity.[161] Under the proposal, from 2026, following a three-year transition period, EU importers would purchase CBAM certificates closely mirroring the EU Emissions Trading System (ETS) price, to bring the carbon price on imports in line with the carbon price paid by EU producers.[162]

56. The Commission proposal affects the geopolitical landscape for the UK carbon border approach, not least as currently, under the Northern Ireland Protocol, electricity generators in Northern Ireland fall under the EU, rather than UK, ETS.[163] We indicate below three areas for consideration in the design of the UK's own carbon border approach, in light of the European Commission's proposal:

a) Assessment of the impact of the proposed EU CBAM on the UK and communicating this with stakeholders;

b) A requirement for specific engagement with stakeholders in Northern Ireland during the design of the UK's carbon border approach; and

c) A linkage between the UK and EU emissions trading schemes.

Impact on the UK of the proposed EU CBAM

57. It is uncertain at this stage how the proposed EU CBAM, if implemented, might affect the UK. As currently drafted, UK exports of the target products to the EU would not be exempt from the CBAM; the only countries exempt are those within the EU ETS and in Switzerland, which has linked its ETS to the EU ETS.[164] The draft Regulation's explanatory text does note the EU's intention to 'explore possibilities' for concluding agreements [with third countries] to take into account their carbon pricing mechanism', which 'could be considered as an alternative to the application of CBAM in case they ensure a higher degree of effectiveness and ambition to achieve decarbonisation of a sector'.[165]

161 European Commission, Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing a carbon border adjustment mechanism (July 2021), p. 23. On 15 March 2022 the Council of Ministers (ECOFIN) adopted a general approach on the Commission proposal: Council of the European Union, 'Council agrees on the Carbon Border Adjustment Mechanism (CBAM)', 15 March 2022.

162 European Commission, Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing a carbon border adjustment mechanism (July 2021), p. 13, 17. At page 17 it is noted that 'while on the EU ETS market the price of allowances is determined through auctions, the price of CBAM certificates should reasonably reflect the price of such auctions through averages calculated on a weekly basis. Such weekly average prices reflect closely the price fluctuations of the EU ETS and allow a reasonable margin for importers to take advantage of the price changes of the EU ETS while at the same ensuring that the system remains manageable for the administrative authorities.'

163 Cabinet Office, EXPLANATORY MEMORANDUM FOR EUROPEAN UNION LEGISLATION WITHIN THE SCOPE OF THE UK/EU WITHDRAWAL AGREEMENT AND NORTHERN IRELAND PROTOCOL 10871/21 COM(2021) 564: Proposal for a Regulation of the European Parliament and of the Council establishing a carbon border adjustment mechanism (October 2021), para 11.

164 European Commission, Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing a carbon border adjustment mechanism (July 2021), p. 24

165 Ibid., p. 2–3

58. This is a fast-moving picture, dependent on the development of the Commission's legislative proposal during 2022 and on any agreement between UK and EU. Some discussion took place between the UK and EU at the meeting of the Trade Specialised Committee on Goods on 4 October 2021.[166]

59. Northern Ireland is a particular area of complexity; under the Northern Ireland Protocol, electricity generators in Northern Ireland remain within scope of the EU ETS, which applies to five electricity generating installations in Northern Ireland.[167] The European Commission has indicated its intention to propose that the EU CBAM be applied on imports into Northern Ireland, so as to prevent importers using Northern Ireland as a route into the single market and thereby avoiding the EU CBAM.[168] The European Commission has proposed that the EU CBAM be in force from 2023. New EU rules within the scope of the Protocol may indeed be applied to Northern Ireland, but both the EU and UK must agree within the UK-EU Joint Committee governing the Withdrawal Agreement.[169] If the CBAM Regulation were added to the Protocol, it would then be applied to trade between GB and NI, unless an exclusion from the measure were negotiated for GB.[170] The Government's Explanatory Memorandum of October 2021 on the Commission's CBAM proposal says 'it is not yet clear whether and how the CBAM, if the proposal is passed in its current form, would apply in Northern Ireland', and that the Government 'will need to monitor the impact of any such proposals on Northern Ireland, including—in this case—how indirect costs related to electricity are accounted for': under the Protocol, 'the EU would have to ask for UK consent to seek for the CBAM to apply in Northern Ireland.'[171] While the application of the EU CBAM might be treated as a separate issue, we note that it might equally fall to be considered in the overall context of negotiations over any revision of the Protocol.

60. Contributors pointed to the significance of UK exports to the EU,[172] with Richard Warren, of UK Steel, noting that for steel, 'we export between 40% and 50% of everything we make and about 70% of that will go to the EU'.[173] Deloitte told us that where 'UK businesses that trade with countries which do introduce a CBAM', this 'could actually help meet the UK's environmental objectives by encouraging the adoption of low carbon solutions by exporters which may otherwise have not been cost effective or competitive'.[174] Dr Misato Sato told us:

166 Minutes of the first Trade Specialised Committee on Goods, 8th October 2021 (European Commission and UK Government, 15 November 2021): "there was a productive exchange […] on the impact of the proposals on trade in goods, and the Parties noted that domestic decarbonising efforts of third countries would be taken into account by the EU CBAM".

167 Cabinet Office, EXPLANATORY MEMORANDUM FOR EUROPEAN UNION LEGISLATION WITHIN THE SCOPE OF THE UK/EU WITHDRAWAL AGREEMENT AND NORTHERN IRELAND PROTOCOL 10871/21 COM(2021) 564: Proposal for a Regulation of the European Parliament and of the Council establishing a carbon border adjustment mechanism (October 2021), para 11

168 Cabinet Office, Explanatory Memorandum on the Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Directive 2003/87/EC establishing a system for greenhouse gas emission allowance trading within the Union

169 If the UK and EU cannot reach agreement on the addition of new legislation to the list of applicable EU law, the EU may, subject to conditions set out in the Protocol, take remedial measures.

170 European Scrutiny Committee, Thirteenth Report, HC (2021–22) 121–xii, chapter 2 (1 December 2021)

171 Ibid., paras 12, 22, 27

172 Chemical Industries Association (CBM0003); Professor Michael Gasiorek (Professor of Economics at University of Sussex); Dr Camilla Jensen (Senior Research Fellow in International (Economics) at University of Sussex) (CBM0028); Q19; Q118

173 Q73

174 Deloitte LLP (CBM0021)

> The economic impact is likely to be not very big. The UK carbon price is currently higher than Europe's. It is likely to be credited by the EU CBAM, such that for the basic material exports the CBAM covers it will probably not have to pay the EU CBAM when exporting from the UK.
>
> However, there could be some high administrative costs that could accumulate, especially in some imported supply chains, integrated value chains that cross the border or the channel several times. Blanket exemption is quite unlikely but there might be some targeted exclusions. For example, in the electricity sector in Northern Ireland, which is integrated into the EU's electricity market, there will be potential for exemption.[175]

She added that as the EU CBAM formed part of a wider package (the 'Green Deal')[176] of support strategies for industrial decarbonisation, 'ensuring that a similar level of support for decarbonisation is provided to UK industry on this side will have a very important impact on UK competitiveness'.[177]

61. Contributors also raised concerns that the EU's CBAM might result in high-carbon products covered by the EU CBAM, such as high-carbon steel or cement, produced in countries outside the EU being re-directed and imported instead into the UK;[178] the Mineral Products Association told us an equivalent UK CBAM would be needed to prevent this.[179] Richard Warren, of UK Steel, said that while additional payments in respect of CBAM certificates would not be required for UK products entering the EU initially 'provided the UK carbon price was at a comparable level to the EU's', this might change 'as the EU ramps down its free allocation, if the UK were not to follow suit and was to continue with levels […] that were higher than the EU's'.[180]

62. In the Industrial Decarbonisation Strategy, the Government has indicated that it 'will work with business, academic and government stakeholders in the EU and UK to understand how [an EU CBAM] would affect UK industry, and [is] committed to ensuring […] businesses do not face any unreasonable barriers to trade, given the UK and EU's shared high levels of climate ambition.'[181] However, little detail is available of

175 Q25
176 European Union, European Green Deal: Commission proposes transformation of EU economy and society to meet climate ambitions, accessed 17 November 2021
177 Q25. The European Commission has not published any assessment of the potential impact of its proposal on the UK. The Government's explanatory memorandum on the Commission proposal, prepared in October 2021, observed that "whilst HM Government will continue to track all elements of the CBAM design throughout this process to understand possible impacts on the UK, there are no plans to undertake an Impact Assessment for this instrument".
178 Zero Carbon Campaign (CBM0002); Chemical Industries Association (CBM0003); Mineral Products Association (CBM0014); Trade Justice Movement (CBM0016); Q74; Q76
179 Mineral Products Association (CBM0014)
180 Q73
181 GOV.UK, Industrial Decarbonisation Strategy (March 2021), p. 36

the Government's assessment of the potential impact of the EU CBAM on UK industry.[182] Lucy Frazer told us:

> We are following the development of the EU CBAM very closely. Obviously, that might have an impact on UK exporters and manufacturers. […] We would expect the EU to take our ETS into account. Of course, our scheme is modelled on their scheme. If we were doing everything that they were doing under their scheme and the price were similar, we would expect them to take our own scheme into account when they bring in their CBAM.[183]

Similarly, only limited information is available on the nature of the UK's engagement with the EU on the proposed legislation, with minimal detail available on the content of discussions held between the UK and EU at meetings in July, October and November 2021.[184] Mike Williams, Director, Business and International Tax at the Treasury, told us:

> In the spirit of being neighbours, because the UK and EU are very interested in this, we talk to the Commission about quite a lot of the international tax

182 In its Explanatory Memorandum, the Government said 'the impacts that [the EU CBAM] will have on the UK—including on Northern Ireland—will depend on the final design of the measure, which is likely to change as the EU's legislative procedure progresses' and that the Government 'will continue to track all elements of the CBAM design throughout this process to understand these impacts'. The Government said that under the initial proposal, 'any burden of additional administrative costs caused by the CBAM that would apply to UK businesses would be proportionate to the relevant industrial concentration within UK regions', but did not provide any detail on how this assessment had been reached. The Government also said that 'whilst HM Government will continue to track all elements of the CBAM design […] to understand possible impacts on the UK, there are no plans to undertake an Impact Assessment for this instrument.' (Cabinet Office, EXPLANATORY MEMORANDUM FOR EUROPEAN UNION LEGISLATION WITHIN THE SCOPE OF THE UK/EU WITHDRAWAL AGREEMENT AND NORTHERN IRELAND PROTOCOL 10871/21 COM(2021) 564: Proposal for a Regulation of the European Parliament and of the Council establishing a carbon border adjustment mechanism (October 2021), paras 14, 28 and 35). In a recent letter to the Chair of the European Scrutiny Committee, the Energy Minister said the Government was 'working to build a full understanding of the implications of the proposal, as currently drafted, on the UK', without providing any further detail, for instance on how it was working with business, academic and government stakeholders in the EU and UK in building this understanding. (Cabinet Office, Letter from the Minister of State for Energy, Clean Growth and Climate Change to the Chair of the European Scrutiny Committee, 16 December 2021).

183 Q166

184 The EU's CBAM proposal and draft legislation was published on 14 July 2021 (European Union, European Green Deal: Commission proposes transformation of EU economy and society to meet climate ambitions, accessed 17 November 2021). On 15 July 2021, the EU CBAM was discussed at a meeting of the Joint Consultative Working Group, in which 'the EU informed the UK that it considers the measure to be new legislation in scope of the [Northern Ireland] Protocol' (Cabinet Office, EXPLANATORY MEMORANDUM FOR EUROPEAN UNION LEGISLATION WITHIN THE SCOPE OF THE UK/EU WITHDRAWAL AGREEMENT AND NORTHERN IRELAND PROTOCOL 10871/21 COM(2021) 564: Proposal for a Regulation of the European Parliament and of the Council establishing a carbon border adjustment mechanism (October 2021), para 4). In October 2021, at a meeting of the Trade and Cooperation Agreement (TCA) Trade Specialised Committee on Goods, the EU proposal was presented to the UK and 'there was a productive exchange […] on the impact of the proposals on trade in goods, and the Parties noted that domestic decarbonising efforts of third countries would be taken into account by the EU CBAM', and the UK and EU 'agreed to hold further informal technical discussions' (European Union, Minutes of the first Trade Specialised Committee on Goods, 8th October 2021, para 6). In December 2021, the Chair of the European Select Committee wrote to the Energy Minister to request further detail on the timing and nature of those informal technical discussions and how the Government intended to communicate progress; when the Minister's response did not contain this detail, the Chair reiterated this request in a further letter in February 2022. (European Scrutiny Committee, Thirteenth Report of Session 2021–22, Documents considered by the Committee on 1 December 2021, HC 121-xii, para 2.27; European Scrutiny Committee, Seventeenth Report of Session 2021–22, Documents considered by the Committee on 9 February 2022, HC 121-xv, para 2.8). In his reply of 16 March 2022 the Energy Minister confirmed that Treasury officials had met their European Commission counterparts in November 2021 to discuss details of the Commission proposal: the conversation had 'focused on bettering the UK's understanding of the proposed Regulation, including which elements of the CBAM would likely be implemented through secondary legislation later in 2022.'.

> agenda, for example. We also talk to countries that are member states of the EU, because plainly the CBAM will not pass unless the member states sign up to it. The sort of things we have talked to them about are the WTO compatibility, which was mentioned just now and is clearly a very important issue. Just as the UK would have to abide by its international obligations, so would the EU—they are basically similar obligations. There is a question about how we do the measuring and how far you go with the measuring. If you do not want to grind exceedingly small, you have got to have some sort of de minimis or point at which you stop. If different countries have a different point, then the manufacturer of the goods is faced with coping with different tracking for different countries. And then there are the wider sectors. Why has the EU gone initially for the sectors that it has gone for in its proposed [Regulation]?[185]

63. **In our view, the Government's commitment to work with stakeholders to understand the potential impact of an EU CBAM on UK industry and ensure no unreasonable barriers to trade is welcome. Given the potential UK impacts, clarity is needed on how the Government intends to do this, and urgently, given that the proposed EU CBAM is intended to be fully in effect from the mid-2020s.**

Northern Ireland

64. As noted above, Northern Ireland electricity generators remain in the EU ETS, while the remaining industries are covered by the UK ETS.[186] As the European Scrutiny Committee observed in a recent report, this adds complexity for the EU CBAM over the carbon price, and it is unclear currently how this will be resolved.[187] Contributors noted that this causes complexity for a UK CBAM too.[188] Accordingly, it is important that there should be specific engagement with stakeholders in Northern Ireland and the EU in the design of the UK carbon border approach.

Linking the UK and EU ETS

65. Under the Trade and Cooperation Agreement, the UK and EU agreed to 'give serious consideration to linking their respective carbon pricing systems in a way that preserves the integrity of these systems and provides for the possibility to increase their effectiveness'.[189] This could be a lengthy process; currently, only Switzerland has linked its ETS with the EU ETS, following ten years of negotiations.[190] The European Scrutiny Committee has described linking the emissions trading schemes as 'the easiest way to

185 Q167

186 Cabinet Office, EXPLANATORY MEMORANDUM FOR EUROPEAN UNION LEGISLATION WITHIN THE SCOPE OF THE UK/EU WITHDRAWAL AGREEMENT AND NORTHERN IRELAND PROTOCOL 10871/21 COM(2021) 564: Proposal for a Regulation of the European Parliament and of the Council establishing a carbon border adjustment mechanism (October 2021), para 11.

187 European Scrutiny Committee, Thirteenth Report of Session 2021–22, Documents considered by the Committee on 1 December 2021, HC 121-xii, para 2.11

188 RWE (CBM0001); Trades Union Congress (CBM0024)

189 GOV.UK, TRADE AND COOPERATION AGREEMENT BETWEEN THE EUROPEAN UNION AND THE EUROPEAN ATOMIC ENERGY COMMUNITY, OF THE ONE PART, AND THE UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND, OF THE OTHER PART (December 2020), Article 7.3: Carbon pricing, para 6

190 Cambridge Institute for Sustainability Leadership, On the Borderline: The EU CBAM and its place in the world of trade (October 2021), p. 53

mitigate the impact of EU CBAM on the UK'.[191] Dr Sanna Markkanen told us that 'linking the UK ETS to the EU ETS […] would afford exemption to UK producers [from the EU CBAM] and remove all administrative costs as well' making it economically beneficial and 'potentially quite helpful for especially smaller producers in the UK'.[192] Shell told us that a 'standalone UK ETS might be more exposed to the risks of carbon leakage' and that in 'a less liquid UK market, linking the UK and EU ETS is the best way to reduce market instability and volatility.'[193] RWE noted that linking the systems 'would provide a model for further linking and expansion of carbon markets with international trade partners and, if necessary, allow the UK and EU to coordinate their CBAMs to incentivise trading partners to adopt carbon markets.' Paul Dawson, of RWE, told the Committee that linking the systems would be the best way to 'overcome the complexity' in calculating an accurate carbon price in imports of electricity between the EU and UK.[194]

66. The Grantham Research Institute observes that while the 'benefits of high convergence are clear […], that does not mean there are not risks' to linking, although it considers these to be outweighed by the benefits:

> The UK may become linked to a market without a say over how it is governed, in other words it may be a 'rule taker'. There is also the possibility that EU carbon prices may become lower than a counterfactual UK ETS, which could undermine UK decarbonisation efforts. Given the reforms to the EU ETS, however, this scenario looks unlikely. On balance, given that the UK has opted for an emissions trading scheme (rather than a carbon tax), the benefits of linking far exceed these risks.[195]

Dr Richard Leese, of the Mineral Products Association, told us that the assessment of benefit versus risk for the mineral products sector 'depends on which products you are talking about':

> We have a particular issue with lime production in the UK. It is subject to an EU benchmark that was determined by a small number of plants in a small area of Europe with special circumstances and access to biomass. When you add in the cross-sectoral correction factor in the EU ETS, that means that UK lime production is not getting enough allocation even to produce lime above the technical limitations of lime production, which involve process emissions. There are specific circumstances where linking would be massively problematic albeit that overall, for many sectors, linking is the right answer.[196]

191 European Scrutiny Committee, Thirteenth Report of Session 2021–22, Documents considered by the Committee on 1 December 2021, HC 121-xii, para 2.22

192 Q27

193 Shell International (CBM0023). This was echoed by Richard Warren, of UK Steel, who told us the UK steel sector has 'a higher price and smaller market and that leads to easier manipulation of the market, less liquidity' and that 'linking with the EU ETS is definitely the steel sector's goal,' and Paul Dawson, of RWE, who told us the 'UK price is very fragile and responds to sentiment' and that 'coupling with the EU creates a more reliable price, more market liquidity [making it] easier to manage the risks'. (Q79)

194 Q62

195 Grantham Research Institute on Climate Change and the Environment, What does an EU Carbon Border Adjustment Mechanism mean for the UK? (April 2021), p. 28–29.

196 Q79

Rich Woolley, of the Chemical Industries Association, told us this was also the case for chemicals manufacturing:

> We have one sub-sector with a benchmark that would have particular problems under the EU scheme. Otherwise, we see the benefits as [Dr Richard Leese] outlined—greater liquidity and a level playing field with European competitors—but we can also see the disadvantage that the UK cannot account for its own unique circumstances in its energy transition if it is not in control of policy setting for its carbon pricing. There are benefits and risks to linking.[197]

67. The Government has included 'exploring linking with other schemes internationally' within its planned actions under the Industrial Decarbonisation Strategy in 2021/22'[198] and has said it 'is open to linking the UK ETS internationally in principle and is considering a range of options, but no decision on any preferred linking partners has yet been made'[199] When we asked what progress had been made to link the UK ETS and the EU ETS, Lucy Frazer told us the Government remained 'open to the possibility of linking the schemes, but we are not yet at that point'.[200] Mike Williams told us:

> It is then a question of mechanics. If you are linked, then how do you ensure there isn't a double charge, say, if you pay in one country and it is then moved into the UK, or the other way around? That is the main issue. If you are not linked but in effect you are trying to do the same thing by different means, why should we necessarily adopt the same mechanism, and how do you avoid double taxation—double charges—even within that system? […] In a sense, that is a challenge that the international tax system has to cope with at the moment. Sometimes you address it by exemption, and you say that because tax is likely to have been paid somewhere else you do not need to do anything in the UK. In other circumstances, you say, "Well, we're not satisfied with that so we will charge you in the UK, but we will give you credit for the foreign tax." So, there are precedents that we can draw on, whether we are linked to the ETS or not.[201]

Our view

68. In our view, prioritising the linkage of EU and UK carbon pricing systems would have the beneficial effect of removing any impact from the EU's CBAM on UK exporters, as well as resolving the complexity around the treatment of electricity imports to and exports from Northern Ireland. The specific nature and scope of the linking agreement[202] would be determined via negotiation between the UK and EU. Given the evidence we have received of product-specific impacts within sectors, it will be important for the Government to consult with UK stakeholders as an essential first step, so as to understand the different issues at stake across sectors.

197 Q79
198 GOV.UK, Industrial Decarbonisation Strategy (March 2021), p. 100
199 GOV.UK, Net Zero Review: Analysis exploring the key issues (October 2021), p. 75
200 Q168
201 Q168; Q169
202 For illustration, the ETS linking agreement between Switzerland and the EU is available here: European Union, Agreement between the European Union and the Swiss Confederation on the linking of their greenhouse gas emissions trading systems (December 2017).

69. **It is at present unclear how the proposed EU CBAM might impact the UK, particularly Northern Ireland, where electricity generators are currently under the scope of the EU's ETS. We understand that this is a dynamic discussion which depends on wider continuing negotiation between the UK and EU, as well as developments in the proposed EU CBAM. It is nevertheless important that UK stakeholders are kept informed.**

70. **The Government has committed to ensuring businesses do not face any unreasonable barriers to trade; further detail would be welcome on how it plans to work with stakeholders in the EU and UK to achieve this. Given that electricity generators in Northern Ireland are under the scope of the EU ETS, it will be important to work with stakeholders to understand how this might interact with the UK CBAM and wider carbon border approach.**

71. **The UK and EU have agreed to consider linking the UK and EU ETS systems, which would exempt UK producers from the EU's CBAM (and vice versa), simplifying administrative processes for UK-EU trade; as linking can be a lengthy process, it is important for exploratory work to commence on this now. This may also be a welcome sign that there is a political recognition on both sides that linkage of CBAM schemes in due course could be achievable.**

72. ***We recommend that the Government:***

a) ***set out in its response to this report:***

i) ***how it intends to work with stakeholders in the EU and UK to understand how the proposed EU CBAM, would affect the UK, including in Northern Ireland; and***

ii) ***how it intends to ensure open and transparent communication on progress on its actions to ensure businesses do not face any unreasonable barriers to trade, to provide greater clarity to UK industry;***

b) ***engage directly with affected stakeholders in Northern Ireland and the EU during the design stage of any UK carbon border approach, and***

c) ***before the end of 2022, launch a consultation on measures to link the UK and EU emissions trading schemes.***

3 Further design considerations

Sectors and objectives

73. The report of the Treasury's Net Zero Review notes that 'while carbon leakage risks can be mitigated, a one size fits all approach should be avoided':

> […] the specifics of sectors vary a lot, even among those that are tradeable and carbon-intensive. Therefore, a policy response that works for one sector, will not necessarily be appropriate for another sector. At the same time, parity of policy approach is important to avoid shifting demand between sectors - balancing these risks will be important as the UK develops its policy approaches.[203]

As we concluded in Chapter 1, the UK's carbon border approach should consist of a co-ordinated set of policies, including CBAM and product standards. The approach must be able to cover the range of imported products with the most appropriate choice of policy response applied in each case. It must also ensure that the approach is inclusive of trading partners, including low- and middle-income country trading partners, as discussed in Chapter 2 above, and considers the impact on consumers, including vulnerable and low-income households, as we discuss below. So as to meet these objectives, supporting policies may be needed as part of the carbon border approach, where these policy objectives cannot be met through the design of a CBAM or through product standards themselves.

74. This section highlights three aspects to be considered in navigating the design of the carbon border approach to ensure it meets the needs of all sectors while delivering its environmental objectives:

- The need to define objectives from the outset, and to use these objectives to inform design choices;
- Consultation with stakeholders through dedicated forums, and impact assessments for sectors and their supply chains; and
- Consideration of effects on small and medium-sized enterprises and on end users, including consumers.

Defining objectives

75. In designing any UK CBAM and wider carbon border approach, the Government will need to make a series of decisions between different design considerations. Some of these considerations have already been set out in the literature we have reviewed:[204]

- whether the CBAM is applied as a traditional carbon tax or extension of the UK's ETS;

203 GOV.UK, Net Zero Review: Analysis exploring the key issues (October 2021), p. 42

204 For example, Alice Pirlot, Carbon Border Adjustment Measures: A Straightforward Multi-Purpose Climate Change Instrument?, Journal of Environmental Law, eqab028 (2021), pp. 1–28, and Michael A. Mehling, Harro van Asselt, Kasturi Das, Susanne Droege, and Cleo Verkuijl, Designing Border Carbon Adjustments for Enhanced Climate Action, The American Journal of International Law, vol. 113:3 (2019), pp. 433–481

- which carbon-intensive imports are best addressed by carbon pricing through the CBAM, and which are best addressed via other mechanisms, such as product standards;
- the treatment of exports;
- the scope and calculation of an import's carbon footprint, including whether to consider only direct emissions or extend to indirect emissions, whether to measure actual emissions or apply a default value, and the methodology for calculating any default value;
- how to account for any explicit carbon price already levied on the import in the exporting jurisdiction, and how to treat imports from countries with implicit forms of carbon pricing; and
- how to allocate the revenue generated by a CBAM.

76. Regarding **product coverage**, a number of contributors told us that CBAM should apply initially on imports of basic industrial materials, such as iron, steel, cement, aluminium, fertiliser and petrochemicals, and pulp and paper,[205] which contributors told us: faced the greatest carbon leakage risk owing to traditionally high-carbon manufacturing techniques and trade exposure;[206] were covered by the UK ETS and thus would represent an extension of the UK's domestic carbon pricing to imports;[207] and for which the calculation of embodied carbon was the least technically complex.[208] Contributors also highlighted the risk that applying CBAM to basic industrial goods might simply transfer the carbon leakage risk to semi-finished and finished goods further down the value chain;[209] Domien Vangenechten, of E3G, said product standards on such goods might be a 'more suitable [way] to address potential carbon leakage issues in sectors down the value chain.'[210] RWE and National Grid Ventures told us that complexity in measuring the carbon content meant electricity was not well suited for inclusion in the CBAM;[211] RWE suggested that linking the EU and UK ETS would be a preferable option for electricity.[212] WWF told us CBAM would not be suitable for food imports, as 'accounting for [greenhouse gas] emissions, but not impacts on biodiversity, water pollution, soil quality, etc., could lead to perverse outcomes', proposing that product standards would be more appropriate and effective.[213]

77. Regarding **the treatment of exports**, several contributors called for the CBAM to consider exports from, as well as imports into, the UK by refunding the carbon price paid by domestic producers for exports.[214] Dr Misato Sato, of the Grantham Research Institute on Climate Change and the Environment, told us that 'reimbursing carbon costs

205 RWE (CBM0001); Zero Carbon Campaign (CBM0002); Professor Michael Gasiorek (Professor of Economics at University of Sussex); Dr Camilla Jensen (Senior Research Fellow in International (Economics) at University of Sussex) (CBM0028); CCm Technologies (CBM0030); Q17; Q33

206 RWE (CBM0001); Third Generation Environmentalism (E3G) (CBM0018); Shell International (CBM0023)

207 Mineral Products Association (CBM0014)

208 Zero Carbon Campaign (CBM0002); Third Generation Environmentalism (E3G) (CBM0018)

209 Q23; Q47; Q57; Q100

210 Q41

211 RWE (CBM0001); National Grid Ventures (CBM0013)

212 RWE (CBM0001)

213 WWF-UK (CBM0015)

214 Mineral Products Association (CBM0014); Dr Dominic Hogg (Director at Equanimator Ltd) (CBM0022); Shell International (CBM0023); Q56; Q57

for exporters is quite controversial', 'contradicts with the domestic policy goal of driving forward carbon neutral production', and 'might be challenged under the WTO law,' although 'on the other hand, if the exporters are not reimbursed, the leakage risk would still remain'.[215] Michael Mehling, of the University of Strathclyde and Massachusetts Institute of Technology, told us 'international WTO rules on prohibited subsidies make it very hard to exempt exports or to rebate or credit exports'.[216] Mike Williams, Director, Business and International Tax at the Treasury, told us there were 'more constraints' around the treatment of exports, 'because the bar to a Government, a state, intervening in the market is greater with exports.'[217]

78. Regarding **the treatment of imports from jurisdictions with different forms of carbon pricing**, Rich Woolley, of the Chemical Industries Association, told us that including 'measures in third-party countries that are not carbon prices […] as a comparative to a carbon price' would 'not create the level playing field we are looking for and it [would] not effectively apply a carbon price to third markets.'[218] In contrast, the Brazilian National Confederation of Industry told us any CBAM should 'ensure that efforts and policies to reduce emissions made by other countries and foreign companies will be taken into account when establishing any mechanism, even if these efforts are not related to carbon pricing'.[219] Michael Mehling recommended 'flexibility and leeway', as 'many different countries have slightly different approaches to carbon-intensity determination standards or methodologies' and that 'there are some international standards but, by and large, most of them achieve the same outcome.'[220] He added that 'giving a bit of flexibility rather than requiring only a strict UK-based sort of approach might also help to lower resistance and opposition'.[221]

79. Regarding **the allocation of revenue generated by CBAM**, contributors expressed a range of views. The Mineral Products Association told us it 'could be used to offset other taxes or costs'.[222] Several contributors suggested the revenues be used to support decarbonisation,[223] including in low- and middle-income countries,[224] as discussed in Chapter 2 above. The Citizen's Climate Lobby UK suggested the revenue be used to 'ensure public support' through a universal dividend or for 'popular environmental policies such as free public transport'.[225] E3G told us that 'if a CBAM is effective it should catalyse climate action internationally leading to declining revenues as countries invest in cleaner production processes' and 'for both these practical, as well as political reasons, a UK CBAM should not be framed as a fiscal measure.'[226]

80. Given the range of options open to the UK in the design of the carbon border approach, including in the CBAM, it will be important for the Government to define

215 Q23
216 Q36
217 Q152
218 Q57
219 Brazilian National Confederation of Industry - CNI (CBM0019)
220 Q28
221 Q28
222 Mineral Products Association (CBM0014)
223 Zero Carbon Campaign (CBM0002); Chemical Industries Association (CBM0003); Third Generation Environmentalism (E3G) (CBM0018); Shell International (CBM0023); Q57
224 Zero Carbon Campaign (CBM0002); Citizens' Climate Lobby UK (CBM0007); Third Generation Environmentalism (E3G) (CBM0018); Q42
225 Citizens' Climate Lobby UK (CBM0007)
226 Third Generation Environmentalism (E3G) (CBM0018)

from the outset what its objectives are, in order that the choice of design feature might be guided by these objectives, to ensure an effective policy response. The Government's objectives in establishing any CBAM must encompass the need to drive decarbonisation across the economy to address climate change, whilst minimising any adverse impacts on low- and middle-income countries, vulnerable households and wider environmental goals.

Engagement with industry

81. To inform its design choices, it is important that the Government consult with all levels of industry and conduct impact assessments covering different sectors, to ensure the design of the carbon border approach, including a CBAM, product standards and supporting policies, reflects the diversity of industry at all stages of the value chain and that the most appropriate policy instrument is used in each case; for transparency, the results of these impact assessments should be shared with industry.

82. The Chemical Industries Association told us:

> Industry needs to be involved in the design of a CBAM. The Industrial Decarbonisation Strategy and [the] CCC's 6th Carbon Budget both advocate consideration of a UK CBAM. Yet, aside from this inquiry there has been no open engagement with stakeholders on this topic, from BEIS or the Treasury. Industry is keen to work with the government to ensure the design of any CBAM allows UK manufacturing sites to remain globally competitive whilst decarbonising their operations.[227]

83. Contributors also told us that engagement was important to understand the timescales in which policies should be implemented. Richard Warren, of UK Steel, observed that

> [a key element of engagement] is planning and the trajectory that the Government have in mind for decarbonisation of key sectors. The Government have set an informal or unofficial target of 2035 to have most of steel production decarbonised, certainly the big blast furnace sites in Port Talbot and Scunthorpe. Government would need to introduce the CBAM to fit in with that timetable and I think the UK has an advantage here. In the EU, 27 countries to a certain extent had a CBAM foisted upon them that did not necessarily fit in with their national decarbonisation plans. The UK has the ability here to say, "This is our trajectory, this is our plan for each sector, let's design a CBAM that fits in with that timetable."[228]

Regarding engagement with importers and downstream industries, Fergus McReynolds, of Make UK, told us:

> It is that tandem of making sure that we recognise […] a system of calculating embedded carbon that works with the grain of business. I think it is about understanding how we create the right timeframe for the development of this process and allow businesses time to adjust to that. One of the biggest elements to this is working with the grain in how long it would take a process to take place. How long and how complex a product is to calculate its impact

227 Chemical Industries Association (CBM0003)
228 Q67

> with carbon, and working with that grain and the gradual introduction. Rather than looking at fixed term points in time for introducing things, introduce them in a timeline that meets the requirements of how long it will take that individual industry or those individual businesses to adjust.[229]

84. On the process for this engagement, Dr Scott Steedman, of the British Standards Institution, told us:

> I would like to suggest that, as we emerge or learn to live with [covid-19] and coming to a digital economy, we change the model by which we do this. We talk about timelines and stages and actually we do not have time for that. […] approaching this in a systems way is a much more productive and rapid way of reaching a consensus with the community—the SME community, the consumer community, the environmental community, Government, academics and so on. That idea that you approach it using the regulator, the relevant Departments, industry, academics and consumers all in one go, [which] has been very effective in a range of specific issues in the last two years. I suggest that this is an ideal candidate […]. You get them all into a room together, convene that community and design the system to get the outcome you want, incentivising SMEs not to have to do paperwork if they change their behaviour, that kind of approach.[230]

We note that such an approach could build on the successful recent experience of the Government's Green Jobs Taskforce, which was convened by Ministers from two Departments and brought together representatives from industry, trade unions and the skills sector.[231]

Effects on small and medium-sized enterprises

85. We have heard that SMEs, which make up 'the vast majority of manufacturing firms' in the UK,[232] could be particularly affected by carbon border measures. Green Alliance told us that 'smaller businesses are likely to face a disproportionate burden, having fewer resources available for extra administrative work.'[233]

86. Dr Sanna Markkanen noted that 'SMEs are less likely than big corporations to be able to redesign and adjust their production processes to increase the material efficiency in their production or to use alternative materials instead', and that in the UK, this could impact SMEs 'in the construction sector' or those which 'produce a very significant component that is used in automotive manufacturing or other industries where, let's say, 80% to 90% of this specific component are materials that would be covered by CBAM.'[234] She added that SMEs in low- and middle-income countries producing low-carbon products 'might be very adversely impacted' by the administrative costs of demonstrating their production was low-carbon,[235] as noted above in Chapter 2. Accordingly, it is important that the impact on SMEs be considered, and the specific needs of SMEs incorporated into the

229 Q126
230 Q126
231 GOV.UK, Green Jobs Taskforce, accessed 23 February 2022
232 Q124
233 Green Alliance (CBM0025)
234 Q34
235 Q34

design of the approach.

87. To design a system that works for SMEs, Fergus McReynolds told us it was important to have a system 'low in the bureaucracy associated with it but, equally, ensuring that there is a level playing field':

> If we have a system that is recognised, a system where industry is part of the process, […] that is developed in a way that is easy for businesses to input and to use, you create the systems that allow businesses to bed this into their operations. What is important is not to create undue complexity, not creating an unlevel playing field, so creating a set of requirements that one set of SMEs will have to fulfil and another set of SMEs will not when they are selling the same product. That level playing field is important here, but working hand in hand with industry to develop that.[236]

He added that another important element for SMEs was designing a system where there was not 'continuous change', as:

> It is simpler for a business to embed a process and for that to become business as usual. To consistently change is the challenge that SMEs find because […] SMEs are often time poor in personnel and they often lack, in some senses, the knowledge and skills to be able to do that correctly. Therefore, a robust system that is developed with us, that applies to both us and our competitors, and a system that does not change regularly is important for SMEs.[237]

88. **As the report of the Treasury's Net Zero Review notes, there can be no one-size-fits-all mechanism to address carbon leakage risks. The UK's carbon border approach needs to comprise a set of complementary policies, designed to drive industrial decarbonisation in the UK and globally. A CBAM will be an important lever to support decarbonisation in key foundational sectors; complementary mechanisms such as standards, regulation and support for low-carbon technologies are also required to drive this change across the economy.**

89. **To navigate the design options available and ensure a policy response that is effective in achieving its objectives, it is important that the Government articulate from the outset the objectives of the UK's carbon border approach, so that the design is led by these, and understand the potential impacts to industries across all sectors of the economy and at all stages of the value chain, to ensure effective policy responses and implementation. This should include assessment of the impact on SMEs.**

90. ***We recommend that the Government:***

a) ***clearly define its objectives for any carbon border approach at the outset, and ensure the choice of policy options and design consideration at each stage is led by these objectives. These should encompass the need to drive decarbonisation across the economy to address climate change, whilst ensuring low- and middle-income countries, vulnerable households and wider environmental goals, such as nature, are not adversely impacted;***

236 Q124
237 Q124

b) ***during the design stage of the carbon border approach, engage with industrial stakeholders and conduct impact analysis across sectors, so as to understand the most effective policy instruments and implementation timescales for each sector and ensure industries at all stages of the value chain, including end users, are involved in the design of the carbon border approach. This engagement should be conducted through specific forums which bring stakeholders, including industry, academics, the environmental community and consumer groups, together alongside representatives from all relevant Government departments.***

c) ***carry out a specific assessment of the impact on SMEs during the design phase of the carbon border approach, and set up a forum for engagement with SMEs. The UK's carbon border approach should also include a plan for communicating changes with SMEs and should ensure that ease of administration is built into design.***

Effects on consumers

91. As we noted in Chapter 1, explicit carbon pricing works by applying a price, either fixed or market-driven, to a product proportionate to the amount of carbon dioxide emitted in its production; high-carbon products attract a higher carbon price than low-carbon products. If these costs are passed through from the producer, high-carbon products become more expensive than their low-carbon equivalents.[238] As contributors have noted, this pass-through of the carbon price incentivises downstream industries and consumers to opt for lower-carbon products, which reduces consumption emissions while also increasing the demand for low-carbon products, driving investment in their development.[239]

92. Contributors told the Committee that the current system of free allocation of ETS allowances[240] prevents this pass-through of the carbon price to the consumer.[241] The Mineral Products Association told us that if UK energy intensive industries were to pass through these costs, consumers could 'switch to cheaper imports'.[242] Mike Thompson, of the CCC, told us that carbon border measures such as CBAM and product standards could address this and simultaneously contribute to lower UK production emissions by supporting effective carbon pricing:

> We came at CBAMs and product standards from the perspective of territorial emissions. We were coming at it from the view that this would allow us to do more in the UK to cut our territorial emissions—our UK-produced emissions—because it would allow us to have a higher carbon price without that free allocation and, therefore, with a pass through to the final consumer.[243]

238 Mineral Products Association (CBM0014); Third Generation Environmentalism (E3G) (CBM0018); Q13; Q42; Q50
239 Mineral Products Association (CBM0014); Third Generation Environmentalism (E3G) (CBM0018)
240 The Government's current approach to anti-carbon leakage, including free allocation of ETS allowances, is set out above in Chapter 1.
241 Mineral Products Association (CBM0014); Q42
242 Mineral Products Association (CBM0014)
243 Q42

93. Contributors differed in their assessment of how far the carbon price might be passed on to end consumers if the UK were to implement a CBAM. E3G considered that 'given the nature of the products that will likely be covered by a CBAM, basic industrial materials, impacts on consumers will be minimal', with only 'a fairly small impact' on the overall cost of final products such as cars or houses.[244] Fergus McReynolds, of Make UK, told us there would be 'a downstream pressure to increase price[s]', while recognising that not every industry would be able to pass its costs on to its consumers.[245] Dr Sanna Markkanen said that while manufacturers would 'most likely pass on [the] increased material cost to their consumers', manufacturers and the construction sector might mitigate the pass-through of carbon costs to end consumers by substituting for alternative materials or improving the material efficiency of their production processes.[246] Dr Markkanen added the caveat that material substitution 'could result in some unintended market distortions'. We note that substitution of high-carbon materials for lower carbon alternatives, or improving resource efficiency, is part of how effective carbon pricing contributes to better outcomes for climate change as described at the start of this section, noting that there will still be a role for monitoring and regulation to ensure any unintended market effects do not result in negative environmental consequences.[247]

94. Any pass-through of carbon costs to end consumers must be assessed in the context of the current stark increases in the cost of living, where increases in the global gas price have had a knock-on impact on electricity prices and inflation, hitting low income households particularly hard.[248] Contributors highlighted the importance of engaging the public in the design of the policy, and the need for impact assessments, to better understand societal impacts.[249] The Trade Justice Movement told us that:

> a CBAM should be developed with full consultation of those affected; not just UK citizens, but also developing country voices including civil society […] As part of the design of the CBAM, there should be a full assessment of how it might affect vulnerable workers, and who ends up bearing the brunt of the taxation. The methods for assessing carbon emissions in production should be made clear and open to challenge, ideally involving both civil society and academic experts.[250]

95. Hannah Dillon, of the Zero Carbon Campaign, noted that, notwithstanding the need for 'interventions […] particularly at the vulnerable and low-income household level',[251] carbon pricing could help 'increase access to low carbon products' as 'they will be cheaper than high-carbon products', and that there was an opportunity for policy to 'make sure that as many people as possible […] have access to the net-zero transition and are able to

244 Third Generation Environmentalism (E3G) (CBM0018)
245 Q120
246 Q34.
247 This is discussed further in 'Co-ordination' below.
248 Rising cost of living in the UK, Research Briefing Number 9428, House of Commons Library, January 2022, p. 4, 7, 9; Office for National Statistics, Energy prices and their effect on households, accessed 14 February 2022
249 Zero Carbon Campaign (CBM0002); Trade Justice Movement (CBM0016); Shell International (CBM0023)
250 Trade Justice Movement (CBM0016)
251 Analysis within HM Treasury's Net Zero Review finds that 'higher income households consume more carbon than lower income households in absolute terms, but less relative to their income', therefore 'untargeted policies are likely to lead to taxpayers providing most support to the wealthiest and most polluting households to reduce their emissions, because they emit more in absolute terms'. HM Treasury concludes that instead, 'reflecting the significant variation in household characteristics within income deciles, public spending should be targeted at specific decarbonisation measures for low-income households.' GOV.UK, Net Zero Review: Analysis exploring the key issues (October 2021), p. 46–47, 49.

benefit from it, regardless of circumstance.'[252]

96. The report of the Treasury's Net Zero Review confirms the Treasury's intention to minimise consumer impacts in the design of any anti-carbon leakage policies.[253] When we asked whether the Government had done any modelling on how CBAM might impact households, Mike Williams, Director, Business and International Tax at the Treasury, told us:

> In reality, we have not got that far. […] the Government are looking at the CBAM; we haven't got to that. Of course, in considering introducing a new tax, we would try to work out not only who, up front, paid the tax, which would probably be the importer if you had the CBAM, but who would ultimately bear the burden of that tax. We do do distributional analyses.[254]

On building wider public consensus, Lucy Frazer told us:

> on the broader question about climate change […] and its impact on the individual, in financial terms—I think there is an acceptance across the board, including politically, that, absolutely, we must deal with climate change. It is a challenge that is facing us as a world, and we must deal with it. I would not assume that there are no economic benefits to tackling climate change; there are some. For example, if we, as a nation, are at the cutting edge of technologies that help to reduce carbon, that brings investment and jobs to this country. It is not a zero-sum game; it could be a win-win.[255]

97. **Pricing the carbon element, so low-carbon products become less expensive than high-carbon ones, is a powerful lever to reduce consumption emissions, to support the development of low-carbon products and increase access to such products. Currently, high energy prices and rises in inflation are contributing to stark rises in living costs; it is important that the design of any carbon border approach include a strategy for public engagement to build consensus around the importance of the policy response as a measure to combat climate change, alongside assessments to understand any potential impact on consumers, including vulnerable and low-income households, to ensure any supporting policies which might be required can be incorporated into the approach.**

98. ***We recommend that the Government, at the design stage:***

a) ***include a strategy to engage with the public in the design of the carbon border approach to develop and maintain public support and keep the public informed of the changes that would occur, the rationale and methodology supporting the changes, and their impact and timescales; and***

b) ***conduct analysis to understand any potential impact on consumers, including vulnerable and low-income households, and ensure the carbon border approach includes any measures needed to address this.***

252 Q50
253 GOV.UK, Net Zero Review: Analysis exploring the key issues (October 2021), p. 41, 68
254 Q161
255 Q162

Co-ordination and monitoring

99. While the Treasury is responsible for carbon leakage policy, overall responsibility for emissions reduction and industrial decarbonisation sits with the Department for Business, Energy and Industrial Strategy (BEIS), which shares responsibility with the Treasury for the UK ETS. Any action taken to green the UK's imports will naturally interact with trade policy, where the Department for International Trade (DIT) is in the lead; the Trade Justice Movement told us that 'along with many other civil society organisations and business groups', it was 'concerned about a disconnect between the UK's climate ambition and its new trade policy.'[256]

100. Researchers from Lancaster University and Teesside University questioned how a UK CBAM might interact with the tax and customs arrangements in proposed UK freeports.[257] They told us that if freeports were 'exempt from a CBAM (or a CBAM [were] applied differently within freeport sites) due to their exemption from normal tax and customs rules, there is an evident risk that they could contribute to significant additional carbon leakage', and that 'the simplified customs regime within freeport sites also adds an extra dimension of complexity to the application of CBAMs within freeports, as it is likely to increase the difficulty of accurately and comprehensively tracing the provenance and history of imported goods and components.'[258]

101. Contributors also highlighted the importance of alignment with wider environmental objectives, to ensure that policies focused on emissions did not inadvertently result in adverse impacts on biodiversity, water pollution or soil quality.[259]

102. As a policy area with cross-cutting impacts, it is important that the UK's carbon border approach is aligned with: trade policy, led by DIT, as well as wider climate and environment strategy, led by BEIS and Defra; and development strategy, led by the Foreign, Commonwealth and Development Office. The Treasury's central role is likely to be beneficial in enabling this co-ordination; Dr Dominic Hogg told us that 'given the Treasury's central role in setting tax policy, and making final decisions as to how tax revenue will be spent, its role has to be considered pivotal in achieving the desired outcomes.'[260]

103. As we noted in our recent *Green Jobs* report, where policy areas cut across Departmental boundaries, there must also be oversight at a sufficient level to identify and manage successfully any inter-Departmental interdependencies and conflicts which might arise.[261]

256 Trade Justice Movement (CBM0016)

257 Dr Andy Yuille (Researcher Co-Investigator at Lancaster University); Professor David Tyfield (Professor at Lancaster University); Professor Matthew Cotton (Professor at Teesside University); Dr Nick Gray (Researcher Co-Investigator at Teesside University) (CBM0010)

258 Dr Andy Yuille (Researcher Co-Investigator at Lancaster University); Professor David Tyfield (Professor at Lancaster University); Professor Matthew Cotton (Professor at Teesside University); Dr Nick Gray (Researcher Co-Investigator at Teesside University) (CBM0010)

259 Zero Carbon Campaign (CBM0002); WWF-UK (CBM0015)

260 Dr Dominic Hogg (Director at Equanimator Ltd) (CBM0022)

261 Environmental Audit Committee, Third Report of Session 2021–22, Green Jobs, HC 75, para 23

104. We consider that the Cabinet Committees on climate action would be well placed to provide this oversight.[262] Lucy Frazer told us she was 'regularly in subcommittees of the Cabinet discussing a range of cross-Government issues':

> […] in the work that we have done on the ETS, I have worked very closely with BEIS and [Energy Minister] Greg Hands. Only a number of weeks ago, I was in a climate action and implementation committee with all the key players from the Department—there were probably seven or eight Departments represented at that, led by Alok Sharma—and of course, there is the climate action strategy committee chaired by the Prime Minister. This is not novel; this is not the only area where there is cross-Departmental interest. Most areas of Government have a need to work cross-Departmentally.[263]

She told us that the interaction between freeports and carbon leakage policy was 'something that [the Government] would look into and consider'.[264] Mike Williams added that the need to understand how different policies might interact was 'a reason for consulting because you cannot be sure that you would spot all the interactions', and 'consulting gives stakeholders a chance to flag things that they are bothered about'.[265]

105. As HM Treasury notes in the final report of the Net Zero Review, 'both technology and the level of emissions mitigation effort in trading partners may change over time, possibly abruptly, which could change the levels of leakage risk in any given sector, and potentially the balance between different mitigating options' entailing that 'options should be kept under review.'[266] Furthermore, measures such as CBAM are novel. Therefore, it is important that as part of the design of the carbon border approach, the Government set in place plans for ongoing monitoring of the impacts of the approach once implemented. Dr Misato Sato, of the Grantham Research Institute on Climate Change and the Environment, told us:

> I think it will be very difficult to assess causal effect of the CBAM on reducing leakage, creating a level playing field and so on. I guess that we could keep an eye on the trade intensity and some of these carbon leakage indicators. However, there is likely to be a phase-in and phase-out period with the CBAM free allocation. Many other measures will be implemented at the same time to try to drive forward large-scale decarbonisation, like rapid investment in these sectors.
>
> […] W]e should focus more on to what extent CBAM really reduces uncertainty and delivers these investments for these sectors, even perceived uncertainty, how much the move to a CBAM really gives confidence to the sectors that by going low carbon they will be able to recoup their investment costs and drive forward or kick-start that decarbonisation process. […] Close industry consultation is important for this rather than ex-post economic

262 GOV.UK, List of Cabinet Committees, accessed 23 February 2022. These are: the Climate Action Strategy Committee chaired by the Prime Minister, responsible for domestic and international climate strategy; and the Climate Action Implementation Committee chaired by Rt Hon Alok Sharma MP (initially in his previous role as Secretary of State for BEIS, and now in his role as President of UNFCCC COP), responsible for matters related to COP26 delivery, net zero, and building UK resilience to climate impact.

263 Q172

264 Q176

265 Q178

266 GOV.UK, Net Zero Review: Analysis exploring the key issues (October 2021), p. 42

> analysis in five or 10 years' time.[267]

Rich Woolley, of the Chemical Industries Association, told us:

> there needs to be a long-term iterative process of engagement with Government so that when these issues are identified, we can come back to the table and discuss them. From the beginning, there will need to be a mechanism for how to intervene properly to make sure that we can correct things that seem to be going wrong with any scheme we introduce.[268]

We consider that it will be important for this ongoing engagement also to include the wider stakeholders identified above in this Chapter and Chapter 2, including industry, trading partners, including low- and middle-income country trading partners, and consumers.

106. **The UK's carbon border approach needs to be aligned with the Government's wider environmental policies, and integrated into trade, development and fiscal policy. The context for carbon border measures is not fixed, and CBAM in particular represents a new policy lever. It is important that the UK's design for a carbon border approach include a strategy for ongoing monitoring of its impact, to ensure its objectives are being achieved.**

107. ***We recommend that the Government:***

a) ***ensure, through the oversight of both Cabinet Committees on Climate Action, that the UK's carbon border approach is aligned with existing environmental, trade, development and fiscal policy, through both its design and implementation stages. This should include setting out how the carbon border approach would interact with the tax and customs arrangements in Freeports; and***

b) ***during the design stage, establish methods for monitoring and understanding the impacts of the carbon border approach once implemented. This should include mechanisms for periodic consultation with stakeholders, including those in industry, academics, the environmental community and consumer groups.***

We expect any statement of policy on the UK's carbon border approach to be presented to Parliament.

267 Q37
268 Q68

Conclusions and recommendations

A UK carbon border approach

1. Effective carbon pricing is crucial to decarbonisation, but cannot be achieved without effective anti-carbon leakage policies in place. The Government's current approach to addressing the risks of carbon leakage, including free allocation of Emissions Trading Scheme (ETS) allowances, is insufficient on its own to incentivise industrial decarbonisation effectively. A clear policy response is needed to address this; we consider that a UK carbon border approach is the most appropriate response. (Paragraph 30)

2. Multilateral and global approaches to carbon pricing represent the most appropriate way to support global decarbonisation. Since the process to negotiate and agree these is lengthy, they cannot provide the urgent action necessary in the short term. Pursuing a unilateral carbon border approach does not preclude continuing to push for global action; rather, unilateral action may support these efforts by encouraging other jurisdictions to strengthen their own decarbonisation policies and spurring co-operation on multilateral solutions, while delivering the action needed to address emissions in the meantime. It is important that unilateral action is aligned with the UK's international obligations and commitments. (Paragraph 31)

3. While net zero policies address the UK's territorial production emissions, 43% of the UK's consumption emissions arise from imports. The UK's principal carbon pricing mechanism, the ETS, applies to domestic production, but no carbon price is currently applied to imports of the same products. A CBAM could address this, enabling a carbon price to be applied to consumption emissions arising from both domestic production and imports of products covered by the ETS. In particular, CBAM has the potential to help build support for green policies in historic manufacturing areas where opportunities for a renaissance in low-carbon UK-based manufacturing are likely to be greatest. (Paragraph 32)

4. Alongside CBAM, the UK's carbon border approach needs to comprise a set of complementary policies, including product standards, to tackle consumption emissions beyond those covered by explicit carbon pricing, and support decarbonisation across the economy. Careful design is needed to ensure the carbon border approach is successful in achieving its environmental objectives while mitigating the risks of adverse impacts. (Paragraph 33)

5. *We recommend that the Government commence work immediately on developing a comprehensive UK carbon border approach, in order that this might be implemented during the 2020s. We recommend that this include a CBAM as part of a co-ordinated set of policies including product standards, alongside work to build consensus with trading partners, industry and consumers on the need for this policy response. The Chancellor of the Exchequer should provide an initial report to the House on progress on a CBAM not later than Budget 2023. We recommend that the Government build on its COP26 climate leadership internationally through pursuing long-term multilateral solutions alongside this ambitious UK approach.* (Paragraph 34)

Geopolitical considerations

6. The UK is an open, trading economy, and trade can be a powerful lever to drive environmental outcomes. Careful design, alongside inclusive engagement with trading partners, is needed to ensure that any CBAM and wider carbon border approach are aligned with the UK's international obligations and commitments, including the principle of common but differentiated responsibilities and respective capabilities in respect of low- and middle-income country trading partners, as set out in the Paris Agreement and Glasgow Climate Pact. (Paragraph 52)

7. As the UK continues to negotiate its own trade agreements following exit from the European Union, there is an opportunity to align trade policy with the UK's role as a leader in climate change action; further analysis is required to understand how the UK's carbon border approach might interact with these negotiations. (Paragraph 53)

8. *Our recommendations to Government on the design of the carbon border approach are as follows:*

    a) *to ensure, from the outset, that the carbon border approach is designed to adhere to the principles of common but differentiated responsibilities and respective capabilities set out in the Paris Agreement and Glasgow Climate Pact in respect of low- and middle-income country trading partners. This might be through the CBAM design itself, or through a complementary policy in parallel to the CBAM;*

    b) *to ensure that the UK CBAM is designed in accordance with WTO rules;*

    c) *to establish forums to enable inclusive engagement with trading partners on the design and implementation of the carbon border approach. These should include forums specifically for engagement with low- and middle-income country trading partners; and*

    d) *to conduct analysis to understand how the carbon border approach might interact with free trade agreements.* (Paragraph 54)

9. In our view, the Government's commitment to work with stakeholders to understand the potential impact of an EU CBAM on UK industry and ensure no unreasonable barriers to trade is welcome. Given the potential UK impacts, clarity is needed on how the Government intends to do this, and urgently, given that the proposed EU CBAM is intended to be fully in effect from the mid-2020s. (Paragraph 63)

10. It is at present unclear how the proposed EU CBAM might impact the UK, particularly Northern Ireland, where electricity generators are currently under the scope of the EU's ETS. We understand that this is a dynamic discussion which depends on wider continuing negotiation between the UK and EU, as well as developments in the proposed EU CBAM. It is nevertheless important that UK stakeholders are kept informed. (Paragraph 69)

11. The Government has committed to ensuring businesses do not face any unreasonable barriers to trade; further detail would be welcome on how it plans to work with stakeholders in the EU and UK to achieve this. Given that electricity generators in

Northern Ireland are under the scope of the EU ETS, it will be important to work with stakeholders to understand how this might interact with the UK CBAM and wider carbon border approach. (Paragraph 70)

12. The UK and EU have agreed to consider linking the UK and EU ETS systems, which would exempt UK producers from the EU's CBAM (and vice versa), simplifying administrative processes for UK-EU trade; as linking can be a lengthy process, it is important for exploratory work to commence on this now. This may also be a welcome sign that there is a political recognition on both sides that linkage of CBAM schemes in due course could be achievable. (Paragraph 71)

13. *We recommend that the Government:*

    a) *Set out in its response to this report:*

    b) *how it intends to work with stakeholders in the EU and UK to understand how the proposed EU CBAM, would affect the UK, including in Northern Ireland; and*

    c) *how it intends to ensure open and transparent communication on progress on its actions to ensure businesses do not face any unreasonable barriers to trade, to provide greater clarity to UK industry;*

    d) *Engage directly with affected stakeholders in Northern Ireland and the EU during the design stage of any UK carbon border approach, and*

    e) *Before the end of 2022, launch a consultation on measures to link the UK and EU emissions trading schemes.* (Paragraph 72)

Further design considerations

14. As the report of the Treasury's Net Zero Review notes, there can be no one-size-fits-all mechanism to address carbon leakage risks. The UK's carbon border approach needs to comprise a set of complementary policies, designed to drive industrial decarbonisation in the UK and globally. A CBAM will be an important lever to support decarbonisation in key foundational sectors; complementary mechanisms such as standards, regulation and support for low-carbon technologies are also required to drive this change across the economy. (Paragraph 88)

15. To navigate the design options available and ensure a policy response that is effective in achieving its objectives, it is important that the Government articulate from the outset the objectives of the UK's carbon border approach, so that the design is led by these, and understand the potential impacts to industries across all sectors of the economy and at all stages of the value chain, to ensure effective policy responses and implementation. This should include assessment of the impact on SMEs. (Paragraph 89)

16. *We recommend that the Government:*

    a) *clearly define its objectives for any carbon border approach at the outset, and ensure the choice of policy options and design consideration at each stage is led by these objectives. These should encompass the need to drive decarbonisation across*

the economy to address climate change, whilst ensuring low- and middle-income countries, vulnerable households and wider environmental goals, such as nature, are not adversely impacted;

b) During the design stage of the carbon border approach, engage with industrial stakeholders and conduct impact analysis across sectors, so as to understand the most effective policy instruments and implementation timescales for each sector and ensure industries at all stages of the value chain, including end users, are involved in the design of the carbon border approach. This engagement should be conducted through specific forums which bring stakeholders, including industry, academics, the environmental community and consumer groups, together alongside representatives from all relevant Government departments.

c) Carry out a specific assessment of the impact on SMEs during the design phase of the carbon border approach, and set up a forum for engagement with SMEs. The UK's carbon border approach should also include a plan for communicating changes with SMEs and should ensure that ease of administration is built into design. (Paragraph 90)

17. Pricing the carbon element, so low-carbon products become less expensive than high-carbon ones, is a powerful lever to reduce consumption emissions, to support the development of low-carbon products and increase access to such products. Currently, high energy prices and rises in inflation are contributing to stark rises in living costs; it is important that the design of any carbon border approach include a strategy for public engagement to build consensus around the importance of the policy response as a measure to combat climate change, alongside assessments to understand any potential impact on consumers, including vulnerable and low-income households, to ensure any supporting policies which might be required can be incorporated into the approach. (Paragraph 97)

18. *We recommend that the Government, at the design stage:*

a) Include a strategy to engage with the public in the design of the carbon border approach to develop and maintain public support and keep the public informed of the changes that would occur, the rationale and methodology supporting the changes, and their impact and timescales; and

b) Conduct analysis to understand any potential impact on consumers, including vulnerable and low-income households, and ensure the carbon border approach includes any measures needed to address this. (Paragraph 98)

19. The UK's carbon border approach needs to be aligned with the Government's wider environmental policies, and integrated into trade, development and fiscal policy. The context for carbon border measures is not fixed, and CBAM in particular represents a new policy lever. It is important that the UK's design for a carbon border approach include a strategy for ongoing monitoring of its impact, to ensure its objectives are being achieved. (Paragraph 106)

20. *We recommend that the Government:*

    a) *Ensure, through the oversight of both Cabinet Committees on Climate Action, that the UK's carbon border approach is aligned with existing environmental, trade, development and fiscal policy, through both its design and implementation stages. This should include setting out how the carbon border approach would interact with the tax and customs arrangements in Freeports; and*

    b) *During the design stage, establish methods for monitoring and understanding the impacts of the carbon border approach once implemented. This should include mechanisms for periodic consultation with stakeholders, including those in industry, academics, the environmental community and consumer groups.*

    We expect any statement of policy on the UK's carbon border approach to be presented to Parliament. (Paragraph 107)

Formal minutes

Wednesday 23 March 2022

Members present

Philip Dunne, in the Chair

Sir Robert Goodwill

Clive Lewis

Cherilyn Mackrory

Jerome Mayhew

Dr Matthew Offord

Valerie Vaz

Carbon border adjustment mechanisms

The Committee deliberated.

Draft Report (*Greening imports: a UK carbon border approach*), proposed by the Chair, brought up and read.

Paragraphs 1 to 107 read and agreed to.

Summary agreed to.

Resolved, That the Report be the Fifth Report of the Committee to the House.

Ordered, That the Chair make the Report to the House.

Ordered, That embargoed copies of the Report be made available, in accordance with the provisions of Standing Order No. 134.

[…]

Adjournment

Adjourned till Wednesday 30 March at 2.00 pm.

Witnesses

The following witnesses gave evidence. Transcripts can be viewed on the inquiry publications page of the Committee's website.

Wednesday 24 November 2021

Sir Dieter Helm, Professor of Economic Policy, University of Oxford — Q1–21

Dr Sanna Markkanen, Research Programme Lead and Senior Analyst, Cambridge Institute for Sustainability Leadership; **Michael Mehling**, Professor of Practice, University of Strathclyde School of Law, Deputy Director, Center for Energy and Environmental Policy Research, Massachusetts Institute of Technology; **Misato Sato**, Assistant Professorial Research Fellow, Grantham Research Institute on Climate Change and the Environment, London School of Economics — Q22–37

Mike Thompson, Chief Economist, Climate Change Committee; **Domien Vangenechten**, Policy Advisor - Industrial Decarbonisation, Third Generation Environmentalism (E3G); **Hannah Dillon**, Head of Campaign, Zero Carbon Campaign — Q38–52

Wednesday 8 December 2021

Paul Dawson, Head of Regulatory Affairs, RWE Supply & Trading GmbH; **Dr Richard Leese**, Director, Cement, Industrial Policy, Energy & Climate Change, Mineral Products Association; **Richard Warren**, Head of Policy and External Affairs, UK Steel; **Rich Woolley**, Head of Energy and Climate Change, Chemical Industries Association — Q53–91

Mr Pawel Kisielewski, Chief Executive Officer, CCm Technologies; **Fergus McReynolds**, Director of EU & International Affairs, Make UK; **Dr Scott Steedman**, Director-General, Standards, British Standards Institution — Q92–126

Wednesday 23 February 2022

Rt Hon Lucy Frazer QC MP, Financial Secretary to the Treasury, HM Treasury; **Mike Williams**, Director, Business and International Tax, HM Treasury — Q127–181

Published written evidence

The following written evidence was received and can be viewed on the inquiry publications page of the Committee's website.

CBM numbers are generated by the evidence processing system and so may not be complete.

1 Brazilian National Confederation of Industry - CNI (CBM0019)

2 British Standards Institution (CBM0020)

3 CCm Technologies (CBM0030)

4 CCm Technologies (CBM0011)

5 Cambridge Institute for Sustainability Leadership (CBM0029)

6 Chemical Industries Association (CBM0003)

7 Citizens' Climate Lobby UK (CBM0007)

8 Council on Geostrategy (CBM0008)

9 Deloitte LLP (CBM0021)

10 Gasiorek, Professor Michael (Professor of Economics, University of Sussex); and Dr Camilla Jensen (Senior Research Fellow in International (Economics), University of Sussex) (CBM0028)

11 Green Alliance (CBM0025)

12 HM Treasury (CBM0027)

13 Hogg, Dr Dominic (Director, Equanimator Ltd) (CBM0022)

14 Institute for Public Policy Research (CBM0009)

15 International Emissions Trading Association (IETA) (CBM0012)

16 Mineral Products Association (CBM0014)

17 National Grid Ventures (CBM0013)

18 Pirlot, Dr Alice (Research Fellow, Oxford University Centre for Business Taxation) (CBM0031)

19 RWE (CBM0001)

20 Russell, Professor David (Company Chairman, emh group) (CBM0004)

21 Shell International (CBM0023)

22 Third Generation Environmentalism (E3G) (CBM0018)

23 Trade Justice Movement (CBM0016)

24 Trades Union Congress (CBM0024)

25 WWF-UK (CBM0015)

26 Yuille, Dr Andy (Researcher Co-Investigator, Lancaster University); Professor David Tyfield (Professor, Lancaster University); Professor Matthew Cotton (Professor, Teesside University); and Dr Nick Gray (Researcher Co-Investigator, Teesside University) (CBM0010)

27 Zero Carbon Campaign (CBM0002)

List of Reports from the Committee during the current Parliament

All publications from the Committee are available on the publications page of the Committee's website.

Session 2021–22

Number	Title	Reference
1st	Biodiversity in the UK: bloom or bust?	HC 136
2nd	The UK's footprint on global biodiversity	HC 674
3rd	Green Jobs	HC 75
4th	Water quality in rivers	HC 74
1st Special	Energy efficiency of existing homes: Government Response to the Committee's Fourth Report of Session 2019–21	HC 135
2nd Special	Growing back better: putting nature and net zero at the heart of the economic recovery: Government and Bank of England Responses to the Committee's Third Report of Session 2019–21	HC 327
3rd Special	Biodiversity in the UK: bloom or bust?: Government Response to the Committee's First Report	HC 727
4th Special	Green Jobs: Government Response to the Committee's Third Report	HC 1010
5th Special	The UK's footprint on global biodiversity: Government Response to the Committee's Second Report	HC 1060

Session 2019–21

Number	Title	Reference
1st	Electronic Waste and the Circular Economy	HC 220
2nd	Pre-appointment hearing for the Chair-Designate of the Office for Environmental Protection (OEP)	HC 1042
3rd	Growing back better: putting nature and net zero at the heart of the economic recovery	HC 347
4th	Energy Efficiency of Existing Homes	HC 346
1st Special	Invasive species: Government Response to the Committee's First Report of Session 2019	HC 332
2nd Special	Our Planet, Our Health: Government Response to the Committee's Twenty-First Report of Session 2017–19	HC 467
3rd Special	Electronic Waste and the Circular Economy: Government Response to the Committee's First Report	HC 1268