Introduction

1. Shell UK Ltd1 (Shell UK) welcomes the opportunity to respond to the consultation on the Carbon Emissions Tax (CET).

2. Shell has had a home in the UK since 1897, employing currently around 6,000 skilled staff in the UK. Globally, Shell is organised into four separate businesses: Upstream, Downstream, Projects & Technology, and Integrated Gas & New Energies. All four businesses operate in the UK, making a vital contribution to its energy security and economy. In addition, Shell Energy Europe Ltd, based in London, is a leading trader of energy commodities, including gas, power and environmental products, including EU Emission Trading Scheme (ETS) allowances.

3. Shell fully supports the goal of the Paris Climate Agreement and the UK’s 2050 net zero target, and, in April 2020, Shell announced that it aims to be a net-zero emissions energy business by 2050, or sooner if possible, in step with society and with our customers.2 The Government’s setting of clear targets and policies will be crucial to delivering the market confidence, investment, and skills that industry and society need.

4. Shell has long supported government-led carbon pricing mechanisms (CPMs) as an effective tool that gives choices to energy consumers and producers, stimulates the development of low-carbon fuels, technologies, products, and services, and helps drive energy efficiency. We believe that carbon pricing will be a central tool to help the UK achieve net-zero emissions by 2050.

5. It is important to note as well, however, that a carbon price alone will not deliver the necessary emissions reductions. It will also require policy actions that address barriers to the carbon price signal being passed through the economy and that enable responses to that signal, for example building enabling infrastructure and providing information to consumers about necessary behavioural changes. Nevertheless, it should remain the ambition of policymakers to structure CPMs to allow a single carbon price to emerge in the longer run.

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1 The companies in which Royal Dutch Shell plc directly and indirectly owns investments are separate legal entities. In this consultation response, “Shell”, “Shell Group” and “Royal Dutch Shell” are sometimes used for convenience where references are made to Royal Dutch Shell plc and its subsidiaries in general. Likewise, the words “we”, “us” and “our” are also used to refer to Royal Dutch Shell plc and its subsidiaries in general or to those who work for them. These terms are also used where no useful purpose is served by identifying the particular entity or entities. “Subsidiaries”, “Shell subsidiaries” and “Shell companies” as used in this consultation response refer to entities over which Royal Dutch Shell plc either directly or indirectly has control. Entities and unincorporated arrangements over which Shell has joint control are generally referred to as “joint ventures” and “joint operations”, respectively. Entities over which Shell has significant influence but neither control nor joint control are referred to as “associates”. The term “Shell interest” is used for convenience to indicate the direct and/or indirect ownership interest held by Shell in an entity or unincorporated joint arrangement, after exclusion of all third-party interest.

2 More details on the announcement are available here. It is important to note that as of 29 September 2020, Shell’s operating plans and budgets do not reflect Shell’s Net-Zero Emissions ambition. Shell’s aim is that, in the future, its operating plans and budgets will change to reflect this movement towards its new Net-Zero Emissions ambition. However, these plans and budgets need to be in step with the movement towards a Net-Zero Emissions economy within society and among Shell’s customers. Also, in this submission we may refer to Shell’s “Net Carbon Footprint”, which includes Shell’s carbon emissions from the production of our energy products, our suppliers’ carbon emissions in supplying energy for that production and our customers’ carbon emissions associated with their use of the energy products we sell. Shell only controls its own emissions. The use of the term Shell’s “Net Carbon Footprint” is for convenience only and not intended to suggest these emissions are those of Shell or its subsidiaries.


Summary

Providing certainty in the long term

6. While we note that the consultation does not seek views on the attractiveness or otherwise of other carbon pricing options, such as implementing a standalone UK ETS, or implementing a UK ETS linked to the EU ETS, Shell’s fundamental view is that emissions trading is preferable compared to emissions taxation.

7. Emissions trading currently provides many benefits to both the UK government and UK industry, namely: delivery of internationally agreed climate targets; emission reductions at least-cost; and a common carbon price across participating sectors in Europe, thereby creating a level playing field for all participants and helping to maintain economic competitiveness. The shared ambition of the EU and UK to reach net zero emissions by 2050 encourages cooperation in emissions trading as a target-driven scheme (vs. price-driven in the case of a tax).

8. Further, Shell prefers an ETS for the following reasons:

8.1. Under a cap-and-trade mechanism, a cap on emissions ensures a predetermined environmental objective is met.

8.2. It confers a greater ability to protect industry competitiveness and prevent carbon leakage.

8.3. It enables market participants (especially in the power market) to hedge their exposures forwards years into the future.

8.4. Most carbon policies are being formulated at country or regional levels, rather than being driven by global approaches. ETS markets are well-suited to international linking while tax coordination is complex and politically difficult. Linking CO2 markets is consistent with the Paris Agreement’s ambition to see a global CO2 market develop in the long term, through its Article 6 framework.

8.5. An ETS creates a simple framework to trade carbon reduction credits, such as those generated by nature-based solutions (NBS) and carbon capture, usage, and storage (CCUS) projects.

9. Given that the Government has ruled out remaining within the EU ETS in its negotiating mandate for charting the UK’s future relationship with the EU,3 we support the proposal that a UK ETS be set up: so long as it is with the explicit aim of it being linked to the EU ETS as soon as possible. In a less liquid market, such as the current proposed UK ETS, a degree of convergence between it and the EU ETS is the best way to reduce market instability and volatility. A standalone UK ETS might also be more exposed to the risks of carbon leakage than a linked ETS, as outlined in the report to the Committee on Climate Change (CCC) on the future of UK carbon pricing, due to a carbon price differential driven by divergence in cap level or scope, differences in carbon leakage identification, and in the level of allocation.4

10. Nevertheless, in the event that it is not possible for the UK to implement its own ETS by 1 January 2021, we support a CET for emissions currently in the scope of the EU ETS insofar as it will continue to provide a carbon price signal to the economy, even as a short-term contingency measure.

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Fundamental design principles of a CET

11. To Shell, there are four key considerations that need to be reflected in the operation of the CET:

11.1. The CET should broadly follow the EU ETS approach of identifying and providing a degree of protection for those sectors at risk of carbon leakage, where the cost of purchasing carbon allowances leads to risks of carbon leakage not just to the rest of the world, but also to the EU-27. A fair and transparent process for determining the sectors eligible for such protection, broadly equivalent to the European Commission’s, but based on UK rather than EU data, should be put in place.

11.2. The CET should follow the EU ETS in being compatible with power markets, with the rate set in such a way as to enable power generators to understand and manage their carbon price liability well in advance. The Government should either remove the proposed uplift and opt for a simpler average forward price methodology; announce the fixed premium several years in advance; or adopt a fixed, known percentage premium to the average prices.

11.3. We support the principle of recycling CET revenues in support of innovation and deployment of low-GHG technologies. To date the carbon price signal has not been strong enough to incentivise a significant level of investment in abatement. A net-zero target will require a step-change in technology and infrastructure. This will need to be a shared public-private endeavour. Developing and deploying these technologies will require (time-limited) fiscal and financial support, and recycled tax revenues will supplement other supportive policies such as technology-specific tendering and a stable tax environment.

11.4. The design and application of a CET should be consistent with other government policies and objectives, such as the Maximising Economic Recovery strategy owned by the government and the regulator, the Oil and Gas Authority. As the CCC’s scenarios to 2050 indicate, consumption of hydrocarbons will continue to play a role in the UK’s energy system under the new 2050 targets and, as the CCC notes, maintaining production in the UKCS is vital from a security of supply perspective.

11.5. In order to support delivery of a net-zero target, Shell recommends exploring how the CET might allow for domestic and international carbon credits, the latter in line with the terms of Article 6 of the Paris Agreement.

12. Shell is of the strong view that the design and application of a CET should be consistent across the whole United Kingdom

Response to questions

Questions 1 and 2 – Tax Emission Allowances

1. Do you have any views on the methodology and process for setting tax emission allowances and adjusting them in light of activity level reports?

2. Do you agree that small emitters should have their tax emission allowance for 2022 increased by the amount of their unused tax emission allowances from 2021? Do you think that, instead, a payment scheme as outlined below for main scheme installations would be an appropriate means of incentivising decarbonisation for small emitters?
15. Shell UK broadly agrees with the methodology proposed, closely aligned as it is to that of the EU ETS Phase IV, and replicating what was laid out in the Government’s UK ETS proposals.

16. Nevertheless, in noting the proposed review in 2022, focused on the mechanism for determining tax emission allowances from 2023 onwards, we encourage the Government to revisit the status of offshore gas installations (NACE 0620), which have been removed from the EU ETS carbon leakage list for Phase IV. As we said in our response to the 2019 BEIS consultation on The Future of UK Carbon Pricing, the oil and gas sector did not support this conclusion based on a review by NERA Consulting using Eurostat and IEA data. This review found that natural gas production in the EU (including the UK) was sufficiently trade exposed to be eligible for the carbon leakage list. Should the Government introduce a Carbon Emissions Tax, we recommend that the proposed review in 2022 revisit this issue.

17. As a matter of principle, Shell UK would agree that Government funds should be earmarked for the pursuit of decarbonisation, given the short time the UK has to reach net zero emissions by 2050, and to mitigate any regressive effects of the carbon price on the lowest income households.

18. Shell UK supports a funding mechanism that encourages operators to decarbonise beyond their tax emission allowance. We acknowledge the rationale for restricting eligibility for payments to those installations that have reduced emissions below their TEA. However, we invite the Government to consider a mechanism to stimulate investment in decarbonisation projects which may not reduce installation emissions below the TEA, but which nonetheless deliver significant emissions reductions, and which remain NPV-negative and economically unfeasible for operators even accounting for a reduced tax bill. This could provide a useful financial incentive for hard-to-abate installations to invest incrementally in decarbonisation projects and technologies.

19. We agree that the submission of data vis-à-vis decarbonisation payments should be voluntary, to avoid unnecessary administrative burdens on operators.

20. While Shell UK agrees that the methodology proposed would demonstrate the extent of an installation’s genuine emissions reductions, by measuring CO₂ by unit of output (for benchmarked products), the methodology doesn’t appear to differentiate between efforts made deliberately to reduce emissions, and other actions that happen to reduce them. We would encourage the Government to use a definition of ‘decarbonisation’ that incorporates operational efficiency measures, which can be an important source of emission reductions, alongside measures such fuel switching.

21. We also would encourage the Government to define further the process by which installations, in order to be eligible, must ‘demonstrate the extent to which the emissions reductions were achieved through

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NERA Economic Consulting (2018), A Review of the Trade Intensity Indicator for Natural Gas: Prepared for Oil and Gas UK and the International Association of Oil and Gas Producers.
decarbonisation’ (paragraph 2.51) beyond the data they provide. For instance, to be considered a Sustainable Emission Reduction, an intervention must have occurred; the intervention must have resulted in a quantifiable reduction in emissions (vs. what would have happened without the intervention); and the reduction achieved must be intended to be permanent.

22. Shell UK has no objection to the timelines proposed regarding the submission of claims, but encourages the Government to make payments for 2021 claims under the scheme before 2023 to provide a faster return on investments made in the first year of the CET.

Questions 7 and 8 – Rate in 2021 and 2022

5. Do you agree that the Carbon Emissions Tax rate should be set using EU ETS price data?
6. What are your views on the proposal to adjust the rate?

23. In case the Government proceeds with implementing a UK CET, Shell UK supports the Government’s proposal to link the CET rate to EU ETS prices. We think this will help maintain consistency and avoid the risk the carbon leakage. In particular, we support the proposal to base the CET rate on a historical average of EU ETS forward prices. Given UK operators’ understanding of this market, and the fact that much of their competition will be subject to it, this lends a level of protection against carbon leakage. In addition, in the context of the EU exploring possible carbon border adjustment mechanisms, explicitly linking UK carbon pricing to the EU ETS, may protect UK exporters from such an EU trade measure.6

24. However, Shell UK has one main concern with the proposed mechanism to set the actual and indicative rate: the potential uplift element that the Government may add to the indicative rate. This is a concern because it is not possible for market participants to anticipate a) whether the Government will add an uplift (i.e. an uplift may or may not be added and this will not be known in advance); and b) if an uplift is added, what the level of the uplift to the CET rate will be. As a result, the indicative rate itself will not be able to be anticipated.

25. This is a particular problem for the power sector given generators sell power and buy carbon in forward markets, typically one to three years ahead of delivery - thereby locking in margins and stabilising prices through the value chain down to consumers. As such, it is essential that they can anticipate their carbon price exposure. The proposed uplift, and the uncertainty over both its method and its use, means generators will not be able to anticipate the carbon price far enough in advance to hedge efficiently. Rather, they will only know at what price to sell power in a given future year when the indicative rate is set in the autumn immediately preceding, i.e. when the uplift is or isn’t added to the average historic futures price. For example, this would mean that power generators would not know the carbon price that will determine the power price in January 2022 until October 2021 – severely limiting forward trading.

26. In order to facilitate forward trading, generators will instead add a risk premium to forward prices that reflects the degree of uncertainty over the CET rate, which will both increase the cost of power for UK consumers and have a negative impact on the liquidity of the UK wholesale power market. In turn, such a negative impact could make generators more dependent on alternative forms of consumer-supported financing, such as the capacity market or renewable subsidies.

27. Simply removing the uplift element and using the historic futures prices to set the indicative rate, will reduce costs for UK industry and consumers and we urge the Government to do so.

28. In making its final decision we would also request the Government to be clear on the details of how the indicative and actual rates will be calculated, including:

28.1. Which EUA futures contracts will be referenced;

28.2. The period that will be used to calculate the average EUA price to set the indicative rate;

28.3. Whether the Government will calculate a volume weighted average to determine the indicative and actual rate; and

28.4. The exchange rate that the Government will use to determine both the indicative and actual rate.

29. Clarity on these details is important to enable power market participants to anticipate at least partially, based on publicly available information, what the indicative and actual CET rates will be, enabling them to trade power forward, lowering risk and ultimately consumer energy bills.

**Question 9 – Paying the tax to HMRC**

9. For the longer term, do you think other payment methods should be made available (e.g. a transfer involving the Business Tax Account)?

30. Shell UK suggests that the process for paying a VAT bill could be followed, given that operators may need to pay their CET bill at different speeds depending on their circumstances. The current options for VAT are online or telephone banking, CHAPS, Direct Debit, Bacs, standing order, online by debit or corporate credit card and in person at your bank or building society.

31. This response considers the use of carbon removal credits, whether from geological or natural sinks, in more detail below.

**Questions 10 and 11 – Conclusion**

10. Do you have any views on the practicality of the proposals in Part B of chapter 2 that you cannot cover in responses to other questions?

11. Are there any omissions or do you have any concerns or other suggestions about the operation of the tax?

32. Shell recommends that, should the CET come into force, the Government should seek to define, as soon as possible, a trajectory for the number of TEAs, such that business can plan. That trajectory should tighten the number of TEAs available according to a Linear Reduction Factor, such as that which we see in the EU ETS, smoothing the path to net-zero emissions in 2050. The CET, as currently proposed, does not lead automatically to a carbon reduction, and a reduction of the available TEAs is a necessary to ensure abatement over time.

**Questions 12 – Broadening the scope of the tax: capturing additional emissions**

12. Do you have any views on how, in the years after 2021, a Carbon Emissions Tax could drive decarbonisation in sectors beyond those that would be subject to the tax at introduction?

33. Whilst Shell in principle positively views the extension of emissions trading to all sectors in the economy with the view of creating an economy-wide price for carbon, we also recognise that the timing for individual sectors will vary based on the cost and availability of technology options as well as the numbers of players who can effect change (market structure). In such sectors a tax can potentially provide a complementary policy signal whilst other policy levers such as performance standards and mandates would be leading.
Building on the Climate Change Levy (CCL) and Fuel Duty, the merits of carbon taxation for housing, transport and other non-ETS sectors should be considered. Carbon taxation should be looked at broadly to look at how the existing fiscal system, in particular VAT, can be utilised to incentivise decarbonisation. The most recent UK Budget (March 2020) confirmed that the current UK standard rate of 20% and the reduced rate of a VAT of 5% will be maintained. These two different rates provide opportunity for policymakers to apply them with a view to incentivise decarbonisation in sectors with the likely freedom afforded by the UK no longer being subject to EU VAT rules and regulations.

**Aviation**

Shell supports the inclusion of aviation within the CET, given airlines are subject to the EU ETS and would be to the UK ETS. A tax obligation and rising carbon pricing will motivate airlines to drive for greater energy efficiency in aircraft and operations, and to use sustainable aviation fuels (SAFs).

**Taxing road transport**

Shell recommends policymakers build on the existing mix of policy instruments in road transport to incentivise car manufacturers, fuel suppliers and car owners to reduce emissions through standards, mandates and subsidies. Standards and mandates need to align with the UK’s NZE trajectory and be achievable with multi-year targets and realistic implementation.

The Government’s proposal to bring forward the phase out date for sales of new petrol and diesel vehicles in the light duty segment has made clear the direction of travel for the road transport sector and carbon pricing policy should reflect this. Indeed, Shell UK believes that this can and should be brought forward to 2030, and carbon pricing policy must form part of the plan that will enable the transition to electric vehicles. The design mechanisms of the fuel duty and vehicle excise duty should be adjusted to effectively support consumers in fuel-switching. The government’s most recent Budget confirmed that the existing fuel duty for all vehicles will remain frozen at 57.95 pence per litre, for the tenth consecutive year. Linking the duty rates to the carbon content of the fuel would help incentivise the switching to lower carbon fuels. Currently the fuel duty is volumetric. By changing it to a carbon-indexed duty, it would encourage fuel suppliers and users to invest in cleaner fuels. Changing the fuel duty to a carbon basis could be combined with a change to the vehicle excise duty (VED). The VED is currently paid on an annual basis. By linking the level of taxation to the number of miles and weight driven per year, one creates a further mechanism to switch road transport to cleaner forms of travel.

The UK government has a further opportunity to incentivise low-carbon transport by revisiting the impact of the current VAT rates applied to users of charging stations for electric vehicles. Currently the classification of EV charging station use is not clear in the UK. There is the option for the UK government to make it clear first that EV charging can fall under the de minimis thresholds for the supply of electricity and therefore subject to VAT at the reduced rate of 5%; and secondly that the Climate Change Levy is also not applicable under the same de minimis test. This will provide a clear VAT benefit as compared to fuels for ICE car users where the standard rated VAT of 20% would be applicable.

Given the early stages of alternative fuels and technologies for the heavy-duty vehicles (HDV) sector, Shell would recommend incentivising the scale up of low-carbon solutions for HDVs through non-pricing methods (e.g. performance standards, subsidies for research and development, and pilots) until they reach commercial stage instead of an additional carbon tax. Including road transport in the CET at this time could delay action within the sector given the high cost of road transport abatement relative to the current and anticipated price levels in the EU ETS and CET.7

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Taxing residential housing

40. The current tax treatment of domestic gas and power in the UK significantly hampers the move to low carbon heating systems as domestic electricity prices can be up to three times higher than natural gas.

41. Shell supports the view of the CCC that the pricing of domestic energy consumption needs to be reformed to reflect the relative emissions intensity of different fuels in heating. We would support a reform of energy taxation that better reflects the carbon intensity of heating fuels and over time drives convergence in the carbon price in traded and non-traded sectors.

42. The current very high abatement costs of the residential heating sector, modelled by the CCC to be at £155/tCO2 for UK buildings, also mean a range of policy measures will be required to promote innovation and competition to decarbonize heating. Standards, mandates and subsidies will be necessary to promote energy efficiency in residential buildings and drive the uptake of lower carbon heating technologies. Any use of a carbon pricing mechanism for residential heating must be very carefully managed to avoid increases in fuel poverty.

Maritime

43. Shell UK supports a proposal to incentivize CO2 reductions in the maritime sector through carbon pricing. Given the global nature of the shipping business, Shell prefers an international scheme to decarbonize the maritime sector. The International Maritime Organization, as well as the EU, introduced monitoring, reporting, and verification (MRV) and performance standards to improve efficiency of shipping operations. Shell, however, also recognizes that MRV and performance standards will not be enough to achieve GHG emissions reductions consistent with the objectives of the Paris Agreement. Shell therefore supports the EU’s proposal to incentivize further reductions through carbon pricing, including at an EU level. Shell recommends the UK to maintain alignment with an EU carbon pricing scheme for the maritime sector.

Questions 13 and 14 – Incentivising negative emissions in the longer term

13. Do you agree that the government should explore the case for tax incentives to support negative emissions technologies?

14. In designing any tax incentive, what issues should the government consider regarding negative emissions technologies?

44. The CCC acknowledges that carbon capture and storage (CCS) in its various guises is a ‘necessity not an option’. As such, Shell UK agrees that the tax system must do its bit to ensure that CCS plays its role in the UK reaching its net zero target.

45. While recognising that the treatment of negative emissions technologies will be the subject of further review, Shell UK believes that, subject to recognised high standards of integrity (including on permanence and additionality), verified carbon removal credits from nature-based solutions (NBS) could be explored as a compliance pathway within the CET. This could also be applied in the future to carbon capture technologies, such as CCUS, bioenergy with CCS (BECCS), or Direct Air Carbon Capture (DACC), which have a higher cost per MT of carbon stored.

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9 Committee on Climate Change (2019), Net Zero: The UK’s contribution to stopping global warming, p.23.
10 Shell UK offered more details on possible uses of and roles for nature-based carbon removal credits in its response to DfT’s 2019 call for evidence on Carbon offsetting in transport.
46. A system of carbon removal credits should be thoughtfully designed, to avoid removing the incentive actually to decarbonise. The Government could carry out an assessment that defines the roles of and justifications for allowing credits. For instance, one such justification might be for sectors that have so few low-cost abatement options in the near term that they will either go out of business, or will offshore their emissions, leading to carbon leakage.

47. What’s more, the ability to sell such carbon removal credits on a market would allow for more than point-to-point carbon exchanges. Rather, it would enable emitters far from possible CO₂ transport and storage to buy storage they might not physically be able to use. As such, a market could bolster demand, creating an incentive for others to invest in negative emissions. Shell UK encourages the Government to consider how a tax incentive could replicate that effect.

48. Nevertheless, tax incentives and, until they are at sufficiently high levels, carbon prices will not be enough in unlocking the UK’s significant potential in CO₂ capture and storage. Rather, to provide as much certainty and clarity as possible at the outset, they will play their part alongside, and should be developed in conjunction with, measures including but not limited to:

48.1. Permitting: Government should establish a transparent, clear process for permitting for storage licensing;

48.2. Policymaking: Government policymaking should not target single projects but wider aspirations for (e.g.) CCUS and future projects, also considering requirements to integrate industrial clusters fully. Furthermore, policies should be politically de-risked and relied upon for long-term planning;

48.3. Funding: as indicated in BEIS’s response to its consultation on business models for CCUS, government funding should be coherent, supporting multiple projects and clusters, future carbon trains as well as transport and storage (T&S) infrastructure development (e.g. contracts-for-difference for power CCS, economic regulation for T&S infrastructure, etc.); and

48.4. Risk allocation and long-term liability: there needs to be a sharing of risk between developers and governments; potential CO₂ storage liabilities should be capped; decommissioning liabilities and costs for maintaining reuse infrastructure should be clarified;

48.5. Permanence: the Government should be clear on the question of permanence for any carbon removal credit system.

49. In addition, there is a risk that tax support for negative emissions technologies will not make projects investable, because taxes are necessarily unstable and can be changed much more quickly than projects and investments. While the price of allowances within a market-based system might go up and down, investors know that the system will be in operation for a designated period and so have certainty about their investments. Should tax incentives be pursued, therefore, Shell UK encourages the Government to consider ways to ensure they are guaranteed for long enough that investors are not taking on undue risk.