

**A Report for the
Climate Change
Committee:
Summarising the
Call for Evidence
Responses for
Offsets**

**Final Report
March 2022**

Customer:

Climate Change Committee (CCC)

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1. Introduction

Purpose of the Work

1. The Climate Change Committee (CCC) is planning on publishing a report on voluntary carbon offsets in 2022.
2. The report will characterise the current and anticipated status of voluntary offset usage in the UK, evidence the risks and opportunities that accompany that, and generate recommendations for policymakers on how to direct voluntary offset activity in the UK.
3. To inform the report, throughout February 2022 the CCC ran an online call for evidence on voluntary carbon offsets.
4. The primary aim of this piece of work was to summarise the call for evidence responses, into a written report which can be published in 2022.

Summarising the data

5. A total of 56 stakeholders submitted responses to the call to evidence. Of these stakeholders, 16 were businesses, 5 were government agencies, 4 were individuals, 25 were NGOs, 2 were offset programme brokers, 1 was in research or academia and 3 were from other sectors.
6. To summarise the data, all responses received were consolidated into a data table. This included responses received through the call for evidence online form and responses received directly by the CCC by email. In parallel, all references to submitted evidence were highlighted, examined, and added to a summary table.
7. Responses to each question were then initially analysed to develop a codeframe of common themes and issues, in order to group responses for further analysis and highlight areas of significant interest. All responses were then coded against this developed codeframe.
8. This report provides an overview of these identified themes and issues discussed by respondents.

Assessing the evidence

9. A qualitative assessment of the evidence provided for each question (see Appendix C: Strength of evidence assessment) focused on three key dimensions, namely:

- Level of relevance of responses to the question, which considers the extent to which the responses seek to answer the question asked.
- Detail of responses, considering the extent to which the responses cover the different aspects of the question.
- Types of research cited, considering both the type and source of evidence provided.

10. This assessment of the quality of the evidence for each question was conducted in conjunction with the coding and analysis of responses, as the former requires an understanding of the relevance and detail provided for each question.

Disclaimer

11. All views in this report belong to the respondents and do not necessarily represent the views of MCC or CCC.
12. This report, therefore, aims to provide a snapshot of viewpoints and considerations seen in responses. As such, this report makes no claim that the views and statements included are true, accurate, or justified.
13. Further, the views and statements included in this report should not be taken as being representative of all possible respondents and are solely based on those of the individuals and organisations that responded to the Call to Evidence.

Overall risks and opportunities

1.1. Summary of responses to Q1

1. What are the main risks and opportunities presented by voluntary carbon offsets?							
51 respondents							
Business	Government Agency	Individual	NGO	Offset Programme Broker	Other	Research/Academia	Trade Association
12	3	5	21	2	3	3	2

Overall Summary

14. Most respondents highlighted risks relating to voluntary carbon offsets (**VCO**) markets transparency and incentives, carbon accounting concerns, and monitoring, verification, and reporting issues. Many respondents pointed to the opportunity VCOs present for directing private investment to tackle climate change, and the wider positive impacts that offset projects can have.

VCO market issues

15. Most respondents (39 of 51) suggested that the current status of the voluntary carbon market (**VCM**) represents a real risk. In particular, respondents noted that it may:

- Provide credits that tend to be of lower quality and focus on offsets and reductions, rather than focusing on removals. This could lead to the market becoming saturated with options which do not meaningfully contribute to actual climate impacts as organisations make claims of carbon neutrality or net zero. Respondents note that widespread use of offsets by companies and public authorities can thus give a false impression of progress.
- Raise real concerns about the risk of illegitimate carbon claims, due to a lack of an appropriate governance and regulatory framework. Current rules and governance arrangements of different carbon crediting programmes differ widely, including on:
 - a) eligible mitigation activities
 - b) levels of transparency and oversight
 - c) effectiveness of third-party auditing
 - d) timings for when credits can be used
 - e) provisions to avoid double counting
- Need to address the current complexity and integrity of the market. Some of the infrastructure for a fully functioning carbon market in the UK has not yet been developed. For example, there is a lack of:

- a) price transparency, which is vital to success
 - b) clarity on the legal nature of voluntary carbon credits
 - c) a definitive threshold standard for high-quality credits or how those credits should be used as part of a credible net zero pathway
- Not yet be fully transparent, deep, standardised, or scalable and that this may inhibit trading and investment.

Carbon accounting

16. Many respondents (23 of 51) highlighted the risks related to carbon accounting. In particular, respondents noted that:

- The lack of permanence and additionality in both nature-based and engineered systems – paying for offsets when those reductions may well have occurred anyway.
- Double counting emissions reductions if robust accounting procedures are not implemented, in particular to avoid two entities, such as a company and a host country, claiming ownership for the same emissions reduction or removal.
- Leakage, where the offsetting scheme leads to increased emissions elsewhere. For example, superficial offsets observed in South America can see tree planting in one area be replaced by deforestation elsewhere.

Monitoring, verification, and reporting issues

17. Many respondents (20 of 51) identified that problems relating to monitoring, verification, and reporting (**MVR**) across the VCM represent very real risks. In particular, respondents noted that:

- There is a lack of transparency and recognition that fossil and biological carbon are not equivalent and that companies should assess and report emissions and removals from the two sources separately.
- Sequestered carbon must be scientifically measurable according to robust, high-integrity methodologies. With insufficient MVR many schemes will fail to deliver promised greenhouse gas abatement, further undermining trust in ecosystem markets. This will also create a barrier to a more effective and efficient market.
- Inaccurate and overestimated baselines may be used to calculate carbon credits.
- Greenwashing represents a reputational risk to companies, which can be through misleading or false claims, or inconsistent claims made by carbon offset providers that are difficult to monitor and verify.
- There is a trend for businesses in the UK to want a standard or formal verification of carbon neutral status to avoid greenwash accusations. However, respondents noted

that currently, the only option is PAS 2060:2014, with the demand for this likely to grow.

Private investment in tackling climate change

18. Most respondents (29 of 51) suggested that the VCM presents opportunities for private investment to supplement government funding. Respondents noted that:

- VCMs can finance tackling the interlinked climate and nature crises, while saving public money for other critical infrastructure and services.
- High-quality carbon markets play a role in raising ambition on climate action from corporates and governments, and direct significant sums of private finance into:
 - a) restoring and enhancing nature
 - b) large scale habitat protection and restoration
 - c) peatland restoration
 - d) carbon positive farming practices
- VCMs create a funding mechanism that can channel investment into new carbon mitigation and adaptation initiatives.
- Voluntary offsetting helps finance mitigation in countries where:
 - a) costs and a lack of the required expertise are barriers to achieving more ambitious [Nationally Determined Contributions \(NDC\)](#)
 - b) a steady stream of financial flows can increase local capacity
 - c) it can accelerate the shift to low-emissions development paths

Contributes to net zero

19. Many respondents (24 of 51) argue that VCMs provide wide-ranging, flexible options to increase and accelerate action to achieve net zero. In particular, respondents noted that:

- They provide the opportunity to reduce and remove greenhouse gas emissions at the speed and scale necessary to meet the [1.5°C goal](#).
- The acceleration allows time for harder-to-abate emissions to be tackled and the necessary new technologies to be developed and implemented.

Positive wider impact

20. A significant number of respondents (17 of 51) mentioned the wider positive impact of VCMs. In particular, respondents mentioned:

- That nature-based carbon credits and the restoration of nature can have the co-benefits of improving:

- a) biodiversity
 - b) flood and drought resilience
 - c) air and water quality
 - d) crop yields
- [Research by Imperial College](#), which found that each tonne of carbon reduced has additional benefits such as:
 - a) poverty alleviation
 - b) infrastructure development
 - c) nature conservation

2. Quality and duration of offsets

2.1. Summary of responses to Q2

2. What data/evidence is there on the scale, range, pricing, and quality of offset activities that are being purchased in the UK, and are being produced in the UK? How can we expect this to change in future? What are the data gaps?

38 respondents							
Business	Government Agency	Individual	NGO	Offset Programme Broker	Other	Research/Academia	Trade Association
10	3	2	18	1	3	1	0

Overall Summary

21. While some respondents highlighted available data on UK offset activities, most respondents suggest that there is limited data available on VCOs, particularly relating to the ownership, quality, pricing of offsets. Many respondents highlighted concerns about the use of data for greenwashing, while many pointed out the need for change in the future, particularly calling for increased regulation and use of standards.

Some data or evidence exists

22. A small number of respondents (6 of 38) reported that some data exists about activities that are being purchased and produced in the UK, which includes:

- Data on the scale and range of offsets from peatland restoration projects, available through the official [IHS Markit](#) registry, which catalogues carbon units associated with each project and any sale of credits. Pricing is more difficult as this information is not publicly available for individual transactions. However, there is a broad price range.
- The scale and range of the [Woodland Carbon Code](#) and [Woodland Carbon Guarantee](#). Projects are also given a score for their potential to deliver biodiversity, water, community, and economic benefits. These two schemes are active in the UK, well-regarded, and referenced for use within corporate greenhouse gas reporting, which is under the government's guidance for [Streamlined Energy and Carbon Reporting](#).
- [Research recently coordinated by WWF-UK and Green Alliance](#) which estimated that about 600 square kilometres of land in the UK is being managed under VCMs, equivalent to roughly the extent of Greater Manchester, or 0.25 per cent. of UK land. This includes planned [Woodland Carbon Code](#) and [Peatland Code](#) projects and an assumed 147 soil carbon projects at 100 hectares each.

- However, there is limited evidence of the quality of Woodland Carbon Code and Peatland Code projects, given how recently such codes were established, which highlights a need for transparent ways of scrutinising the verification process for projects, together with open consultation for improving the codes when new versions are designed.

Little or limited data exists

23. About half of respondents (19 of 38) reported that there is very little data on the range, price, and quality of voluntary offsetting activities, and that developing these insights is challenging, in the UK and globally. Respondents highlighted several points, noting that:

- Publicly available data confirms there is a significant supply of credits today, but it is unclear where they are located, which raises questions about scale and quality.
- There is an inability to uniformly track the ownership and retirement of credits, as information is not required to be reported in VCM registries, which aim to:
 - a) track offset projects and issue offset credits for each unit of emissions reduction or removal that is verified and certified
 - b) create a credible, fungible offset commodity
 - c) record the ownership of credits
- As a voluntary market, it is difficult to obtain thorough information on purchased offsets as disclosure is not mandatory, with prices depending on factors such as the:
 - a) type of habitat, for example, peatland, woodland, or soil
 - b) profile of the site restored
 - c) location
 - d) co-benefits
 - e) duration of the project
 - f) willingness of the buyer to pay
- The registry set up in the UK has limited flexibility and only allows end buyers to open registry accounts to hold carbon credits, which is dissimilar to the international carbon market.
- Even within public registries such as [IHS Markit](#), [Gold Standard](#), [Verra](#) and the [UN Clean Development Mechanism \(CDM\)](#), there is a lack of traceability and transparency on the trading of carbon credits.
- International credits under [Gold Standard](#), [Verra](#), [Climate Action Reserve \(CAR\)](#), and [American Carbon Registry \(ACR\)](#) make up the bulk of offsets, whereas the UK domestic market is limited in size and by its design is unable to compare or compete with demand, corporate requirements, and carbon efficiency.

Gaps in data

24. Many respondents (12 of 38) also referred to general and specific gaps in data, though this was not specific for the UK or globally. Respondents noted that these include limitations in:

- The types of credits available under VCMs. Although some early-stage work is in development to provide transparency to buyers and the wider market, at present there is no clear and centralised data source for VCMs to utilise.
- The various origins arising from the different standards that the VCM actors follow and limited obligations for reporting.
- The purpose and evidence about completed transactions in relation to entities' retiring credits.
- The nature of pricing, where sellers and buyers are not required to disclose the price at which credits are sold.
- The distribution of proceeds from the sale of credits, where there is a lack of clarity on the ultimate beneficiaries and the proportions that are received by brokers, intermediaries, or the underlying projects.
- The contribution of offsets to the UK NDCs when corresponding adjustments are fully implemented.

Concerns about data and evidence

25. Some respondents (8 of 38) identified concerns about aspects of data relating to VCO activities, such as:

- Quality of VCMs, regarding whether credits on offer are of good quality. The [available data](#) puts this into question as, in 2021, activities which often have numerous flaws that undermine their quality or call into question their suitability for offsetting made up the vast majority of the 284 million total credits issued on the four largest VCM registries. These included:
 - a) 106 million credits from [Reducing Emissions from Deforestation and forest Degradation \(REDD+\)](#) activities
 - b) 105 million credits from renewable energy activities
 - c) 30 million credits from other nature-based activities
- [Greenwashing](#), with respondents stating concerns regarding the claims made by buyers on the purchase of credits, including incorrect or misleading claims. While there is no widespread data on this subject, the analysis that exists suggests that many buyers make inappropriate claims or exaggerate the actual impacts of the

credits. This could be a result of the lack of both transparency and a regulatory environment for these activities.

- Types of VCM, as the market has rapidly increased in volume over the last five years, with the majority of this increase due to an upsurge in avoidance offsets rather than an increase in removals. As a result, and according to a recent paper published by [Bloomberg New Energy Finance](#), the market could be oversupplied at present.
- Pricing of certain credits, as there are discrepancies between domestic and international offerings, such as [REDD+ Lowering Emissions by Accelerating Forest finance \(LEAF\)](#) pricing of USD 10 tCO₂e in the UK.
- MVR and quality, as there is growing evidence that verification and certification mechanisms, such as [Verra](#) and [Gold Standard](#), are not working to ensure the quality of offsets. This is potentially indicative of a problem with the structure of verification and certification mechanisms as a whole, as opposed to specific offset projects. A potential conflict of interest is also highlighted as certification companies and verification schemes can receive commissions for issuing offsets (on a per tonne basis), which could create a vested interest in positively verifying offset projects.

Changes needed in the future

26. Many respondents (12 of 38) identified the need for changes in the future that would enable better data on price, scale, range, and quality to be available. Respondents noted that these changes include:

- Regulation, through a transparent and regulated trading body that will eventually have to be in operation, with sufficient volumes, to make carbon markets work
- Minimum standards to ensure transparency and that UK natural climate solutions is "High Integrity" in line with post-COP26, [Article 6](#), which goes beyond MVR to communicating variation in carbon and importantly biodiversity co-benefits specific to a given offset
- A registry, with all carbon credit sales, purchases, and retirements listed on a government-owned public domain
- A clearer focus on quality, to recognise the difference between carbon credits which represent avoidance, reduction, or removal of greenhouse gas emissions aligned with the Oxford Principles. This is being driven both by regulators, who are starting to look at the issue in the context of potential [greenwashing](#), as well as by the media and public opinion, which increasingly expects a robust focus on environmental integrity.
- A robust approach to assessing quality, to include the:

- a) wider benefits
 - b) locality of the credits to the emissions being offset
 - c) traceability of the credits
 - d) longevity of the credits
- An international market for VCOs, with the adoption of a variety of VCOs across global markets and a unified international approach for counting carbon offset under an international governance and compliance regime. There is existing precedent for such internationally administered schemes to exist in the global energy market, such as the [Energy Charter Treaty](#). The UK government can lead here by encouraging overseas offsets, such as United Nations Framework Convention on Climate Change (UNFCCC) [REDD+](#) to be correspondingly adjusted. In this way, UK-domiciled corporates can contribute to the climate finance of an overseas developing country while continuing to reduce the overall UK NDC.

3. Voluntary offset market regulation and standards

3.1. Summary of responses to Q3

3. What is your assessment of the various standards relating to offsets (including UK specific standards such as the Peatland Code, and international verification standards such as Gold Standard and Verified Carbon Standard), including those in development (including UK specific standards such as the UK Farm Soil Carbon Code, and international standards/principles such as the Core Carbon Principle)? What more is needed?

50 respondents							
Business	Government Agency	Individual	NGO	Offset Programme Broker	Other	Research/Academia	Trade Association
12	3	7	19	2	3	2	2

Overall Summary

27. While some respondents were positive about existing standards, highlighting their wide adoption in the industry, most respondents noted concerns and highlight limitations with respect to integrity, transparency, and equitability. Changes needed relate to increased regulation, MVR, and improved use of standards and codes.

Positive responses to standards

28. Some respondents (14 of 50) responded positively to a range of standards as referred to in the question. Respondents noted that these include:

- The [Woodland Carbon Code](#) standards, which is the only UK-specific standard endorsed and listed in the [International Carbon Reduction and Offset Alliance's \(ICROA's\) Code of Best Practice](#). Other international codes mentioned include:
 - a) [American Carbon Registry](#)
 - b) [Clean Development Mechanism](#)
 - c) [Climate Action Reserve](#)
 - d) [Gold Standard](#)
 - e) [Joint Implementation](#)
 - f) [Verified Carbon Standard](#)
 - g) [Emission Reduction Funds credits](#)
- The [UK's Peatland Code](#), which is backed by a government entity and therefore does not require an ICROA endorsement. Along with the [Woodland Carbon Code](#), it upholds a reputation for strict standards and quality assurance guidelines to ensure

high integrity of carbon credits issued. As a result, data transparency is seen as a strength of the UK's VCM.

- The [IUCN Global Standard](#), which:
 - a) issues credits for projects that achieve positive impact for climate and development
 - b) is most effective when used from the outset, involving people and the co-design and co-production of nature-based solutions
 - c) has benefited from 15 years of practice
 - d) is constantly evolving to support scientific rigour and best practice
- [Verified Carbon Standard \(VCS\)](#), as the most used independent greenhouse gas crediting programme worldwide, project developers and buyers trust in its assessments of reduced and removed emissions, while reducing and addressing risks and uncertainty (leakage, permanence, additionality, monitoring, etc).
- [Community, Climate and Biodiversity \(CCB\)](#) and the [Sustainable Development Verified Impact Standard \(SD Vista\)](#), which identify projects that simultaneously address climate change, support local communities and smallholders, and conserve biodiversity.

Concerns about standards

29. Most respondents (33 of 50) identified concerns about standards, some of which were general and others relating to specific standards, including:

- International soil carbon standards, where approaches to additionality, permanence, leakage, and reversals vary considerably across the codes. It is noted that existing global soil carbon codes would need substantial investment and development to be applicable in the UK.
- The [Woodland Carbon Code](#) and [Peatland Code](#), which should be reviewed and have safeguards introduced to better protect existing and potential sites of species-rich grasslands, especially with a view to there being significantly greater demand for VCO activity in the coming years. For the Woodland Carbon Code, nature considerations are only covered by a toolkit and there are no guidelines for the Peatland Code.
- [Gold Standard](#) and VCS, which have an insufficient focus on human rights and have highly contrasting views on several elements that are fundamental to the integrity of offsetting. These include the:
 - a) required permanence of biological removals
 - b) requirements to apply corresponding adjustments
 - c) additionality required towards a Paris-aligned NDC

- VCS, which respondents note has additionally been widely documented to fail basic tests around atmospheric integrity, financial transparency, and equitability
- The integrity of international standards, which is undermined by:
 - a) imperfect additionality tests
 - b) flawed baseline methodologies
 - c) lack of information regarding retirement
 - d) lack of claims guidance which risks double counting
 - e) inadequate buffering of emissions reductions against reversals
- The lack of robust standards for removal technologies. Respondents note that while various standards for removals are in development, the majority of these are approaching the development of standards for removals based on existing standards and rules applied to offset technologies. Respondents note that this may not always be appropriate especially given the differences in key characteristics of offsets and removals.
- That many standards have yet to commit to making corresponding adjustments, which is problematic following the adoption of [Article 6](#) rules and guidance. Respondents noted that many credible offsetting programmes are working to ensure that all offsets are backed by corresponding adjustments, with [Gold Standard](#) making progress in requiring corresponding adjustments and in considering how best to respond to the elements of adaptation resources and an overall mitigation in global emissions (**OMGE**).
- The unclear distinction between removals and reductions, due to the difference between target emissions, baseline emissions, and methodologies, especially at net zero where there will be no more reductions to be traded. Respondents note that removal credits may not be accurately represented and could be outcompeted by reduction credits when placed under the same label, potentially due to the higher cost associated with higher quality.
- That significant challenges remain for the development of new codes, which, without a significant increase in public support, may not progress at the speed required to help meet net zero and species abundance targets in the UK

Changes needed and recommendations

30. Most respondents (33 of 50) identified changes and recommendations relating to standards in general, such as:

- Changes to international frameworks and standards, to address the confusing variety of national and international verification standards. It is noted that there is a need for overarching framework standards to be managed through a formal governance

process that is visibly independent of the verification and certification standards and offered at international or national level.

- Government having an important role to play in ensuring that MVR requirements and standards are robust and, if appropriate, regulated to ensure the private sector can confidently invest in reliable high-quality offsets
- The next phase of carbon standards and policies needing to distinguish removal credits as a separate unit and employ market forces to incentivise the purchase of more expensive removal credits, complemented by innovation policy; current policies and market mechanisms in place do not reflect the important role removals play in climate change
- New codes being developed to include habitats like grasslands, heathlands, saltmarshes, seagrass beds, and reefs. Within the UK, the MVR processes are largely restricted to woodland and peatland works. Wider-ranging carbon offsetting initiatives in the UK require international accreditation, given the absence of UK based regulations for their validation. If not addressed, this could act as a disincentive for businesses to invest in carbon offsetting schemes, other than the qualifying woodland or peatland in the UK.

3.2. Summary of responses to Q4

4. What are the strengths and weaknesses of monitoring, verification, and reporting for offsets produced in the UK and globally? What more is needed?

39 respondents							
Business	Government Agency	Individual	NGO	Offset Programme Broker	Other	Research/Academia	Trade Association
11	3	5	13	1	3	1	2

Overall Summary

31. Respondents suggest that MVR for offsets is critical to ensure confidence, create a highly transparent market, support pledge realisation, and enable data aggregation and comparison. However, weaknesses were also noted due to limitations such as leakage, lack of permanence, poor monitoring, double counting, and the impossibility of verifying avoided emissions, as well as methodological challenges and oversight concerns.

Strengths

32. Some respondents (16 of 39) suggested strengths to MVR for offsets, noting that:

- MVR for offsets and removals will be critical to ensure that confidence in the various technologies and processes available can be assured
- They can help create a highly transparent market, which is needed given some of the past criticisms of the VCM
- Some MVR methods are robust for particular sectors, such as peatlands and woodlands
- Additional benefits of MVR include:
 - a) ensuring that offset schemes and project developers realise the purported benefits of pledges
 - b) the ability to compare efforts between the UK and the world
 - c) the comparison of different policy designs and instruments
 - d) the aggregation of jurisdictions' progress in global greenhouse gas reduction objectives by combining data on a common metric

Weaknesses

33. Most respondents (32 of 39) suggested weaknesses to MVR for offsets, noting that:

- Claims from schemes are broadly contested due to:
 - a) leakage
 - b) lack of permanence
 - c) poor monitoring
 - d) double counting
 - e) the impossibility of verifying avoided emissions
- Some metrics, such as permanence, are not given due representation in some MVR and VCM schemes
- Global and UK MVR systems can be inconsistent, such that different standards of quality of MVR exist
- Costs can be an obstacle for many small-scale projects, as well as time requirements
- There is limited oversight of MVR processes when assessing using private methodologies and standards, with difficulties understanding the detail behind MVR schemes from publicly available information
- There are concerns for certain standards, such as [Verra](#), which allow developers to select standards that may benefit their own circumstances
- International processes can lead to issues such as double counting, where reductions are measured in the purchasing and delivery countries
- Many international programmes have yet to be trialled, calibrated, and validated for use in the UK, with a substantial effort required for this to be completed

- A common best practice methodology is lacking across the applicability of VCOs, either nationally or internationally
- The lack of proper accounting and transparency systems can create risks relating to financial reporting and complexity
- Various methodological challenges were also noted, such as:
 - a) strength of baselines
 - b) data availability
 - c) sporadic reporting
 - d) verification at difference scales by different auditors
 - e) imprecision of estimates
 - f) unreliability of certain approaches
 - g) numerous bottlenecks in certain processes, which cause delays
 - h) a lack of capacity to verify carbon offset projects

Improvements for MVR in general

34. Most respondents (33 of 39) suggested improvements to MVR for offsets, including the need for:

- A clear MVR framework to highlight the quality and permanence of a carbon offset
- Harmonisation across schemes to ensure that buyers can easily access information and have the confidence to participate in VCMs (currently, several different organisations have interests in MVR schemes across the offsets and removals space)
- Globally or regionally agreed minimum standards of quality, which would improve the overall trust in the quality of offsets, particularly if independently recognised
- New protocols for removals to make sure that carbon removals are accounted for correctly and are implemented more easily through premade protocols
- Comparability between MVR methods
- A move to technological verification given the expected sector growth in volume and complexity
- Further work regarding remote sensing methods to help widen the data available and reduce costs of MVR
- A reliable high-tech infrastructure that reduces costs and improves precision
- More integrated systems, such as a GIS-based registry or online process for application, validation, and verification

- All standards to undergo the international peer review process contemplated under [Article 6.4 of the Paris Agreement](#). Respondents suggest that such a policy would dramatically improve both national and international carbon accounting systems.
- Carbon offsetting initiatives to assess any societal or environmental detriment caused, to prevent [greenwashing](#) and misplaced investment decisions
- Regulation and oversight from governments, particularly as the industry scales up

3.3. Summary of responses to Q5

5. What does the evidence indicate are the key areas of voluntary offset markets that could benefit from regulation or intervention?							
44 respondents							
Business	Government Agency	Individual	NGO	Offset Programme Broker	Other	Research/Academia	Trade Association
12	3	6	14	2	3	3	1

Overall Summary

35. Respondents noted the key areas that could benefit from regulation would be related to offsetting claims, due to the potential for overclaiming and concerns about credibility, and existing standards and codes, as these require oversight. Some respondents also suggested that, as well as improvements to domestic regulations, an international regulatory framework could be beneficial. Generally, respondents noted that expanded regulation will lead to improved credibility and integrity, and improve overall contributions to climate ambitions.

Regulating offsetting claims and carbon accounting

36. Some respondents (17 of 44) noted that offsetting claims and carbon accounting is an area that could benefit from regulation, as:

- There is potential for overclaiming on the amount of carbon sequestered or reduced if offset credits are not produced to good standards, which was previously identified as a problem with a large majority of offset credits issued under the [UN CDM](#)
- The credibility of corporate claims should be verified with appropriate disclosures. Respondents note that scrutiny is needed on the methods used before carbon neutral or net zero claims are made, as there is a difference in the credits required for a specific claim to be legitimate; an example being that carbon reduction offsets are needed for a claim of being “carbon neutral”, whereas a claim of being “net zero” requires carbon removal credits.

- Businesses should operate with a requirement to focus on making good on reduction plans before using offsets, and particularly before claiming to be carbon neutral or net zero
- Unregulated VCMs are challenged with additionality, permanence, and leakage, which has implications for the scaling of high-quality natural climate solutions and [Carbon+](#) benefits nationally

Oversight and regulation of standards and codes

37. Some respondents (8 of 44) noted that oversight and regulation of standards and codes may be required, as:

- The growth of the industry could create competing codes and schemes, which could make it difficult to distinguish between high- and low-quality credits. Respondents note that oversight from government would help to ensure that the codes in use in the UK's voluntary offset market are credible and high-quality.
- Carbon market intermediaries should be held to a standard for disclosures in relation to transactions and revenue
- A set of principles for carbon codes may assist the development of the UK's voluntary offset market
- MVR approaches require harmonisation and standardisation, and all should account for the quality of credits for various offset or removal options, taking into account metrics such as:
 - a) permanence and durability of CO₂ storage
 - b) avoided and removed emissions
 - c) lifecycle emissions

Other areas requiring regulation

38. Other respondents (11 of 44) mentioned various areas that could benefit from regulation, such as:

- Quality of offsets, as the integrity of products is critical to the survival of the market and to ensure the contribution of the market to climate ambitions. Respondents also noted the variation in methodologies used by accreditors and how they are applied by different project types, with a lack of tools available in the market to effectively interrogate these differences.
- The use of offsets, as decarbonisation efforts for businesses should be obligatory before the use of offsets is considered.

- MVR methods, which would provide oversight on how credits are issued, quantified, recorded, accounted for, tracked, retired, and reported.
- Pricing and the trading market, to ensure a market with transparent and standardised processes and documentation.

International regulatory framework

39. Some respondents (15 of 44) suggest that an internationally agreed regulatory framework could be beneficial, as it could:

- Provide consistency in the application and issuing of VCOs.
- Establish minimum standards for current schemes and create the possibility for use of international ISO style standards, as well as common rules and principles.
- Assist in the creation of international codes, particularly for areas where these do not yet exist, such as an international standard on soil carbon credits.
- Allow for cross-border trading regulations, which are currently lacking.

4. Harnessing financial flows

4.1. Summary of responses to Q6

6. What is the scale and potential impact of voluntary offset activity on land use and on wider social, environmental and development outcomes, both positive and negative? How would this differ between UK-based and international projects?

37 respondents							
Business	Government Agency	Individual	NGO	Offset Programme Broker	Other	Research/Academia	Trade Association
8	3	5	15	1	2	1	2

Overall Summary

40. Respondents noted specific positive impacts with respect to land use, as opportunities could be created when current land uses have limited benefits. General positive impacts on wider social, environmental, and development outcomes were also noted, such as job creation in project areas, supply chain growth, and support of local communities. However, issues arising from land use pressures were also highlighted, particularly relating to biodiversity and other environmental concerns. Some respondents indicated there are differences in impacts between UK and international projects, driven primarily by differences in land use systems, regulation, and the nature of opportunities.

Positive impacts

41. Many respondents (16 of 37) noted specific positive impacts related to land use, noting that:

- On-farm carbon sequestration in the UK could bring opportunities and benefits to farmers and landowners, particularly in areas with limited food production. However, it is noted that this solution may not meet the overall demand for carbon sequestration.
- Land use pressures could increase as demand for solutions such as energy crops increases. If a strategy for identifying land use for sustainably sourced biomass is developed, this change in land use could result in greater biodiversity.

42. Some respondents (8 of 37) noted general positive impacts of voluntary offset activity on land use and on wider social, environmental, and development outcomes, such as:

- Job creation in the project area and support of national and regional economic agendas, such as [Levelling Up](#), in addition to increasing the financial flow into developing regions of the world
- Strengthening local communities' customary rights claims on their territories, particularly if following [FPIC guidelines](#)
- Contribution to global climate goals, such as [halving global emissions by 2030](#) and achieving [net zero by 2050](#), as well as contributing to [carbon budgets](#) and reducing the cost of achieving these targets
- Supply chain growth through new technology development, such as [Carbon Capture Usage and Storage \(CCUS\)](#) deployment
- Community lands bringing more value and revenue streams through natural capital restoration and the selling of carbon credits
- Funding for related objectives, such as nature conservation and green development, which can be sourced through VCMs
- Shifts in land use for voluntary offset activity supporting other UK government targets, such as those for [tree planting and woodland coverage](#)
- Other positive impacts, including:
 - a) water quality improvements
 - b) soil regeneration
 - c) biodiversity benefits and protection
 - d) reservation and regeneration of natural habitats
 - e) remediation of brownfield land
 - f) more green spaces for the public
 - g) flood risk reduction

Negative impacts

43. Some respondents (9 of 37) noted negative impacts of voluntary offset activity, relating to:

- Biodiversity and general function of the ecosystem, which can be especially pronounced with renewable energy projects
- Risks to environmental and social outcomes, particularly with an unregulated offset market
- Detrimental effects on types of habitats due to actions in respect of another type. This can be seen when tree planting occurs close to peat bogs, for example. Eventually the parts of the peat bog which are within a certain proximity will dry out and result in net greenhouse gas losses.

- The pricing of carbon, which may lead to risks of unintended consequences if the wrong behaviours are incentivised
- Nature-based solutions, as there can be potential for:
 - a) speculative land purchases and consequential increases in land value
 - b) [greenwashing](#)
 - c) conflicts with indigenous peoples and local communities
- The impacts of afforestation and reforestation, due to the large areas of land that they require. Respondents note that this could have varying impacts depending on the type of land on which they are deployed. For example, if on agricultural land, this could lead to increases in food prices, whereas deployment on wild land could lead to decreases in biodiversity.
- The threat to species-rich grasslands and other non-forest habitats, such as [Important Plant Areas](#) as a result of international offsetting projects, particularly tree planting
- Over-reliance on offsetting, which could replace emissions reduction efforts
- Dense tree planting and monoculture planting, which can lead to increased wildfire risk and impacts adjacent wetland habitats through hydrological changes
- The increase in deployment of bioenergy crops leading to:
 - a) very low biodiversity value on farmland
 - b) potentially increased risks of soil erosion
 - c) crop losses from disease if large monocultures appear
 - d) land take from food production
 - e) use of land that could otherwise serve as a high-quality habitat
 - f) implications for additional release of N₂O, if nitrogen-hungry cereal crops are embraced

Differences in impacts

44. Some respondents noted differences in impacts between UK and international projects, highlighting:

- Differences in land use systems, for example, the UK has a clearly defined cadastre system which ensures the legality of land deeds and land use rights, unlike those seen in developing countries
- Land management issues, baselines, reversal risks, and other concerns, which can be addressed more readily at the national level through regulation than at the international level, where compliance systems and means of enforcement may be lacking

- That differences between UK and other international voluntary schemes can be due to the governance, methodology, accountability, and oversight which underpins the quality of credits
- That many international projects are concerned with avoiding forest loss through [REDD+](#), whereas the largest opportunities for the UK are in restoring the nation's lost forests, peatlands, and grasslands

4.2. Summary of responses to Q7

7. Are there specific activities or regions where directing funds for offsetting might have a particularly positive impact? Please consider the UK and/or the international context, depending on experience.

43 respondents							
Business	Government Agency	Individual	NGO	Offset Programme Broker	Other	Research/Academia	Trade Association
10	3	6	16	1	3	2	2

Overall Summary

45. Respondents suggest that activities that are nature focused, involve removal, and leverage innovative technologies might provide distinct positive impacts from funding. Many respondents also suggest that developing countries, areas that have high potential, and areas that have particularly high environmental risk, could benefit most from funding.

Specific activities

46. Many respondents (19 of 43) suggested specific activities where directing funds for offsetting might have a particularly positive impact, such as:

- Nature-based solutions generally
- [Natural Climate Solutions \(NCS\)](#)
- Those under the [REDD+ Mechanism](#)
- Removal technologies, namely [Carbon Capture Usage and Storage \(CCUS\)](#), [Bioenergy with Carbon Capture and Storage \(BECCS\)](#), and [direct air carbon capture \(DAC\)](#)
- Permanent native forest and woodland planting, preservation, and conservation
- Species-rich grassland
- Peatland restoration

- Blue carbon, especially restoration of seagrass beds and saltmarsh creation associated with coastal realignment
- High-integrity permanent removal to enable transportation and storage of carbon dioxide
- Green infrastructure in cities
- Replacing plastic sports fields with real turf

Specific regions

47. Many respondents (15 of 43) suggested specific regions where directing funds for offsetting might have a particularly positive impact, such as:

- Developing countries or the [Global South](#)
- Those identified by the [Natural Climate Solutions World Atlas](#) as having high potential
- Biodiversity hot spots, many of which are in the Asia Pacific
- Areas at extreme risk of immediate desertification
- Areas that are carbon efficient and provide multiple co-benefits to communities
- Areas of particularly intense deforestation and/or planned deforestation
- Areas with high rates of poaching and general environmental degradation
- Areas that struggle to produce food at a profit
- Regions that host stores of irrecoverable carbon
- Upland and lowland peatlands in the UK

4.3. Summary of responses to Q8

8. What could help concentrate private investment in offsets towards the most effective activities? What role, if any, is there for public funding?

43 respondents							
Business	Government Agency	Individual	NGO	Offset Programme Broker	Other	Research/Academia	Trade Association
11	3	6	14	2	3	2	2

Overall Summary

48. Respondents suggest that the concentration of private investment in offsets primarily needs a clear and transparent market with verifiable high-quality credits, and guidance

on reputable and successful VCO schemes. Respondents note that public funding may continue to play an important role in the VCO market particularly in building the market, providing funding for research and other expansion efforts, and providing tax incentives. However, some respondents noted that the role of public funding should be limited to assisting regulation and ensuring legality in the market. In addition to funding, respondents suggest that support from public bodies may be needed, particularly in regulating standards.

Public funding

49. About half of the respondents (22 of 43) suggested that public funding may continue to play an important role in the VCO market, noting that it is needed to:

- Build the market and market infrastructure until carbon prices rise sufficiently, and the market builds momentum
- Finance:
 - a) research and development
 - b) quantification and analysis work
 - c) similar start-up expenses
 - d) MVR efforts
- Support innovative removal projects in the form of power [Contracts for Difference](#) and negative emissions payments
- Work in partnership with private sector finance to:
 - a) enable the sector and reduce risk, such as through first loss or de-risking capital, or to ensure that a minimum return on investment can be achieved
 - b) provide subsidies
 - c) demonstrate explicit support through investments and direct purchases
- Provide matched, stacked, or seed funding to allow projects, or certain aspects of projects, to go ahead which may otherwise stall
- Issue carbon bonds or loans linked to particular activities, such as the carbon sequestration of woodlands
- Allow changes to tax arrangements for:
 - a) land ownership
 - b) inheritance tax relief
 - c) the creation of incentives

50. There was some disagreement between respondents on the role of public funding, however, with few stakeholders (3 of 43) suggesting that:

- It should be limited to:
 - a) supporting the establishment of a framework to regulate the market
 - b) ensuring only effective activities are legal
- There should be no role for public money in private companies

51. Some respondents (13 of 43) noted that government support, rather than funding, is necessary to facilitate private investment in the most effective activities, by:

- Creating enabling conditions for the market, through supporting regulation and monitoring efforts
- Enforcing standards for genuine benefits of credits to enable products to enter the market, which would reassure buyers
- Mandating natural capital accounting and planning
- Expanding government support for codes to cover a wider range of habitats
- Developing governance mechanisms to support the avoidance of [greenwashing](#)
- Promoting carbon offsets that result in long-term carbon removal, with holistic environmental and societal benefits
- Preventing the availability and use of low-quality offset projects, through the use of mandatory registries with appropriate levels of disclosure and third-party verification of climate impact
- Developing a Greenhouse Gas Removals (**GGR**) strategy, which outlines:
 - a) government objectives for GGR deployment
 - b) robust principles to ensure sustainability and compatibility with net zero
 - c) coverage of regulation

Other considerations

52. Some respondents (10 of 43) noted that a clear and transparent market with verifiable high-quality credits would help to concentrate private investment towards the most effective activities. As such, respondents noted that there is a need for:

- An international regulatory framework to standardise VCO schemes and mitigate risks for investors
- Standards, oversight, and regulation to guide market forces, which will lead to the allocation of capital to the most effective carbon reduction and removal projects

- A clear market and appropriate quantification of value for offsets
- Transparency in the source and overall impact of carbon offsets
- Clarity across jurisdictions about the legal nature of voluntary carbon credits
- Scale and liquidity, which may be difficult with the voluntary market's project-based approach and may require the use of [sovereign green bonds](#), which refers to bonds issued by a sovereign government and designed to finance projects that have been earmarked as climate or environment-related
- Countries producing offsets to have systems in place to guarantee their legitimacy, particularly regarding:
 - a) land rights
 - b) policies regulating developers
 - c) independent monitoring systems

53. Some respondents (6 of 43) suggest that guidance on credits and offsets for buyers would be welcomed, noting the need for:

- Reputable and successful VCO schemes to be identified
- Guidance on the role of temporary and permanent methods for some activities, such as carbon dioxide removal, with an appropriate valuation methodology in line with permanence
- Guidance on how carbon credits can enable net zero targets, highlighting the types of carbon credits available to businesses to support the achievement of these targets. This guidance should be renewed at regular intervals, for example every three years, to assess the increase of private investment in the market and determine whether more support is needed.
- Authoritative guidance, from the UK government or CCC on how to conduct effective due diligence on carbon crediting projects
- Guidance on the most cost-effective activities available, beyond those required to achieve NDC targets

5. Company transparency and targets

5.1. Summary of responses to Q9

9. What do UK companies, financial institutions and/or other institutions (or specifically, your company or institution) consider when making purchasing decisions

about offsets? What evidence/information do they/you draw on, and what more information would be useful?

31 respondents

Business	Government Agency	Individual	NGO	Offset Programme Broker	Other	Research/Academia	Trade Association
11	2	4	9	1	2	1	1

Overall Summary

54. Respondents provided a range of factors that could be considered when making a purchasing decision on offsets, including quality of offsets, focus on removal, integrity and credibility, positive impact on environment, and wider social benefits. Some respondents also suggested that carbon credits should not take priority over emissions reductions and aggressive decarbonisation.

55. It should be noted that there were limited responses from businesses covering their own purchasing decision for offsets, with respondents rather noting what should and could be considered.

Considerations

56. Respondents suggested that considerations when making purchasing decisions about offsets include:

- Quality of offsets (13 of 31), which can be verified against ratings systems and quality standards, such as:
 - a) [ICROA endorsement](#)
 - b) [UK Environmental Reporting Guidelines](#)
 - c) [Core Carbon Principles](#)
 - d) [PAS 2060](#)
 - e) [BeZero Carbon Rating](#)
 - f) [Sylvera Rating](#)
- Focus on removal (5 of 31), with reference to:
 - a) the [Oxford Principles for Net Zero Aligned Carbon Offsetting](#)
 - b) [Carbon Dioxide Removals](#)
- Integrity and credibility (11 of 31), as evidenced by:
 - a) appropriate information from producers and sellers on methods, climate integrity, and traceability of offsets
 - b) prices reflective of science-based targets
 - c) restrictions on vintage and methodology types

- d) relevant risk and compliance checks, such as those to assess anti-money laundering, Know-Your-Client, and corporate governance
- e) a broad and widely trusted registry
- Positive impact on environment and wider social benefits (5 of 31), such as:
 - a) protecting biodiversity
 - b) water benefits
 - c) community benefits
 - d) [Carbon+](#) benefits
 - e) a commitment to corresponding adjustments by the project host country
 - f) the percentage cancellation rate applied by the crediting programme or purchaser entity toward the delivery of an OMGE
 - g) the scale of contribution to the [Adaptation Fund](#) and adaptation resources

57. A few respondents (2 of 31) suggested that carbon credits should not take priority over emissions reductions and aggressive decarbonisation, noting that:

- Companies may choose an easier option of purchasing offsets instead of cutting their own emissions
- It is difficult to guarantee that emissions have been genuinely offset, so emissions reduction is preferred

58. Respondents noted that evidence drawn on to inform purchasing decisions include:

- [ICROA's Business Leadership on Climate Action: Drivers and Benefits of Offsetting](#)
- [University Network COP26 Carbon Offsetting Briefing Paper](#)
- [IETA's Annual GHG Market Sentiment Survey](#)
- [Oxford Principles for Net Zero Aligned Carbon Offsetting](#)
- [Carbon Dioxide Removals](#)

5.2. Summary of responses to Q10

10. What is the evidence on the scale of reliance on offsets for Net Zero targets, for businesses, financial institutions, and/or other institutions and the role that offsets play in affecting emissions reduction ambition? If you are a business/financial institution/other institution with a Net Zero target, what role do voluntary carbon offsets play in your Net Zero target and emissions reduction ambition?

35 respondents							
Business	Government Agency	Individual	NGO	Offset Programme Broker	Other	Research/Academia	Trade Association
10	2	5	13	1	1	2	1

Overall Summary

59. Respondents suggest that the use of VCOs represents a significant part of the journey to net zero for businesses, given reports of their widespread use to contribute towards net zero targets. However, respondents note that it is difficult to ascertain the scale of their use. Some respondents suggest that reliance on offsets has a positive role in net zero targets and emissions reduction ambitions considering the mechanism, price, and alignment of VCOs.

60. Although this report has provided a sum of respondents that held particular views or positions in other question summaries, this is of limited use for Q10 due to the variety seen in responses. Therefore, the summary provided below aims to provide a summary of the breadth of views and positions seen in responses

61. It should be noted that there were limited responses from businesses covering their own reliance on offsets, with respondents rather commenting on the market generally.

Scale of reliance on offsets

62. Respondents noted that it is expected that the use of VCOs represents a large part of the journey to net zero, given that:

- Most companies have set net zero targets, including many of the world's largest firms, and state that they intend to use offsets. However, the proportion of reductions that will be met with offsets is not known
- The appetite from major corporations for offset inclusive strategies has accelerated significantly in recent years

- Companies with a net zero plan that includes the use of offsets or other capture technology assume that they will continue to play a role in future years, even after all possible measures to decarbonise have taken place

63. However, some respondents noted that:

- there is a lack of evidence of over-reliance on voluntary carbon credits
- the scale is generally difficult to estimate due to a lack of transparency and access to data

Role of offsets

64. Respondents suggested that reliance on offsets has a positive role in net zero targets and emissions reduction ambitions, given:

- VCOs currently represent the only mechanism to achieve net zero targets, in the absence of carbon reduction technologies
- Their ability to complement other efforts to reduce, replace, and remove emissions
- The option they create to offset unavoidable emissions
- Their alignment with initiatives
- The ability for companies to take climate action immediately through the use of offsets
- They funnel necessary funds to projects that are currently reducing emissions, which can be in a developing country where financing is hard to find
- They put a price on a company's emissions, which can encourage emissions reduction
- There is a scarcity of ways for some sectors (such as aviation) to technically effect a net zero pathway and so voluntary carbon credits provide a bridging solution
- Companies who offset may do more to reduce their own Scope 1, 2, 3 emissions than those who do not offset

65. However, some respondents suggested that:

- Reliance on offsets:
 - a) must not replace efforts to reduce emissions
 - b) can obscure and ultimately reduce overall mitigation ambition
- The remainder of emissions after decarbonisation efforts should be compensated through beyond value chain mitigation.

5.3. Summary of responses to Q11

11. What would be the strengths/weaknesses/considerations of:

1. Regulation, guidance and/or incentives which could encourage and/or require businesses to only use offsets where emitting activities cannot currently be reduced?
2. Consumer protection standards for low-carbon products and offset purchases that accompany products?
3. Regulation on business Net Zero targets' reliance on offsets?
4. Including specification of offset use for investment product labelling?
5. Any other interventions?

32 respondents

Business	Government Agency	Individual	NGO	Offset Programme Broker	Other	Research/Academia	Trade Association
10	2	3	11	1	2	2	1

Overall Summary

66. Respondents noted that regulation of standards in the market could assist with integrity issues, such as [greenwashing](#) claims. Respondents also highlighted the potential for increased costs and emissions that could develop as a result of implementing additional measures, and other difficulties, particularly given the uncertainty in the field, and possible business, administrative, and accounting implications.

67. Although this report has provided a sum of respondents that held particular views or positions in other question summaries, this is of limited use for Q11 due to the multiple topics covered in the question and resulting variety seen in responses. Therefore, the summary provided below aims to provide a summary of the breadth of views and positions seen in responses.

Regulation, guidance and/or incentives which could encourage and/or require businesses to only use offsets where emitting activities cannot currently be reduced

68. Respondents noted that such regulation could have potential:

- Strengths, such as in:
 - a) addressing [greenwashing](#)
 - b) standardising approaches for businesses
 - c) funding carbon dioxide emissions reduction projects that support communities and biodiversity
- Weaknesses, as it:
 - a) may be difficult to prove the possibility of further reduction

- b) may suggest that the use of offsets grants permission for further emissions
- c) requires ongoing assessments and resources from regulators, so is only as robust as the underlying criteria and the regulator's ability to assess and enforce
- Matters to consider for implementation, given:
 - a) the uncertainty in the future trajectory and potential cost reduction of decarbonisation technology
 - b) how a loose definition of allowances could enable companies to take action in their own interests
 - c) it may limit financial flows in the short-term until companies can adjust to appropriately mitigating their emissions
 - d) the potential administrative burden
 - e) current accounting challenges

Consumer protection standards for low-carbon products and offset purchases that accompany products

69. Respondents noted that such standards could have potential:

- Strengths, such as:
 - a) increasing and maintaining integrity of the market
 - b) driving carbon reduction
 - c) enabling development of environmental regulation and transparent accounting
 - d) better regulation and prevention of corporate green claims and [greenwashing](#)
 - e) making it easier for consumers to assess the underlying quality and impact of offsets
- Weaknesses, as they:
 - a) could result in an increased cost to consumers
 - b) come with inherent difficulties in measuring and accounting for carbon
- Matters to consider for implementation, given:
 - a) the direction needed regarding making environmental claims
 - b) the need to convene an appropriate stakeholder community to work together on the desired outcome

Regulation on businesses' net zero targets' reliance on offsets

70. Respondents noted that such regulation could have potential:

- Strengths, such as in:
 - a) addressing [greenwashing](#)
 - b) standardising approaches and reporting standards for businesses
 - c) increasing regulation of corporate targets and pledges, which is required
 - d) ensuring that businesses are using offsets in line with best practice, such as [Voluntary Carbon Markets Integrity Initiative](#) (VCMI) and the [Oxford Offsetting Principles](#)

- e) the potential to set a maximum percentage that can be offset from emissions reduction credits
- Matters to consider for implementation, particularly:
 - a) in a scenario where reliance on offsets is mandatory, which could compel high emitters to increase decarbonisation efforts
 - b) regarding company reporting of absolute emissions reductions separately from emissions reductions financed outside of their value chain, rather than reporting one aggregate number
 - c) in relation to outlining which companies are given permission to purchase offsets
 - d) that targets should require science-based or Paris-aligned emissions reductions before any use of offsets

Including specification of offset use for investment product labelling

71. Respondents noted that the inclusion of specification of offset use for investment product labelling may:

- Be beneficial for offset markets, making it more transparent and trustworthy by developing specific standards
- Require a summation of all offsets of the portfolio investments
- Ensure that any product that contains carbon credits be described in a way that clearly distinguishes between the climate-harming elements of the product and any climate-positive elements, as opposed to presenting a net balance which can be misleading
- Provide confidence for non-sustainability experts when investing for sustainable purposes

Other interventions

72. Respondents suggested other potential interventions and enhancements, such as:

- A mechanism for strengthening the mitigation hierarchy and confirming a business's carbon footprint and whether it has made all feasible reductions, although this could be challenging and complex
- A move to SBTi-aligned pathways and purchasing credits for mandatory contributions, rather than offset claims
- Legal clarification and differentiation of terminology, such as net zero and carbon neutral
- Fiscal regulation and regulated transparency and disclosure of use of carbon credits as part of corporate decarbonisation transitions

- Aligned governance approaches between countries through institutions such as the [International Organisation for Standardization \(ISO\)](#) and [International Sustainability Standards Board \(ISSB\)](#)
- [A British Standards Institution \(BSI\)](#) standard and ISO standard for carbon neutrality claims
- Regulation for businesses to use regulated carbon only, to allow for easier measurement of the national and international impacts of carbon offsets
- The implementation of offsetting fossil fuel emissions only with removal with permanent storage
- A clear roadmap to 2050 for every country and jurisdiction, which states the role of permanent removal and how it will enable net zero targets to be reached
- A requirement for a defined value component to offsets, linked to a scientific carbon value determined price

6. Article 6 and greenhouse gas accounting

6.1. Summary of responses to Q12

12. What is the evidence on the key risks and opportunities to sustainability and development outcomes that the updated guidance for voluntary offsetting in relation to [Article 6](#) presents to Net Zero?

29 respondents							
Business	Government Agency	Individual	NGO	Offset Programme Broker	Other	Research/Academia	Trade Association
7	1	4	10	2	3	1	1

Overall Summary

74. Respondents noted risks and concerns presented by the updated guidance for voluntary offsets from [Article 6](#), particularly with respect to double counting, inconsistencies with international standards, and quality monitoring. However, respondents also suggest that [Article 6](#) guidance creates opportunities in cross-border carbon credit trading, the application of corresponding adjustments, and further market developments.

75. Although this report has provided a sum of respondents that held particular views or positions in other question summaries, this is of limited use for Q12 due to variety seen in responses. Therefore, the summary provided below aims to provide a summary of the breadth of views and positions seen in responses.

Risks

76. Respondents noted risks and concerns presented by the updated guidance for voluntary offsets from [Article 6](#), which include:

- Double counting, such that two separate entities could claim the same emissions reductions, albeit this could be addressed by:
 - a) applying corresponding adjustments, although there is some uncertainty regarding the challenges these might present, such as difficulties for host countries in meeting their NDCs and within domestic schemes where no international transfers of carbon credits take place
 - b) implementing a standardised registry
- The potential for multiple regional certification mechanisms, which could create inconsistencies with international requirements
- Challenges around quality, which was seen in the implementation of previous mechanisms, such as the Kyoto Protocol's [CDM](#)

- The potential for the guidance to become too complex to understand and too cumbersome to implement
- Concerns that the VCM will be used to fund national climate targets or NDCs
- Potentially higher administrative costs for developers and possible uncertainty to the market that would discourage activity and investment

Opportunities

77. Respondents noted that [Article 6](#) guidance creates opportunities, such as:

- The ability to export credits internationally and achieve NDCs using the cross-border trading of carbon credits
- The possibility to apply corresponding adjustments to mitigation outcomes that are used for voluntary purposes which could:
 - a) accelerate the global transition to net zero beyond what corporates are doing through their own action
 - b) support mitigation beyond existing country commitments
 - c) contribute to the long-term environmental integrity of offset claims and the long-term sustainability of the voluntary offset market
- Mobilising private finance for climate action and accelerating the global transition to net zero
- Enabling crediting programmes to go beyond offsetting to support net mitigation, through the cancellation of units that are not used toward NDCs or for other international mitigation purposes, to deliver an overall mitigation in global emissions and therefore compete based on global mitigation impacts
- Harnessing private capital flows to generate resources for adaptation in developing countries that are particularly vulnerable to the impacts of climate change
- Encouraging independent project inspection and verification as a condition of credibility for offsets
- Replacing existing voluntary standards with those internationally reviewed and agreed under the Paris Agreement, which could help to create a standardised market
- Developing a global market for removal technologies, including the export of technologies such as [Bioenergy with Carbon Capture and Storage \(BECCS\)](#), and [direct air carbon capture \(DAC\)](#) globally
- Helping countries clarify the mitigation outcomes that are beyond their NDC requirements and for which they would be willing to do a corresponding adjustment

7. Other

7.1. Summary of responses to Q13

13. Please submit any further evidence that you would like us to consider.							
23 respondents							
Business	Government Agency	Individual	NGO	Offset Programme Broker	Other	Research/Academia	Trade Association
5	1	1	11	0	2	1	2

Overall Summary

78. Many respondents (15 of 23) supplied references to, or direct links for, a variety of research articles, reports, and publications in response to this question. These have been included in a table of submitted evidence, supplied separately.

79. Other respondents reiterated points previously discussed and summarised above.

8. Appendices

Appendix A: Questions set from Call to Evidence

Figure 1: Call to evidence questions within the scope of MCC's review

Question	Question Text
Q1	What are the main risks and opportunities presented by voluntary carbon offsets?
Q2	What data/evidence is there on the scale, range, pricing, and quality of offset activities that are being purchased in the UK, and are being produced in the UK? How can we expect this to change in future? What are the data gaps?
Q3	What is your assessment of the various standards relating to offsets (including UK specific standards such as the Peatland Code, and international verification standards such as Gold Standard and Verified Carbon Standard), including those in development (including UK specific standards such as the UK Farm Soil Carbon Code, and international standards/principles such as the Core Carbon Principle)? What more is needed?
Q4	What are the strengths and weaknesses of monitoring, verification, and reporting for offsets produced in the UK and globally? What more is needed?
Q5	What does the evidence indicate are the key areas of voluntary offset markets that could benefit from regulation or intervention?
Q6	What is the scale and potential impact of voluntary offset activity on land use and on wider social, environmental and development outcomes, both positive and negative? How would this differ between UK-based and international projects?
Q7	Are there specific activities or regions where directing funds for offsetting might have a particularly positive impact? Please consider the UK and/or the international context, depending on experience.
Q8	What could help concentrate private investment in offsets towards the most effective activities? What role, if any, is there for public funding?
Q9	What do UK companies, financial institutions and/or other institutions (or specifically, your company or institution) consider when making purchasing decisions about offsets? What evidence/information do they/you draw on, and what more information would be useful?
Q10	What is the evidence on the scale of reliance on offsets for Net Zero targets, for businesses, financial institutions, and/or other institutions and the role that offsets play in affecting emissions reduction ambition? If you are a business/financial institution/other institution with a Net Zero target, what role do voluntary carbon offsets play in your Net Zero target and emissions reduction ambition?
Q11	What would be the strengths/weaknesses/considerations of: 1. Regulation, guidance and/or incentives which could encourage and/or require businesses to only use offsets where emitting activities cannot currently be reduced? 2. Consumer protection standards for low-carbon products and offset purchases that accompany products? 3. Regulation on business Net Zero targets' reliance on offsets? 4. Including specification of offset use for investment product labelling? 5. Any other interventions?
Q12	What is the evidence on the key risks and opportunities to sustainability and development outcomes that the updated guidance for voluntary offsetting in relation to Article 6 presents to Net Zero?
Q13	Please submit any further evidence that you would like us to consider.

Appendix B: List of all respondents for Call to Evidence

Figure 2: Respondents table, with confidential responses redacted and individual responses anonymised

Ref #	Respondent Name	Confidentiality
1	Individual1	Not confidential
2	Individual2	Not confidential
3	South Pole Carbon Asset Management	Not confidential
4	Coalition for Negative Emissions	Not confidential
5	Local Authority Pension Fund Forum	Not confidential
6	Corona Energy	Not confidential
7	Friends of the Earth	Not confidential
8	BeZero Carbon	Not confidential
9	Royal Society of Wildlife Trusts	Not confidential
10	Individual10	Not confidential
11	Individual11	Not confidential
12	Coalition for Rainforest Nations (CfRN)	Not confidential
13	Fund Nature	Not confidential
14	Auditel UK Ltd	Not confidential
15	Oxfam Great Britain	Not confidential
16	Individual16	Not confidential
17	IEMA	Not confidential
18	Finnwatch	Not confidential
19	Carbon Engineering	Not confidential
20	IUCN UK Peatland Programme	Not confidential
21	Scottish Forestry	Not confidential
22	EAUC	Not confidential
23	Perspectives Climate Research	Not confidential
24	Wilder Carbon	Not confidential
25	Rainforest Foundation UK	Not confidential
26	Severn Trent	Not confidential
27	Cambridge Centre for Carbon Credits	Not confidential
28	Carbon Market Watch	Not confidential
29	Intercontinental Exchange	Not confidential
30	NewClimate Institute	Not confidential
31	The Integrity Council for the Voluntary Carbon Market	Not confidential
32	Carbon Capture & Storage Association	Not confidential
33	Pollination Foundation	Not confidential
34	International Swaps and Derivatives Association	Not confidential
35	Sustainable Soils Alliance	Not confidential
36	WWF-UK	Not confidential
37	Global Witness	Not confidential
38	Wildlife and Countryside Link	Not confidential
39	Respira International	Not confidential
40	Verra	Not confidential
41	Plantlife International and the Floodplain Meadows	Not confidential
42	Positive Impact Events	Not confidential
43	Institute for Agriculture and Trade Policy	Not confidential
44	IETA	Not confidential
45	Climeworks AG	Not confidential
46	Steve Vallance	Not confidential
47	Lydia Sheldrake	Not confidential
48	Sylvera	Not confidential
49	Climate Analytics	Not confidential
50	NatureScot	Not confidential
51	Tom Astor	Not confidential
52	The Coalition for Rainforest Nations	Not confidential
53	Drax	Not confidential
54	Green Alliance	Not confidential
55	Redacted	Confidential
56	Greenpeace	Not confidential

Appendix C: Strength of evidence assessment

Question	Assessment
Q1	- The responses are relevant to the content of the question and include various perspectives on the risks of offsets and recent relevant updates in the offsetting field, though there is also general criticism of the offsets market. - The responses are detailed in responding to the different aspects of the question, as they provide not only risks, but also opportunities in the field of offsets. Notably, there are more responses that highlight risks and issues with offsets generally and the offsets market specifically. - The evidence provided (39 pieces of evidence) leverage a variety of types of research that are appropriate to the question, including government publications, publications of relevant commercial organisations and NGOs, opinion pieces and news articles.
Q2	- The evidence that respondents provided (40 pieces of evidence) is very relevant to the content of the question, with specific articles on scale, range, pricing, and quality of offset activities. - The responses were also detailed in providing good coverage and discussion about the issues of pricing, scale and quality of offset activities, and detailed evidence on offset purchasing activity in the UK currently, market size, and on future demand. Additionally, there is varied and rich feedback about data gaps, concerns about data and the changes and improvements needed in the future. - Sources for evidence include news articles, government agency publications, research articles, and publications by interest groups.
Q3	- The evidence that the respondents provided (23 pieces of evidence) was very relevant to the content of the question, covering domestic and international standards. In addition to discussion about the specific standards mentioned in the question, responses also provided an assessment of other standards and codes that were considered relevant, and references to codes and standards in development. - The level of detail is noteworthy in that the responses covers both complimentary and critical assessments of the standards, thereby ensuring that different perspectives have been included. Additionally, responses to the final portion of this question, relating to changes needed in the future, provide recent reviews and recommendations from industry bodies. - The evidence that the respondents provided included government agency publications, academic reports, guidance from international industry bodies, and publications by the carbon accounting organisations that administer the standards.
Q4	- There is limited evidence provided by the respondents to this question. However, the evidence provided (10 pieces of evidence) is relevant to the content of the question as it includes various perspectives on the strengths and weaknesses of MVR for offsets. Notably, there is more evidence highlighting the weaknesses and ongoing challenges of MVR approaches than those highlighting strengths. - Responses focus on different aspects of the question and provide various perspectives on the state of MVR for offsets. - The evidence that the respondents provided leverages government agency publications, publications from relevant commercial organisations, NGOs, and international finance institutions, and news articles.
Q5	- There is limited evidence provided by the respondents to this question, though the evidence provided (11 pieces of evidence) is relevant to the content of the question as it highlights key areas of voluntary offset markets that could benefit from regulation or intervention. - The evidence provided, though limited, provides good coverage of perspectives from relevant bodies on the need for regulation of the market by highlighting current risks and gaps that require attention. - Sources include publications from domestic and international government agency, intergovernmental organisations, as well as opinion pieces from industry bodies and interest groups.
Q6	Most of the evidence that the respondents provided (52 pieces of evidence) is relevant to the content of the question, though the potential impact of voluntary offset activity on land use

Question	Assessment
	and on wider social, environmental and development outcomes, is covered more extensively than the scale of impacts. • Responses cover the different aspects of the question and provide resources covering the positive and negative potential impacts and includes discussion of initiatives and realistic limitations of voluntary offset activity. There is limited evidence covering the differences in the scale and potential impacts between the UK-based and international projects. • The evidence that the respondents provided includes peer-reviewed articles, government and intergovernmental organisation publications, and publications by relevant commercial organisations and NGOs.
Q7	• The evidence that the respondents provided (21 pieces of evidence) is relevant to the content of the question as respondents highlighted where directing funds for offsetting might have a particularly positive impact and supplied reviews and reports that specifically supported this proposition. • Responses provide detail on where funds can have greater impact, with a range of areas proposed. There was notably more discussion covering offsetting activities than those related to regions and areas that would particularly benefit. • Sources for evidence include peer-reviewed articles, government publications, news articles, and publications by relevant commercial organisations and NGOs.
Q8	• There is limited evidence that the respondents provided (17 pieces of evidence) to this question, with some relevant evidence provided. • There is very limited evidence for ways in which to encourage private investment in effective activities and on the role of public funding in the market. • Sources for evidence include academic publications, scientific website articles, government publications, news articles, publications by relevant commercial organisations and NGOs including publications by carbon accounting organisations.
Q9	• There is limited evidence that the respondents provided to this question generally, with no evidence relevant to the content of the question on considerations when making purchasing decisions about offsets. • As above, the evidence that the respondents provided did not provide detail on considerations when making purchasing decisions about offsets. • The evidence that the respondents provided (7 pieces of evidence) include peer-reviewed articles and publications of relevant NGOs.
Q10	• The evidence that the respondents provided (23 pieces of evidence) was relevant to the content of the question as it includes surveys and monitoring reports that investigate the scale of reliance on offsets for Net Zero targets, and coverage of the integrity of corporate claims on the role that offsets play in affecting emissions reduction ambition. • The evidence that the respondents provided focussed on the first part of the question, namely the scale of reliance on offsets, with no evidence provided by individual respondents on the roles of offsets in their own Net Zero targets or climate ambitions. Coverage of the limitations, wrongful usages, and realities of offsets was also covered by responses. • Sources for evidence include peer-reviewed academic articles, and publications by relevant commercial organisations, NGOs, interest groups, and industry bodies.
Q11	• There is limited evidence provided (7 pieces of evidence) for this question, with limited evidence relevant to the content of the question, though related content on the regulation of corporate claims was provided. • As above, the evidence that the respondents provided did not provide detail on the strengths, weaknesses, and considerations of the topics outlined, though the evidence provided did have a general focus on responsibility and regulation. • The evidence that the respondents provided includes publications of relevant NGO, interest groups, and carbon accounting organisations that administer offset standards.
Q12	• There is limited evidence provided (6 pieces of evidence) for this question. However, the evidence provided was very relevant to the content of the question as it related to updated guidance for voluntary offsetting Article 6.

Question	Assessment
	• The evidence that the respondents provided included an analysis of the implications and drawbacks of Article 6, on offsetting generally and the achievement of Net Zero targets. • Sources included peer-reviewed academic articles, and publications by intergovernmental organisation, NGOs, and industry bodies.
Q13	• As this question asked for additional evidence to be considered, many respondents supplied references to, or direct links for, a variety of research articles, reports, and publications (71 pieces of evidence). • As such, an overarching assessment on the strength of evidence is not applicable.