

(carbon)plan

APR 21 2023

Federal Trade Commission
Office of the Secretary
600 Pennsylvania Avenue NW
Washington, DC 20580

RE: Comments on Green Guides Review (Matter No.P954501)

To whom it may concern:

Thank you for the opportunity to respond to the Federal Trade Commission's request for comment on the Guides for the Use of Environmental Marketing Claims (hereafter referred to as the Green Guides).¹

Our comments focus on the Green Guides' provisions around the use of carbon offsets.² For context, CarbonPlan is a nonprofit research organization dedicated to improving the transparency and scientific integrity of carbon removal and climate solutions through open data and tools. Our comments are informed by extensive research on carbon markets' quality standards³ and disclosure practices.⁴

Since the Green Guides were last revised in 2012, our collective understanding of the climate science underpinning global climate goals has evolved dramatically. Most notably, the global scientific community now recognizes that it is necessary to achieve net zero CO₂ emissions to stabilize global temperatures — an understanding that was relatively new only a decade ago.⁵

¹ U.S. Federal Trade Commission, Request for Comment on the Guides for the Use of Environmental Marketing Claims, 87 Fed. Reg. 77766 (2022).

² U.S. Federal Trade Commission, Guides for the Use of Environmental Marketing Claims § 260.5, 77 Fed. Reg. 62126, (2012).

³ Grayson Badgley et al., Systematic over-crediting in California's forest carbon offsets program, *Global Change Biology* 28: 1433-45 (2022); Freya Chay et al., Verification Confidence Levels for carbon dioxide removal, CarbonPlan (2022); CarbonPlan, Soil carbon protocols database (2021).

⁴ Sadie Frank et al., Why carbon offset disclosure matters, CarbonPlan (2022); Sadie Frank and Danny Cullenward, Climate-related financial risk and corporate net-zero commitments, CarbonPlan (2021).

⁵ H. Damon Matthews and Ken Caldeira, Stabilizing Climate Requires Near-Zero Emissions, *Geophysical Research Letters* 35: L040705 (2008); Miles Allen et al., Net Zero: Science, Origins, and Implications, *Annual Review of Environment and Resources* (2022).

Achieving net zero requires that ongoing CO₂ emissions are balanced out by removing carbon from the atmosphere and storing it on timescales that are commensurate with the atmospheric lifetime of CO₂ — essentially permanently.⁶

Today's carbon markets mostly fail to reflect this scientific understanding. Although all carbon offset credits nominally represent a climate benefit that can compensate for the emission of 1 tCO₂, only a small fraction of available credits satisfy that compensation claim by providing carbon removal with long-duration storage.⁷ Historically, the market has not differentiated offset credits based on the type of climate service they provide — carbon removal versus avoided emissions — or on their storage duration. However, leading private-sector standards have begun to distinguish between credit types and specify which credit types can be used to make net-zero compensation claims.⁸

In this shifting landscape, disclosure around the use of offsets is critical to ensure that consumers and consumer advocates can assess how offset-based claims align with real-world climate outcomes. Unfortunately, current disclosure practices in the voluntary carbon market do not provide the information needed to connect offset-based marketing claims to the credits on which they rely.⁹

We urge the FTC to address this shortcoming by providing guidance in its Green Guides about the disclosures necessary to substantiate offset use. At minimum, recommended disclosures should include (1) disclosure of offset use, (2) disclosure of the key offset attributes that are required for evaluating the environmental claims made using those credits, and (3) public justification of how the disclosed use of carbon credits supports the specific marketing claims

⁶ Intergovernmental Panel on Climate Change, Climate Change 2022: Mitigation of Climate Change, Summary for Policymakers (2022) at 36 (“The deployment of carbon dioxide removal (CDR) to counterbalance hard-to-abate residual emissions is unavoidable if net zero CO₂ or GHG emissions are to be achieved.”); Miles Allen et al., *supra* note 5 at 850 (“Durable, climate-neutral net zero strategies require like-for-like balancing of anthropogenic greenhouse gas sources and sinks in terms of both origin ... and gas lifetime.”).

⁷ Ivy S. So et al., Voluntary Registry Offsets Database, Berkeley Carbon Trading Project (2023); Micah Macfarlane, Assessing the State of the Voluntary Carbon Market in 2022, *Carbon Direct* (2022) (analyzing the Voluntary Registry Offsets Database and showing that of the credits issued by the four largest voluntary market registries, “very few credits are removals and none are durable”).

⁸ See, e.g., Science-Based Targets initiative, SBTI Corporate Net-Zero Standard (2021) at 11 (“companies must neutralize any [residual] emissions by permanently removing carbon from the atmosphere”); Oxford Net Zero, The Oxford Principles for Net Zero Aligned Carbon Offsetting (2020) (recommends a “shift to carbon removal offsetting” and “shift to long-lived storage”).

⁹ Sadie Frank et al. (2022), *supra* note 4 (explaining how the current disclosure regime does not reliably provide public information about who is the ultimate beneficiary of retired offset credits); Kimber Streams, Does Buying a Carbon Offset for Your Laptop Really Help the Planet?, *Wirecutter* (2022) (describing a journalistic attempt to understand what offset credits would support consumer-facing options to offset the emissions of their laptop purchase).

made. These disclosure requirements would allow the FTC to avoid setting environmental policy itself with respect to offset use, but facilitate oversight, accountability, and transparency by researchers and consumer advocacy groups.

We elaborate on these recommendations below in response to the FTC's offset-related questions (B.1 a-c and e-f).

B.1. The Guides currently include guidance relating to carbon offsets. Should the Commission consider revising this section or provide additional guidance addressing other types of advertising claims related to carbon offsets and/or climate change?

Yes. The Commission should consider revising the guidance relating to carbon offsets to include additional disclosures that are necessary in order to evaluate offset-based marketing claims. We recommend that three public disclosures accompany all claims that rely on the use of carbon offsets: (1) disclosure of whether offsets are used or not, (2) disclosure of the key offset attributes required for evaluating the environmental claims made using those credits, and (3) justification of how the disclosed use of carbon credits substantiates the marketing claim made. We elaborate on each of these recommendations below:

(1) Carbon offset use should be clearly and publicly disclosed alongside any offset-based marketing claim.

We recommend that all offset-based marketing claims should be accompanied by a clear disclosure of whether offsets are used or not.

“Low carbon” is an example of a claim that may or may not rely on the use of carbon offsets. A company could claim to be “low carbon” on the basis of reducing emission within their own supply chain, such as electrifying their operations or investing in novel low-carbon technology. Alternatively, a company could claim to be “low carbon” on the basis of purchasing offsets.

Being able to easily identify when a claim is based on carbon offsets requires a basic level of disclosure necessary for consumers and consumer advocates to navigate climate marketing claims. Such disclosure requirements would also contribute to maintaining a fair competitive environment for companies who are investing in the direct emission reductions needed to reach net zero.¹⁰

¹⁰ Leading private sector standards increasingly reflect the fact that offset use cannot substitute for the deep emission reductions needed to meet global climate goals. See, e.g., Science-Based Targets initiative (2021), *supra* note 8 at 21 (“Carbon credits do not count as reductions toward meeting your science-based [emission reduction] targets”).

(2) Claims made on the basis of carbon offset use should be accompanied by a public disclosure of offset attributes.

Evaluating any offset-based marketing claim requires knowing which offset credits were used to make the claim. Unfortunately, this information is not consistently available in today's carbon market.¹¹ We recommend that all offset-based claims be substantiated by the disclosure of the specific offset credits used (via a unique project ID or URL), as well as the associated credit attributes (climate service and storage duration).

For context, offset credits available in carbon markets today represent one of two distinct climate services: avoided emissions or carbon removal. A project could claim to provide avoided emissions if, for example, it deploys renewable energy and displaces fossil fuel use. In contrast, deploying direct air capture technology would result in atmospheric carbon removal. Although avoided emissions can be beneficial in terms of reducing fossil CO₂ emissions, only carbon removal can physically counteract the damages of emitting fossil CO₂.

Compensating for fossil CO₂ emissions in the context of net zero and temperature stabilization requires that carbon removal be paired with carbon storage on a timescale that is commensurate with the long lifetime of CO₂ in the atmosphere. Burning fossil fuels emits CO₂ that contributes to warming for thousands of years.¹² Carbon removal approaches that store carbon on comparable timescales are emerging, but they represent a small portion of what is available in the market today.¹³ Instead, most carbon removal credits guarantee carbon storage on the order of decades, and some carry storage guarantees as short as 1 year.¹⁴ Since temporary carbon storage cannot physically compensate for the long-lived effects of CO₂

¹¹ The majority of carbon offset credits are issued by centralized offset registries, organizations which set crediting rules and maintain a public ledger of credit issuance and retirement. However, registries do not currently require the disclosure of the ultimate beneficiary who takes ownership of a retired credit's climate attributes. This often makes it impossible to trace which offset credits underpin an offset-based marketing claim. See, e.g., Sadie Frank et al. (2022), *supra* note 4, and Kimber Streams (2022), *supra* note 9. The Integrity Council for the Voluntary Carbon Markets (ICVCM) — a high-profile initiative aimed at improving market outcomes — will require registries to “identif[y] ... the entity on whose behalf the carbon credit was retired” in order to receive the ICVCM stamp of approval. See the ICVCM's Core Carbon Principles, Assessment Framework and Assessment Procedure (2023) at Table 2.1. However, the ICVCM registry assessment process has not yet started and ultimate registry participation will be voluntary.

¹² David Archer et al., Atmospheric Lifetime of Fossil Fuel Carbon Dioxide, *Annual Review of Environment and Resources* (2009); Raymond T. Pierrehumbert, Short-Lived Climate Pollution, *Annual Review of Environment and Resources* 42: 341-79 (2014).

¹³ Carbon Direct (2022), *supra* note 7.

¹⁴ Freya Chay et al., Unpacking ton-year accounting, CarbonPlan (2022). Ton-year accounting is a family of methods that is gaining popularity as a way to package up carbon storage as short as 1 year into carbon offsets that are marketed as equivalent to ongoing fossil CO₂ emissions.

emissions, evaluating the validity of offsetting claims requires knowing the durability of the underlying carbon storage.

In addition to being distinguished by their climate service and storage durability attributes, offset credits vary in quality. This is especially true when evaluating additionality — whether the sale of the offset credit enables a new climate benefit as opposed to taking credit for business as usual. There is substantial evidence of non-additional outcomes across credit-types and crediting programs.¹⁵ Evaluating additionality involves consulting project documentation in detail, and, increasingly, a growing body of investigative reporting documenting project-specific additionality concerns.¹⁶ Required disclosures about specific credits used would enable these critical forms of accountability through an evaluation of public information.

Put simply, not all offset credits are created equal. Treating them as such is both scientifically incorrect and a barrier to evaluating the trustworthiness of an offset-based claim. Furthermore, corporations investing resources in reducing emissions and procuring high-quality offsets will be at a competitive disadvantage if others are relying on low-quality offsets without public accountability. Low-quality offsets can cost as low as a couple of dollars a ton, which is often substantially cheaper than taking other forms of meaningful action.¹⁷ To address these problems and enable public discernment of offset-based marketing claims, all offset-based claims should be accompanied by a public disclosure of the specific offset credits used¹⁸ and the associated credit attributes (credit type and storage durability).¹⁹

¹⁵ Evidence of non-additional outcomes have been well documented in academic literature and investigative reporting. See, e.g., Martin Cames et al., How additional is the Clean Development Mechanism?, *Oko Institute* (2016) (finding that 85% of the projects participating in the Clean Development Mechanism were likely to be non-additional); Thales West et al., Overstated carbon emission reductions from voluntary REDD+ projects in the Brazilian Amazon, *PNAS* (2020) (finding “no significant evidence that voluntary REDD+ projects in the Brazilian Amazon have mitigated forest loss.”); Caley et al., Do carbon offsets offset carbon?, *London School of Economics and Political Science* (2021) (finding that 52% of credits issued to Indian wind farms were likely to be non-additional)

¹⁶ Ben Elgin, These Trees are Not What they Seem, *Bloomberg* (2020); Lisa Song and James Temple, The Climate Solution Actually Adding Millions of Tons of CO₂ Into the Atmosphere, *ProPublica* (2021); Patrick Greenfield, Revealed: more than 90% of rainforest carbon offsets by biggest certifier are worthless, analysis shows, *The Guardian* (2023).

¹⁷ Lucas Joppa et al., Microsoft’s million-tonne CO₂-removal purchase — lessons for net zero, *Nature* 597: 629-32 (2021)

¹⁸ This information should be trivial for companies using offset credits to provide. Most offset projects have unique project identification numbers within a centralized offset registry. Projects operating outside of a registry could be identified by a unique project name or URL.

¹⁹ Although information on credit type and storage durability exists in public project documentation, it’s not yet standard practice to label credits with these attributes. If credits are not clearly labeled by registries, it should still be possible for a company to characterize the credits based on project documentation. If an offset project produces both avoided emissions and carbon removals, a company may not be able to resolve the credit type and could indicate as much.

(3) Claims made on the basis of carbon offset use should be accompanied by a public explanation of why the disclosed offset use substantiates the marketing claim.

We recommend that any offset-based claim be accompanied by a public explanation of how the disclosed offset use (per our comments in the sections above) substantiates the claim. In the absence of standardization around claims like “net zero” or “carbon neutral”, this descriptive disclosure is necessary to understand and evaluate a claim in relation to the underlying offsets.

Many offset-based marketing claims lack explicit, objective definitions. For example, “net zero” can be interpreted to apply to all greenhouse gasses, or CO₂ emissions exclusively. “Carbon neutral” can be interpreted as an equivalent claim to net zero CO₂ emissions — i.e. a state in which all CO₂ emissions to the atmosphere are compensated for by long-duration carbon removals — or as a weaker claim about buying enough offsets to nominally match a CO₂ emission footprint, regardless of the offsets’ attributes. Critically, the public interpretation and use of climate claims often differs from the scientific interpretation of these claims and evolves through time.²⁰

To address this ambiguity, offset-based claims should be accompanied by a definition that relates offset use to a clearly defined claimed climate outcome. The disclosed definition should at minimum include:

- The scope of company emissions and greenhouse gasses covered;
- The role and necessary attributes of offsets needed to substantiate the claim.

More robust disclosures would additionally include public reporting of the gross emissions and quantity of offsets retired.²¹ Together, these disclosures would provide critical information to consumers and consumer advocates in an evolving landscape without requiring the FTC to establish or regulate the definition of particular offset-based claims.

²⁰ Miles Allen et al., *supra* note 5 at 874 (“The use of terms such as carbon neutral and net zero has changed over time, and the terms have diverged from their IPCC origins, in which they were originally defined as the like-for-like balancing of anthropogenic CO₂ emissions with anthropogenic removal of CO₂. In voluntary contexts, carbon neutrality ... does not require that emissions be balanced with removals and instead allows carbon credits based on avoided emissions.”)

²¹ See, e.g., Greenhouse Gas Protocol, *A Corporate Accounting and Reporting Standard: Revised Edition*, World Business Council for Sustainable Development and World Resources Institute (2004) at 60 (“It is important for companies to report their physical inventory emissions ... separately and independently from any [carbon offset purchases] they undertake.”).

B.1.a. Are there any specific claims related to carbon offsets not currently addressed by the Green Guides that are appropriate for further consideration during the review?

Yes. We recommend that the FTC consider providing guidance around what is necessary to substantiate offset-based claims that consumers may reasonably interpret as an assertion about eliminating, undoing, or otherwise physically compensating for the impacts of fossil CO₂ emissions. In the context of the FTC guidance, we recommend that such claims only be based on carbon removal with 1,000 or more years of carbon storage.²²

From a climate science perspective, only carbon removal with long-duration storage can physically compensate for the long-lasting impacts of fossil CO₂ emissions. Making compensatory claims on the basis of temporary carbon removal or avoided emissions is inconsistent with the prevailing scientific understanding of the carbon cycle, and misleading to consumers about the real impacts of a company's operations.²³ We recommend that the FTC reflect this scientific understanding in the Green Guides' guidance.

B.1.b. What, if any, evidence is there of deceptive claims related to climate change in the market?

Corporate net zero targets are growing in popularity, but often lack a detailed plan for execution.²⁴ Alongside the growth in corporations climate targets, there is evidence of a global rise in anti-greenwashing climate litigation, including around misleading marketing claims.²⁵ An offset-based climate claim could mislead consumers if it omits information necessary to evaluate the claim (see question B.1) or if it inaccurately implies that offsets physically compensate for fossil CO₂ emissions (see question B.1.a).

²² Although CO₂ emissions impact climate outcomes for more than 1,000 years, 1,000 years has emerged as a commonly used threshold for identifying approaches that align with long-term climate goals. See e.g., [Frontier Advanced Market Commitment](#) (2023; see table or purchase criteria) and [SBTi Public Consultation Letter](#) (2022).

²³ See e.g., [Dutch Ad Watchdog Tells Shell to Pull 'Carbon Neutral' Campaign](#) (August 27, 2021); [Shell Loses Dutch Appeal Over Misleading Carbon Emission Ads](#) (October 21, 2022).

²⁴ Oxford Net Zero, [Net Zero Tracker](#) (see table "Companies").

²⁵ Lisa Benjamin et al., [Climate Washing Litigation: Legal Liability for Misleading Climate Communications](#), *The Climate Social Science Network* (2022).

B.1.c. If such evidence exists, what specific guidance should the FTC provide to help marketers avoid deceptive claims?

The FTC could help marketers avoid deceptive offset-based claims by providing guidance around the necessary disclosures (see question B.1) and establishing objective criteria for what type of offsets are necessary to substantiate compensatory claims (see question B.1.a).

B.1.e. Are there any specific deceptive claims related to climate change prevalent in the market?

See our response to question B.1.b.

B.1.f. If evidence of deception exists, what specific guidance should the FTC provide to help marketers avoid deceptive claims? What evidence supports your proposed revision?

The FTC could help marketers avoid deceptive offset-based claims by providing guidance around the necessary disclosures (see question B.1) and establishing objective criteria for what type of offsets are necessary to substantiate compensatory claims (see question B.1.a).

Thank you for the opportunity to submit comments.



Jeremy Freeman, PhD
Executive Director
jeremy@carbonplan.org



Freya Chay
Program Manager
freya@carbonplan.org



Grayson Badgley, PhD
Research Scientist
grayson@carbonplan.org