



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

April 20, 2023

RE: Green Guides Review, Matter No. P954501

Federal Trade Commission
Office of the Secretary
600 Pennsylvania Avenue NW, Suite CC-5610 (Annex J)
Washington, DC 20580

The U.S. Environmental Protection Agency (EPA) is pleased to submit the attached comments related to the Federal Trade Commission's proposed rule entitled "Guides for the Use of Environmental Marketing Claims" ("Green Guides" or "Guides") (RIN 2070-AB15; Docket Id. No. 2022-27558; 87 FR 77766, December 20, 2022).

In addition to responding to the individual questions posed by the FTC in the proposed rule, the EPA appreciates the open invitation to provide additional comments and background on other issues related to the Green Guides, which we have included in the "general comments" section of the attached submission.

The comments enclosed represent the EPA's consolidated Agency views based on our expertise and experience with implementing U.S. environmental laws and mandates on topics relevant to those included in the Green Guides. As appropriate, the EPA would welcome an opportunity to meet with the FTC to discuss further our comments and to identify areas where we may be able to work together on the issues highlighted in our comments. If you would like to discuss this matter further, please contact me by email at romer.jennie@epa.gov.

Sincerely,

**JENNIE
ROMER**

Digitally signed by
JENNIE ROMER
Date: 2023.04.20 17:01:03
-04'00'

Jennie Romer
Deputy Assistant Administrator for Pollution Prevention
Office of Chemical Safety and Pollution Prevention
U.S. Environmental Protection Agency

Enclosure:

Green Guides Review, Matter No. P954501

U.S. Environmental Protection Agency Comments on the Federal Trade Commission's Proposed Rule entitled "Guides for the Use of Environmental Marketing Claims"

(RIN 2070-AB15; Docket Id. No. 2022-27558; 87 FR 77766, December 20, 2022)

April 20, 2023

The U.S. Environmental Protection Agency (EPA) appreciates the opportunity to provide comments on the Federal Trade Commission's (FTC) Guides for the Use of Environmental Marketing Claims ("Green Guides" or "Guides") with respect to preventing greenwashing in advertising, supporting reliable sustainability claims, and increasing the effectiveness of U.S. recycling systems. In our view, the timing of this request for comment is particularly important given the growing domestic and international attention to global plastic pollution. EPA has therefore, as a general matter, chosen to focus its response to the FTC's request on the recommendations relating to plastics, recycling, and building a circular economy. EPA's comments are based on its deep background and engagement on waste and recycling, including the emergence of plastic pollution as an issue of concern.

EPA would welcome the opportunity to continue to work with the FTC to determine effective means for addressing the pressing issues raised by the FTC in its request for comment. As an Agency, EPA is responsible for the implementation of several environmental laws and mandates across a range of environmental media. These comments represent EPA's consolidated Agency views.

EPA's Role in Building a Circular Economy for All

EPA is responsible for the implementation of the Resource Conservation and Recovery Act (RCRA) established in 1976. RCRA gives EPA the authority to manage hazardous and non-hazardous waste and regulate solid waste disposal facilities. Overall, RCRA sets the framework for EPA's mission to protect human health and the environment from significant health risks and the potential hazards from waste disposal. This authority spans multiple topic areas, including conserving energy and natural resources, reducing the amount of waste generated, and ensuring that wastes are managed in an environmentally sound manner.

In 2018, in response to recent international policy changes and other challenges, Congress directed EPA to begin an effort to focus on recycling challenges in the United States. In 2019, EPA published the National Framework for Advancing the U.S. Recycling System (the National Framework) to highlight the four main challenges the U.S. recycling system must address to be effective: promoting education and outreach, enhancing infrastructure, strengthening materials markets, and enhancing measurement. The National Framework also identified specific voluntary actions, ongoing and planned, that EPA and recycling stakeholders could take to improve the effectiveness and resiliency of America's recycling system.

While recycling was identified as one issue where additional action was needed, Congress also recognized there were issues with plastic pollution. In December 2020, Congress passed the Save Our Seas 2.0 Act (SOS 2.0), which aims to address and manage plastic pollution and waste in our waterways, including global oceans and coasts. Among other things, SOS 2.0 Act authorized EPA to create a grant program on post-consumer materials management, a strategy on post-consumer materials management, and several reports on the management of plastic waste, including identifying the barriers to recycling.

In 2021, building on EPA's long history of providing data, tools, information, and other resources to support recycling in the United States, EPA developed the *National Recycling Strategy: Part One of a Series on Building a Circular Economy for All* to identify the actions needed to create a strong, resilient, cost-effective, and less resource-intensive U.S. recycling system – all key elements of a circular economy. Given the task at hand to consider the Green Guides, the *Strategy* includes a particularly relevant action on improving the consistency of labels for recyclable products¹ (Action C1.5) because “clarifying existing labels that are confusing to consumers – for example, the resin identification code – could make recycling easier. Labels should be accurate and not misleading.”

As part of EPA's commitment to strengthening the recycling system of the United States, EPA issued its *National Recycling Strategy* on November 15, 2021, the same day that President Biden signed the Bipartisan Infrastructure Law (BIL). The BIL authorized \$275,000,000 for EPA to improve local post-consumer materials management programs and upgrade local waste management systems. The U.S. municipal solid waste system (MSW), for example, has changed drastically in the last 10 years and currently faces a number of challenges, including confusion about what materials can be recycled, a recycling infrastructure that has not kept pace with today's diverse and changing waste stream, reduced markets for recycled materials, and varying methodologies to measure recycling system performance. Additionally, changes to global trade have shifted the markets for recycled materials, further amplifying the need for strengthening end markets and improved infrastructure across the United States.

Finally, over the last 20 years, the global annual production of plastic products has more than doubled and, as a result, plastic waste has also doubled. In 2019, roughly 23 percent of global plastic waste was either improperly disposed of, burned, or leaked into the environment.² Plastic products account for approximately 85 percent of total global marine waste and between 70-80 percent of all waste that ends up in land and marine environments combined (UNEP, 2021).³ Plastic products in the environment tend to break down over time to form very small pieces called microplastics, which can pose serious threats to wildlife and may potentially harm human health. The pervasiveness and persistence of plastic waste in the environment were drivers for

¹ The term product in this context is intended to mean product or package.

² OECD (2022a), “Global Plastics Outlook: Economic Drivers, Environmental Impacts and Policy Options.” OECD Publishing, Paris, <https://doi.org/10.1787/de747aef-en>.

³ National Academies of Sciences, Engineering, and Medicine. (2022). “Reckoning with the U.S. Role in Global Ocean Plastic Waste.” Washington, DC: The National Academies Press. <https://doi.org/10.17226/26132>.

the international community to start work in 2022 on an international legally binding instrument on plastic pollution (UNEA, 2022).⁴

Given these challenges, EPA would like to take the opportunity to share with the FTC the recent news that EPA has released a subsequent strategy to increase plastic product circularity, including the reduction, reuse, collection, and capture of plastic products and packaging. In that strategy, EPA reaffirmed that the Agency does not consider activities that convert non-hazardous solid waste to fuels, or fuel substitutes (“plastics-to-fuel”) or for energy production to be “recycling” activities and proposed questions for public comment regarding which criteria should be considered recycling activities. EPA also signaled its intent to require companies submitting new pyrolysis oil chemicals to the Agency for review under TSCA to conduct testing for impurities that could be present in the new chemical substance prior to approval, and to continue ongoing testing to ensure there is no variability in the plastic waste stream that is used to generate the pyrolysis oil.

The FTC’s review of the Green Guides is therefore well timed in EPA’s view and aligns with the Agency’s initiatives set forth in the *National Recycling Strategy* and its focus on improving plastic product circularity, including working with stakeholders to improve the consistency of labels for recyclable products.

Overarching Comments on Building a Circular Economy for All

1. **The U.S. MSW system has drastically changed since the China National Sword policy went into effect in 2018, several years after the Green Guides were last updated.** It is widely acknowledged that our current recycling system is facing significant challenges around access, consumer education, and a clear understanding of what can and should be recycled; these challenges have only become more pronounced since 2018.
2. **There should be a very high bar for all qualified and unqualified environmental claims included in the Green Guides.** When products aren’t recycled right or aren’t recycled at all, the cost for consumers and communities is high. The “60% substantial majority” claim that allows for an unqualified recyclable claim should be reconsidered in light of the changing waste stream and known access to recycling issues.
3. **EPA strongly encourages the FTC to clarify that products and packaging may only be marketed as recyclable if they have a strong end market.** A strong end market should be defined to mean that materials collected and sorted by the recycling facility can reliably be sold for a price higher than the cost of disposal (e.g., the tipping fee) for the same materials, with some accounting for market fluctuations.

⁴ UNEP Intergovernmental Negotiating Committee on plastic pollution - <https://www.unep.org/about-un-environment/inc-plastic-pollution>

4. **Plastics are a significant problem that need to be addressed. Categorizing plastics by resin identification code coupled with chasing arrow symbols does not accurately represent recyclability as many plastics (especially 3-7) do not have end markets and are not financially viable to recycle.** EPA recommends that the FTC address this issue by revising the Green Guides to reflect the language and understanding of the original ASTM intention of the resin identification codes for manufacturer, business, and consumer awareness. According to ASTM, the intention of the coding system was never to determine the recyclability of a product, but rather to determine resin composition and quality control measures before recycling.

5. **EPA strongly encourages the FTC to revise the Green Guides to increase transparency in environmental benefit claims and to support increasing the use of third-party certification to support those claims.** This includes requiring that all evidence supporting such claims be made readily available to the public and other interested parties for review. Transparency of information is critical to addressing the confusion around what is recyclable or compostable and to combating greenwashing.

6. **EPA recommends that the Green Guides be updated to restrict the use of the terms degradable, biodegradable, oxo-degradable, oxo-biodegradable, or photodegradable on any products which are customarily disposed of in landfills, incinerators, or recycling facilities.** Unlike the claims of “compostable” and “recyclable,” there is very little value associated with the use of the term “degradable”⁵ in advertising claims.

⁵ The term “degradable” here also applies to biodegradable, oxo-degradable, oxo-biodegradable, and photodegradable.

Responses to Specific Questions Posed by the FTC

A. General Issues

1. Is there a continuing need for the Guides? Why or why not?

Yes, there is a continued need for the Green Guides. Consumer demand for green products, and business demand or interest in environmental marketing of their products, means that there is a continuing need for the Green Guides.

The Green Guides are even more important now than they were previously. The Green Guides provide guidance that manufacturers use to make environmental claims in the United States. EPA's Environmentally Preferable Purchasing (EPP) program, tasked with helping federal agencies procure more sustainable products and services, assesses and recommends private sector environmental performance standards and ecolabels for use in federal purchasing. As part of the assessment process, the EPP program reviews the environmental effectiveness and conformity assessment procedures of an individual standard or ecolabel. During its review process, the program has found a wide variation of quality in terms of the criteria developed within the standard and the conformity assessment processes established to ensure accurate claims in the marketplace. The EPP program also frequently receives questions from manufacturers on how to make accurate environmental claims in the marketplace, and in response, directs manufacturers to the Green Guides.

Additionally, businesses can make claims about the end-of-life recyclability, compostability, or reusability of products or their packaging using the product packaging or label, which often guides consumer decisions about how to manage those products at the end of their life. It is important that the claims that manufacturers make on their products align with the existing U.S. infrastructure for reuse, recycling, and composting. False claims confuse the public about what can and cannot be recycled or composted, leading to increased waste management costs and the ineffective recovery of materials.

There is a deep need for the Green Guides to continue to exist and be regularly updated to help address these issues.

3. What modifications, if any, should be made to the Guides to increase their benefits to consumers?

EPA provides the following inline edits, as well as general text suggestions, regarding the current Green Guides language to increase their benefits to consumers. Please note that edits and suggestions relevant to this question for Sections 260.7, 260.8, 260.12, and 260.13 are provided alongside responses under part B. Specific Claims.

§ 260.2 Interpretation and substantiation of environmental marketing claims.

- *Inline text edit* – Section 5 of the ... In the context of environmental marketing claims, a reasonable basis often requires competent and reliable scientific evidence. Such evidence consists of tests, analyses, research, **third party certification**, or studies that have been conducted and evaluated in an objective manner by qualified persons and are generally accepted in the profession to yield accurate and reliable results. Such evidence should be sufficient in quality and quantity based on standards generally accepted in the relevant scientific fields, when considered in light of the entire body of relevant and reliable scientific evidence, to substantiate that each of the marketing claims is true. **All such evidence substantiating claims used in advertising shall be made readily available to the public and other interested parties for review, by clearly displaying a website address or QR code that links directly to the evidence that substantiates the claim.**

§ 260.4 General environmental benefit claims.

- *General text suggestion* – Example 1: Suggest revising this example to explain when making any claim of “eco-friendly,” or “environmentally preferable,” all key environmental impacts of that product need to have been addressed and minimized by the manufacturer. For example, if the product has another key environmental impact related to its production, use, or disposal, such as including toxic substances like PFAS, and this has not been addressed by the manufacturer, then this product brand name would be inaccurate and misleading for consumers.

§ 260.6 Certifications and seals of approval.

- *General text suggestion* – Section 260.6: Suggest adding text to clarify that if manufacturers choose to use ecolabels and standards to make environmental claims in the marketplace, they should ensure that those ecolabels and standards are credible and environmentally effective. To help with this, EPA has developed a [Framework for the Assessment of Environmental Performance Standards and Ecolabels](#) which manufacturers can use to help select appropriate standards and ecolabels. Manufacturers can also use [EPA’s Recommendations of Specifications, Standards, and Ecolabels](#) to see standards and ecolabels identified by the U.S. Government as meeting the Framework criteria. The FTC should require third-party certification for environmental benefit claims in the marketplace, which is preferred over manufacturer self-declarations.
- *Inline text edit* – Revise link in fn. 2 to the most recent version of [OMB Circular A119](#).

For reference:

- Whenever feasible, EPA recommends that the FTC require third-party certification for environmental benefit claims in the marketplace and that these and evidence substantiating a claim be made available to the public.

- Since the Green Guides were last updated in 2012, several Federal policies regarding standards and conformity assessment have been updated. This includes [OMB A-119, “Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities”](#) (updated in 2016) and [15 CFR 287, “Guidance on Federal Conformity Assessment”](#) (updated in 2020). In 2018, the U.S. Department of Commerce, National Institute for Standards and Technology (NIST) also issued two publications that provide additional conformity assessment resources for Federal Agencies: [NIST SP 2000-01: ABCs of Conformity Assessment](#); [NIST SP 2000-02: Conformity Assessment Considerations for Federal Agencies](#). EPA encourages the FTC to ensure that the upcoming revision to the Green Guides (and, in particular, Subsection 260.6) aligns with these updated policies and guidance, and that this revision supports other Federal agencies’ implementation of such policies.
- With regards to discussion of certification and other conformity assessment activities in the Green Guides, EPA would like to highlight for the FTC’s attention Section 7 of the 2016 update to OMB A-119: Working closely with NIST and OMB. In that section, agencies are encouraged to identify their conformity assessment needs in such areas as regulatory compliance and enforcement, procurement, and other programmatic contexts and to assess, subject to certain conditions, whether the use of private sector conformity assessment mechanisms (in lieu of or in conjunction with government conformity assessment procedures) would be beneficial, where such use is feasible and appropriate and not otherwise prohibited by law. Agencies are also to consider whether reliance on international conformity assessment schemes would meet their conformity assessment needs.

§ 260.7 Compostable Claims. See part B (Specific Claims) below.

§ 260.8 Degradable claims. See part B (Specific Claims) below.

§ 260.9 Free-of Claims

- *General text suggestion* – Per- and Polyfluoroalkyl Substances (PFAS) in human health and the environment is an emerging issue being addressed by EPA in several ways, as detailed in our [PFAS Strategic Roadmap](#). EPA has increasingly been seeing “PFAS-free” claims used on product packaging in the marketplace, despite the lack of standards and adequate testing procedures. EPA would therefore encourage adding a “PFAS-free” example to this section to help reduce the use of PFAS in products and ensure the protection of human health and the environment.

§ 260.12 Recyclable claims. See part B (Specific Claims) below.

§ 260.13 Recycled content claims. See part B (Specific Claims) below.

a. What evidence supports your proposed modifications?

All proposed modifications are based on EPA experience with the implementation of policies and programs related to recyclability, compostability, certifications, and conformity assessment. Additional evidence and information are available under part B (Specific Claims) below.

b. How would these modifications affect the costs the Guides impose on businesses, particularly on small businesses?

The proposed modifications are intended to increase the transparency of environmental benefit claims so that businesses, as well as consumers, can rely on these claims. Businesses making deceptive marketing claims create an unfair market advantage and stand to financially benefit from deceptive claims. Other businesses, consumers, municipal recyclers, and communities pay if the claims are not in fact true.

Regarding substantiation claims: More businesses would potentially have to incur the cost of getting third-party certification. The individual certification bodies determine the cost and fee schedules. More businesses would have to incur the costs of making the evidence of their claims public through a website or similarly available technology.

c. How would these modifications affect benefits to consumers?

Regarding substantiation claims: Increasing third-party certification requirements will result in a direct benefit to consumers because they would no longer have to worry about whether the claim on a product is legitimate. Requiring third-party certification could also result in less enforcement needed by the FTC because it would result in less faulty claims in the marketplace. Consumers would also have an easier way to validate claims being made through publicly available information of claims on websites.

8. Please provide any evidence that has become available since 2012 concerning consumer interest in particular environmental issues. Does this new information indicate the Guides should be modified? If so, why, and how? If not, why not?

There have been several studies and surveys performed since 2012 to document consumer interest in environmental issues. The following statistics can be used to demonstrate consumer interest as well as the need to modify the Green Guides:

- Eighty-one percent of respondents to a survey conducted by EPA in 2020 said they were interested in using the Safer Choice label to inform their purchasing decisions once they understood the benefits of the label. The interest was even higher for parents (89%) and millennials (87%).

- Multiple surveys note that 85% of Americans support recycling. In a March 2020 survey conducted by The Recycling Partnership, nearly 50% of Americans said they would never shop with a company again if they learned they weren't being as sustainable as possible. Consumers want to recycle and will be influenced by environmental claims made on products.

Other resources⁶ include but are not limited to:

- [International Public Opinion on Climate Change, 2022](#) by Yale Program on Climate Change Communications
- [Majority of U.S. Consumers Say They Will Pay More for Sustainable Products](#) by Sustainable Brands
- [More consumers are serious about climate change. Are business and government listening?](#) by GreenBiz
- [Healthy and Sustainable Living Annual Study](#) by GlobeScan

15. What potentially unfair or deceptive environmental marketing claims, if any, are not covered by the Guides?

The general categories of marketing claims are sufficiently covered by the Green Guides. EPA has suggested additional potentially unfair or deceptive environmental marketing within the relevant sections.

18. Are there international laws, regulations, or standards with respect to environmental marketing claims the Commission should consider as it reviews the Guides? If so, what are they? Should the Guides be modified to harmonize with these international laws, regulations, or standards? If so, why, and how? If not, why not?

There are a number of foreign governments and international organizations with many years of experience with respect to environmental marketing claims that could be relevant for the FTC, including with respect to “harmonization.” From EPA’s perspective, the process to revise the Green Guides would benefit from considering actions taken by those foreign governments and international organizations, in particular actions which resulted in successfully addressing some of the challenges currently facing the United States. It is our understanding, for example, that at this particular moment, the European Union (EU) is working on its Proposal for a Directive on Green Claims and is requesting comments on its approach. The EPA is planning to review the EU’s proposal and would welcome an opportunity to work with the FTC to provide a more comprehensive U.S. perspective for the consideration of the EU.

⁶ Identification of these sources does not constitute endorsement of their content by EPA.

19. Should the Commission initiate a proceeding to consider a rulemaking under the FTC Act related to deceptive or unfair environmental claims?

EPA is supportive of the FTC initiating a proceeding to consider a rulemaking under the FTC Act. Despite the existence of the Green Guides, EPA still sees misleading and false claims in the marketplace and therefore believes a rule making would be beneficial to appropriately regulate the marketplace. As noted in EPA’s comments, the issues surrounding consumer confusion about what is recyclable and/or compostable are complex and would benefit from greater standardization at the national level. A rulemaking could provide an opportunity to provide such standardization of the areas of marketing and labeling practices and require increased transparency of the evidence supporting environmental claims to reduce the instances of misleading and false claims in the marketplace.

Also, given the rapidly changing policies and market conditions in the recycling industry, EPA recommends that the Green Guides consider updates more frequently than every 10 years.

- a. If so, which principles set out in the Green Guides should be incorporated into a rule? For each suggested provision, explain why and provide any evidence that supports your proposal.

All sections covered in the Green Guides should be incorporated into a proposed rule to level the playing field and provide consumers with uniform and trusted information. Misleading environmental benefit claims, as noted herein, have become pervasive in the marketplace—creating a false sense of safety for consumers. Such claims have also become broad in scope, spanning from general sustainability to claims of being free from chemicals of concern like PFAS, and therefore need to be addressed in a future rulemaking.

- b. Are there additional principles related to environmental claims not currently covered by the Guides that should be incorporated into a rule? For each suggested provision, explain why and provide any evidence that supports your proposal.

Since the last Green Guide was published, many additional terms have surfaced in advertising (e.g., “low embodied carbon,” “zero waste,” “climate-friendly,” etc.) The Green Guides should identify a process to encompass and address prominent new terms and include guidelines on how those terms can be used appropriately.

For example, claims of products or materials being “low carbon” or having “low embodied carbon” is likely to rise as manufacturers respond to market signals pushing for disclosure of full lifecycle impacts. How these impacts are calculated and disclosed is important for accuracy, consistency, and benefit comparisons across like materials or products. Please refer to EPA’s new programs on [low embodied carbon in construction material](#) under the Inflation Reduction Act and [EPA’s interim determination](#) for more information on this emerging market.

B. Specific Claims

2. Compostable, [16 CFR 260.7](#). The Guides currently advise marketers claiming products are “compostable” in municipal or institutional facilities that they should qualify such claims if appropriate facilities are not available to a substantial majority of consumers or communities where the item is sold. Should this guidance be revised to define “substantial majority” consistent with the “recyclable” section? If so, why, and what guidance should be provided? If not, why not? What evidence supports your proposed revision(s)?

The guidance should be revised to remove the “substantial majority” section (16 CRF 260.7.d). Instead of the “substantial majority” section, EPA recommends emphasizing the need to qualify “compostable” claims when products can only be composted in a municipal/commercial/industrial composting facility and that products will only compost as designed if placed in an appropriate composting system or facility, but not if disposed of as trash.

Composting is a growing organics management pathway as more states look to divert food waste and other organic waste from landfills. Access to industrial or municipal composting facilities varies widely across the country, and it is impractical to expect manufacturers to keep up with the rapidly changing landscape of where such composting facilities are available. Even in areas where industrial or municipal composting facilities are available, they may not accept compostable products into their composting system. Furthermore, it would be unreasonable to expect manufacturers to know who has access to each industrial or municipal composting facility. Fees or transportation barriers can also reduce accessibility to some consumers and communities. Where industrial or municipal facilities are not available or accessible, home or community composting may be an option, but these smaller-scale systems often cannot process compostable products.

- **Instead of the “substantial majority” section (d), EPA recommends emphasizing the need to qualify “compostable” claims when products can only be composted in a municipal/commercial/ industrial composting facility.** Most consumers perceive compostable labels to mean that the item can be composted anywhere – in their home compost or in a municipal/commercial/industrial facility – but this is not always the case, leading consumers to place items in their home compost that will only break down in an industrial facility. In a review of consumer perceptions of environmental marketing, [Otto et al. \(2021\)](#) notes that “Consumers evaluate food packaging by affective feelings [rather] than using cognitive reasoning. Their knowledge about the practical implementation of recyclability, biodegradability, and reusability as well as additional environmental impact factors are low. Consequently, consumers’ buying behavior is in most cases less environmentally sustainable than intended.” [Ruf et al. \(2022\)](#) confirms that “many consumers do not know or understand respective end-of-life properties like biodegradability or recyclability (Dilkes-Hoffman et al., 2019; Allison et al., 2021; Mehta et al., 2021).”

- To strengthen transparency about the environmental benefit of a compostable item, EPA recommends the FTC add further emphasis and clarification to environmental performance at *16 CFR 260.7.c*, remove *16 CFR 260.7.d.*, and add a qualification to indicate that a compostable item will only compost as designed if placed in an appropriate composting system or facility, but not if disposed of as trash.
- The differentiation between products that are compostable in industrial or municipal facilities and those that are compostable in home (or community) compost systems aligns with existing standards for compostability. Voluntary consensus-based standards and third-party certifications exist for labeling of products that are compostable in industrial or municipal composting facilities (e.g., ASTM D6400, ASTM D6868, ISO 17088, BPI Commercial Compostability Certification). Standards are in development for labeling of products that are compostable in in-home composting systems.
- **EPA also recommends that the FTC add restrictions on other forms of marketing that imply compostability to consumers.** These include the use of certain labels, coloring, tinting, and other design features on non-compostable plastic films and packaging. Based on evidence that these other design elements could mislead consumers, Washington State enacted a law in 2020 to this effect ([Chapter 70A.455 RCW](#)) prohibiting use on plastic packaging of design elements that imply compostability to consumers, such as green-tinted film. The Green Guides could similarly advise against these types of misleading marketing on non-compostable products and packaging and include an example of when such a marketing decision could be deceptive.
- **Although not requested in the questions about compostable products, EPA recommends emphasizing that products labeled as compostable should not release substances that may cause harm to human health or the environment (i.e., PFAS or microplastics) as they decompose.**

§ 260.7 Compostable Claims.

Please see below inline edits, as well as general text suggestions, regarding the current Green Guides language.

- *Inline text edit – 260.7(b):* A marketer claiming that an item is compostable should have competent and reliable scientific evidence that all the materials in the item **meet established compostability standards and** will **fully** break down into, or otherwise become part of, usable compost (e.g., soil-conditioning material, mulch) in a safe and timely manner (i.e., in approximately the same time as the materials with which it is composted) in an appropriate composting facility, or in a home compost pile or device.
- *Inline text edit – 260.7(c):* A marketer should clearly and prominently qualify compostable claims to the extent necessary to avoid deception if: (1) the item cannot be composted safely or in a timely manner in a home **or community-scale** compost pile or device; or (2) the claim misleads reasonable consumers about the environmental benefit

provided when the item is disposed of in a landfill. **All items marketed as compostable must also be labeled “Will not compost if disposed of in trash.”**

- *General text suggestion* – 260.7(d): EPA recommends deleting this subsection given the limited value of such a qualification.

3. Degradable, [16 CFR 260.8](#). The Guides provide that an unqualified claim indicating a product or package is degradable, biodegradable, oxo-degradable, oxo-biodegradable, or photodegradable should be substantiated by competent and reliable scientific evidence demonstrating the entire item will completely break down and return to nature within a reasonably short period of time after customary disposal. For products customarily disposed in a landfill, “reasonably short period of time” is defined as one year.

EPA recommends that the Green Guides be updated to restrict the use of the terms degradable, biodegradable, oxo-degradable, oxo-biodegradable, or photodegradable on any products which are customarily disposed of in landfills, incinerators, or recycling facilities, and that products labeled with terms such as degradable, biodegradable, etc., should always provide clear instructions for consumers on how to dispose of the product in a way that it will decompose in a safe and timely manner.

The current Green Guides say that it is deceptive to make an unqualified “degradable” claim for items that are customarily disposed in landfills, incinerators, and recycling facilities because these locations do not present conditions in which complete decomposition will occur within one year; yet many marketers still use the term on these types of products. Labeling a product as “degradable” does not provide consumers with useful information on how to dispose of the product. It also confuses many consumers who falsely assume that degradable equates to compostable, leading consumers to make ambiguous assumptions that impact the purchasing and disposal of the product. Studies (most notably, [Ruf et al. \(2022\)](#) have shown that “many consumers assume that bioplastics are biodegradable (Boesen et al., 2019; Zwicker et al., 2020; Zwicker et al., 2021) or wrongly dispose of compostable bioplastics (Taufik et al., 2020). Furthermore, a low level of consumer knowledge on bio-based packaging labels was found by Boesen et al. (2019) and Allison et al. (2021) and on brands by Gaffey et al. (2021).” These claims can also contribute to the contamination of compost, costing compost collectors and processors money and reducing the quality of the final compost product.

- a. Should the Commission revise the Guides to provide an alternative timeframe for product decomposition for all or any category of products? Does the timeframe differ for liquid products?

Alternative timeframes based of the type of product and the rates and extent of degradation should be considered and made readily available to consumers. Timeframes should be based on scientific evidence and competent testing that utilizes standards such as those set by standard-setting authorities for the degradability of chemicals or products. Setting

thresholds based on a physical property may not be the best approach as degradation rates are based on chemical composition/reactions and not solely on the state of matter (*i.e.*, whether a product is in liquid, gas, or solid form). It is best to require the use of standardized testing to substantiate any degradability claims.

- b. If so, why, and what should the timeframe be? If not, why not? What evidence supports your proposed revision(s)?

EPA recommends that the Commission refer to a standard-setting organization in the decision making for the determination of rates and timeframes based on chemical composition and environmental conditions needed for decomposition. Established guidelines for degradation, environmental fate and transport analysis substantiates the proposed revision.

- c. Should the Commission clarify or change existing guidance on degradable claims in light of its decision in the *ECM Biofilms* matter? If so, how?

Yes. Degradability should be based on criteria established by standardized methods (e.g., ASTM, OECD, etc.) and companies should be required to provide evidence of appropriate testing to certify and use such claims.

Most consumers are unable to understand the complexities of claims made on the degradability of products, so the onus should be on manufacturers to conduct testing to prove their claims. Furthermore, information should be made publicly available on the degree to which products degrade, in what environmental conditions, and the associated time frames. For an item to be considered degradable, the degradation time frames should fit within the applicable standards established by standard setting organizations.

The Green Guides should also add guidance stating that any products labeled as degradable, biodegradable, etc., should not release substances or other emerging contaminants of concern that may cause harm to human health or the environment (e.g., PFAS or microplastics) as they decompose.

§ 260.8 Degradable claims.

Please see below inline edits, as well as general text suggestions, regarding the current Green Guides language.

- *Inline text edit* – 260.8(a) It is deceptive to misrepresent, directly or by implication, that a product or package is degradable, biodegradable, oxo-degradable, oxo-biodegradable, ~~or~~ photodegradable, **or decomposable**. The following guidance for degradable claims also applies to biodegradable, oxo-degradable, oxobiodegradable, ~~and~~ photodegradable, **and decomposable** claims.

- *Inline text edit – new text – 260.8: (e) Use of the term “degradable” in marketing claims are deceptive unless the marketer identifies the appropriate customary disposal method in which the item will meet established standards of degradability, the availability of such disposal methods to the consumer, and includes a disclaimer on the label that identifies the conditions under which the product will degrade.*
- *General text suggestion – Examples: EPA encourages the FTC to revisit the examples provided in this section, taking into consideration how current state laws have addressed the use of a “degradable” claim.⁷*

5. Recyclable, [16 CFR 260.12](#). Should the Commission revise the Guides to include updated guidance on “recyclable” claims? If so, why, and what guidance should be provided? If not, why not?

Yes. To avoid misleading consumers, recycling standards need to be clearer to the consumer and reflect which products or packages are actually recycled. The bar needs to be high to make a recyclable claim and labels should reduce, not contribute to consumer confusion. Given the complexity of products that are on the market (*i.e.*, those that use multiple materials) and the limitations of U.S. recycling system, simply labeling a product as “recyclable” is not enough to ensure that the product will get recycled.

EPA strongly encourages the FTC to provide explicit guidance in the Green Guides that products and packaging may only be marketed as recyclable if they have a strong end market to use in the manufacture of new products, meaning they are reliably sold by recycling facilities for a higher price than the cost of disposal of the same material (with caveats that market prices for recycled materials can fluctuate over time.) This should be considered above and beyond access to collection services and sorting infrastructure.

Conversely, EPA recommends the Green Guides encourage companies that produce products that cannot be recycled to label their product with information on how consumers should properly dispose of the product. EPA also recommends FTC consider further restricting qualified claims related to accessibility. These include store-drop off, which may be limited in scope and scale, and “check locally” which has little value in assessing recyclability. This information on the product would help to reduce “wishcycling” – when consumers put nonrecyclable products in their recycling bin because they are not sure if their product is recyclable and hope it will be recycled.

In addition, EPA recommends that the FTC address confusion created by the chasing arrows symbol and the resin identification codes by revising the Green Guides to reflect the intention of the ASTM standard for resin identification coding. EPA believes the use of the RIC with the chasing arrows symbol constitutes a misrepresentation and violation of claims prohibited under Section 5 of the FTC Act – “A representation, omission, or practice is deceptive if it is likely to mislead consumers acting reasonably under the circumstances and is material to consumers’

⁷ California, Maryland, Minnesota, Washington

decisions.” Consumers generally understand the chasing arrows triangle to represent a universal recycling symbol and interpret it to mean that the product is recyclable, and its use with the resin identification codes influences consumer decisions on how they dispose of plastic products.

According to ASTM standard D7611/D7611M, the intention of the coding system was never to determine the recyclability of a product, but to determine resin composition and quality control measures before recycling. Not all resin codes can be recycled currently in the United States. Resin codes 3-7 cannot be recycled in most material recovery facilities and do not have strong end markets. The issue is not the resin codes themselves, but the implication that all of them can be recycled. This implication is made when the numbers are combined with the chasing arrows symbol, which is why the combination becomes deceptive or misleading. As such, the current ASTM standard no longer uses the chasing arrows symbol to surround the number and has switched to an equilateral triangle. Moreover, California passed SB 343, which prohibits the use of the chasing arrows or any other indicator of recyclability on products and packaging unless certain criteria are met.

EPA believes updates to the FTC Green Guides "recyclable" claims can be a tool to reduce consumer confusion that contributes to recycling facilities receiving many plastic materials that they do not accept and cannot recycle, which adds a financial burden to facilities and taxpayers to haul, process and ultimately incinerate or landfill this contamination.

a. What evidence supports your proposed revision(s)?

Studies have found that local recycling guidelines are unclear to the point where it is difficult to determine whether an item is recyclable. A recent survey by the Recycling Partnership found that 73% of respondents reported that they are unclear on what is recyclable.⁸ In addition, analyses being conducted by academia, industry, states and localities illustrate the complexities of achieving recycling viability. A key highlight from a 2022 University of Florida assessment of the financial viability and environmental impacts of Florida's recycling programs states "The most effective way to control the cost of recycling is to reduce contamination (saving processing time/capacity/labor/energy usage; transportation costs; and disposal costs)."⁹

Other resources¹⁰ include but are not limited to:

- University of Buffalo's 2022 study documenting the costs of contamination under new international policy conditions, [Impact of China's National Sword Policy on the U.S. Landfill and Plastics Recycling Industry](#)

⁸ The Recycling Partnership. 2019. Together: Transforming Recycling for Good. SWNS Survey Results Summary. https://recyclingpartnership.org/wp-content/uploads/dlm_uploads/2019/09/Recycling-Partnership-Consumer-Research-Summary-April2019-CONFIDENTIAL.pdf

⁹ Florida Recycling Partnership Foundation and University of Florida. 2022 Investigating the Economics of Current and Future Recycling Programs in Florida <https://flrecycling.org/wp-content/uploads/2023/01/Investigating-the-Economics-of-Current-and-Future-Recycling-Programs-in-Florida-UF-Study.pdf>

¹⁰ Identification of these sources does not constitute endorsement of their content by EPA.

- New York City Department of Sanitation’s 2017 [Determination on the Recyclability of Food-Service Foam Pursuant to Local Law 142 of 2013](#)

b. What evidence is available concerning consumer understanding of the term “recyclable”?

EPA receives frequent inquiries from the public regarding the term recyclable, the recyclability of plastics, and concerns over mislabels and misleading claims on labels, including the chasing arrows and resin identification codes found on many plastics and other products. EPA has directed these concerned citizens to the FTC to share their concerns.

In addition, EPA hears first-hand from local governments and material recovery facilities about contamination issues operators are facing in their daily operations and the resulting costs to their programs. They relay that this contamination is related to consumer confusion about what is recyclable and what can be included in municipal recycling collections, despite local program education efforts.

In 2019, EPA, in collaboration with U.S. stakeholders, identified that confusion about what materials can be recycled is one of four major challenges facing the recycling system¹¹ and often leads to costly recycling contamination and reduced yields (putting non-recyclables in the recycling bin or cart or throwing recyclables in the trash.)

The Consumer Brands Association (CBA), which represents the world's leading consumer packaged goods companies, issued a report in April 2019 titled [Reduce. Reuse. Confuse: How Best Intentions Have Led to Confusion, Contamination, and a Broken Recycling System in America](#). CBA acknowledges that consumer confusion on what is recyclable is understandable. The trade association reported that 92 percent of Americans did not understand the plastic resin code labels. Sixty-eight percent said they assume that any product with the resin code symbol would be recyclable. Of those surveyed, 24 percent said they did not know what the resin codes meant. Only eight percent indicated that the resin code did not necessarily mean the material is recyclable. Upon learning that only two of the seven codes (#1 and #2) were typically recyclable in most U.S. recycling programs, 73 percent were surprised. The CBA report reiterated that the resin codes are intended for the recycling processing centers, but consumers are, often incorrectly, interpreting them to mean the products are recyclable.

c. What evidence constitutes a reasonable basis to support a “recyclable” claim?

In order for a product to have an unqualified “recyclable” claim, EPA believes the entire item must be 100% recyclable and if it is not, the item should reflect directions on what would make it recyclable. For example, if a plastic bottle is recyclable, but the “shrink sleeve”

¹¹ U.S. EPA, 2019, National Framework for Advancing the U.S. Recycling System, 530-F-19-008, Washington, DC, https://www.epa.gov/sites/default/files/2019-11/documents/national_framework.pdf

label is not compatible to recycle with the bottle, the product must indicate that the label be removed for the bottle to be recycled.

In addition to access to collection services and sorting infrastructure, many factors contribute to an item's recyclability. For plastics, these include:

- **Resin type:** While most, if not all, plastic resins are theoretically recyclable, resins #1 (polyethylene terephthalate, PET) and #2 (high-density polyethylene, HDPE) are the most readily and economically recycled resins in the United States, and resins #3-#7 are the least able to be recycled. However, there is an emerging domestic market for these resins, particularly polypropylene, and as a result a growing number of MRFs are accepting these materials.
- **Size, shape, color:** In some MRFs, recyclable materials are sorted using optical sorting, which requires materials to conform to certain size, shape, and color requirements. If items do not conform, they are discarded as contaminants regardless of chemical content. In addition, MRF equipment is often not able to process small-format items.
- **Linings, labels, components:** Products are increasingly made of multiple components, which means they cannot be easily recycled. In some cases, consumers must remove certain components for a product to be effectively recycled.
- **End market:** The recovered material has a strong end market if it is financially viable to recycle, meaning that the material can reliably be sold for a higher price than the cost of disposal tipping fees for the same material.

6. *Recyclable, 16 CFR 260.12. The Guides provide that marketers can make an unqualified "recyclable" claim when recycling facilities are available to a substantial majority of consumers or communities where the item is sold. "Substantial majority" is defined as 60%.*

- a. Should the Guides be revised to update the 60% threshold? If so, why, and what guidance should be provided? If not, why not? What evidence supports your proposed revision? Is there any recent consumer perception research relevant to the 60% threshold?

The Green Guides should be revised to update the 60% "substantial majority" section given the burgeoning challenges associated with consumer access to recycling and the ever changing, evolving packaging waste stream. As discussed above, access to collection services and sorting facilities, which is what the "substantial majority" reflects, is only part of what constitutes recycling viability. Access to recycling services and facilities varies widely across the country, and the plethora of products and packaging being produced makes it impractical to expect product manufacturers to keep up with the rapidly changing landscape of where recycling facilities that can accept these materials are located. Even in areas where recycling facilities are available, they may not accept the same products as other recycling facilities. Furthermore, it would be unreasonable to expect manufactures to know who has access to each recycling

facility. For example, fees or transportation barriers can reduce accessibility to some consumers. Therefore, the bar for an “unqualified” claim should be much higher than 60%. Businesses benefit from these claims and consumers and communities pay if they are not in fact true.

- b. Should the Guides be revised to include guidance related to unqualified “recyclable” claims for items collected by recycling programs for a substantial majority of consumers or communities but not ultimately recycled due to market demand, budgetary constraints, or other factors? If so, why, and what guidance should be provided? If not, why not? What evidence supports your proposed revision?

As discussed above, EPA strongly believes the bar for an “unqualified” claim should be incredibly high. EPA has provided text suggestions below, and evidence is provided above under question 5.

§ 260.12 Recyclable claims.

Please see below inline edits, as well as general text suggestions, regarding the current Green Guides language.

- *Inline text edit* – 260.12(a): It is deceptive to misrepresent, directly or by implication, that a product or package is recyclable. A product or package should not be marketed as recyclable unless it can be collected, separated, or otherwise recovered from the waste stream through an established **residential municipal** recycling program for reuse or use in manufacturing or assembling another item.
- *General text suggestion* – 260.12(b)(1): EPA encourages the FTC to set the bar for “substantial majority” to be much higher than 60% of consumers or communities where the item is sold.
- *General text suggestion* – 260.12(b): To help avoid consumer confusion and contamination of municipal recycling streams, EPA encourages the FTC to further restrict qualified claims regarding availability, including “This product [package] may not be recyclable in your area,” “Recycling facilities for this product [package] may not exist in your area” and “check locally.”
- *Inline text edit – new text* – 260.12(b)(3): **A marketer may not use an unqualified recyclable claim if a product is not recycled through a curbside program. A marketer may only use a qualified recyclable claim for a product recycled through a non-curbside program (e.g., store drop-off, mail-in) if the seller can substantiate that the substantial majority of that product is collected through that program, sorted, and has a strong end market.**
- *General text suggestion* – 260.12(c): Consider adding a definition for “minor incidental components.” Otherwise, it gives manufacturers significant flexibility in determining what qualifies as an incidental component and can lead to misleading claims. For

example, many plastic bottles use “shrink sleeve” labels that, while light weight encompass the entire product/package and may impact recyclability.

- *Inline text edit – new text* – 260.12(e) For an item to reliably be used in manufacturing or assembling another item it must have a strong end market, meaning that the materials collected and sorted by the recycling facility can reliably be sold for a price higher than the cost of disposal (e.g., the tipping fee) for the same materials. It is important to note that market prices for recycled materials can fluctuate over time. Because of this, certain materials that are considered financially viable to recycle can, for periods of time, be valued at less than disposal tipping fees. However, they remain sold into productive use due to offtake agreements or other ongoing relationships with buyers. In these instances, where there is generally a viable market over time, the recyclable claim on a marketing label is not deceptive.
- *General text suggestion* – Example 2: In 2013, ASTM replaced the chasing-arrows symbol in the RIC with a solid equilateral triangle. This example should be updated to reflect the new RIC and other updates.
- *Inline text edit* – Example 3: A container can be burned in incinerator facilities to produce heat and power. It cannot, however, be recycled into another product or package. Any claim that the container is recyclable would be deceptive. **The same is true for items that can be sent to facilities which convert plastics to fuel.**
- *Inline text edit* – Example 5: Foam polystyrene cups are advertised as “Recyclable in the few communities with facilities for foam polystyrene cups.” A half-dozen major metropolitan areas have established collection sites for recycling those cups. The claim is ~~not~~ deceptive because ~~it clearly discloses the limited availability of recycling programs~~ **the collection programs are very limited in scope. The claim is also deceptive because foam polystyrene has extremely low value on the secondary market and faces significant logistical hurdles to collect at a scale and in a manner that it could reliably be processed and subsequently used in manufacturing another item.**
- *Inline text edit – new text* – Example 11: **A package or product substantially made from paper that is coated or otherwise treated does not include information on the label that specifies whether the item is recyclable. Consumer perception is that all paper can be recycled. Omitting the information whether the item is not or may not be recyclable is deceptive.**

7. Recycled Content, [16 CFR 260.13](#). The Guides state marketers may make “recycled content” claims only for materials recovered or otherwise diverted from the solid waste stream, either during the manufacturing process or after consumer use. Do the current Guides provide sufficient guidance for “recycled content” claims? If so, why? If not, why not, and what guidance should be provided? What evidence supports your proposed revision(s)?

The current Green Guides do not provide sufficient guidance for “recycled content” claims. EPA recommends that the Green Guides only allow post-consumer recycled materials to be labeled as “recycled content,” and provide guidance on minimum recycled content verification to increase consumer understanding and trust of recycled content claims.

At present, it is difficult for a consumer to discern the environmental benefit of “recycled content” claims. Giving producers the ability to include pre-consumer materials in unqualified recycled content claims could lead to the manipulation of claims and be deceptive to consumers. As currently written, a manufacturer has broad discretion to identify materials as “waste” for the purpose of claiming that a product is made of recycled content.

Current guidance on recycled content from the Green Guides states that “marketers should make such claims only for materials that were recovered or otherwise diverted from the waste stream, either during the manufacturing process (pre-consumer) or after consumer use (post-consumer).” Additionally, the Green Guides “advise marketers to qualify claims for products or packages only partially made from recycled materials.” As a result, no post-consumer recycled (PCR) material is required to make a lawful recycled content claim, and a recycled content claim may be made for a product that contains only a small amount of recycled material (e.g., five percent). EPA encourages the FTC to address this issue by requiring unqualified recycled content claims to include 100% post-consumer recycled content and requiring that products containing pre-consumer content use qualified claims.

Additional guidance regarding recycled content claims is necessary as there is increasing evidence that some companies provide false declarations of sustainability, set recycled content goals, and make voluntary commitments to increase the use of recycled plastic in their packaging products. In addition, an increasing number of proposed regulations, at both the national and state levels, aim to establish minimum recycled content for certain products. Federal guidelines, such as the United States EPA’s Comprehensive Procurement Guideline program, recommend PCR levels for products (U.S. EPA, 2021a), whereas states such as California, Washington, and New Jersey have passed laws establishing minimum recycled content requirements for specific plastic products (California A.B. 793 in 2020, Washington S.B. 5022 in 2021, New Jersey S. 2515 in 2022). Minimum recycled content verification (QA/QC) and improved labeling of recycled content in plastic products would help address consumer confusion and mistrust of manufacturers’ sustainability claims.

8. Recycled Content, [16 CFR 260.13](#). The Guides suggest marketers can substantiate “recycled content” claims using per-product or annual weighted average calculation methods. Should the Guides be revised to provide guidance on making “recycled content” claims based on alternative method(s), e.g., mass balance calculations, certificate (i.e., credit or tagging) systems, or other methods? If so, why, and what guidance should be provided? If not, why not? What evidence supports your proposed revision?

EPA does not recommend that the Green Guides promote the mass balance approach as it is not widely implemented or accepted worldwide. The current weighted average calculation allows a producer to buy a certain amount of recycled material, but there is no requirement to use the recycled material. Allowing producers to advertise that a product contains “recycled content” based on the amount of recycled material purchased is deceptive. It would be clearer to focus on calculations that involve the actual amount of material used.

The FTC may consider products meeting consensus-based standards and third-party certification requirements for recycled content; social, environmental, and chemical practices; and chain-of-custody restrictions as the basis for making recycled content claims. Appropriate methods for detecting chemicals of concern, including PFAS, in post-consumer recycled content should be included to ensure the protection of human health and the environment.

9. Recycled Content, [16 CFR 260.13](#). What changes, if any, should the Commission make to its guidance on pre-consumer or post-industrial recycled content claims? How do consumers interpret such claims? Please provide any relevant consumer perception evidence.

Guidance on recycled content claims should focus on the use of post-consumer recycled content and using measures that reflect the actual recycled content that is being used in a product. Currently, producers can manipulate the calculations of recycled content in their products.

There is no standardized measure or tracking of the use of recycled plastics in products. Information on recycled content in products depends on manufacturers reporting the information. Contents of recycled plastics are much more difficult to control and/or verify, increasing the risk of harmful additives being present. The FTC should consider third-party tracking and verification of recycled content. Standard-setting bodies, as well as third-party certifiers, can play an important role in developing the recycled content market by supporting credibility of claims, safety of products, and consistency of quality. Standard-setting bodies also play an important role in the global plastic recycling supply chain by facilitating informed trade.

§ 260.13 Recycled content claims.

Please see below inline edits, as well as general text suggestions, regarding the current Green Guides language.

- *Inline text edit* – 260.13(b) It is deceptive to represent...Recycled content claims ~~may but do not have to~~ **must** distinguish between pre-consumer and post-consumer materials. Where a marketer distinguishes between pre-consumer and post-consumer materials, it should have substantiation for any express or implied claim about the percentage of pre-consumer or post-consumer content in an item.
- *Inline text edit* – 260.13(c) Marketers can make unqualified claims of recycled content if the entire product or package, excluding minor, incidental components, is made from **post-consumer** recycled material. **Marketers must use a qualified recycled content claim for items made with pre-consumer recycled material.** For items that are partially made of recycled material, the marketer should clearly and prominently qualify the claim to avoid deception about the amount or percentage, by weight, of **post-consumer (and pre-consumer if applicable)** recycled content in the finished product or package.
- *Inline text edit* – Example 2: Fifty percent of a greeting card’s fiber weight is composed from paper that was diverted from the waste stream. Of this material, 30% is post-consumer and 20% is pre-consumer. It would ~~not~~ be deceptive if the marketer claimed that the card ~~either~~ “contains 50% recycled fiber,” **but would not be deceptive if the marketer claimed that the card** ~~or~~ “contains 50% total recycled fiber, including 30% post-consumer fiber.”

12. Sustainable. In 2012, the Commission determined it lacked a basis to give specific guidance on how consumers interpret “sustainable” claims. Should the Commission revisit this determination? If so, why, and what guidance should be provided? If not, why not?

EPA encourages the FTC to revisit this decision and EPA supports adding information on “sustainable” claims to the Green Guides.

- a. What evidence supports making your proposed revision(s)?

The term “sustainable” has become ubiquitous in the marketplace since 2012 and is used in many different contexts. Therefore, the marketplace would greatly benefit from specific guidance within the Green Guides. Companies should not be allowed to market their products as “sustainable” without completing full lifecycle assessments (LCAs) for each product and acquiring third party certification that the product meets each hotspot identified in the LCAs. Further, companies should not be allowed to market themselves as a “sustainable” company without fulfilling the above requirements for every product/service line offered *and* without performing an LCA on the company as a whole, including all suppliers and contractors.

- Other resources¹² include but are not limited to:
 - The [United Nations Bruntland commission](#) definition of sustainability

¹² Identification of these sources does not constitute endorsement of their content by EPA.

- [The Guidelines for Providing Product Sustainability Information from the UN One Planet Network](#)
- [A Framework for Sustainability Indicators at EPA](#)
- [Learn About Sustainability, EPA](#)
- [Sustainability, EPA](#)

13. Comments on any issues related to the Green Guides not specifically mentioned in the questions below.

§ 260.15 Renewable electricity claims.

There is a continued need for the Green Guides to provide guidance on renewable electricity claims (§ 260.15). Since the Green Guides first addressed renewable energy claims, the guides have provided transparent and useful examples to help avoid deceptive consumer marketing and claims issues related to both suppliers and consumers who make claims related to renewable electricity. While EPA does not believe any of the existing guidance or examples illustrated in the Green Guides for renewable electricity claims require modifications at this time, **EPA is recommending that the FTC consider adding new examples for benefit claims from carbon free electricity and renewable natural gas** as these are emerging market trends that can benefit from better examples. Below supports our recommendation.

The Environmental Protection Agency's (EPA) Green Power Partnership [Green Power Partnership](#) has been building a market for renewable electricity that is credible and transformative. EPA relies on the Green Guides as a useful resource to help marketers and consumers understand the credible methods for claiming electricity through its sale and use. EPA has received significant anecdotal feedback on the usefulness and application of the Green Guides in directing behaviors in the market that mitigate implicit or explicit practices that result in deceptive marketing practices.

For more than 25 years, U.S. renewable energy markets have relied on market instruments issued to an energy generator to substantiate claims of generation and consumption of energy on a shared electric grid where the physical energy is undifferentiated when delivered to consumers. The Green Guides have been critical in helping consumers understand the role of market instruments (*i.e.*, Renewable Energy Certificates) in substantiating renewable electricity claims (§ 260.15). The Green Guides have also contributed to a set of nationally consistent renewable energy claims by marketers and consumers.

EPA does not believe any of the existing guidance or examples illustrated in the Green Guides for renewable electricity claims require modifications at this time. The current Green Guides provide a supportive baseline from which claims and claims practices can be based through the entire renewable energy and energy market value chain (e.g., electricity marketers and consumers making electricity marketing claims). The Green Guides are consistent with state Power Source Disclosure rules, state Renewable Portfolio Standards, as well as U.S. voluntary market practices.

EPA is aware that critics often argue against long-standing elements of the Green Guides as being misplaced or deceptive to consumers. EPA is of the view that these criticisms often conflate different types of market instruments which are used to convey different claims. While renewable energy certificates (REC) are used to convey a unit of electricity generated and consumed from a zero or low-emitting renewable resource across on a shared grid system, they are often conflated with project offsets by critics. EPA [developed a paper](#) that details the significant differences between renewable energy certificates and project offsets. Project offsets are emissions instruments that convey ownership of a ton of emissions reduced, while RECs are energy instruments that convey a claim to the energy attributes of one mega-watt hour (MWh) of generation from a zero- or low-emitting renewable energy sources. The ability to claim use of a MWh of renewable energy is not the same as the ability to claim avoiding or removing a ton of emissions. As such, claims related to RECs are unique in their scope and application in substantiating energy generated and consumed on a shared grid where consumers would not otherwise be able to tell the source, origin, or emissions intensity of the physical power they purchase or consume. From EPA's perspective, the Green Guides have not imposed significant cost on consumers or environmental organizations to achieve compliance. In fact, any costs related to buying, consuming, and substantiating credible claims of renewable energy have largely trended lower since its inclusion in the Green Guides due to declining technology costs that are inherent to the generation of REC instruments.

There are several areas where the FTC may want to add additional examples which reflect emerging market needs:

- Consider “carbon-free electricity” claims as a broader category of electricity in section (§ 260.15). EPA is aware of an increasing interest in the market for some marketers and consumers to pursue carbon-free electricity from sources that are zero emitting in the generation of energy, but do not meet traditional definitions for renewable energy sources. Carbon-free electricity could include nuclear power, as an example, whereby the marketer and consumer buying and consuming carbon-free power from a nuclear source should rely on similar practices to avoid deceptive claims. In this example, Energy Attribute Certificates (EACs) would be a resource agnostic category of market instruments that are used to describe any generation source consumed on a shared electricity grid. EACs can be issued to any resource, including fossil fuel generation, utility scale hydropower, traditional renewables, and nuclear power. The Green Guides currently focus on renewable electricity and its substantiation through RECs which are a type of EAC from a renewable source. Broadening section (§ 260.15) to include carbon-free energy and its substantiation through EACs would provide a more comprehensive guidance for the market. Evidence of this proposed modification includes the [Federal Executive Order 14057](#) and [Implementing Instructions](#), which directs federal agencies to purchase carbon-free energy to meet federal targets. The [federal government is working with electricity suppliers in the market to develop and provide tariffs](#) that encompass a broader set of resources that include carbon-free electricity from nuclear power plants, as an example. [The GHG Protocol](#) was the first to define EACs as a category of instruments used to convey energy attributes and substantiate claims of generation and consumption of electricity (Source: [GHG Protocol Scope 2 guidance](#); Page 9; Box 1.1).

- Renewable Natural Gas (RNG), or biomethane, is an emerging area of focus for some suppliers and consumers who are seeking to [sell or purchase biomethane fuels](#). Capture of biomethane from these sources allows it to be utilized to produce either thermal energy or electricity. While biomethane used to produce electricity can be tracked and substantiated by a renewable energy certificate, [tracking and use of biomethane through common carrier pipelines for thermal energy end use applications requires a separate market instrument](#). Gas utility suppliers and consumers are increasingly purchasing differentiated methane gas products. While these biomethane markets are nascent, the FTC may consider developing examples for renewable natural gas products that are generated/captured, injected into a common carrier pipeline, and then purchased by consumers who wish to claim usage and claim the biomethane energy attributes. The general function and practice of biomethane markets should be similar to what is required in renewable electricity markets to substantiate claims.