

PRE-PUBLICATION NOTICE

On Wednesday, September 14, 2022, **Michal Freedhoff**, the Assistant Administrator for EPA's Office of Chemical Safety and Pollution Prevention, signed the following document:

Action: Notice.

Title: Toxic Substances Control Act (TSCA) Section 21 Petition for Rulemaking under TSCA Section 6; Reasons for Agency Response: Denial of Requested Rulemaking

FRL #: 9987-01-OCSP.

Docket ID #: EPA-HQ-OPPT-2022-0593.

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Once the official version of this document is published in the *Federal Register*, this version will be removed from the Internet and replaced with a link to the official version. At that time, you will also be able to access the on-line docket for this *Federal Register* document at <https://www.regulations.gov>.

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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Chapter I

[EPA-HQ-OPPT-2022-0593; FRL-9987-01-OCSPP]

Toxic Substances Control Act (TSCA) Section 21 Petition for Rulemaking under TSCA

Section 6; Reasons for Agency Response; Denial of Requested Rulemaking

AGENCY: Environmental Protection Agency (EPA).

ACTION: Petition; reasons for Agency response.

SUMMARY: This action announces the availability of EPA's response to a petition received on June 16, 2022, from Daniel M. Galpern on behalf of Donn J. Viviani, John Birks, Richard Heede, Lise Van Susteren, James E. Hansen, Climate Science, Awareness and Solutions, and Climate Protection and Restoration Initiative (the petitioners). The petitioners request that EPA in general phase out the anthropogenic manufacture, processing, distribution, use, and disposal of greenhouse gas (GHG) emissions, fossil fuels, and fossil fuel emissions. They also request multiple actions under TSCA, and actions pursuant to the Clean Air Act (CAA), the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and the Independent Offices Appropriations Act (IOAA). EPA has determined that the request for risk management rulemaking under TSCA is within the ambit of a petition under TSCA's provision for a citizen petition. EPA is treating the other actions requested as petitions under the Administrative Procedure Act (APA), which this notice does not address. EPA shares the petitioners' concerns regarding the threat posed by climate change, and the Biden Administration will continue to combat the climate crisis with a whole of government approach. Nonetheless, after careful consideration, EPA has denied the petition for the reasons set forth in this notice.

DATES: EPA's response to this TSCA section 21 petition was signed September 14, 2022.

ADDRESSES: EPA has established a docket for this TSCA section 21 petition under docket identification (ID) number EPA-HQ-OPPT-2022-0593 and available online at <https://www.regulations.gov>. Additional instructions on visiting the docket, along with more information about dockets generally, is available at <https://www.epa.gov/dockets>.

FOR FURTHER INFORMATION CONTACT: The TSCA-Hotline, ABVI-Goodwill, 422 South Clinton Ave., Rochester, NY 14620; telephone number: (202) 554-1404; email address: TSCA-Hotline@epa.gov.

SUPPLEMENTARY INFORMATION:

I. General Information

A. Does this action apply to me?

This action is directed to the public in general. This action may, however, be of interest to those persons who manufacture (including import), process, distribute in commerce, use, or dispose of fossil fuels or greenhouse gases. Since other entities may also be interested, the Agency has not attempted to describe all the specific entities that may be affected by this action.

B. What is EPA's authority for taking this action?

Under TSCA section 21 (15 U.S.C. 2620), any person can petition EPA to initiate a proceeding for the issuance, amendment, or repeal of a rule under TSCA sections 4, 6, or 8, or to issue an order under TSCA sections 4, 5(e), or 5(f). A TSCA section 21 petition must set forth the facts which it is claimed establish that it is necessary to initiate the action requested. EPA is required to grant or deny the petition within 90 days of its filing. If EPA grants the petition, the Agency must promptly commence an appropriate proceeding. If EPA denies the petition, the Agency must publish its reasons for the denial in the *Federal Register*. A petitioner may

commence a civil action in a U.S. district court seeking to compel initiation of the requested proceeding within 60 days of a denial or, if EPA does not issue a decision, within 60 days of the expiration of the 90-day period.

C. What criteria apply to a decision on this TSCA section 21 petition?

1. Legal standard regarding TSCA section 21 petitions.

TSCA section 21(b)(1) requires that the petition “set forth the facts which it is claimed establish that it is necessary” to initiate the proceeding requested. 15 U.S.C. 2620(b)(1). Thus, in addition to petitioners’ burden under TSCA section 21 itself, TSCA section 21 implicitly incorporates the statutory standards that apply to the requested actions. Accordingly, EPA has reviewed this TSCA section 21 petition by considering the standards in TSCA section 21 and in the provisions under which actions have been requested.

2. Legal standard regarding TSCA section 6(a).

Under TSCA section 6(a), if EPA determines that the manufacture, processing, distribution in commerce, use, or disposal of a chemical substance or mixture, or that any combination of such activities, presents an unreasonable risk of injury to health or the environment, EPA conducts a rulemaking to apply one or more of TSCA section 6(a) requirements to the extent necessary so that the chemical substance or mixture no longer presents such risk. In proposing and promulgating rules under TSCA section 6(a), EPA considers, among other things, the provisions of TSCA sections 6(c)(2), 6(d), 6(g), and 9. In addition, to the extent that EPA makes a decision based on science, TSCA section 26(h) requires EPA, in carrying out TSCA sections 4, 5, and 6, to use “scientific information, technical procedures, measures, methods, protocols, methodologies, or models, employed in a manner consistent with the best available science,” while also taking into account other considerations, including the relevance of

information and any uncertainties. 15 U.S.C. 2625(h). TSCA section 26(i) requires that decisions under TSCA sections 4, 5, and 6 be “based on the weight of scientific evidence.” 15 U.S.C. 2625(i). TSCA section 26(k) requires that EPA consider information that is reasonably available in carrying out TSCA sections 4, 5, and 6. 15 U.S.C. 2625(k).

II. Summary of the TSCA Section 21 Petition

A. What action was requested?

On June 16, 2022, EPA received a TSCA section 21 petition from Daniel M. Galpern on behalf of Donn J. Viviani, John Birks, Richard Heede, Lise Van Susteren, James E. Hansen, Climate Science, Awareness and Solutions, and Climate Protection and Restoration Initiative (Ref. 1). The petition requests EPA determine that the manufacture, processing, distribution in commerce, use, or disposal of greenhouse gas emissions, fossil fuels, and fossil fuel emissions present an unreasonable risk of injury to health or the environment and initiate a proceeding for the issuance of a rule under TSCA section 6(a) to: (1) Phase out the manufacture (including import), processing, distribution in commerce, use, or disposal of “subject chemical substances and mixtures”; and (2) Remove and sequester, or – in the alternative – establish a pay-in fund for the purpose of removing, such “subject chemicals substances and mixtures” from the environment (Ref. 1, pp. 7-8, 35). The petition seeks action regarding “subject chemical substances and mixtures,” by which the petition collectively refers to “the GHG emissions from all anthropogenic sources, the fossil fuels, and those emissions associated with fossil fuels (GHGs and otherwise)” (Ref. 1, p.7). The chemical substances or mixtures implicated by these groups, according to the petition, include: “carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O) and the Halocarbons -- chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs) and halons (HFCs)) from all sources”; “[c]ertain fossil fuels” that meet the TSCA definition of

chemical substance or chemical mixture; and both GHGs and “other pollutants released or emitted during” the manufacture, processing, distribution in commerce, use and disposal of fossil fuels, “including particulate matter and sulfur and nitrogen dioxides.” (Ref. 1, p.7 (footnotes 7-8) and p.19).

The petition requests that EPA also take actions under TSCA sections 7 and 9. In addition, the petition requests actions under the CAA (CAA sections 108-110, 115), CERCLA (CERCLA sections 101, 102, 104-108), and the IOAA (31 U.S.C. 9701).

This *Federal Register* document specifically addresses the petitioners’ TSCA section 21 petition requesting EPA to issue rules under TSCA section 6(a). This *Federal Register* document does not address the TSCA-requested actions which cannot be addressed under TSCA section 21 (i.e., TSCA sections 6(b), 7 and 9), nor does it address the petitioners’ requests under the CAA, CERCLA, and the IOAA. EPA will consider those requests separately, as appropriate, under the APA.

1. Request for rulemaking under TSCA section 6(a).

The petition requests that EPA undertake rulemaking under TSCA section 6(a) to “phase out [the] production and importation and, as warranted, [the] processing, distribution, use or atmospheric disposal of subject chemicals substances and mixtures, as required to secure the elimination of associated emissions and legacy GHG emissions, on a timetable that is consistent with both the overarching need to protect and restore a habitable climate system and with the demands of national and international security” and “remove and securely sequester from the environment excess atmospheric greenhouse gases including, at minimum, surfeit atmospheric carbon dioxide (CO₂) and methane (CH₄) or, in the alternative, to pay into an Atmospheric Carbon Abatement Fund that EPA will establish for the purpose of removing such subject

chemicals and mixtures in an amount and pursuant to a timetable consistent with protection and restoration of a habitable climate system” (Ref. 1, pp. 7-8). TSCA section 21 provides for the submission of a petition to initiate a proceeding for the issuance, amendment, or repeal of a rule under TSCA section 4, 6, or 8, or to issue an order under TSCA section 4, 5(e), or 5(f). As the petitioners are seeking issuance of a rule under TSCA section 6(a), this *Federal Register* document addresses this request.

2. Request for standalone finding of unreasonable risk of injury to health and the environment.

The petition requests that EPA “render a determination that ‘the manufacture, processing, distribution in commerce, use, or disposal’ of the subject chemical substances and mixtures present an unreasonable risk of injury to health or the environment” (Ref. 1, p. 7). With respect to actions under TSCA section 6, TSCA section 21 provides only for the submission of a petition seeking the initiation of a proceeding for the issuance, amendment, or repeal of a rule under TSCA section 6. Citizens may not petition under TSCA section 21 for a stand-alone risk determination (i.e., one that is independent from and not solely underlying and inherent to a request for a specific rulemaking under TSCA section 6(a)) or an Agency risk evaluation pursuant to TSCA section 6(b). To the extent that the petition seeks a stand-alone risk determination, this *Federal Register* document does not address this specific request because TSCA section 21 does not provide an avenue for the petitioners to request a stand-alone risk determination or the initiation of the TSCA section 6(b) prioritization (and potential risk evaluation) process. However, in reviewing the request for rulemaking under TSCA section 6(a) (see Unit II.A.1.), the Agency considered the information set forth in the petition that petitioners claim establishes that it is necessary to initiate the proceeding requested, including the

information presented by the petitioners regarding whether the manufacture, processing, distribution in commerce, use, or disposal of a chemical substance or mixture, or any combination of such activities, presents an unreasonable risk of injury to health or the environment.

3. Request for actions under other sections of TSCA, the CAA, CERCLA, and the IOAA.

TSCA section 21 does not provide for the submission of a petition seeking action under TSCA section 7 or 9, the CAA, CERCLA, or the IOAA. Therefore, this *Federal Register* document does not address those portions of the petitioners' filing.

EPA notes that the petition includes one qualified sentence mentioning TSCA section 4: “If information on the efficacy of removal and sequestration technologies is inadequate, the [p]etitioners recommend that the Agency utilize its authorities under TSCA [section 4].” The sentence is a recommendation related to a potential lack of information under a potential sequestration requirement, and the petitioners made no attempt to assess the TSCA section 4 standards or set forth facts showing a necessity to act under the TSCA section 4 authorities. For example, in a TSCA section 21 petition seeking the issuance of a test rule or order under TSCA section 4(a)(1)(A)(i), the burden is on the petitioner to demonstrate that the manufacture, distribution in commerce, processing, use, or disposal of a chemical substance or mixture, or that any combination of such activities, may present an unreasonable risk of injury to health or the environment; that information and experience are insufficient to reasonably determine or predict the effects of a chemical substance on health or the environment; and that testing of the chemical substance is necessary to develop the missing information. Moreover, the focus of the recommendation in the petition is on how EPA might deal with a potential lack of information under a potential sequestration requirement under TSCA, but neither point is a live issue. Thus,

although TSCA section 21 petitions may petition for action under TSCA section 4, EPA does not consider the quoted sentence to be a facially complete TSCA section 21 petition for action under TSCA section 4 and is not addressing it further in this *Federal Register* document.

B. What support did the petitioners offer?

To support the request for issuance of a rule under TSCA section 6(a), the petitioners provided an appendix to the petition that contains scientific and economic data and literature on climate change (Ref. 1, pp. 38-112 (“Part II: Select Scientific and Economic Considerations”)). The appendix is divided into sections that discuss Earth’s energy imbalance; carbon dioxide, methane, and other atmospheric pollutants; risks to land, water, and air biota; risk reduction methods, including GHG emission reduction and sequestration; and risk reduction costs and benefits.

The Agency appreciates the robustness of information provided in the petition toward showing climate risks and finds it generally consistent with decades of peer-reviewed and published data on climate change, including risks to human health and the environment. From a scientific standpoint, and as described further in Unit III.B.1., EPA notes that the information and science provided in the petition is generally consistent with what the Agency used to make the 2009 “Endangerment Finding” that elevated atmospheric concentrations of six key well-mixed GHGs taken in combination may reasonably be anticipated to endanger the public health and welfare of current and future generations, and does not appear to present information that would be considered inappropriate or that the Agency would otherwise disagree with related to climate change science.

EPA also received public comments on the petition, which can be viewed via docket ID number EPA-HQ-OPPT-2022-0593, through the Federal eRulemaking Portal at

<https://www.regulations.gov>.

III. Disposition of TSCA Section 21 Petition

A. What is EPA's response?

EPA shares the petitioners' concerns regarding the threat posed by climate change, and the Biden Administration will continue to combat the climate crisis with a whole of government approach. Nonetheless, after careful consideration, EPA has denied this TSCA section 21 petition. A copy of the Agency's response, which consists of the letter to the petitioners and this document, is posted on EPA TSCA petition website at <https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/tsca-section-21##greenhouse>. The response, the petition (Ref. 1), and other information is available in the docket for this TSCA section 21 petition (see **ADDRESSES**).

B. What was EPA's reason for this response?

TSCA section 21 provides for the submission of a petition seeking the initiation of a proceeding for the issuance, amendment, or repeal of a rule under TSCA section 6. The petition must set forth the facts which it is claimed establish that it is necessary to issue the requested rule. 15 U.S.C. 2620(b)(1). When determining whether the petition meets that burden here, EPA considered whether the petition established that it is necessary to issue a TSCA section 6(a) rule to address the manufacture, processing, distribution in commerce, use, or disposal of the petitioned substances, or any combination of such activities, that the petitioners claim present an unreasonable risk of injury to health or the environment within the meaning of TSCA section 6(a), 15 U.S.C. 2605(a). For EPA to be able to conclude within the statutorily-mandated 90 days of receiving the petition that the initiation of a proceeding for the issuance of a TSCA section 6(a) rule is necessary, the petition would need to be sufficiently clear and robust.

EPA evaluated the information presented in the petition and considered that information in the context of the applicable authorities and requirements of TSCA sections 6, 9, 21, and 26. Notwithstanding that the burden is on the petitioners to set forth the facts which it is claimed establish that it is necessary for EPA to issue the rule sought, EPA nonetheless also considered relevant information that was reasonably available to the Agency during the 90-day petition review period. EPA shares the petitioners' concerns about the climate crisis and, as explained in Unit III.B.3.a., the Agency is taking numerous actions to combat climate change. As detailed further in Units III.B.2 and III.B.3., EPA finds that the petition is insufficiently specific and that the petitioners did not meet their burden under TSCA section 21(b)(1) of establishing that it is necessary to issue a rule under TSCA section 6(a). These deficiencies, among other findings, are detailed in this notice.

1. Undeniable threat associated with the climate crisis.

The petition addresses a unique challenge—the climate crisis, which touches on every facet of commerce and life around the world. EPA shares the petitioners' concerns regarding the threat posed by climate change, and the Biden Administration has approached the climate crisis with a whole of government approach.

Petitioners argue that risks associated with climate change are “unreasonable risks” under TSCA. The petitioners' reference four past instances where EPA made an unreasonable risk determination and regulated chemical substances and mixtures under TSCA section 6(a) and state that the “risk of injury to health and the environment (as well as actual injury) stemming from fossil fuels and other GHG sources is orders of magnitude greater than [such] risks” (Ref. 1, p. 14). As previously mentioned, the petitioners in an appendix to the petition discuss risks to land, water, and air biota posed by greenhouse gas emissions, fossil fuels, and fossil fuel

emissions (Ref. 1). In describing this and other information, the petitioners state, “That the subject chemical substances and mixtures present not only an unreasonable but also an imminent risk of serious and widespread injury has been exhaustively established in credible reports and documents available to the Agency, including many adopted by the Agency or by other US government units” (Ref. 1, p. 19).

The Agency agrees that the climate crisis is an undeniable and urgent threat to human health and the environment. Not only is climate change happening now, but it is already affecting human health and well-being, wildlife, and the natural environment. According to the Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report, “[i]t is unequivocal that human influence has warmed the atmosphere, ocean and land. Widespread and rapid changes in the atmosphere, ocean, cryosphere and biosphere have occurred” (Ref. 2). The IPCC states these changes have led to increases in heat waves and wildfire weather, reductions in air quality, and more intense hurricanes and rainfall events. New records continue to be set for indicators such as global average surface temperatures, GHG concentrations, and sea level. Billion-dollar weather disasters in the United States over the last five years have occurred at more than twice the rate of such disasters over the past 42 years, with 2022 already seeing multiple large tornadoes, hail storms, floods, heat waves, droughts, and wildfire events (Ref. 3). Higher CO₂ concentrations have led to acidification of the surface ocean in recent decades, with negative impacts on marine organisms that use calcium carbonate to build shells or skeletons. The 4th National Climate Assessment (NCA4) found that it is very likely (greater than 90% likelihood) that by mid-century, the Arctic Ocean will be almost entirely free of sea ice by late summer for the first time in about 2 million years. Moreover, heavy precipitation events have increased in the eastern United States while severe drought and outbreaks of insects like the

mountain pine beetle have killed hundreds of millions of trees in the western United States. Wildfires have burned more than 3.7 million acres in 14 of the 17 years between 2000 and 2016, and Federal wildfire suppression costs were about a billion dollars annually. The NCA4 also recognized that climate change can increase risks to national security, both through direct impacts on military infrastructure, and also by affecting factors such as food and water availability that can exacerbate conflict outside U.S. borders. The most severe harms from climate change may also fall disproportionately upon underserved communities who are least able to prepare for, and recover from, heat waves, poor air quality, flooding, and other impacts (Ref. 4). As such, understanding and addressing climate change is critical to EPA's mission of protecting human health and the environment.

As set forth in EPA's December 7, 2009, Endangerment Finding under section 202(a) of the CAA, the Administrator found, for the purposes of that particular provision, that six greenhouse gases taken in combination endanger both the public health and the public welfare of current and future generations (74 FR 66496, December 15, 2009, FRL-9091-8). In order to develop this Finding, the Agency held a 60-day public comment period on the proposed Finding, during which it received over 380,000 public comments. EPA carefully reviewed and considered these comments before publishing the final Endangerment and Cause or Contribute Findings. Following publication of these Findings, EPA received 10 petitions to reconsider the findings, which were denied after careful review and consideration. In 2012, the D.C. Circuit in *Coalition for Responsible Regulation, Inc. v. EPA* denied all the petitions for review of the 2009 Endangerment and Cause or Contribute Findings. 684 F.3d 102 (D.C. Cir. 2012) (per curiam), reh'g denied 2012 U.S. App. LEXIS 26313, 26315, 25997 (D.C. Cir. 2012). In 2016, EPA issued another set of similar findings for greenhouse gas emissions from aircraft under section

231(a)(2)(A) of the CAA, triggering a requirement for EPA to promulgate standards addressing GHG emissions from engines on covered aircraft. For these 2016 Findings, EPA reviewed major new peer-reviewed scientific assessments that had been released since 2009, finding that “these new assessments are largely consistent with, and in many cases strengthen and add to, the already compelling and comprehensive scientific evidence detailing the role of the six well-mixed GHGs in driving climate change, explained in the 2009 Endangerment Finding” (81 FR. 54421, August 15, 2016, FRL-9950-15-OAR). Finally, EPA received four petitions between 2017 and 2019 for reconsideration, rulemaking, or reopening of the Endangerment and Cause or Contribute Findings. EPA denied these petitions on April 21, 2022 (87 FR. 25412, FRL-9735-01-OAR), though litigation is ongoing. Although EPA does not rely on these findings as a basis for today’s action, this history highlights a few instances where EPA has recognized the significant concerns related to climate change. EPA further notes that in describing these prior findings under sections 202(a) and 231(a)(2)(A) of the CAA, it is neither reopening nor revisiting those findings.

Thus, the Agency acknowledges both the urgency and uniqueness of the threat presented by climate change. However, as explained in the following discussion, even assuming EPA were to determine that the petitioners have adequately demonstrated that the manufacture, processing, distribution in commerce, use, or disposal of at least some of “the subject chemical substances and mixtures” present an unreasonable risk of injury to health or the environment for purposes of TSCA section 6(a), EPA nonetheless finds that the petition is insufficiently specific and fails to establish that it is necessary to issue a rule under TSCA section 6. EPA makes this latter finding in light of ongoing and expected federal government actions to address these risks, the relative efficiency of TSCA rulemaking, and lack of TSCA authority to regulate historical GHG

emissions (as described in detail in Unit III.B.3.).

2. Insufficient specificity of the petition.

As an initial matter, the petitioners' request for a rule is insufficient because it lacks specificity, especially in comparison to the magnitude of the request. In light of the sprawling nature of the climate problem and its solutions, and the number of federal government activities already ongoing to address the problem (discussed further in Unit III.B.3.a), the petitioners must do more to specify what the petitioners are seeking for EPA to do under TSCA with respect to particular chemical substances or mixtures (e.g., by specifying each chemical substance on the TSCA Inventory implicated by the broad request to regulate, among others, fossil fuels, fossil fuel emissions, and halocarbons as groups) and the activities associated with each chemical substance (including each source of GHG emissions) that the petitioners seek a TSCA rule to address. In other words, while EPA undeniably has authority under TSCA to regulate chemical substances and mixtures (see TSCA sections 3(2), 3(10), 6(a)), including those that may be implicated by the petition, the petitioners must provide more specificity on which chemical substances and which mixtures from which sources and activities the petitioners ask EPA to regulate under TSCA and, to the extent petitioners implicitly seek categorization under TSCA section 26(c), more specificity on the extent of such categorization and the basis to treat any such category as a single chemical substance or a single mixture.

The petitioners assert in their petition that "it is not Petitioners' burden *here* to propose in detail requirements that EPA should propose following its determination" (Ref. 1 p. 15). But especially under the unique circumstances presented in this case, where the petitioners identify a wide-ranging global threat associated with innumerable activities and a multitude of chemical substances and mixtures (many of whose emissions are already subject to regulation under other

federal authorities or are anticipated to be affected by resources provided under the Inflation Reduction Act of 2022 (IRA), Public Law No. 117-169 (2022) (see discussion in Unit III.B.3.)), the petitioners did not sufficiently clarify the contours of the “rule” under TSCA they assert it is necessary for the Agency to issue. Petitioners’ request potentially affects an extraordinary number of industries and activities (e.g., agriculture, transportation, utilities, etc.), including innumerable small sources of emissions (e.g., residential homes). In the context of the massive climate change problem, the petitioners did not provide a sufficiently specific and targeted request addressing particular substances and industries, so that EPA can determine within 90 days whether the petition sets forth the facts which it is claimed establish that it is necessary to issue a TSCA section 6(a) rule, and whether any part of the requested rule (in addition to the requested requirement for removal and sequestration of legacy GHG emissions, which as discussed in Unit III.B.3.c is not authorized under TSCA section 6(a)) falls beyond the outer bounds of EPA’s regulatory authority under TSCA section 6(a).

The petitioners attempted to group together very different types of substances under one defined term that the petition labeled as “subject chemical substances and mixtures.” The petitioners described these broad groups as “the GHG emissions from all anthropogenic sources, the fossil fuels, and those emissions associated with fossil fuels (GHGs and otherwise)” (Ref. 1 p. 7). Yet even within each of these three broad groups, there is a multitude of chemical substances that might fit. Apart from giving examples of some of the substances that the petition envisioned being addressed by EPA regulation (Ref. 1 p. 7 footnotes 7-8, and p. 19), the petition did not specify the extent of the chemical substances or mixtures for which rulemaking action was sought and did not explain the basis or boundary for any categorization.

Moreover, although the petition sought a rule for the “subject chemical substances and

mixtures,” EPA believes that a rule for GHGs, for example, would look very different than a rule for fossil fuels, for example, in light of differences in TSCA section 6(a) regulatory tools for manufacture, processing, distribution in commerce, use, or disposal and differences in appropriate regulatory approaches for the relevant chemical substance. For example, the TSCA section 6(a) regulatory options for disposal significantly differ from those tools for manufacturing, processing, or distribution. Even within the group of GHGs, a rule addressing carbon dioxide would likely look very different from a rule addressing methane, or nitrous oxide, or any one of various halocarbons, due to the differences in the activities that result in atmospheric releases of these substances. The petition’s imprecision about what type of regulation it sought for which chemical substance or mixture under which of its activities is a significant deficiency, especially considering the wide range of substances and activities the petition implicates, as well as the aggressive action already taken or underway across a wide range of statutes for many of these same activities (such as EPA’s ongoing actions to implement the mandated reductions in HFC production and consumption within the American Innovation and Manufacturing (AIM) Act, for example).

3. Necessity of regulation under TSCA.

More broadly, and relatedly, even assuming the petition were sufficiently specific, and that EPA were to determine that an unreasonable risk is presented for purposes of TSCA section 6(a), the petitioners have failed to demonstrate that regulation under TSCA is “necessary” under the unique circumstances presented here. TSCA section 21 requires petitioners to set forth the facts which it is claimed establish that it is necessary to issue, amend, or repeal a rule under TSCA section 6. In addition to the scientific information provided in the appendix to the petition, the petitioners argue that a TSCA section 6(a) rule is necessary because of insufficient domestic

action to date, lack of regulation of legacy emissions, and the specific applicability of TSCA to achieve “deep decarbonization” (Ref. 1, pp. 22-24).

As discussed in Unit III.B.3.a., the federal government has numerous programs aimed at reducing GHG emissions, and President Biden has committed to a whole of government approach to using federal tools to reduce GHG emissions. Notably, since the petitioners filed their petition, Congress passed the most significant climate legislation ever, the IRA. The IRA marks the largest investment in history to combat climate change (\$369 billion) and will focus in part on reducing harmful pollution, building a clean energy economy, and lowering energy costs. Moreover, the IRA ensures efforts to tackle the climate crisis and secure environmental and economic benefits for all people, that investments will reach the communities that need them most, and that EPA will accelerate work on environmental justice and empower community-driven solutions in overburdened neighborhoods (Ref. 5). The petitioners have not demonstrated that all of the existing and anticipated federal programs, including but not limited to those discussed in this notice (as well as efforts by state, local, and tribal governments and private entities), will fail to achieve sufficient progress towards meeting U.S. GHG reduction targets or that, in particular, a TSCA section 6(a) rule requiring the phase-out of manufacturing, processing, distribution in commerce, use, or disposal of the “subject chemical substances and mixtures,” is necessary to make sufficient progress towards meeting these targets to address the threat posed by climate change in light of actions under all of the other federal programs. As a result, EPA need not here opine on the outer extent of the Agency’s authority under TSCA to phase out greenhouse gases or fossil fuels.

Further, as described in this Unit III.B.3.b., EPA retains discretion in TSCA section 6(a) rulemaking to refer action to other agencies and EPA programs under TSCA section 9 and to

grant exemptions from TSCA section 6(a) rule requirements under TSCA section 6(g) as appropriate (such as where compliance with a requirement, as applied with respect to a specific condition of use, would significantly disrupt the national economy, national security, or critical infrastructure), and EPA is required to consider reasonably ascertainable economic consequences of the rule, as well as availability of technically and economically feasible safer alternatives, among other requirements. The exercise of these authorities could lead to rulemaking that would not achieve emission reductions more expeditiously or efficiently than those achieved through other nationwide efforts.

Finally, as described in Unit III.B.3.c., EPA lacks authority under TSCA section 6(a) to require removal and sequestration (or pay-in fund for removal) of historical GHG emissions as requested by the petition.

a. Substantial ongoing and expected Federal government actions.

The petitioners assert that efforts to restrict fossil fuel and other GHG emissions “pursuant to other statutes” lack a “fossil fuel phaseout course” and have not put the United States on track to achieve national GHG emission reduction targets for 2030, 2035, and 2050; and that “[n]o federal statute, other than TSCA, provides the Agency with the needed comprehensive authority and duty to impose requirements prohibiting or restricting the manufacture, processing, distribution, use or disposal” of GHG emissions, fossil fuels, and fossil fuel emissions (Ref. 1, pp. 22-24). As such, the petitioners conclude that a TSCA section 6(a) rule is necessary “because the Agency has declined to date to undertake the requested or equivalent actions on its own” and that such a rule is the only means to address GHG emissions, fossil fuels, and fossil fuel emissions “until the point that their unreasonable risk is abated” (Ref. 1, p. 22-24).

In fact, the U.S. Government has made and will continue to make substantial efforts to reduce future domestic emissions. In 2021, in line with Article 4 of the Paris Agreement, the U.S. Nationally Determined Contribution set a GHG reduction target of 50-52% below 2005 levels by 2030, and net zero emissions by no later than 2050 (Ref. 6 and 7). Meeting these ambitious targets will be achieved through benefits from actions already implemented, as well as future anticipated mitigation efforts. The recently-enacted IRA is expected to help reduce GHG emissions to 40% below 2005 levels by 2030, and “get the U.S. a significant way towards our overall 2030 climate goals, positioning the [United States] to reach 50-52% GHG emission reductions below 2005 levels in 2030 with continued executive branch, state, local, and private sector actions.” (Ref. 8). The IRA will help reduce emissions in both the near and long term by creating credits for clean electricity, energy storage, nuclear energy, and electric vehicles. Additionally, it supports agricultural conservation efforts, clean manufacturing, and more efficient buildings. A fee on methane emissions will also create incentives for the oil and gas industry to reduce leakage and waste. The IRA follows on the heels of the Bipartisan Infrastructure Law of 2021 (Infrastructure Investment and Jobs Act), Public Law No. 117-58, 135 Stat. 429 (2021), which advances a variety of infrastructure investments that will reduce transportation-related GHG emissions, including investing billions of dollars to modernize and expand sustainable public transit infrastructure, build out the first-ever national network of electric vehicle chargers in the United States, and deliver thousands of electric school buses nationwide, among other things, as well as investing in clean energy transmission and the electric grid (Ref. 9 and 10).

The IRA and Bipartisan Infrastructure Law will lead to new GHG emissions reductions on top of already existing government programs, such as the implementation of the AIM Act of

2020 (see e.g., 86 FR 55116, October 5, 2021 (FRL 8458-02-OAR)) which includes measures to reduce HFC production and consumption by 85% over the next 15 years; a series of rules addressing GHG emissions from light duty and heavy duty vehicles (86 FR 74434, December 31, 2021 (FRL-8469-01-OAR); 85 FR 24174, April 30, 2020 (FRL-10000-45-OAR); 81 FR 73478, October 25, 2016 (FRL-9950-25-OAR); 77 FR 62624 October 15, 2012 (FRL-9706-5); 76 FR 57106, September 15, 2011 (FRL-9455-1); 75 FR 25324, May 7, 2010 (FRL-9134-6)), GHG standards for aircraft (86 FR 2136, January 11, 2021 (FRL-10018-45-OAR)), standards for new and existing municipal solid waste landfills to reduce methane emissions (86 FR 27756, May 21, 2021 (FRL-10022-82-OAR); 81 FR 59275, August 29, 2016 (FRL-9949-55-OAR), 81 FR 59331, August 29, 2016 (FRL-9949-51-OAR)), New Source Performance Standards for new, modified, and reconstructed fossil fuel-fired power plants (80 FR 64510, October 23, 2015 (FRL-9930-66-OAR)), standards to reduce methane emissions from the oil and natural gas industry (81 FR 35824, June 3, 2016 (FRL-9944-75-OAR); 85 FR 57398, November 15, 2020 (FRL-10013-60-OAR)), and limitations on GHG emissions from new and modified stationary sources in construction permits under the PSD program, based on the requirement to apply Best Available Control Technology (BACT) (42 U.S.C. 7475(a)(4); *Utility Air Regulatory Group (UARG) v. EPA*, 134 S.Ct. 2427, 2447-49 (2014); 80 FR 50199, 50200, August 19, 2015 (FRL-9932-11-OAR)). Moreover, in 1990, Congress amended the CAA to include Title VI (42 U.S.C. 7671c-7671q), which includes measures that are directed at phasing out production and consumption of listed class I substances, which include CFCs, halons, and carbon tetrachloride, and listed class II substances, which are HCFCs. To implement the phaseout of class I substances, EPA issued a rule in 1992 to limit the production and consumption of class I substances, with production and consumption of most such substances to be phased out by

January 1, 2000, and then in 1993 EPA announced the acceleration of the phaseout date for the production of most class I substances from January 1, 2000 to December 31, 1995 (57 FR 33754, July 30, 1992 (FRL-4158-2) and 58 FR 65018, December 10, 1993 (FRL-4810-7)). In 1993, EPA established a phaseout schedule for HCFCs, which focused on certain HCFCs first and will lead to a complete phaseout of the production and consumption of HCFCs by 2030 (see e.g., 58 FR 65018, December 10, 1993 (FRL-4810-7) and 85 FR 15258, March 17, 2020 (FRL-10003-80-OAR)).

Beyond the IRA and the highlighted regulatory programs, EPA's efforts also include coordinating international programs such as the Global Methane Initiative (see <https://www.globalmethane.org/>), domestic labeling and voluntary programs such as ENERGY STAR (see <https://www.energystar.gov/>), Natural Gas Star (see <https://www.epa.gov/natural-gas-star-program>), the Coalbed Methane Outreach Program (see <https://www.epa.gov/cmop>), and the Landfill Methane Outreach Program (see <https://www.epa.gov/lmop>), developing Agency, Regional, and program-office climate adaptation plans, and communication and educational efforts such as the updated Climate Change webpage (see <https://www.epa.gov/climate-change>). EPA also partners with states and tribes to assist with adaptation and mitigation through programs such as Creating Resilient Water Utilities (see <https://www.epa.gov/crwu>) and the State and Local Climate and Energy Program (see <https://www.epa.gov/statelocalenergy/local-climate-and-energy-program>).

EPA also is developing new stationary and mobile source standards under the CAA to better control GHG emissions from oil and gas operations, electric generating units (EGUs), and vehicles. Examples include the following:

- Oil and gas methane new source performance standards (RIN 2060-AV16);

- Oil and gas methane emission guidelines (RIN 2060-AV16);
- EGU GHG new source performance standards (RIN 2060-AV09);
- EGU GHG emission guidelines (RIN 2060-AV10);
- Phase 3 GHG standards for heavy-duty engines and vehicles (RIN 2060-AV50); and
- Multi-pollutant emissions standards for model years 2027 and beyond, light duty and medium duty vehicles (RIN 2060-AV49).

These rules under development will build on earlier stationary and mobile source standards. Similarly, EPA is continuing its work to address HFCs through timely and effective implementation of the AIM Act. Those efforts include development of a rule (RIN 2060-AV45) to provide the framework for how the Agency will issue allowances in 2024 and later years for the phasedown of the production and consumption of listed HFCs on the schedule listed in the AIM Act, and a rule (RIN 2060-AV46) under subsection (i) of the AIM Act, which provides EPA authority to restrict, fully, partially, or on a graduated schedule, the use of HFCs in sectors or subsectors in which they are used. The public may track the regulatory plan for these and other actions by searching or browsing the Unified Agenda of Regulatory and Deregulatory Actions, available online at <https://www.reginfo.gov/public/do/eAgendaMain>.

In addition, in combination with state, local, tribal, and international actions, the U.S. federal government is pursuing a whole of government strategy to reduce GHG emissions to protect current and future generations. For example, federal initiatives launched since 2021 from the U.S. Department of Agriculture, the U.S. Department of Energy, the U.S. Department of the Interior, and the U.S. Department of Transportation, include investments to build or improve renewable energy infrastructure in rural communities (Ref. 11); partnerships to finance pilot projects that create market opportunities for U.S. agricultural and forestry products that use

climate-smart practices (Ref. 12); efforts to accelerate innovation in carbon dioxide removal and storage (Ref. 13), initiatives to catalyze nationwide development of new and upgraded high-capacity electric transmission lines (Ref. 14); approvals for construction and operation of commercial-scale, offshore wind energy projects (Ref. 15); programs to allow states, tribes, and territories to retrofit low-income homes to increase energy efficiency and lower utility bills (Ref. 16); and grants to transit agencies, territories, and states for bus fleets that use zero-emissions technology and training for transit workers to maintain and operate new clean bus technology (Ref. 17). In addition, the U.S. Securities and Exchange Commission proposed rule changes in Spring 2022 that, if finalized, would require registrants to provide certain climate-related information in their registration statements and periodic reports, including certain information about climate-related financial risks and disclosure of a registrant's GHG emissions, to enable investors to make informed judgments about the impact of climate-related risks on current and potential investments (87 FR 21334, April 11, 2022). At the state level, the U.S. Climate Alliance – including 24 states and 2 U.S. territories – continue to work to combat climate change through policies that encourage investment in clean energy, energy efficiency, and climate resilience. Following the passage of the IRA, this organization published tools and resources to help states better utilize the social cost of greenhouse gases (Ref. 18).

In light of actions taken to date, as well as ongoing and planned actions, and with the recently authorized resources and programs under the IRA, the Agency finds that the petitioners have not met the TSCA section 21(b)(1) burden to establish that it is necessary to initiate a proceeding under TSCA section 6(a) at this time. EPA believes that actions under all of these other authorities and programs are best suited at this time to address the urgent threat of climate change.

b. Relative efficiency of TSCA rulemaking.

Even if EPA were to initiate a rulemaking proceeding under TSCA section 6(a) to address an unreasonable risk associated with prospective GHG emissions and/or fossil fuels, any final rule under TSCA would be unlikely to achieve emissions reductions more expeditiously or efficiently than those that are already anticipated to be achieved through the IRA and other recent, ongoing, or planned federal actions.

In proposing and promulgating rules under TSCA section 6(a), EPA considers the provisions of TSCA sections 6(c)(2), 6(d), 6(g), and 9. TSCA section 6(c)(2)(A) requires EPA to consider and publish a statement based on reasonably available information with respect to: the effects of the chemical substance or mixture on health and the environment and magnitude of exposure; the benefits of the chemical substance or mixture for various uses; and reasonably ascertainable economic consequences of the rule (15 U.S.C. 2605(c)(2)(A)). These economic consequences include consideration of the likely effect of the rule on the national economy, small business, technological innovation, the environment, and public health; the costs and benefits of the proposed and final regulatory action and of one or more primary alternative regulatory actions considered by the Administrator; and the cost effectiveness of the proposed regulatory action and of the one or more primary alternative regulatory actions considered by the Administrator (15 U.S.C. 2605(c)(2)(A)(iv)). EPA must factor in these considerations to the extent practicable when selecting among prohibitions and other restrictions in the rulemaking (15 U.S.C. 2605(c)(2)(B)).

In addition, under TSCA section 6(d), any rule under TSCA section 6(a) must provide for a reasonable transition period (15 U.S.C. 2605(d)(1)(E)). Further, in deciding whether to prohibit or restrict in a manner that substantially prevents a specific condition of use of a chemical

substance or mixture, and in setting an appropriate transition period for such action, EPA must also consider, to the extent practicable, whether technically and economically feasible alternatives that benefit health or the environment, compared to the use so proposed to be prohibited or restricted, will be reasonably available as a substitute when the proposed prohibition or other restriction takes effect (15 U.S.C. 2605(c)(2)(C)).

TSCA section 6(g) allows EPA to grant an exemption from a requirement of a TSCA section 6(a) rule for a specific condition of use of a chemical substance or mixture, if the Administrator finds that: the specific condition of use is a critical or essential use for which no technically and economically feasible safer alternative is available; compliance with the requirement, as applied with respect to the specific condition of use, would significantly disrupt the national economy, national security, or critical infrastructure; or the specific condition of use of the chemical substance or mixture, as compared to reasonably available alternatives, provides a substantial benefit to health, the environment, or public safety (15 U.S.C. 2605(g)(1)). EPA must establish a time limit on any exemption, to be determined by the Administrator as reasonable on a case-by-case basis, but may extend an exemption where warranted (15 U.S.C. 2605(g)(3)).

Taken together, the TSCA sections 6(c)(2), (d), and (g) considerations regarding economic consequences, reasonable transition periods, technically and economically feasible alternatives, and critical exemptions indicate that a rulemaking proceeding under TSCA section 6(a) at this time would be unlikely to reduce GHG emissions more expeditiously or efficiently than would actions under the IRA, the Bipartisan Infrastructure Law, the CAA and other environmental statutes, and the AIM Act, as well as the other federal government actions described earlier. The historic and transformational climate investments made in the IRA and the

Bipartisan Infrastructure Law, and the ongoing regulatory actions under the CAA and other statutes, provide a means for reducing GHG emissions more rapidly and efficiently than would initiating a new rulemaking proceeding under TSCA.

Furthermore, TSCA section 9(b) provides that EPA “shall coordinate actions taken under [TSCA] with actions taken under other Federal laws administered in whole or in part by [EPA]” (15 U.S.C. 2608(b)(1)). TSCA section 9(d) further instructs the Administrator to consult and coordinate TSCA activities with other federal agencies for the purpose of achieving the maximum enforcement of TSCA while imposing the least burden of duplicative requirements. TSCA sections 9(a) and (b) each establish mechanisms for referring an unreasonable risk identified under TSCA for risk management action under another federal statute if the Administrator determines that the risk could be eliminated or reduced to a sufficient extent by action taken under that other federal statute. Through TSCA section 9, Congress intended “to assure that overlapping or duplicative regulation is avoided” (S. Rep. No. 94-1302, at 84 (1976) (Conf. Rep.)). Given the range of other federal actions either planned or already underway to address risks posed by various GHGs and emissions associated with fossil fuels—including but not limited to those described previously in this notice—other federal authorities clearly play a crucial role in addressing risks from GHG emissions and climate change. Accordingly, even if EPA were to initiate a rulemaking proceeding under TSCA section 6(a), the Agency would retain discretion to refer action under TSCA section 9, and would necessarily consider whether the risks could be better addressed under other federal authorities such as the CAA.

Although not a basis for EPA’s denial, the Agency notes that the TSCA program is still relatively nascent following comprehensive amendments to the law in 2016, which significantly expanded the Agency’s requirements and responsibilities. In the years that followed the

amendments, and despite the substantially increased workload, the program's budget remained essentially flat (Ref 19). As a result, although the program has made continued progress, it continues to struggle to meet statutory deadlines to, for example, review pre-manufacture notices for new chemicals, conduct risk evaluations, and regulate chemicals that the Agency has determined to present unreasonable risks, risks that in many cases only TSCA has the clear federal authority to address.

Because there are numerous other federal, state and local actions already undertaken or underway to address the climate crisis, and because EPA believes that a complete consideration of the costs, critical and military uses, needed transition times, technological feasibility, and other required factors and discretionary considerations under TSCA would be unlikely to lead to a different outcome than these other actions for the activities involving the GHG emissions, fossil fuels, and/or fossil fuel emissions that would be subject to a TSCA rule, EPA believes it is unnecessary and would be an inefficient use of government resources to initiate a new, resource-intensive rulemaking under TSCA at this time.

c. TSCA authority to address legacy emissions.

In regard to legacy emissions, the petitioners argue that EPA "has not yet imposed any requirement pursuant to any statute upon any fossil fuel company, or indeed, upon any other source of GHG emissions, to remove all, or even a share, of such source's legacy GHG emissions" and that TSCA is the only federal statute that can compel a party to "remove and securely sequester their legacy GHG emissions" (Ref. 1, p. 23). The petitioners advocate for the removal of such legacy emissions because the "scientific consensus is that humanity has already far overshoot the safe level of atmospheric CO₂ and other GHGs so that, even in conjunction with a rapid yet feasible phaseout of additional quantities of the subject chemical substances and

mixtures, at least some substantial carbon removal will be necessary to protect and restore a viable climate system” (Ref. 1, p. 23). To achieve the outcome of removing and sequestering historical GHG emissions from the atmosphere or undertaking a security and burden sharing agreement (i.e., carbon abatement fund) based on such historical GHG emissions, the petitioners invoke TSCA section 6(a)(6) and 6(a)(7).

EPA does not have legal authority under TSCA to require removal and sequestration of historical GHG emissions from the atmosphere, or to establish an atmospheric GHG abatement fund and require historical GHG emitters to pay into the fund based on such historical GHG emissions. EPA considers such historical GHG emissions to be legacy disposals (i.e., disposals that have already occurred), and EPA has interpreted legacy disposals to be excluded from those “conditions of use” that EPA evaluates and regulates under TSCA. See *Safer Chemicals v. EPA*, 943 F.3d 397, 425-26 (9th Cir. 2019) (upholding EPA’s exclusion of legacy disposals from consideration as conditions of use under the TSCA Risk Evaluation rule); 15 U.S.C. 2602(4). Thus, EPA does not consider historical GHG emissions to be activities subject to regulation under TSCA section 6(a). EPA recognizes that TSCA section 6(a)(6) could be used to address ongoing or prospective disposal by certain entities and that TSCA section 6(a)(7) could be used to require manufacturers or processors to replace or repurchase their substances. However, the petitioners have not demonstrated how either of these tools could – either legally or practically – be used to impose regulatory requirements on entities today based on activities that occurred decades ago.

C. What were EPA’s conclusions?

The petitioners’ request to initiate a proceeding for the issuance of a rule under TSCA section 6(a) lacks sufficient specificity, especially in comparison to the magnitude of the request.

Even assuming that the petition were sufficiently specific in its request for a rule, when the requested actions are considered in the context of the IRA and current actions under the CAA, the Bipartisan Infrastructure Law, the AIM Act, and other statutes, which include programs being implemented by a range of federal agencies, as well as considerations inherent to the promulgation of a TSCA section 6(a) rule, EPA's review of relevant information that was reasonably available to the Agency during the 90-day petition review period does not support a grant of the petition to initiate rulemaking under TSCA section 6(a). The petitioners have not established at this time that it is "necessary" to initiate a proceeding for the issuance of a TSCA rule, given the unique challenges of the climate crisis, the multitude of other ongoing federal efforts to address it, and the other considerations discussed in this notice. The Agency does not believe that a rulemaking proceeding under TSCA at this time would likely achieve a different result than aforementioned federal authorities and programs in addressing climate change, greenhouse gas emissions, fossil fuels, and fossil fuel emissions. Accordingly, EPA denied the request to initiate a proceeding for the issuance of a rule under TSCA section 6(a).

IV. References

The following is a listing of the documents that are specifically referenced in this document. The docket includes these documents and other information considered by EPA, including documents that are referenced within the documents that are included in the docket, even if the referenced document is not physically located in the docket. For assistance in locating these other documents, please consult the technical person listed under **FOR FURTHER INFORMATION CONTACT**.

1. Daniel M. Galpern. 2022. Petition to Phase Out Greenhouse Gas (GHG) Pollution to Restore a Stable and Healthy Climate.

2. Intergovernmental Panel Climate Change (IPCC). 2021: Summary for Policymakers: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the IPCC. Available from:

https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_FullReport.pdf

3. National Ocean and Atmospheric Administration (NOAA) National Centers for Environmental Information (NCEI). 2022. U.S. Billion-Dollar Weather and Climate Disasters. Available from: <https://www.ncei.noaa.gov/access/billions/>

4. EPA. 2021. Climate Change and Social Vulnerability in the United States A Focus on Six Impacts. Available from: <https://www.epa.gov/cira/social-vulnerability-report>

5. EPA. 2022. Press Release: Statement by Administrator Regan on the Passage of the Inflation Reduction Act of 2022. Available from: <https://www.epa.gov/newsreleases/statement-administrator-regan-passage-inflation-reduction-act-2022>

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9. White House. 2021 FACT SHEET: The Bipartisan Infrastructure Deal Boosts Clean Energy Jobs, Strengthens Resilience, and Advances Environmental Justice. Available from: <https://www.whitehouse.gov/briefing-room/statements-releases/2021/11/08/fact-sheet-the-bipartisan-infrastructure-deal-boosts-clean-energy-jobs-strengthens-resilience-and-advances-environmental-justice>

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11. United States Department of Agriculture (USDA). 2021. USDA Invests \$464 Million in Renewable Energy Infrastructure to Help Rural Communities, Businesses and Ag Producers Build Back Better. Available from: <https://www.usda.gov/media/press-releases/2021/09/09/usda-invests-464-million-renewable-energy-infrastructure-help-rural>

12. USDA. 2022. USDA to Invest \$1 Billion in Climate Smart Commodities, Expanding Markets, Strengthening Rural America
Available from: <https://www.usda.gov/media/press-releases/2022/02/07/usda-invest-1-billion-climate-smart-commodities-expanding-markets>

13. DOE. 2022. Carbon Negative Shot. Available from: <https://www.energy.gov/fecm/carbon-negative-shot>.

14. DOE. 2022. DOE Launches New Initiative from President Biden's Bipartisan Infrastructure Law to Modernize National Grid. Available from: <https://www.energy.gov/oe/articles/doe-launches-new-initiative-president-bidens-bipartisan-infrastructure-law-modernize>

15. Department of Interior. 2021. Interior Department Approves Second Major Offshore Wind Project in U.S. Federal Waters. Available from:

<https://www.doi.gov/pressreleases/interior-department-approves-second-major-offshore-wind-project-us-federal-waters>

16. DOE. 2022. Biden Administration Announces Investments to Make Homes More Energy Efficient and Lower Costs for American Families

<https://www.energy.gov/articles/biden-administration-announces-investments-make-homes-more-energy-efficient-and-lower>

17. Joint Office of Energy and Transportation. 2022. NEWS Over \$1.6 Billion in BIL Funding to Nearly Double the Number of Clean Transit Buses in America. Available from:

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18. United States Climate Alliance. 2022. US Climate Alliance Releases New Tools to Help States Confront Climate Crisis, Drive Just and Equitable Transition. Available from:

<http://www.usclimatealliance.org/publications/2022/8/29/new-tools-scghg-just-transition>.

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<https://www.epw.senate.gov/public/index.cfm/2022/6/toxic-substances-control-act-amendments-implementation>

Authority: 15 U.S.C. 2601 *et seq.*

Dated: September 14, 2022.

Michal Freedhoff,

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