June 17, 2022

Chairman Gary Gensler and Commissioners M. Hester Pierce,
Allison Herren Lee, and Caroline A. Crenshaw
U.S. Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549

Supplemental Comments
Re: File Number S7-10-22, The Enhancement
and Standardization of Climate-Related Disclosures for
Investors, Proposed Rule

Dear Chair Gensler and Commissioners Pierce, Lee, and Crenshaw:

The Center for Biological Diversity submits these supplemental comments to our comment letter submitted on June 6, 2022.

In these supplemental comments, we recommend additional measures to improve clarity and propriety of some proposed provisions, as well as recommendations to enhance transparency and accountability of attestation entities. In addition to the obvious necessity for fossil fuel registrants to be subject to this rule, we are also specifying the need to ensure the rule effectively applies to meat and dairy industry registrants due to their substantial greenhouse gas emissions, particularly methane. Furthermore, climate change presents a risk to the industry itself. For example, climate change will likely alter feed production locations and characteristics[1] and increase heat stress in farmed animals, especially those whose genetics have been specifically selected to increase various production metrics. This may particularly affect dairy cows, since the primary domestic dairy breed has a limited heat tolerance.[2]

Animal agriculture (measured as ruminant enteric fermentation, plus manure management), is the single largest source of methane (CH4) in the U.S., contributing 36% of all domestic emissions.[3] While methane's global warming potential (GWP) is often cited as 25[4] or 27-30[5] times that of CO2, that's on a

[1] Burchfield, E. K. (2022). Shifting cultivation geographies in the Central and Eastern US. Environmental Research Letters. https://orcid.org/0000-0003-0459-6270
[2] Thornton, P., Nelson, G., Mayberry, D., & Herrero, M. (2021). Increases in extreme heat stress in domesticated livestock species during the twenty-first century. Global Change Biology, 27(22), 5762-5772. https://doi.org/10.1111/gcb.15825
[3] United States Environmental Protection Agency (2022). Greenhouse Gas Emissions: Overview of Greenhouse Gases. https://www.epa.gov/ghgemissions/overview-greenhouse-gases#methane
[4] Ibid.
[5] United States Environmental Protection Agency. (2022) Greenhouse Gas Emissions: Understanding Global Warming Potentials. https://www.epa.gov/ghgemissions/understanding-global-warming-potentials

100-year time scale. Since methane's atmospheric lifetime is less than twenty years, another time scale should be used that more accurately reflects the impact of greenhouse gases on climate change. With such considerations, methane's GWP is 84 times that of CO2[6] Therefore, establishing effective and consistent standards in GHG accounting and reporting is absolutely essential to reach goals of comparability and utility. This is consistent with the Biden administration's position and efforts to reduce agricultural methane, especially from beef and dairy systems.[7]

Despite the significant contribution of greenhouse gas emissions from animal agriculture, there is currently no established mandatory best practice for accounting and reporting such emissions. This is particularly concerning for companies whose dominant source of total emissions may be generated outside the U.S. and its territories (e.g. via feed crop production or grazing) with no oversight. Given this and other accounting uncertainties, we recommend applying a scientifically rigorous life cycle assessment model that applies animal weight and feed weight production data to calculate emissions, such as Lazarus et al[8].

The NOPR specifies that "a registrant would also be required to disclose separately its total Scope 3 emissions for the fiscal year if those emissions are material,"[9] but we can find no definition for the term "material" in the NOPR. Consistent with the existing U.S. Environmental Protection Agency's (EPA) 2009 Mandatory Reporting of Greenhouse Gases Rule,[10] we reinforce the message initially communicated by my colleague Howard Crystal that the SEC "introduce a uniform materiality threshold." Profit-seeking registrants, especially members of industries under close scrutiny after decades of uncountable adverse environmental impacts (such as the meat and dairy industries), must not be implicitly or otherwise granted regulatory flexibility to establish independent definitions for materiality.

Animal Agriculture Must Disclose Scope 3 Emissions and Data Sources (Questions 100, 104, 106)

Large animal agriculture companies have actively opposed climate-related regulation, and have made it clear they will continue to attempt to minimize their regulatory responsibilities.[11] All ten of the largest US meat and dairy companies have also demonstrated lack of transparency in their emissions reporting to date: none included Scope 3 emissions in their reporting, and many failed to set meaningful and appropriate emissions targets---that is, when asked, some only provided general statements without specific commitments, or identified a CO2 target, even though CH4 and nitrous oxide (N2O) comprise the majority of total emissions from agriculture. Many failed to provide even a general statement.[12]

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[6] IPCC, 2014: Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)]. IPCC, Geneva, Switzerland, 151 pp.

[7] White House Briefing Room. (2022). Fact Sheet: Biden Administration Tackles Super-Polluting Methane Emissions. https://www.whitehouse.gov/briefing-room/statements-releases/2022/01/31/fact-sheet-biden-administration-tackles-super-polluting-methane-emissions/

[8] Lazarus, O., McDermid, S., & Jacquet, J. (2021). The climate responsibilities of industrial meat and dairy producers. Climatic Change, 165(1), 1-21. https://doi.org/10.1007/s10584-021-03047-7

[9] NOPR at 21,374

[10] EPA. (2013). EPA Fact Sheet: Greenhouse Gases Reporting Program Implementation. https://www.epa.gov/sites/default/files/2014-09/documents/ghgrp-overview-factsheet.pdf.

[11] Lazarus, O., McDermid, S., & Jacquet, J. (2021). The climate responsibilities of industrial meat and dairy producers. Climatic Change, 165(1), 1-21. https://doi.org/10.1007/s10584-021-03047-7

[12] Ibid.

Reporting of **all** material Scope 3 emissions should be mandatory, especially since the beef industry, a primary source of methane, is among the least vertically integrated in American animal agriculture.[13] Since animal ownership in a segmented industry changes hands throughout the supply chain, such industry structure facilitates any intention to avoid responsibility for Scope 3 emissions reporting, as JBS specifically claimed was their right in their 2019 annual report).[14] Scope 3 emissions are likely to dominate most meat and dairy company emissions, since 95% of the livestock supply chains emissions originate from enteric fermentation (45%), feed production (41%) and manure management (10%).[15] These figures may not include GHG emissions associated with the production of agricultural chemicals used in meat and dairy production, which would further increase total Scope 3 emissions. Unless the registrant is vertically integrated, these emissions are likely generated by third-party suppliers, contractors, and others, not the registrant itself. Such a provision should therefore specify that required reporting includes emissions generated by these private (i.e., not publicly held) parties, including suppliers, contract farmers, contractors, corporations, or other entities. We see no evidence of any proposed provisions addressing such concerns. Moreover, the emission figures reported above were calculated according to a model developed by the United Nations Food and Agriculture Organization in partnership with industry representatives.[16] Although these emissions have been calculated according to an industry-approved model, the industry has thus far shirked responsibility for its contribution to the climate crisis. Mandatory reporting would help ensure greater accountability.

Given the need for comparability and the uncertainties in agriculture-related emissions accounting, registrants should not be allowed to provide their own categories of upstream or downstream activities, but such categories should be defined for each industry by the Commission. We agree that a registrant required to disclose its Scope 3 emissions should be required to describe the data sources used to calculate the Scope 3 emissions, as proposed. Specifically, within the meat and dairy industries, we think upstream activities should include all the products and processes involved in producing the animals for consumption, i.e., producing fertilizer, growing feed, raising animals (whether or not contracted out), any transportation of live animals, slaughter and carcass disposal. Downstream activities should include transport for further processing, transport to distributors, warehouses and ultimately to commercial kitchens and retail establishments.

In addition, it is in investors' best interests that registrants disclose any upstream land use change to feed crop cultivation, pasture, feedlot or any other use directly related to animal agriculture, especially if the original land use was tropical forest or savanna. The impacts to biodiversity and ecosystem services from such losses are so significant[17,18] and easily comprehensible to investors that such information

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[13] Drouillard, J. S. (2018). Current situation and future trends for beef production in the United States of America—A review. Asian-Australasian Journal of Animal Sciences, 31(7), 1007. https://doi.org/10.5713%2Fajas.18.0428

[14] Lazarus, O., McDermid, S., & Jacquet, J. (2021). The climate responsibilities of industrial meat and dairy producers. Climatic Change, 165(1), 1-21. https://doi.org/10.1007/s10584-021-03047-7

[15] Ibid.

[16] Ibid.

[17] Foley, J. A., Ramankutty, N., Brauman, K. A., Cassidy, E. S., Gerber, J. S., Johnston, M., ... & Zaks, D. P. (2011). Solutions for a cultivated planet. Nature, 478(7369), 337-342. https://doi.org/10.1038/nature10452

[18] Laurance, W. F., Sayer, J., & Cassman, K. G. (2014). Agricultural expansion and its impacts on tropical nature. Trends in ecology & evolution, 29(2), 107-116. https://doi.org/10.1016/j.tree.2013.12.001

would influence decision-making by many investors. One of the world's largest investment firms has already divested from JBS over such issues.[19]

Such description of Scope 3 emissions data sources should include the use of: (i) Emissions reported by parties in the registrant's value chain, and whether such reports were verified or unverified; and (ii) data concerning specific activities, as reported by parties in the registrant's value chain. These reports add credibility to the registrant's Scope 3 emissions report. For example, where the registrant is a slaughterhouse, a GHG emissions report from a fertilizer company producing fertilizer to grow corn and soy for animal feed would be germane, and reinforce the validity of the registrant's report. Likewise, a GHG emissions breakdown from a contract farmer raising pigs for slaughter would add clarity to the registrant's Scope 3 emissions report.

Registrants Must Disclosure Methodologies and Data Gaps (Questions 115, 116, 128)

We appreciate and support the fact that the "proposed GHG emissions disclosure requirement [is based] primarily on the GHG Protocol's concept of scopes and related methodology."[20] We also find that "allowing for some flexibility in the choice of GHG emissions methodologies"[21] may be appropriate in rare cases, but we are concerned that allowing registrants in the meat and dairy industries to use different methodologies defeats the intended goal of comparability among registrants' data (even if such use is defensible by a specific registrant). Indeed, given the uncertainties in reporting agriculture-related emissions in general,[22] and the segmented nature of the methane-intensive beef industry in particular,[23] allowing wide flexibility in chosen methodology is a recipe for disaster for comparability in the meat and dairy industries. However, eligible alternate methodologies for each industry, if any, should be defined by the Commission, and not left to the self-interested decisions of meat and dairy industry registrants. The choice of such approved alternate methodology should be identified by the registrant, along with the rationale, and, similar to the GHG Protocol itself. If the rationale is not suitable or appropriate, the Commission should have authority to reject the alternate choice and require use of the GHG aProtocol.

We agree that registrants should be required to disclose all methodologies, inputs, and assumptions used to calculate GHG emission metrics, as proposed, and to follow methodology pursuant to the GHG Protocol's Corporate Accounting and Reporting Standard. Investors will be unable to compare registrants' GHG emissions figures and factor them into their investment decisions if registrants don't utilize a common methodology that accounts for all components of production. Investors are best served by consistency across industries, and especially among companies within each industry sector.

We further agree that a registrant should be required to disclose the organizational boundaries used to calculate its GHG emissions, as proposed. Investors should know whether the registrant included some or all of its holdings in calculating its GHG emissions. Additionally, the registrant should determine its

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[19] Phillips, D. (2020). Investors drop Brazil meat giant JBS. The Guardian. https://www.theguardian.com/environment/2020/jul/28/investors-drop-brazil-meat-giant-jbs

[20] NOPR at 21,345

[21] NOPR at 21,377

[22] Lazarus, O., McDermid, S., & Jacquet, J. (2021). The climate responsibilities of industrial meat and dairy producers. Climatic Change, 165(1), 1-21. https://doi.org/10.1007/s10584-021-03047-7

[23] Drouillard, J. S. (2018). Current situation and future trends for beef production in the United States of America—A review. Asian-Australasian Journal of Animal Sciences, 31(7), 1007. https://doi.org/10.5713%2Fajas.18.0428

organizational boundaries using the same scope of entities, operations, assets, and other holdings within its business organization that it used in its consolidated financial statements, as proposed, in order to assist investors in their analyses of the registrant's organization. The registrant should use the same reporting scope in its emissions report and financial statement to simplify investors' evaluations of the registrant's operations. The recent consolidation in the meat industry, and the Biden administration's response,[24] certainly support the Commission enacting and strictly enforcing such provisions.

We understand a registrant may encounter data gaps, impacts of which could be especially significant in the beef industry due to its outsized climate impacts and the high degree of segmentation. If a registrant discloses any data gaps encountered when calculating its Scope 3 emissions or other types of GHG emissions, it should it be required to discuss whether it used proxy data or another method to address the gaps, and how its management of data gaps has affected the accuracy or completeness of its GHG emissions disclosure. Disclosing gaps in the registrant's data is fundamental to data transparency and comparability, and the use of proxy data could be misleading unless disclosed. Investors may or may not trust the proxy data, but they have a right to know about it in order to make that determination. This is consistent with establishing and requiring consistent methodologies, as noted above.

SRC-related Exemptions from Scope 3 Emissions Reporting Should not be Permissible (Question 134)

Given that the highly segmented structure of the beef industry suggests the presence of many smaller reporting companies (SRCs), such an exemption could render the Scope 3 emissions reporting requirement meaningless. We therefore find the exemption for SRCs to be unreasonable, especially since the SRC definition is based purely on financial or economic criteria, which have no bearing on quantity or nature of GHG emissions. Thus, SRCs may easily still have material Scope 3 emissions, perhaps even in quantities disproportionate to their financial status. This becomes even more important in light of administration efforts to de-consolidate the meat-packing industry,[25] which could result in the creation of a substantial number of SRCs, notably in the highly-consolidated pork and poultry industries. Additionally, large dominant corporations could disaggregate, creating multiple SRCs under the guise of "increasing competition" to minimize further regulatory pressure, as well as to avoid reporting requirements under this rule. The result would be an equivalent production of emissions, but now generated by potentially dozens of SRCs exempt from the rule's Scope 3 provisions. Additionally, the setting of a goal by a registrant is also irrelevant to eligibility for an exemption, since the goal may be random, meaningless and unachievable, and may not necessarily be proportional to Scope 3 emissions.

Attestation Providers Must be Held to Reasonable Standards of Competence (Questions 144 -147, and 161)

We appreciate the Commission's attempts to ensure that attestation providers are held to reasonable standards of competence. However, optional membership in an accreditation body may not be identical to actually being accredited by that body. Thus, we suggest that the provision for membership in the

[24] Deese, B., Fazilli, S., & Ramamurti, B. (2021, September 8). Addressing Concentration in the Meat-Processing Industry to Lower Food Prices for American Families. Blog Post. https://www.whitehouse.gov/briefing-room/blog/2021/09/08/addressing-concentration-in-the-meat-processing-industry-to-lower-food-prices-for-american-families/

[25] Ibid.

accrediting body be replaced by a requirement for actual accreditation by such a body, and that the registrant be required to confirm in the report that its provider is in good standing with a recognized accreditation body, that is certified by the National Commission for Certifying Agencies, the accrediting arm of the Institute for Credentialing Excellence, the recognized standard in the field. Such good standing should be predicated upon periodic review of the attestation provider by the accreditation body.

Given the uncertainties in emissions accounting and the beef industry's segmented structure, we agree that expertise requirements must be specific, including prescriptive requirements related to the qualifications and characteristics of personnel under the proposed rules. Such requirements should not only mandate an attestation provider firm to have established policies and procedures to confirm that firm personnel have the required skillset and reasonable experience, but such personnel need certification in that particular industry sector. That is, personnel employed to provide the actual analyses for an attestation provider retained by a meat industry registrant should have specific knowledge and competence in meat industry emissions analysis. The same should apply to all industry sectors.

We also agree with the Commission's proposal that attestation providers be independent of any and all corporate relationships to the registrant and its affiliates and subsidiaries. We find such a provision to be necessary and appropriate to ensure objectivity, as well as completeness and accuracy of reporting. We support the Commission's criteria by which an attestation provider might fail to meet criteria for independence, as well as the Commission's proposal regarding conflicts of interest and whether the attestation provider appears to be an employee or advocate for the registrant. The Commission should consider all relevant circumstances and relationships, of any type or to any degree, in assessing such conditions.

Registrants Should Be Required to Set Meaningful Targets (Question 168-169)

To date, social, political and regulatory pressure to encourage the meat and dairy industries to establish substantive, voluntary, sustainability targets has resulted in minimal progress on any meaningful metric. Moreover, climate-related impacts should not be considered the only sustainability indicator that could materially impact the business or financial position of registrants in the meat and dairy industries; others could include biodiversity losses, deforestation and land use change (as previously mentioned), water pollution[26] and supply[27] impacts, forced migration,[28] and various aspects of public health, such as contribution to pandemic risks[29] and antibiotic resistance.[30] Therefore, we find that the Commission

[26] Glibert, P. M. (2020). From hogs to HABs: impacts of industrial farming in the US on nitrogen and phosphorus and greenhouse gas pollution. Biogeochemistry, 150(2), 139-180. https://doi.org/10.1007/s10533-020-00691-6
[27] Warziniack, T., Arabi, M., Brown, T. C., Froemke, P., Ghosh, R., Rasmussen, S., & Swartzentruber, R. Projections of Freshwater Use in the United States under Climate Change. Earth's Future, e2021EF002222. https://doi.org/10.1029/2021EF002222
[28] Abel, G. J., Brottrager, M., Cuaresma, J. C., & Muttarak, R. (2019). Climate, conflict and forced migration. Global environmental change, 54, 239-249. https://doi.org/10.1016/j.gloenvcha.2018.12.003
[29] Wegner, G. I., Murray, K. A., Springmann, M., Muller, A., Sokolow, S. H., Saylors, K., & Morens, D. M. (2022). Averting wildlife-borne infectious disease epidemics requires a focus on socio-ecological drivers and a redesign of the global food system. EClinicalMedicine, 47, 101386. https://doi.org/10.1016/j.eclinm.2022.101386
[30] Oliver, A., Xue, Z., Villanueva, Y. T., Durbin-Johnson, B., Alkan, Z., Taft, D. H., ... & Lemay, D. G. (2022). Association of Diet and Antimicrobial Resistance in Healthy US Adults. Mbio, e00101-22. https://doi.org/10.1128/mbio.00101-22

should require registrants to establish meaningful, realistic GHG reduction targets or any other climate- or environment-related target or goal, and to disclose such targets. Possible targets in addition to specific, timebound GHG reductions relevant to the meat and dairy industries might include eliminating land use changes in native landscapes (including tropical and temperate) regions, reducing water usage per unit of production, protecting waterways and riparian areas from erosion and manure pollution, and mitigating adverse impacts to biodiversity. Continued failure to meet reasonable goals in these metrics would likely diminish the health of ecosystems upon which these industries rely and increase pressure on regulatory bodies to propose and enforce stricter requirements, which together would likely affect a registrant's costs, increase public and legal scrutiny, and therefore, alter financial performance and position. The most meaningful targets would satisfy most, if not all, of the criteria established in Question 169. Far from discouraging registrants from setting such targets or goals, such provisions could increase competition among registrants to meet these emissions and environmental targets, and thus better attract investors. Additionally, we encourage the Commission to require registrants to compare themselves to other registrants of similar capitalization in the same industry to facilitate and foster such competition and increase transparency to current and future investors.

In conclusion, the Center for Biological Diversity supports the proposed rule and adoption of these recommendations and their application to meat and dairy industry registrants. In particular, the meat and dairy industries warrant investor attention due to their substantial environmental impacts, and the subsequent risks to these industries due to anticipated alterations in crop production and animal welfare. Additionally, strategic provisions to mandate establishment of meaningful targets could facilitate competition, substantially reduce environmental impacts, and stimulate investment. Accordingly, effective application of this proposed rule to these industries is in the best interests of investors, the economy as a whole, as well as the environment. Indeed, the value of healthy ecosystems to the U.S. economy has been estimated at $2.1 trillion, which includes virtually all domestic agriculture and related supply chains.[31] However, effective application requires deliberate Commission action to a) standardize accepted methodologies, reporting requirements and competencies, b) define critical terms, and c) eliminate imprudent exemptions. Without such measures, the proposed rule risks becoming another "paper tiger," easily circumvented by self-interested corporations seeking to minimize scrutiny and burnish their image to investors and regulators. We appreciate the opportunity to comment, and invite agency contact to secure any additional information necessary.

Sincerely,

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[redacted]

[31]World Economic Forum. (2020). Nature Risk Rising: Why the Crisis Engulfing Nature Matters for Business and the Economy. World Economic Forum and PwC. https://www.weforum.org/reports/nature-risk-rising-why-the-crisis-engulfing-nature-matters-for-business-and-the-economy