July 29, 2022

via the IFRS website
Re: IFRS S2 Climate-related Disclosures Exposure Draft

To Whom It May Concern:

Environmental Defense Fund ("EDF") respectfully submits the following comment to the International Sustainability Standards Board ("ISSB") in response to the IFRS S2 Climate-related Disclosures Exposure Draft ("Exposure Draft").[1] One of the world's leading international nonprofit organizations, EDF creates transformational solutions to the most serious environmental problems. To do so, EDF links science, economics, law, and innovative private-sector partnerships.

EDF supports the IFRS 1 and 2 Exposure drafts, which will provide investors around the globe with the information necessary to inform their investment decisions. EDF commends the ISSB's goal of creating a global baseline and believes that the ISSB's use of the Task Force on Climate-Related Financial Disclosure ("TCFD") framework and Sustainability Accounting Standards Board ("SASB") standards will help to achieve that goal. In addition, EDF encourages the ISSB to consider certain modifications to the oil & gas, gas utilities & distribution, electric utilities & power generators, and marine transportation industry-specific standards that will provide investors with further material information regarding an entity's transition risk.

I. EDF supports the ISSB's use of TCFD and SASB standards.

As noted by the ISSB, the goal of harmonizing multiple climate disclosure regimes can be made difficult by "[k]ey differences in regulatory environments, voluntary standards, industry structures and business models across geographic regions."[2] Efforts the ISSB has taken to account for these differences include amending the SASB standards[3] and creating a jurisdictional working group to further harmonize climate disclosures,[4] among other strategies. EDF commends these efforts, and further supports the use of TCFD and SASB to define the global baseline.

[1] INTERNATIONAL SUSTAINABILITY STANDARDS BOARD, IFRS S2 CLIMATE-RELATED DISCLOSURES (Mar. 2022), https://www.ifrs.org/content/dam/ifrs/project/climate-related-disclosures/issb-exposure-draft-2022-2-climate-related-disclosures.pdf [hereinafter Climate Exposure Draft]
[2] IFRS, BASIS FOR CONCLUSIONS ON [DRAFT] IFRS S2 CLIMATE-RELATED DISCLOSURES 40 (July 2022)
[3] *Id.*
[4] Jurisdictional Working Group, https://www.ifrs.org/groups/jurisdictional-working-group/#about (last visited June 6, 2022)

The TCFD framework is globally recognized and widely used by companies in the United States and around the world.[5] As of January 2022, over 3400 organizations across 95 jurisdictions with a combined market capitalization of $27.2 trillion support the use of TCFD.[6] In addition, over 1,000 financial institutions, managing assets of $194 trillion, support the TCFD.[7] Both the United States Securities and Exchange Commission ("U.S. SEC") and the European Financial Reporting Advisory Group ("EFRAG") proposed sustainability/climate disclosure rules that align with the TCFD.[8] This broad-based acceptance of the TCFD will allow jurisdictions worldwide to integrate the standards more easily. Moreover, it will limit the overall compliance burden associated climate risk disclosures, since many companies are already utilizing the framework.

SASB's set of 77 industry-specific standards are meant to provide investors with a "minimal set of financially material sustainability topics."[9] Thus, ISSB's use of SASB will help to shape standards that are maximally useful for investors. In 2021, half of the companies in the S&P Global 1200 index (approximately 70% of global market capitalization) used the SASB standards to communicate with investors.[10] In addition, 258 institutional investors representing $76 trillion in assets across 23 countries support SASB.[11] Similar to the TCFD, this broad acceptance will allow for easier integration into multiple jurisdictions and limit overall compliance burden.

II. EDF recommends that the ISSB consider including additional industry-specific metrics that will provide material information for investors

While EDF supports use of SASB's industry-specific standards, EDF recommends additional disclosure metrics in the oil & gas, gas utilities & distribution, electric utilities & power generators, and marine transportation standards. As noted in the Exposure Draft, the objective of the standards is "to require entities to provide material information about their exposure to climate-related risks and opportunities that is useful to users of general-purpose financial reporting in assessing the entity's enterprise value."[12] The additional recommended industry-specific disclosure metrics, below, will provide investors with material information regarding an entity's transition risk. Transition risk is financial risk associated with the shift to a lower-carbon economy and as noted in the Exposure Draft, may include "extensive policy, legal, technology and market changes to address mitigation and adaptation requirements relating to climate change."[13] Granular disclosures regarding an entity's greenhouse gas emissions and how it will manage those emissions, particularly in emissions-intensive

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[5] More than 2,600 organizations globally (with a total market capitalization of $25 trillion) have signaled their support for TCFD. *See* TCFD, 2021 Status Report 2 (2021), https://www.fsb.org/wp-content/uploads/P141021-1.pdf

[6] *About*, TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURE, https://www.fsb-tcfd.org/about/ (last visited July 5, 2022); Support the TCFD, TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURE, https://www.fsb-tcfd.org/support-tcfd/ (last visited July 27, 2022)

[7] *See* TCFD, 2021 Status Report 2 (2021), https://www.fsb.org/wp-content/uploads/P141021-1.pdf.

[8] *See generally* Sec. & Exch. Comm'n, The Enhancement and Standardization of Climate-Related Disclosures for Investors, 87 Fed. Reg. 21,334 (Apr. 11, 2022); EFRAG, Draft European Sustainability Reporting Standards: App'x IV TCFD Recommendations and ESRS Reconciliation Table (April 2022); *See also* ERM & PERSEFONI, THE EVOLUTION OF SUSTAINABILITY DISCLOSURE COMPARING THE 2022 SEC, ESRS, AND ISSB PROPOSAL 14 (2022), https://www.sustainability.com/globalassets/sustainability.com/thinking/pdfs/2022/comparing-the-sec-efra-and-issb.pdf

[9] *Understanding SASB Standards*, SASB, https://www.sasb.org/ (last visited July 6, 2022)

[10] *More Than Half of S&P Global 1200 Now Disclose Using SASB Standards*, VRF (2021), https://www.valuereportingfoundation.org/news/more-than-half-of-sp-global-1200-now-disclose-using-sasb-standards/

[11] *Global Use of SASB Standards*, SASB, https://www.sasb.org/about/global-use/ (last visited July 6, 2022)

[12] Climate Exposure Draft, *supra* note 1, at 50.

[13] *Id.* at 47.

industries, are material to investors and other stakeholders in assessing the entity's transition risk and making investment decisions.

a. Recommendations for Oil & Gas disclosure requirements

Methane poses various transition risks for entities in the oil and gas industry.[14] A primary component of uncombusted natural gas, methane is a potent greenhouse gas with 28-34 times more warming power than carbon dioxide over a 100-year period and 84-86 times more warming power than carbon dioxide over a 20-year period.[15] Studies show that the oil & gas industry leaks on average 2.3% of produced gas,[16] resulting in negative environmental and financial impacts. A 2015 study found that methane emissions resulted in a loss of $30 billion globally by the oil & gas industry.[17] Another recent study found that leaks in New Mexico alone resulted in a loss of $275 million worth of natural gas annually.[18] At least 25% of today's global warming is caused by methane emissions, and the oil and gas industry is the largest industrial source.[19] Due to its impacts, over 100 jurisdictions—representing 45% of methane emissions across the globe—have pledged to reduce their methane emissions by 30% by 2030.[20]

Managing the investment risks associated with methane is made difficult by the lack of accuracy and specificity in methane emissions reporting. A study published by experts from more than a dozen different research institutions has found that traditional reporting methods have resulted in underestimating methane emissions by 60%.[21] Another study published in March 2022 concluded that methane emissions from the New Mexico Permian Basin were 6.5 times larger than estimated.[22] These and other data gaps associated with methane emissions prevent investors and other stakeholders from meaningfully assessing transition risk.[23]

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[14] CERES ET AL., SETTING THE BAR: IMPLEMENTING THE TCFD RECOMMENDATIONS FOR OIL AND GAS METHANE DISCLOSURE 8–9 (Oct. 2018) (explaining the legal, market, reputational, and policy risks an entity may face), https://www.tcfdhub.org/wp-content/uploads/2019/07/CeresEDFPRImethaneFINAL.pdf

[15] *The Challenge*, UNECE, https://unece.org/challenge (last visited July 6, 2022).

[16] Ramón Alvarez et al, Assessment of methane emissions from the U.S. oil and gas supply chain, 361 SCIENCE -186, 186–188 (2018), https://doi.org/10.1126/science.aar7204; Benjamin Storrow, *Methane Leaks Erase Some of the Climate Benefits of Natural Gas*, SCIENTIFIC AMERICAN (May 5, 2020), https://www.scientificamerican.com/article/methane-leaks-erase-some-of-the-climate-benefits-of-natural-gas/

[17] KATE LARSEN ET AL, UNTAPPED POTENTIAL REDUCING GLOBAL METHANE EMISSIONS FROM OIL AND NATURAL GAS SYSTEMS, RHODIUM GROUP 1, 8 (April 2015), https://rhg.com/wp-content/uploads/2015/04/RHG_UntappedPotential_April2015.pdf

[18] *New Mexico Oil & Gas data*, EDF, https://www.edf.org/nm-oil-gas/ (last visited July 6, 2022)

[19] CERES ET AL., SETTING THE BAR: IMPLEMENTING THE TCFD RECOMMENDATIONS FOR OIL AND GAS METHANE DISCLOSURE (Oct. 2018), https://www.tcfdhub.org/wp-content/uploads/2019/07/CeresEDFPRImethaneFINAL.pdf

[20] *The Global Methane Pledge*, IEA, https://www.iea.org/reports/global-methane-tracker-2022/the-global-methane-pledge (last visited July 9, 2022).

[21] Alvarez et al., *supra* note 16, at 186-188.

[22] Yuanlei Chen et al., *Quantifying Regional Methane Emissions in the New Mexico Permian Basin with a Comprehensive Aerial Survey*, 56 ENV'L SCI. & TECH. 4317, 4321 (2022), https://doi.org/10.1021/acs.est.1c06458.

[23] For additional reports on data gaps in methane emissions, *see Methane research series: 16 studies*, EDF, https://www.edf.org/climate/methane-research-series-16-studies (last visited July 28, 2022); Rutherford et al., *Closing the methane gap in US oil and natural gas production emissions inventories*, 12 NATURE COMMS. 4715 (2021), https://www.nature.com/articles/s41467-021-25017-4#citeas; Benjamin Hmiel et al., *Preindustrial 14CH4 Indicates Greater Anthropogenic Fossil CH4 Emissions*, 578 NATURE 409, 409 (2020), https://www.nature.com/articles/s41586-020-1991-8; Stefan Schwietzke et al., *Upward Revision of Global Fossil Fuel Methane Emissions Based on Isotope Database*, 538 NATURE 88 (2016), https://www.nature.com/articles/nature19797; *Howarth, R. W. A bridge to nowhere:*

In recent years, there have been a number of investor-led efforts to increase disclosure pertaining to methane. Since 2016, investors have filed over 35 resolutions related to improving methane disclosure and reduction.[24] Between 2017 and 2019, a PRI-led collaborative with thirty-six global institutional investors, representing approximately $4.2 trillion in assets, engaged with 31 oil and gas entities and utilities in an effort to enhance the measurement, management, and reduction of methane emissions.[25] Most recently in May 2022, Chevron's shareholders voted overwhelmingly in favor of a resolution pushing the company to improve its reporting on methane emissions.[26]

To equip investors with information to assess the material risk that methane emissions pose, ISSB should consider requiring additional metrics that will provide investors with an accurate depiction of an entity's methane emissions. These metrics should be included for upstream and downstream entities in the oil & gas sector.[27] Absolute methane emissions and intensity are commonly reported by companies in the oil and gas industry,[28] but are not included in the ISSB industry-specific standards. In addition, participation in OGMP 2.0 can assist investors and other stakeholders in verifying the accuracy of an entity's emissions.

1. Volume of methane emissions in metric tons, in addition to percentage methane

Methane emissions should be disclosed in metric tons of methane, in addition to percentage of total carbon dioxide equivalent emissions. Disclosure of a percentage methane figure alone does not provide

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methane emissions and the greenhouse gas footprint of natural gas, 2 ENERGY SCI. ENG. 47–60 (2014), https://onlinelibrary.wiley.com/doi/10.1002/ese3.35.

[24] Sarah Smith, *Shareholder activism has improved methane reporting, but unevenly, study finds*, S&P GLOBAL (Feb. 6, 2018), https://www.spglobal.com/marketintelligence/en/news-insights/trending/wzn2nwmpdpr2r7c3q7jc4w2; *See also Climate and Sustainability Shareholder Resolutions Database*, CERES, https://www.ceres.org/resources/tools/climate-and-sustainability-shareholder-resolutions-database (last visited July 10, 2022).

[25] *Engaging on methane: results of the PRI collaborative engagement*, PRI (July 22, 2020), https://www.unpri.org/methane/engaging-on-methane-results-of-the-pri-collaborative-engagement/6103.article

[26] Andrew Howell, *Big bright spot in a disappointing season for shareholder climate resolutions* (May 26, 2022), https://business.edf.org/insights/big-bright-spot-at-chevron-in-a-disappointing-season-for-shareholder-climate-resolutions/.

[27] Methane poses a variety of transition risks, including regulatory and legal, to the electric utilities & power generators and gas utilities & distributor sectors. *See, e.g., Climate risks are accelerating. Here's what Duke, PG&E and 16 other utilities expect to pay*, UTILITY DIVE (Nov. 2020), *https://www.utilitydive.com/news/climate-risks-accelerating-heres-what-costs-duke-pge-and-16-other-utilities-expect/588860/* (highlighting costs associated with various GHG regulation, including methane). Both upstream and downstream oil and gas entities emit a significant amount of methane. In major importing countries, such as several European member states and Japan, downstream segments (i.e. distribution) are responsible for more than 80% of emissions. Tomas de Oliveira Bredariol et al, *The case for regulating downstream methane emissions from oil and gas*, IEA (Sept. 8, 2021), https://www.iea.org/commentaries/the-case-for-regulating-downstream-methane-emissions-from-oil-and-gas; *see also* ENERGY COMMUNITY SECRETARIAT, REPORT ON METHANE EMISSIONS BY GAS TRANSMISSION AND DISTRIBUTION SYSTEM OPERATORS IN THE ENERGY COMMUNITY CONTRACTING PARTIES 7 (May 2021) (indicating that Europe's gas distribution system accounts for 59% of the gas industry's methane emission). In the United States, it is estimated that production accounts for 60% of emissions, processing accounts for 6%, transmission accounts for 19%, and distribution accounts for 7%. *Estimates of Methane Emissions by Segment in the United States*, U.S. EPA (last updated May 5, 2022), https://www.epa.gov/natural-gas-star-program/estimates-methane-emissions-segment-united-states.

[28] *See* Isabel Mogstad et al., *Hitting the Mark: Improving the Credibility of Industry Methane Data*, EDF, 25, 27 (Feb. 2020), https://storage.googleapis.com/edfbiz_website/Oil%20Gas%20Methane/Hitting-the-Mark.pdf; ROLAND KUPERS ET AL., AN EYE ON METHANE: INTERNATIONAL METHANE EMISSIONS OBSERVATORY 2021 REPORT 28, UNEP (2021) (listing 65 entities in the oil & gas industry and their absolute and intensity methane targets), https://www.unep.org/resources/report/eye-methane-international-methane-emissions-observatory-2021-report.

investors with a clear understanding of total methane emissions and can make comparison between entities difficult. EDF recommends adding the following scope 1 disclosures:[29]

- **Oil & Gas–Exploration & Production:** volume of emissions in metric tons methane (in addition to the Exposure Draft's proposed methane percentage disclosure)
- **Oil & Gas–Midstream:** volume of emissions in metric tons methane (in addition to the Exposure Draft's proposed methane percentage disclosure)
- **Electric Utilities & Power Generators:** volume of emissions in metric tons methane and percentage methane
- **Gas Utilities & Distribution:** volume of emissions in metric tons methane and percentage methane

2. *Methane intensity in percent methane emitted*

Methane intensity figures are useful for benchmarking companies on their methane performance and associated transition risk. EDF recommends adding the following scope 1 disclosures:

- **Oil & Gas–Exploration & Production:** percent methane emitted / marketed natural gas OR percent methane emitted / energy content of marketed product
- **Oil & Gas–Midstream:** percent methane emitted / transported natural gas OR percent methane emitted / energy content of transported product
- **Electric Utilities & Power Generators:** percent methane emitted / natural gas combusted OR percent methane emitted / energy content of combusted product
- **Gas Utilities & Distribution:** percent methane emitted / delivered gas OR percent methane emitted / energy content of delivered product

3. *Accuracy of methane emissions calculations*

The Oil and Gas Methane Partnership 2.0 ("OGMP 2.0") is the leading measurement standard for oil and gas companies to accurately measure and report their methane emissions.[30] OGMP membership is rapidly growing and currently includes 80 companies with assets on five continents that represent a significant share of the world's oil and gas production.[31] OGMP members also include operators of natural gas transmission and distribution pipelines, gas storage capacity and LNG terminals.[32] Major investors such as EOS at Federated Hermes, LGIM and Blackrock have backed the OGMP.[33] Notably,

[29] All categories of methane emissions should be reported, including fugitives, intentionally vented emissions, abnormal process emissions, and normal operational emissions.
[30] *See* OGMP, AN INVESTOR'S GUIDE TO THE OIL AND GAS METHANE PARTNERSHIP 2.0, 2 (2021), https://business.edf.org/files/OGMP-INVESTOR-GUIDE_R8_MapUpdates.pdf
[31] *Oil & Gas Methane Partnership 2.0*, https://www.ogmpartnership.com/ (last visited July 27, 2022)
[32] *Id.*
[33] *A clear and credible standard to understand and track oil and gas methane emissions*, EDF (Sept. 2021) (listing quotes by EOS at Federated Homes and LGIM), https://business.edf.org/insights/an-investors-guide-to-the-oil-and-gas-methane-partnership/; 2022 CLIMATE-RELATED SHAREHOLDER PROPOSALS MORE PRESCRIPTIVE THAN 2021, 2 (May 2022), https://www.blackrock.com/corporate/literature/publication/commentary-bis-approach-shareholder-

in May 2022, 98% of Chevron's shareholders voted in favor of a resolution for improved methane emissions reporting, which explicitly pointed to OGMP 2.0 as a model reporting framework for "improving methane data quality and consistency."[34]

Disclosure of OGMP membership can serve as a valuable metric for investors and other stakeholders to assess an entity's transition risk. In addition, understanding how non-OGMP members calculate their methane emissions can provide investors and other stakeholders with valuable insight. EDF recommends adding the following disclosures for **Oil & Gas–Exploration & Production, Oil & Gas–Midstream, Electric Utilities & Power Generators, and Gas Utilities & Distribution standards**:

- Whether the entity is a member of the OGMP 2.0 and if so, a specification of the relevant OGMP 2.0 reporting level[35]
- If the entity is not a member of the OGMP 2.0, whether the entity is calculating emissions through emissions factors or direct emissions measurements *and* whether the entity is calculating emissions in accordance with another defined protocol, such as EPA GHGRP Subpart W, Veritas, or other framework

b. Recommendations for Marine Transportation disclosure requirements

A requirement to disclose carbon intensity, or operational or energy efficiency as it may be referred, should be included. Carbon intensity measures the amount of greenhouse gases a ship emits relevant to the amount of cargo carried over a distance. This measurement will serve as a valuable metric for investors assessing a shipping entity's transition risk and should be included as an industry-specific metric.

The International Maritime Organization ("IMO"), the United Nations agency responsible for regulating worldwide shipping pollution,[36] set a greenhouse gas emissions reductions strategy in 2018 to reduce carbon intensity by 40% by 2030.[37] Subsequently, the IMO adopted several emissions regulations, including a Carbon Intensity Indicator ("CII") rating scheme addressing ships' operational efficiency, which will take effect in 2023.[38] The IMO's goals illustrate the importance and relevance of carbon intensity in the maritime shipping industry.

Notably, carbon intensity is widely used in the maritime shipping industry. Use of a carbon intensity metric is supported by the Poseidon Principles—a framework "for assessing and disclosing the climate alignment of ship finance portfolios."[39] The Poseidon Principles were developed by global shipping

proposals.pdf?campaign_id=4&emc=edit_dk_20220511&instance_id=61019&nl=dealbook&regi_id=55487583&segment_id=91886&te=1&user_id=59841661147ebb243ac12d05050fb3f4#page=2.

[34] Howell, *supra* note 26; CHEVRON CORPORATION, 2022 PROXY STATEMENT 94 (May 2022), https://www.chevron.com/-/media/shared-media/documents/chevron-proxy-statement-2022.pdf#page=100.

[35] Under the OGMP framework, entities "report on methane emissions along 5 levels of reporting, increasing in granularity by quantification methodology, level and sources of geography, and uncertainty in quantification." OGMP, AN INVESTOR'S GUIDE TO THE OIL AND GAS METHANE PARTNERSHIP 2.0, 2 (2021), https://business.edf.org/files/OGMP-INVESTOR-GUIDE_R8_MapUpdates.pdf

[36] The IMO includes 175 Member States and three associate members. *Member States*, INT'L MARITIME ORG, https://www.imo.org/en/OurWork/ERO/Pages/MemberStates.aspx (last visited July 15, 2022).

[37] *Further shipping GHG emission reduction measures adopted*, INT'L MARITIME ORG (June 17, 2021) https://www.imo.org/en/MediaCentre/PressBriefings/pages/MEPC76.aspx

[38] *Id.*

[39] POSEIDON PRINCIPLES ANNUAL DISCLOSURE REPORT 2021, GLOBAL MARITIME FORUM (Dec. 20, 2021) https://www.globalmaritimeforum.org/publications/poseidon-principles-annual-disclosure-report-2021

banks in collaboration with leading entities in the maritime shipping industry.[40] The framework utilizes carbon intensity as a key metric to evaluate a shipping's entity's climate risk.[41]

Carbon intensity should be expressed at the fleet level in Annual Efficiency Ratio ("AER") in g CO2/dwt/nm or according to the IMO Energy Efficiency Operational Indicator ("EEOI") using cargo data in $gCO_{2/(transport\ work)}$. [42] This metric should be complemented at the vessel level with the IMO CII letter grade when those become available in 2023.

Respectfully Submitted,

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[40] *Id.* ("The Poseidon Principles were developed in an effort spearheaded by global shipping banks – Citi, Société Générale, and DNB – in collaboration with leading industry players – A.P. Møller – Mærsk, Cargill, Euronav, Gram Car Carriers, Lloyd's Register, and Watson Farley & Williams – with expert support provided by the Global Maritime Forum, Rocky Mountain Institute, and University College London Energy Institute/UMAS.")
[41] *See* POSEIDON PRINCIPLES, ANNUAL DISCLOSURE REPORT 2021, 7 (2021), https://www.globalmaritimeforum.org/content/2021/12/Poseidon-Principles-Annual-Disclosure-Report-2021.pdf; INTEGRATING CLIMATE RISK INTO SHIP FINANCE LENDING DECISIONS, UMAS, 8 (July 2020), https://www.poseidonprinciples.org/finance/wp-content/uploads/2020/07/Integrating-climate-risk-into-ship-finance-lending-decisions.pdf.
[42] *See* INTEGRATING CLIMATE RISK INTO SHIP FINANCE LENDING DECISIONS, UMAS, 9 (July 2020), https://www.poseidonprinciples.org/finance/wp-content/uploads/2020/07/Integrating-climate-risk-into-ship-finance-lending-decisions.pdf (highlighting AER and EEOI as carbon intensity metrics in the shipping industry). An example of EEOI metric can be found in reports by Maersk, the world's largest shipping company. Maersk Annual Report 2021, 5 (2021), https://investor.maersk.com/node/33351/pdf.