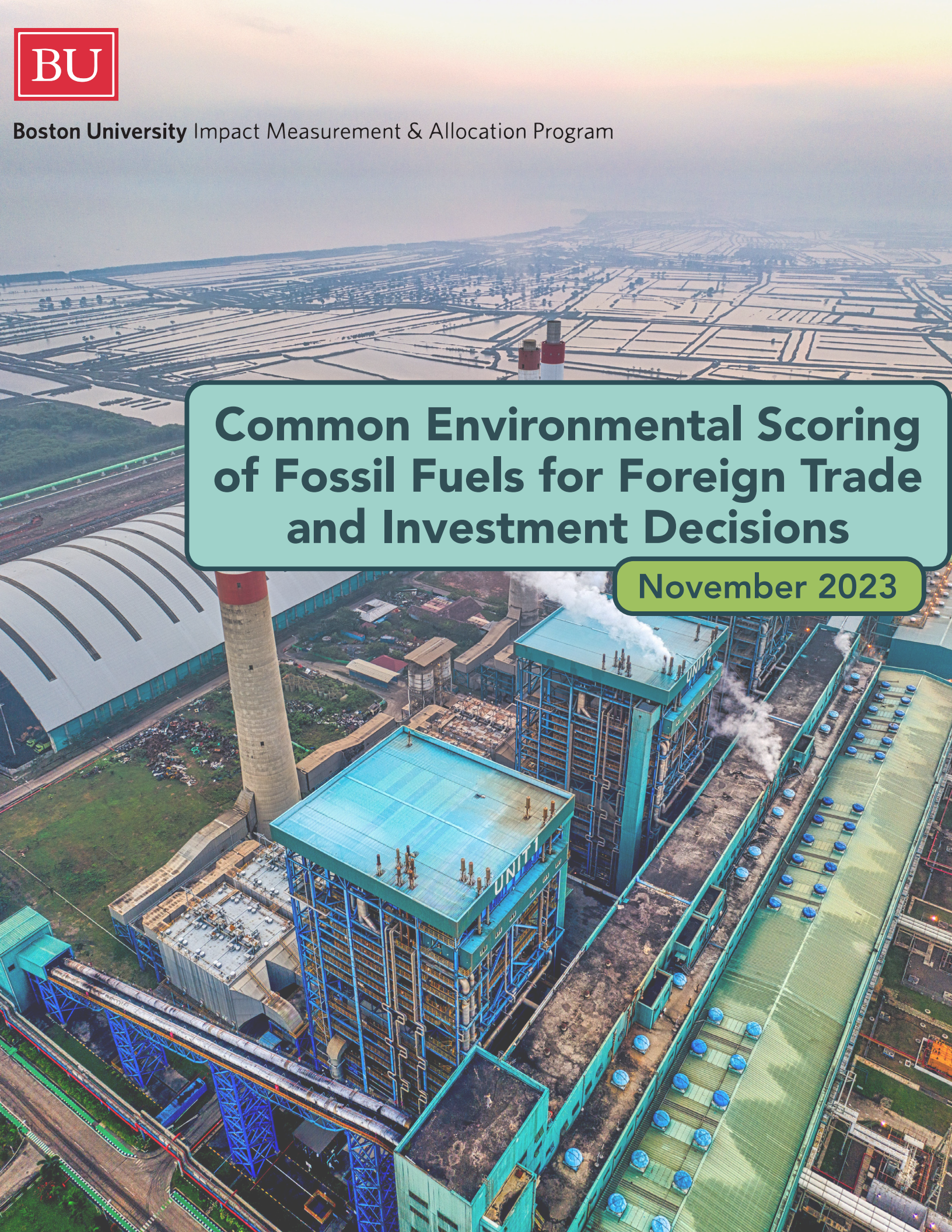




Boston University Impact Measurement & Allocation Program

Common Environmental Scoring of Fossil Fuels for Foreign Trade and Investment Decisions

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Robert L. Kleinberg

Senior Fellow, Boston University Impact Measurement & Allocation Program

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The Need for Better ESG Data

Investment communities are searching for reliable sources of data in the environmental, social, and governance (ESG) spheres. These data can aid wise allocation of capital, to the benefit of individual market participants and the economy as a whole. However, difficulties in finding and weighing ESG data have, to a certain extent, cast doubt on the entire ESG scoring enterprise.

Standards for Embodied Greenhouse Gases

A similar problem is beginning to infect international trade. Globally important trading blocs, such as the European Union and East Asian nations led by Japan, Korea, and Australia, are seeking to reduce embodied greenhouse gas emissions across the supply chains of important internationally traded commodities such as liquefied natural gas.¹ However, there are at present no generally accepted standards for the measurement, reporting, and verification (MRV) of embodied greenhouse gases. I argue here that the adoption of common MRV standards in the European Union and the United States would benefit international trade in general, perhaps U.S. fossil fuel exporters in particular, and investment communities at large.

International Agreements and European Regulations

International agreements through which the nations of the world are pledging to reduce their greenhouse gas emissions are growing in scope. The Paris Agreement of 2015 has been signed by 197 countries and the European Union.^{2,3} Recognizing that methane is the second most important greenhouse gas after carbon dioxide, the United States and the European Union announced the Global Methane Pledge in 2021, and since then 150 participants have joined.⁴

These agreements are voluntary and do not in themselves have the force of law. However, they can prompt actions that influence international trade. Since the 1990s the European Union has taken the lead in using its market power to influence production practices in nations from which it imports goods.⁵

The Carbon Border Adjustment Mechanism (CBAM) is a European Union regulatory mechanism that entered into force in transitional form on 1 October 2023,⁶ after which greenhouse gas emissions associated with the supplies of imported cement, iron and steel, aluminum, fertilizers, electricity, and hydrogen must be reported to the EU. After 2026, a greater range of imports will be subject to fees levied according to the greenhouse gases emitted in their respective supply chains.

EU Methane Regulation Announcement

Although CBAM does not explicitly apply to methane associated with fossil fuel imports, the EU has clearly signaled its intention to impose a similar system in that domain. The European Commission has proposed,⁷ and the Council of the European Union⁸ and the European Parliament⁹ have separately approved (with amendments) draft legislation on methane emissions reduction in the energy sector with a path to extraterritorial effect.¹⁰ On 15 November 2023, the Council announced that a final agreement between it and the Parliament which would elevate the proposal to EU Law was imminent.¹¹



U.S. Can Benefit

The Russian invasion of Ukraine and the resulting reorganization of the international trade in fuels, gives the United States an opportunity to influence, and potentially benefit from, a European focus on greenhouse gas emissions embodied in its imports, most particularly of natural gas.¹² If U.S. inventories of greenhouse gas emissions – particularly of methane – are based on physics-based measurements, it is likely to be found that the United States is a world leader in the clean production of fossil fuels.¹³ However, in the absence of empirical data, that claim cannot be made.¹⁴ On 15 November 2023, a few hours after the European Union announced progress on finalizing its law on methane emissions in the international trade in fossil fuels, the U.S. Department of Energy announced the formation of an international working group to establish a framework for measurement, monitoring, reporting, and verification of supply chain emissions of greenhouse gases.^{15,16}

Adopting Common Reporting Standards Helps Everyone

Investment communities face a challenge similar to that of the European Union: they need realistic and effective pathways to improve the environmental footprints of their portfolios. According to PIMCO, a well-regarded buy-side investment house, “Clear, ambitious methane regulations can assist investors, such as PIMCO, to better execute a more effective transition risk-mitigation strategy, as a predictable regulatory landscape is likely to lead to increasingly dependable capex guidance and improved data transparency.”¹⁷

Without broadly-agreed-upon measures of environmental, social, and governance performance, it is difficult or impossible to score the relative sustainability performance of corporate entities, even within industrial sectors. Regulatory and investment communities can aid one another by adopting common standards of greenhouse gas emission reporting. Agreement on these standards between European Union and United States authorities would send the strongest possible message that greenhouse gas emissions measurements can be a reliable cornerstone of environmental assessment.

¹ Joint Statement on Accelerating Methane Mitigation from the LNG Value Chain, 18 July 2023.

https://energy.ec.europa.eu/publications/joint-statement-accelerating-methane-mitigation-lng-value-chain_en

² United Nations Climate Change, The Paris Agreement. Accessed 29 July 2023.

<https://unfccc.int/process-and-meetings/the-paris-agreement>

³ United Nations Climate Change, Parties to the United Nations Framework Convention on Climate Change. Accessed 29 July 2023.

<https://unfccc.int/process/parties-non-party-stakeholders/parties-convention-and-observer-states>

⁴ Global Methane Pledge, About the Global Methane Pledge. Accessed 29 July 2023.

<https://www.globalmethanepledge.org/>

⁵ A. Bradford, *The Brussels Effect: How the European Union Rules the World*, Oxford University Press, 2020.

⁶ European Commission, Carbon Border Adjustment Mechanism. Accessed 29 July 2023.

https://taxation-customs.ec.europa.eu/carbon-border-adjustment-mechanism_en

⁷ European Commission, Proposal for a Regulation of the European Parliament and of the Council on methane emissions reduction in the energy sector and amending Regulation (EU) 2019/942, 15 December 2021.

https://eur-lex.europa.eu/resource.html?uri=cellar:06d0c90a-5d91-11ec-9c6c-01aa75ed71a1.0001.02/DOC_1&format=PDF

⁸ Council of the European Union, Proposal for a Regulation of the European Parliament and of the Council on methane emissions reduction in the energy sector and amending Regulation (EU) 2019/942, 15 December 2022.

https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CONSIL:ST_16043_2022_INIT&from=EN

⁹ European Parliament, Methane emissions reduction in the energy sector, 9 May 2023.

https://www.europarl.europa.eu/doceo/document/TA-9-2023-0127_EN.pdf

¹⁰ R.L. Kleinberg, T. Boersma, *The European Union Approach to Methane Emission Control*, Stanford University Methane Emissions Technology Alliance, 29 June 2023.



<https://www.youtube.com/watch?v=Kmv68tf7XWA>

¹¹ Council of the European Union, Climate action: Council and Parliament reach deal on new rules to cut methane emissions in the energy sector, 15 November 2023.

<https://www.consilium.europa.eu/en/press/press-releases/2023/11/15/climate-action-council-and-parliament-reach-deal-on-new-rules-to-cut-methane-emissions-in-the-energy-sector/>

¹² T. Boersma, R.L. Kleinberg, Prospects for EU Extraterritorial Reduction of Methane Emissions from Its Natural Gas Supply, Columbia University Center on Global Energy Policy, June 2023.

<https://www.energypolicy.columbia.edu/publications/prospects-for-eu-extraterritorial-reduction-of-methane-emissions-from-its-natural-gas-supply/>

¹³ R.L. Kleinberg, Methane Emissions from the Fossil Fuel Industries of the Russian Federation, Columbia University Center on Global Energy Policy, January 2023.

<https://www.energypolicy.columbia.edu/publications/methane-emissions-fossil-fuel-industries-russian-federation/>
https://www.energypolicy.columbia.edu/wp-content/uploads/2023/01/RussianFossilFuelMethane-CGEP_Report_010923.pdf

¹⁴ Cutting Methane Pollution: Safeguarding Health, Creating Jobs, and Protecting Our Climate. Hearing Before the Select Committee on the Climate Crisis, House of Representatives, One Hundred Seventeenth Congress Second Session. Hearing Held June 24, 2022. See esp. questioning of Dr. Kleinberg by Representatives Crenshaw and Graves, pg. 53-55.

<https://www.congress.gov/event/117th-congress/house-event/114942?s=1&r=10>

<https://www.congress.gov/117/meeting/house/114942/documents/HHRG-117-CN00-Transcript-20220624.pdf>

<https://www.youtube.com/watch?v=xAe1oLyffhI>, see esp. 1:28:30 to 1:33:05.

¹⁵ U.S. Department of Energy, Office of Fossil Energy and Carbon Management, Greenhouse Gas Supply Chain Emissions Measurement, Monitoring, Reporting, Verification Framework, 15 November 2023.

<https://www.energy.gov/fecm/greenhouse-gas-supply-chain-emissions-measurement-monitoring-reporting-verification-framework>

¹⁶ U.S. Department of Energy, Public Announcement of International Working Group to Establish a Greenhouse Gas Supply Chain Emissions Measurement, Monitoring, Reporting, and Verification (MMRV) Framework for Providing Comparable and Reliable Information to Natural Gas Market Participants, 15 November 2023.

https://www.energy.gov/sites/default/files/2023-11/MMRVFramework_PublicAnnouncement_15Nov2023.pdf

¹⁷ U.S. Environmental Protection Agency, Comment submitted by PIMCO, Posted by the Environmental Protection Agency on Feb 1, 2022. <https://www.regulations.gov/comment/EPA-HQ-OAR-2021-0317-0600>

