

CLIMATE CHANGE AND THE PRIVATE SECTOR: THE ROLE OF INTERNATIONAL REPORTING FRAMEWORKS IN PROMOTING PRIVATE SUSTAINABLE INVESTMENT

ABSTRACT

Climate change presents an existential threat to the future of humanity and our planet and will require a coordinated global response to prevent its most catastrophic effects. In recognition of this threat, global leaders created an international regime designed to prevent further dangerous anthropogenic interference with the climate. Since its inception, the United Nations Framework Convention on Climate Change has recognized that achieving this goal will require substantial global resources. While contributions from countries will comprise the bulk of international funding, public resources alone are insufficient to meet the investment requirements necessary to accomplish climate change mitigation and adaptation objectives. World leaders have called on the private sector to fill this gap.

This Article explores how sustainability reporting frameworks such as the Global Reporting Initiative (GRI) can encourage greater contribution from the private sector to meet international climate change goals. The GRI and other reporting initiatives have substantially increased access to sustainability and climate-related investment information. Yet access to information has not achieved a meaningful increase in private sector investment. Indeed, too much information may be part of the problem. Major obstacles such as a lack of standardized reporting requirements and lack of transparency inhibit higher levels of private sector involvement. This Article identifies problems as they relate to the GRI and how sustainability reporting frameworks can promote greater contribution from the private sector to meet international climate change goals by addressing investor concerns and filling current data gaps.

TABLE OF CONTENTS

INTRODUCTION	636
I. THE NEED FOR PRIVATE INVESTMENT	637
<i>A. Private Investment Under the UNFCCC</i>	638
<i>B. Private Sector Financing Under the Paris Agreement</i>	639
II. THE ROLE OF SUSTAINABILITY REPORTING FRAMEWORKS	641
<i>A. Reporting Frameworks and Private Sector Climate Finance</i>	641
<i>B. The Problems with Current Sustainability Reporting Frameworks</i>	642
III. THE GRI FRAMEWORK.....	643
<i>A. GRI 305: Emissions Reporting Framework</i>	645

<i>B. GRI 305 Promotes Improved Emissions Data but Remains Deficient in Several Key Areas</i>	646
IV. RECOMMENDATIONS TO IMPROVE GRI REPORTING TO MEET INVESTOR DEMANDS	647
CONCLUSION.....	651

INTRODUCTION

Over the past several decades, the private sector has led the charge for investment in climate change mitigation, renewable energy, and adaptation. Encouragingly, climate-related development priorities are increasingly recognized as compatible with—and complementary to—international business interests.¹ However, private investment does not always align with public goals, leading to substantial investment gaps in key sectors for sustainable development. Part of this problem stems from the unreliable, nontransparent, and inconsistent sustainability investment information currently available to investors.² Both investors and the international community have called for better sustainability reporting by private actors.³

This Article explores how voluntary international reporting frameworks—specifically the Global Reporting Initiative (GRI) framework— influence private sector investment in global sustainable development. Part I explores why private sector investment will be necessary to meet climate change goals under the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement. Part II addresses the role of reporting frameworks and their influence on sustainability reporting and discusses several problems identified by investors and the international community. Part III addresses the GRI framework in detail by examining its history and the structure of one of its reporting standards and assessing whether the standards adequately address investor and policy maker concerns. Based on this analysis, Part IV provides several recommendations for how the GRI framework can advance the climate change goals of the Paris Agreement while encouraging greater financial contributions from the private sector.

1. UNITED NATIONS GLOBAL COMPACT, BUILDING THE POST-2015 BUSINESS ENGAGEMENT ARCHITECTURE 7 (2013).

2. U.N. CONF. ON TRADE & DEV., WORLD INVESTMENT REPORT 2021, at 229–30, U.N. Sales No. E.21.ILD.13 (2021).

3. See, e.g., TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES, FINAL REPORT: RECOMMENDATIONS OF THE TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES 1 (2017) [hereinafter TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES 2017]; see also Sara Bernow, Jonathan Godsall, Bryce Klemptner, & Charlotte Merten, *More than Values: The Value-Based Sustainability Reporting that Investors Want*, MCKINSEY & CO. (Aug. 7, 2019), <https://www.mckinsey.com/business-functions/sustainability/our-insights/more-than-values-the-value-based-sustainability-reporting-that-investors-want>.

I. THE NEED FOR PRIVATE INVESTMENT

“Financing is considered the linchpin for the success of the new sustainable development agenda[.]”⁴ “Climate finance” is “local, national or transnational financing . . . that seeks to support mitigation and adaptation that will address climate change.”⁵ Climate finance is important to address the threats of climate change and the economic costs of mitigation and adaptation. While public financing is “central and fundamental” to accomplish sustainable development, public funding alone cannot meet the demands imposed by the United Nations’ Sustainable Development Goals (SDGs) and the Paris Agreement.⁶ Given the scope of the new sustainability agenda, private investment is more important than ever to alleviate the financial pressures on public budgets.⁷

Recent research shows that private financing is a key driver of investment in adapting to and mitigating climate change.⁸ In its 2020 World Investment Report, the United Nations Conference on Trade and Development (UNCTAD) found that investment in climate change mitigation has increased, largely due to private investment (particularly in renewable energy), and “continues to account for the major share of climate investments, at 54% for 2015–2016 annually.”⁹ Private sector contributions towards climate change adaptation have also increased in recent years; however, these contributions remain limited and difficult to quantify due to several constraints, including a lack of private sector investment data.¹⁰

Despite substantial increases in private investment over the past three decades, large gaps in global climate financing persist. The total projected investment gap for developing countries is estimated at \$2.5 trillion between 2015 and 2030.¹¹ Climate-related investment—mitigation and adaptation—will require an additional \$440–\$780 billion to meet the 2030 SDGs.¹² Given the need for huge investment and strained public budgets, public sector investment alone is insufficient to fill current financing gaps.¹³ Significant increases in private sector investment are necessary to

4. *Countries Reach Historic Agreement to Generate Financing for New Sustainable Development Agenda*, UN, <https://www.un.org/esa/ffd/ffd3/press-release/countries-reach-historic-agreement.html> (last visited Feb. 23, 2022).

5. U.N. Secretariat, *Introduction to Climate Finance*, UNFCCC, <https://unfccc.int/topics/climate-finance/the-big-picture/introduction-to-climate-finance> (last visited Feb. 7, 2022).

6. U.N. CONF. ON TRADE & DEV., *WORLD INVESTMENT REPORT 2014: INVESTING IN THE SDGs: AN ACTION PLAN* at 137, U.N. Sales No. E.14.II.D.1 (2014) [hereinafter UNCTAD 2014 WORLD INVESTMENT REPORT].

7. *Id.*

8. *See* U.N. CONF. ON TRADE & DEV., *SDG INVESTMENT TRENDS MONITOR* 30 (2019).

9. *Id.* at 31.

10. *See id.* at 32, 35; *see also* ARAME TALL, SARAH LYNAGH, CANDELA BLANCO VECCHI, PEPUKAYE BARDOUILLE, FELIPE MONTOYA PINO, ELHAM SHABAHAT, VLADIMIR STENEK, FIONA STEWART, SAMANTHA POWER, CINDY PALADINES, PHILIPPE NEVES, & LORI KERR, *ENABLING PRIVATE INVESTMENT IN CLIMATE CHANGE ADAPTATION & RESILIENCE: CURRENT STATUS, BARRIERS TO INVESTMENT AND BLUEPRINT FOR ACTION* 10 (2021).

11. *See* UNCTAD 2014 WORLD INVESTMENT REPORT, *supra* note 6, at 140.

12. U.N. CONF. ON TRADE & DEV., *supra* note 8, at 28, 32.

13. *See* TALL ET AL., *supra* note 10, at 10.

meet the SDGs.¹⁴ The UNCTAD predicts that a doubling of the growth rate of private investment funds is necessary to fill this investment gap.¹⁵

A. Private Investment Under the UNFCCC

Well before the adoption of the SDGs and the Paris Agreement, the UNFCCC recognized the need for private investment to fund climate development. At the 2002 International Conference on Financing for Development, it was acknowledged that a combination of public, private, domestic, and international finance would be necessary to meet the UNFCCC's goals.¹⁶ The Monterrey Consensus—the international agreement that came out of the conference—noted dramatic shortfalls in resources required to achieve development goals, including, at the time, the Millennium Development Goals.¹⁷ The signatories to the agreement felt that foreign direct investment and private investment were “vital complements to national and international development efforts” and would be necessary to make up the shortfalls in development financing.¹⁸

In 2007, in response to increasing concerns over the risks of climate change, the parties to the Thirteenth Conference of Parties and the Third Meeting of the Parties to the Kyoto Protocol adopted the Bali Road Map, a set of decisions outlining the work needed to accomplish a secure climate future.¹⁹ The Bali Road Map included the Bali Action Plan, a “comprehensive process” to ensure full implementation of the convention, achievement of an agreed outcome, and formal adoption of a decision by the parties.²⁰ As part of the Bali Action Plan, the parties to the convention established a subsidiary body known as the Ad Hoc Working Group on Long-term Cooperative Action (AWG-LCA).²¹ The AWG-LCA published a report in 2008 that assessed investment and financial flows necessary to address global climate change.²² The report identified the growing role of private investment, particularly renewable energy investment.²³ Between 2004 and 2007, private equity and venture capital investment in clean energy increased nearly sixfold.²⁴ However, this increase pales in comparison to the “substantial” investment needed to sustain development while

14. UNCTAD 2014 WORLD INVESTMENT REPORT, *supra* note 6, at 145.

15. *Id.* at 146–47.

16. International Conference on Financing for Development, *Monterrey Consensus on Financing for Development*, ¶ 4, U.N. Doc. A/CONF.198/11, chapter 1, resolution 1, annex (Mar. 18, 2002).

17. *Id.* at ¶ 41.

18. *Id.* at ¶ 20.

19. Framework Convention on Climate Change, *Report of the Conference of the Parties on its Thirteenth Session, Held in Bali from 3 to 15 December 2007*, FCCC/CP/2007/6/Add.1, at 3 (Mar. 14, 2008); *Bali Road Map Intro*, UNFCCC, <https://unfccc.int/process/conferences/the-big-picture/milestones/bali-road-map> (last visited Feb. 23, 2022).

20. Framework Convention on Climate Change, *supra* note 19, at 3.

21. *Id.* at 5.

22. Ad Hoc Working Group on Long-term Cooperative Action under the Convention (AWG-LCA), *Investment and Financial Flows to Address Climate Change: An Update*, FCCC/TP/2008/7 at 4 (Nov. 26, 2008).

23. *Id.* at 61 (noting that private sector investment would likely become the main driver of funding to address climate change).

24. *Id.* at 62 tbl.19.

addressing climate change mitigation and adaptation to meet the 2030 climate change goals.²⁵

In 2008, the parties reaffirmed the Monterrey Consensus' calls for private investment to meet sustainable development goals.²⁶ The Doha Declaration on Financing for Development (Doha Declaration) noted a substantial increase in private investment flows since the signing of the Monterrey Consensus.²⁷ However, global financial crises, increased pressures on global food security, energy security concerns due to volatile price fluctuations, and the rising threat of climate change required an even stronger commitment from private sources to offset the burden on public financing mechanisms.²⁸ The Doha Declaration called for increased efforts to mobilize financial resources from the private sector.²⁹

The Addis Ababa Action Agenda (AAAA)—adopted after the 2015 Third International Conference on Financing for Development—represented one of the most robust attempts to create a comprehensive framework to finance global sustainable development.³⁰ The AAAA underpins the financing plan for the SDGs as well as the Paris Agreement.³¹ The AAAA calls on signatories to “commit to coherent . . . financing . . . frameworks to protect, manage and restore our ecosystems, including marine and terrestrial ecosystems, and to promote their sustainable use, build resilience, reduce pollution and combat climate change, desertification and land degradation.”³² The AAAA also acknowledged the importance of private international capital flows, but observed that substantial investment gaps persist in key sectors for sustainable development.³³ The AAAA reiterated calls for stable financial markets, investment protections, and better alignment of investment with regional and national sustainable development strategies to maximize investment impact.³⁴

B. Private Sector Financing Under the Paris Agreement

The Paris Agreement represents a landmark achievement and the culmination of decades of effort to create a cooperative global action plan to combat climate change. The Paris Agreement, along with the SDGs, serve

25. *Id.* at 4.

26. Follow-Up International Conference on Financing for Development to Review the Implementation of the Monterrey Consensus, *Doha Declaration on Financing for Development*, ¶¶ 1–3, A/Conf.212/L.1/Rev.1 (2009).

27. *Id.* at ¶¶ 47–55.

28. *Id.* at ¶ 3.

29. *Id.* at ¶ 83.

30. See G.A. Res. 69/313, ¶ 1 (July 27, 2015).

31. See G.A. Res. 70/1, ¶¶ 40–41 (Sept. 25, 2015); see also Decision 1/CP.21, Framework Convention on Climate Change, *Report of the Conference of the Parties on its Twenty-First Session, Held in Paris from 30 November to 13 December 2015*, U.N. Doc. FCCC/CP/2015/10/Add.1 (Jan. 29, 2016) [hereinafter Paris Agreement Conference of Parties].

32. G.A. Res. 69/313, *supra* note 30, at ¶ 17.

33. *Id.* at ¶ 35.

34. *Id.* at ¶ 45.

as “the blueprint to achieve a better and more sustainable future for all.”³⁵ The Paris Agreement’s reporting requirements and incorporation of the SDGs and the AAAA serve as an important legal foundation for mobilizing global private sector climate finance.

The Paris Agreement may offer an important, legally enforceable, means of increasing standardized, reliable reporting to encourage private sector investment. The Paris Agreement is considered a treaty under the Vienna Convention on the Law of Treaties,³⁶ meaning the Paris Agreement is legally binding under international law.³⁷ However, the Paris Agreement is the product of hard-fought negotiations and embodies a combination of hard and soft laws with certain provisions having a greater legal effect than others.³⁸ The Paris Agreement’s provisions related to financing and reporting vary in their enforceability and legal effect.³⁹ Whether a provision is legally binding depends on several factors, including its language, precision, and “what institutional mechanisms exist for transparency, accountability and compliance.”⁴⁰ While the Paris Agreement’s financing provisions have a softer legal effect, the Paris Agreement’s reporting requirements create legally binding obligations that require members to report their progress towards addressing climate change and meeting their individual contributions. For example, developed countries “shall biennially communicate . . . as available . . . projected levels of public financial resources to be provided to developing country [p]arties.”⁴¹ Developed countries also shall provide information on financial support provided to developing countries.⁴²

The Paris Agreement explicitly commits to “[m]aking finance flows consistent with a pathway towards low greenhouse gas (GHG) emissions and climate-resilient development.”⁴³ Article 9.3 states that developed countries “should continue to take the lead in mobilizing climate finance from a wide variety of sources, instruments and channels[.]”⁴⁴ Although the provision’s use of “should” weakens its legal effect,⁴⁵ it still represents a multilateral consensus on the need to generate more financing to achieve global climate change policies. The agreement also incorporates both the

35. *Take Action for the Sustainable Development Goals*, UN SUSTAINABLE DEVELOPMENT GOALS, <https://www.un.org/sustainabledevelopment/sustainable-development-goals/> (last visited Feb. 2, 2022).

36. Vienna Convention on the Law of Treaties, May 23, 1969, 1155 U.N.T.S. 331. art. 2.1(a).

37. U.N. Secretary-General, *Paris Agreement Entry Into Force* (Jan. 18, 2022), <https://treaties.un.org/Pages/CNs.aspx?cnTab=tab1>.

38. DANIEL BODANSKY, JUTTA BRUNNÉE, & LAVANYA RAJAMANI, *INTERNATIONAL CLIMATE CHANGE LAW 211* (1st ed. 2017).

39. *See id.* at 225 (discussing the finance recommendations in comparison to requirements).

40. Lavanya Rajamani, *The 2015 Paris Agreement: Interplay Between Hard, Soft and Non-Obligations*, *J. ENV'T L.* 337, 338 (2016).

41. Paris Agreement to the U.N. Framework Convention on Climate Change, art. 9.5, Dec. 12, 2015, T.I.A.S. No. 16-1104 [hereinafter Paris Agreement].

42. *Id.* art. 13.9.

43. *Id.* art. 2.1c.

44. *Id.* art. 9.3.

45. BODANSKY ET AL., *supra* note 38, at 213.

AAAA and its call to close sustainable investment gaps as well as the 2030 Agenda for Sustainable Development (2030 Agenda), including issues important to the seventeen SDGs.⁴⁶ The 2030 Agenda, specifically goal thirteen, recognizes the need for private financial resources and creates a specific set of targets to reduce GHG emissions to meet UNFCCC goals.⁴⁷

The cornerstone of the Paris Agreement is the Nationally Determined Contributions (NDC) program. Article 4.2 states that each party “shall prepare, communicate and maintain successive nationally determined contributions that it intends to achieve.”⁴⁸ Although parties have discretion in establishing their particular goals, each party is obligated to prepare reports that provide “the information necessary for clarity, transparency and understanding.”⁴⁹ To ensure proper accounting, the Paris Agreement requires reporting that is comparable, consistent, transparent, accurate, and complete to avoid double counting.⁵⁰ The Paris Agreement specifies the data necessary to ensure proper NDC monitoring, specifically calling for quantifiable data and methods of standardization, such as reference points, time frames, scope and coverage, and methodological approaches for calculating anthropogenic GHG emissions.⁵¹

II. THE ROLE OF SUSTAINABILITY REPORTING FRAMEWORKS

A. Reporting Frameworks and Private Sector Climate Finance

The Paris Agreement and other international agreements make it clear that successfully combating climate change requires adequate financing and reliable frameworks for measuring progress. Private sector contributions play a key role in achieving goals under the SDGs and the Paris Agreement because investors need information on climate-related financial risks to ensure that such risks are measured and managed effectively.⁵² Frameworks can help funnel private investment towards specifics to maximize impact and reduce inefficiencies.⁵³ However, such frameworks must adequately address investor needs and provide reliable, financially material information.

As the global financial community increasingly recognizes the financial risks and opportunities presented by climate change, growing demand for sustainability reporting has led to a profusion of sustainability

46. See Paris Agreement Conference of Parties, *supra* note 31, at 2 (discussing issues of poverty, hunger, health, education, gender equality, and the other SDGs).

47. See G.A. Res. 70/1, at 8–10, 23 (October 21, 2015).

48. Paris Agreement, *supra* note 41, art. 4.

49. *Id.* art. 4.8.

50. *Id.* art. 4.13.

51. Paris Agreement Conference of Parties, *supra* note 31, at ¶ 27.

52. Rostin Benham, David Gillers, Bob Litterman, Leonardo Martinez-Diaz, Jesse M. Keenan, & Stephen Moch, *Managing Climate Risk in the U.S. Financial System: Report of the Climate-Related Market Risk Subcommittee*, U.S. COMMODITY FUTURES TRADING COMM’N 25–28 (2020).

53. UNCTAD 2014 WORLD INVESTMENT REPORT, *supra* note 6, at 138.

reporting.⁵⁴ At least nine global reporting frameworks exist plus as many as 500 separate private, national, and regional initiatives that encourage or require climate-related company disclosures.⁵⁵ Global frameworks such as the GRI framework provide high-level guidance for sustainability reporting that focuses on a broad range of stakeholders. However, investors and decision-makers have identified several shortcomings that must be addressed if reporting frameworks are to have their intended effect.⁵⁶

B. The Problems with Current Sustainability Reporting Frameworks

The deficiencies in current reporting frameworks lie not with the amount or availability of information, but rather the quality and usefulness of the information reported and gathered in financial decision-making. Indeed, there appears to be plenty of funds available (given the level of interest in sustainability and climate-related investment),⁵⁷ but the funds are not finding their way to sustainability development-oriented projects, especially in developing countries.⁵⁸ Further, investors note several major shortcomings, including a lack of standardization, transparency, and financially material information.⁵⁹

Investors have long lamented the lack of a standardized, cohesive approach to sustainability reporting.⁶⁰ The vast majority of the available reporting frameworks are voluntary, and, while increasing numbers of companies are reporting some sustainability-related information, the information varies significantly in quality and type.⁶¹ Many voluntary frameworks, including the GRI framework, allow considerable freedom for companies to choose which data to report and what methodologies to rely on.⁶²

Current sustainability reporting also suffers from a lack of transparency. While sustainability reporting has grown significantly in recent years, many companies either do not report or only report limited

54. See, e.g., RICHARD THRELFALL, ADRIAN KING, JENNIFER SHULMAN, & WIM BARTELS, *THE TIME HAS COME: THE KPMG SUSTAINABILITY REPORTING SURVEY OF 2020* 10 (11th ed. 2020).

55. See TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES 2017, *supra* note 3, at 59–61 tbl.A4.3; Andrew Buchanan & Henning Drager, *Sustainability Frameworks A Snapshot: September 2021*, BDO GLOBAL 2 (2021).

56. See Bernow et al., *supra* note 3.

57. See Adam Sulkowski & Sandra Waddock, *Beyond Sustainability Reporting: Integrated Reporting Is Practiced, Required and More Would Be Better*, 10 U. ST. THOMAS L.J. 1060, 1063 (2013) (noting that, even in 2013, 95% of the Global Fortune 250 voluntarily report on sustainability-related metrics due to investor demand).

58. G.A. Res. 69/313, *supra* note 30, at ¶ 35.

59. See Bernow et al., *supra* note 3; Jill E. Fisch, *Making Sustainability Disclosure Sustainable*, 107 GEO. L.J. 923, 929–30 (2019); Markus J. Milne & Rob Gray, *W(h)ither Ecology? The Triple Bottom Line, the Global Reporting Initiative, and Corporate Sustainability Reporting*, 118 J. BUS. ETHICS 13, 18 (2013).

60. Kenneth P. Pucker, *Overselling Sustainability Reporting*, HARV. BUS. REV. (2021), <https://hbr.org/2021/05/overselling-sustainability-reporting>.

61. TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES, STATUS REPORT 49 (2019).

62. Bernow et al., *supra* note 3.

information.⁶³ Some companies manipulate information or withhold unfavorable data, a practice known as “greenwashing.”⁶⁴ Over and underreporting often lead to the same effect—companies obscure relevant, material information on environmental and sustainability performance, limiting investors’ ability to make informed decisions.⁶⁵

Investors have long called for “decision-useful,” or material climate-risk disclosures.⁶⁶ Several commentators have questioned the compatibility between traditional business considerations and ecology or environmental sustainability.⁶⁷ Nevertheless, mainstream financial industry players now widely recognize that climate-related financial risks are no longer theoretical and may cause systemic shock to financial systems and the value of financial assets.⁶⁸ Yet the existing frameworks do not provide information on what is considered “material” or the type of climate-related issues that impact a firm’s underlying operations and capital investment.⁶⁹ Inadequate information can lead to mispricing of assets and inefficient capital allocations, and may contribute to financial instability by leaving investors and businesses unaware of potentially volatile market corrections.⁷⁰ Concern also revolves around reliability. The GRI framework and other reporting frameworks do not require external auditing or independent verification of sustainability reporting.⁷¹

III. THE GRI FRAMEWORK

While the previous Part makes clear that many shortcomings still exist, sustainability reporting frameworks—the GRI framework in

63. See TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES, *supra* note 61, at 57–59 fig.62 (discussing the use of climate-related financial disclosures).

64. Fisch, *supra* note 59, at 948.

65. Bryant Cannon, *A Plea for Efficiency: The Voluntary Environmental Obligations of International Corporations and the Benefits of Information Standardization*, 19 N.Y.U. ENV’T L.J. 454, 478 (2012).

66. California Public Employees’ Retirement System, John Chiang, California State Teachers’ Retirement System, Bill Lockyer, Ceres, Environmental Defense, F&C Management, Alex Sink, Friends of the Earth, Jonathan Miller, David G. Lemoine, Nancy K. Kopp, the Nathan Cummings Foundation, Orin Kramer, William C. Thompson, Jr., Andrew M. Cuomo, Thomas P. DiNapoli, Richard Moore, Randall Edwards, Pax World Management Corporation, Frank T. Caprio, & Jeb Spaulding, *Petition for Interpretive Guidance on Climate Risk Disclosure. A Petition Before the U.S. Securities and Exchange Commission*, U.S. SEC (Sept. 18, 2007), <https://www.sec.gov/rules/petitions/2007/petn4-547.pdf>.

67. See Milne & Gray *supra* note 59, at 16; see also Shipeng Yan, Fabrizio Ferraro, & Juan (John) Almandoz, *The Rise of Socially Responsible Investment Funds: The Paradoxical Role of the Financial Logic*, ADMIN. SCI. Q. 466, 474 (2018) (assessing the paradoxical relationship between the institutionalized profit-maximizing logic and the social logic of sustainability-driven reporting).

68. Benham et al., *supra* note 52, at 25–27.

69. TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES, *supra* note 61, at 7–10.

70. Mark Carney, Chairman, Fin. Stability Bd., Speech, *Breaking the Tragedy of the Horizon—Climate Change and Financial Stability at Lloyd’s of London* (Sept. 29, 2015).

71. See TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES 2017, *supra* note 3, at 55–56 tbl.A4.1 (noting that many reporting frameworks do not disclose or require any form of external assurance of reporting accuracy). Although companies are not required to do so, KPMG’s survey of corporate responsibility reporting showed that, even in 2013, over half of the world’s largest corporations now have their reports “assured.” See KPMG INT’L, *THE KPMG SURVEY OF CORPORATE RESPONSIBILITY REPORTING 2013 12* (2013).

particular—have driven substantial increases in private sector investment towards climate change initiatives and sustainable development. The question remains, and this Article seeks to explore, whether the GRI framework and other frameworks are addressing the problems of standardization, transparency, and materiality identified by investors and the international community. This Article focuses on the GRI framework given its widespread acceptance, its relationship to the UNFCCC and international climate change efforts, and its attempts to directly integrate its own reporting frameworks with the SDGs, particularly SDG thirteen.⁷²

The GRI framework began in 1997 and is rooted in the U.S.-based Coalition for Environmentally Responsible Economies and the Tellus Institute.⁷³ “The first official edition of the GRI . . . was released in June 2000,” and it quickly became a vital resource for monitoring progress towards international climate change goals.⁷⁴ Shortly thereafter, the GRI incorporated in Amsterdam as “a Collaborating Centre of the United Nations Environment Programme.”⁷⁵ Today, the GRI framework is widely considered the global benchmark for sustainability reporting and was specifically mentioned in the Plan of Implementation from the World Summit in Johannesburg.⁷⁶ More than 10,000 companies use GRI reporting and of the Global 250 (the world’s largest 250 companies by revenue), 84% report using the GRI framework’s standards.⁷⁷

The GRI framework’s goal is to provide a standard, high-quality framework for organizations to use and adapt for purposes of “triple bottom line” reporting.⁷⁸ The GRI framework standards are comprised of two types of disclosures: “[G]eneral standard disclosures for all organizations, and specific standard disclosures” related to industry-specific considerations.⁷⁹ For purposes of climate change reporting in terms of the Paris

72. See CHARLOTTE PORTIER, PIETRO BERTAZZI, BASTIAN BUCK, TIM MOHIN, SABINE CONTENT, FRANCESCA PALAMIDESSI, BERNHARD FREY, LILA KARBASSI, NESSA WHELMN, LINDA MIDGLEY, LOUISE SCOTT, HANS SCHOOLDERMAN, & CAROLINE REES, *INTEGRATING THE SDGS INTO CORPORATE REPORTING: A PRACTICAL GUIDE* 24 (2018).

73. Alberto Fonseca, *Barriers to Strengthening the Global Reporting Initiative Framework: Exploring the Perceptions of Consultants, Practitioners, and Researchers*, http://www.csin-rcid.ca/downloads/csin_conf_alberto_fonseca.pdf (last visited Feb. 19, 2022).

74. Halina Szejnwald Brown, Martin de Jong, & Teodorina Lessidrenska, *The Rise of the Global Reporting Initiative (GRI) as a Case of Institutional Entrepreneurship* 4 (Corp. Soc. Resp. Initiative, Working Paper No. 36, 2007).

75. *Id.*

76. *Id.* at 2, 5.

77. We’re GRI, *Setting the Agenda for the Future*, GLOB. REP. INITIATIVES, <https://www.globalreporting.org/> (last visited Feb. 23, 2022); THRELFALL ET AL., *supra* note 54, at 25.

78. See Paulette L. Stenzel, *Sustainability, the Triple Bottom Line, and the Global Reporting Initiative*, 4 GLOBAL EDGE BUS. REV. 1, 1 (2010) (“Triple bottom line” reporting refers to a company’s “actions that contribute to the three facets of sustainability: economy, social equity, and environment.”).

79. Cynthia A. Williams, *The Global Reporting Initiative, Transnational Corporate Accountability, and Global Regulatory Counter-Currents*, 1 U.C. IRVINE J. INT’L, TRANSNAT’L, & COMP. L. 67, 74 (2016).

Agreement and the SDGs, “GRI 305: Emissions” plays an important role and will be explored in detail in the following Part.⁸⁰

Previous examinations of the GRI framework have yielded harsh criticisms against its approach, finding similar problems to those described in Section II.B above.⁸¹ However, given the GRI framework’s continued recognition as a global leader in sustainability reporting, its widespread acceptance and utilization by the Global 250, and its relationship to the UNFCCC, the GRI framework’s potential for furthering climate sustainability goals warrants continued examination. The next Section explores whether the GRI’s emissions reporting framework under GRI 305 addresses investor concerns while facilitating greater climate financing towards reducing global GHG emissions to meet the UNFCCC’s objectives.

A. GRI 305: Emissions Reporting Framework

While climate-related disclosures span numerous categories, emissions-related disclosures offer a useful opportunity for analysis given that emissions levels are more easily quantifiable and are central to SDG thirteen, the UNFCCC agreement, and the Paris Agreement.⁸² The GRI 305 standard addresses emissions and offers guidelines for companies to report GHG emissions.

For a company to claim compliance with the GRI framework reporting requirements, it must provide emissions reporting data on the following: direct emissions; types of gases included in the calculation (based on an enumerated list); biogenic CO₂ emissions; the base year for the calculation; emissions factor sources; consolidation approaches; and standards, methodologies, assumptions, and any calculation tools relied upon.⁸³ GRI 305 also requires separate disclosures on GHG emissions’ intensity by type (direct or indirect), emissions of ozone-depleting substances, and emissions of specific pollutants, such as nitrogen oxides, sulfur oxides, persistent organic pollutants, volatile organic compounds, hazardous air pollutants, particulate matter, and other regulated air pollutants.⁸⁴

GRI 305 also offers reporting recommendations and disclosure guidance.⁸⁵ Disclosures are “encouraged but not required,” as indicated by the term “should” in the guidance.⁸⁶ The standards provide guidance for direct emissions calculations.⁸⁷ Under the standard’s guidelines, companies can choose from several different reporting methodologies, including site-

80. See, e.g., Paris Agreement, *supra* note 41, art. 13.7(a) (requiring that countries track their anthropogenic GHG emissions as part of the mandatory reporting requirements).

81. See Milne & Gray, *supra* note 59, at 14–15; see also Klaus Dingwerth & Margot Eichinger, *Tamed Transparency: How Information Disclosure Under the Global Reporting Initiative Fails to Empower*, 10 GLOB. ENV’T POL. 74, 88 (2010).

82. G.A. Res. 70/1, *supra* note 31, at 23; Paris Agreement, *supra* note 41, at 3.

83. GLOB. SUSTAINABILITY STANDARDS BD., GRI 305: EMISSIONS 9 (2016).

84. *Id.* at 11, 13, 17, 19, 20.

85. See, e.g., *id.* at 7.

86. *Id.* (describing recommendation provisions).

87. *Id.* at 9–10.

specific data, calculations based on published criteria, direct GHG emission measurements conducted by the companies, or estimations of direct emissions.⁸⁸ The requirements do not mandate a specific methodology and recommend, but do not require, increased transparency and comparability by categorizing emissions based on factors such as business unit, country, type of source, or type of activity.⁸⁹

B. GRI 305 Promotes Improved Emissions Data but Remains Deficient in Several Key Areas

Emissions reporting requirements under GRI 305 directly address several mandatory obligations under the Paris Agreement. GRI 305's requirement that companies report on standardization techniques such as base years, consolidation approaches, and methodologies addresses the "quantifiable information" and "methodological approaches" called for in the Paris Agreement.⁹⁰ The GRI 305 standard also provides detailed explanations of the different types of emissions (direct versus indirect), intensity of emissions, and emissions type.⁹¹ This level of detail aligns with emissions reporting standards recommended by the Task Force on Climate-Related Financial Disclosures (TCFD)⁹² and provides disaggregated data to investors seeking to compare company emissions performance to other industries and companies. For example, GRI 305-4 requires a reporting organization to calculate its emissions intensity ratio for a given type of emission by dividing the organization's absolute GHG emissions by a selected, organization-specific metric.⁹³ Intensity ratios are a common means of normalizing emissions data and allow for interpretation of relative environmental impacts.⁹⁴ Normalization factors such as emissions intensity ratios are considered relevant for decision-making and facilitate better stakeholder communications.⁹⁵ GRI framework reporting organizations must also provide the type of organization-specific metric, such as emissions by units of product, production volume, facility size, or sales and revenue volume.⁹⁶

GRI 305 also calls on reporting organizations to provide a breakdown of emissions by business unit or country, type of source, and type of activity.⁹⁷ Investors can make comparisons within and across business sectors, between countries, and based on emissions sources and facility size.

88. *Id.* at 8.

89. *Id.* at 9.

90. *Compare id.* at 9, with Paris Agreement Conference of Parties, *supra* note 31, at ¶ 27.

91. GLOB. SUSTAINABILITY STANDARDS BD., *supra* note 83, at 10, 12, 16,

92. See David Carlin, Jeremy McDaniels, Peter Marshall, Remco Fischer, Sonja Gibbs, & Paul MacIntosh, *TCFD Report Playbook*, UNEP FI 31 (2020).

93. GLOB. SUSTAINABILITY STANDARDS BD., *supra* note 83, at 16.

94. See Carlin et al., *supra* note 92, at 16, 31. The TCFD calls for absolute and relative emissions intensity ratios as a means of comparison. *Id.*

95. See *id.*; see also Massimo Pizzol, Alexis Laurent, Serenella Sala, Bo Weidema, Francesca Veronesi, & Christoph Koffler, *Normalisation and Weighting in Life Cycle Assessment: Quo Cadis?*, 22 INT'L J. LIFE CYCLE ASSESSMENT 853, 863 (2017).

96. GLOB. SUSTAINABILITY STANDARDS BD., *supra* note 83, at 16.

97. *Id.* at 9.

Requiring reporting of scope 1 (direct), scope 2 (energy indirect), and scope 3 (other indirect) emissions ensures that investors have emissions data that encompasses the entire life cycle of an organization's product or service.⁹⁸ Further, some countries regulate emissions based on specific categories or types of pollutants.⁹⁹ The GRI framework's required reporting on types of gases can help investors identify potential regulatory risks for specific pollutants.¹⁰⁰

However, GRI 305 appears deficient in several areas of concern addressed in Part II. Although GRI 305 asks for detailed GHG emissions reporting, the standards still allow for considerable discretion in reporting methodologies. For example, under GRI 305-1, reporting companies may choose between six different methodologies, and, while recommended, the standard does not require reporting breakdowns based on industry, country, source, or activity.¹⁰¹ This and other discretionary allowances have left—and will continue to leave—gaps in reporting and insufficient data for investors to make comparable emissions assessments.¹⁰²

Additionally, because companies can choose what and how to report, there is a risk companies will cherry-pick data that casts their performance in a positive light while ignoring negative but material emissions reporting data.¹⁰³ Further, the GRI framework standards in general suffer from a lack of external accountability. The GRI framework does not mandate external audits of a company's sustainability reports.¹⁰⁴ Many investors doubt the reliability and accuracy of company reporting that does not undergo some type of third-party verification process.¹⁰⁵

IV. RECOMMENDATIONS TO IMPROVE GRI REPORTING TO MEET INVESTOR DEMANDS

Despite the GRI framework's shortcomings, its role as a pioneer in global sustainability reporting has left an indelible mark on company and investor approaches to nonfinancial disclosures worldwide. Given the GRI

98. See JANET RANGANATHAN, LAURENT CORBIER, PANKAJ BHATIA, SIMON SCHMITZ, PETER GAGE, & KJELL OREN, *THE GREENHOUSE GAS PROTOCOL: A CORPORATE ACCOUNTING AND REPORTING STANDARD*, WORLD RESOURCES INST. & WORLD BUS. COUNCIL FOR SUSTAINABLE DEV. 25 (2004) (the Greenhouse Gas Protocol calls on reporting companies to report at least all scope 1 and scope 2 emissions and recommends an optional scope 3 emissions category to account for emissions that result as a consequence of a company's activities).

99. For an example, see United States Clean Air Act regulation of "criteria pollutants" such as particulate matter in 42 U.S.C. § 7408(f)(A).

100. GLOB. SUSTAINABILITY STANDARDS BD., *supra* note 83, at 14.

101. *See id.* at 9–10.

102. See TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES, *GUIDANCE ON METRICS, TARGETS, AND TRANSITION PLANS*, 8 fig.B1 (2021) (noting comparability across sectors, industry, and portfolio as one of the principles for effective sustainability disclosures).

103. See Williams, *supra* note 79, at 78 (noting that companies may leave out bad information under voluntary reporting frameworks).

104. See GLOBAL REPORTING INITIATIVE, *THE EXTERNAL ASSURANCE OF SUSTAINABILITY REPORTING 13* ("GRI recommends the use of external assurance for sustainability reports, but does not require it to prepare a report 'in accordance' with the G4 guidelines.").

105. See Bernow et al., *supra* note 3.

framework's prevalence in international business reporting schemes, its relationship to the UNFCCC, and its apparent compatibility with the Paris Agreement—along with its ongoing efforts to better align with SDGs and adjust to investor demands¹⁰⁶—the GRI framework can play an important role in promoting increased and more efficient private sector sustainability investing. While addressing every perceived deficiency in the GRI framework is beyond the scope of this Article, below are several recommendations that may strengthen the GRI framework's contribution to accomplishing the Paris Agreement reporting requirements and improve its usefulness to investors.

First, the parties to the Paris Agreement should consider adopting the GRI framework as its preferred reporting framework for measuring progress towards the goals of the NDC. The GRI framework is already broadly accepted among financial institutions¹⁰⁷ and respected within—and incorporated into—the international climate change regulatory regime.¹⁰⁸ Further, the GRI framework may be more compatible with the broad focus of the Paris Agreement than other, more investor-focused reporting frameworks.¹⁰⁹ The GRI framework was designed to provide guidance to companies to report to a broad range of stakeholders on issues that cover an expansive set of sustainability issues.¹¹⁰ Similarly, the Paris Agreement sought to incorporate earlier UNFCCC decisions into a comprehensive approach that addresses climate change mitigation, adaptation, finance, capacity building, technology, and transparency.¹¹¹ Thus, the GRI framework may be most effective as a means of promoting higher-quality, disaggregated quantitative reporting while still allowing for the same type of flexibility that was important to the Paris Agreement's near-universal adoption. The parties' adoption of the GRI framework would also provide greater standardization. The GRI framework could produce a single, universally adopted definition of sustainability for countries and companies to apply to their unique sectors, industries, and jurisdictions. This could also facilitate the combining of other international reporting frameworks, something most investors have requested to improve reporting reliability.¹¹² Companies can also save time and costs by reporting under a single, comprehensive framework.¹¹³

106. See, e.g., PORTIER ET AL., *supra* note 72, at 24.

107. See THRELFALL ET AL., *supra* note 54, at 16.

108. See generally Brown et al., *supra* note 74, at 5–6.

109. GRI has recently issued guidance for organizations to utilize GRI's more comprehensive model in conjunction with more industry-specific, investor-focused reporting standards, such as the framework issued by the Sustainability Accounting Standards Board. See GLOBAL REPORTING INITIATIVE AND SUSTAINABILITY ACCOUNTING STANDARDS BOARD, A PRACTICAL GUIDE TO SUSTAINABILITY REPORTING USING GRI AND SASB STANDARDS 5 (2021).

110. See *id.* (“The GRI standards support broad and comprehensive disclosures . . . for a comprehensive understanding of the organization's impacts on economy, environment, and society[.]”).

111. See Paris Agreement, *supra* note 41, at 8.

112. See Bernow et al., *supra* note 3.

113. See Heather Clancy, *Investor Interest Fuels SASB Adoption, Inspires New GRI Tax Disclosure Standard*, GREENBIZ (Dec. 9, 2019), <https://www.greenbiz.com/article/investor-interest-fuels-sasb-adoption-inspires-new-gri-tax-disclosure-standard>.

This approach has several weaknesses, namely inhibiting achievement of international consensus to adopt the GRI framework. Some parties may believe that other frameworks are more suitable options or fear that adopting a single framework may increase their individual obligations under the UNFCCC. One potential solution is private pressure from domestic and international companies. Major institutional investors, such as BlackRock and Vanguard, wield significant financial influence and are demanding sustainability reports from the companies in which they invest.¹¹⁴ This private pressure has already driven significant increases in sustainability reporting that align with the TCFD (including the GRI framework).¹¹⁵ If enough private actors demand it, public leaders and policy makers may adopt a universal reporting framework. Additionally, the parties may consider initially attempting a soft approach to the adoption of a universal framework. The parties could agree to adopt an informal framework or one that does not implement any legally binding obligations. This type of soft law instrument can help induce broad participation initially, with the goal of moving towards long-term, legally binding obligations.¹¹⁶

Second, and in combination with the first recommendation, is for the GRI and the Paris Agreement to mandate external assurance of sustainability reports. Even if the parties were to adopt the GRI framework as the central reporting framework, its reliability and usefulness would still be called into question because it lacks a mandatory independent verification mechanism.¹¹⁷ For a disclosure regime to be effective, it “must be mandatory (so that disclosers cannot be selective in what they disclose), specific, . . . targeted to clearly identified users[,]” and backed by well-funded monitoring mechanisms.¹¹⁸ Such auditing requirements could be implemented at the domestic level, and indeed, some countries already have implemented such requirements.¹¹⁹ Further, mandatory reporting and independent verification can help facilitate a regulatory scheme for sustainability reporting. By using the GRI framework, regulators can consistently identify the information companies must disclose that is financially material to investors.¹²⁰ This provides not only more consistency, but also greater

114. See Catherine M. Clarkin, Melissa Sawyer, & Joshua L. Levin, *The Rise of Standardized ESG Disclosure Frameworks in the United States*, HARVARD L. SCH. F. ON CORP. GOVERNANCE (June 22, 2020).

115. See Leslie P. Norton, *BlackRock Pushes for Single Reporting Framework for ESG*, BARRON'S (Oct. 30, 2020, 6:30 AM), <https://www.barrons.com/articles/blackrock-pushes-for-single-reporting-framework-for-esg-51604053801> (“By the end of the third quarter, BlackRock . . . saw [in 2020] a 58% increase in companies reporting according to SASB metrics in the U.S. and a 42% increase in those reporting in Europe.”).

116. See BODANSKY ET AL., *supra* note 38, at 22 (noting that soft compromises often precede more binding international agreements).

117. See generally Williams, *supra* note 79, at 76–77 (discussing critiques of the GRI framework’s lack of required independent verification mechanisms).

118. *Id.* at 82.

119. See Council Directive 2014/95/EU, art. 1.5, 2014 O.J. (L 330) 1.

120. The GRI is also attempting to improve the materiality of its reporting. See STATEMENT OF INTENT TO WORK TOGETHER TOWARDS COMPREHENSIVE CORPORATE REPORTING, IMPACT MGMT. PROJECT 7 (2020); see also IN FOCUS: ADDRESSING INVESTOR NEEDS IN BUSINESS REPORTING ON THE SDGs, UN GLOB. COMPACT 10 (2018).

scrutiny of company reporting and avenues for legal challenges to prevent misrepresentation and enhance transparency.¹²¹

Finally, the GRI should consider changes to its voluntary structure. While increasing mandatory reporting obligations may discourage some companies from using the GRI framework reporting standards, mandating a breakdown of the emissions reporting by business unit, country, type of source, and activity could improve comparability and reporting consistency among companies and better meet the Paris Agreement's reporting requirements.¹²² Global private financing continues to fail to reach the developing countries that face the greatest threats from climate change.¹²³ Investment in sustainability and climate change-related projects in developing countries plummeted in 2020 as a result of the COVID-19 pandemic.¹²⁴ Despite a significant rebound in 2021, the vast majority of foreign direct investment flows were concentrated in developed countries.¹²⁵ In least developed countries, sustainability-related investment projects declined by an additional 17% on top of a 30% decline in 2020.¹²⁶ Unfortunately, this trend may continue as research demonstrates an inverse relationship between the domestic economic, environmental, and political stability of a country and the amount of private finance it receives.¹²⁷

Mandatory country-level reporting under the GRI framework can help better identify investment gaps and opportunities and better align private investment strategies with national sustainable development goals. The Organization for Economic Cooperation and Development (OECD) claims that the successful alignment of private financing with the SDGs and the Paris Agreement depends on the "granularity of available data."¹²⁸ According to the OECD's report, "The more granular the data, the more precise the analysis of the purpose of financing and thus its alignment."¹²⁹ Mandatory reporting under the GRI framework can help ensure that the

121. See, e.g., Ruth Jebe, *Corporate Sustainability Reporting and "Material Information:" An Empirical Study of Materiality under the GRI and IR Frameworks*, 33 CONN. J. INT'L L. 95, 101–03 (2017).

122. See GLOB. SUSTAINABILITY STANDARDS BD., *supra* note 81, at 9; see also ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT, GLOBAL OUTLOOK ON FINANCING FOR SUSTAINABLE DEVELOPMENT 2021: A NEW WAY TO INVEST FOR PEOPLE AND PLANET 36 (2020) (discussing how more detailed information makes for a better understanding of measuring financial flow) [hereinafter OECD].

123. U.N. CONF. ON TRADE & DEV., GLOBAL FDI REBOUNDS STRONGLY IN 2021, BUT RECOVERY HIGHLY UNEVEN, 40 INV. TRENDS MONITOR 1 (2022) (noting that while global foreign direct investment rebounded sharply in 2021, it flowed primarily to developed countries with least developed countries experiencing more modest growth) [hereinafter GLOBAL FDI REBOUNDS STRONGLY].

124. U.N. CONF. ON TRADE AND DEV., SDG INVESTMENT TRENDS MONITOR: INTERNATIONAL SDG INVESTMENT FLOWS TO DEVELOPING ECONOMIES DOWN BY ONE THIRD DUE TO COVID 19 1 (2020).

125. GLOBAL FDI REBOUNDS STRONGLY, *supra* note 123, at 1.

126. *Id.* at 2.

127. See Irene Basil & Carolyn Neunuebel, *Blended Finance in Fragile Contexts: Opportunities and Risks* 5–6 (OECD Dev. Coop. Working Paper No. 62, 2019).

128. OECD, *supra* note 122, at 36.

129. *Id.*

trillions of dollars of private investment have the intended effect of promoting progress towards the goals under the Paris Agreement.¹³⁰

CONCLUSION

Climate change is the defining challenge of the modern age. National and international cooperation and commitments are essential to accomplishing the ambitious goals of the Paris Agreement, but public sector participation alone is not enough. Trillions of dollars are available from investors interested in sustainability, but investors require adequate reporting frameworks to guide their investment toward the industries, companies, and countries where sustainable investment can make the biggest impact. The GRI framework has led to a wave of sustainability-driven reporting from companies, and its close relationship with the UNFCCC makes it ideally suited to be directly integrated into the Paris Agreement. Adoption of the GRI framework as a single framework can consolidate and standardize sustainability reporting by serving as the central framework on which investors and countries can rely to track company performance and progress towards national contributions to achieving climate change goals.

*Adam Cribari**

130. *See id.* at 5.

* Adam Cribari currently serves as a Legal Fellow for Defenders of Wildlife in the conservation law department. His practice focuses on the protection of wild species and their native habitats across the Rocky Mountains and western United States. Mr. Cribari received his J.D. from the University of Denver (DU), where he participated in the Environmental Law Clinic and served on the board of DU's Water Law Review. Mr. Cribari also holds bachelor's degrees in economics and political science from the University of Colorado. The author wishes to thank Professor Kristy Disney Bruckner for her valuable suggestions and feedback, and the dedicated and talented members of the *Denver Law Review*.