

## **Sustainability Reporting in the Banking Industry: Examining the Extent of Assurance**

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### **Abstract**

We examine the sustainability reporting assurance choices made by 58 banks from 13 countries. We find the most common assurance choice is partial assurance, whereby only part of the sustainability report is assured. We also undertake detailed content analysis of the extent of partial assurance at three different levels: total sustainability metrics assured, total subject matter metrics assured, and total pages assured. Across all three extent measures, we find low levels of assurance. Our findings add to the limited academic literature on partial assurance. The low assurance levels we report also call into question the credibility to be accorded the full set of information disclosed in banks' sustainability reports.

**Keywords:** Assurance, Assurance Extent, Banking, ESG, Construct Validity, Sustainability Assurance, Sustainability Reporting

### **Introduction**

It is well-accepted that the role of assurance is to add credibility to information disclosed by a firm to its external stakeholders (Knechel, 2021). Historically, this was information contained in the firm's financial statements. Recently, there has been significant growth in the disclosure of sustainability information, often contained in separate sustainability reports (KPMG, 2022). However, criticisms of sustainability reporting, notably claims of greenwashing (Santos et al, 2023), have led to increased demand

for sustainability assurance (Clarkson et al, 2019; KPMG, 2022). This study explores the sustainability assurance landscape in the worldwide banking industry. Specifically, we pose the following overall research question: What is the extent to which banks provide assurance over the sustainability information contained in their sustainability reports? We examine this overall research question at different levels. At a broader level, we determine the firm's overall choice whether to provide full, partial, or no assurance over its sustainability information. Subsequently, and focusing on cases of partial assurance, we deepen our analysis to a more fine-grained level, examining assurance choices over total disclosed sustainability metrics, specific subject matter metrics, and total pages assured.

We find the most common overall choice is for banks to provide partial assurance, that is, to assure a selected set of sustainability metrics. Both full assurance and no assurance are found to be far less common choices. Our deeper analysis of partial assurance reveals such assurance to be at very low levels, usually less than 10 percent. This finding holds whether measured by total metrics assured, subject matter metrics assured, or pages assured.

We believe that our study, with its focus on partial assurance, helps fill a significant gap in the sustainability assurance literature and consequently should be of interest to the academic community. Additionally, the very low levels of assurance coverage we document call into question the overall credibility which should be accorded banks' sustainability reporting. These empirical findings should be of significant interest to assurance practitioners, investment analysts, securities regulators, and corporate preparers of sustainability reports.

Our paper is organized as follows. The next section presents an overview of the worldwide banking industry. With its various commitments to sustainability, this industry forms an ideal setting for our study. The third section describes the current sustainability assurance environment, including any proposed regulatory changes. Section four reviews the sustainability assurance literature, including identifying limitations in the literature. Section five describes our research methodology. Section six presents our results, organized around four specific research questions. Section seven provides concluding comments, including study limitations and areas for future research.

### **The Worldwide Banking Industry**

The worldwide banking industry is substantial, with its size and influence extending across economies and industries. In 2022, the financial services sector managed approximately \$400 trillion (USD) in assets and generated \$6.8 trillion (USD) in revenue (McKinsey & Company, 2023). Not

only do banks play a critical role in the economy, but they also have a great degree of influence across various sectors. Banks are no exception to the growing commitment to sustainability seen for over a decade, with corporations recognizing the importance of sustainability and subsequently integrating ESG considerations into their core operations (KPMG International, 2008). This continuing transition is driving the desire to signal commitment to stakeholders, to differentiate, and to reduce costs (Galpin & Whittington, 2012).

Sustainable finance has gained momentum globally as investors recognize its impact on public perception and increasingly prioritize sustainability in investment decisions (Edmans & Kacperczyk, 2022). Sustainable finance markets have created more long-term investments in sustainable projects that many deem vital in addressing the climate change emergency (European Commission, n.d.; PwC, 2021; Intercontinental Exchange Inc., 2023). Green bonds, a tool used to raise capital for projects with environmental benefits, alongside the increasingly popular social bonds, which seek to achieve positive social outcomes, comprise a large segment of sustainable finance initiatives (Bhutta et al, 2022; International Capital Markets Association, 2020; International Capital Markets Association, 2023).

Overall, the banking industry plays a major role in both the world economy and the economy of individual countries. Concerned with their corporate well being, banks act to ensure their own sustainability as viable entities. Through their actions in sustainable finance, they also play a crucial role in promoting sustainable economic growth such as advancing the green economy. These various actions in sustainability are regularly reported in each bank's sustainability report. The extent to which this information is credible is consequently of great importance in society. Our study examines this credibility by examining the extent of assurance within the banks' sustainability reports.

### **Sustainability Assurance – Professional Environment**

In their 2022 survey of sustainability reporting, KPMG found a 96% sustainability reporting rate among the G250, a rate they suggest continues to grow incrementally (KPMG, 2022). The G250 consists of the world's 250 largest companies by revenue, based on the 2021 Fortune 500 rankings. They also found that 79 percent of N100 companies engage in some form of sustainability reporting, an increase of 15 percent over the last ten years. The N100 consists of the largest 100 companies in each of 58 countries, indicating that sustainability reporting is present and increasing all over the world. KPMG found the largest increases in the last two years have come in the Asia Pacific and European regions, both of which observed a 5 percent

increase in sustainability reporting between 2020 and 2022. Due to the voluntary nature of sustainability reporting at the time of their study, KPMG found companies utilized a number of different frameworks, including those from the GRI, SASB, or TCFD, or were aligned with the UN's SDG's.

While a relatively high percentage of companies are reporting on their sustainability activities, far fewer are seeking external assurance on this information. KPMG's 2022 survey found that only 47 percent of the N100 companies sought third-party assurance of their sustainability reporting information (KPMG, 2022). Likewise, a 2021 study by the International Federation of Accountants (IFAC) that sampled 1,350 companies from G20 countries found that while 95% of companies reported on ESG information, only 64% of these companies sought third-party assurance (IFAC, 2023). This lower percentage is due to the voluntary nature of assuring sustainability information in most jurisdictions. The IFAC study also noted that presenting sustainability information alongside financial information in a single integrated report is becoming increasingly common. Canada and the United States are notable exceptions to this trend as over 95% of companies still choose to release stand-alone sustainability reports (IFAC, 2023).

Among the companies that did seek assurance, 80% of engagements were at the limited assurance level, including 97% of the engagements performed by accounting firms (IFAC, 2023). One notable example is France, in which assurance on sustainability information is already mandatory due to their transposition of the EU NFRD (Lopasio et al, 2022). In France, 98% of companies sought assurance on ESG information with 96% of these engagements being at the limited level and 98% being performed by accounting firms (IFAC, 2023). Some of the proposed or recently adopted sustainability regulations include mandatory assurance regulations and will affect the companies analyzed in our study. The European Union's Corporate Sustainability Reporting Directive (CSRD) requires limited assurance on all topics starting from the first year of reporting, as soon as fiscal 2024 for some companies, with a gradual transition to reasonable assurance, potentially by fiscal 2028 (KPMG, 2023). France was the first country to transpose the CSRD into national law (Latham & Watkins, 2024). Germany followed suit in March 2024. The deadline for all members of the European Union to transpose the CSRD into national law was July 6, 2024 (Deloitte, 2024). The European Commission has since issued formal notices to Member States who have failed to communicate their transposition efforts (European Commission, 2024).

The IFAC study also observed that 70% of assurance engagements used the ISAE 3000 (Revised) assurance standard or equivalent national standards, including 95% of the assurance engagements performed by accounting firms (IFAC, 2023). ISAE 3000 (Revised) is an assurance

standard that can be used in assurance engagements other than audits or reviews of historical financial information (IAASB, 2013). In parallel with the growth in sustainability reporting and the demand for sustainability assurance, the IAASB has developed and published a new standard, ISSA 5000, which applies specifically to assurance engagements on sustainability information. The final version of ISSA 5000 was published on November 12, 2024, and is effective as of December 15, 2026 (ISSB, 2024).

### **Sustainability Assurance – Academic Literature**

The sustainability assurance research is extensive and varies significantly in its research design and questions. For example, Cho et al (2014), using US data, explore what factors led companies to obtain assurance on their sustainability reports and whether the market valued this assurance. While assurance choices were linked to industry and disclosure effectiveness, no association was found between assurance and higher market values. Datt et al (2020), using an international sample, find that firms subject to greater carbon emission legitimacy pressures were more likely to choose accounting firms as their assurance provider. Du and Wu (2019), using data from Taiwan, find that the issuance of CSR reports was associated with lower future CSR misconduct, but only where the report was accompanied by external assurance. Garcia-Sanchez et al (2022), using data from multinational firms, note that the lack of standardization of sustainability assurance as compared to financial auditing complicates its assessment by stock market participants. Two additional studies, O'Dwyer et al (2011) and Larrinaga et al (2020), examine the evolution of sustainability assurance within the accounting profession, exploring how assurance practitioners seek to legitimise or institutionalize this emerging area practice. Their research draws upon theories of social construction and institutional sociology.

A comprehensive review of the recent sustainability assurance research was completed by Venter and Krasodomska (2024). This research reviewed 51 articles published between 2020 and 2023 on the assurance of Extended External Reporting (EER), a technical term synonymous with sustainability reporting. The most common sustainability assurance studies (78.4%) were archival. These archival studies investigate both the determinants and consequences of sustainability assurance choices. One such example is Fan et al (2021) which uses CDP data to examine the determinants of the choice whether to voluntarily assure the level of GHG emissions. Overall, their literature review of the archival research organizes the determinants into five categories: carbon assurance (due to carbon information asymmetry); ownership (e.g., institutional shareholding); governance (e.g., board independence, audit committees); institutions (e.g.,

country culture, country legal system); and other (primarily country-specific studies). The consequences of assurance choices are organized into three categories: reporting related outcomes (e.g. quality of integrated reporting, quality of ESG reporting, extent of reporting on UN SDGs); investor's decisions (e.g., equity valuation, information asymmetry (bid-ask spread, cost of capital, analyst forecast error)); and other (e.g., cost of debt, financial distress, future CSR performance). Experimental research was also examined in the literature review. This included Hoang and Trotmam (2021), where postgraduate students, proxying for investors, were found to ascribe higher valuations where reasonable level assurance was provided on CSR information as compared to limited or no assurance. This finding, however, only held where the respondent was not asked to make an explicit assessment of the company's performance.

Also reviewed was a set of non-positivist studies which used semi-structured interviews or ethnographic approaches. The interview studies included Sivola and Vinnari (2021) where auditors in Finland were interviewed to examine how they promoted the need for sustainability assurance. A notable finding was the auditors involvement in EU-level advocacy for mandatory sustainability assurance. A second interview study, Channuntapipat (2020), challenged the current role of sustainability assurance providers as simply data verifiers and suggested they go further to act as organizational culture change agents.

A set of studies using ethnographic designs were also reviewed. A notable example is Gaudy and Malsch (2023). In their study of two small French accounting firms which offered sustainability assurance services the concept of meaningfulness was explored, being the desire to create a positive sense of purpose aligned with one's own values. Positive elements of meaningfulness were found to include shared sustainability values amongst colleagues, which is heightened by working in a small firm committed to a strong sustainability environment. In contrast, meaningfulness was counteracted when clients view sustainability assurance as simply a required compliance exercise, or when the assurers become aware of the limitations of their agentic and transformative capacities. A second notable examine is the Li et al (2023) longitudinal fieldwork study of a Chinese state-owned enterprise. An important finding was that while managers within the enterprise recognize the importance of sustainability assurance for helping ensure organizational legitimacy, any such support for external sustainability assurance was counteracted by concerns of interference with the stability of an authoritarian regime.

The Venter and Krasodomska (2024) literature review also contained a separate section focusing on the assurance quality construct. Within the section they made specific reference to the Hummel et al (2019) study which

highlighted that obtaining a valid measure of this construct was a key design consideration in the sustainability assurance literature. The literature review found that assurance quality is currently measured in the literature based on information contained in the sustainability assurance reports. This includes, for example, the presence (or absence) of information on engagement scope, whether a description is provided of the assurance standards used, how materiality was determined, and the independence and competencies of the assessor. However, given that most assurance reports are boilerplate, the authors raised concerns with construct validity. As noted in our methodology section, our measures of assurance extent (an important element of assurance quality) use information contained in the actual sustainability reports.

We found a small set of studies that, like our study, attempt to measure assurance quality by measuring the extent of assurance over the firm's disclosed sustainability information. The most notable of these was the study by Gipper et al (2023). Using S&P data from 2010 to 2020 the authors gathered data on the sustainability reporting – and related assurance – for 11 specific metrics, six environmental and five social. The resulting measure, titled scope of assurance, is measured as the ratio of assured metrics contained in the assurance report to disclosed metrics in the sustainability (or ESG) report. The authors specifically note they are the first in the literature to examine assurance within ESG reports (Gipper et al, 2023). They also state that they do not treat ESG assurance as binary whereby partial assurance is equated with full assurance, with the alternative being no assurance. Instead, their research design allows them to reveal the considerable heterogeneity that exists when sustainability assurance is provided (Gipper et al, 2023). Examples in the literature where binary measures are used when measuring the extent of assurance include Simnett et al (2009), Dhaliwal et al. (2012), Martinez-Ferraro et al (2017), Clarkson et al (2019), and Bakarich et al (2023). As noted in the following section, in our research design we also do not treat sustainability assurance as binary. Indeed, we believe our design allows us to reveal even greater heterogeneity in partial assurance settings beyond the Gipper et al (2023) study.

## **Research Methodology**

Our overall objective in choosing which banks to include in our study was to achieve broad representation from numerous countries around the world. In each of the thirteen countries selected, we began by identifying the five largest banks in each country, measured by total assets. To be included in our formal data set it was then required that the bank meet all of the following selection criteria: that personal or commercial banking is the primary business activity, the bank is publicly traded on a stock exchange, the bank is headquartered in that identified country, and the bank's ESG

reporting is available in English. Also required was that the bank's sustainability information is clearly identifiable, either within a broader report, such as an annual report or integrated report or in its own separate, stand-alone document. A final criterion was that if the bank mentioned it had assurance over its sustainability information, the assurance report be publicly available. Our final set of 58 banks included five each from Australia, Brazil, Canada, China, Japan, Norway, South Africa, and the United Kingdom. Four banks were included from each of France, Saudi Arabia, and the United Arab Emirates. Two German banks were also included. Our full set of 58 banks is presented in Table 1.

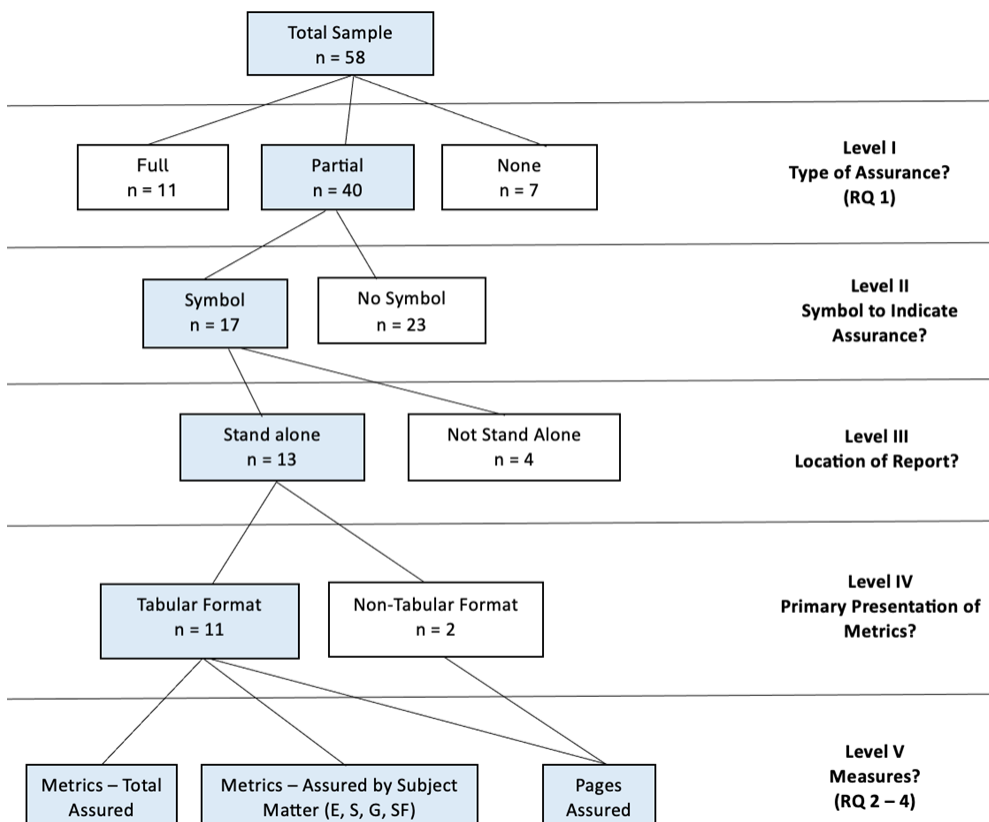
**Table 1:** Overview of Data Set  
(n = 58)

Country	Name of Bank	Fiscal Year End	Total Assets (\$B USD)	Country	Name of Bank	Fiscal Year End	Total Assets
Australia	National Australia Bank	Sept 30, 2023	681	France	BPCE	Dec 31, 2022	1,643
	Commonwealth Bank	Jun 30, 2023	835	Germany	Deutsche Bank AG, Frankfurt/M.	Dec 31, 2022	1,435
	ANZ Banking Group	Sept 30, 2023	711		Commerzbank AG, Frankfurt/M.	Dec 31, 2022	512
	Westpac Banking Corporation	Sept 30, 2023	662	Japan	Mitsubishi UFJ Financial Group	Mar 31, 2023	2,875
	Bank of Queensland	Aug 31, 2023	68		Japan Post Bank	Mar 31, 2023	1,729
Brazil	Itaú Unibanco Holding SA	Dec 31, 2023	524		Mizuho Financial Group	Mar 31, 2024	1,915
	Banco do Brazil SA	Dec 31, 2022	380		Sumitomo Mitsui Financial Group	Mar 31, 2023	2,025
	Banco Bradesco SA	Dec 31, 2023	397	Resona Holdings Inc.	Mar 31, 2023	560	
	BTG Pactual	Dec 31, 2022	86	Norway	DNB Bank	Dec 31, 2022	331
Canada	Toronto-Dominion Bank	Oct 31, 2023	1,410		Sparebanken Vest	Dec 31, 2022	27
	Bank of Nova Scotia	Oct 31, 2023	1,016		Sparebanken More	Dec 31, 2022	9
	Bank of Montreal	Oct 31, 2023	932		Storebrand ASA	Dec 31, 2022	80
	Canadian Imperial Bank of Commerce	Oct 31, 2023	703	Sparebank 1 SMN	Dec 31, 2022	23	
	RBC	Oct 31, 2022	1,405	Saudi Arabia	Saudi National Bank	Dec 31, 2022	252
China	Industrial and Commercial Bank of China	Dec 31, 2022	5,733		Al-Rajhi Bank	Dec 31, 2022	203
	China Construction Bank	Dec 31, 2022	5,800		Riyad Bank	Dec 31, 2022	96
	Agricultural Bank of China	Dec 31, 2022	4,911		Saudi Awwal Bank	Dec 31, 2022	.552
	Bank of China	Dec 31, 2022	4,185		Banque Saudi Fransi	Dec 31, 2022	62
	Postal Savings Bank of China	Dec 31, 2022	2,036	South Africa	Standard Bank	Dec 31, 2023	109
France	Crédit Agricole	Dec 31, 2023	2,417		FirstRand	Jun 30, 2023	88
	BNP Paribas	Dec 31, 2022	2,862		Absa Bank	Dec 31, 2022	105
	Société Générale	Dec 31, 2022	1,596		Nedbank	Dec 31, 2022	74
South Africa	Investec Bank	Mar 31, 2023	71	United Kingdom	Lloyds Banking Group	Dec 31, 2022	1,062
United Arab Emirates	First Abu Dhabi Bank PJSC	Dec 31, 2022	302		NatWest Group	Dec 31, 2022	871

	Emirates NBD	Dec 31, 2023	235		Standard Chartered PLC	Dec 31, 2023	823
	Dubai Islamic Bank	Dec 31, 2022	79	United States	JP Morgan	Dec 31, 2022	3,666
	Mashreq	Dec 31, 2022	.332		Bank of America	Dec 31, 2022	3,051
United Kingdom	HSBC	Dec 31, 2022	281		Wells Fargo	Dec 31, 2022	1,881
	Barclays	Dec 31, 2022	1,832		Citigroup	Dec 31, 2022	2,417

The primary research method used in the study is content analysis. Figure 1 shows the process we used to identify the set of banks on which our detailed analysis was performed (level V; RQ2-4). For each bank, we first determined if assurance was obtained over the full report (full), only parts of the report (partial), or if there was no assurance (none). This is level I in Figure 1, and where research question 1 is located. A classification of full (11 banks) indicates that the bank has received third-party assurance over the complete contents of its sustainability report. A classification as partial (40) indicates that the bank received assurance over some information within the report, most commonly a select set of metrics, but not over the entire contents of the report. A classification of none (7) signifies that the bank has not obtained any external assurance on its sustainability report. Appendix 1 profiles these three classifications using three banks from our data set.

Where the bank received partial assurance we next examined whether the bank used symbols (17 banks) to indicate which metrics were assured. This is level II in Figure 1. This use of symbols was important for two reasons. First, it allows us to count both assured metrics and assured pages within the sustainability report. Second, the symbol potentially leads to a halo effect, explained more fully below. At level III the banks were then separated based on the location of the report. There are two potential locations for reports. Stand-alone documents (13 banks) serve as the primary source of a company's sustainability information and importantly contain only sustainability information. The feature of being self-contained in sustainability information was a necessary criterion in validating our extent measures. Documents considered not stand-alone would include annual reports or integrated reports. Level IV then identifies those stand-alone documents that use tabular formats to present sustainability metrics (11 banks). We found tabular presentation to be a common disclosure format. Basing our analysis on this tabular presentation also allowed for the uniform application of our data collection and coding process. Finally, level V shows our three assurance extent measures. This is where our detailed analysis took place. These three measures align with our three additional research questions.



**Figure 1:** Sub-Sample Identification Process

Appendix 2 provides important details on how we operationalize our three measures in level V. Our total metrics assured and subject matter metrics assured significantly extend the scope of assurance measures developed in Gipper et al (2023). Specifically, our measures are not limited to a predetermined (and maximum) set of eleven metrics. Using our working rules, we capture and analyze any metrics disclosed in a tabular format. Consequently, we identify a significantly more comprehensive set of disclosed sustainability metrics. We then categorize the metrics into those which are assured and those which are not assured. We also separate the metrics into four different subject matter categories: environmental, social, governance, and sustainable finance.

Our pages assured measure differs from Gipper et al (2023) both in its construction and its conceptual underpinning. An important rationale behind the pages assured measure comes from the concept of the halo effect, being a bias created when an initial positive judgment unconsciously affects subsequent broader perceptions (Psychology Today, n.d.). This concept has been empirically supported in psychology research. Notably, Chernev and

Blair (2020) found evidence of a halo effect for companies whose products are made using environmentally friendly technologies. In their study, the halo effect was found to counteract concerns that the quality of the companies' products might be substandard due to the traditional methods of manufacturing. In our study, we assume that a single appearance of an assurance symbol presented on any page in the sustainability report creates a halo effect, thereby adding credibility to the full set of information on the page. Hence this measure is constructed as pages assured divided by total pages in the report.

The development of the formal coding process involved considerable discussion amongst the research team, including numerous pilot tests of preliminary schemes. A series of reliability checks were also performed on the coding process. The most significant reliability check compared in detail the results of the coding for two Canadian banks, TD and BMO. Only minor differences were identified from this independent coding check. Once the veracity of the coding process was finalized, two of the study co-authors worked to code the data for all our measures. Overall, the author team has strong confidence in the reliability of the results.

## **Study Results**

This section presents the results of the study organized around four specific research questions.

### **Research Question #1: To what extent do banks choose to provide full, partial, or no assurance on their sustainability reports?**

Table 2 provides information on the overall assurance choice made by the 58 banks presented by report location. The most common overall assurance choice (40 of 58 banks; 69%) was partial assurance. This was the case whether the report was a stand-alone document (27/37; 73%), an annual report (11/14; 79%), or an integrated report (2/3; 67%). The second most common overall assurance choice was full assurance, a choice made by 11 banks (19%). Choices of full assurance existed across all four sustainability report types, including all four universal registration documents which contained the sustainability information for the four French banks in our data set. The least common assurance choice across our 58 banks was no assurance (7/58; 12%). Table 3 provides the overall assurance choices made by specific banks. These seven no-assurance banks include four of the five banks from Saudi Arabia, two of the four banks from the United Arab Emirates, and JP Morgan from the United States.

**Table 2:** Overall Sustainability Assurance Choice – By Report Location  
(n=58)

	<b>Full assurance (n=11)</b>	<b>Partial assurance (n=40)</b>	<b>No assurance (n=7)</b>
<b>Stand alone document (n=37)</b>	4	27	6
<b>Within annual report (n=14)</b>	2	11	1
<b>Integrated report (n=3)</b>	1	2	0
<b>Universal registration document (n=4)</b>	4	0	0

**Table 3:** Overall Sustainability Assurance Choice – Specific Banks  
(n=58)

<b>Country</b>	<b>Name of Bank</b>	<b>Location of Sustainability Report</b>	<b>Type of Assurance</b>
Australia	National Australia Bank	Within Annual Report	Partial
	Commonwealth Bank	Within Annual Report	Partial
	ANZ Banking Group	Stand Alone	Full
	Westpac Banking Corporation	Stand Alone	Partial
	Bank of Queensland	Stand Alone	Partial
Brazil	Itaú Unibanco Holding SA	Stand Alone	Full
	Banco do Brazil SA	Within Annual Report	Partial
	Banco Bradesco SA	Integrated	Full
	BTG Pactual	Within Annual Report	Full
Canada	Toronto-Dominion Bank (TD Bank)	Stand Alone	Partial
	Royal Bank of Canada (RBC)	Stand Alone	Partial
	Bank of Nova Scotia (Scotiabank)	Stand Alone	Partial
	Bank of Montreal (BMO)	Stand Alone	Partial
	Canadian Imperial Bank of Commerce (CIBC)	Stand Alone	Partial
China	China Construction Bank	Stand Alone	Partial
	Industrial and Commercial Bank of China Limited	Stand Alone	Partial
	Agricultural Bank of China	Stand Alone	Partial
	Bank of China	Stand Alone	Partial
	Postal Savings Bank of China	Stand Alone	Partial
France	Crédit Agricole	Universal Registration Document	Full
	BNP Paribas	Universal Registration Document	Full
	Société Générale	Universal Registration Document	Full
	BPCE	Universal Registration Document	Full
Germany	Deutsche Bank AG, Frankfurt/M.	Stand Alone	Full
	Commerzbank AG, Frankfurt/M.	Stand Alone	Full
Japan	Mitsubishi UFJ Financial Group	Stand Alone	Partial
	Japan Post Bank	Stand Alone	Partial

	Mizuho Financial Group	Stand Alone	Partial
Japan	Sumitomo Mitsui Financial Group	Stand Alone	Partial
	Resona Holdings, Inc.	Integrated	Partial
Norway	DNB Bank	Within Annual Report	Partial
	Sparebanken Vest	Within Annual Report	Partial
	Sparebanken More	Within Annual Report	Full
	Storebrand ASA	Within Annual Report	Partial
	Sparebank 1 SMN	Within Annual Report	Partial
Saudi Arabia	Saudi National Bank	Stand Alone	None
	Al-Rajhi Bank	Within Annual Report	None
	Riyad Bank	Stand Alone	None
	Saudi Awwal Bank	Stand Alone	Partial
	Banque Saudi Fransi	Stand Alone	None
South Africa	Standard Bank	Stand Alone	Partial
	FirstRand	Stand Alone	Partial
	Absa Bank	Stand Alone	Partial
	Nedbank	Integrated	Partial
	Investec Bank	Stand Alone	Partial
United Arab Emirates	First Abu Dhabi Bank PJSC	Stand Alone	Partial
	Emirates NBD	Stand Alone	None
	Dubai Islamic Bank	Stand Alone	None
	Mashreq	Stand Alone	Partial
United Kingdom	HSBC	Within Annual Report	Partial
	Barclays	Within Annual Report	Partial
	Lloyds Banking Group	Stand Alone	Partial
	NatWest Group	Stand Alone	Partial
	Standard Chartered Plc	Within Annual Report	Partial
United States	JP Morgan	Stand Alone	None
	Bank of America	Within Annual Report	Partial
	Wells Fargo	Stand Alone	Partial
	Citigroup	Stand Alone	Partial

**Research Question #2: Under conditions of partial assurance, to what extent do banks choose to assure their disclosed sustainability metrics?**

Table 4 presents the findings on our first major measure of interest, total metrics assured. The analysis is done for a subset of eleven banks. The first row presents the total number of distinct metrics presented in each bank’s sustainability report. The number ranges from a low of 121 at Saudi Awwal to a high of 873 at Westpac. The second row presents the number of the metrics that were specifically identified as assured in the sustainability report. The number of metrics assured ranged from a low of 6 at Mizuho and FirstRand to a high of 74 at TD. The third row shows that unassured disclosed metrics ranged from a low of 151 at Mizuho to a high of 809 at Westpac. The fourth row in Table 4 presents the percentage of metrics

disclosed in the sustainability report which were specifically identified as assured. This percentage is the first of our three primary measures of the extent of assurance. The percentage ranges from a low of 2.7% at Scotiabank to a high of 14.3% at TD. The final row presents this primary measure as the percentage of disclosed metrics not assured. Conversely then, it ranges from a low of 85.7% at TD to a high of 97.3% at Scotiabank. Untabulated, across the eleven banks, the overall percentage of metrics disclosed but not assured is 92.8% (3,818/4,115). This last result contrasts with a disclosed, but not assured, rate of 72.1% found in the Gipper et al (2023) study. Our higher rate of non assurance can be partially explained by the fact we did not restrict the disclosed metrics to a restricted set as the Gipper et al (2023) study had done.

**Table 4: Total Metrics Assured**

	BMO (Canada)	CIBC (Canada)	RBC (Canada)	Scotiabank (Canada)	TD (Canada)	Westpac (Australia)	Saudi Awwal (Saudi Arabia)	Lloyds Banking Group (United Kingdom)	Mizuho (Japan)	FirstRand (South Africa)	Investec (South Africa)
Total number of metrics disclosed	434	331	291	523	519	873	121	245	157	179	442
Total number of metrics assured	15	16	18	14	74	64	12	19	6	6	53
Total number of metrics not assured	419	315	273	509	445	809	109	226	151	173	389
Percentage of total metrics assured	3.5%	4.8%	6.2%	2.7%	14.3%	7.3%	9.9%	7.8%	3.8%	3.4%	12.0%
Percentage of total metrics not assured	96.5%	95.2%	93.8%	97.3%	85.7%	92.7%	90.1%	92.2%	96.2%	96.6%	88.0%

**Research Question #3: Under conditions of partial assurance, to what extent do banks choose to assure their various disclosed subject matter sustainability metrics?**

Table 5 presents the findings on our second major measure of assurance extent, subject matter metrics assured. In this analysis we divide the total metrics disclosed into four subject matter categories: environment, social, governance, and sustainable finance. In the second and third rows we break down the total metrics into the four categories, first by nominal amount, and second in percentage form. In both cases, the most common metric being disclosed, and by a significant margin over the other three categories, are social metrics.

The most notable example here is CIBC, where of its 331 disclosed metrics, 307 (92.7%) are in the social category. Of the other three subject matter categories, there was no consistently identifiable pattern across the eleven banks. Environmental disclosures ranged from a low of 2.3% of total disclosures (BMO) to a high of 68.2% (Mizuho). Governance disclosures ranged from a low of 0% of total disclosures (FirstRand) to a high of 28.2% (Lloyds Banking Group). Sustainable finance disclosures ranged from a low of 0.3% of total disclosures (BMO) to a high of 39.4% (TD).

**Table 5:** Subject Matter Metrics Assured

		BMO (Canada)	CIBC (Canada)	RBC (Canada)	Scotia- bank (Canada)	TD (Canada)	Westpac (Australia)	Saudi Awwal (Saudi Arabia)	Lloyds Banking Group (United Kingdom)	Mizuho (Japan)	FirstRand (South Africa)	Investec (South Africa)
Total number of metrics disclosed		434	331	291	523	519	873	121	245	157	179	442
Total number of each subject matter metrics disclosed	E	10	15	21	64	134	128	28	74	107	43	151
	S	304	307	182	283	315	317	56	86	21	112	188
	G	109	8	30	105	44	84	24	69	26	0	11
	SF	11	1	58	71	26	344	13	7	3	24	92
Percentage of total number of metrics disclosed	E	2.30%	4.50%	7.20%	12.20%	25.80%	14.70%	23.10%	30.20%	68.20%	24.00%	34.20%
	S	70.00%	92.70%	62.50%	54.10%	60.70%	36.30%	46.30%	35.10%	13.40%	62.60%	42.50%
	G	25.10%	2.40%	10.30%	20.10%	8.50%	9.60%	19.80%	28.20%	16.60%	0.00%	2.50%
	SF	2.50%	0.30%	19.90%	13.60%	5.00%	39.40%	10.70%	2.90%	1.90%	13.40%	20.80%
Total number of each subject matter metrics assured	E	0	7	7	4	23	5	4	10	1	6	41
	S	11	9	11	7	49	7	3	9	5	0	12
	G	1	0	0	3	2	3	4	0	0	0	0
	SF	3	0	0	0	0	49	1	0	0	0	0
Percentage of each subject matter metrics assured	E	0.00%	46.70%	33.30%	6.30%	17.20%	3.90%	14.30%	13.50%	0.90%	14.00%	27.20%
	S	3.60%	2.90%	6.00%	2.50%	15.60%	2.20%	5.40%	10.50%	23.80%	0.00%	6.40%
	G	0.90%	0.00%	0.00%	2.90%	4.50%	3.60%	16.70%	0.00%	0.00%	0.00%	0.00%
	SF	27.30%	0.00%	0.00%	0.00%	0.00%	14.20%	7.70%	0.00%	0.00%	0.00%	0.00%

The bottom two rows of Table 5 present the subject matter findings based on assurance. The first of these rows shows the nominal amount of each subject matter metric that was assured in the sustainability report. The bottom row converts this nominal amount into a percentage assured. The most commonly assured subject matter metrics are environmental. Seven out of the eleven banks assured their environmental metrics at the highest rate across the four subject matter categories. This assurance ranged from a low of 6.3% (Scotiabank) to a high of 46.7% (CIBC). This finding is consistent with the Gipper et al (2023) study which also found that where environmental metrics are disclosed, they are more likely to be assured than other metrics. We found that social metrics, when disclosed, are the second most commonly assured metric, including a high of 23.8% at Mizuho. For both environmental and social metrics, ten of the 11 banks provided some level of assurance. Conversely, only five of the 11 banks provided assurance over disclosed governance metrics, and only three provided assurance over disclosed sustainable finance metrics.

**Research Question #4: Under conditions of partial assurance, to what extent do banks choose to signal assurance on each page of their report?**

Table 6 presents the findings on our third major measure of assurance extent, pages assured. As noted in the methodology section, the rationale for this measure stems from the halo effect. Specifically, we assume that should any formal communication of assurance be contained on the sustainability report page – in our study the existence of an assurance symbol – then by association the remainder of the information on the page is considered to contain some level of assurance. Hence, our third measure is constructed as the total number of pages assured in the sustainability report divided by total number of pages. The results in Table 6 indicate that a large proportion of the total pages in the sustainability report do not communicate any element of assurance. In terms of total pages, across the 13 banks there were 1,112 pages of sustainability reporting. Of these 107 (9.6%) had assurance attached to them. As shown in the bottom row, these percentages range from a low of 61.1% for Westpac to a high of 98.5% for FirstRand.

**Table 6: Pages Assured Measure**

	BMO (Canada)	CIBC (Canada)	RBC (Canada)	Scotia- bank (Canada)	TD (Canada)	Westpac (Australia)	Saudi Awwal (Saudi Arabia)	Lloyds Banking Group (United Kingdom)	Mizuho (Japan)	First- Rand (South Africa)	Investec (South Africa)	Standard Bank (South Africa)	NatWest (United Kingdom)
Total number of pages	105	124	137	121	101	18	51	29	28	131	134	61	72
Total number of pages assured	8	12	10	7	17	7	6	4	3	2	12	6	13
Total number of pages not assured	97	112	127	114	84	11	45	25	25	129	122	55	59
Percentage of pages assured	7.6%	9.7%	7.3%	5.8%	16.8%	38.9%	11.8%	13.8%	10.7%	1.5%	9.0%	9.8%	18.1%
Percentage of pages not assured	92.4%	90.3%	92.7%	94.2%	83.2%	61.1%	88.2%	86.2%	89.3%	98.5%	91.0%	90.2%	81.9%

## **Concluding Remarks**

Banks play a visible and important role in the world economy. Through their actions in sustainable finance, they are also committed to a more sustainable global environment. Similar to any organization, banks are also concerned with their own corporate sustainability. These various sustainability actions are commonly reported by banks in their sustainability reports, often on a voluntary basis. Banks must then also decide whether to provide assurance on this reporting, in order to add to its credibility. In this study, we examine the propensity of banks worldwide to seek such assurance, and where sought, we further describe the extent of this assurance. Our analysis is based on 58 banks from 13 countries. We find the most common overall assurance choice (40 of 58 banks; 69%) is partial assurance, whereby only a selected set of sustainability metrics disclosed are assured. In contrast, 11 banks (19%) provided full assurance and 7 (12%) provided no assurance. Using detailed content analysis, where cases of partial assurance is provided, we find the overall extent of assurance to be at very low levels. For example, the highest rate of assurance over disclosed metrics for a single bank was found to be 14.3%. Similarly, for all four subject matter metrics, cases of disclosed but unassured metrics were identified. This included six banks where disclosed governance metrics were not assured. Finally, we found that only 9.6% of the pages in the sustainability reports contained evidence of assurance. Taken together, our results present an assurance environment in the banking industry characterized by low levels of assurance extent. Consequently, we suggest caution when ascribing a level of credibility to the banks' sustainability reporting.

We believe the results of our study make an important contribution to both the academic and professional assurance literature. Our findings are, of course, subject to certain limitations. Notably, our three introduced measures are unique to this study and may not accurately proxy for the actual level of credibility users attach to information in the sustainability reports. Our definition of total metrics is also restricted to current-year metrics, and metrics presented in formal tables. Nevertheless, a broader measure of total metrics, including prior year totals, or metrics incorporated in the narrative, would have significantly reduced our reportedly low assurance levels. Our detailed analysis of the extent of assurance was also restricted to a subset of the 58 banks. Finally, although we selected banks from 13 different countries, our results may not generalize to sustainability assurance decisions made by a larger worldwide set. Upcoming regulatory changes to require sustainability assurance, particularly in Europe, may also limit the extent to which our results are indicative of future assurance decisions. Nevertheless, especially in markets where sustainability assurance will remain voluntary for the foreseeable future, such as Canada and the United States, we advocate

for additional research focusing on settings of partial assurance. For example, interviews could be used to explore why managers only choose to ensure certain sustainability metrics. Could it be due to institutional isomorphism, or a belief in the halo effect?

**Conflict of Interest:** The authors reported no conflict of interest.

**Data Availability:** All of the data are included in the content of the paper.

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### References:

1. Bank of Montreal. (2023). *2023 Sustainability Report and Public Accountability Statement*. [https://our-impact.bmo.com/wp-content/uploads/2024/03/BMO\\_2023\\_SR\\_EN.pdf](https://our-impact.bmo.com/wp-content/uploads/2024/03/BMO_2023_SR_EN.pdf)
2. Bakarich, K.M., Baranek, D., and O'Brien, P.E. (2023). The current state and future implications of environmental, social, and governance assurance. *Current Issues in Auditing*, 17(1), A1-A21. <https://doi.org/10.2308/CIIA-2022-012>
3. Bhutta, U. S., Tariq, A., Farrukh, M., Raza, A., & Iqbal, M. K. (2022). Green bonds for sustainable development: Review of literature on development and impact of green bonds. *Technological Forecasting & Social Change*, 175, 1-16.
4. Canadian Imperial Bank of Commerce. (2024, March). *2023 Sustainability Report and Public Accountability Statement: Ambitions Made Real*. [https://www.cibc.com/content/dam/about\\_cibc/corporate\\_responsibility/pdfs/cibc-sustainability-report-2023-en.pdf](https://www.cibc.com/content/dam/about_cibc/corporate_responsibility/pdfs/cibc-sustainability-report-2023-en.pdf)
5. Canadian Imperial Bank of Commerce. (2024). *CIBC Sustainable Finance Methodology*. [https://www.cibc.com/content/dam/about\\_cibc/corporate\\_responsibility/pdfs/sustainability-finance-methodology-en.pdf](https://www.cibc.com/content/dam/about_cibc/corporate_responsibility/pdfs/sustainability-finance-methodology-en.pdf)
6. Channuntapipat, C. (2020). Can sustainability report assurance be a collaborative process and practice beyond the ritual of verification? *Business Strategy and the Environment*, 30(2), 775–786. <https://doi.org/10.1002/bse.2653>
7. Chernev, A. and Blair, S. (2020). When sustainability is not a liability: The halo effect of marketplace morality. *Journal of Consumer Psychology*, 31(3), 551-569. <https://doi.org/10.1002/jcpy.1195>

8. Cho, C.H., Michelon, G., Patten, D.M., and Roberts, R.W. (2014). CSR report assurance in the USA: An empirical investigation of determinants and effects. *Sustainability Accounting, Management and Policy Journal*, 5(2), 130-148.
9. Clarkson, P., Li, Y., Richardson, G., and Tsang, A. (2019). Causes and consequences of voluntary assurance of CSR reports. *Accounting, Auditing & Accountability Journal*, 32 (8), 2451-2474.
10. Datt, R., Luo, L., and Tang, Q. 2020. Corporate choice of providers of voluntary carbon assurance. *International Journal of Auditing*, 24(1), 145-162.
11. Deloitte. (2024, February 2). *CSRD: Transposition deadline approaches*. <https://www.deloitte.com/mt/en/services/audit-assurance/perspectives/csrd-deadline-approaching.html>
12. Dhaliwal, D., Radhakrishnan, S., Tsang, A., and Yang, Y. (2012). Nonfinancial Disclosure and Analyst Forecast Accuracy: International Evidence on Corporate Social Responsibility Disclosure. *The Accounting Review*, 87(3), 723-759. <https://doi.org/10.2308/accr-10218>
13. Du, K., and Wu, S. J. (2019). Does external assurance enhance the credibility of CSR reports? Evidence from SCR-related misconduct events in Taiwan. *Auditing: A Journal of Practice & Theory*, 31(4), 101-130. <https://doi.org/10.2308/ajpt-52418>
14. Edmans, A., & Kacperczyk, M. (2022). Sustainable Finance. *Review of Finance*, 26(6), 1309-1313. <https://doi.org/10.1093/rof/rfac069>
15. European Commission. (2024, September 25). *Commission Takes Action to Ensure Complete and Timely Transposition of EU Directives*. [https://ec.europa.eu/commission/presscorner/detail/en/inf\\_24\\_4661](https://ec.europa.eu/commission/presscorner/detail/en/inf_24_4661).
16. European Commission. (n.d). *Overview of sustainable finance*. [https://finance.ec.europa.eu/sustainable-finance/overview-sustainable-finance\\_en](https://finance.ec.europa.eu/sustainable-finance/overview-sustainable-finance_en)
17. Fan, H., Tang, Q., & Pan, L. (2021). An international study of carbon information asymmetry and independent carbon assurance. *The British Accounting Review*, 53, 100971. <https://doi.org/10.1016/j.bar.2020.100971>.
18. Galpin, T., & Whittington, J. L. (2012). Sustainability leadership: from strategy to results. *Journal of Business Strategy*, 33(4), 40-48. <https://doi.org/10.1108/02756661211242690>
19. García-Sánchez, I.-M., Aibar-Guzmán, B., & Aibar-Guzmán, C. (2022). What sustainability assurance services do institutional investors demand and what value do they give them? *Sustainability*

- Accounting, Management and Policy Journal (Print)*, 13(1), 152–194. <https://doi.org/10.1108/SAMPJ-06-2020-0199>
20. Gaudy, C., & Malsch, B. (2023). Auditors' search for meaningfulness in sustainability assurance work. *Qualitative Research in Accounting & Management*, 20(2), 257–277. <https://doi.org/10.1108/QRAM-10-2022-0161>.
21. Gipper, B., Ross, S., and Shi, S. (2023). ESG Assurance in the United States. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4263085>
22. Hoang, H., & Trotman, K. T. (2021). The effect of CSR assurance and explicit assessment on investor valuation judgments. *Auditing: A Journal of Practice & Theory*, 40(1), 19–33. <https://doi.org/10.2308/AJPT-18-092>
23. Hummel, K., Schlick, C., & Fifka, M. (2019). The role of sustainability performance and accounting assurors insustainability assurance engagements. *Journal of Business Ethics*, 154(3), 733–757. <https://doi.org/10.1007/s10551-016-3410-5>
24. IAASB. (2013, December 9). *International Standard on Assurance Engagements (ISAE) 3000 Revised, Assurance Engagements Other than Audits or Reviews of Historical Financial Information*. <https://www.iaasb.org/publications/international-standard-assurance-engagements-isae-3000-revised-assurance-engagements-other-audits-or>
25. IAASB. (2024, November 12). *International Standard on Sustainability Assurance 5000, General Requirements for Sustainability Assurance Engagements*. <https://www.iaasb.org/publications/international-standard-sustainability-assurance-5000-general-requirements-sustainability-assurance/>
26. Intercontinental Exchange, Inc. (2023). *Environmentals*. <https://www.ice.com/energy/environmental>
27. International Capital Markets Association. (2020, June). *Social Bond Principles*. <https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/June-2020/Social-Bond-PrinciplesJune-2020-090620.pdf>
28. International Capital Markets Association. (2023). *Green Bond Principles (GBP)*. <https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/green-bond-principles-gbp/>
29. International Federation of Accountants. (2023, February). *The State of Play: Sustainability Disclosure & Assurance*.

- [https://ifacweb.blob.core.windows.net/publicfiles/2023-02/IFAC-State-of-Play-Sustainability-Assurance-Disclosures\\_0.pdf](https://ifacweb.blob.core.windows.net/publicfiles/2023-02/IFAC-State-of-Play-Sustainability-Assurance-Disclosures_0.pdf)
30. Knechel, R. (2021). The future of assurance in capital markets: Reclaiming the economic imperative of the auditing profession. *Accounting Horizons*, 35(1), 133-151. <https://doi.org/10.2308/HORIZONS-19-182>.
31. KPMG International. (2008, September). *A survey into the growth and sustainability issues driving consumer organizations worldwide*. <http://www.kpmg.com.au/Portals/0/KPMG%20CIES%20Survey.pdf>
32. KPMG. (2022, October). *Big shifts, small steps Survey of Sustainability Reporting 2022*. <https://assets.kpmg/content/dam/kpmg/xx/pdf/2022/10/ssr-small-steps-big-shifts.pdf>
33. KPMG. (2023, November). *Get Ready for European Sustainability Reporting Standards*. <https://assets.kpmg.com/content/dam/kpmg/xx/pdf/2022/07/talkbook-get-ready-for-esrs.pdf>
34. Larrinaga, C., Rossi, A., Luque-Vilchez, M., & Núñez-Nickel, M. (2020). Institutionalization of the contents of sustainability assurance services: A comparison between Italy and United States. *Journal of Business Ethics*, 163(1), 67–83. <https://doi.org/10.1007/s10551-018-4014-z>
35. Latham & Watkins. (2024, January 24). *France Transposes Corporate Sustainability Reporting Directive Into Law*. <https://www.lw.com/admin/upload/SiteAttachments/France-Transposes-Corporate-Sustainability-Reporting-Directive-Into-Law.pdf>
36. Li, T., Hidayah, N. N., Lyu, O., & Lowe, A. (2023). Navigational space for the absence of sustainability assurance in China. *Accounting, Auditing & Accountability Journal*, 36(5), 1221–1248. <https://doi.org/10.1108/AAAJ-04-2020-4514>
37. Lopassio, N., Garcia, L., and Benau, M. (2024, January 10). *Contagion Effect on Sustainability Reporting Assurance in Latin America*. <http://dx.doi.org/10.2139/ssrn.4690917>
38. Martinez-Ferrero, J. and Garcia-Sanchez, I. (2017). Coercive, normative and mimetic isomorphism as determinants of the voluntary assurance of sustainability reports. *International Business Review*, 26, 102-118. <https://doi.org/10.1016/j.ibusrev.2016.05.009>
39. McKinsey & Company. (2023, October). *The Great Banking Transition*. <https://www.mckinsey.com/~media/mckinsey/industries/financial%20services/our%20insights/global%20banking%20annual%20review%20>

[202023/the-global-banking-annual-review-2023-vf.pdf?shouldIndex=false](#)

40. O'Dwyer, B., Owen, D., & Unerman, J. (2011). Seeking legitimacy for new assurance forms: The case of assurance on sustainability reporting. *Accounting, Organizations and Society*, 36(1), 31–52. <https://doi.org/10.1016/j.aos.2011.01.002>
41. PwC. (2021, September). *Scaling the sustainable finance market: A cross-border FMI-driven approach*. <https://www.strategyand.pwc.com/gx/en/insights/scaling-sustainable-finance-market.html>
42. Psychology Today. (n.d). *Halo Effect*. <https://www.psychologytoday.com/ca/basics/halo-effect>
43. Royal Bank of Canada. (2022). *Environment, Social and Governance (ESG) Performance Report 2022*. [https://www.rbc.com/community-social-impact/\\_assets-custom/pdf/2022-ESG-Report.PDF](https://www.rbc.com/community-social-impact/_assets-custom/pdf/2022-ESG-Report.PDF)
44. Royal Bank of Canada. (2023). *Environmental, Social and Governance (ESG) Progress Report 2023*. [https://www.rbc.com/community-sustainability/\\_assets-custom/pdf/esg-progress-report-2023.pdf](https://www.rbc.com/community-sustainability/_assets-custom/pdf/esg-progress-report-2023.pdf)
45. Santos, C., Coelho, A., and A. Marques. 2023. A systematic literature review on greenwashing and its relationship to stakeholders: state of art and future research agenda. *Management Review Quarterly*. <https://doi.org/10.1007/s11301-023-00337-5>
46. Scotiabank. (2023). *2023 ESG Report*. [https://www.scotiabank.com/content/dam/scotiabank/corporate/Documents/Scotiabank\\_2023\\_ESG\\_Report\\_Final.pdf](https://www.scotiabank.com/content/dam/scotiabank/corporate/Documents/Scotiabank_2023_ESG_Report_Final.pdf)
47. Silvola, H., & Vinnari, E. (2021). The limits of institutional work: A field study on auditors' efforts to promote sustainability assurance in a trust society. *Accounting, Auditing & Accountability Journal*, 34(1), 1–30. <https://doi.org/10.1108/AAAJ-02-2019-3890>
48. Toronto Dominion. (2023). *2023 Sustainability Report*. <https://www.td.com/content/dam/tdcom/canada/about-td/pdf/esg/2023-sustainability-report-en.pdf>
49. United Nations Environment Programme. (n.d). *Net-Zero Banking Alliance*. <https://www.unepfi.org/net-zero-banking/>
50. Venter, E. and Krasodomska, J. (2024). Research on Extended External Reporting Assurance: An update on recent developments. *Journal of International Financial Management & Accounting*, 35(2), 390-428. <https://doi.org/10.1111/jifm.12200>

## Appendix 1 – Assurance Provided – Full, Partial, None Appendix 1a: Full Assurance

### Independent Limited Assurance Report to the Directors of Australia and New Zealand Banking Group Limited



#### Conclusion

Based on the evidence we obtained from the procedures performed, we are not aware of any material misstatements in the ESG Reporting, which has been prepared by ANZ in accordance with the GRI Standards and ANZ's basis of reporting for the year ended 30 September 2022.

#### Information subject to assurance

Australia and New Zealand Banking Group Limited (ANZ) engaged KPMG to perform a limited assurance engagement in relation to the ANZ 2022 ESG Supplement and 2022 ESG Supplement Data Pack ("ESG Reporting"). KPMG's scope of work comprises limited assurance over all material text and data claims presented in pages 1 to 80 of the ANZ 2022 ESG Supplement, and all material 2022 data points presented in the 2022 ESG Supplement Data Pack. The ANZ 2022 ESG Supplement is attached to this assurance report, and the 2022 ESG Supplement Data Pack is available at [anz.com/annualreport](http://anz.com/annualreport).

The ESG Reporting covers ANZ's global operations for year ended 30 September 2022 unless otherwise indicated.

#### Criteria

The ESG Reporting is prepared in accordance with the GRI Standards published by the Global Reporting Initiative (GRI), version dated 2016 and management's basis of reporting, a summary of which is included in the Explanatory Notes section in the ANZ 2022 ESG Supplement.

#### Basis of our conclusion

We conducted our work in accordance with International Standard on Assurance Engagements ISAE 3000 (Standard). In accordance with the Standard we have:

- used our professional judgement to plan and perform the engagement to obtain limited assurance that we are not aware of any material misstatements in the ESG Reporting, whether due to fraud or error;
- considered relevant internal controls when designing our assurance procedures, however we do not express a conclusion on their effectiveness; and
- ensured that the engagement team possess the appropriate knowledge, skills and professional competencies.

#### Summary of procedures performed

Our limited assurance conclusion is based on the evidence obtained from performing the following procedures:


- Enquiries with management to understand ANZ's process for determining material ESG issues; and implementation of these across the business;
- Interviews with relevant staff responsible for developing the content (text and data) within the ESG Reporting to understand the approach for management, monitoring, collation and reporting of such information and the accuracy, completeness and existence of reported text and data within the ESG Reporting;
- Comparing text and data (on a sample basis) presented to underlying sources. This included considering whether all material matters had been included or excluded;
- Identifying and testing assumptions supporting the calculations;
- Undertaking analytical review procedures to support the reasonableness of the data;
- Assessment of whether information reported was in accordance with the GRI Standards Comprehensive level of disclosures; and
- Reviewing other ANZ reporting including the Annual Report, Annual Review, UN Principles for Responsible Banking Self-Assessment, explanatory notes of the ANZ 2022 ESG Supplement and GRI Navigator in its entirety to ensure it is consistent with our knowledge obtained through our assurance engagement.

\*Page 96 of ANZ's 2022 ESG Supplement

<https://www.anz.com.au/content/dam/anzcomau/about-us/2022-anz-esg-supplement-accessible.pdf>

## Appendix 1b: Partial Assurance Independent Practitioner's Limited Assurance Report

### To Management of Bank of Montreal:

We have undertaken a limited assurance engagement on selected indicators of Bank of Montreal ("BMO"), denoted by the symbol  in the accompanying 2023 Sustainability Report and Public Accountability Statement (the "Report") and accompanying 2023 Sustainability Report Data Pack and Glossary (collectively the "subject matter information") and as described below, as at and for the year ended October 31, 2023.

Topic	Selected Indicator(s)	Reported Value for 2023	Sustainability Report Page(s)	Data Pack and Glossary Pages	Applicable Criteria
Data Security	Substantiated complaints regarding breaches of customer privacy and losses of customer data (#)	0	26	16	
Diversity & Inclusion	Gender equity in senior leadership roles - enterprise-wide (%)	42.3%	25, 58	8	
	People of Colour in senior leadership roles - Canada (%)	25.4%			
	People of Colour in senior leadership roles - United States (%)	26.6%			
	Indigenous peoples across our workforce - Canada (%)	1.4%			
	Persons with disabilities across our workforce - Canada & United States (%)	5.6%			
	2SLGBTQ+ representation across our workforce - Canada & United States (%)	5.0%			
Talent attraction and retention	Total turnover rate - enterprise-wide (%)	16.7%	25	10	
	Total turnover rate - Canada (%)	13.7%	-	10	Internally developed criteria, which is presented on pages 89-92 of the Report.
	Total turnover rate - United States (%)	23.3%	-	10	
	Voluntary turnover rate - enterprise-wide (%)	11.8%	25	11	
	Voluntary turnover rate - Canada (%)	10.6%	-	11	
	Voluntary turnover rate - United States (%)	14.4%	-	11	
Employee Engagement	Employee engagement index (%)	86%	25, 64	12	
Community Impact	Donations - Canada and United States - (\$ millions)	\$84.0 million	25, 67	13	
Financial Inclusion	First Nations participating in BMO's On-Reserve Housing Loan Program - Canada (#)	107	23	3	
Sustainable Finance	Capital to clients pursuing sustainable outcomes (\$ billions)	\$68.61 billion	24, 40	4	
Climate Change	Lending to carbon-related assets - Metric 1 (non-renewable energy and power generation) (%)	1.5%	24	14	
	Lending to carbon-related assets - Metric 2 (includes Metric 1 plus transportation, materials and buildings, and agriculture, food and forest products) (%)	20.4%			

Other than as described in the preceding paragraph, we did not perform assurance procedures on the remaining information included in the Report, and accordingly, we do not express a conclusion on this information.

### Management's Responsibility

Management is responsible for the preparation and presentation of the subject matter information in accordance with the applicable criteria (the "applicable criteria").

There are no mandatory requirements for the preparation or presentation of the subject matter information. As such, BMO applies internally developed measurement methods. These measurement methods are described in the Glossary on pages 89-92 of the Report.

Management is responsible for the development of such criteria and for determining the appropriateness of the use of the applicable criteria.

Management is also responsible for determining BMO's objectives in respect of sustainability performance and reporting, including the identification of stakeholders and material issues.

Management is also responsible for such internal control as management determines necessary to enable the preparation and presentation of the subject matter information that is free from material misstatement, whether due to fraud or error.

### Practitioner's Responsibilities

Our responsibility is to express a limited assurance conclusion on the subject matter information based on evidence we have obtained. We conducted our limited assurance engagement in accordance with Canadian Standards on Assurance Engagements (CSAE) 3000, *Attestation Engagements Other than Audits or Reviews of Historical Financial Information*.

This standard requires that we plan and perform our engagement to obtain limited assurance about whether based on the procedures performed and evidence obtained, any matter(s) has come to our attention to cause us to believe that the subject matter information is materially misstated.

The procedures performed in a limited assurance engagement vary in nature and timing from and are less in extent than for a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed. Accordingly, it is not a guarantee that a limited assurance engagement conducted in accordance with this standard will always detect a matter that causes the practitioner to believe that the subject matter information is materially misstated.

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the decisions of users of our report.

The nature, timing and extent of procedures performed depends on our professional judgment, including an assessment of the risks of material misstatement, whether due to fraud or error, and involves obtaining evidence about the subject matter information.

Our engagement included: assessing the appropriateness of the underlying subject matter; the suitability of the criteria used by BMO in preparing the subject matter information in the circumstances of the engagement and evaluating the appropriateness of the: methods, policies and procedures used in the preparation of subject matter information and the reasonableness of estimates made by BMO.

Our engagement included, amongst others, the following procedures:

- Inquiries of BMO's management, including those with responsibility for sustainability reporting governance, management and reporting;
- Assessment of the suitability, application and disclosure of the applicable criteria in respect of the subject matter information;
- Where relevant, performance of walkthroughs to understand the processes for data collection and reporting of the subject matter information;
- Comparisons of the reported data for the subject matter information to underlying data sources on a sample basis;
- Inquiries with relevant personnel regarding key assumptions and the limited re-performance of calculations on a sample basis; and
- Review of the presentation and disclosure of the subject matter information.

The engagement was conducted by a multidisciplinary team which included professionals with suitable skills and experience in both assurance and in the applicable subject matter, including environmental, social and governance aspects.

### Practitioner's Independence and Quality Management

We have complied with the relevant rules of professional conduct/code of ethics applicable to the practice of public accounting and related to assurance engagements, issued by various professional accounting bodies, which are founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

The firm applies Canadian Standard on Quality Management 1, *Quality Management for Firms that Perform Audits or Reviews of Financial Statements, or Other Assurance or Related Services Engagements* which requires the firm to design, implement and operate a system of quality management, including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

### Significant Inherent Limitations

Historical non-financial information, such as that contained in the Report, is subject to more inherent limitations than historical financial information, given the qualitative characteristics of the underlying subject matter and methods used for determining this information. The absence of a significant body of established practice on which to draw allows for the selection of different but acceptable evaluation techniques, which can result in materially different measurements and can impact comparability. The nature and methods used to determine such information, as described in the applicable criteria, may change over time, and it is important to read BMO's reporting methodology presented on pages 89-92 of the Report.

### Emphasis of Matter

We draw attention to footnote 2 on page 24 of the Report, and footnote 1 on page 40 of the Report, which describes results for 2019 to 2022 have been restated, to reflect an update to BMO's definition of sustainable outcomes. Our conclusion is not modified with respect to this matter.

### Other Matter

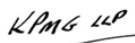
We have not been engaged to, and therefore do not, provide any assurance in respect of the restatements discussed in footnote 2 on page 24 and footnote 1 on page 40. Our conclusion is not modified with respect to this matter.

### Conclusion

Our conclusion has been formed on the basis of, and is subject to, the matters outlined in this report. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion. Based on the procedures performed and evidence obtained, no matters have come to our attention to cause us to believe that BMO's subject matter information as at and for the year ended October 31, 2023 is not prepared and presented, in all material respects, in accordance with the applicable criteria.

### Specific Purpose of Subject Matter Information

The subject matter information has been prepared in accordance with the applicable criteria and as a result may not be suitable for another purpose.



Chartered Professional Accountants

Toronto, Canada

March 6, 2024

\*Page 93-94 of BMO's 2023 Sustainability Report and Public Accountability Statement  
[https://our-impact.bmo.com/wp-content/uploads/2024/03/BMO\\_2023\\_SR\\_EN.pdf](https://our-impact.bmo.com/wp-content/uploads/2024/03/BMO_2023_SR_EN.pdf)

## Appendix 1c: No Assurance

### Global Reporting Initiative Index

We identified the following GRI topics as related to our key ESG topics: economic performance, indirect economic impacts, anti-corruption, anti-competitive behavior, energy, water and effluents, emissions, biodiversity, employment, training and education, diversity and equal opportunity, human rights assessment, local communities, public policy, product portfolio, audit, active ownership, marketing and labeling, customer privacy and socioeconomic compliance.

The index below includes GRI indicators that are relevant to our business. Unless otherwise noted, all data and descriptions apply to our entire Firm and are as of or for the year ended December 31, 2022.

#### Source Key

2022 Form 10-K	2022 ESG Report
2022 Climate Report	Human Rights Statement
Code of Conduct	Modern Slavery Act Statement
Code of Ethics for Finance Professionals	2023 Proxy Statement
Corporate Governance Principles	weblinks
Environmental Data	

Indicator	Disclosure Title	Source	Indicator	Disclosure Title	Source
<b>GRI 2: GENERAL DISCLOSURES (2021)</b>					
2-1	Organizational details	2022 Form 10-K (p. 1, 33) 2022 ESG Report (p. 3-4) Who We Are	2-10	Nomination and selection of the highest governance body	2023 Proxy Statement (p. 20-21)
2-2	Entities included in the organization's sustainability reporting	2022 Form 10-K (p. 1) 2022 ESG Report (p. 3-4)	2-11	Chair of the highest governance body	2023 Proxy Statement (p. 3, 5, 22-23)
2-3	Reporting period, frequency and contact point	2022 ESG Report (p. 4)  Note: Reporting frequency is annually, and aligns to the Firm's financial reporting period.  Contact points: Sustainability Investor Relations	2-12	Role of the highest governance body in overseeing the management of impacts	2022 Form 10-K (p. 81-84) 2022 ESG Report (p. 51) 2023 Proxy Statement (p. 28-31)
2-4	Restatements of information	2022 ESG Report (p. 8, footnote 1 D)	2-13	Delegation of responsibility for managing impacts	2022 ESG Report (p. 14-16, 40-42, 51-52, 56)
2-5	External assurance	Note: We did not seek external assurance for the contents of this report.	2-14	Role of the highest governance body in sustainability reporting	Note: Our Corporate Sustainability team, which is led by the Global Head of Sustainability who reports to the Global Head of Corporate Responsibility, oversees the development of our sustainability reporting.
2-6	Activities, value chain, and other business relationships	2022 ESG Report (p. 3, 25-27, 33-37) 2022 Form 10-K (p. 33, 44, 61-60) Suppliers Who We Are  Note: JP Morgan Chase does business with over 20,000 suppliers globally across a wide range of production categories. Our third party vendor spend is spread across companies such as real estate, professional services, technology, marketing, document production, printing, shipping and travel, among others.	2-15	Conflicts of interest	Code of Conduct Corporate Governance Principles 2023 Proxy Statement (p. 13-18, 34-35)
2-7	Employees	2022 ESG Report (p. 39) 2022 Form 10-K (p. 2)	2-16	Communication of critical concerns	Corporate Governance Principles
2-9	Governance structure and composition	Corporate Governance Principles 2022 ESG Report (p. 51) 2023 Proxy Statement (p. 5, 10, 12-19, 24-26)	2-17	Collective knowledge of the highest governance body	2023 Proxy Statement (p. 27)
			2-18	Evaluation of the performance of the highest governance body	2023 Proxy Statement (p. 27)
			2-19	Remuneration policies	2023 Proxy Statement (p. 32-80)
			2-20	Process to determine remuneration	2023 Proxy Statement (p. 32-80)
			2-21	Annual total compensation ratio	2023 Proxy Statement (p. 78)
			2-22	Statement on sustainable development strategy	2022 ESG Report (p. 2)

**\*Page 63 of JP Morgan's 2022 Environmental Social Governance Report**  
<https://www.jpmorganchase.com/content/dam/jpmc/jpmorgan-chase-and-co/documents/jpmc-esg-report-2022.pdf>

## Appendix 2 - Extent of Assurance – Data Collection and Coding Process

### Measure #1 – Metrics Assured

*Number of metrics assured/Total number of metrics*

**Data Collection:** Data for Measure #1 was sourced from the 2023 ESG/sustainability reports of five large Canadian banks: TD, BMO, RBC, Scotiabank, and CIBC.

**Metric Defined:** For the purpose of this paper, a metric must be a current period result that is contained in full tabular format. The term metrics can be used interchangeably with sustainability metrics.

#### Working Rules for Data Collection:

- **Metrics must be contained in full tabular format**, see for example Appendix 2a
  - Appendix 2a would be counted as two separate metrics.
  - Metrics may also commonly be presented as a 'highlight' within the report, in a graph, or within the narrative. These metrics will not be counted in either the number of metrics assured or the total number of metrics. See Appendix 2b for common examples of metrics that will not be counted.
  - Commonly, these tables will include goals or targets, however it is not necessary for the table to include a goal/target to qualify it as a table.
- **Goals or targets are not a counted as a metric.** A metric must be a result.
- **Metrics must be presented as the most recent year's results** (i.e. 2023) to be counted.
  - Cumulative metrics that include the current year will be counted as a metric.
- **Results do not have to be a numerical number to be considered a metric** (i.e. 4/5 stars; results being 'met').
- **If multiple metrics that make up a total are presented, each will be counted as a separate metric**, see for example Appendix 2c.

- **Duplicate metrics** (i.e. identical metrics included in separate areas of the report) **will only be included once.**
  - Duplicate metrics are common in introduction sections and appendices.
  - The assurance report will be utilized to check for duplicate metrics.
    - i.e. Count the number of metrics assured in the assurance report to confirm the total collected by counting the assured metrics in the ESG report.
- **Blank or dashes are included as metrics if it is clear they represent a zero. Blanks or dashes are not included as metrics if it is clear they signify a metric that is not being reported in the current period.**
- **Assured metrics will be counted by identifying metrics accompanied by a symbol** the company uses in their reporting to depict to the reader which metrics have received assurance by a third-party, see for example Appendix 2d.

Any non-duplicate metric accompanied by a symbol indicating assurance will be included regardless of if the company has multiple assurance providers or assurance reports.

### **Measure #2 - Subject Major Categorization**

*Number of subject matter metrics assured/Total number of subject matter metrics*

**Data Collection:** Data for Measure #2 was sourced from the 2023 ESG/sustainability reports of five large Canadian banks: TD, BMO, RBC, Scotiabank, and CIBC.

**Subject Matter Categories:** Subject matter categories include environmental (E), social (S), governance (G), and sustainable finance (SF).

- Environmental (E) metrics are focused on environmental and climate change mitigation activities.
- Social (S) metrics are focused on employee equity, diversity and inclusion, and impacts on the broader community.
- Governance (G) metrics are focused on the bank's governance structure, activities, and activities of the board.
- Sustainable Finance (SF) metrics are specifically focused on the environmental, social, and/or governance impact of a bank's lending and investment activities. Unlike traditional ESG metrics that pertain to a bank's internal operations, sustainable finance metrics specifically target the bank's more indirect financing and lending activities, which often may involve more than one ESG category.

### **Working Rules for Data Collection:**

- **The categorization of the metric is based on how the company reports it** (i.e. does it fall under the E, S, G, or SF area of their report?). This is commonly identified through section headings within the report, see for example appendix 2e.
- If it is unclear how the company is categorizing the metric based on their reporting, we will refer to how the metric was categorized by TD in their 2023 Sustainability Report.

If it is unclear how the company is categorizing the metric based on their reporting and a similar metric was not included in the TD 2023 Sustainability Report, professional judgement will be exercised to categorize the metric using conventional definitions of the subject matter categories.

**Measure #3 – Pages Assured**

*Number of pages with assurance/Total number of pages*

**Data Collection:** Data for Measure #3 was sourced from the sustainability reports of the 13 banks with partial assurance that used symbols to indicate which metrics were assured within a stand alone sustainability report.

**Page with Assurance Defined:** If a page includes at least one assured metric that is identified using a symbol, it will be counted as a ‘page with assurance.’

**Working Rules for Data Collection**

- If a page includes at least one assured metric that is identified using a symbol, it will be counted as a ‘page with assurance.’
- If only duplicate metrics appear on a page, and those metrics are assured, that page will still count as an assured page
- If a page includes only a prior year metric, it will be counted as a page with assurance.
- If a page contains only a metric that is assured but would not be counted as a metric as defined for this project (i.e. in full tabular format), it will still be counted as a page with assurance.
- All pages within the ESG/sustainability report will be counted (i.e. including the title page, table of contents), with the exception of the assurance report. The assurance report if included within the ESG report, will be excluded from the total number of pages count.

This is to remove any effects on the measure due to the company’s decision to include the assurance report directly in the report or rather provide a link to the assurance report.

**Appendix 2a: Table Format Used for Collection of Measures**

	Goal	FY22 Result	FY23 Result	Status
<b>Governance</b>				
Remain committed to sound corporate governance.				
Women on the Board of Directors <sup>4</sup>	At least 30% - 40% of the Board of Directors	44%	44%	Met
Independent Directors	Substantial majority	94%	94%	Met
Directors that voluntarily self-identified as a visible minority, an Indigenous person, 2SLGBTQ+, or a person with a disability <sup>5</sup>	n/a	44%	56%	
Eligible employees who completed the Code of Conduct and Ethics training <sup>6</sup>	n/a	100%	100%	
Legendary Experience Index (LEI) - TD Composite Score <sup>11</sup>	70.76	70.69	73.23	Met
<b>Sustainable Finance</b>				
Help our clients further their social and environmental goals, and support a more sustainable future for local communities, while supporting progress toward the Bank’s broader sustainability strategy.				
TD’s support of eligible environmental, decarbonization and social activities through lending, financing, underwriting, advisory services, insurance and the Bank’s own investments <sup>8</sup>	\$500 billion by 2030	—	\$69.5 billion	On track

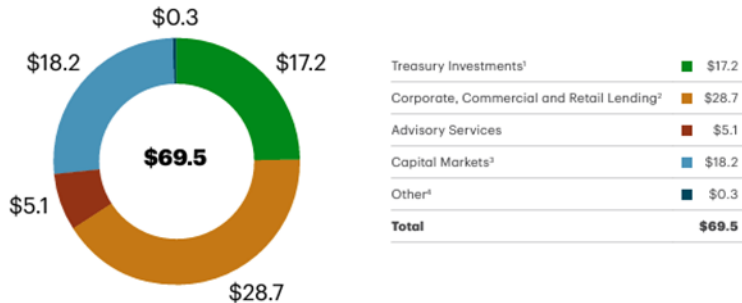
**Engaging Our Employees**

Progress on Goal				
Goal	2024 Target <sup>1</sup>	2023 Target	Progress	2023 Result
Deliver Legendary Customer Experience - Legendary Experience Index (TD Composite Score) <sup>2</sup>	72.61	70.76	Met	73.23

## Appendix 2b: Other Formats Measures May be Presented In In a graph:

Progress toward our \$500 billion Sustainable & Decarbonization Finance Target

2023 Business Activities (in billions)



## In a performance highlight:

### Performance Highlights

**56%**

of the Board voluntarily self-identified as a visible minority, an Indigenous person, 2SLGBTQ+ or a person with a disability<sup>1</sup>

**100%**

of eligible employees completed the Code of Conduct and Ethics training<sup>2</sup>

## In written narrative:

### Gender Pay Ratio and Minority Pay Ratio

Since 2018, the Bank has worked with a third-party provider on an annual basis to complete a detailed statistical analysis of compensation to assess potential differences based on gender and ethnicity. These reviews are used to actively monitor our compensation outcomes and make adjustments where appropriate for consistency and fairness. After adjusting for factors such as job level, geography and role, the 2023 review (data is as at June 1, 2023), which included over 95,000 employees globally, found that for both base salary and total compensation:

- Women globally earned more than 99 cents for every dollar earned by men.
- Visible minorities<sup>7</sup> in Canada earned more than 99 cents for every dollar earned by non-visible minorities.
- Minorities<sup>8</sup> in the U.S. earned one dollar for every dollar earned by non-minorities.





## Appendix 2c: Subtotals and Totals

Scope 1 & 2 by country (location based) (tonnes CO <sub>2</sub> e) <sup>5</sup>	2023	2022	2021
<b>Canada</b>			
Scope 1	25,280	27,870	24,936
Scope 2 (location-based)	26,561	29,086	28,876
<b>Total Canada</b>	✓ 51,840	✓ 56,955	✓ 53,811
<b>U.S.</b>			
Scope 1	14,807	15,636	15,642
Scope 2 (location-based)	49,335	49,538	51,375
<b>Total U.S.</b>	✓ 64,142	✓ 65,174	✓ 67,017
<b>International<sup>4</sup></b>			
Scope 1	260	201	269
Scope 2 (location-based)	1,075	992	907
<b>Total International</b>	✓ 1,335	✓ 1,193	✓ 1,177
<b>Total Scope 1 &amp; 2 (location-based)</b>	✓ 117,317	✓ 123,322	✓ 122,005

Note: Both the totals and subtotals will be counted as separate measures

## Appendix 2d: Assurance Symbols

### Symbol Key

-  Supporting content/links
-  Facts and figures for which EY provided a limited level of assurance
-  Facts and figures for which LBG assessed our data and calculated our corporate giving based on their methodology
-  Analyst Corner: Links to additional policies and references

## Appendix 2e: Subject Matter Categorization Based on Headings