

The Association of Accountants and Financial Professionals in Business



Sustainability CFO: The CFO of the Future?

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### Introduction

### "I would argue that the CFO is at the centre of a change that is happening within business. Corporate responsibility is no longer the philanthropic side-line that is a million miles away from the core business; it is now an essential part of the CFO's toolkit."

Gregor Alexander, CFO, SSE<sup>1</sup>

The value of an organization far exceeds what financial statements show. Eighty percent of the valuation of a company actually depends on the worth of its intangible assets.<sup>2</sup> A 2012 report found that nonfinancial information and integrated reporting (commonly understood as the merger of financial and nonfinancial reporting) was rated the No. 1 driver expected to have the greatest impact on the accountancy profession.<sup>3</sup>

Historically, accountants have struggled to account for and systematically integrate nonfinancial value into financial reports. That's now changing, as an increasing number of companies have begun to include the monitoring of nonfinancial performance in their strategic reviews.<sup>4</sup> In line with the evolution of the profession toward a better inclusion of sustainability into accounting practices, a new job is now appearing: what we have labelled "the sustainability CFO."<sup>5</sup> A CFO is the senior executive responsible for managing the financial strategic decisions of a company, such as the company's investments, capital structure, and financial planning. The sustainability CFO is a new position within a company, separate from the existing CFO position. The sustainability CFO is exclusively responsible for the nonfinancial performance of the company—also referred to as sustainability performance. Sustainability encompasses a broad range of themes, such as managing carbon footprints, assessing social impact, and participating in the creation of nonfinancial reporting standards.

<sup>&</sup>lt;sup>1</sup> Gregor Alexander, "The CFO's Dilemma," Accounting for Sustainability, July 12, 2017, www.accountingforsustainability. org/en/knowledge-hub/blogs/the-cfos-dilemma.html.

<sup>&</sup>lt;sup>2</sup> T. David Colgren, "Expanding the Accounting Ecosystem, *Strategic Finance*, February 2017, pp. 62-63, http:// sfmagazine.com/post-entry/february-2017-expanding-the-accounting-ecosystem/.

<sup>&</sup>lt;sup>3</sup>IMA<sup>®</sup> (Institute of Management Accountants)/ACCA, "100 Drivers of change for the global accountancy profession," September 2012, www.imanet.org/insights-and-trends/the-future-of-management-accounting/100-drivers-of-change-forthe-global-accountancy-profession?ssopc=1.

<sup>&</sup>lt;sup>4</sup>See Task Force on Sustainable Development and Canadian Institute of Chartered Accountants, "Environmental Stewardship: Management Accountability and the Role of Chartered Accountants," 1993; FEE, "Environmental Accounting, Reporting and Auditing: Survey of Current Activities and Developments within the Accountancy Profession," 1995; Chartered Institute of Management Accountants, "Environmental Management: The Role of the Management Accountant," 1997; Institute of Chartered Accountants in England and Wales, "Sustainability: The Role of Accountants," 2004, www.icaew.com/-/media/corporate/files/technical/sustainability/sustainability-the-role-of-accountants-2004. ashx; International Federation of Accountants, "Professional Accountants in Business—At the Heart of Sustainability?" 2006, www.ifac.org/publications-resources/professional-accountants-business-heart-sustainability; Chartered Institute of Management Accountants, "Sustainability and the role of the management accountant," 2011, www.cimaglobal.com/ Documents/Thought\_leadership\_docs/Sustainability%20and%20Climate%20Change/Management-control\_NZICA. pdf; IMA, "From Share Value to Shared Value: Exploring the Role of Accountants in Developing Integrated Reporting in Practice," 2016, www.imanet.org/insights-and-trends/external-reporting-and-disclosure-management/share-value-toshared-value?ssopc=1.

<sup>&</sup>lt;sup>5</sup>Other titles used to describe this role include "nature CFO," "director of sustainability accounting," or "finance director for sustainability."



Sustainability CFOs remain rare, but the creation of this new position is of particular interest for the profession. One can wonder whether this emergence is a signal of profound change.

We interviewed a number of sustainability CFOs, sustainability accountants, and accounting professionals to explore the specificities of this new position and understand who sustainability CFOs are, what they do, the main challenges they face, and what the future could hold for both sustainability CFOs and CFOs alike.

# Who Are Sustainability CFOs?

The scope of accounting has never ceased to expand over the past 30 years. As the environment and organizations have become more complex, the number of items to measure and report on has exploded. The inclusion of sustainability into accounting has been supported by the accounting profession itself through publications, research grants, awards such as Bacardi's Efficiency Index Method for sustainability performance measurement, and case studies, for example, CPA Canada's case studies on climate change and the Finance of the Future Awards Case Studies.<sup>6</sup>

Aligned with this development, a growing number of professional accountants see themselves as particularly well-equipped and positioned to manage the sustainability aspects of their organization. As one of our interviewees said, "The training and everything that a [Certified Public Accountant (CPA)] has makes them very suitable to do other things." These accountants believe that sustainability should be part of their accounting mandate, and some of them have even decided to become sustainability CFOs.

The core mission of sustainability CFOs is to monitor and report on how their organization contributes to a sustainable development, i.e., a development that meets the needs of the present without compromising the future generations to meet their own needs.<sup>7</sup> Sustainability CFOs are often linked by a strong line to the chief sustainability officer and a dotted line to the CFO of the company.

Sustainability CFOs are professionally trained accountants, often chartered accountants or CPAs (or the equivalent), who are dedicated to the identification, collection, estimation, analysis, and reporting of physical and monetary information related to nonfinancial topics. Such topics include but are not limited to the measure of environmental footprint, societal impact, stakeholder management, and the protection of biodiversity.

Sustainability CFOs consider themselves to be full members of the accounting profession. They have extensive experience in financial accounting, often through auditing

<sup>&</sup>lt;sup>6</sup> Jon Bartley, Frank Buckless, Y.S. Al Chen, Stephen K. Harvey, Scott Showalter, and Gilroy Zuckerman, "Flexible Budgeting meets Sustainability at Bacardi Limited," *Strategic Finance*, December 2012, pp. 29-34, http://sfmagazine.com/wp-content/uploads/sfarchive/2012/12/Flexible-Budgeting-Meets-Sustainability-at-Bacardi-Limited.pdf; "CPAs enable climate adaptation and resilience," CPA Canada, www.cpacanada.ca/en/business-and-accounting-resources/ other-general-business-topics/sustainability/publications/adapting-to-climate-change-growth-area.

<sup>&</sup>lt;sup>7</sup> "Report of the World Commission on Environment and Development: Our Common Future," 1987, www.undocuments.net/our-common-future.pdf.

experience and management accounting experience within multinationals. Most of the sustainability CFOs we surveyed did not have a sustainability background. But they often reported having a challenge-oriented mind-set that helped them move from financial to sustainability accounting.

There are very few sustainability CFOs at the top level of companies. Most individuals responsible for sustainability accounting are in middle management at their organization, particularly in small and medium companies (see Table 1). Given the lack of data on sustainability CFOs, we have included both top managers and mid-level managers. We refer to them as sustainability CFOs. We have not included accountants and controllers in charge of monitoring and reporting on some dimensions of nonfinancial performance—who are obviously much more numerous.

Table 1: Active Sustainability CFOs in 2018	
Sustainability CFOs (within multinationals)	5
Sustainability accountants (mid-level)	8
Sustainability accountants (entry-level)	2
* These sustainability CFOs and accountants have been identified through personal networks, snowballing, and a LinkedIn keyword search. The numbers do not include CFOs who have responsibility for sustainability or who have included sustainability into their work. Those included here are different from CFOs who compose the Accounting for Sustainability CFO Leadership Network.	

# Why Do Organizations Name Sustainability CFOs?

Companies that appoint sustainability CFOs want to be at the forefront of the integration of social and environmental concerns into their organizational practices. For example, one of our interviewees said:

[The CEO] thought, "Well, in my power as CEO, I can create a project. I can have a legacy accounting project that will hopefully change the industry of accounting. **It will bring sustainability and accounting together."** (Our emphasis)

These companies typically have a well-established sustainability strategy, a chief sustainability officer, and **a desire to lead the sustainability accounting movement.**<sup>8</sup> The companies have these in place due to the following:

• The search by consumers and employees of environmentally friendly and socially responsible products.<sup>9</sup>

<sup>&</sup>lt;sup>8</sup> According to Christine Bader, the first chief sustainability officer was appointed at Dupont in 2004, and their number has risen dramatically since then ("What Do Chief Sustainability Officers Actually Do?" *The Atlantic*, May 6, 2015, www. theatlantic.com/business/archive/2015/05/what-do-chief-sustainability-officers-actually-do/392315/). Today, many organizations have a senior executive in charge of sustainability, corporate responsibility, or citizenship.

<sup>&</sup>lt;sup>9</sup> Sixty-two percent of Millennials are looking for "meaning" and responsible organizations to work for (Matthew Jenkin, "Millennials want to work for employers committed to values and ethics," *The Guardian*, May 5, 2015, www.theguardian.

com/sustainable-business/2015/may/05/millennials-employment-employers-values-ethics-jobs).

- The constant increase of legal requirements regarding nonfinancial reporting.<sup>10</sup>
- The growth of "socially responsible investors."

According to a 2011 EY survey of global sustainability executives, 65% of respondents stated "their CFO has become involved in sustainability. Respondents cited cost reductions (74%) and managing risks (61%) as two of the three key drivers of their company's sustainability agenda—both of which are of keen interest to CFOs."<sup>11</sup> According to the same survey, "One key reason for growing CFO involvement is the growing scrutiny of company sustainability issues by equity analysts."

The mandate of a sustainability CFO comprises three main missions:

- Bring sustainability into decision-making processes and act as the "business partner" of the organization.
- Become the entry point of the organization for investors, auditors, and other stakeholders who inquire about topics that relate to nonfinancial performance.
- Reinforce the credibility of the sustainability numbers produced by the organization.

The CFO, the finance function, or the chief sustainability officer is usually responsible for these three missions. Organizations we surveyed created the position of sustainability CFO to address the rise of external expectations with regard to nonfinancial reporting. They felt they needed someone in a full-time position to report and monitor their nonfinancial performance. They explicitly searched for a professional accountant to take up the job, as one interviewee said:

We needed someone full-time to consolidate and analyze the numbers, whether they would be tons of  $CO_2$  or liters of water. It also quickly appeared that the person had to be an accountant. It would bring credibility—especially for assurance purpose—and help with investors.

Thanks to their accounting background, sustainability CFOs are expected to bridge the rigor and savoir faire of accounting to the complexity and emergence of sustainability. Such inclusion should help trigger change toward a better inclusion of social and environmental concerns into the day-to-day practices of the organization.

<sup>&</sup>lt;sup>10</sup> In 2016, there were 383 reporting schemes for nonfinancials, of which 65% were mandatory. This represented 71 countries—many of them requiring that companies disclose sustainability information directly within the annual financial reports (KPMG, GRI, UNEP, and the Centre for Corporate Governance in Africa, "Carrots & Sticks: Global trends in sustainability reporting regulation and policy," May 18, 2016, https://home.kpmg.com/xx/en/home/insights/2016/05/ carrots-and-sticks-global-trends-in-sustainability-reporting-regulation-and-policy.html). The most recent largest move in mandatory nonfinancial reporting was the Directive 2014/95/EU on disclosure of nonfinancial and diversity information, requiring organizations with more than 500 employees to write a "non-financial statement" in relation to the following topics: environmental matters, social and employee aspects, respect for human rights, anticorruption and bribery issues. <sup>11</sup> "Six growing trends in corporate sustainability," Ernst & Young, www.ey.com/us/en/services/specialty-services/climate-change-and-sustainability-services/six-growing-trends-in-corporate-sustainability\_trend-2.





The tasks of a sustainability CFO resemble the tasks of a traditional CFO—only applied to nonfinancial issues. There are, however, some specific tasks assigned to the sustainability CFO due to the novelty of sustainability accounting. In particular, sustainability CFOs are highly engaged in the creation of sustainability accounting standards. They also have to communicate both internally and externally the workings and added-value of their job to the organization. This standardization and legitimization process is less of a need for traditional CFOs. The main tasks of a sustainability CFO are as follows.

### Reporting

The first responsibility of sustainability CFOs is the reporting of nonfinancial performance. This includes maintaining an effective key performance indicator (KPI) reporting system and publishing reporting in corporate publications in a professional and adequate manner.

### Conforming to existing nonfinancial standards and regulations

The second responsibility of sustainability CFOs is to keep up-to-date with the development of required nonfinancial reporting systems (for example, carbon emissions) and highlight potential impacts on internal reporting systems and requirements.

### Benchmarking

Sustainability CFOs must maintain an ongoing and up-to-date knowledge of the development of new sustainability accounting standards that are published and by whom they are implemented. Sustainability CFOs also have to benchmark their organization's performance and measurement tools and standards against peer companies. Since there are no mandatory standards for sustainability accounting, this comparison is essential to ensure that the organization's sustainability accounting practices are aligned with globally accepted best practices.

### **Performance measurement**

Sustainability CFOs are responsible for developing, measuring, and analyzing KPIs with respect to the environmental and social impacts of their company. This includes monitoring the collection of data per country and administering internal and external audits. Sustainability CFOs are expected to flag risks arising from KPI data trends and to prepare the quarterly KPI board report. Finally, they are responsible for driving the incorporation of environmental and social KPIs into relevant decision-making and reporting processes across the organization (for example, capital expenditure decisions). One interviewee provided one example of this task:

The implementation of elements directly linked to finance, for example, the "green capital expenditure" procedure, which is the implementation of a procedure that allowed us to invest but at the same time reduce CO<sub>2</sub> emissions.

#### Putting systems and controls in place

Several organizations have started developing specific internal monitoring systems for environmental and social performance. Sustainability CFOs are expected to lead the design and implementation of any IT projects relating to nonfinancial data and any business intelligence reporting projects that will automate KPI output. According to one interviewee:

Once you worked on the methodology, there is the challenge to implement it in a new information system. One thing is method; the other is the information system implementation, which is a huge challenge, too.

#### **Business partnering/education**

Sustainability CFOs assist functional departments with the analyses of functional nonfinancial KPIs. Not everyone inside the organization is convinced yet of the need for nonfinancial accounting or the need for a sustainability CFO. Sustainability CFOs, therefore, have a role to play in educating and explaining the benefits of sustainability accounting. They judge their ability to convince internal and external stakeholders to be decisive for the success of both the project and the position. As one interviewee explained:

Sustainability CFO: My job is to help senior management make better financial decisions. That is what I strive to do when I wake up in the morning. Researcher: So, that would be?

Sustainability CFO: It would be getting involved in projects; it would be getting involved in providing supporting evidence; it would be getting involved in providing thought leadership; it would be involved in getting evidence to substantiate arguments or points of view.

### Inventing the accounting metrics of tomorrow

Sustainability CFOs work on "emerging" accounting standards (for example, impact assessment), older ones such as the Global Reporting Initiative, and others that are still in development, such as the social capital protocol. Some organizations also build their own tools, such as Kering's Environmental Profit and Loss, the Crown Estate's Total Contribution, and Danone's consolidation of product carbon accounting. As one interviewee explained:

Today, the profession of sustainability CFO is marked by the fact that on the one hand you have to conform to certain existing standards, and you have to report, etc., but at the same time you have a large role to play in inventing the "right" KPIs, something that in finance you do not need to invent because they already exist.

#### Lobby and representation

Sustainability CFOs must be subject matter experts on nonfinancial accounting in different stakeholders' forums for their organizations. They promote their practices and role, as one interviewee said:



EXTERNAL REPORTING AND DISCLOSURE MANAGEMENT

If you truly believe in it, you can advocate in forums, nationally, internationally, interprofessionally, or interindustry, for a particular industry, etc. You can say: "We found this solution, and it is beneficial for this solution to be the solution applied by everyone in our industry, so we do not have to change things in five years in our own accounts, the day it becomes mandatory." In doing so, you can advocate or influence organizations that are working on standards.

### Linking to "traditional" finance

Sustainability CFOs have some impact on traditional financial statements and must consequently work hand in hand with traditional CFOs. For instance, they provide CFOs with  $CO_2$  offsets, information on environmental taxes, or provisions that need to be recorded. According to one interviewee:

Until now the only figures that were interesting in a company were financial figures. That is why the "numbers" expert is called a CFO. But in practice, what I do is applying mathematics, consolidation, management controls to prepare data for decision making. It is the most interesting thing. It is nearly the same as what someone who works in finance does.

## What Challenges Do Sustainability CFOs Face?

The sustainability CFOs we interviewed all concurred that their new position involved a high level of uncertainty and risk. Sustainability accounting is a novel practice that requires an innovative mind-set and critical vision.<sup>12</sup> Sustainability CFOs are still new in the function, and the main challenges they face are therefore mainly linked to the difficulties to establish their position. Legitimizing and measuring but also becoming a sustainability accountant are by far today's main concerns.

### **Choosing standards**

Sustainability metrics have not yet been incorporated into the public accounting standards (for example, International Financial Reporting Standards or U.S. Generally Accepted Accounting Principles). Despite this absence, mandatory nonfinancial reporting has kept increasing. To address these new demands, sustainability accounting reporting initiatives have burgeoned all over the world to provide companies with standardized reporting metrics, for example, Global Reporting Initiative 2002-2017, Sustainability Accounting Standards Board (SASB), Climate Disclosure Standards Board, International Integrated Reporting Council (IIRC), Greenhouse Gas Protocol, International Organization for Standardization (ISO) standards on life cycle assessment, material flow cost accounting, and water accounting, sustainable brands, Carbon Disclosure

<sup>&</sup>lt;sup>12</sup> On this point, the qualities put forward for sustainability CFOs mirror those identified by the profession for the future of all accountants: "characteristics such as entrepreneurial spirit, curiosity, creativity and strategic thinking skills (will) assume far more significance in the selection of tomorrow's accountants." (IMA/ACCA, 2012)



Project, social life cycle assessment, the Natural Capital Protocol, and so on. Meanwhile, some public bodies have proposed what sustainability accounting should entail.<sup>13</sup> And an increasing number of educators have incorporated sustainability into their accounting curriculum.<sup>14</sup>

Yet numerous competing sustainability standards keep arising, challenging the dominant position of the firstcomers and adding to the complexity of the field. Notwithstanding the large amount of initiatives, some topics, such as biodiversity, are still a very much "unmeasurable" topic for organizations. When faced with such a diversity of voluntary initiatives and the absence of clear indications from the financial accounting bodies, sustainability CFOs can hesitate about the direction they should take. For example, they wonder if they should pick up one reporting system, if they should wait for the financial standards to include sustainability, or if they should create their own metrics.

### Measuring sustainability

Calculating the financial value of sustainability, such as pricing carbon emissions, doesn't necessarily help organizations better manage sustainability issues.<sup>15</sup> Nevertheless, most companies search to assign a financial value to sustainability, for instance, by implementing an environmental profit and loss statement (like Kering).<sup>16</sup> Allocating a financial value to social and environmental issues helps legitimatize sustainability within organizations by demonstrating the costs and benefits associated with the good management of such themes. For smaller organizations, the need for a sustainability accountant arises from having to follow their clients' need to measure across the value chain or the willingness to take the lead in the industry.

Yet assessing the financial value or cost of sustainability is difficult to achieve. Among the main challenges to do such assessment are the lack of metrics, the novelty, and the intangibility of the assets under scrutiny. The increased demand for assurance of nonfinancial statements by auditors and the direct contact between sustainability CFOs and investors also add to the difficulty. This pressure makes it essential that the metrics put forward by the organization are of good quality. Other challenges imply measuring social, human, and intellectual capital, and biodiversity impacts and dependencies, as well as translating the sustainable development goals into organizationally measurable KPIs.<sup>17</sup> These are no small tasks.

<sup>&</sup>lt;sup>13</sup> United Nations, "Environmental Management Accounting Procedures and Principles," 2001, www.un.org/esa/sustdev/ publications/proceduresandprinciples.pdf.

<sup>&</sup>lt;sup>14</sup> Kathy Gibson, "Courses on environmental accounting," Accounting, Auditing and Accountability Journal, 1997, pp. 584-593; Donna Mangion, "Undergraduate Education in Social and Environmental Accounting in Australian Universities," Accounting Education, November 2006, pp. 335-348.

<sup>&</sup>lt;sup>15</sup> Diane-Laure Arjaliès and Tima Bansal, "Beyond Numbers: How Investment Managers Accommodate Societal Issues in Financial Decisions," Ivey Working Paper.

<sup>&</sup>lt;sup>16</sup> The appetite for financialization is explained by several elements: 1) Contingent valuation of pollution that assigned a financial value to oil disasters; 2) Publications of studies pricing externalities—e.g. the cost of a disengaged employee is estimated to be EUR12,600 per year (Mozart Consulting, IBET Survey, 2016); 3) Financialization of common goods by markets such as the EU Emissions Trading Scheme and offset markets for carbon; 4) Development of financial approaches to sustainability by professional accountants (i.e. multiple capitals model (IIRC), "true value" model (KPMG), "long-term value" (Ernst and Young) or the Integrated P&L by True Price).

<sup>&</sup>lt;sup>17</sup> The sustainable development goals (SDGs) are the goals set by the United Nations in its 2030 Agenda for Sustainable Development in 2015. They comprise 17 sustainable goals and 169 targets.

#### Becoming sustainability accountants

Those in the accounting profession increasingly agree on the fact that accountants can play a key role in transforming organizations toward sustainable development. All our interviewees, though, pointed to the fact that they lack knowledge and training on sustainability topics. Accountants eager to improve their skills need to mobilize personal resources (for example, through the Accounting for Sustainability CFO Leadership Network) or learn as they go. Aligned with this finding, Marie-Andrée Caron and Anne Fortin found that accountants are mostly trained on sustainability within their organization (by training and informal discussions).<sup>18</sup>

Although training on sustainability accounting at universities is increasing, it remains scarce and absent from most professional examinations and continuous education. In addition, accountants who are willing to include sustainability issues into their mandate are often asked to do it in addition to their primary job. For most companies, sustainability is "exceeding the requirements of their profession" and is the "result of a discretionary personal choice."<sup>19</sup> Consequently, not only do sustainability CFOs lack resources, they also tend to feel marginalized—struggling to be recognized by their peers as "true accountants."

## Are Sustainability CFOs Here to Stay?

The appearance of sustainability CFOs seems to indicate a growing need for professionalizing the measurement and management of companies' nonfinancial performance. As the expectations for sustainability rise in society, the trend will probably remain steady and the number of management accountants tasked with sustainability accounting will continue to increase.<sup>20</sup> The immensity of the task makes it very unlikely that traditional CFOs will soon directly manage the social and environmental performance of their organizations. Sustainability CFOs are probably a necessary intermediate for appropriating such an extensive and evolving landscape. One day, CFOs will probably become chief value officers as sustainability CFOs expand their responsibilities (see Figure 1).<sup>21</sup> Today, however, there still seems to be a long way to go.

The question then becomes: "Can and should accountants save the planet?"<sup>22</sup> Sustainability CFOs think they could help if given the means and the opportunities. Accountants have the skills to add significant value to the C-suite and also have the capacity to advance the sustainability agenda.<sup>23</sup> Today, however, most initiatives toward the inclusion of sustainability

<sup>&</sup>lt;sup>18</sup> Marie-Andrée Caron and Anne Fortin, "Accountants' construction of CSR competencies and commitment," *Sustainability Accounting, Management and Policy Journal*, 2014, pp. 172-196.

<sup>&</sup>lt;sup>19</sup> Ibid.

<sup>&</sup>lt;sup>20</sup> Angele Renaud, "The controller's role in environmental management control," *Comptabilité-Contrôle-Audit*, February 2014, pp. 67-94.

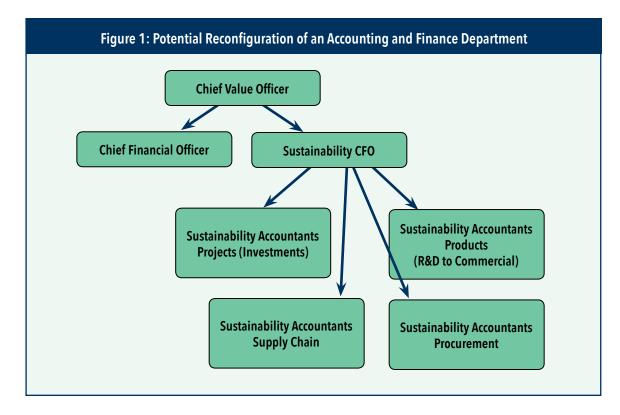
<sup>&</sup>lt;sup>21</sup> Mervyn King and Jill Atkins, The Chief Value Officer–Accountants Can Save the Planet, Routledge, 2016.

<sup>&</sup>lt;sup>22</sup> Jane Gleeson-White, Six Capitals: The Revolution Capitalism Has to Have—or Can Accountants Save the Planet? W. W. Norton & Company, 2015.

<sup>&</sup>lt;sup>23</sup> AICPA, "Accounting for the Sustainability Cycle: How the Accounting Profession Can Add Value to Sustainability-Oriented Activities," October 2013.



accounting into the CFO mandate emerge from outside the traditional professional bodies (for example, Accounting for Sustainability CFO Leadership Network, Finance for the Future Awards, SASB credentials for sustainability accounting). If these initiatives are successful, they might pave the way for partnerships with national and global professional bodies—but this would require a change of competency map and strategic priorities of the profession.



# Appendix

Table of Interviews	
Sustainability CFO	France
Sustainability CFO	United Kingdom
Sustainability Accountant	United States
Chartered Accountancy Association	Canada
Chartered Accountancy Association	Canada
Chartered Accountancy Association	Canada

# Resources

### **CFOs and Sustainability**

"The CFO's Role in Sustainability is on the Rise," Ernst & Young, www.ey.com/US/en/Services/ Specialty-Services/Climate-Change-and-Sustainability-Services/Six-growing-trends-in-corporatesustainability\_Trend-2.

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Jennifer Anderson, "Talking Sustainability with Your CFO Shouldn't Be Scary," TriplePundit, October 31, 2014, www.triplepundit.com/2014/10/talking-sustainability-with-your-cfo-shouldntbe-scary/.

### Where to train?

SASB's FSA Credential: https://fsa.sasb.org/credential/

GHG Management Institute: http://ghginstitute.org/product/201-basics-organizational-ghg-accounting/

The IIRC competence matrix: http://integratedreporting.org/wp-content/uploads/2016/04/IR-Competence-Framework-Section-One.pdf

### Where are examples of sustainability accounting in practice?

CPA Canada case studies on climate change: www.cpacanada.ca/en/business-and-accountingresources/other-general-business-topics/sustainability/publications/adapting-to-climate-changegrowth-area

Finance for the Future case studies: www.financeforthefuture.co.uk/previous-winners

The Sustainable Brands New Metrics Channel: www.sustainablebrands.com/news\_and\_views/ new\_metrics

The IIRC examples database: http://examples.integratedreporting.org/getting\_started

### What to read?

### Professional bodies' reports on the accounting profession and sustainability

ICAEW, "Sustainability: the role of accountants," 2004, www.icaew.com/-/media/corporate/files/ technical/sustainability/sustainability-the-role-of-accountants-2004.ashx?la=en. IFAC, "Professional Accountants in Business—At the Heart of Sustainability?" 2006, www.ifac. org/publications-resources/professional-accountants-business-heart-sustainability. CIMA, "Sustainability and the role of the management accountants," 2011, www.cimaglobal. com/Documents/Thought\_leadership\_docs/Sustainability%20and%20Climate%20Change/ Management-control\_NZICA.pdf.

AICPA, Accounting for the Sustainability Cycle: How the Accounting Profession Can Add Value to Sustainability-Oriented Activities," 2013, www.aicpa.org/InterestAreas/FRC/ AssuranceAdvisoryServices/DownloadableDocuments/Sustainability/Whitepaper\_Accounting\_ for\_the\_Sustainability\_Cycle.pdf.

IMA/ACCA, From Share Value to Shared Value: Exploring the Role of Accountants in Developing Integrated Reporting in Practice, 2016, www.accaglobal.com/content/dam/ACCA\_Global/ Technical/integrate/acca-ima-report-from-share-value-to-shared-value.pdf.

Accounting for Sustainability, A4S Essential guides series, 2015-2017,

www.accountingforsustainability.org/en/knowledge-hub/guides/About-A4S-Essential-Guide-Series.html.



### Books

Jan Bebbington, Jeffrey Unerman, and Brendan O'Dwyer, *Sustainability Accounting and Accountability*, Routledge, 2014.

Anthony G. Hopwood, Jeffrey Unerman, and Jessica Fries, *Accounting for Sustainability: Practical Insights*, Routledge, 2010.

Robert Gray and Jan Bebbington, *Accounting for the Environment*, Second Edition, Sage Publishing, 2001.

Stefan Schaltegger and Roger Burritt, *Contemporary Environmental Accounting: Issues, Concepts and Practices*, Routledge, 2000.

IFAC, International Guidance Document: Environmental Management Accounting, 2005, www.ifac.org/publications-resources/international-guidance-document-environmental-management-accounting.

### Sustainability accounting standards

### **Global performance**

The IIRC Framework, 2013, https://integratedreporting.org/wp-content/uploads/2013/12/13-12-08-THE-INTERNATIONAL-IR-FRAMEWORK-2-1.pdf The SASB standards: www.sasb.org/standards/download/ The GRI Standards, 2016, www.globalreporting.org/standards/

### Natural capital

Climate Disclosure Standards Board (CDSB), "CDSB Framework for Reporting Environmental Information & Natural Capital," June 2015,

www.cdsb.net/sites/cdsbnet/files/cdsb\_framework\_for\_reporting\_environmental\_information\_ natural\_capital.pdf.

ISO, "ISO 14040:2006 Environmental Management—Life Cycle Assessment—Principles and Framework," July 2010, www.iso.org/iso/catalogue\_detail?csnumber=37456.

ISO, "ISO 14044:2006 Environmental Management—Life Cycle Assessment—Requirements and Guidelines," July 2006, www.iso.org/iso/catalogue\_detail?csnumber=38498. The natural capital protocol: http://naturalcapitalcoalition.org/protocol/.

### Waste accounting

Environmental management—Material flow cost accounting—General framework, ISO 14051, 2011, www.iso.org/standard/50986.html.

### Water accounting

Environmental management—Water footprint—Principles, requirements and guidelines, ISO 14046, 2014, www.iso.org/standard/43263.html. The Water Footprint Network Standard: http://waterfootprint.org/en/standard/.



### GHG-specific accountings

The Greenhouse Gas Protocol, "A Corporate Accounting and Reporting Standard," March 2004, www.ghgprotocol.org/sites/default/files/ghgp/standards/ghg-protocol-revised.pdf.

The Greenhouse Gas Protocol, "The GHG Protocol for Project Accounting," November 2005, www.ghgprotocol.org/files/ghgp/ghg\_project\_accounting.pdf.

The Greenhouse Gas Protocol, "Product Life Cycle Accounting and Reporting Standard," September 2011, www.ghgprotocol.org/sites/default/files/ghgp/standards/Product-Life-Cycle-Accounting-Reporting-Standard\_041613.pdf.

The Greenhouse Gas Protocol, "Corporate Value Chain (Scope 3) Accounting and Reporting Standard," September 2011, www.ghgprotocol.org/sites/default/files/ghgp/standards/ Corporate-Value-Chain-Accounting-Reporting-Standard\_041613\_2.pdf.

ISO, "ISO 14064-1:2006 Greenhouse Gases—Part 1: Specification with Guidance at the Organization Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals," March 2006, www.iso.org/iso/catalogue\_detail?csnumber=38381.

ISO, "ISO 14064-2:2006 Greenhouse Gases—Part 2: Specification with Guidance at the Project Level for Quantification, Monitoring and Reporting of Greenhouse Gas Emission Reductions or Removal Enhancements," March 2006, www.iso.org/iso/catalogue\_detail?csnumber=38382. ISO, "ISO 14064-3:2006 Greenhouse Gases—Part 3: Specification with Guidance for the Validation and Verification of Greenhouse Gas Assertions," March 2006, www.iso.org/iso/catalogue\_detail?csnumber=38700.

British Standards Institution (BSI), "PAS 2050:2011 Specification for the Assessment of the Life Cycle Greenhouse Gas Emissions of Goods and Services," 2011, http://shop.bsigroup.com/en/forms/PASs/PAS-2050.

Climate Disclosure Standards Board (CDSB), "Climate Change Reporting Framework," October 2012, www.cdsb.net/sites/cdsbnet/files/cdsb\_climate\_change\_reporting\_framework\_ edition\_1.1.pdf.

### Social capital

A4S, 2017, www.accountingforsustainability.org/en/knowledge-hub/guides/social-and-human-capital.html.

The social capital protocol: www.wbcsd.org/Clusters/Social-Impact/Social-Capital-Protocol/ Resources/Social-Capital-Protocol.

Frank Vanclay, Ana Maria Esteves, Ilse Aucamp, and Daniel M. Franks, "Social Impact Assessment: Guidance for Assessing and Managing the Social Impacts of Projects," April 2015, International Association for Impact Assessment (IAIA), www.iaia.org/pdf/IAIA%202015%20 Social%20Impact%20Assessment%20guidance%20document.pdf.

The SROI Network, "A Guide to Social Return on Investment," January 2012, The Social Value UK, http://socialvalueuk.org/publications/publications/doc\_download/241-a-guide-to-social-



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Roundtable for Products Social Metrics: The Handbook for Product Social Impact Assessment: http://product-social-impact-assessment.com/wp-content/uploads/2014/07/Handbook-for-Product-Social-Impact-Assessment-3.0.pdf.

United Nations Environment Programme, "The Guidelines for Social Life Cycle Assessment of Products," 2009, www.oeko.de/oekodoc/908/2009-023-en.pdf.

### Intellectual capital

WICI, "WICI KPI," www.wici-global.com/kpis.