

# Sustainable Business and ESG Actions for Bank CIOs

Published 6 April 2022 - ID G00755438 - 18 min read

By Analyst(s): Alistair Newton, Simon Mingay, David Furlonger

Initiatives: [Financial Services Digital Business Strategy and Innovation](#)

The technology and business requirements to address increasingly complex sustainability and ESG agendas are becoming vital for bank CIOs. Gartner highlights the emerging developments around growth, governance and regulation and operational capabilities that bank CIOs need to know.

## Overview

### Impacts

- **Growth Opportunities Develop:** As sustainability issues increasingly influence how customers select banking providers and consume all forms of products and services, bank CIOs will be required to support growth strategies by enhancing existing technologies and developing new demand-side product and service offerings.
- **Governance and Regulation Become Pervasive:** Rapidly developing governance and regulatory requirements around sustainability will reset many technology decisions, and require new ways of justifying, prioritizing and supporting many technology investments.
- **Operational Capabilities Adapt:** Technology and business leaders will need to collaborate to adapt and adjust supply-side operational and technology capabilities to increase sustainability-focused transparency and efficiency for the enterprise.

### Recommendations

Bank CIOs looking to address sustainable business and ESG challenges as part of digital banking strategy and innovation should:

- Document new potential products and services driven by emerging sustainability-focused business models around green financing, payments, investment services and customer insight.

- Assess your technology preparedness for the new flows of sustainability-related data from internal and external sources that will power growth opportunities and regulatory compliance.
- Engage your executive colleagues responsible for regulatory compliance and ask them for details of short- and medium-term sustainability reporting and accounting requirements that will impact technology investment and decisions.
- Revisit your internal technology and operational capabilities and strategies in light of emerging sustainability-focused accounting and reporting requirements. Increasingly, CIOs will need to account for the sustainability impacts of decisions on the physical location of technology and operations sites, sourcing partners and choices on a range of hardware and software.

## Introduction

Sustainable business and ESG (environmental, social and governance) are emotive subjects, with a wide range of social, political and wider discussions on the topic. Still, they are now significant factors in driving financial needs for end-customers, reshaping business models and adding new stakeholders — including bank staff. This research will not take any side on those debates, but rather enable bank CIOs to understand this topic and take informed actions to address the growth and risk issues.

CIOs reading this note will have different local contexts:

- For CIOs supporting banks early on the journey to digital maturity, with a stronger focus on maximizing asset and process efficiency, the advice and insight may be viewed as directional. It will indicate the broader industry thinking and prepare the CIO for the medium to long term.
- For CIO readers focusing on digital optimization or digital transformation, they will work more closely with the business to enhance, grow and transform it. Based on recent Gartner surveys, it's also likely that many of their executive leaders are already acting on this subject, with those leaders telling us that environmental sustainability is now one of their top ten issues — equal in focus to that of cost management. The advice for these CIOs will prove more actionable in the short to medium term.

CIOs should also recognize sustainability's increasing priority for managing risk across banks. Gartner's 2021 ERM ESG Panel Survey identified the need to mitigate ESG-related risks as primary areas of focus for FSIs. Similarly, 33% of respondents to the 2021 Gartner CEO and Senior Business Executive Survey indicated that climate change mitigation has a significant impact on their business.

## Impacts and Recommendations

This note addresses the broader issue of business sustainability and environment, reflecting the intensity of regulatory changes, the focus of Gartner's client enquiry and the immediate threat level to banks. The social and governance aspects of ESG are still important to the future of banks and should not be ignored. However, the most immediate technology, regulatory, operational and business threats stem from the environmental aspects of sustainability. To address those issues, we view what a CIO needs to know about sustainable business through three areas of impact:

- Sustainability-led growth opportunities
- Governance and regulation drivers
- Operational capabilities

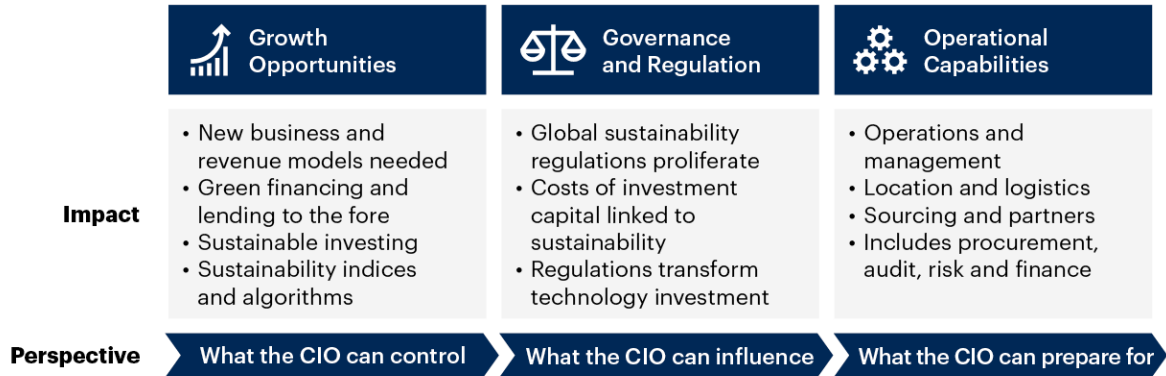
For each impact statement, we also use three lenses to describe what a bank CIO can:

- **Control** where they can directly impact outcomes and decisions.
- **Influence** where their knowledge and expertise can contribute to executive thinking and actions, and where they can input to the materiality of technology in addressing sustainability.
- **Prepare** for where they can neither control nor influence, but can prepare for potential outcomes.

For example, in some areas, such as technology, infrastructure and facilities management strategies, CIOs can have direct control. In others, such as product innovation and technology's use in managing bank and customer sustainability risks, their role will need to be that of an influencer. In others, they can have no direct control or influence, but can prepare their technology and their teams for a range of inevitable outcomes (see Figure 1).

Figure 1: Three Areas of Impact and Three Perspectives for CIO Action

Three Areas of Impact and Three Perspectives for CIO Action



Source: Gartner  
755438\_C

Gartner

Growth Opportunities Develop

As sustainability issues increasingly influence customer decisions on consumption of banking and wider forms of products and services, many CIOs will be called on to help develop and support new demand-side product and service offerings.

Sustainable growth opportunities are one of the pivotal issues that businesses need to address (see [Executive Leadership: Sustainability Primer for 2021](#)). Bank CEOs and senior business leaders tell us that growth remains their major priority. <sup>1</sup> There is strong demand for opportunities that address customer sentiment around sustainability, for both retail and corporate customers (see Note 1). Appropriately adapting product and service portfolios will offer opportunities for banks to grow revenue and deepen customer engagement.

CIO Control:

Accelerate open platform and ecosystem capabilities and governance.

Understanding sustainability impacts in customer supply chains requires banks to develop tools to analyze downstream and upstream sustainability impacts (see [Take Control of Your Digital Acceleration by Focusing on How Value Flows Through Ecosystems](#)). Open banking-led collaboration with sustainability focused fintechs will help deliver this innovation, transparency and insight. API-led integration into back-offices of corporate customers will be needed to help them manage new sustainability-focused reporting requirements.

#### Develop technology to support new sustainable product types.

For example, payment systems to support new information-led debit and credit cards that provide sustainability data on payment transactions. <sup>2</sup> Core systems will need to support green lending, investment and deposit products, where interest rates and fees flex — depending on the sustainability impacts of the asset being financed or invested in.

#### Develop a sustainability index strategy:

Many banks already rely on external ESG rating agencies, such as S&P Global, Bloomberg, MSCI ESG Research, Sustainalytics, FTSE Russel, Institutional Shareholder Services, CDP, Refinitiv, Arabesque and others. <sup>3</sup> These ratings and indexes are focused on managing bank risk in their own portfolios. However, customers will demand help with quantifying and reporting on their own sustainable risks and impacts. Banks are developing customer-facing reporting indexes to address this need, such as carbon calculators to support retail payment products and dashboards to assist corporate customers in running their own businesses. <sup>4</sup> Bank CIOs will need to consider options for the development of stand-alone indexes or options to collaborate for developing shared, industrywide indexes. The market is embryonic, so they will also have a role in continually assessing the viability and reliability of rating agencies and other models.

#### **CIO Influence:**

#### Development of new sustainability-led pricing and risk assessment models.

These models will integrate sustainability criteria, business, social and environmental risks for lending and associated products. Early examples of retail product launches are from Nat West in the United Kingdom <sup>5</sup> and ABN AMRO in the Netherlands, <sup>6</sup> and corporate finance initiatives from Nordea and BBVA. <sup>7</sup> Principles to support sustainability linked lending were laid out globally by the Loan Market Associations for Europe and Asia/Pacific, in collaboration with the Loans Syndication and Trading Association in 2019. <sup>8</sup> Developments from the COP26 meeting in Glasgow will accelerate this focus. CIOs will need to document the feasibility of integrating such new pricing and risk models into existing core platforms.

#### The integration of sustainability-focused assets and liabilities on enterprise balance sheets.

Prepare for the need to measure and report on multiple new sustainability-led types of asset class by auditing existing core banking and financial accounting systems.

#### Technology-led innovation to support sustainable business.

Describe the “art-of-the-possible.” Show business colleagues and other executive leaders how technologies like digital business platform models <sup>9</sup> can adapt existing banking business models (e.g., Rabobank’s CO2 Sequestration platform). <sup>10</sup> Additionally, as you upgrade your bank’s sustainability risk and reporting applications, consider how technology could support productizing internal risk and reporting capabilities for provision to your customers. Think sustainable risk and regulation management “as-a-product.”

#### **CIOs should prepare for:**

##### Threats from green-washing of products, services and operations.

Banks will increasingly be required to “prove” that products and operations comply with certain sustainability compliance criteria. This may drive some enterprises to the margins of greenwashing. CIOs need to prepare for these pressures and strive for clarity on their commitment to avoid such occurrences.

##### Technology solutions beyond core banking.

Existing core banking applications will be unable to manage or account for many of the emerging new sustainability-focused products and asset classes. CIOs need to highlight that existing core systems will need adaptation or augmentation to address these needs.

## Shifts to decentralized finance models support sustainable-led trading.

Decentralized finance models will accelerate the tokenization of many new forms of sustainable assets and liabilities, making them more transparent, fungible and tradeable. Describe the capabilities that you will need to manage, and trade these new forms of assets.

### *Recommendations:*

- Document new potential products and services driven by emerging sustainability-focused business models around green financing, payments, investment services and customer insight.
- Assess your technology preparedness for the new flows of sustainability-related data that will power growth opportunities and regulatory compliance.

## Governance and Regulation Become Pervasive

**Rapidly developing governance and regulatory requirements around sustainability will challenge technology leaders to develop new ways to justify and prioritize their technology investments.**

Government- and industry-led regulations drive significant operational impacts for banks. Often, these simply add cost and become a drag on business innovation. Additionally, technology and technologists can be passive, simply acting to support and deliver against these regulations as they develop. In the area of sustainability and ESG, however, CIOs will need to become more engaged and proactive.

Proposed sustainability regulations and new governance initiatives will have truly significant impacts on existing banking business models and operations. Senior executive leaders in banking are active in this space. CEOs from the majority of the world's Tier 1 banks have committed to developing and launching these initiatives. These regulations will be transformative, as few are truly mature. More will emerge, none are all-encompassing and they will place huge demands on CIOs in terms of new data flows and reporting requirements. So CIOs risk simply absorbing more costs for technology that adds little growth value to the business. They need to understand these impacts and look to influence and differentiate, rather than passively comply.

## CIO Control:

Examine technology and sourcing partners for sustainability reporting transparency.

As reporting requirements like scope 2 of the greenhouse gas protocol emerge, emissions generated by your supply chain will be drawn into standard reporting requirements. Future shifts to scope 3 reporting will bring the need to report on sourcing partners and external providers of infrastructure and software.

## CIO Influence:

As green financing initiatives in the retail and corporate lending and investment space grow:

The asset management industry is already heavily engaged in using external assessment agencies to quantify the sustainability impacts for client investments. CIOs can influence the choice of these external rating and assessment agencies. Product focus will grow to include wider types of investment and lending, with banks needing to quantify, track and report on the sustainability impacts of their lending and investment strategies. CIOs will need to influence business thinking on how that reporting can be delivered effectively.

Technology investments will be increasingly influenced by sustainability impacts:

Start adding sustainability metrics to your own strategic technology plans. Business case justifications and procurement processes will increasingly include significant, sustainability-focused components.

## CIOs should prepare for:

Increased scrutiny from local regulators.



CIOs will already be familiar with stress-testing initiatives to assess their banks' risk exposure and capital adequacy. Now, climate scenario stress testing will assess operational resilience and overall exposure to climate risk. For example, the European Central Bank, <sup>11</sup> the Federal Reserve, <sup>12</sup> the Banco Central do Brazil <sup>13</sup> and the Bank of England <sup>14</sup> have all publicly stated their intention to initiate such stress tests.

#### Fundamental changes in the flows of finance and costs of capital.

Recognize that increasingly sustainability impacts will influence the cost of capital being deployed within the enterprise. Sustainability costs associated with technology investments will need to be measured, recorded and reported — and some technology investments may be rendered uneconomic by these additional costs.

#### Multiple industry and regulatory initiatives are developing, and will have, increasing impacts on day-to-day operations of banks, their underlying business models and the responsibilities and activities of CIOs.

Individual regulations and initiatives will impact different banks in different ways, depending on geographic location, risk appetite, their stance on regulatory compliance, customer base and engagement of executive teams in such initiatives. Those that Gartner deems most worthy of immediate CIO attention would be:

#### **Expansion of regulations like Europe's SFDR — Sustainable Finance Disclosure Regulation: <sup>15</sup>**

- This regulation will require banks to quantify the full extent of sustainability impacts of bank products and services. Designed by the EBA, EIOPA and ESMA to improve disclosure on adverse ESG impacts from investment decisions, it will also require examining the actual sustainability features of individual investment products.

#### **Impact of Glasgow Financial Alliance for Net Zero (GFANZ) <sup>16</sup>**

- Announced at the COP26, the United Nations-backed GFANZ seeks to align the various task forces covering banking, asset management and insurance around targets for net zero finance initiatives. Membership comprises some 450 financial service firms across 45 countries, responsible for managing some \$130 trillion in assets. Members will collectively define transition plans for investment and lending that supports decarbonization strategies, and define net-zero transition plans for individual members themselves. Participating banks will price sustainability costs into their future lending, meaning higher costs and restricted access for investments in non-sustainable assets or projects. Commitment to this initiative from so many Tier 1 bank CEOs means that CIOs should prioritize focus on the technology challenges of managing these new, more restricted flows of capital.

## Initiatives from the TCFD – Task Force on Climate Related Financial Disclosures. <sup>17</sup>

- *“The Financial Stability Board created the Task Force on Climate-related Financial Disclosures (TCFD) to improve and increase reporting of climate-related financial information...The TCFD has developed a framework to help public companies and other organizations more effectively disclose climate-related risks and opportunities through their existing reporting processes.”* Given the focus on risk, CIOs should engage risk management colleagues to discuss the technology role in supporting these new reporting requirements. Shifting the focus from compliance burden to innovation opportunity will also require increased discussion with customer-facing product colleagues.

## Financial accounting implications from the IFRS – International Financial Reporting Standards <sup>18</sup>

- CIOs will need to understand the impacts of setting up the ISSB -- International Sustainability Standards Board – *“The intention is for the ISSB to deliver a comprehensive global baseline of sustainability-related disclosure standards that provide investors and other capital market participants with information about companies’ sustainability-related risks and opportunities to help them make informed decisions.”* Anticipate impacts on cost of capital, amortization rates and other fundamental cost drivers for technology investment. While CIOs will not be leading accounting initiatives within their banks, they need to be aware of likely impacts of such initiatives.

## Partnership for Carbon Accounting Financials – PCAF <sup>19</sup>

- Launched in 2015 by a group of Dutch banks as a response to the Paris Climate Agreement, PCAF to develop and implement “a harmonized approach to assess and disclose the greenhouse gas (GHG) emissions associated with their loans and investments.” The objective is to develop a starting point for science-based reporting to align with the requirements of the Paris Accord. In the intervening years, the membership has grown to 195 banks and insurance companies across the globe. <sup>20</sup>

## Recommendations:

- Engage your executive colleagues responsible for regulatory compliance, and ask them for details of short- and medium-term sustainability reporting and accounting requirements that will impact technology investment and decision.
- Given the convergence of all these regulatory pressures, prepare for restrictions and additional reporting requirements on project finance — the prioritization of technology investments will start being influenced by sustainability-related issues.

## Operational Capabilities Adapt

**Technology and business leaders will need to adapt and adjust supply-side enterprise operational and technology capabilities to increase sustainability-focused transparency and efficiency.**

Bank CIOs are being challenged to help address internal targets and aspirations on becoming more sustainable businesses. They will be expected to launch technology-enabled initiatives aimed at reducing emissions across the enterprise. Equally, given that IT is material to sustainability performance, the CIO will need to put significant focus on the key environmental impact areas associated with IT assets and services.

### CIO Control:

Responsibility for managing and reporting IT impact on enterprise energy and GHG footprint.

CIOs must set targets and put in place a program for baselining and improving the sustainability performance of the bank's IT and digital infrastructure and services. The targets will need to be tightly aligned to the enterprise ambition, and targets and should cover:

- Energy consumption, efficiency and intensity — including data center compute and storage utilization
- E-waste reuse, recycling, component harvesting, reductions in media shredding
- Procurement guidelines compliance, such as procurement of devices meeting standards (e.g., Energystar or EPEAT Silver)

Establish workstreams with procurement that engage all key vendors and service providers. Align ambitions, timelines and opportunities for innovation. Monitor progress to identify vendors and service providers that present risks. Establish formal, prioritized programs to work with executives and business units to manage climate or broader ESG-related opportunities and risks across the product and service portfolios.

If the bank has targets for scope 3 GHG emissions (supply chain), then CIOs will need to do the same.

Scope 3 purchased goods and services will likely represent 50% of IT's overall footprint and the most challenging performance area. Even if the enterprise has not yet set scope 3 targets for purchased goods and services, bank CIOs need to start tackling this early, as it will take time to address effectively.

#### **CIO Influence:**

Much of the new, sustainability-focused product development will be delivered through collaboration with fintech, big tech providers or academic and not-for-profit charities.

CIOs will need to work with their Procurement, Audit, Legal and Financial Accounting colleagues to ensure that appropriate governance and reporting procedures are in place to facilitate this collaboration. Open banking technologies will play a key role in enabling external partnerships and sustainable business innovation, so CIOs should factor this into their ongoing investment in open banking infrastructures and technologies.

#### **CIOs should prepare for:**

Sustainability-focused Centers of Excellence (COE's) will grow in prominence.

Whether you build one or not, CIOs need to recognize the requirement to build knowledge and capabilities in the area of sustainability-focused technology. Technology accelerators and incubators will be adapted to support and develop sustainability-focused fintech partnerships.

## Recommendations:

- Revisit your internal technology and operational capabilities and strategies in the light of emerging sustainability-focused accounting and reporting requirements. Increasingly, CIOs will need to factor in the sustainability impacts of decisions about physical location of technology and operations sites, sourcing partners and choices on a range of hardware and software.
- Prepare to provide greater transparency on the sustainability footprint of your supply chains. Validate the ability of your current and future sourcing partners to provide you with relevant sustainability data.
- Align your technology planning to your Enterprise Sustainability Materiality Assessment. If no such tool framework exists, conduct your own assessment specific to the technology teams under your control. <sup>22</sup>

## Acronym Key and Glossary Terms

Greenwashing	A form of marketing spin that overinflates an organization's environmental or sustainability credentials to create a positive public image. The environmental or sustainability credentials being shown are not backed by any activity or program that has substance or credibility.
--------------	--

## Evidence

<sup>1</sup> 2021 CEO and Senior Business Leaders Survey

<sup>2</sup> Examples include [Doconomy](#), [Svalna](#) and [Cogo](#)

<sup>3</sup> Gartner 2021 ERM ESG Panel Survey

<sup>4</sup> [NatWest Group Joins Forces With Microsoft to Support Businesses](#), NatWest; [BBVA, the World's First Bank to Use Data Analytics to Calculate Companies' Carbon Footprint](#), BBVA.

<sup>5</sup> [Helping you move towards a greener future](#), NatWest.

<sup>6</sup> [Interest rate discount for energy-efficient homes](#), Abn AMRO.

<sup>7</sup> [BBVA and Acerinox finalize the first sustainable loan in the steel industry in Spain](#), BBVA; [Nordea introduces green corporate loans at reduced rates with the European Investment Fund](#), Nordea; [Financing Policy](#), Nordea.

<sup>8</sup> [Sustainability Linked Loan Principles](#), LMA.

<sup>9</sup> [What is a Platform Business Model?](#)

<sup>10</sup> [Rabobank to Announce Initiative to Tackle Global CO2 Challenge While Enhancing Farmers' Businesses](#), Rabobank.

<sup>11</sup> [Occasional Paper Series](#), European Central Bank.

<sup>12</sup> [Building Climate Scenario Analysis on the Foundations of Economic Research](#), The Federal Reserve.

<sup>13</sup> [Brazil's Banks to Incorporate Climate Change Risks Into Stress Tests](#), Reuters.

<sup>14</sup> [Key Elements of the 2021 Biennial Exploratory Scenario: Financial Risks From Climate Change](#), Bank of England.

<sup>15</sup> [Joint Regulatory Technical Standards on ESG Disclosure Standards for Financial Market Participants](#), European Banking Authority.

<sup>16</sup> [Glasgow Financial Alliance for Net Zero](#), Gfanz.

<sup>17</sup> [Task Force on Climate-related Financial Disclosures](#), TCFD.

<sup>18</sup> [IFRS](#).

<sup>19</sup> [Enabling Financial Institutions to Assess and Disclose Greenhouse Gas Emissions of Loans and Investments](#), PCAF.

<sup>20</sup> [Overview of Financial Institutions](#), PCAF.

<sup>21</sup> [Deutsche Bank Establishes ESG Centre of Excellence in Singapore](#), Deutsche Bank;  
[Mastercard launches global Sustainability Innovation Lab](#), Mastercard.

<sup>22</sup> [Ignition Guide to Conducting a Materiality Assessment](#)

## Note 1: Retail and Corporate Customer Sustainability

[Growing Demand From Consumer Goods Manufacturers for Environmental Sustainability Solutions](#)

For more information about sustainability for retail and corporate customers, please see this research, published 3 September 2021.

## Document Revision History

[Gartner's Digital Banking Taxonomy 3.0 — How to Focus Your Transformation Efforts - 10 May 2019](#)

[Gartner's Digital Banking Taxonomy 2.0 - 13 February 2017](#)

---

## Recommended by the Authors

Some documents may not be available as part of your current Gartner subscription.

[The Role of the CIO and Technology in the Enterprise Sustainability and ESG Endeavor](#)

[Apply Digital Business to Sustainability](#)

[Quick Answer: What Does COP26 Mean for Businesses?](#)

[How Financial Services Leaders Are Winning on ESG Goals](#)

---

© 2022 Gartner, Inc. and/or its affiliates. All rights reserved. Gartner is a registered trademark of Gartner, Inc. and its affiliates. This publication may not be reproduced or distributed in any form without Gartner's prior written permission. It consists of the opinions of Gartner's research organization, which should not be construed as statements of fact. While the information contained in this publication has been obtained from sources believed to be reliable, Gartner disclaims all warranties as to the accuracy, completeness or adequacy of such information. Although Gartner research may address legal and financial issues, Gartner does not provide legal or investment advice and its research should not be construed or used as such. Your access and use of this publication are governed by [Gartner's Usage Policy](#). Gartner prides itself on its reputation for independence and objectivity. Its research is produced independently by its research organization without input or influence from any third party. For further information, see "[Guiding Principles on Independence and Objectivity](#)."