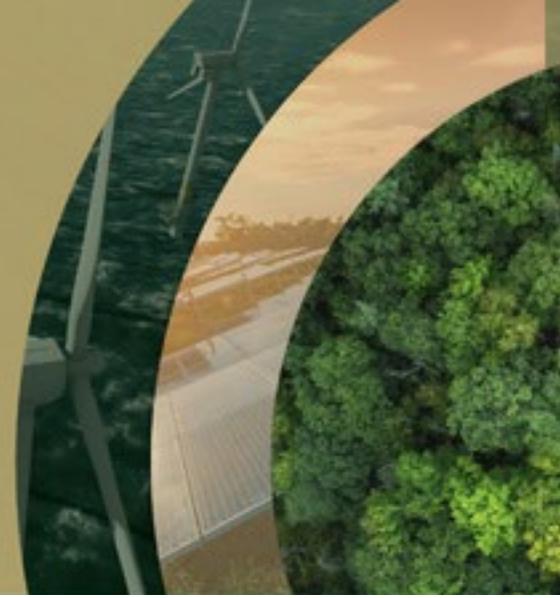


UPDATED FOR 2023

# Chartered Banker



PRINCIPLES AND PRACTICE OF

# GREEN AND SUSTAINABLE FINANCE

---

Module Specification January 2023

## Module Version 2023

**LEVEL:** SCQF Level 8 and broadly comparable to EQF Level 5

**CREDITS:** 13

**QUALIFICATIONS TO WHICH MODULE CONTRIBUTES:**

- Certificate in Green and Sustainable Finance
- Diploma in Green and Sustainable Finance
- Professional Banker Diploma

**AUDIENCE:**

All financial services professionals globally who wish to develop and demonstrate their knowledge and expertise of green and sustainable finance. Broad financial services sector coverage, including bankers, insurers, investment managers, central bankers and regulators, risk managers, analysts and consultants. No prior knowledge of the green and sustainable finance sector is required.

**AIM:**

To develop the learner's knowledge, understanding and ability to apply the key principles and core practice of green and sustainable finance. Specific aims are to increase the learner's knowledge and understanding of: climate change and its impacts; climate risks and emerging environmental and sustainability risks; the evolution of green and sustainable products and services in the banking, investment and insurance sectors; and increasing awareness of the role of the finance sector and finance professionals in supporting the transition to a low-carbon world.

**LEARNING OUTCOMES:**

On completion of this module, the learner will be able to:

1. explain what is meant by 'green' and 'sustainable' finance, the key factors that underpin the science of climate change, and the ways in which the finance sector can support the transition to a sustainable, low-carbon economy
2. explain the role of a range of key players and policy and regulatory frameworks in aligning finance with the objectives of the Paris Agreement and the UN Sustainable Development Goals, and the importance of monitoring, measuring and reporting impacts, outcomes, alignment and flows of finance
3. examine the nature and importance of key climate, environmental and emerging sustainability risks, and how these may be managed
4. describe how different types of financial services strategies, activities, products and services (including banking, investment and insurance) can support the development of green and sustainable finance, the transition to a low-carbon economy, and the quality and functioning of the natural environment and natural systems
5. describe the role of financial technology in supporting the growth of green and sustainable finance
6. explain the steps that regulators, policymakers, institutions, organisations and Green and Sustainable Finance Professionals can take to support the mainstreaming of green and sustainable finance.

**DELIVERY METHODOLOGY:**

*Green and Sustainable Finance* has 12 units. The learning approach includes:

- reading and self-study
- learning activities
- a wide range of case studies
- eLearning
- knowledge checks
- personal reflection and application of principles.

**LEARNING RESOURCES:**

Learning resources include:

- an online Study Guide – *Principles and Practice of Green and Sustainable Finance (2023)* – for core reading and learning activities
- interactive eLearning modules, including audio and visual resources, and online quizzes and knowledge checks to enhance understanding of key concepts.

**ASSESSMENT:**

*Green and Sustainable Finance* is assessed by one online examination, lasting 90 minutes, and consisting of 75 multiple choice questions.

## Module Version 2023

### LEARNING OUTCOMES AND UNITS MATRIX

This module has six high level learning outcomes.

The table below shows which unit(s) of study relate to each learning outcome.

Learning outcomes	Units
LO1	Unit 1: An Introduction to Green and Sustainable Finance
	Unit 2: Climate Change and Our Changing World
LO2	Unit 3: Building a Sustainable Financial System
	Unit 4: Measuring and Reporting Impacts, Alignment and Flows of Green and Sustainable Finance
LO3	Unit 5: Risk Management
LO4	Unit 6: Responsible Retail, Commercial and Corporate Banking
	Unit 7: Green and Sustainable Bonds
	Unit 8: Central and Development Banks
	Unit 9: Responsible and Sustainable Investment
	Unit 10: Insurance - Impact Underwriting
LO5	Unit 11: Green and Sustainable FinTech
LO6	Unit 12: The Future of Green and Sustainable Finance

# Module Version 2023

## UNIT 1: AN INTRODUCTION TO GREEN AND SUSTAINABLE FINANCE

Learning outcomes	Assessment criteria	Indicative content
<p><b>The learner will be able to:</b></p> <p><b>LO1:</b> Explain what is meant by ‘green’ and ‘sustainable’ finance, the key factors that underpin the science of climate change, and the ways in which the finance sector can support the transition to a sustainable, low-carbon economy.</p>	<p><b>The learner can:</b></p> <p><b>1.1</b> Define the terms ‘green’ and ‘sustainable’ finance, and distinguish between these and related terms.</p> <p><b>1.2</b> Describe a range of approaches to green and sustainable finance.</p> <p><b>1.3</b> Describe the opportunities and challenges for green and sustainable finance.</p> <p><b>1.4</b> Describe the UN Sustainable Goals (SDGs).</p> <p><b>1.5</b> Outline the development of the green and sustainable finance sector globally.</p>	<ul style="list-style-type: none"> <li>• Definitions of and approaches to green and sustainable finance</li> <li>• Climate-related, environmental and social sustainability factors</li> <li>• ‘Greening finance’, ‘financing green’ and transition finance</li> <li>• Different shades of green – introduction to taxonomies, green and sustainable economic activities</li> <li>• Introduction to green and sustainable industry sectors, products, and services</li> <li>• Barriers to sustainable finance: short-termism, narrow focus, failure to address externalities: the ‘Tragedy of the Horizon’</li> <li>• Introduction to the Paris Agreement and the UN Sustainable Development Goals</li> </ul>

# Module Version 2023

## UNIT 2: CLIMATE CHANGE AND OUR CHANGING WORLD

Learning outcomes	Assessment criteria	Indicative content
<p><b>The learner will be able to:</b></p> <p><b>LO1:</b> Explain what is meant by ‘green’ and ‘sustainable’ finance, the key factors that underpin the science of climate change, and the ways in which the finance sector can support the transition to a sustainable, low-carbon economy.</p>	<p><b>The learner can:</b></p> <p><b>1.6</b> Explain the key factors that underpin the science of climate change and global warming.</p> <p><b>1.7</b> Outline the more recent IPCC assessments of climate change.</p> <p><b>1.8</b> Describe the risks and opportunities for the finance sector arising from our changing environment.</p> <p><b>1.9</b> Explain the nature of, and challenges arising from, ‘stranded assets’ and the ‘carbon bubble’.</p> <p><b>1.10</b> Outline the ways in which the finance sector can support the transition to a sustainable, low-carbon economy.</p>	<ul style="list-style-type: none"> <li>• The climate system and anthropogenic climate change</li> <li>• Greenhouse gases and the greenhouse effect</li> <li>• Measuring greenhouse gas emissions</li> <li>• Impacts of climate change on the environment and society</li> <li>• The Intergovernmental Panel on Climate Change (including AR6: Climate Change 2021 and 2022)</li> <li>• Climate change mitigation and adaptation</li> <li>• Climate change and the finance sector</li> <li>• ‘Stranded assets’ and the ‘carbon bubble’</li> <li>• The Green New Deal, ‘Building Back Better’ and circular economy models</li> </ul>

# Module Version 2023

## UNIT 3: BUILDING A SUSTAINABLE FINANCIAL SYSTEM

Learning outcomes	Assessment criteria	Indicative content
<p><b>The learner will be able to:</b></p> <p><b>LO2:</b> Explain the role of a range of key players and policy and regulatory frameworks in aligning finance with the objectives of the Paris Agreement and the UN Sustainable Development Goals, and the importance of monitoring, measuring and reporting impacts, outcomes, alignment and flows of finance.</p>	<p><b>The learner can:</b></p> <p><b>2.1</b> Identify a range of key actors involved in building a sustainable financial system.</p> <p><b>2.2</b> Identify key policy and regulatory frameworks that support green and sustainable finance.</p> <p><b>2.3</b> Explain how intergovernmental bodies, governments and other organisations support the development of green and sustainable finance.</p> <p><b>2.4</b> Describe a range of key industry initiatives on green and sustainable finance.</p> <p><b>2.5</b> Explain the ways in which sustainability may be embedded in organisational strategies.</p>	<ul style="list-style-type: none"> <li>• The primary actors/agreements involved in building a sustainable financial system, including: UNFCCC, Kyoto Protocol, Paris Agreement, Race to Zero</li> <li>• Global, EU and national policy responses, including EU Taxonomy</li> <li>• Finance sector alliances, e.g. UNEP FI, PRI, PRB, PSI, GFANZ and UN-convened Net Zero Alliances</li> <li>• The role of intergovernmental bodies, governments, and other organisations in supporting green and sustainable finance</li> <li>• Embedding sustainability in corporate strategies: light green v dark green strategies, and avoiding greenwashing</li> <li>• Aligning organisational cultures with sustainability - leadership and governance, remuneration, education and training</li> </ul>

# Module Version 2023

## UNIT 4: MEASURING AND REPORTING IMPACTS, ALIGNMENT AND FLOWS OF GREEN AND SUSTAINABLE FINANCE

Learning outcomes	Assessment criteria	Indicative content
<p><b>The learner will be able to:</b></p> <p><b>LO2:</b> Explain the role of a range of key players and policy and regulatory frameworks in aligning finance with the objectives of the Paris Agreement and the UN Sustainable Development Goals, and the importance of monitoring, measuring and reporting impacts, outcomes, alignment and flows of finance.</p>	<p><b>The learner can:</b></p> <p><b>2.6</b> Outline how environmental and sustainability performance and impacts can be measured and reported</p> <p><b>2.7</b> Describe some of the frameworks and tools commonly used to measure and report impacts, and identify key organisations and approaches involved</p> <p><b>2.8</b> Explain the importance of independent, external review</p> <p><b>2.9</b> Describe approaches to monitoring the alignment of lending and investment portfolios with the objectives of the Paris Agreement, including PACTA and SBTi</p> <p><b>2.10</b> Explain the importance and challenges of monitoring, measuring, and reporting flows of finance to track progress towards achieving Article 2.1 (c) of the Paris Agreement</p> <p><b>2.11</b> Describe how advances in data availability and analysis can support impact analysis and monitoring flows of finance</p>	<ul style="list-style-type: none"> <li>• Process monitoring v monitoring impacts and outcomes</li> <li>• External review – levels of assurance (self-certification to verification/certification, e.g. Climate Bonds Standard)</li> <li>• Commonly used reporting metrics</li> <li>• Approaches, methodologies and standards for reporting emissions and other sustainability impacts and outcomes (e.g. CDP, PCAF, SASB, GRI)</li> <li>• Harmonizing sustainability reporting - International Sustainability Standards Board (ISSB)</li> <li>• Approaches to measuring the alignment of lending and investment portfolios with the Paris Agreement (PACTA, SBTi)</li> <li>• UNFCCC Biennial Assessments, OECD Research Collaborative, ISO 14097</li> <li>• Improving data availability, quality and analysis to support measurement and reporting</li> </ul>

# Module Version 2023

## UNIT 5: RISK MANAGEMENT

Learning outcomes	Assessment criteria	Indicative content
<p><b>The learner will be able to:</b></p> <p><b>LO3:</b> Examine the nature and importance of key climate, environmental and emerging sustainability risks, and how these may be managed.</p>	<p><b>The learner can:</b></p> <p><b>3.1</b> Describe the nature and importance of key climate-related and environmental risks.</p> <p><b>3.2</b> Explain the different types of climate-related risk (physical, transition, liability) and their impact on the finance sector.</p> <p><b>3.3</b> Describe the emergence of climate-related and environmental risks as priorities for central banks, regulators and policymakers.</p> <p><b>3.4</b> Examine approaches to identifying, disclosing, managing and pricing climate-related risks, the use of scenario analysis, and the evolving regulatory agenda in this area.</p>	<ul style="list-style-type: none"> <li>• WEF Global Risks Report</li> <li>• The nature and importance of key climate-related and environmental risks (standalone v cross-cutting risks)</li> <li>• Different types of climate-related risk (physical, transition and liability) and their impact on business, society and the finance sector</li> <li>• Stranded asset risk, and its potential impact on financial institutions and financial stability</li> <li>• Approaches to identifying, disclosing, managing, and pricing climate-related risks, and the use of scenario analysis (including examples of scenarios, e.g NGFS)</li> <li>• Key regulatory bodies, e.g. TCFD, NGFS, TFCR and initiatives at global, regional (EU) and national levels; stress-testing</li> <li>• Climate risk governance and management in practice</li> <li>• Emerging sustainability risks – nature-based risks and the TNFD</li> <li>• Pricing climate risks – carbon pricing (carbon taxes, ETS schemes and offsetting)</li> </ul>

## Module Version 2023

### UNIT 6: RESPONSIBLE RETAIL, COMMERCIAL AND CORPORATE BANKING

Learning outcomes	Assessment criteria	Indicative content
<p><b>The learner will be able to:</b></p> <p><b>LO4:</b> Describe how different types of financial services strategies, activities, products and services (including banking, investment and insurance) can support the development of green and sustainable finance, the transition to a low-carbon economy, and the quality and functioning of the natural environment and natural systems.</p>	<p><b>The learner can:</b></p> <p><b>4.1</b> Describe how banking activities can impact the environment and society – both positively and negatively - and play a key role in a successful transition to net zero</p> <p><b>4.2</b> Describe the UN Principles for Responsible Banking, and the Net Zero Banking Alliance, and how these support the alignment of banking with the objectives of the Paris Agreement and the UN Sustainable Development Goals</p> <p><b>4.3</b> Describe how banking products and services can align finance with the Paris Agreement, and other sustainability objectives, and support customers and clients in adopting more sustainable business models and behaviours.</p> <p><b>4.4</b> Describe the ‘Green Loan Principles’, ‘Social Loan Principles’ and ‘Sustainability Linked Loan Principles’.</p> <p><b>4.5</b> Cite examples and case studies of responsible, innovative green and sustainable banking products and services.</p>	<ul style="list-style-type: none"> <li>• Different types of banks, their functions, and the impacts of their activities</li> <li>• Embedding sustainability into banks’ strategies, operations and activities</li> <li>• UN Principles for Responsible Banking</li> <li>• UN-convened Net Zero Banking Alliance</li> <li>• Retail banking products and services that promote sustainable consumption and behaviour (e.g. carbon footprint trackers, green mortgages)</li> <li>• Wholesale and investment banking products and services that promote sustainability (e.g. green loans, SLLs, asset finance and project finance)</li> <li>• LMA Green Loan (2021), Social Loan and Sustainability Linked Loan Principles, and examples of lending products utilising these</li> <li>• Examples and case studies of innovative green and sustainable banking products and services</li> </ul>

# Module Version 2023

## UNIT 7: GREEN AND SUSTAINABLE BONDS

Learning outcomes	Assessment criteria	Indicative content
<p><b>The learner will be able to:</b></p> <p><b>LO4:</b> Describe how different types of financial services strategies, activities, products and services (including banking, investment and insurance) can support the development of green and sustainable finance, the transition to a low-carbon economy, and the quality and functioning of the natural environment and natural systems.</p>	<p><b>The learner can:</b></p> <p><b>4.6</b> Describe the range of debt products available to green and sustainable finance investors.</p> <p><b>4.7</b> Describe the main types and features of green and sustainable bonds, including green sukuk.</p> <p><b>4.8</b> Explain what is meant by the 'Green Bond' 'Social Bond' and 'Sustainability-Linked Bond' Principles, and the 'Sustainability Bond Guidelines' and how these and other frameworks, standards and guidelines support the development of the green and sustainable bond market.</p> <p><b>4.9</b> Describe how securitisation may be used to support smaller green and sustainable finance projects and help these grow and develop.</p>	<ul style="list-style-type: none"> <li>• Debt capital markets, and the development of the green and sustainable bond market</li> <li>• Green, social, sustainability-linked, SDG-linked and other forms of sustainable bonds (e.g. blue bonds, transition bonds, green sukuk)</li> <li>• Green Bond Principles (2021), Social Bond Principles, Sustainability-Linked Bond Principles, SDG Impact Standards and similar market/national bond frameworks</li> <li>• Green bond listings, indices and funds</li> <li>• Securitisation</li> </ul>

## Module Version 2023

### UNIT 8: CENTRAL AND DEVELOPMENT BANKS

Learning outcomes	Assessment criteria	Indicative content
<p><b>The learner will be able to:</b></p> <p><b>LO4:</b> Describe how different types of financial services strategies, activities, products and services (including banking, investment and insurance) can support the development of green and sustainable finance, the transition to a low-carbon economy, and the quality and functioning of the natural environment and natural systems.</p>	<p><b>The learner can:</b></p> <p><b>4.10</b> Explain the role of central and development banks (national and multilateral) in relation to green and sustainable finance.</p> <p><b>4.11</b> Describe how central banks can support the transition to a low-carbon economy.</p> <p><b>4.12</b> Describe how development banks play a key role in promoting sustainable economic development, and the key products and services they provide in order to do so.</p> <p><b>4.13</b> Cite examples and case studies of central and development banks supporting green and sustainable finance.</p>	<ul style="list-style-type: none"> <li>• The role of central and development banks</li> <li>• Central banks and climate change: mandates, monetary and financial policy tools, regulation</li> <li>• Positive Money Green Central Banking Scorecard</li> <li>• Overview of MDBs and climate action (e.g. World Bank, ADB, EIB, EBRD), mobilisation of climate finance</li> <li>• National development banks and green development banks</li> <li>• Development bank products and services (especially supporting blended finance)</li> </ul>

## Module Version 2023

### UNIT 9: RESPONSIBLE AND SUSTAINABLE INVESTMENT

Learning outcomes	Assessment criteria	Indicative content
<p><b>The learner will be able to:</b></p> <p><b>LO4:</b> Describe how different types of financial services strategies, activities, products and services (including banking, investment and insurance) can support the development of green and sustainable finance, the transition to a low-carbon economy, and the quality and functioning of the natural environment and natural systems.</p>	<p><b>The learner can:</b></p> <p><b>4.14</b> Explain the role of investment within the wider financial system, and how investment impacts and is impacted by environmental and social sustainability factors.</p> <p><b>4.15</b> Describe different investment approaches and products, their suitability for different types of investors, and how they may support green and sustainable finance.</p> <p><b>4.16</b> Describe the growth in sustainable investment, and the reasons for this.</p> <p><b>4.17</b> Explain the differences and similarities between sustainable investing, ESG, impact investing and other related terms.</p> <p><b>4.18</b> Describe different types of investment funds and explain how these may support investment in green and sustainable finance.</p> <p><b>4.19</b> Explain the risks of greenwashing, and other challenges to the growth of sustainable investing.</p>	<ul style="list-style-type: none"> <li>• Foundations of investment and the role of equity markets in the financial system</li> <li>• ‘Sustainable investment’, ‘ESG’ and similar terms – definitions and comparisons</li> <li>• UN Principles for Responsible Investment</li> <li>• Sustainable investment strategies and themes</li> <li>• Growth of sustainable investment, factors driving this (risk, regulation, returns) and challenges to further growth (especially greenwashing)</li> <li>• EU SFDR and UK FCA investment regulation</li> <li>• Sustainable investment products, including funds (mutual, index, ETF, etc), indices, private equity, venture capital, angel investing</li> <li>• Retail fund labelling</li> </ul>

## Module Version 2023

### UNIT 10: INSURANCE - IMPACT UNDERWRITING

Learning outcomes	Assessment criteria	Indicative content
<p><b>The learner will be able to:</b></p> <p><b>LO4:</b> Describe how different types of financial services strategies, activities, products and services (including banking, investment and insurance) can support the development of green and sustainable finance, the transition to a low-carbon economy, and the quality and functioning of the natural environment and natural systems.</p>	<p><b>The learner can:</b></p> <p><b>4.20</b> Describe the role of insurance within the wider financial system, and how climate-related financial risks are impacting the insurance sector.</p> <p><b>4.21</b> Describe how different insurance activities, products and services can improve the quality and functioning of the natural environment and natural systems.</p> <p><b>4.22</b> Explain how impact underwriting can promote more environmentally and socially sustainable consumer behaviour</p> <p><b>4.23</b> Cite examples and case studies of green and sustainable insurance products and services.</p>	<ul style="list-style-type: none"> <li>• The role of insurance (general and life insurers)</li> <li>• The insurance sector and the physical impacts of climate change (natural disasters, increasing insurance costs)</li> <li>• UN Principles for Sustainable Insurance, Sustainable Insurance Forum</li> <li>• The role of insurance (general and life insurers)</li> <li>• The insurance sector and the physical impacts of climate change (natural disasters, increasing insurance costs)</li> <li>• Impact underwriting: personal insurance, including green home insurance and green motor insurance</li> <li>• Impact underwriting: commercial and corporate insurance, including commercial property, renewable energy, energy efficiency and carbon credit insurance</li> <li>• Climate risk insurance, including sovereign catastrophe risk pooling and index insurance</li> <li>• Climate risk protection gap</li> </ul>

## Module Version 2023

### UNIT 11: GREEN AND SUSTAINABLE FINTECH

Learning outcomes	Assessment criteria	Indicative content
<p><b>The learner will be able to:</b></p> <p><b>LO5:</b> Describe the role of financial technology in supporting the growth of green and sustainable finance.</p>	<p><b>The learner can:</b></p> <p><b>5.1</b> Explain what is meant by FinTech and associated terms.</p> <p><b>5.2</b> Explain how FinTech tools and techniques can support the growth of green and sustainable finance and help align finance overall with the aims of the Paris Agreement, the UN Sustainable Development Goals, and other sustainability objectives.</p> <p><b>5.3</b> Explain the benefits of applying FinTech tools and techniques to support green and sustainable finance</p> <p><b>5.4</b> Explain challenges that may arise from using FinTech tools and techniques to support green and sustainable finance.</p>	<ul style="list-style-type: none"> <li>• Introduction to FinTech and its application to green and sustainable finance – key features and benefits</li> <li>• Applying FinTech tools and techniques in retail banking (e.g. carbon footprint trackers, promoting financial inclusion)</li> <li>• Applying FinTech tools and techniques in corporate banking and capital markets (e.g. green bond issue and verification)</li> <li>• Applying FinTech tools and techniques in investment (access to sustainable investments, enhancing transparency and reporting)</li> <li>• Applying FinTech tools and techniques in insurance (access to insurance, enhancing climate resilience)</li> <li>• Cryptocurrencies – advantages and disadvantages from a sustainability perspective (Cambridge Bitcoin Consumption Index, SolarCoin)</li> <li>• International and national policy initiatives to support FinTech in green and sustainable finance (e.g. UN Inquiry (2016), UNDP Digital Financing Taskforce (2020), GDFA)</li> <li>• Costs and challenges of FinTech (e.g. digital exclusion, social costs, potential for greenwashing)</li> </ul>

## Module Version 2023

### UNIT 12: THE FUTURE OF GREEN AND SUSTAINABLE FINANCE

Learning outcomes	Assessment criteria	Indicative content
<p><b>The learner will be able to:</b></p> <p><b>LO6:</b> Explain the steps that regulators, policymakers, institutions, organisations and Green and Sustainable Finance Professionals can take to support the mainstreaming of green and sustainable finance.</p>	<p><b>The learner can:</b></p> <p><b>6.1</b> Explain why it is vital to the finance sector and society as a whole for green and sustainable finance to become part of mainstream finance.</p> <p><b>6.2</b> Consider progress to date in aligning finance with the objectives of the Paris Agreement and the UN Sustainable Development Goals.</p> <p><b>6.3</b> Describe key challenges to mainstreaming green and sustainable finance.</p> <p><b>6.4</b> Describe emerging and evolving areas of interest in green and sustainable finance.</p> <p><b>6.5</b> Explain the role of Green and Sustainable Finance Professionals, and what individuals can do to promote and embed green and sustainable finance.</p> <p><b>6.6</b> Develop a personal action plan for embedding the principles and practice of green and sustainable finance in their professional activities.</p>	<ul style="list-style-type: none"> <li>Assessing the progress of green and sustainable finance towards the mainstream (GFANZ, UN-convened banking, investment and insurance alliances)</li> <li>COP 26 Private Finance Strategy</li> <li>Building capacity and capability to support organisational cultures aligned with sustainability</li> <li>Emerging areas in sustainable finance (e.g. nature-based financial risks and opportunities, ocean finance)</li> <li>Green and Sustainable Finance Professionals – ethics and values</li> <li>Chartered Banker Code: Guidance for Green and Sustainable Finance Professionals</li> <li>Green Finance Education Charter</li> <li>Reflecting on professional practice and personal development planning.</li> </ul>

**Edinburgh**

2<sup>nd</sup> Floor  
39 George Street  
Edinburgh  
EH2 2HN

**Email:** [info@charteredbanker.com](mailto:info@charteredbanker.com)

**Web:** [www.charteredbanker.com](http://www.charteredbanker.com)

