

CERTIFICATE IN CLIMATE AND INVESTING V.2 TESTED FROM 1 April 2023 to 30 June 2024

UNIT AIMS

By the end of this unit, learners should be able to demonstrate:

- An understanding of climate change as it relates to investing and climate considerations of asset owners,
- An understanding of climate science and the systemic impact of climate risks on the financial
 system, climate-related opportunities, the social factors arising from climate change, and
 societal efforts to address it.
- An understanding of the evolving climate-related policy response, regulation and the reporting landscape for companies and investors.
- An understanding of climate change mitigation and adaptation and resilience.
- An understanding of climate risk measurement through metrics, targets and scenario analysis, including temperature tools and stress testing.
- An understanding of stewardship and engagement on climate topics.
- An understanding of key approaches to managing listed equities and bonds in relation to climate, integrating climate considerations into investment strategy, risk and opportunity assessment, decision-making and valuation.
- An understanding of insurance products related to climate change and risk sharing.
- An understanding of the key approaches to managing private equity and private debt
 investment in relation to climate, integrating climate considerations into investment strategy,
 risk and opportunity assessment, decision-making and valuation.

Commented [CC1]: Amended from:

An understanding of climate change as it relates to investing, the different investment approaches that can be used to incorporate climate considerations into the analysis and valuation of assets and investment instruments, and in portfolio management and construction.

Commented [CC2]: Amended from:

An understanding of climate science and the systemic impact of climate risks on the financial system and the social factors arising from climate change

Commented [CC3]: Amended from:

An understanding of the climate-related regulation, the policy response and the evolving corporate disclosure landscape.

Commented [CC4]: Amended from:

An understanding of climate change impacts and opportunities, climate change mitigation and climate change adaptation and resilience.

Commented [CC5]: Amended from:

An understanding of climate risk measurement: data, metrics, targets and scenario analysis.

Commented [CC6]: Amended from:

An understanding of the key approaches to managing listed investment instruments in relation to climate, integrating climate considerations into investment strategy and decision-making for equities, fixed income, securitisations and listed real estate investment trusts and companies.

An ability to analyse how climate considerations may affect equity valuations and debt credit risk, applying key metrics and tools to listed investment instruments.

Commented [CC7]: New learning aim.

Commented [CC8]: Amended from:

An understanding of the key approaches to managing private market investment in relation to climate, integrating climate considerations into investment strategy and decision-making for private equity, private debt, real estate and infrastructure.

An ability to analyse how climate considerations may affect company valuations and debt credit risk, applying key metrics and tools to private market instruments and direct investments in real assets.

- An understanding of carbon pricing and carbon markets.
- An understanding of the key approaches to managing real estate and infrastructure (real
 assets) investment in relation to climate, integrating climate considerations into investment
 strategy, risk and opportunity assessment, decision-making and valuation.
- An understanding of key approaches for integrating climate change into investment
 mandates, portfolio construction and management, including the role of green and climate
 indices and an ability to analyse climate related risks and opportunities.

Commented [CC9]: New learning aim.

Commented [CC10]: Learning aim previously covered within listed investment instruments and private market investment. Now extracted into a separate learning aim.

Commented [CC11]: Amended from:

An understanding of key approaches for integrating climate change into portfolio construction and management and the role of green and climate indices.

An ability to analyse climate related risks and opportunities by geography and sector, by different types of climate risk, including assessing a portfolio's exposure to carbon intensive, transition and climate-positive (green) assets.

An understanding of key approaches to integrating climate in investment mandates and the evolving client reporting landscape for investors.

Question allocation across the syllabus is balanced on the guidance of psychometric and industry specialists. The following question allocation for Version 2 of the Certificate in Climate and Investing is provided as a broad indication of the relative 'weighting' of different parts of the syllabus in examinations from 1 April 2023.

Topic	Topic Name	Question Allocation		
1	Introduction to Climate and Investing	2-4		Commented [CC12]: Amended from: 3-6
2	Climate Science and Climate Risks, Impacts and Opportunities	5-9		Commented [CC13]: Amended from:
3	Policy Response, Regulation and the Reporting Landscape	8-11		Climate Science and Climate Risks and Considerations
4	Climate Change Mitigation and Adaptation	4-7		Commented [CC14]: Amended from: 4-8 Commented [CC15]: Amended from:
5	Climate Risk Measurement: Data, Metrics, Targets and Scenario Analysis	8-12		Regulation, Policy Response and the Corporate Report Landscape Commented [CC16]: Amended from: 6-12
6	Stewardship and Engagement on Climate	3-6		Commented [CC17]: Amended from: Climate Change Impacts and Opportunities
7	Listed Equities and Bonds. Insurance Products	12-16		Commented [CC18]: Amended from: 4-8 Commented [CC19]: Amended from: 12-16
	Listed Lydines and Bonds. Insulance Floducis	12-10	\ \≻	Commented [CC20]: Amended from 4-7
8	Private Equity and Debt. Carbon Markets	10-14		Commented [CC21]: Amended from:
9	Real Assets	8-12	1 />	Listed Investment Instruments Commented [CC22]: Amended from:
10	Portfolio Management	8-12	1 / />	Private Market Investment Instruments Commented [CC23]: Amended from: 12-18
			\≻	Commented [CC24]: Real Assets now sits in new to

OTHERINFORMATION REGARDING THIS UNIT:

Exam format: 100 questions

Online testing using standard multiple choice, drag and drop,

gap-fill and item set questions

Time allowed for exam: 2 hours and 20 minutes

Grades: Pass or Fail

Study Materials: Official Training Manual Edition 2

Recommended study hours: 140 hours

Commented [CC25]: Amended from 150 hours

TOPIC 1 INTRODUCTION TO CLIMATE AND INVESTING

1.1 INTRODUCTION TO CLIMATE AND INVESTING

- 1.1.1 Define what is meant by climate change
- 1.1.2 Explain the concepts of:
 - climate change mitigation
 - greenhouse gas emission scopes, carbon neutrality and net zero
 - · climate change adaptation and resilience
- 1.1.3 Identify the asset classes and investment instruments that can be impacted by climate considerations
- 1.1.4 Explain how climate considerations can impact investment strategy and how investments can impact climate change, including the relevance of time horizons and the use of various investment approaches

1.2 CLIMATE CONSIDERATIONS OF ASSET OWNERS

- 1.2.1 Explain why there are various climate considerations for different types of asset owners given their different investment drivers and aims
- 1.2.2 Explain the role of investment advisers (including independent financial advisers and similar) with respect to incorporating climate considerations into investment decisions and product suitability assessment

TOPIC 2 CLIMATE SCIENCE AND CLIMATE RISKS, IMPACTS AND OPPORTUNITIES

2.1 CLIMATE SCIENCE

- 2.1.1 Explain the science of climate change:
 - the greenhouse effect, greenhouse gases, emissions and atmospheric concentrations
 - carbon sinks e.g. land, ocean and biosphere
 - · carbon budgets
 - global impacts, including planetary boundaries
- 2.1.2 Assess the impacts of climate change and their feedback loops:
 - global warming
 - · melting ice caps and sea level rises
 - extreme weather events and natural hazards

Commented [CC26]: Learning outcome statement moved from 1.1.5 to 1.1.3

Commented [CC27]: Learning outcome statement moved from 1.1.3 to 1.1.4.

Amended from:

1.1.3 Explain how climate considerations can impact investment strategy and how investments can impact climate change

Commented [CC28]: New section

Commented [CC29]: Learning outcome statement moved from 10.1.2 to 1.2.1.

Amended from:

- 10.1.2 Analyse climate considerations (e.g. investment horizon, risk profile, asset liability management) for different types of asset owners given their different investment drivers and aims:
- •pension funds and plan trustees
- •life and non-life insurance companies, including catastrophe and casualty insurance considerations
- •endowments and foundations
- •family offices and High Net Worth Individuals (HNWI)
- •sovereign wealth funds

Commented [CC30]: Learning outcome statement moved from 10.1.4 to 1.2.2.

Commented [CC31]: Amended from Climate Science and Climate Risks and Considerations.

Commented [CC32]: Amended from:

- 2.1.1 Explain the history and science of climate change:
- •greenhouse effect, greenhouse gas, emissions and concentration
- •carbon sinks land, ocean and biosphere
- •carbon budgets
- •global impacts

Commented [CC33]: Amended from:

- $2.1.2 \ \mbox{Assess}$ the impacts of climate change and their feedback loops:
 - •global warming
 - •melting ice caps and sea level rises
 - extreme weather events and natural hazards
 - •biodiversity and natural habitat loss in relation to the economy

- 2.1.3 Explain the challenges of accounting for climate change related impacts:
 - challenges in climate change modelling
 - attributing impacts to climate change
 - · feedback processes and tipping points
 - human choices

2.2 CLIMATE CHANGE RISKS, IMPACTS AND OPPORTUNITIES

- 2.2.1 Explain the potential systemic impact of climate risks on the financial system:
 - · macroeconomic impact
 - · financial system risk
 - universal ownership
- 2.2.2 Explain the financial risks and impacts of climate change:
 - physical risks (acute / chronic)
 - transition risks (policy / legal / technology / markets / reputation)
- 2.2.3 Assess supply, operational and resource management issues as they relate to climate change, including:
 - natural capital and resource scarcity
 - biodiversity and natural habitat loss
 - · supply chain vulnerability, transparency and traceability
 - stakeholder relationships
- 2.2.4 Explain the financial manifestation of climate change:
 - major financial categories: revenues; expenditure; assets and liabilities; capital and financing
 - stranded assets
 - financial risks at the corporate level
 - financial risks at the public level
 - investment materiality: asset, project and business activity assessment
- 2.2.5 Explain the following climate-related opportunities:
 - energy sources
 - resource efficiency
 - · circular economy
 - products and services
 - markets and diversification
 - adaptation and resilience

Commented [CC34]: Amended from:

Climate Risks and Considerations

Commented [CC35]: Amended from:

- 2.2.1 Explain the systemic impact of climate risks on the financial system:
- •financial risk
- •universal ownership
- Commented [CC36]: Amended from:
- 2.2.3 Assess supply, operational and resource management issues as they relate to climate change, including:
- •natural capital and resource scarcity
- •supply chain vulnerability, transparency and traceability
- •stranded assets
- •low carbon economy transition business models
- •circular economy
- •stakeholder relationships

Commented [CC37]: Learning outcome statement moved from 4.1.1 to 2.2.4.

Amended from:

4.1.1 Explain major categories of financial impact of climate change: revenues; expenditure; assets and liabilities (including stranded assets); capital and financing

Commented [CC38]: Learning outcome statement moved from 4.1.2 to 2.2.5.

Amended from:

- $4.1.2\ Explain\ the\ following\ climate-related\ opportunities:$
- •resource efficiency and circularity
- energy sources
- •products and services
- •markets and diversification
- •adaptation and resilience

2.2.6 Assess the social factors arising from climate change, including:

Commented [CC39]: Learning outcome statement moved from 2.2.4 to 2.2.6

- health and labour productivity
- food security
- · security and migration
- · cities and urbanisation
- · disaster preparedness and resilience
- 'just' transition

TOPIC 3 POLICY RESPONSE, REGULATION AND THE REPORTING

LANDSCAPE

3.1 POLICY RESPONSE AND REGULATION

- 3.1.1 Explain the key elements of, and stakeholders in, international climate agreements and conventions:
 - the emergence of climate in international policy discourse: the role of the UN Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol
 - · COP21 and the Paris Agreement
 - the role of the UN Intergovernmental Panel on Climate Change (IPCC)
- 3.1.2 Explain the key drivers and stakeholders in regional and national climate policies:
 - nationally determined contributions (NDCs) and progress to date
 - regional (e.g. EU) and national policy response (e.g. UK, USA, China)
 - addressing climate vulnerabilities through adaptation
- 3.1.3 Assess the strengths and limitations of climate change mitigation policy response, including:
 - carbon pricing
 - subsidies and green finance tax incentives
 - research and development programmes
 - · regulation, standards and awareness campaigns
 - public private partnerships and blended finance
 - · integrating multiple policies
- 3.1.4 Assess the role of green and sustainable finance taxonomies in driving climate action and implementing policy, including:
 - evolution and key components of taxonomies
 - key taxonomies: Climate Bonds Taxonomy, the EU Sustainable Finance Taxonomy, China's Green Bond Catalogue
 - the key challenge interoperability

Commented [CC40]: Amended from:

Regulation, Policy Response and the Corporate Reporting Landscape

Commented [CC41]: Learning outcome moved from 3.1.3 to 3.1.1.

Amended from:

- 3.1.1 Explain the key drivers and stakeholders in international climate and environmental agreements and conventions:
- •greenhouse gas emissions and the Kyoto Protocol
- •response to climate science and the role of the UN Intergovernmental Panel on Climate Change (IPCC)
- •coordinated commitments to address climate change and the role of the Paris Agreement
- •target setting and tracking progress and the role of the UN Framework Convention on Climate Change (UNFCCC)
- •systemic nature of climate change, its impact on the financial system and central banks and regulator response

Commented [CC42]: Learning outcome statement moved from 3.1.4 to 3.1.2.

Amended from:

- 3.1.4 Explain the key drivers and stakeholders in national environmental and climate policies:
- •nationally determined contributions (NDCs) and progress to date
- •carbon budgets and sovereign carbon accounting
- •addressing climate vulnerabilities through adaptation

Commented [CC43]: Learning outcome statement moved from 4.2.3 to 3.1.3.

Commented [CC44]: New learning outcome statement. Taxonomies formerly covered under 7.2.3.

- 3.1.5 Explain the role and aims of key international initiatives related to climate change:
 - · investment-related initiatives
 - · central banks and financial regulators
 - intergovernmental / multilateral institutions

3.2 THE CORPORATE REPORTING LANDSCAPE

- 3.2.1 Explain key elements of corporate reporting and financial disclosures for companies and issuers, including:
 - the relationship between financial and sustainability reporting
 - · voluntary frameworks and mandatory reporting
 - · range of reporting channels
- 3.2.2 Assess the concept of materiality as it relates to climate-related risk management, disclosures and financial reporting, including:
 - financial and non-financial materiality
 - dual / double and dynamic materiality
- 3.2.3 Assess the key frameworks and standards that are driving climate-related corporate disclosure, and how they interact with one another and with financial reporting, including
 - Climate disclosure frameworks
 - Sustainability disclosure frameworks and standards
- 3.2.4 Assess the key regulations that are driving climate-related and sustainability corporate disclosure, covering the EU, UK, USA and China
- 3.2.5 Explain the role of other key stakeholders in the reporting landscape including:
 - · financial institutions
 - stock exchanges
 - indices
 - rating agencies
 - · groups and non-governmental organisations
 - supranational stakeholders

3.3 INVESTOR DISCLOSURE

- 3.3.1 Explain the key drivers and elements of investor climate-related disclosures, including:
 - investor climate reporting
 - product disclosures and labels
 - stewardship reporting

Commented [CC45]: Learning outcome statement moved from 3.1.6 to 3.1.5

Commented [CC46]: Learning outcome statement moved from 3 2 3 to 3 2 1

Amended from:

- 3.2.3 Explain key elements of corporate reporting and financial disclosures for companies and issuers:
 - •mandatory regulations: principles-based and standards
 - •voluntary guidelines and standards
 - •range of reporting channels available
 - •distinction between sustainability reporting and financial reporting

Commented [CC47]: Amended from:

- 3.2.2 Assess the concept of materiality as it relates to climaterelated risk management, disclosures and financial reporting, including:
- •relevance of economic, environmental and social aspects, stakeholder groups and time horizons
- •interaction between non-financial and financial materiality:
 dual and dynamic materiality
 •International Financial Reporting Standards (IEPS)
- •International Financial Reporting Standards (IFRS) accounting guidance on financial materiality as it relates to climate change
- •assessment and impact on future financial performance, including cost benefit assessments

Commented [CC48]: New learning outcome statement.

Taken from:

- 3.2.4 Assess the strengths and limitations of disclosures across frameworks and the link to corporate reporting
- 3.2.5 Assess key aspects of integrating climate change in financial accounts and reports

Commented [CC49]: New learning outcome statement.

Commented [CC50]: Learning outcome statement moved from 3.2.6 to 3.2.5.

Amended from:

- 3.2.6 Explain the role of key stakeholders in the reporting landscape including:
- •regulators
- •standard setters
- •investors
- •insurers / guarantors

Commented [CC51]: Former Section 10.2 moved to Section 3.3.

Commented [CC52]: Learning outcome statement moved from 10.2.1 and 10.2.2 to 3.3.1.

Amended from:

10.1.1 Explain the drivers and aims of climate-related disclosures for asset managers, asset owners and investment

- · voluntary and industry reporting initiatives
- 3.3.2 Explain greenhouse gas emissions accounting for asset owners and asset managers

TOPIC 4 CLIMATE CHANGE MITIGATION AND ADAPTATION

4.1 CLIMATE CHANGE MITIGATION

- 4.1.1 Describe mitigation costs at a global level:
 - range and cost of mitigation (abatement curve)
 - fitting mitigation options into comprehensive transition scenarios
- 4.1.2 Assess the range of climate change mitigation analysis and solutions by sector and cross-sectoral themes, including:
 - energy sector
 - industry with a focus on high-emissions sectors such as steel, cement and chemicals
 - transport
 - property and buildings
 - forestry, agriculture and food production
 - cross-sectoral themes, such as energy efficiency, waste management, equipment and IT, carbon capture and storage

4.2 CLIMATE CHANGE ADAPTATION AND RESILIENCE

- 4.2.1 Explain the context for climate change adaptation
- 4.2.2 Assess the range of adaptation and resilience solutions, including:
 - protecting coastlines and infrastructure; adapting to sea level rise
 - managing agriculture and land use practices to improve carbon sequestration
 - planning for scarce water resources
 - resilient built environments and protecting public infrastructure from extreme weather events
- 4.2.3 Assess approaches to the design, operations and monitoring of solutions for climate change adaptation and resilience:
 - physical climate risk exposure assessment
 - impact definition, targets and assessment, including resilience assessment at asset and national level, cost benefit analysis of resilience options, and trade-off analysis
 - · the role of insurance
- 4.2.4 Assess the strengths and limitations of climate change adaptation and resilience policy

Commented [CC53]: New learning outcome statement, previously covered under:

- 3.2.4 Assess the strengths and limitations of disclosures across frameworks and the link to corporate reporting:
- •emissions and carbon accounting frameworks and
- •sustainability disclosure frameworks and standards used for climate-related reporting
- •non-financial disclosures in corporate reporting and labelled debt reporting

Commented [CC54]: Amended from:

Climate Change Impacts and Opportunities

Commented [CC55]: Section 4.2 moved to section 4.1.

Commented [CC56]: Learning outcome statement moved from 4.2.1 to 4.1.1.

Commented [CC57]: Learning outcome statement moved from 4.2.2 to 4.1.2.

Amended from:

- $4.2.1 \ Assess the strengths and limitations of disclosures across frameworks and the $$ link to $$ corporate reporting:$
- emissions and carbon accounting frameworks and standards
- •sustainability disclosure frameworks and standards used for climate-related reporting
- non-financial disclosures in corporate reporting and labelled debt reporting

Commented [CC58]: Section 4.3 moved to Section 4.2.

Commented [CC59]: Learning outcome statement 4.3.1 moved to 4.2.1.

Commented [CC60]: Learning outcome statement moved from 4.3.2 to 4.2.2.

Commented [CC61]: Learning outcome statement moved from 4.3.3 to 4.2.3.

Commented [CC62]: Learning outcome statement moved from 4.3.4 to 4.2.4.

response, including:

- multilateral development finance institutions
- adaptation and resilience frameworks and disclosure

TOPIC 5 CLIMATE RISK MEASUREMENT: DATA, METRICS, TARGETS AND SCENARIO ANALYSIS

5.1 DATA, METRICS AND TARGETS

- 5.1.1 Explain the strengths, limitations and challenges of climate data, including the use of forward looking data and benchmarking, data gaps, and company reported data versus third-party data and assessment
- 5.1.2 Assess greenhouse gas emissions (scopes 1, 2 and 3)
 - · organisational boundary for reporting emissions
 - operational boundary for reporting emissions
 - · strengths, limitations and challenges of emissions data
- 5.1.3 Calculate total emissions, carbon intensity and weighted average carbon intensity
- 5.1.4 Assess metrics for carbon intensive assets and low-carbon technologies:
 - metrics for carbon intensive assets: fossil fuel exposure, emissions, carbon intensity, carbon momentum
 - metrics for low-carbon technologies: revenue-based metrics, saved emissions, avoided emissions
- 5.1.5 Assess the scope and limitations of carbon footprinting versus decarbonisation trajectories and temperature alignment
- 5.1.6 Explain key metrics and indicators related to:
 - energy usage
 - waste management
 - weather and natural hazards
 - water usage and risks
 - · air pollution
 - carbon sinks and sequestration
- 5.1.7 Explain the range of targets set due to regulatory requirements and / or market constraints:
 - target setting and science-based targets
 - target setting and reporting for asset owners and asset managers, including Science

Commented [CC63]: Amended from:

- 5.1.1 Explain the strengths, limitations and challenges of climate data:
- •relevance, consistency, comparability, decision useful •historical / current versus forward looking
- •benchmarking
- •calculation methodologies
- •SMART targets
- 5.1.2 Explain the strengths and limitations of company disclosed data versus third-party sources

Commented [CC64]: Learning outcome statement moved from 5.1.3 to 5.1.2.

Commented [CC65]: Learning outcome statement moved from 5.1.4 to 5.1.3.

Commented [CC66]: New learning outcome statement.

Commented [CC67]: Learning outcome statement moved from 5.1.8 to 5.1.6.

Amended from:

- 5.1.8 Explain key metrics and indicators related to:
- •weather and natural hazards
- •water usage and risks
- •air pollution
- •carbon sinks and sequestration

Commented [CC68]: Learning outcome statement moved from 5.1.9 to 5.1.7.

Amended from:

- 5.1.9 Explain the range of targets set due to regulatory requirements and / or market constraints:
 - •energy usage
 - •waste management
- •target setting and science-based targets
- •GHG emissions targets and net zero

Based Targets Initiative (SBTi) and Net-Zero Asset Owner Alliance (NZAOA)

• greenhouse gas emissions targets and net zero

5.2 ANALYTICAL TOOLS AND SCENARIO ANALYSIS

- 5.2.1 Explain the distinctions between climate models, integrated assessment models (IAMs), and climate scenario pathways
- 5.2.2 Compare key climate-economy scenario models and commonly used analytical scenarios:
 - Integrated assessment models (IAMs)
 - Representative Concentration Pathways (RCPs) and Shared Socioeconomic Pathways (SSPs) use in IAMs
 - Commonly used scenarios, covering scenarios produced by the International Energy Agency (IEA), International Renewable Energy Agency (IRENA) and Principles for Responsible Investment (PRI) Inevitable Policy Response
- 5.2.3 Identify the limitations and pitfalls of scenario analysis and the drivers behind the choice of model(s) and scenarios.
- 5.2.4 Assess relevant assessment tools and models, distinguishing between:
 - transition risk and decarbonisation pathways
 - · physical risk to assets
- 5.2.5 Evaluate climate value-at-risk and carbon value-at-risk, including stress testing for given carbon prices at asset level and portfolio level
- 5.2.6 Assess stress testing, including a focus on scenarios for financial system analysis, e.g. Network for Greening the Financial System
- 5.2.7 Evaluate scenario temperature tools, including portfolio warming potential, implied temperature rise, temperature rating and temperature alignment

TOPIC 6 STEWARDSHIP AND ENGAGEMENT ON CLIMATE

6.1 CORPORATE STEWARDHSIP AND ENGAGEMENT ON CLIMATE

- 6.1.1 Explain the purpose and regulation of stewardship and engagement:
 - · fiduciary duty
 - stewardship codes, e.g. UK, EU, the USA, Japan, Brazil and India
 - · industry practices
- 6.1.2 Explain the following key concepts in the context of climate change:

Commented [CC69]: Amended from:

- 5.2.1 Explain the distinctions between climate models and scenario analysis
- •climate models, integrated assessment models (IAMs), scenario analysis and stress testing, and how they relate to each other
- •different types of models: deterministic, probabilistic, observation-based

Commented [CC70]: Amended from:

- 5.2.2 Compare key climate models and scenarios and commonly used analytical scenarios:
- •General circulation models (GCMs)
- •Integrated assessment models (IAMs)
- •Intergovernmental Panel on Climate Change (IPCC) temperature scenarios
- -Representative Concentration Pathways (RCP)
- -Shared Socioeconomic Pathways (SSP)
- •International Energy Agency (IEA) scenarios •International Renewable Energy Agency (IRENA)
- •Principles for Responsible Investment (PRI) Inevitable Policy Response

Commented [CC71]: Amended from:

- 5.2.3 Identify the limitations and pitfalls of scenario analysis and the drivers behind the choice of model(s) and scenarios:
- •quantitative and qualitative considerations
- •defining assumptions versus seeking an answer
- •key considerations to determine the analytical approach, e.g geographical coverage, economic variables and sector information

Commented [CC72]: Learning outcome statement moved from 5.2.5 to 5.2.4

Commented [CC73]: Learning outcome statement moved from 5.2.6 to 5.2.5.

Commented [CC74]: Learning outcome statement moved from 5.2.7 to 5.2.6.

Commented [CC75]: Learning outcome moved from 5.2.4 to 5.2.7.

Amended from:

5.2.4 Evaluate scenario temperature rating tools

Commented [CC76]: Amended from:

- 6.1.1 Explain the purpose and regulation of stewardship and engagement:
- •fiduciary duty
- •stewardship codes UK, EU, US, Japan industry practices

- challenges to engagement including inertia, policy and behavioural economics
- evolution and distinction between corporate social responsibility (CSR) and stewardship
- corporate governance of climate risks and opportunities
- incorporating climate change in corporate strategy
- climate governance engagements
- 6.1.3 Apply appropriate methods to establish an engagement approach and set engagement
 - using climate disclosures to inform engagement strategy
 - using taxonomies to inform engagement strategy
 - addressing climate lobbying
 - establishing an engagement approach: goal setting and tactics
 - escalation techniques
 - divestment versus engagement
 - voting
 - conflicts of interest for the stewardship role

6.2 SYSTEM ENGAGEMENT ON CLIMATE

- Explain how climate change can be incorporated into investor engagement strategy and 6.2.1 planning:
 - investment firm corporate responsibility
 - challenges to climate engagement and action
- 6.2.2 Explain key corporate focused investor initiatives for engagement
- 6.2.3 Describe the drivers and scope of engagement with governments, regulators and policymakers

TOPIC 7 LISTED EQUITIES AND BONDS. INSURANCE PRODUCTS

7.1 **EQUITIES**

- 7.1.1 Assess the strengths and limitations of key approaches to managing equities in relation
- 7.1.2 Explain key approaches to integrating climate considerations into business strategy:
 - decarbonisation
 - tracking the level of transition to low-carbon business activities (e.g. green revenues)
 - pure-play companies
 - financial institutions

Commented [CC77]: Amended from: Listed Investment Instruments

- 7.1.3 Apply key tools and metrics to equities
- 7.1.4 Explain how corporate reporting and financial disclosures for companies and issuers support equity analysis
- 7.1.5 Analyse how climate considerations may affect valuation for equities

7.2 FIXED INCOME

- 7.2.1 Assess the strengths and limitations of key approaches to managing fixed income and structured finance in relation to climate:
 - decarbonisation approach
 - · climate solutions approach
- 7.2.2 Explain the growth and appeal of sustainable and labelled debt, including:
 - unlabelled bonds (climate aligned bonds)
 - use of proceeds bonds funding climate solutions
 - · sustainability-linked bonds
 - transition bonds
 - funding mitigation solutions versus adaptation and resilience solutions
- 7.2.3 Explain key elements of sustainable debt analysis and reporting, including:
 - guidance and standards
 - post-issuance allocation and impact reporting
 - external review and verification
- 7.2.4 Apply key metrics to fixed income and securitisations
- 7.2.5 Apply key analytical tools to fixed income and securitisations
- 7.2.6 Analyse how climate considerations may affect valuation of fixed income and securitisations
- 7.2.7 Analyse how climate considerations may affect the credit risk rating of fixed income and structured finance securities, including the difference between ESG / climate-related assessments and ESG / climate integration in credit risk ratings

7.3 **INSURANCE PRODUCTS**

- 7.3.1 Explain the evolution and history of the insurance-linked securities (ILS) industry and the catastrophe bond market
- 7.3.2 Assess risk transfer mechanisms between reinsurance industry and capital markets through various products such as catastrophe bond, collateralised Re, industry loss

Commented [CC78]: Amended from:

- 7.1.4 Explain how corporate reporting and financial disclosures for companies and issuers support equity analysis including:
- •reporting frameworks, e.g. Task Force on Climate-related Financial Disclosures (TCFD), stakeholder disclosure, and value chain disclosure
- •accounting standards, e.g. IFRS guidance, integrated reporting and sector-specific materiality assessment

Commented [CC79]: Amended from:

- 7.1.1 Explain key elements of reporting as they relate to analysing sustainable debt, including:
- •guidance and standards
- $\bullet development$ and use of taxonomies
- •post-issuance allocation and impact reporting
- •external review and verification

Commented [CC80]: Amended from:

7.2.4 Apply key metrics to fixed income and structured finance

Commented [CC81]: Amended from:

7.2.5 Apply key analytical tools to fixed income and structured finance

Commented [CC82]: Amended from:

7.2.6 Analyse how climate considerations may affect valuation for fixed income and structured finance

Commented [CC83]: New section 7.3 title.

- Commented [CC84]: New learning outcome statement.
- Commented [CC85]: New learning outcome statement.

warranty (ILW) and quota share

7.3.3 Explain factors influencing valuation of risk transfer over the short, medium and long term and how climate risk may be reflected

Commented [CC86]: New learning outcome statement.

TOPIC 8 PRIVATE EQUITY AND DEBT. CARBON MARKETS

8.1 PRIVATE EQUITY AND VENTURE CAPITAL

- 8.1.1 Assess the strengths and limitations of key approaches to managing private equity / unlisted equities and venture capital in relation to climate change
- 8.1.2 Apply key climate-related tools and metrics to lifecycle investment management of private equity / unlisted equities and venture capital, including integration in:
 - · deal sourcing and new investments
 - · post investment monitoring and engagement
 - exit
- 8.1.3 Explain key elements of corporate reporting and financial disclosures for companies and issuers as they relate to private equity / unlisted equities and venture capital
 - · reporting frameworks and regulations
 - data quality, benchmarking and estimation
- 8.1.4 Analyse how climate considerations may affect valuation for private equity / unlisted equities and venture capital

8.2 PRIVATE DEBT AND LENDING

- 8.2.1 Assess the strengths and limitations of key approaches to managing private debt: engagement, divestment / disinvestment, and exclusions
- 8.2.2 Explain the growth and appeal of labelled private placements and loans, including:
 - · use of proceeds private placements and loans (green, sustainability)
 - transition instruments such as sustainability-linked loans (SLL)
- 8.2.3 Apply key tools and metrics to private debt such as analysing reported emissions and use of estimator tools
- 8.2.4 Explain key elements of reporting as they relate to private debt, including:
 - disclosure frameworks
 - reporting for green loans and SLL, including use of taxonomies, LMA / APLMA / LSTA Green Loan Principles, SLL principles and standards

Commented [CC87]: Amended from:

8.1.2 Apply key tools and metrics to private equity / unlisted equities and venture capital:

•deal sourcing and new investments

post investment monitoring and engagement

• A V

8.2.5 Analyse the relevance of climate-related risks and opportunities to credit risk analysis and how climate considerations may affect valuation for private debt

8.3 CARBON PRICING AND CARBON MARKETS

8.3.1 Explain the concept of carbon pricing and key carbon pricing instruments:

- · emissions trading systems
- carbon tax
- social cost of carbon
- internal carbon pricing (shadow price)

8.3.2 Calculate an internal carbon price

8.3.3 Assess the benefits and challenges of the regulated ETS market and its implications for corporates

8.3.4 Assess the benefits and challenges of voluntary carbon markets, including:

- · supply and demand for offsets
- challenges of the offset market: quantification, permanence, additionality, transparency and market integrity
- · issuance of offsets and trading
- key trends and the role of the Paris Agreement, Article 6

8.3.5 Describe carbon investment products, including range of products and their regulation including carbon allowance based investment products and offset investment products

8.4 OTHER PRIVATE MARKET INSTRUMENTS

- 8.4.1 Assess the key approaches to integrating climate considerations in other private market instruments, including:
 - derivatives including commodity derivatives
 - retail products (e.g. savings products) and funding platforms

TOPIC 9 REAL ASSETS

9.1 INVESTMENT IN REAL ESTATE

- 9.1.1 Assess the strengths and limitations of key approaches to managing investment in real estate
- 9.1.2 Apply key tools and metrics to investment in real estate and real estate financing:
 - · measuring carbon emissions

Commented [CC88]: Amended from: Direct Investment in Real Estate

Commented [CC89]: Learning outcome statement moved from 5.1.6 to 8.3.1

Commented [CC90]: Learning outcome statement moved from 5.1.7 to 8.3.2.

Amended from:

5.1.7 Calculate a theoretical carbon price

Commented [CC91]: New learning outcome statement.

Commented [CC92]: New learning outcome statement.

Commented [CC93]: New learning outcome statement.

Commented [CC94]: Section 8.5 moved to Section 8.4.

Commented [CC95]: Learning outcome statement moved from 8.5.1 to 8.4.1

Commented [CC96]: New topic title. Real Assets content moved from Topics 7 and 8 to new Topic 9.

Commented [CC97]: Learning outcome statement moved from 8.3.1 to 9.1.1.

Amended from:

8.3.1 Assess the strengths and limitations of key approaches to managing direct investment in real estate

Commented [CC98]: Learning outcome statement moved from 8.3.2 to 9.1.2.

Amended from:

- 8.3.2 Apply key tools and metrics to direct investment in real estate and real estate financing:
- •measuring carbon emissions
- •transition risk assessment and decarbonisation trajectories
- physical risk assessment

- transition risk assessment and decarbonisation trajectories
- · physical risk assessment
- 9.1.3 Explain key elements of disclosures as they relate to investment in real estate equity and / or debt, including:
 - building certification
 - benchmarking GRESB Real Estate
 - disclosure frameworks (e.g. EU Taxonomy, Sustainable Finance Disclosure Regulation (SFDR), green and sustainability bond reporting)
- 9.1.4 Analyse how climate considerations may affect valuation for investment in real estate
- 9.1.5 Explain key elements of climate-related disclosures and analysis, including valuation considerations, as they relate to investment in listed real estate securities, including REITs and property companies

9.2 INVESTMENT IN INFRASTRUCTURE

- 9.2.1 Explain the key features of green and resilient infrastructure, including the distinction from climate mitigation and adaptation of existing infrastructure
- 9.2.2 Assess the strengths and limitations of key approaches to managing investment in infrastructure
 - · natural capital, biodiversity and nature-based solutions
 - financing public infrastructure, including the US municipal bond market and publicprivate partnerships
- 9.2.3 Apply key tools and metrics to investment in infrastructure and infrastructure financing
 - measuring carbon emissions
 - · transition risk assessment
 - physical risk assessment
- 9.2.4 Explain key elements of disclosures as they relate to investment in infrastructure equity and / or debt, including:
 - benchmarking GRESB Infrastructure
 - disclosure frameworks (e.g. EU Taxonomy, SFDR)
 - use of green taxonomies in financing infrastructure and KPI reporting under sustainability-linked debt
- 9.2.5 Analyse how climate considerations may affect valuation for investment in infrastructyre assets
- 9.2.6 Explain key elements of climate-related disclosures and analysis, including valuation considerations, as they relate to investment in listed infrastructure securities such as

Commented [CC99]: Learning outcome statement moved from 8.3.3 to 9.1.3.

Amended from:

8.3.3 Explain key elements of disclosures as they relate to direct investment in real estate equity and/or debt, including:

- •building certification
- •benchmarking GRESB Real Estate
- disclosure frameworks (e.g. EU Taxonomy, Sustainable Finance Disclosure Regulation (SFDR), green and sustainability bond reporting)

Commented [CC100]: Learning outcome statement 8.3.4 moved to 9.1.4

Amended from:

7.3.3 Explain key elements of disclosures as they relate to investment in listed real asset securities

Commented [CC101]: Learning outcome statement moved from 7.3.3 to 9.1.5.

Amended from

Commented [CC102]: Learning outcome statement moved from 8.4.1 to 9.2.1.

Amended from:

9.2.1 Explain the key features of green and resilient infrastructure

Commented [CC103]: Learning outcome statement moved from 8.4.2 to 9.2.2.

Amended from:

8.4.2 Assess the strengths and limitations of key approache ...

Commented [CC104]: Learning outcome statement moved from 8.4.3 to 9.2.3.

Amended from:

8.4.3 Apply key tools and metrics to direct investment in ...

Commented [CC105]: Learning outcome statement moved from 8.4.4 to 9.2.4.

Amended from:

8.4.4 Explain key elements of disclosures as they relate to ...

Commented [CC106]: Learning outcome statement moved from 8.4.5 to 9.2.5.

Amended from:

8.4.5 Analyse how climate considerations may affect

Commented [CC107]: Learning outcome statement moved from 7.3.3 to 9.2.6.

Amended from:

7.3.3 Explain key elements of disclosures as they relate to

TOPIC 10 PORTFOLIO MANAGEMENT

Commented [CC108]: Topic 10 was formerly Topic 9.

10.1 PORTFOLIO STRATEGY

- 10.1.1 Explain the challenge of designing investment products versus direct financing of real economy climate solutions
- 10.1.2 Explain how climate considerations can impact investment mandates, including:
 - · investment strategy and aims
 - integrating climate considerations in client guidelines, requests for proposal (RFPs) and setting mandates
- 10.1.3 Evaluate approaches for integrating climate change factors into portfolio construction and management:
 - · overview of investment frameworks
 - · strategic asset allocation decisions
 - · portfolio exposure
 - risk management
- 10.1.4 Evaluate the range of investment strategies that can be used to incorporate climaterelated factors into portfolio construction:
 - exclusion
 - climate improvers
 - best-in-class
 - tilting portfolio exposure
 - thematic
 - impact investing
 - · active ownership
 - active versus passive

10.2 THE ROLE OF GREEN AND CLIMATE INDICES

- 10.2.1 Explain the EU benchmarking regulations by reference to the Paris Agreement and climate change:
 - EU ESG disclosure requirements for benchmarks
 - the EU climate benchmarks
- 10.2.2 Explain the growth of green indices and climate-related index products, including the evolution of climate-related exclusion / inclusion rules for ESG indices
- 10.2.3 Evaluate opportunities presented by climate and sustainability indices and index

Commented [CC109]: Learning outcome statement 9.1.1 moved to 10.1.1.

Commented [CC110]: Learning outcome statement moved from 10.1.1 to 10.1.2.

Amended from:

10.1.1 Explain how climate considerations can impact client mandates, including:

- ·fiduciary duty
- •investment strategy and aims
- •behavioural finance
- •integrating climate in requests for proposal (RFPs) and setting mandates

Commented [CC111]: Learning outcome statement moved from 9.1.2 to 10.1.3

Amended from:

- 9.1.2 Evaluate approaches for integrating climate change factors into portfolio construction and management:
- •overview of investment frameworks
- •strategic asset allocation decisions
- •portfolio exposure
 •risk management
- •performance attribution

Commented [CC112]: Learning outcome statement moved from 9.1.3 to 10.1.4.

Commented [CC113]: Learning outcome statement moved from 9.2.1 to 10.2.1.

Commented [CC114]: Learning outcome statement moved from 9.2.2 to 10.2.2.

Commented [CC115]: Learning outcome statement moved from 9.2.3 to 10.2.3.

exchange-traded funds (ETFs):

- climate index construction
- climate index approaches
- equity indices
- fixed income indices
- sovereign debt indices
- property indices

10.3 PORTFOLIO CLIMATE-RELATED ANALYSIS

- Assess climate-related portfolio management considerations at asset class, sector and Commented [CC116]: New learning outcome statement. 10.3.1 market (emerging versus developed) level, including:

- decarbonisation pathway alignment
- choice of index and tracking error
- challenges and impact of including Scope 3 investee company emissions
- multi-asset portfolio calculations, including approaches to incorporating listed and unlisted instruments, sovereign debt, and real assets exposures
- 10.3.2 Assess a portfolio's exposure to carbon-intensive assets or exposure to low carbon technologies (backward looking climate-related analysis)
 - exposure to carbon intensive assets
 - exposure to low-carbon technologies and calculating EU Taxonomy alignment at portfolio level
- 10.3.3 Apply portfolio modelling and management techniques single- and multi-asset portfolios, using forward looking indicators and climate analysis.

Commented [CC117]: Learning outcome statement moved from 9.3.2 to 10.3.2.

Amended from:

- 9.3.2 Assess a portfolio's exposure to carbon-intensive assets or exposure to low carbon technologies using revenue-based and emissions-based metrics (backward looking climaterelated analysis)
- •exposure to carbon intensive assets: power generation, fossil fuel exposure, emissions, carbon intensity, carbon score, carbon momentum
- •exposure to low-carbon technologies: sector specific metrics, emissions reduction, net carbon emissions

Commented [CC118]: Learning outcome statement moved