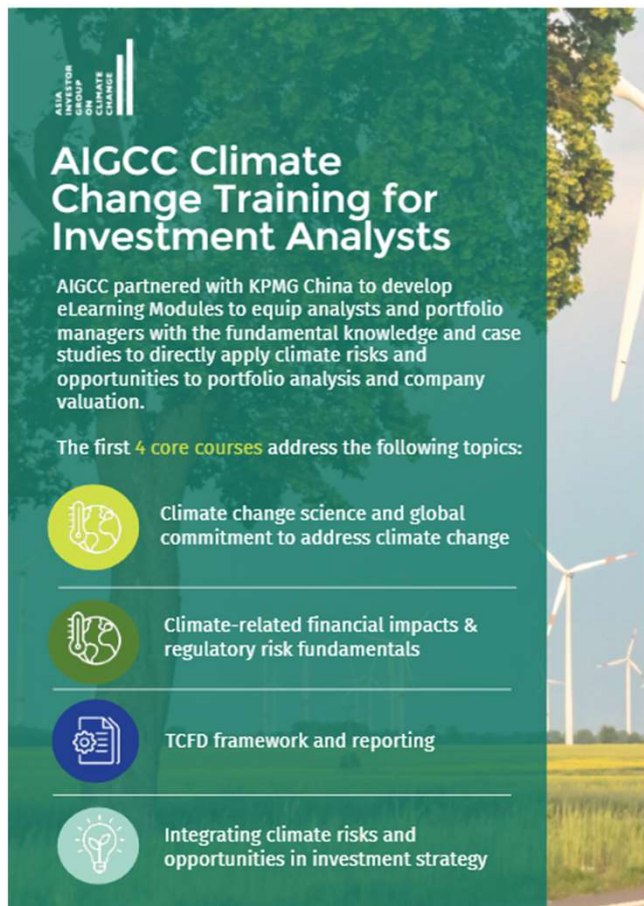


# AIGCC Climate Change Training for Investors

## Overview

# AIGCC Climate Change Training Foundation Course

The graphic features a green background with a white bar chart in the top left corner. The bar chart has four bars of increasing height, with the text 'ASIA INVESTOR GROUP ON CLIMATE CHANGE' written vertically next to it. The main title 'AIGCC Climate Change Training for Investment Analysts' is in large white font. Below it, a paragraph states: 'AIGCC partnered with KPMG China to develop eLearning Modules to equip analysts and portfolio managers with the fundamental knowledge and case studies to directly apply climate risks and opportunities to portfolio analysis and company valuation.' Below this, a line of text says: 'The first 4 core courses address the following topics:'. There are four circular icons, each with a white symbol on a green background. The first icon shows a globe with a leaf, and the text next to it is 'Climate change science and global commitment to address climate change'. The second icon shows a globe with a dollar sign, and the text is 'Climate-related financial impacts & regulatory risk fundamentals'. The third icon shows a document with a gear, and the text is 'TCFD framework and reporting'. The fourth icon shows a lightbulb, and the text is 'Integrating climate risks and opportunities in investment strategy'. The background of the graphic also shows a white wind turbine in a green field under a blue sky.

**AIGCC Climate Change Training for Investment Analysts**

AIGCC partnered with KPMG China to develop eLearning Modules to equip analysts and portfolio managers with the fundamental knowledge and case studies to directly apply climate risks and opportunities to portfolio analysis and company valuation.

The first 4 core courses address the following topics:

- Climate change science and global commitment to address climate change
- Climate-related financial impacts & regulatory risk fundamentals
- TCFD framework and reporting
- Integrating climate risks and opportunities in investment strategy

## Course Objectives

1. Equip investment analysts and portfolio managers with the fundamental knowledge and case studies to directly apply climate risks and opportunities to portfolio analysis and company valuation.
2. Introduce TCFD climate-related financial disclosure framework and reporting.
3. Provide a structured approach for integration of climate-related risks and opportunities to investment strategies.


*This training course is designed to expand the knowledge on climate-related risks and opportunities as part of the continuous education development of an investment professional.*

### Note:

*The CFA Institute allows its members the ability to self-determine and self-report continuing education credits earned from external sources. CFA Institute members are encouraged to self-document such credits in their online PL (Professional Learning) tracker.*

# Foundation Modules

# Module 1A



**ASIA INVESTOR GROUP ON CLIMATE CHANGE**

## Module 1A

### Climate change science and global commitment to address climate change

**This module will give you an understanding of:**

- The latest climate change science and projected future impacts of climate change on environment and society
- The evolution of international climate agreements and key commitments of countries under the Paris Agreement to keep global warming well below 2 degrees Celsius while aiming for 1.5 degrees.

**Target audience:**

- Entry-level investment analysts and portfolio managers interested in gaining knowledge on climate change and related financial impacts

**Duration:**

- 60-75 minutes

**Other modules available:**

- Module 1B – Climate-related financial impacts & regulatory risk fundamentals
- Module 2 – TCFD framework and reporting
- Module 3 – Integrating climate risks and opportunities in investment strategy

AIGCC partnered with KPMG China to develop 4 introductory eLearning courses on climate change to enhance the knowledge of investment analysts in Asia Pacific.

For more information, please contact [info@aigcc.net](mailto:info@aigcc.net)


## In this module, you will learn –

- What is the difference between weather and climate?
- What is global warming?
- Why 2°C?
- How does climate change impact us in the long term?
- What are the international agreements on climate change?
- How have the international agreements changed since 1988?
- What are NDCs and why are they important in combating climate change?

# Module 1B

## In this module, you will learn –

- How do climate risks translate into financial risks?
- What are physical risks?
- What are transition risks?
- What are the different types of transition risks?
- Why do these risks impact on financial performance?
- What are climate-related opportunities?
- What are the climate-related regulatory developments relevant to the financial markets?
- What are the different regulatory policies that an investor must be aware of?



**ASIA INVESTOR GROUP ON CLIMATE CHANGE**

### Module 1B

## Climate-related financial impacts & regulatory risk fundamentals

**This module will give you an understanding of:**

- The fundamentals of climate change and financial impact categories.
- Climate-related physical and transition risks and opportunities with case studies to highlight financial implications for companies and investors.
- International and local policy commitments and how policies are translated into local regulations, requirements and carbon trading markets.
- Regulatory trends in key Asian markets

**Target audience:**

- Entry-level investment analysts and portfolio managers interested in gaining knowledge on climate change and related financial impacts

**Duration:**

- 60-75 minutes

**Other modules available:**

- Module 1A – Climate change science and global commitment to address climate change
- Module 2 – TCFD framework and reporting
- Module 3 – Integrating climate risks and opportunities in investment strategy

AIGCC partnered with KPMG China to develop 4 introductory eLearning courses on climate change to enhance the knowledge of investment analysts in Asia Pacific.

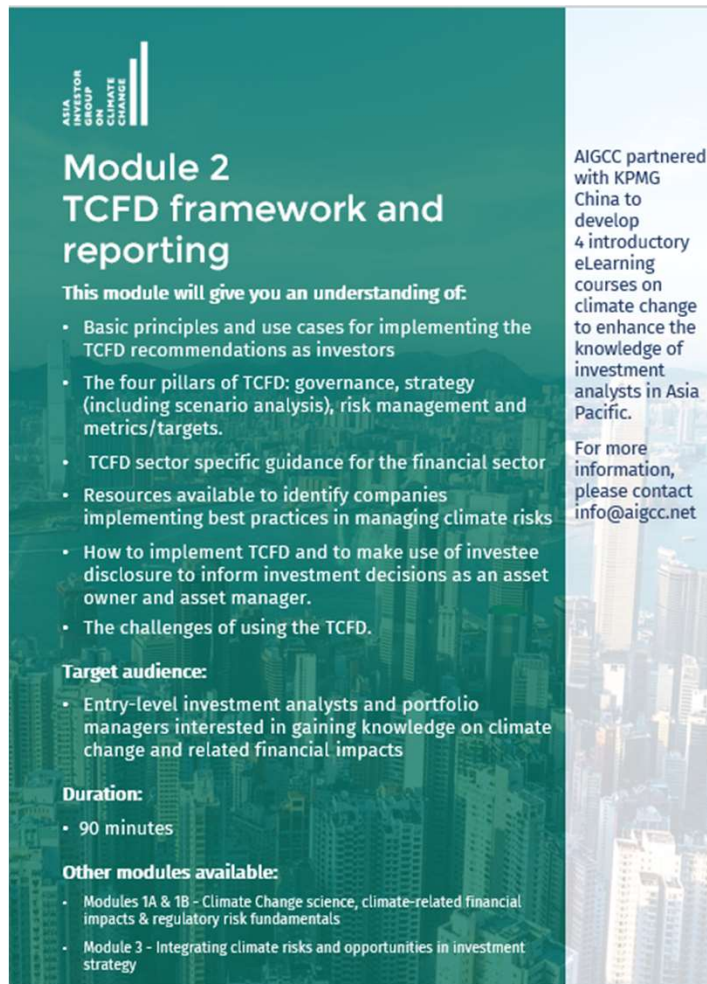
For more information, please contact [info@aigcc.net](mailto:info@aigcc.net)



# Module 2

## In this module, you will learn –

- When and why was TCFD established?
- How does TCFD relate to other existing frameworks?
- What are the four pillars of TCFD?
- Why is implementing TCFD beneficial to investors?
- Who has implemented TCFD?
- How does one start to implement TCFD?
- Is TCFD applicable for all organisations?
- What are the TCFD considerations for asset owners and asset managers?
- What are the TCFD considerations for non-financial sector?
- What are the challenges and limitations of TCFD?

The graphic is a vertical rectangle with a teal background on the left and a light blue background on the right. The left side features a city skyline at the bottom. The right side has a vertical bar with the text 'ASIA INVESTOR GROUP ON CLIMATE CHANGE' written vertically. The main text is in white and black. The title 'Module 2 TCFD framework and reporting' is in white. Below it, 'This module will give you an understanding of:' is in white. A list of bullet points follows in white. Below the list, 'Target audience:' is in white, followed by a list of bullet points. Below that, 'Duration:' is in white, followed by a list of bullet points. At the bottom, 'Other modules available:' is in white, followed by a list of bullet points. On the right side, 'AIGCC partnered with KPMG China to develop 4 introductory eLearning courses on climate change to enhance the knowledge of investment analysts in Asia Pacific.' is in black. Below that, 'For more information, please contact info@aigcc.net' is in black.

**Module 2**  
**TCFD framework and reporting**

**This module will give you an understanding of:**

- Basic principles and use cases for implementing the TCFD recommendations as investors
- The four pillars of TCFD: governance, strategy (including scenario analysis), risk management and metrics/targets.
- TCFD sector specific guidance for the financial sector
- Resources available to identify companies implementing best practices in managing climate risks
- How to implement TCFD and to make use of investee disclosure to inform investment decisions as an asset owner and asset manager.
- The challenges of using the TCFD.

**Target audience:**

- Entry-level investment analysts and portfolio managers interested in gaining knowledge on climate change and related financial impacts

**Duration:**

- 90 minutes

**Other modules available:**

- Modules 1A & 1B - Climate Change science, climate-related financial impacts & regulatory risk fundamentals
- Module 3 - Integrating climate risks and opportunities in investment strategy

AIGCC partnered with KPMG China to develop 4 introductory eLearning courses on climate change to enhance the knowledge of investment analysts in Asia Pacific.

For more information, please contact [info@aigcc.net](mailto:info@aigcc.net)

# Module 3



**Module 3**  
**Integrating climate risks and opportunities in investment strategy**

**This module will give you an understanding of:**

- Overview of the fundamental steps of integrating climate-related risks and opportunities into investment strategy
- The alignment of investment beliefs, portfolio assessment, and investment goals with popular climate scenarios and commonly-adopted climate goals
- The importance and best practices of effective stakeholder engagement and well-structured policy establishment
- Approaches and examples to implement climate change into investment practices, including: exclusion, best-in-class, ESG integration, engagement and voting, as well as theme-based and impact investing
- The importance and best practices of monitoring and disclosure

**Target audience:**

- Entry-level investment analysts and portfolio managers interested in gaining knowledge on climate change and related financial impacts

**Duration:**

- 90 – 120 minutes

**Other modules available:**

- Modules 1A & 1B - Climate Change science, climate-related financial impacts & regulatory risk fundamentals
- Module 2 - TCFD framework and reporting

AIGCC partnered with KPMG China to develop 4 introductory eLearning courses on climate change to enhance the knowledge of investment analysts in Asia Pacific.

For more information, please contact [info@aigcc.net](mailto:info@aigcc.net)

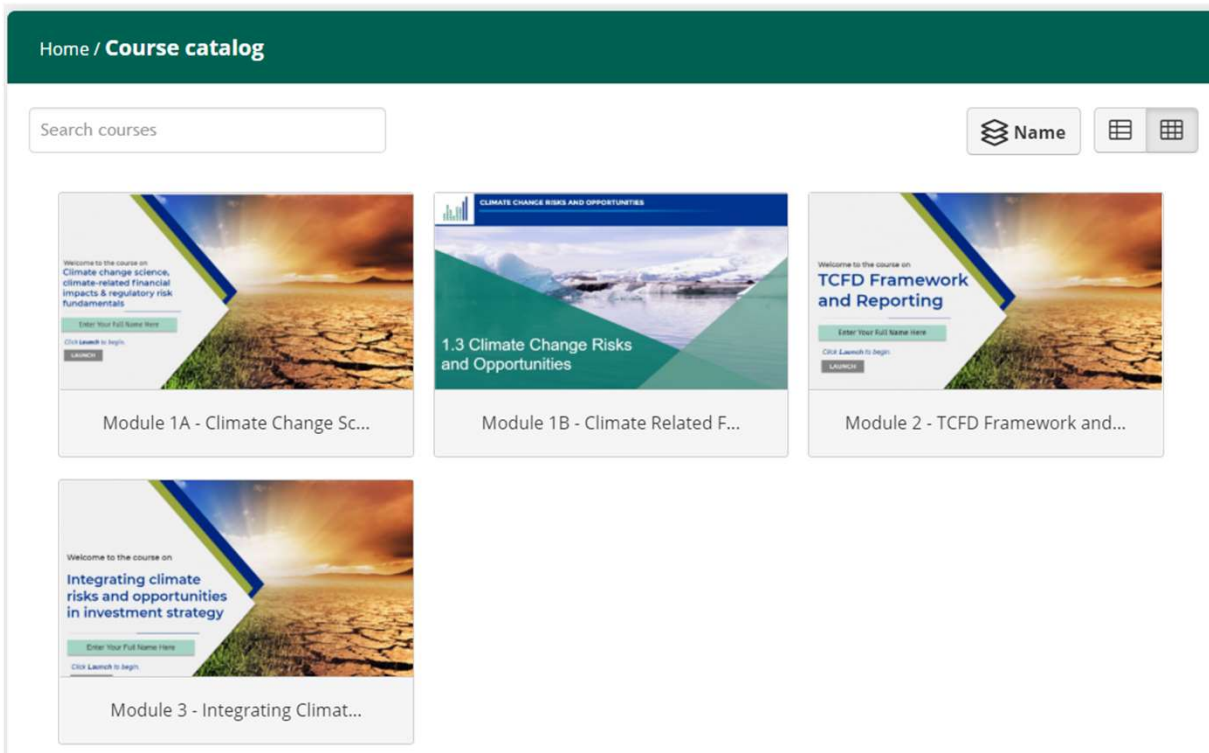
## In this module, you will learn –

- What are the climate-related components to consider in your investment belief?
- How are your investment goals aligned with your climate goals?
- What are the key climate change exposure variables for different asset classes?
- What are the key considerations in setting climate-related investment goals?
- How is an investment policy structured?
- What are the climate change factors in an investment strategy?
- Who are the key stakeholders you wish to engage in your investment strategy?
- What are the considerations for disclosures of your investment strategy?

# User Experience



# E-Learning\*

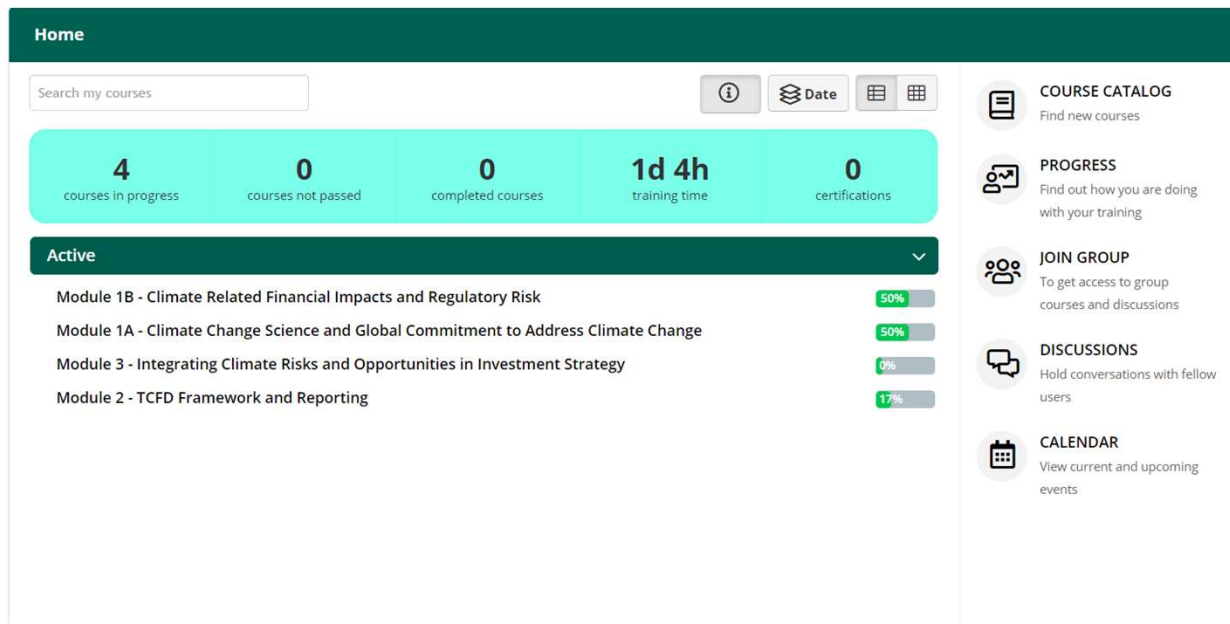


## Online, On-Demand

- Available anytime, anywhere
- Self-paced learning
- Accessible on any device with internet connection

\* Registration required. Please contact [joan.yap@aigcc.net](mailto:joan.yap@aigcc.net) for more information.

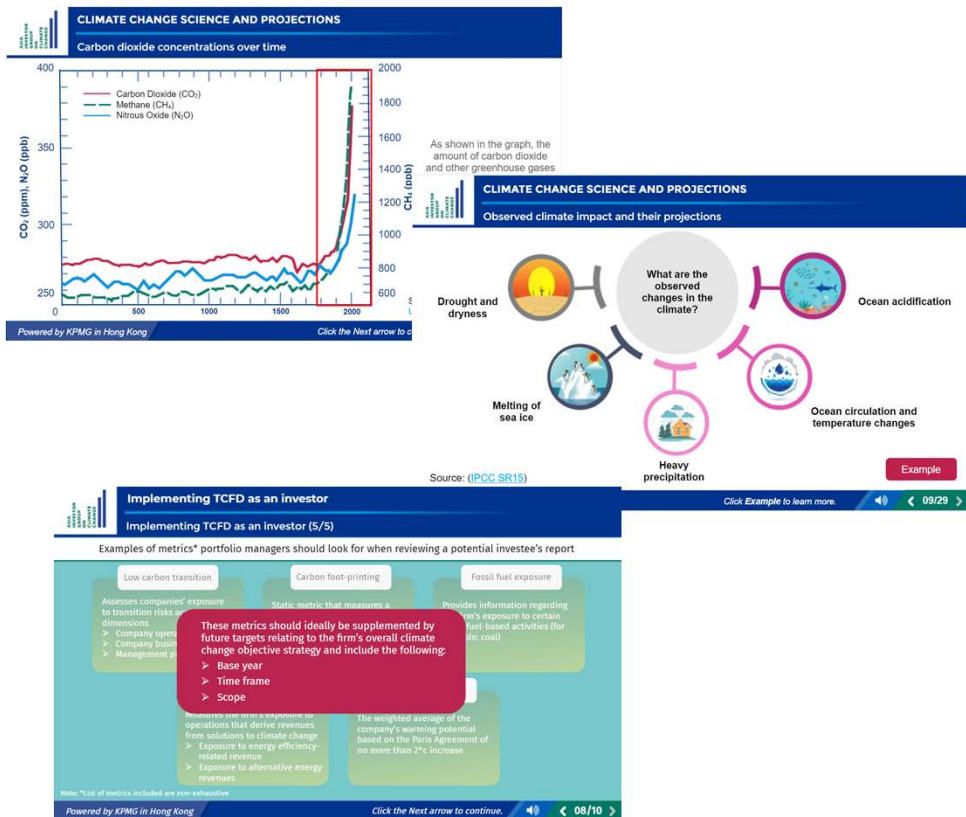
# User Profile



## Overview of Learning

- Shows progress of your learning
- Access to interactive group discussions

# Content Presentation



## Facts & Findings

- Key information shown in easy-to-understand visual and graphical representations
- Supplementary information in pop-up boxes

# Narrated Transcripts

TCFD SUPPLEMENTARY GUIDANCE											
Supplemental guidance for financial and non-financial											
		Governance			Strategy			Risk Management			
		1a	1b	1c	2a	2b	2c	and Targets			
Financial	Banks				✓						
	Insurance Companies					✓					
	Asset Owners					✓					
	Asset Managers					✓					
Non-financial	Energy					✓					
	Transportation					✓	✓			✓	
	Materials and Buildings					✓	✓			✓	
	Ag, Food, and Forest Products					✓	✓			✓	

## Slide Narration

- Every slide is being narrated
- Transcripts of the narration can be read at your own pace

# Useful Resources

ASIA INVESTOR GROUP ON CLIMATE CHANGE

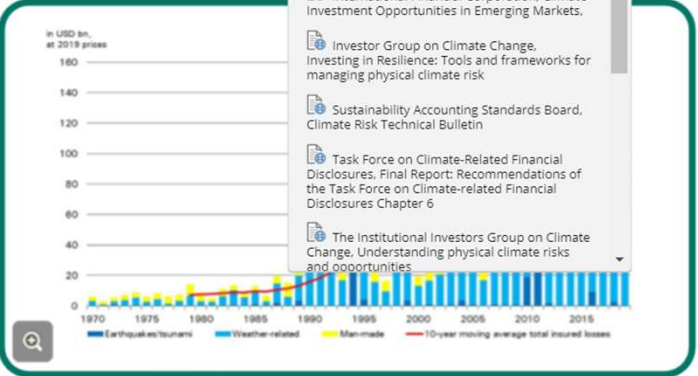
## CLIMATE CHANGE RISKS AND OPPORTUNITIES

### Physical risks and their financial impact - Acute events

#### Increasing climate-related disaster event losses

According to Swiss Re, there has been an increasing trend of climate-related insured losses over time.

It is expected that climate change will lead to more frequent and more severe acute events, driving higher the losses from natural catastrophes



Source: [Swiss Re](#)

Menu | Transcript | Resources | Help | Exit

- Asia Investor Group on Climate Change, Are Asia's Pension Funds Ready for Climate Change?
- Climate Disclosure Standards Board, Implications of climate science for financial markets
- DNB, Good Practice - Integration of climate-related risk considerations into banks' risk management.
- International Financial Corporation, Climate Investment Opportunities in Emerging Markets.
- Investor Group on Climate Change, Investing in Resilience: Tools and frameworks for managing physical climate risk
- Sustainability Accounting Standards Board, Climate Risk Technical Bulletin
- Task Force on Climate-Related Financial Disclosures, Final Report: Recommendations of the Task Force on Climate-related Financial Disclosures Chapter 6
- The Institutional Investors Group on Climate Change, Understanding physical climate risks and opportunities

## Supplementary Information

- Additional resource material for referencing
- Resources are curated for specific topics

# Case Studies



**REVIEW BELIEFS**

**CASE 2: HESTA Australian Based Superannuation Fund, Australia**

HESTA considers investing in climate change as a long-term investment, allowing HESTA to positively impact the broader economy, society, and environment. Every management decision and goal reflects creating long-term value.

Source: <https://www.hesta.com.au/commitment>



**Excerpt from the Ping An 2018 Climate Change Report**

Result of Transition Risks Analysis

The investment categories of Ping An Life are mapped to explore impacts of three levels of climate-related policy risks and climate-related policy opportunities. The results are as follows:

**Risk Classification of Six Major Investment Categories (Investment Assets)**

Risk Level	Percentage	Investment Categories
High	12.2%	Including Building Construction and Power Generation
Medium	8.7%	Including Real Estate
Low	79.1%	Including Transportation (airports, seaports, banks, and non-financial services)

Click [here](#) to view the detailed report.

## Real Applications

- Specially selected case studies to demonstrate effective applications of frameworks and reporting
- Links to original documents for additional reading



# Knowledge Check

ASIA  
INVESTOR  
GROUP  
ON  
CLIMATE  
CHANGE

**CLIMATE CHANGE SCIENCE AND PROJECTIONS**  
**Knowledge Check**

Distinguish the below examples into individual weather events and climate change

Weather event	Climate change
	<div>A rainstorm in the Philippines</div> <div>More frequent and intense drought in Australia</div> <div>Increase in the frequency and intensity of rainstorms in Indonesia</div> <div>Heat waves in China</div>

**SUBMIT**

Powered by KPMG in Hong Kong Drag and drop appropriate option and click Submit. 12/29

## Getting the fundamentals right

- 'Half-time' markers to test learners on newly acquired knowledge.
- Correct answers will be provided and repeat tries are permitted

# Key Takeaways



## CLIMATE CHANGE RISKS AND OPPORTUNITIES

### Key Takeaways

Let us quickly recap the key points we covered.

- Climate change brings both risks and opportunities to investors and corporates.
- There are two major types of climate risks, Physical and Transition:
  - Physical risks could be brought by acute events or chronic changes in the climate.
  - Transition risks could be brought by policy and legal factors, disruptive technology, changes in market preference and reputational factors
- Climate change also presents opportunities from transition of energy source, resource efficiency improvements, new products and services, new markets and climate resilience responses.
- There is huge potential in climate change-related investment, especially in emerging markets



## Summary of each lesson

- Recap of learning goals and understanding of key points
- Ensure completeness of knowledge transfer

# Flexible Learning

The screenshot displays a learning management system interface. At the top, a green header bar reads 'Home / Module 3 - Integrating Climate Risks and Opportunities in Investment Strategy'. Below this, a course card for 'Module 3 - Integrating Climate Risks and Opportunities in Investment Strategy' is shown, featuring a landscape image and a 'Resume course' button. To the right of the card, a brief description states: 'Provide participants with an understanding of how to integrate climate-related risks and opportunities into investment strategy, including an overview of potential steps of such integration, and identify resources to perform relevant management and monitoring.' Below the description, it indicates 'Duration: 60-90 Minutes' and a 'CONTENT' button. A sidebar on the left lists course content: 'COURSE CONTENT FINAL REVIEW' (with sub-items 3.1 to 3.7), 'COURSE CONTENT', 'END-OF-MODULE TEST', 'FEEDBACK SURVEY', and 'COMPLETION RULES' (with checkboxes for 'All units must be completed' and 'Leads to a certification with a duration: Forever'). The main content area shows a slide titled 'ASSESS EXPOSURE' with a background image of a snowy mountain. A menu is open over the slide, listing topics: '3.2 Assess Exposure', 'The Purpose of Exposure Assessment', 'Key Climate Change Exposure Variables - Physical ...', 'CASE 1: QIC, Australia (Physical Risks)', 'CASE 1: QIC, Australia (Physical Risks)', 'Key Climate Change Exposure Variables - Policy & ...', 'Key Climate Change Exposure Variables - Carbon P...', 'Key Climate Change Exposure Variables - Carbon P...', 'Key Climate Change Exposure Variables - Technolo...', 'Exposures in Different Asset Classes', 'CASE 2: Allianz, Germany (Transition Risk)', 'Illustrative Case Study', 'Key Takeaways', and 'Knowledge Check'.

## Self-Paced, Individual Learning

- Start, stop and resume learning at your own pace
- Overview of lesson plan
- Option to go back to specific lessons

# Progress & Certification

## Training Infographic

17/08/2021

4  
courses

2  
certifications



COURSE COMPLETION RATE



4  
courses

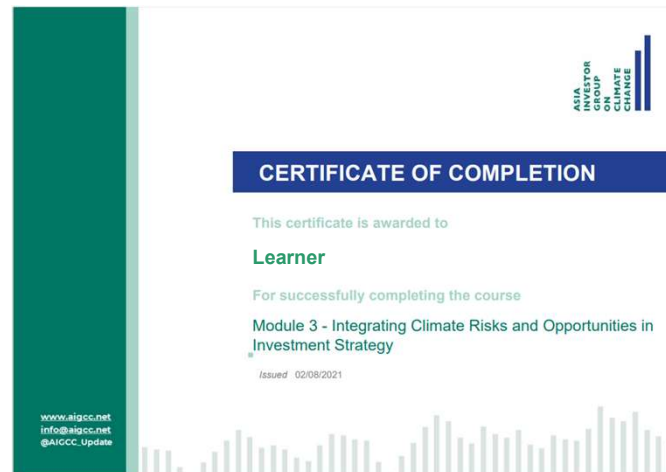
4  
completions

TEST PASS RATE



4  
executions

93%  
average score

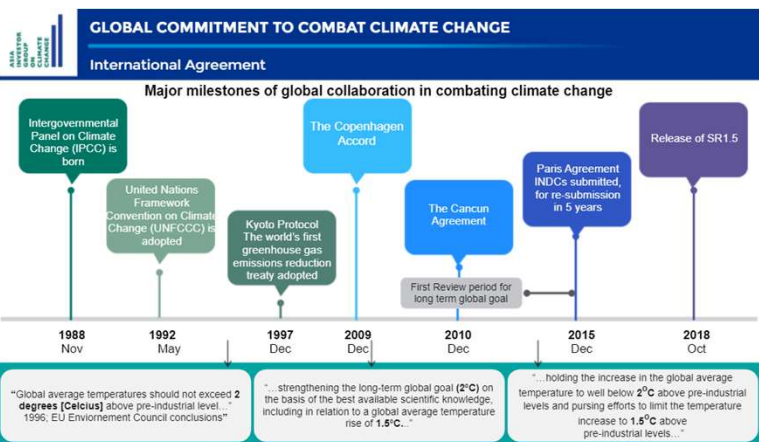
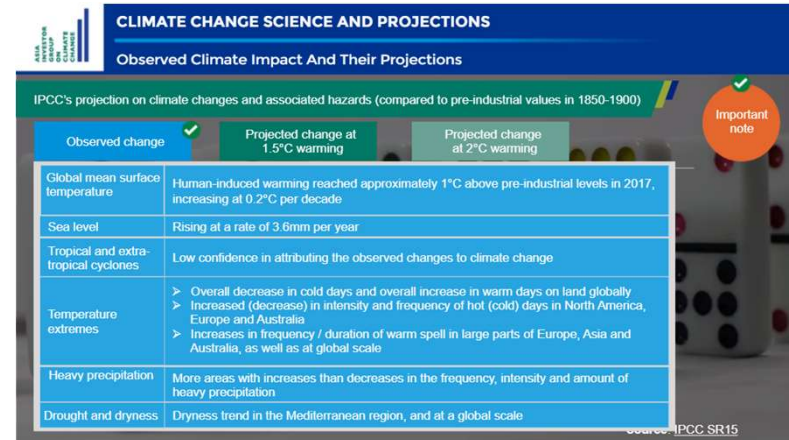
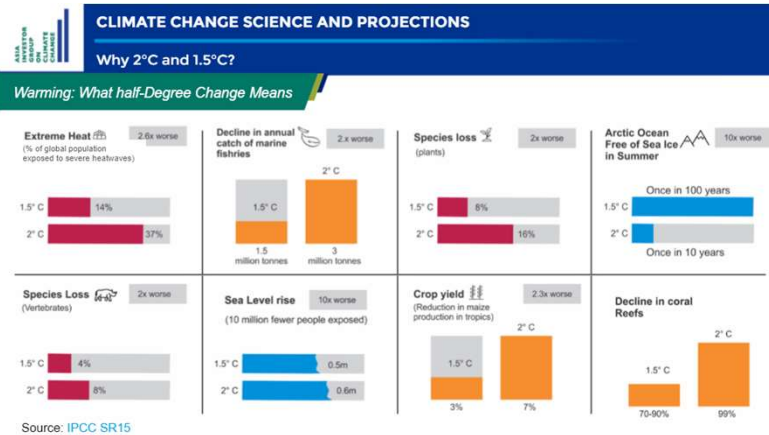


## Visibility of Learning Effort

- Learning hours
- Courses completed
- Certification upon completion of each course with at least 80% test passing rate

# Lesson Previews

# Module 1A – Climate Change Science and Global Commitment to address climate change Preview



## GLOBAL COMMITMENT TO COMBAT CLIMATE CHANGE

### Nationally determined contributions (NDCs) and long-term strategies

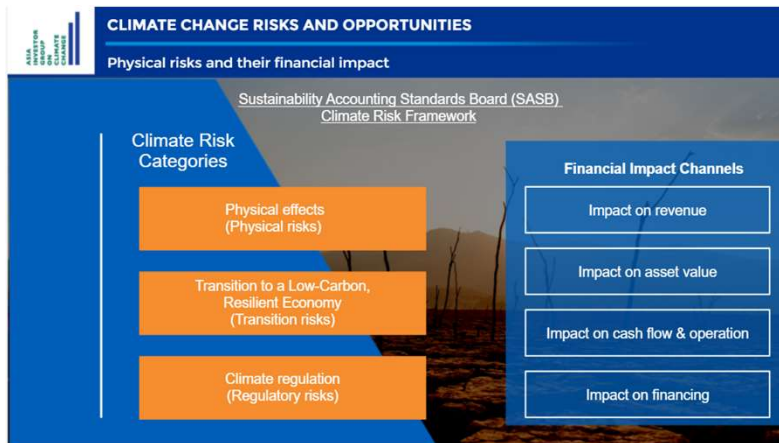
The Paris Agreement requests each country to outline and communicate their post-2020 climate actions, known as their NDCs (Nationally Determined Contributions) and long-term low greenhouse gas emission development strategies.

- [Click here to learn more about NDCs](#)
- [Click here to learn more about Long term strategies](#)
- [Click here to learn more about the notion of equity](#)



# Module 1B – Climate-related financial impacts and regulatory risk fundamentals

## Preview



**CLIMATE CHANGE RISKS AND OPPORTUNITIES**

Transition risks and their financial impact – Policy and legal risks

**Financial impact of policy and legal risks – Ban on fossil fuel vehicles**

Various countries have announced plans to phase out fossil vehicles in near future, banning the sales of fossil fuel vehicles or removing fossil fuel cars from the road. The bans would reduce demand for conventional fossil fuel vehicles and force car manufacturers to transition to alternative energy vehicles.

Some ASPAC countries with plans to phase out fossil fuel cars are:

- China – Ban non-hybrid diesel and petrol vehicle sales by 2035
- India – Ban non-electric cars sales by 2030
- Singapore – Phase out diesel and petrol vehicle by 2040

Some major export markets for Asian automakers with similar plan or discussion:

- California - Ban gasoline and diesel vehicle sales by 2040
- EU - Discussing on banning internal combustion engines by 2040



**REGULATORY DEVELOPMENTS RELEVANT TO THE FINANCIAL MARKETS**

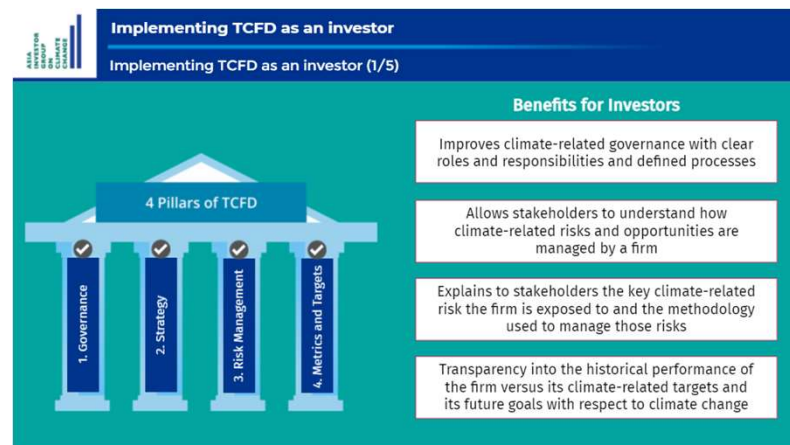
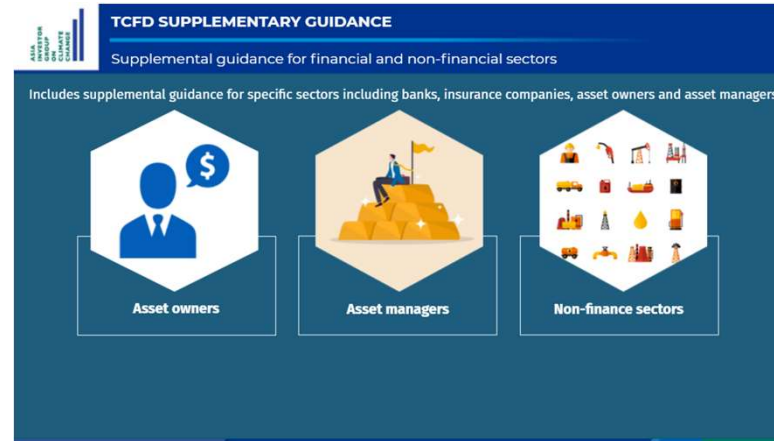
Overview of key themes of initiatives by jurisdiction

	Taxonomy framework	ESG disclosure	Lending	Green stress-testing	Prudential regulations	Green bonds	Investment practices <sup>1</sup>	Emissions trading system	Carbon tax	RE quota obligation
Mainland China										
Hong Kong										
India										
Indonesia										
Japan										
Malaysia										
Singapore										
South Korea										
Thailand								Undecided		

Legend: Policy or initiatives implemented Measures in consideration

1 Practices such as ESG investment guidance, central bank investment policies  
Source: Asia Securities Industry and Financial Markets Association 2020, World Bank 2020, AIGCC and KPMG analysis

## Module 2 – TCFD Framework and Reporting Preview



**TCFD SUPPLEMENTARY GUIDANCE**  
Supplemental guidance for financial and non-financial sectors

	Governance	Strategy	Risk Management	Metrics and Targets
	3a	3b	3c	3d
<b>Asset managers</b>				
<b>Risk Management</b>				
3a	Asset managers should describe, where appropriate, <b>engagement activity with investee companies</b> to encourage better disclosure and practices related to climate-related risks in order to improve data availability and asset managers' ability to assess climate-related risks. Asset managers should also describe how they <b>identify and assess material climate-related risks for each product or investment strategy</b> . This might include a description of the resources and tools used in the process.			
3b	Asset managers should describe how they <b>manage material climate-related risks for each product or investment strategy</b> .			
3c	N/A			

## Module 3 – Integrating climate risks and opportunities in investment strategies

### Preview

## ASSESS EXPOSURE

### Exposures in Different Asset Classes

The diagram illustrates the relationship between Risk and Fixed Income asset classes. It features a large, light blue hexagon with a dashed border. Inside the hexagon is a green icon representing a house, a balance scale, and a stack of coins. A line extends from the bottom of the hexagon to a solid blue rectangle labeled 'Fixed Income'. To the right of the hexagon is a white box labeled 'Risk'. The background of the slide is a dark, textured image of a city skyline at night.

#### Risk

- Heavily dependent fossil fuel economies likely to face higher budget deficits as a result of dramatic policy measures that reduce economic growth and tax revenues from fossil fuel industries.
- Lower volatility likely in low carbon sovereign, credit and emerging debt issuers, as climate mitigation policy is strong, transparent and anticipated hence less uncertainty.

#### Opportunities

- Green and climate bond issuance proliferates, becoming a core component of a fixed income asset mix, embedded into core mandates and also available as thematic mandates.
- In addition to credit issuers in large companies, private debt and project based financing would target small and medium sized enterprises and projects that focus on low carbon, energy efficiency opportunities.

ESG  
INTEGRATION  
IN  
THE  
CAPITAL  
MARKETS

## SET GOALS

### Common Types of Goals

**Reduce Risk Exposure**

**Adjust Asset Allocation**

**Demonstrate Active Ownership**

- To measure and reduce the carbon emissions intensity of a portfolio over a certain time period (*for example: in line with 1.5 degree ambition*).
- To exclude/ reduce exposure to coal/ fossil fuel reserves and exploration over a period of time
- To align with and support the attainment of global commitments such as SDG1, Paris Agreement, Net Zero Target Setting Protocol, etc.

- To invest a specified proportion of the fund's assets in low carbon, energy efficient and climate adaptation opportunities across different asset classes
- To divest investments in high carbon intensity sectors such as fossil fuels and coal-based businesses.

- To engage with high carbon intensive companies to achieve specific carbon reductions by future points in time
- To engage with corporations to disclose climate-related risks.
- To develop product and services that considers climate change impact at its core.

**Governance**

**Governance** states internal and external governance of the institutions or funds

**ESG incorporation approaches**

**ESG incorporation approaches** Investors intend to refer to the incorporation of climate change risks and opportunities across the portfolio, including the approaches to make investment decisions related to strategic asset allocation, selection of new and monitoring of mandates, setting priorities and evaluation of new investment opportunities etc.

**Active ownership and engagement**

**Active ownership and engagement** outlines the approaches of investor's active ownership principles and procedures

**Reporting**

**Reporting** states investors' approaches to public disclosure and monitoring of the investment performance on climate change issues

Normally, climate change investment policy is formed of several key components based on PRI's guide which are:

(For further details of each component, please refer to "Investment Policy: Process & Practice A Guide for Asset Owners" by PRI).

## INVESTMENT APPROACH

### Responsible Investment Strategies and How to Implement Climate Change Factors

# Learning Road Map

# Advanced Modules (2022)

The following advanced training modules are being planned and work is in progress for some. These modules will allow investors to get a deeper dive into the respective topics and to stay updated to the development of climate change for the investment market.

- Detailed Climate Risk and Opportunity Assessment by Asset types
- Climate Transition and Physical Risk Analysis
- Corporate Engagement and Active Stewardship on Climate
- Paris Aligned Climate Targets, Metrics and Reporting
- Advanced TCFD: Applied Scenario Analysis

For more information, please contact [joan.yap@aigcc.net](mailto:joan.yap@aigcc.net)