CLIMATE & NET-ZERO MASTERCLASS: INSTITUTIONAL

We are pleased to offer a unique, tailored series of workshops on the science, technology, economics, and politics of climate change and the zero-carbon transition delivered by Dr Mathew Hampshire-Waugh, author of bestselling book 'CLIMATE CHANGE and the road to NET-ZERO'.

The course is structured around the Task Force on Climate-Related Financial Disclosures (TCFD) framework and provides information on carbon accounting, physical and transition risk, transition opportunities, and how to frame climate change in terms of value destruction and value creation.

Running alongside the bottom-up framework is a top-down, big picture assessment of how and why the planet is warming, where we are headed based on global agreements, the emerging technology consensus on addressing climate change, and what net-zero means in practice.

Learning Outcomes

The course provides simple intuitive explanations of climate science, energy technology, climate frameworks, and regulatory changes to build a better understanding of the climate problem, a clear vision of what a net-zero future means, and the ability to navigate potential physical, technological, and political change.

The course provides valuable insight for corporates, private equity, and financial institutions to better mitigate physical and transition risks whilst also identifying portfolio opportunities.

Tailored Content

The standard presentation session is 3 hours (180 minutes) delivered in one or multiple workshops and including Q&A. However, to ensure we deliver the highest value possible we offer tailored content so please select whether you wish to receive an abridged taster version or more detailed version of the content in each section (delivery time ranges from 60 mins to 240 minutes, split as required).

We also offer the option to build out in tandem an excel workbook which runs through simplified modelling of future emissions pathways, warming outcomes, damage estimates, carbon accounting, discounting, levelized cost calculations, technology pathways, value-at-risk analysis, and GDP impact calculations.

Expert Biography

Dr Mathew Hampshire-Waugh has spent the last ten years working as an equity analyst at global investment bank, Credit Suisse. He resigned his role as director in 2019 to commit to writing and working on climate change and new energy technology full time.

During a decade as an investment banker, Mathew worked with the top executives of many multi-billion-dollar companies and built relationships with many of the world's largest investment managers. Mathew's work centred on forecasting technology trends, financial performance, and the intrinsic value of companies involved in markets including renewable energy, electric cars, battery technology, and biofuels - publishing and pitching share price recommendations to the world's largest institutional investors, hedge funds, and private wealth managers.

Prior to his career in the banking industry, Hampshire-Waugh gained his doctorate in materials chemistry from University College London, where he worked on novel coatings and nano-materials for use in energy saving glazing and solar panel design.

Section	Abridged	Standard	Detailed
The Science of Global Warming & the Fingerprints of Change • Why CO_2 warms the planet - Basic physics of the Greenhouse Effect • Evidence of the Greenhouse Effect - Temperature and CO_2 over 500 million Years • What has already happened – Ongoing changes to Earth's System		x	
Forecasting Future Warming • Climate Change Scenarios Explained – the basics of RCPs and SSPs • How Emissions Scenarios are used to Forecast Warming		x	
Global Agreements – An Abridged History • The UNFCCC, Kyoto, and Paris – Global frameworks explained • Implied warming based on Paris commitments – understanding Carbon Budgets		x	
Physical Impacts based on Implied Warming • Chronic Risks – Average Temperature Rise and Mean Sea Level Rise • Acute Risks – Cyclones, Floods, Heat Waves, Storms, Droughts, Wildfires • Tipping Points – the Known-Unknowns and Systemic Breakdown		x	
Net-Zero Explained • Assessing the Solutions - Mitigation, Adaption, and Climate Engineering explained • CO_2, Other Greenhouse Gases and Scope 1-3 Emissions Accounting • Global Energy and Emissions today		x	
Net-Zero Energy Supply - Building a Safe, Reliable, Affordable Network • Techno-Economic Assessment - Fossil Fuels, Nuclear, and Renewables • Life Cycle Emissions Analysis, Levelized Cost Analysis, Discount Rate Calculations • Energy Storage technologies and building a Smart Electricity Grid		x	
Electrifying Nearly Everything – Transport, Industry, Amenities, and Agriculture • The techno-economic case for Electrifying nearly all Demand • The role of Hydrogen, Carbon Capture, and Biofuels in hard-to-abate areas • Feeding the World Without Heating the Planet - Agriculture and Land-use		x	
The Emerging Initiatives, Frameworks, and Regulatory Landscape • Climate Frameworks – GHGp, SBTi, and TCFD • Climate Strategy and Disclosure – Climate Action & The Networking Effect • Climate Financing – Shifting Capital from Brown to Green			
Transition & Physical Risks • Strategically – Market Share, Reputational Risk, Technology Risk, Disruption • Operationally – Chronic Physical Damage, Supply Chain Disruption, Labour Risks • Financially – Write Downs, Access to Funding, Policy & Legal Risk, Carbon Pricing		x	
Transition Opportunities • Strategically – Diversification, Products & Services, Acquisitions • Operationally – Efficiency, Resilience, Cost-Benefit • Financially – Cost of Financing, Productive Capex Opportunities		x	
Value Creation or Value at Risk? • Assessing the Global Net-Zero opportunity – evaluating GDP outcomes • Business/portfolio specific value assessment – a discounted cash flow analysis		x	
Total Workshop Length	**60 mins**	**120 mins**	**240 mins**

	Select One Option
Excel Modelling Bolt-on (+120 mins)	**Yes/No**