# **PROGRAMME**



17-21 MAY 2021

A FUSION OF SCIENCE AND POLICY ADVANCING A RESILIENT, ZERO-CARBON WORLD



#### WELCOME

Welcome to Climate Exp0 – the first conference organised by the <u>COP26 Universities Network</u> and the <u>Italian University Network for Sustainable Development (RUS)</u>, working together to raise ambition for tangible outcomes from the 2021 UN Climate Change Conference (COP26).

Supported by UK Research and Innovation (UKRI), Cambridge University Press, and the Conference of Italian University Rectors (CRUI), Climate Exp0 is part of the official <u>All4Climate</u> Pre-COP programme and will showcase the latest thinking and most relevant international research to decisions being made at COP26 in November around five key themes.

Free to attend and open to all, Climate Exp0 will harness the power of virtual collaboration to maximise inclusivity and accessibility while minimising environmental impact and carbon footprint – providing a global stage at which policymakers, academics, practitioners, students and members of the public can gather together to collaborate, share and debate climate change science and policy.

**COP26** UNIVERSITIES NETWORK















#### PROGRAMME-AT-A-GLANCE (ALL TIMES BST)

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	Monday 17th May			Tuesday 18th May	h May		Wednesday 19th May		Thursday 20th		Friday 21st May					
	Green Recovery			Nature-based Solution	s		Mitigation Solutions		Adaptation & Resilience		Finance & Regulation		_			
09:00	Conference opening		Opening (Policy): Welcome and introductions		On demand content/		On demand content/		On demand content/							
09:15	Nature-based solutions and the opportunities they offer		poster hall		poster hall		poster hall									
09:30																
09:45		Climate risk		Nature based solutions to address societal shallonger		Opening (Policy): A new perspective on the global energy transition		Opening (Policy): Adaptation and resilience challenges in the COP26 meeting		Opening (Policy): Risk and finance roundtable						
10:00		omnate risk		Nature-based solutions to address societal challenges												
10:15																
10:30		Break			Break		Break			Break		Break				
10:45							The mitigation	insignts from the	Youth advocacy and	Physical science,						
11:00	Opening (Policy): Globa	al perspectives on a resp	onsible green recovery	Implementing	g NbS across landscapes :	and seascapes	landscape: demand, supply and systems		adaptation and Enal	Live poster session 1: Enablers and barriers	Live poster session 2: Adapting robustly to		i			
11:15			,		6 · · · · · · · · · · · · · · · · · · ·			cutting edge	-,	early warning systems  and adaptation finance	to practice and adaptation	climate change	Disclosure and risk	Access to finance	Climate law and	
11:30								Climate change and net					management		governance	
11:45		Break			Break		New evidence on mitigation solutions	zero: Mitigating solutions	Decarbonising electricity systems		Break					
12:00 12:15										Enablers and barriers	Live poster session 3:					
12:15	Green recovery investments and	Inclusivity in green recovery	Solution stars: Mitigation solutions for	Capacity building and knowledge transfer for	Climate risk	Treescape: Building resilience into the				to the practice of adaptation - from	Mainstreaming adaptation in the	Building resilience into the future: Adaptation and resilience	Lunch			
12:30	enterpreneurship		green recovery	nature-based solutions		future		Lunch		mainstreaming to adaptat	Global South					
13:00																
13:15		Lunch			Lunch		Managing transition  Tisks on the road to net-			Lunch						
13:30	RINGO: Primer	on the the climate nego	tiations/COP26		T			Decarbonising transport in cities	Student session							
13:45			I				zero	transport in cities					Macropolicy	Green bonds and novel	Student session	
14:00			Student session - Leaving no-one behind:	cooperation and	Dialogue: Implementing NbS across landscapes	ng s Student session						tudent session	imarcia iist direns			
14:15	Economy-wide impacts of green recovery	Engagement and participation	Ensuring a just green recovery post-COVID-19	climate policy	and seascapes 2			Break	I	Adapting robustly to climate change Climate resilient universities for resilient					Student session	
14:30			in the Global North and Global South				Engaging people as	Low carbon cities:	Universities and the	camate change	communities					
14:45					Break		agents of change	Planning and data	race to net zero					Break		4
15:00		Break											RINGO: Q&A on	The road to COP26 and CMA3 - developing the	Localising the circula	ar
15:15			Delivering green	Scaling up protection, restoration and	You're surrounded! Regionally led, globally	Nature-based solutions		Break			Break		conference topics and their role at COP26	Paris Agreement Rulebook	economy	
15:30	Socially equitable green recovery	Place-based solutions	recovery and just transition in the context			research showcase 1					Live poster session 4:  Physical science, adaptation and resilience: Current risks,	The climate adaptation challenge				
15:45	•		of rapid technological change	landscapes			Green transportation	Public support for climate action	Carbon markets for increasing international	Accelerating adaptation in the Global South				Break		
16:00		Break			Break				ambition		early warning systems and adaptation finance					
16:15		Break			Break			Break			Brook		Closing (Polic	y): Opportunity and finan	ce roundtable	
16:30								вгеак		Break						
16:45		Closing (Policy): The role of 'local' in delivering a green economic recovery				Nature-based solutions							Break			
17:00	- policy insights for the UK and beyond in NBS and new financial mechanisms nature-based solutions		research showcase 2	Closing (Policy): Police	cies for delivering COP26	mitigation objectives		ding international partne eve adaptation and resili			Break Conference closing remark	c	4			
17:15													Connecting remain	_		
17:30																
17:45	On-demand content / On-demand content /								Conf	erence closing panel discu	ssion					
18:00							On-demand content / poster hall		On-demand content / poster hall							
18:15														Po	olicy Sessi	
18:30	30														0	n demand

# **GREEN RECOVERY**

**MONDAY 17TH MAY** 



The Rt Hon Alok Sharma and Italian Minister Roberto Cingolani will open our conference, presenting the priorities of the joint UK and Italian presidency of the 2021 international climate change negotiations (COP26). A session on the latest evidence on climate risks – from systemic risks through to tipping points – will set out the urgent need for ambitious action that will set the tone for the rest of the week.

COP26 takes place against the backdrop of the COVID-19 pandemic and related economic impacts. Countries are shaping COVID recovery plans that fit their national context, and the first day of Climate Exp0 will explore how the global recovery can work in tandem with, and deliver on, climate goals.

Green recovery plans offer the chance to emerge from the global COVID-19 pandemic with a set of reforms that will enable the transition to a prosperous and sustainable future. To be successful, a green recovery needs to balance environment, law, finance and society, ensuring that the transition to a climate-compatible future is just and socially equitable across the globe and populations.

This first day of Climate Exp0 will include sessions on green recovery that take a broad and global perspective, including the approaches of different countries and the overall economic impact and potential of a green recovery. Other sessions will focus on place-based green recovery and the practical applications of green recovery principles.

Green Recovery Organising Lead: Daniel Parsons, University of Hull

09:00-09:30	Conference opening
	Chairs: Emily Shuckburgh, Director of Cambridge Zero, University of Cambridge, UK and Chair of Climate Exp0 and Patrizia Lombardi, Deputy Rector of Politecnico di Torino, President of Rete delle Università per lo Sviluppo Sostenibile (RUS), Italy Keynote speakers: - The Rt Hon Alok Sharma MP, President of COP26, UK - Minister Roberto Cingolani, Ministry of Ecological Transition, Italy
	Welcome to Climate Exp0, the first conference organised by the COP26 Universities Network and Rete delle Università per lo Sviluppo Sostenibile. The Rt Hon Alok Sharma and Italian Minister Roberto Cingolani will present the priorities of the joint UK and Italian presidency of the 2021 international climate change negotiations (COP26).
09:30-10:30	Climate risk
	Panel: - Emily Shuckburgh, University of Cambridge and Chair of Climate Exp0 - Albert Klein Tank, MET Office
	- Tim Benton, Royal Institute of International Affairs, Chatham House
	This session will explore climate risk in more detail including tipping points and systemic risk.
10:30-10:45	Break
10:45-11:45	Opening (Policy): Global perspectives on a responsible green recovery
	Chair: Daniel Parsons, University of Hull
	Panel: - Sharan Burrow, International Trade Union Confederation
	- Louise Smith, Aura - Ron Loveland, Welsh Government
	<ul><li>- Simon Kemp, University of Southampton</li><li>- The Rt Hon Chris Skidmore MP, Minister of State for Universities, Science, Research and Innovation, UK</li></ul>
	This panel will open the day's theme with a discussion on global perspectives of a responsible green recovery - environmental, fiscal and regulatory reforms to build back greener and better following the COVID-19 pandemic. Chaired by Daniel Parsons, the panel will discuss how a successful green recovery should address aspects of social justice, protection of nature and climate change, as well as the roles of government, trade, industries and academia.
11:45-12:00	Break

#### **LIVE SESSIONS**

12:00-13:00	Green recovery investments and entrepreneurship  Chair: Rob McMongle, The Green Economy Presenters:  - Marina Andrijevic, Humboldt University of Berlin - lain Todd, Erasmus University Rotterdam - Silke Schmidt, Philipps University of Marburg - Katie Kish, Canadian Society for Ecological Economics - Lorena Cordero, Pontificia Universidad Católica del Perú (PUCP), Peru Young Energy Professionals  In this session, we will hear speakers from across Europe presenting their research, followed by discussion on investing in resilient and sustainable infrastructure and how decarbonisation fits with post- pandemic fiscal and monetary frameworks.	Inclusivity in green recovery  Chair: Laura Sandys, Challenging Ideas Presenters:  - Katharine Lee, University of Bath  - Miriam Kennet, Green Economics Institute  - Ruth McKie, De Montfort University  - Claire Duncanson, University of Edinburgh  - Carol Cohn, Consortium on Gender, Security and Human Rights  - Marcelo Alejandro Corti, University of Buenos Aires  - Julian Corres, University of Buenos Aires  In this session on inclusivity throughout green recovery and climate change, we will see presentations followed by discussion on inclusion of all ages and genders in the fight for a better tomorrow.	Solution stars: Mitigation solutions for green recovery  Chair: Agota Mockute, University of Hull Presenters:  Jason Hallett, Imperial College London  Chloe Foster, Applied Negative Emissions Centre  Ofonime Harry, University of Uyo  Claire Holland, University of Manchester  Jorge Sainz, Universidad Rey Juan Carlos  Milena Buchs, University of Leeds  Ying Zhou, University of Waterloo  Sergey Kolesnikov, University of Cambridge  Alessandra Zanoletti, University of Brescia  Mariangela Rosano, Politecnico di Torino  Patricia Thornley, Aston University  Emanuela Melis, University of Cagliari  Joan Marc Rodriguez Benuz, Imperial College London  Wladmir Motta, Federal Center for Technologica Education of Rio de Janeiro  This rapid-paced Pecha Kucha session will see presenters from around the world propose, in 2 minutes, their mitigation solution for green recovery and technologies that might just provide the solution for a greener future. Topics will include bio-based solutions, using Al, decarbonisation and managing natural resources.
13:00-13:45	Lunch		
	RINGO: Primer on the climate negotiations/COP26		

research to the negotiations with Tracy Bach and Beth Martin, Washington University St. Louis and RINGO CFPs.

Learn how to navigate a COP, track specific negotiation items of interest, understand the COP policymakers' need for research and how to bring your

#### **LIVE SESSIONS**

13:45-14:45	Chair: Catherine Cameron, Director, Agulhas Applied Knowledge Presenters: - Piers Forster, CONSTRAIN, Priestley International Centre for Climate, University of Leeds - Stijn Van Hummelen, Managing Director (Brussels), Cambridge Econometrics - Cristina Peñasco, University of Cambridge - Daniele Malerba, German Development Institute  In this session on economy-wide impacts of green recovery, speakers will present their modelling research followed by discussion on the importance of this current pivotal point in the global economy.		Student session - Leaving no-one behind: Ensuring a just green recovery post-COVID-19 in the Global North and Global South  This session will discuss common ground, elaborate on differences/challenges between the regions, and offer a constructive space for looking forward to a North/South recovery.
14:45-15:00	Break		
15:00-16:00	Presenters: - Timothy Foxon, SPRU, University of Sussex - Julia Wdowin, University of Cambridge - Melea Press, University of Glasgow - Wai Lok Cheung, The Chinese University of Hong Kong In this session, speakers will present their research followed by a discussion on what measures beyond economics are critical in a just and socially equitable green recovery.	SCI - Peter Taylor, University of Leeds - Henrietta Moore, University College London	Delivering green recovery and just transition in the context of rapid technological change  Chair: Martin Porter, CISL Brussels Presenters:  - Hector Pollitt, Cambridge Econometrics  - Jasper Van Loo, European Centre for the Development of Vocational Training  - Sanna Markkanen, Cambridge Institute for Sustainability Leadership  The economic recovery from Covid-19 will need to support the transition to climate neutrality in a context characterised potentially disruptive technological advances such as automation and digitalisation. This session focuses on how the interconnections between the economic recovery, decarbonisation and technological change can facilitate or hinder equitable recovery and 'just' transition to climate neutral economy.

### **LIVE SESSIONS**

16:00-16:15	Break
16:15-17:30	Closing (Policy): The role of 'local' in delivering a green economic recovery - policy insights for the UK and beyond
	Chair: Rebecca Ford, University of Strathclyde, UK Panel: - Polly Billington, Director of UK100 CFM, UK - Neil Jennings, Grantham Institute and Imperial College London, UK - Meggan Spires, ICLEI Africa, South Africa
	In the run-up to COP26, countries around the world are revisiting their net-zero commitments and nationally determined contributions (NDCs) toward limiting the impacts of climate change. However, there is no clear picture of how these national priorities will be delivered in practice. This session will explore the role that "local" can play in stimulating action and driving Green Economic Recovery. We will explore issues such as:  - The role of local leadership, local delivery, and local responsibility and accountability  - Local development of supply chain industries and career development and progression over time  - The role local action can play in supporting socially equitable recovery  - The interplay between local and national action, and what changes are needed in governance structure to enable positive action  - Opportunities to learn from overseas, and ensure UK learnings support the international community
17:30-18:30	On-demand content / poster hall

Submitting author	Affiliation	Title
Amelie Andre	University of Hertfordshire	Delivering a Healthy and Sustainable Food Economy in Letchworth Garden City
Ario Fahimi	University of Brescia	Environmental sustainability evaluation of technologies to recovery phosphorous from incinerated waste streams, based on embodied energy and carbon footprint
BINJIAN NIE	University of Birmingham	Experimental performance of a phase change material-based road/rail container for cold chain transportation
Ceylan Akbas	Un/Archived Textiles (BHRE)	Un/Archived Textiles
Chiara Tea Antoniazzi	Sant'Anna School of Advanced Studies	Operationalising the Sustainable Development Mechanism: Opportunities for a Human Rights-Based Approach
Dr Katrina Petersen	Trilateral Research	Assessing Risks and Impacts at Different Scales of Action
Gaudi Simona	Italian National Institute of Health	Epigenetics in the Mediterranean area
Giorgio Dal Fiume	Altromercato Impresa Sociale	From Climate Crisis to Climate Justice: The Fair Trade Contribution
James Graham	UEA	Pathways and tensions in zero carbon transition: A review
Laura Fiameni	University of Brescia, Italy	Simultaneous phosphorus and amorphous silica recovery from incinerated sewage sludge ash
Luca Moreschi	University of Genoa	Carbon accounting for big events: challenges and future perspectives towards carbon neutrality from Expo 2015 World Fair to 2021 FIS Alpine World Ski Championships
Lynn Wilson	University of Glasgow	Closing the Loop. Driving a Post-Consumer Clothing Circular Economy
Marcelle McManus	University of Bath	BioHydrogen - The Way Ahead
Marcelle McManus	University of Bath	Energy and Infrastructure Systems Impact: Walking the Temporal Tightrope
Marcelle McManus	University of Bath	Bio-based gasification - potential and opportunities
Matthew Agarwala	Bennett Institute for Public Policy, University of Cambridge, UK	Building Forward: Investing in a Resilient Recovery
Matthias Poralla	Perspectives Climate Research	Impacts of COVID-19 and recovery policies on baseline setting in developing countries
Rebecca St. Clair	University of Manchester	Green Recovery for Blue Food? Exploring the impacts of the COVID-19 pandemic on the UK seafood sector

Submitting author	Affiliation	Title		
Renata Tubelo	University of Nottingham	The Active Communities Revolution		
Renatas Kizys	Southampton Business School, University of Southampton, UK	What Drives the Competitiveness of a Circular Economy?		
Sabine Matysik	University of Cambridge	Cambridgeshire Decarbonisation Fund to Support the Achievement of Net-Zero Cambridgeshire by 2050		
Sharmila Sumsurooah	The University of Nottingham	Solutions for Aircraft Electrification Leadership (SAEL) - Driving zero-net carbon aviation through an open global aircraft electrification technology framework		
The Interdisciplinary Research Hub in Sustainability & Conservation	Wolfson College, Cambridge	Resource Efficiency through Collaboration and Interdisciplinarity; green innovation and equity of access to best practice		
Theodoros Arvanitopoulos	Tyndall Centre, UEA	Local conditions for the decentralisation of energy systems		
Vanessa Corkal	International Institute for Sustainable Development	Green Strings: Principles and conditions for a green recovery from COVID-19 in Canada		

### **ON-DEMAND PRESENTATIONS**

Submitting author	Affiliation	Title	
Aaron Gillich	LSBU	Introducing the 'Carbon Olympics' - Going for Green	
Andrew Howes	University of Manchester	Education and the Green Recovery	
Dimitri Zenghelis	Bennett Institute, University of Cambridge; Grantham Research Institute, London School of Economics	Fiscal responsibility; investment in sustainable and resilient economic recovery from COVID-19	
Dr Trevor Clohessy	Galway-Mayo Institute of Technology	Distributed Ledger Technologies for Sustainable Livestock Farming	
Holly McCloy	Glasgow Caledonian University Masters Student	What Green Conceptual Framework could Glasgow Transition to?	
Linda Clarke	University of Westminster	Labour and the green transition in the built environment	
Rachel Brown	Newcastle University	Value of geological resources in Net Zero: Lessons from onshore oil and gas in the UK	
Samuel Tang	Imperial College Business School	Optimising corporate sustainability behaviour for a green recovery	
William Moody	University of Cambridge (CUSPE)	Using youth community-based resources to tackle the climate emergency within Cambridgeshire communities	

Nature-based Solutions (NbS) are a powerful tool to address the causes and consequences of climate change and biodiversity loss. As such, they have a role in delivering on targets that countries are committed to under the international climate change framework, and may strengthen at COP26. NbS can support human societies in multiple ways from providing food, clean water and shelter, to storing carbon and protecting us from the impacts of extreme events such as floods, droughts and heatwaves.

The day will explore the concept of NbS and discuss why they must be designed, implemented and managed by/in partnership with local communities. The sessions will cover the benefits and potential risks of implementing NbS in land and marine-based environments and will examine some key case studies on sustainable agriculture, reforestation, peatlands, REDD+ and the future of cities. The live panels will discuss the crucial role of education, skills development and shared learning in realising sustainable solutions, boosting employment and securing livelihoods, and will examine the role of youth action and empowerment. The day will close with a debate on climate finance, offsetting and what constitutes high-quality NbS.

NATURE-BASED SOLUTIONS TUESDAY 18TH MAY @ cecilegirardin

Nature-based Solutions Organising Lead: Yaryna Basystyuk, University of Southampton

09:00-09:30	Opening (Policy): Welcome and introductions Nature-based solutions and the opportunities they offer
	Chair: Emily Shuckburgh, Director of Cambridge Zero, University of Cambridge and Chair of Climate Exp0 Keynote speakers:
	- The Rt Hon Zac Goldsmith MP, Minister of State for Pacific and the Environment, UK - Emma Howard Boyd, Chair of the Environment Agency, UK
09:30-10:30	Nature-based solutions to address societal challenges
	Chair: Roberto Buizza, Scuola Superiore di Studi Universitari e di Perfezionamento Sant'Anna and Rete delle Universita' per lo Sviluppo Sostenibile (RUS) and Co-Chair Climate Exp0 Panel:
	- Nathalie Seddon, Professor of Biodiversity and Director, Nature-based Solutions Initiative, University of Oxford - Gideon Henderson, Chief Scientific Advisor, Department for Environment, Food and Rural Affairs (DEFRA)
	- Gideon Henderson, Chief Scientific Advisor, Department for Environment, Food and Rural Affairs (DEFRA)  - Musonda Mumba, Director, United Nations Development Programme (UNDP) Rome Centre for Sustainable Development  - Peninah Murage, co-Deputy Director, LSTHM Centre on Climate Change and Planetary Health
	This session will explore the concept of Nature-based Solutions (NbS), and why it is so important to provide clear definitions and guidance for implementing NbS activities at scale that are designed, implemented and adaptively managed with the stewardship of local communities to provide measurable benefits for biodiversity, people and climate.
10:30-10:45	Break
10:45-11:45	Implementing NbS across landscapes and seascapes
	Chair: Musonda Mumba, Director, United Nations Development Programme (UNDP) Rome Centre for Sustainable Development Panel: - Pete Smith, University of Aberdeen
	- Lera Miles, UNEP-WCMC
	- Tony Juniper, Natural England - William Austin, St Andrews University
	- Rick Stafford, University of Bournemouth - Sue Page, University of Leicester
	This session will explore the benefits and potential risks of implementing nature-based solutions. It will cover land and marine-based approaches, and will examine some key case-studies, including peatlands and REDD+.
11:45-12:00	Break

#### **LIVE SESSIONS**

12:00-13:00

#### Capacity building and knowledge transfer for nature- Climate risk based solutions

Chair: Alison Park, Interim Executive Chair for ESRC, UKRI

#### Panel:

- Dave Reay, Professor of Carbon Management and Education, University of Edinburgh
- Dhanush Dinesh, Head of Partnerships and Outreach, Political Science CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS)
- Claudia Rowse, Deputy Director of Sustainable Growth, NatureScot
- Zainab Zahid, National University of Sciences and Technology, Islamabad, Pakistan YOUNGO

This session will discuss the crucial role of education, skills development and shared learning in realising sustainable Nature-based Solutions around the world. It will examine the role of youth action and empowerment, highlight existing good practice and emerging challenges in the agriculture sector, and provide insights into the opportunities for enhancing learning and skills to boost employment and secure livelihoods through Nature-based Solutions.

#### Panel:

- Simon Lewis, University College London
- Elizabeth Robinson, University of Reading
- Swenja Surminski, Grantham Research Institute on Climate Change and the Environment, London School of Economics and Hydrology

#### Treescape: Building resilience into the future

#### Chairs:

- Julie Urguhart, University of Gloucestershire
- Clive Potter, Imperial College London Presenters:
- Emma Gardner, UK Centre for Ecology and
- Emma Ferranti, University of Birmingham
- Pietro Piana, University of Genoa
- Ashley Hardaker, Bangor University
- Chris Pollard, Forest Research

This session will explore the new interdisciplinary research agenda that will be needed to underpin and help deliver forest expansion and improved tree health, management and protection as key international climate policy objectives. Jointly chaired by the UK's Future Treescapes Ambassadors, the session will bring together future leaders in treescapes research from across the natural and social sciences and from the arts and humanities research communities in order to debate what this new agenda looks like and how it can best be delivered through high impact, collaborative research. Italian researchers will showcase the approach in their own country.

13:00-13:30

Lunch

#### **LIVE SESSIONS**

Chair: Tai Developm Environm Panel: - Minister Peru - Frances Agricultu - Harriet Cities and - Alessand Innovatio  Nature-b are at the environm across th loss, deve conflict a will prese from a w Global So These ins vulnerabl through t smallhold protectin	amsin Ballard, International Nature, Climate and oment Deputy Director, Department for ment, Food and Rural Affairs (DEFRA)  er Rosa Morales, Ministry of the Environment, asco Tubiello, United Nations Food and ure Organisation, Italy the Bulkelely, Durham University, H2020 Smart and Communities programme andro Melis, Professor of Architectural ion, University of Portsmouth  based Solutions (NbS) for global cooperation are heart of the global climate change and mental challenges we face today. NbS can cut the root of other challenges such as biodiversity	Edinburgh Ocean Leaders Panel: - Felix Eigenbrod, Professor of Applied Spatial Ecology, University of Southampton - Hugo Tagholm, Edinburgh Ocean Leaders	Student session - Nature for planet and people: the importance of preserving and regenerating natural systems for both climate and human wellbeing  This session will discuss the UN Sustainable Development Goals (SDGs), ecological resistance in relation to nature-based solutions and the effect of nature-based solutions on human wellbeing.
14:30-14:45 Break			

### **LIVE SESSIONS**

14:45-16:00	Scaling up protection, restoration and connection of key ecosystems across UK landscapes	You're surrounded! Regionally led, globally relevant, nature-based solutions of water	Nature-based solutions research showcase 1
			Chair: Rob Marchant, University of York
	Chair: Edvard Glücksman, Clean Growth and Net Zero	Chair: James Dyke, Assistant Director, Global	Presenters:
	Partnerships Manager, University of Exeter	Systems Institute	- Alejandro Guizar Coutiño, University of
	Panel:	Presenters:	Cambridge
	- David Coomes, Director of University of Cambridge	- Jannis Wenk, University of Bath	- Anne-Kathrin Weber, University of Freiburg
	Conservation Research Institute	- Chris Clements, University of Bristol	and Perspectives Climate Research
	- Carolyn Cadman, CEO, Cornwall Wildlife Trust	- Isabelle Durance, Cardiff University	- David Barnes, British Antarctic Survey
	- Minette Batters, President, National Farmers Union		- Fulvio Boano, Politecnico di Torino
	- Ben Wheeler, European Centre for Environment &	This session organised by the GW4 Alliance makes	- Izabella Koziell, Water, Land and Ecosystems
	Human Health, University of Exeter	use of the geographical resource our Alliance has	(WLE)
		in abundance: water. With three brief	- Sarobidy Rakotonarivo, ESSA-Forêts
		presentations from each panelist, the session will	Antananarivo, Madagascar
		consider how regionally-based research can drive	- Fabrice DeClerck, CGIAR Program on Water
		international progress.	Land and Ecosystems
16:00-16:15	Break		

#### **LIVE SESSIONS**

16:15-17:30

#### Climate finance and offsetting: Investments in NbS and Establishing a global centre of excellence on new financial mechanisms

Chair: Cécile Girardin, Technical Director, Nature Based Solutions Initiative, University of Oxford Panel:

- Myles Allen, Professor of Climate Science, University of Rural Affairs (DEFRA) Oxford
- Susan Chomba, World Resources Institute
- Jonathan Goldberg, CEO, Carbon Direct
- Léna Prouchet, University of Exeter

We urgently need to increase the flow of investment to high quality Nature-based Solutions (NbS) that are people led and support biodiversity. NbS has a significant contribution to make to mitigating and adapting to climate change, yet remains dramatically under-invested. Carbon markets such as cap-and-trade, involving carbon offsets, are increasingly considered as mechanisms for financing NbS. However, offsets present a number of problems if poorly implemented. In this session, we will briefly explore the debates around carbon offsets and NbS, and discuss a range of finance options that reward high quality Nature-based Solutions, including public financing, the carbon offset market, risk management and blended finances to jumpstart the NbS market.

#### nature-based solutions

Chair: Sylvia Hodgson, R&D Project Manager, International Nature, Climate and Development Division, Department for Environment, Food and

Speaker: Maria Baker, Science Evidence Manager, Department for Environment, Food and Rural Affairs (DEFRA)

Defra will be hosting an Early Market Engagement (EME) event for the Global Centre of Excellence (GCOE). The GCOE will be a world-class centre that conducts, synthesises and communicates research and development to drive a global scale up of investment in Nature based Solutions (NbS) policy and implementation. The GCOE is the largest component of a Defra International Climate Finance NbS Research & Development Programme.

#### Nature-based solutions research showcase 2

Chair: Rebecca Spake, University of Southampton Presenters:

- Idil Boran, Dahdaleh Institute for Global Health Research, York University, Canada
- Joshua Buxton, University of Exeter
- Julia P G Jones, Bangor University
- Mark Mulligan, King's College London
- Sander Chan, Global Center on Adaptation
- Sophia Burke, AmbioTEK

17:30-18:30

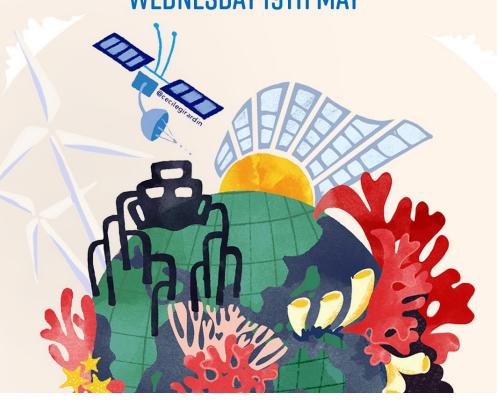
On-demand content / poster hall

Submitting author	Affiliation	Title
Andrea Staccione	Euro-Mediterranean Center on Climate Change and Ca' Foscari University of Venice	Mapping Green Infrastructure Networks: a framework to enhance spatial connectivity
Anton Neil Kuech	University of Aberdeen	Is macroalgal carbon sequestration the 'elephant in the Blue Carbon room'?
Ben James		An Overview of Nature Based Carbon Dioxide Removal Solutions
Chloe Carter	University of Hull	Characterising Leaky Wooden Dams for Working with Natural Processes
Cristina Argudin-Violante	University of Southampton	Transformative Change in the Calakmul Biosphere Reserve: A path to sustainable and resilient livelihoods
David Keith Alan Barnes	British Antarctic Survey	Urgent assessment of Atlantic UKOTs blue carbon needed to protect low hanging fruit of climate mitigation
Dr Ed Rollason	Teesside University	Reimagining retrofit SuDS to maximise value and sustainability
Dr Karen Hornigold	Woodland Trust	Ancient woodland's role in carbon balance
Frances Ifeoma Ukonze	University of Otago, Dunedin, New Zealand	Bioremediation as a nature-based solution tool to Re-naturing cities
Galina Toteva	The University of Edinburgh	Capacity Building through Climate Education
Hamish Creber	The University of Edinburgh	Delivery of Net Zero through Woodland Creation: Can Biochar Make a Difference?
Heidi Tuhkanen	SEI	Urban Greenspace Wellbeing Benefits in Low and Middle Income Countries
Isabel Key	Nature-based Solutions Initiative, University of Oxford	Outcomes of nature-based solutions for biodiversity & ecosystem health
James Karimi	Cranfield University	The Influence of Landscape Configuration on Ecosystem Service Bundles
Jana Cox (original presenting author: Mandy Paauw)	Utrecht University	Saved by Sediment: a review of sedimentation enhancing strategies for river deltas
Jessica Paula Rose Thorn	Department of Environment and Geography, University of York; African Climate and Development Initiative, University of Cape Town	Dryland nature-based solutions for informal settlement upgrading schemes in Africa
Karim HONEIN	RecyGen Ltd.	Custom-built & Turnkey Facilities for Global Recycling Management
Lucy Crane	South West Natural Powerhouse	The South West Natural Powerhouse: an exhibition showcasing sustainable development of renewable energy and critical raw materials to deliver the clean energy transition

Submitting author	Affiliation	Title
Lydia Collas	University of Cambridge	Should UK agricultural policy adopt a land-sharing or land-sparing approach to deliver biodiversity and carbon sequestration?
martin grant evans	University of Manchester	NFM benefits of landscape scale peatland restoration
Mona Webber	Centre for Marine Sciences, University of the West Indies, Jamaica	Use of Sargassum compost in soil amelioration for mangrove seedling production
Nicola Del Seppia	Northern Apennines Hydrographic District Authority	Nature-based solutions to contrast climate change effects, increase resilience and biodiversity: Action strategies of Phusicos Project in the Massaciuccoli Lake Basin (Tuscany, Italy)
Richard Heard	Richard Heard	Offshore Artificial Structures: A Nature-based Solution to Biodiversity Loss
Robbie Fitzpatrick	University of St. Andrews	'It's all fun and games!' Supporting nature-based solutions through golf
Simon Valentin Mathis	University of Cambridge	A Graph-Based Framework for Ecosystem Fragmentation from Remote Sensing Data
Simone Riegel	University of St Andrews	Nature-based Solutions for Climate Change Mitigation: Using a Choice Experiment Approach to Assess the Potential of Scottish Saltmarshes for Climate Change Mitigation Policy
Srinivasan Keshav	University of Cambridge	Towards a Trusted Marketplace for Nature-based Solutions
Suma Mani	University of Sheffield	Stakeholders' perspectives on constraints and opportunities to woodland creation in the Peak District, UK
Valentina Giombini	Eurac Research	Mapping multifunctional and interconnected Green Infrastructure networks: harnessing nature to meet multiple societal challenges
Victoria Vallejo Quintero	Universidad Central, Bogotá D.C Colombia	Conservation agriculture improves soil quality in tropical agroecosystems of Colombia
Viola van Onselen	PhD student NTNU Taiwan	NbS in geoparks

# **ON-DEMAND PRESENTATIONS**

Submitting author	Affiliation	Title
ALIKI KOEMTZOPOULOU		Harvesting Energy from Non-Superficial Ocean Circulation Currents
David Keith Alan Barnes	British Antarctic Survey	Climate mitigation through biological conservation; extensive blue carbon natural capital at Tristan da Cunha
David Lefebvre	Cranfield University	The potential of soil carbonation and enhanced weathering for CO2 sequestration in Brazil: A Life Cycle Assessment
Deanna Coleman	University of St Andrews	St Andrews Forest Proposal
Dr Rob Bellamy	University of Manchester	Unnatural climate solutions?
Dr. Ryan MCGUIRE		Northern Ireland Food Futures: Delivering Sustainability and Resilience in Agriculture and Food Systems
Mateusz Ciasnocha	European Carbon Farmers; COP26 - Race to Zero; University of Edinburgh	Putting each European farmer at the centre of climate change mitigation and adaptation efforts in a profitable way.
Matt Kandel	University of Southampton	Supporting scalable and equitable agroforestry: considering farmer-managed natural regeneration (FMNR) in northeastern Ghana
Perses Bilimoria		Carbon Sequestration using Natural Buoyant Flakes
Professor Hisham Elkadi	University of Salford	IGNITION Nature-based Solutions Living Lab



Mitigation Solutions Organising Lead: Charlie Wilson, Tyndall Centre for Climate Change Research The Mitigation Solutions day will explore how technological innovation is creating abundant opportunities for rapid, affordable and effective greenhouse gas emissions reductions (mitigation) towards net-zero emissions. In particular, mass deployment of renewable power alongside widespread electrification of energy use is a robust strategy for delivering emission reductions.

This energy transition, and the economy-wide transition, to netzero emissions affects us all. Mitigation to meet Paris Agreement goals implies transitional risks for certain industries and the livelihoods of those they employ, which needs careful management in specific geographies and sectors to ensure no-one is left behind. Societal engagement and supportive policy environments are critical enablers. Widespread public demand for action on climate change continues to strengthen and be expressed. Well-designed climate policies can help deliver emission reductions effectively and fairly. Scientific research, testing and analysis builds the evidence base in support of near-term progress on Paris Agreement commitments and shows the potential for greater ambition at COP26.



09:00-09:30	On demand content / poster hall			
09:30-10:30	Opening (Policy): A new perspective on the global energy transition  Chair: Cameron Hepburn, Professor of Environmental Economics, University of Oxford  Panel:  - Michael Grubb, Professor of Energy and Climate Change, University College London  - Henry Snaith, Professor of Physics, University of Oxford  - Simon Sharpe, Deputy Director, Policy Campaigns at COP26 Unit, UK Cabinet Office  - Fu Sha, Director, Strategy and Planning, Energy Foundation China  - Radhika Khosla, Research Director of the Oxford India Centre for Sustainable Development, University of Oxford  This session will communicate evidence on near-term mitigation opportunities for supporting COP26 objectives, and invite policy response.			
10:30-10:45	Break			
10:45-11:30	The mitigation landscape: demand, supply and systems  Chair: Shaun Fitzgerald, University of Cambridge Panel:  - Jim Skea, Chair in Sustainable Energy, Imperial College London and IPCC WG3 Co-Chair  - Joyashree Roy, Professor of Economics, Asian Institute of Technology and IPCC WG3 Convening Lead Author (Demand-Side Transformation) and Co-Chair  - Valentina Bosetti, Professor of Economics, Bocconi University and Senior Researcher, RFF-CMCC European Institute on Economics and the Environment  This session will provide a global overview of technical mitigation solutions and challenges, and the key issues for COP26.	- Peter Styring, University of Sheffield		



11:30-12:15	New evidence on mitigation solutions	Climate change and net zero: Mitigating solutions	Decarbonising electricity systems
	Chair: Jenny Nelson, Professor of Physics, Imperial College London Presenters: - Christina Xiao, University of Cambridge - Michelle DeFreese, Global Green Growth Institute - Thea Jung, University of Cambridge - Michelle Cain, Cranfield University - Matthias Honegger, Utrecht University  This session will survey global evidence and examples of best practice on mitigation solutions and enabling conditions for mitigation.	Panel: - Harriet Thew, University of Leeds - Thomas Hale, University of Oxford - Jessica Omukuti, University of York - Rebecca Ford, University of Strathclyde  This session will discuss key strategies for mitigating climate change, and the role of the COP26 Fellowships in promoting these solutions.	Chair: Keith Bell, Professor of Power Systems Engineering, University of Strathclyde Panel: - Charlotte Higgins, Arup, UK - Ronald Marais, Eskom, South Africa - Christian Schaefer, GHD Advisory, Australia - Juan Carlos Araneda, Coordinador Eléctrico Nacional, Chile  This session will compare experiences of power sector decarbonisation opportunities and challenges from industry leaders around the world.
12:15-13:00	Lunch		
13:00-14:00	Managing transition risks on the road to net-zero  Chair: Rachel Freeman, University College London Panel: - Frank Geels, Professor of System Innovation, University of Manchester - Andreas Löschel, Professor of Energy and Resource Economics, University of Munster and German Energiewende Commission - Anthony Afful-Dadzie, Senior Lecturer, University of Ghana Business School - Ted Christie-Miller, Onward Getting To Zero - Catherine Newman, CEO, Limejump  This session will discuss risks and opportunities for firms, organisations, communities and other actors in the transition to net-zero.	Chair: Felix Creutzig, Professor of Sustainability Economics, Technische Universität Berlin Panel: - Rachel Aldred, Director, Westminster Active Travel Academy - Manos Chaniotakis, Lecturer, MaaSLab, University College London	Student session - Is it too late to mitigate climate change? What can you do?  This session will provide 'an introduction to mitigating solutions' such as carbon sources and sinks, heat sources and sinks, and reducing our individual carbon footprints.
14:00-14:15	Break		

#### **LIVE SESSIONS**

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#### Engaging people as agents of change

Chair: Charlie Wilson, Professor of Energy and Climate Chair: Luciano Pana Tronca, MaaSLab, University Change, Tyndall Centre for Climate Change Research Panel:

- Lorraine Whitmarsh, Professor of Environmental Psychology and Director of the Centre for Climate Change and Social Transformation, University of Bath
- Ilona Otto, Head of Social Complexity and System Transformation Research Group, University of Graz
- Richard Munang, Regional Climate Change Coordinator, African Office, United Nations Environment Programme (UNEP)
- Anna Davies, Professor of Environmental Governance, Trinity College Dublin

This session will explore contrasting perspectives on social engagement as an enabler of mitigation solutions.

#### Low carbon cities: Planning and data

College London

- Panel:
- Arminel Llovel, CDP
- Mark Atherton, Director of Environment, Greater Manchester Combined Authority
- Gabriel Lanfranchi, Managing Director, Environmental Urban Plan Council, Buenos Aires

- Laura Parry, Senior Manager of Partnerships, CDP

Climate Action Plans supported by data for public good are helping cities cut emissions. The panel will debate and propose policy recommendations on: innovation in planning, data monitoring and disclosure, and finance.

#### Universities and the race to net zero

Chair: Carina Mutschele, Youth and Education Officer, United Nations Environment Programme, Kenya

Panel:

- Marlon C. Pareja, Associate Professor of Biology, De La Salle University, Dasmarinas, **Philippines**
- José Alejandro Martínez Sepúlveda, Associate Professor, Researcher in sustainability and circular economy, Universidad Ean, Colombia
- James Longhurst, Assistant Vice Chancellor, University of the West of England, UK

More than 600 universities across the world have signed the Global Climate Letter for Universities and Colleges to date, supporting a three-point plan in line with the Race to Zero criteria. The ambition is to achieve more than 1.000 universities across the world to commit to becoming net zero. This panel session will feature signatories from the global south to highlight the climate actions being taken on the ground, and will galvanise universities to take action and to commit to net zero ahead of COP26.

15:00-15:15

Break



Chair: Jillian Anable, Professor of Transport and Energy, Chair: Wouter Poortinga, Cardiff University University of Leeds Panel: - Minister Enrico Giovannini, Ministry of Sustainable Infrastructures and Mobility, Italy - Siobhan Campbell, Deputy Chief Scientific Advisor, Chair: Anthory Leiserowitz, Yale Program on Climate - Nishatabbas Rehmatulla, Senior Research Associate, University College London - Robert Miller, Chair in Aerothermal Technology and Whittle Lab Director, University of Cambridge - Ruth Townend, Ipsos MORI - This session will discuss the trends, challenges and opportunities for decarbonising transport including electrification of freight (shipping and air).  16:15-16:30  Break  Closing (Policy): Policies for delivering COP26 mitigation objectives  Chair: Simone Borghesi, European University Institute - Anthory Leiserowitz, Vale Program on Climate - Stefano Verde, Florence School of - Republic University of Oxford and UNDP - People's Climate Vote - Ruth Townend, Ipsos MORI - Ruth Townend, Ipsos MORI - Frank Convery, University College Dublin and Emeritus Chief Economist, Rhodium Group - This session will discuss the trends, challenges and opportunities for decarbonising transport including electrification of freight (shipping and air).  16:15-16:30  Break  16:30-17:15  Closing (Policy): Policies for delivering COP26 mitigation objectives  Chair: Laura Diaz Anadon, Professor of Energy Policy, University College London (UCL) Institute for Sustainable Resources, UK - Jacob Werksman, Principal Advisor, DG-CLIMA, European Commission, Brussels, Belgium - Manuel Pulgar Vidal, Global Head of Climate and Energy at WWF, Former Ministry of Environnment of Peru, COP20 President  This session will evaluate policies for delivering on near-term mitigation opportunities, and invite policy response.	15:15-16:15	Green transportation	Public support for climate action	Carbon markets for increasing international ambition	
16:15-16:30  Break  Closing (Policy): Policies for delivering COP26 mitigation objectives  Chair: Laura Diaz Anadon, Professor of Climate Change Policy, University of Cambridge, UK Panel:  Jim Watson, Professor of Energy Policy, University College London (UCL) Institute for Sustainable Resources, UK Jacob Werksman, Principal Advisor, DG-CLIMA, European Commission, Brussels, Belgium Manuel Pulgar Vidal, Global Head of Climate and Energy at WWF, Former Ministry of Environnment of Peru, COP20 President  This session will evaluate policies for delivering on near-term mitigation opportunities, and invite policy response.		University of Leeds Panel: - Minister Enrico Giovannini, Ministry of Sustainable Infrastructures and Mobility, Italy - Siobhan Campbell, Deputy Chief Scientific Advisor, UK Department for Transport - Nishatabbas Rehmatulla, Senior Research Associate, University College London - Robert Miller, Chair in Aerothermal Technology and Whittle Lab Director, University of Cambridge  This session will discuss the trends, challenges and opportunities for decarbonising transport including	Panel: - Kat Steentjes, Centre for Climate Change and Social Transformation (CAST), Cardiff University - Anthony Leiserowitz, Yale Program on Climate Change Communication, Yale University - Stephen Fisher, University of Oxford and UNDP People's Climate Vote - Ruth Townend, Ipsos MORI  This session will help attendees to understand the latest survey data on public support for mitigation action, and discuss the usefulness of polls for	Institute Panel: - Carmine Trecroci, University of Brescia - Stefano Verde, Florence School of Regulation, European University Institute - Frank Convery, University College Dublin and Emeritus Chief Economist, Environmental Defense Fund - Emily Wimberger, Climate Economist, Rhodium Group  The panel will focus on the role of carbon markets amidst increasing international climate ambition and cooperation, touching upon integration, interdependence, arbitrage	
Chair: Laura Diaz Anadon, Professor of Climate Change Policy, University of Cambridge, UK Panel:  - Jim Watson, Professor of Energy Policy, University College London (UCL) Institute for Sustainable Resources, UK  - Jacob Werksman, Principal Advisor, DG-CLIMA, European Commission, Brussels, Belgium  - Manuel Pulgar Vidal, Global Head of Climate and Energy at WWF, Former Ministry of Environnment of Peru, COP20 President  This session will evaluate policies for delivering on near-term mitigation opportunities, and invite policy response.	16:15-16:30	Break			
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17:30-18:30 On-demand content / poster hall		Panel: - Jim Watson, Professor of Energy Policy, University College London (UCL) Institute for Sustainable Resources, UK - Jacob Werksman, Principal Advisor, DG-CLIMA, European Commission, Brussels, Belgium - Manuel Pulgar Vidal, Global Head of Climate and Energy at WWF, Former Ministry of Environnment of Peru, COP20 President			
	17:30-18:30	On-demand content / poster hall			

Submitting author	Affiliation	Title
Alan Richard Bowman	University of Cambridge	The maximum efficiency of halide perovskite tandem solar panels
Anita Shepherd RPBio CBiol	University of Aberdeen	The potential of miscanthus to capture carbon and its upscaling plans
Ayodeji Okunlola	Mechanical Engineering, University of Alberta, Canada	Green hydrogen production in Canada for export to Europe - An assessment of technical potential
Beatriz Beccari Barreto	Politecnico di Milano	Cost Analysis Review for Carbon Capture and Storage
Catrin Harris	Imperial College London	The impact of heterogeneity on capillary trapping for geological carbon storage - from laboratory to field scale.
Chiara Galletti	University of Pisa	Decarbonisation of domestic heating: impact of hydrogen addition on pollutant emissions from condensing boilers.
Christopher Vagg	IAAPS / University of Bath	The Impact of Eco-Driving for Electric Light Commercial Vehicle Fleets
Collette Larkin	The University of Edinburgh and Repsol	Onboard Carbon Capture: Reducing Carbon Dioxide Emissions within the Transport Sector
Daniele Lerede	Politecnico di Torino	Sustainability assessment for the electricity supply mix in energy system optimization models
Denise Connor		Tackling the Addiction to 'Single Use Plastics' in Teaching Laboratories
Dimitrios Pappas	University of Manchester	Framing Sustainable Business Models for Smart and Local Energy Systems - The Triple Layered Proposition
Elena De Angelis	University of Brescia	Low emission road transport scenarios: an integrated assessment of energy demand, air quality, GHG emissions and costs
Emilie Vrain	Tyndall Centre for Climate Change, University of East Anglia	The Role of Social Influence in the Adoption of Low Carbon Digital Innovations
Emily Charlotte Bowyer	The University of Bath	Decarbonising domestic heating at scale: Extracting strategic thinking from EPC data
Emma Cassar	Tyndall Centre for Climate Change Research, University of East Anglia	University graduates choice of commute as they transition into the workplace: potential for Mobility as a Service
Fergus Mcilwaine	Heriot-Watt University	Data-driven screening of carbon capture materials: using active learning to identify promising structures
Fernanda Godoy Santos	Queen's University Belfast	Effects of microalgae supplementation in methane emission and ruminal microbiome on finishing lambs
Giulia Robbiani	University of Parma, Norwegian University of Science and Technology	Design, construction and testing of a fixture for experiments in controlled environment agriculture

Submitting author	Affiliation	Title
Guilherme Pessoa Nogueira	University of Campinas	Lignocellulosic harvest residues as a solution for greenhouse gases emissions reduction in Sao Paulo state: when opportunity and public policies meet
Harriet Dudley	University of East Anglia & the Centre for Climate Change and Social Transformation (CAST)	Decarbonising the UK: The Climate Change Committee's advice to government, 2009-2020.
Hossein Ebadi	MAHTEP Group, Dipartimento Energia 'Galileo Ferrarisâ' Politecnico di Torino, Italy	Introducing a new sustainability index (E3) for agricultural products
Isabella Pecorini	DESTEC - Department of Energy, Systems, Territory and Construction Engineering, University of Pisa, 56122 Pisa, Italy	Innovative Methods for Residual Landfill Gas Emissions Mitigation
Jaise Kuriakose	University of Manchester	Implications of hydro dams for decarbonising Ghana's energy consistent with Paris climate objectives
James Mason	Tyndall Centre for Climate Change Research, The University of Manchester	Mitigating shipping sector CO2: opportunities & headwinds
Jean-Francois Mercure	Global Systems Institute, University of Exeter	Policy for effective decarbonisation of road transport
Jiacheng Sun	UK Biochar Research Centre, School of GeoSciences, The University of Edinburgh	A comprehensive review of algal biofuel and biochar for climate change mitigation: bottlenecks and opportunities
Kate Scott	Geography Department, University of Manchester	Is there a role for consumption-based emissions accounting in Nationally Determined Contributions?
Kumar Biswajit Debnath	Research Associate, Heriot-Watt University, UK	Decarbonisation of energy systems of South Asian developing economies through regional collaborations
Laurie Kerr		Assessing the role of trust in the adoption of peer-to-peer mobility innovations, as a pathway to reduce CO2 emissions
Luke Sperry	University of Alberta	Achieving net-zero greenhouse gas emissions in Canada by 2050 - what does it mean?
Marcel Nedd	University of Strathclyde	Maintaining stable power system operation in the absence of fossil fuelled generation
Mark Wilson	University of East Anglia	Online food hubs - platforms which re-localise, reconnect and reduce
Matthew Davis	University of Alberta	Assessing decarbonization of the electricity supply sector through comprehensive integrated scenario analysis

Submitting author	Affiliation	Title
Matthew Rigby	University of Bristol	Atmospheric data-based greenhouse gas emissions evaluation as part of a national climate change mitigation strategy
Michela Maione	University of Urbino	Co-benefits of changing diet. A modelling assessment at the regional scale integrating social acceptability, environmental and health impacts
Miguel García-Vázquez	The University of Edinburgh	Micro-structured catalytic converters: The key for the real decarbonisation of our energy system
Neil Grant	Grantham Institute - Imperial College London	The policy implications of an uncertain carbon dioxide removal potential
Nicola Comincioli	University of Brescia and Fondazione Eni Enrico Mattei	Seasonality fingerprint on global trading of food-commodities: a data mining approach
Priya Seetharaman	Solar Cookers International	Solar Cookers' Impact on Mitigation of Greenhouse Gas Emissions
Quentin Paletta	University of Cambridge	Short-Term Solar Irradiance Forecasting from Sky Images
Rachel Higgins		Veganism and the Value-Action Gap
Ryan Hughes	Institute of Advanced Automotive Propulsion Systems (IAAPS), Advanced Automotive Propulsion Systems Centre of Doctoral Training (AAPS CDT), University of Bath	Is Elevated Operational Temperature a Barrier to Solid-State Battery Adoption?
Sara Abdel Ahad		Introducing Solar Squared Glass Blocks in Dubai Metro Stations
Shalu Agrawal	Council on Energy Environment and Water (CEEW)	Innovative business model for scaling super-efficient fans in the Global South
Simon Neill	Bangor University	The global and regional tidal range resource
Stefano Riffelli	University of Urbino	Sustainable comfort in buildings
Stefano Zedda	University of Cagliari, Italy	Portfolio strategies for renewable energy share maximization
Stephen Robert Allen	University of Bath	Delivering real carbon reductions: the role of life cycle assessment in design and engineering
Stuart Jenkins	AOPP, Dept. of Physics, University of Oxford	Carbon Takeback Obligation A Policy that guarantees Net Zero?
Stuart Macpherson	University of Cambridge	Nanoscale Defects Are Sites of Degradation in Perovskite Photovoltaic Devices

Submitting author	Affiliation	Title
Susan Elizabeth Le	University of Manchester	Dietary Change to stay within the 1.5°C target. An Analysis of Food Demand in the UK, Sweden, Brazil and China using data from an Integrated Assessment Model
Tatiana Bruce da Silva	IN+, LARSys, IST, Universidade de Lisboa	Climate Change Mitigation Policies in the Transportation Sector in Rio de Janeiro, Brazil
Taylor Uekert	University of Cambridge	Solar-driven conversion of waste into hydrogen fuel for a future circular economy
Thomas Savage	University of Cambridge	Knowledge-Graph Digital Twin of the UK
Timothy Capper	Tyndall Centre for Climate Change Research, University of Manchester	Reducing Energy Imbalances: The key to small renewable generation and flexible demand in Great Britain
Ting Liu	University of Manchester	A classification of attitudes to climate change risk in the UK population
Velma Mukoro	University of Manchester	Life cycle assessment of novel circular economy business models for decarbonising Kenya's solar energy sector
Viktoria Spaiser	University of Leeds	Responsibility to Safeguard (R2S) Against Climate Atrocities: An Emerging Norm
Xinghan Chen	University of Bath, China	MR

#### **ON-DEMAND PRESENTATIONS**

Submitting author	Affiliation	Title
Adrian Isidore Felix	University of Hertfordshire	Design, development and optimisation of a Solid Oxide Fuel Cell-Gas Turbine hybrid system for aircraft propulsion: A project proposal
Aoife Houlihan Wiberg	The Belfast School of Architecture and the Built Environment, Ulster University	Defining (net) zero greenhouse gas emissions buildings: a key mitigation pathway
Axel Michaelowa	Perspectives Climate Research and University of Zurich	Towards net zero: Dynamic baselines for international market mechanisms
Beatriz Figueiredo Eschholz	Politecnico di Torino	The role of renewable energy communities in climate change mitigation
Dario Brescia	Perspectives Climate Group	Bringing green hydrogen costs down through harnessing of the market mechanisms under the Paris Agreement
Diarmaid Clery	University of East Anglia	Stakeholder insights into GGR supply chains reveals complex challenges
Dr Richard Michael Nayak-Luke	University of Oxford	The Hydrammonia Economy: How green ammonia can enable the hydrogen economy and a faster transition to net-zero
Dr Sam Stranks	University of Cambridge	An Emerging Solar Photovoltaic Technology Poised to Revolutionise Energy Generation
Dr Wei Liu	King's College London	Exploring the circular product design for packaging industry
Edmund Ireland	University of Manchester	Assessing the Capability for large, rapid nuclear construction in the UK
Francesco Pietro Campo	Politecnico di Milano	Feasibility of ocean alkalinisation to remove atmospheric $\mathrm{CO}_2$ and counteract seawater acidification
Hui Ben	University of Cambridge	End-user climate change cases for thermal infrared space telescopes on building energy performance
Jonas Kuehl	Global Subsidies Initiative (GSI) of the International Institute for Sustainable Development (IISD)	Emissions Modelling: Impact of FFSR and related policies
Kevin F. Forbes	University College Dublin	Space Solar Power: An Underrated Technology to Displace Fossil Fuels?
Maria Balouktsi	Karlsruhe Institute of Technology (KIT)	New mitigation solutions in construction: use case for assessment methods
Matthew Ives	University of Oxford	A new perspective on decarbonising the global energy system
Milan Kloewer	University of Oxford	How to limit aviation's contribution to global warming
Minyoung Yang	Hanyang University	The hidden costs of power: A global meta-analysis and research synthesis of electricity externalities

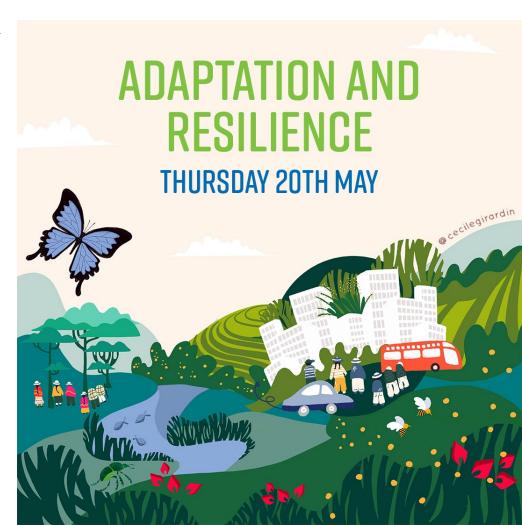
### **ON-DEMAND PRESENTATIONS**

Submitting author	Affiliation	Title
Professor Chris Fogwill	Keele University	The role of 'living laboratories' in unlocking the potential of smart local energy systems on the UK's journey to net zero
Professor Martin Freer	Energy Research Accelerator	The Energy Research Accelerator - a regional innovation partnership delivering net-zero solutions
Renata Morbiducci	University of Genoa	A smart village model for the Italian coastal territory
Steven Kirk	Gravitricity	Gravitricity-System Testing of a novel gravitational energy storage device
Yue Huang	University of Leeds	Develop a Life Cycle Assessment Model for Electric Bike for Passenger Transport in the UK

There is a global adaptation deficit which is growing – not declining – as a result of increasing global poverty and inequality, ecological degradation and climate change. Even if the Paris Agreement is fully implemented, there will be significant climate change and a need for adaptation on an unprecedented scale.

Scaling up adaptation linked to inclusive development processes can contribute to meeting the Sustainable Development Goals. Hence adaptation and resilience must be properly considered alongside mitigation in the COP26 process. The Paris Agreement defines adaptation goals and has initiated a global stocktake of adaptation. The Adaptation and Resilience day will explore the frontiers of adaptation and resilience research, outline the urgency of adaptation at scale and explore mechanisms to strengthen inclusive adaptation and resilience around the world.

Adaptation and Resilience Organising Lead: Robert J Nicholls, Tyndall Centre for Climate Change Research



#### **LIVE SESSIONS**

09:00-09:30	On demand content / poster hall			
09:30-10:30	Opening (Policy): Adaptation and resilience challenges in the COP26 meeting			
	Chair: Sarah Webb, UKRI, UK Panel:  - Minister Maria Cristina Messa, Ministry of University and Research, Italy - The Rt Hon Anne-Marie Trevelyan MP, Minister of State for Business, Energy and Clean Growth, UK - Jim Hall, ECI, University of Oxford, UK - Maarten van Aalst, Red Cross Red Crescent Climate Centre and ITC, University of Twente, Netherlands - Andrew Collins, Northumbria University and Co-Chair of UK Alliance for Disaster Research (UKADR), UK  This panel discussion will seek to identify clear, near-term scientific messages on adaptation opportunities for the COP26 Adaptation and Resilience Theme priority. The session will address key questions such as: - What would you like to see in the COP26 settlement to enhance capacity for adaptation nationally and internationally? - What would you like to see in the COP26 settlement to realise the opportunity adaptation has for combating poverty nationally and internationally? - Can COVID-19 impacts on society and economy, and renewal investment plans be an opportunity to help focus the poverty alleviating opportunity of adaptation? - How might research funding and practice best enable innovative, pro-poor adaptation?			
10:30-10:45	Break			
10:45-11:45	Physical science, adaptation and resilience: Current risks, early warning systems and adaptation finance  Chairs: Emily Black, University of Reading and Piero Di Carlo, Università degli Studi 'G. d'Annunzio' Chieti - Pescara Panel:  - Carlo Cacciamani, Head of ARPAE-SIMC, Italy  - Douglas Parker, University of Leeds  - Emma Visman, UK Centre for Ecology and Hydrology and King's College London  - Jonathan Gascoigne, Centre for Disaster Protection  - Emmah Mwangi, Red Cross Climate Centre Kenya  This session will elucidate the role that robust early warning plays in adapting to climate change, via disaster risk reduction and financial services. The session will cover scientific progress relevant to adaptation and resilience, the connection between functional early warning, accurate risk assessment and resilience, and novel financial instruments for risk	Live poster session 1: Enablers and barriers to practice and adaptation  Chair: Suraje Dessai, Climate Resilience Champion, University of Leeds Presenters: - Andrew Tyler, University of Stirling - Emma Ferranti, University of Birmingham - Katie Jenkins, Tyndall Centre for Climate Change Research - Nigel Arnell, University of Reading - Seunghan Lee, University of Leeds - YoungHwa Cha, University of Edinburgh  This poster session complements the related session on the Land stage, and through poster presentations and discussion will consider enablers and barriers to the practice of adaptation drawing primarily experience in the UK and Europe.	Live poster session 2: Adapting robustly to climate change  Chair: Mark Pelling, King's College London Presenters: - Karl Dudman, University of Oxford - Lorenzo Alfieri, CIMA Research Foundation - Stewart Mottram, University of Hull - Trigal Velasquez Rodriguez, University of Cambridge - Eleni Christidoulou, University of Manchester  This poster session complements the related session on the Land stage, and through poster presentations and discussion will critically examine new and emerging approaches to adaptation.	

#### **LIVE SESSIONS**

11:45-12:00	Break		
12:00-13:00	Enablers and barriers to the practice of adaptation - from mainstreaming to transformation	Live poster session 3: Mainstreaming adaptation in the Global South	Building resilience into the future: Adaptation and resilience
	Chairs: Kate Lonsdale, University of Leeds and Enrico Ferrero, Università del Piemonte Orientale Panel:  - Paul Watkiss, Paul Watkiss Associates  - Kit England, Climate Ready Clyde  - Anna Scolobig, University of Geneva  This session will consider enablers and barriers to the practice of adaptation drawing on European experience, and particularly the UK Climate Change Risk Assessments. In this session we will hear about the development of practical transformational approaches for Clyde Estuary in Scotland for Clyde Rebuilt as well as organisational and institutional barriers to transformative adaptation through nature-based solutions in Europe. This session will explore what is required for successful mainstreaming, where this becomes limiting and the opportunities and barriers to the practical application of more transformational approaches.	This poster session complements the related session on the Land stage, and through poster	Chair: Samantha Francis, UKRI Panel: - Katie McQuaid, University of Leeds - Christina Vanderwel, University of Southampton - Adrian Healy, Cardiff University - Aoife Brophy Haney, University of Oxford - Beenish Siddique, AEH Innovative Hydrogel Ltd  The UK's ability to prepare and adapt for a secure, safe and sustainable future can only come about through interdisciplinary research into key challenges around adaption and resilience. This panel session will discuss the opportunities and challenges, with a focus on promoting the future research talents in this space.
13:00-13:30	Lunch		

#### LIVE SESSIONS

13:30-15:00 Adapting robustly to climate change Climate resilient universities for resilient Student session communities Chair: Deborah Roberts, Sustainable and Resilient City This session will provide an exploration of Chair: Alex Wright, Head of Policy and Public Affairs, Initiatives Unit, eThekwini Municipality, Durban, South locally-led adaptation and resilience Africa and Co-Chair IPCC Working Group II Association of Commonwealth Unversities strategies. Panel: Panel: Conservation/Biodiversity: - David Smith, Director, Centre for Environmental Lucy Waruingi, Director of Africa Conservation Centre, Management, University of the West Indies and ACU Climate Resilience Network Kenya - Musonda Mumba, United Nations Development - Jeremy Collymore, Disaster Risk Management and Programme (UNDP) Rome Centre for Sustainable Resilience Specialist Institute for Sustainable Development Development, University of the West Indies and ACU Climate Resilience Network Fausto Manes, University La Sapienza, Italy Coastal Systems: - Nii-K Plange, Director, Fiji National University Marjolijn Haasnoot, Utrecht University, Netherlands Centre for Interdisciplinary Studies and Sustainable Ian Townend, University of Southampton, UK Development Jochen Hinkel, Global Climate Forum (GCF), Germany and ACU Climate Resilience Network - Tristan McCowan, Professor of International **Urban Systems:** - Jane Weru, Akiba Mashinani Trust (AMT), Kenya Education at the Institute of Education, University Stéphane Hallegatte, World Bank, USA College London and Principal Investigator - Mario Losasso, Università Federico II Napoli, Italy 'Transforming Universities for a Changing Climate' Maurizio Tira, Rector of the Università degli Studi di Drawing on the experience of members of the Brescia, Italy Discussant: Association of Commonwealth Universities' Climate Melissa Leach, Institute of Development Studies, Resilience Network, and the initial work of the University of Sussex, UK 'Transforming Universities for a Changing Climate' project led by UCL/IOE, this session will examine: This session will critically examine new and emerging how the climate emergency impacts on the approaches to adaptation using three contrasting operation of universities in vulnerable settings, what themes to illustrate key issues. The session will comprise strategies are being deployed to develop models for 3 panels on: Conservation/biodiversity, Coastal Systems a climate resilient university, and how this informs

and Urban Systems. Each panel will address the common the work of universities in developing resilience and themes of (a) co-benefits and transformation issues; (b) adaptation strategies in their communities.

how to handle uncertainty; (c) justice dimensions; (d) links between systems; and (e) working across scales –

national policy to local implementation.

#### **LIVE SESSIONS**

15:15-16:15

#### Accelerating adaptation in the Global South

Chairs: Rob Marchant, University of York and Siyabusa Mkuhlani, London School of Hygiene and Tropical Medicine (LSHTM)

#### Panel:

- Chris Gordon, University of Ghana and Earth Commission
- Lindsay Stringer, University of York, IPCC, IPBES
- Mahua Mukherjee, Indian Institute of Technology Roorkee
- Riccardo Valentini, University of Tuscia-CMCC
- Ana Maria Loboguerrero, CGIAR Research Program on Lauro Rossi, Program Director, CIMA Research Climate Change, Agriculture and Food Security (CCAFS) Foundation Columbia

This session will explore how to promote actionorientated adaptation research in the Global South at the scale needed. Action-orientated research for adaptation is research that is iterative, transdisciplinary that robust early warning plays in adapting to and co-produced, creating enhanced long-term understanding and mutually beneficial knowledge that financial services. is usable in practice. In this session, we will hear about the panel's experience applying action-orientated research and explore what are the enabling factors that allow action-orientated research to happen and the findings to be used. There will be a critique of the challenges in conducting this research and panellists will speak to what approaches have worked for them, or not. There will be insights into what are the multiand trans-disciplinary enabling conditions that would allow others to more widely adopt this research approach that listens, communicates and responds to the needs of communities.

Live poster session 4: Physical science, adaptation The climate adaptation challenge: How can and resilience: Current risks, early warning systems and adaptation finance

Chair: Emily Black, University of Reading Presenters:

- Annika Heike Stechemesser, Potsdam Institute for Advisor, Department for Environment, Food Climate Impact Research
- Daniela Anghileri, University of Southampton
- Gianpaolo Balsamo, European Centre for Medium - Tom Handysides, Department for Range Weather Forecasts
- Graham Wood
- Raquel Nunes, University of Warwick

This poster session complements the related session on the Land stage, and through poster presentations and discussion will elucidate the role DEFRA is one of the key UK government climate change, via disaster risk reduction and

academics and policy professionals work together to support the UK's domestic adaptation objectives?

Chair: Gideon Henderson, Chief Scientific and Rural Affairs (DEFRA) Panel:

- Environment, Food and Rural Affairs (DEFRA)
- Catherine Gamper, Organisation for Economic Co-operation and Development (OECD)
- Suraje Dessai, University of Leeds
- Amanda Crossfield, Yorkshire Water
- Keith Jones, National Trust

departments in terms of climate policy, being responsible for domestic adaptation activities mandated by the Climate Change Act. The Capabilities in Academic Policy Engagement (CAPE) project is working to strengthen and expand engagement between universities and public policy. This session will explore some of the key needs of climate teams within DEFRA and how the evidence community can respond to support post-COP needs.

16:15-16:30

Break

16:30-17:30	Closing (Policy): Building international partnerships to support and achieve adaptation and resilience
	Chair: Rosalind West, Foreign and Commonwealth Development Office (FCDO) Climate Science Lead, UK
	Panel: - Saleemul Huq, International Centre for Climate Change and Development (ICCCAD), Bangladesh
	<ul> <li>Nicola Ranger, Deputy Director, Centre for Greening Finance and Investment (CGFI), Oxford Sustainable Finance Programme, World Bank, UK</li> <li>Patrizia Lombardi, Politecnico di Torino, President of Rete delle Università per lo Sviluppo Sostenibile (RUS), Italy</li> <li>David Mfitumukiza, Rhodes University, South Africa</li> </ul>
	- María del Pilar Bueno Rubial, National Council of Scientific and Technical Research and National University of Rosario, Argentina
	This session builds on the insights from the session Accelerating Adaptation in the Global South, with a strong policy focus. The panel discussion will focus around the various initiatives being developed to mainstream and expand the amount of action-orientated research being undertaken to rise to the global climate emergency. In particular, the session will discuss the role of agriculture in the Adaptation Research Alliance and how to transform agricultural systems innovation for people, nature and climate.
17:30-18:30	On-demand content / poster hall

Submitting author	Affiliation	Title
Abigail Croker	Imperial College London	"Community-Based Fire Management": A colonial narrative?
Abubakar Abbas		
Amanda Power	University of Oxford	Transforming the "anthropogenic" for climate adaptation and resilience
Andrea Sulis	Dept. of Architecture, Design and Urban planning (DADU), University of Sassari	Wave height trend and implications for South Sardinia coastal planning
Anita Lazurko	School of Environment, Resources, and Sustainability, University of Waterloo	How might businesses shape the future? Finding coherence between climate adaptation and the Sustainable Development Goals
Anna Barford	University of Cambridge	Adapting to climate change in Uganda - young people's challenges and recommendations
Anna Jones	British Antarctic Survey	Antarctica Net Zero
Bill Flinn	CARE International UK	'Self-recovery': a pathway to physical and mental resilience
Christopher Lyon	University of Leeds; McGill University	Climate change research and action must look beyond 2100
Christopher Rhys Goddard	Met Office	${\it 'Meeting\ in\ the\ middle'\ -\ exploring\ novel\ climate\ information\ for\ Heritage\ management\ adaptation}$
Davide Bazzana	Università degli Studi di Brescia; Fondazione Eni Enrico Mattei	The day after tomorrow: mitigation and adaptation policies to deal with uncertainty
Deissy Martínez Barón	CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS) and Alliance Bioversity and the International Center for Tropical Agriculture (CIAT)	Strengthening the climate services chain in Central America
Dr Nadine Johnston	British Antarctic Survey	International collaborative science to support adaptation and resilience in Southern Ocean ecosystems
Dr. Mark Ashley Parry	Northumbria University	The Implementation of the Yonmenkaigi System Method to Build Resilience and Adaptation to Climate Change within the United Kingdom
Eleanor Snare	Leeds Arts University	From Here to There: how art education can help us imagine climate change resilient communities
Elizabeth Fuller	Met Office	The City Packs - the co-production of an urban climate service providing local summaries of a city's future climate
Ellen Cunningham	University of Glasgow	Preliminary research: A systematic review of the existing research identifying household impacts of water insecurity

Submitting author	Affiliation	Title
Elliot Miles	University of Liverpool	Drivers of Forest Resistance to Climate Change
Emily Theokritoff	Geography department & IRI THESys, Humboldt University of Berlin; Climate Analytics	Constraints to climate change adaptation in the Caribbean
Francesco Avanzi	CIMA Research Foundation	Promoting adaption to climate change in glacierized regions: the example of Aosta valley (Western European Alps)
Gözel Shakeri	University of Glasgow	Envirofy your Shop: a real time tool to support eco-friendly food purchases online
Grady Walker	University of Reading	Using climate change storytelling to initiate adaptation dialogue with local government: A case study of farmers and fishers in Mukono, Uganda
Hector U. Levatti	London South Bank University	The role of education in civil engineering to face the climate change
Ilaria Salerno	University of Edinburgh	Sustainable buildings' thermal energy management system to adapt to climate change
Isabella Villanueva-García	CEUS Chile NGO	The role of youth in a new resilient society
Jenny Vivian		Sustainable agriculture approaches
Kerry Black	University of Edinburgh	Contribution of anthropogenic aerosols to changes in the Northern Hemisphere storm tracks during the 20th and 21st centuries
Leanne Archer	University of Bristol	Assessing current and future flood risk estimates associated with hurricane rainfall under the $1.5^{\circ}\text{C}$ and $2^{\circ}\text{C}$ Paris Agreement targets in Puerto Rico
Lisa Jones	University of Hull	2020 vision: Understanding climate in(action) and the need for positivity and hope
Lorraine Whitmarsh	University of Bath	Climate anxiety: what is it and how common is it?
Lucia Mortara	University of Genova, CIMA Research Foundation	Towards a methodology for flood risk mapping for promoting resilience to climate change
Maisie Keogh	TEDxUniversityofStrathclyde	Resilience Reignited: A Conference Where the Sharing of Ideas can Spark Positive Change in the Fight Against the Climate Crisis.
Marie Schlenker	University of Southampton	Collaborative climate monitoring in remote islands - the example of the Anglican Church of Melanesia Environment Observatory
Marina Andrijevic	Humboldt University in Berlin	Overcoming gender inequality for climate resilient development
Mark Ching-Pong Poo	Research Asscoiate in Marine Transport, Liverpool Logistics, Offshore and Marine Research Institute, Liverpool John Moores University, the UK	Climate change adaptation for seaports and airports

Submitting author	Affiliation	Title
Maximilian Kotz	Potsdam Institute for Climate Impact Research	Day-to-day temperature variability reduces economic growth
Mercy Macharia	Sant'Anna School of Advanced Studies in Pisa, Italy	Participatory climate smart agriculture: co-development of genetic and forecasting climate services among smallholder communities in Mozambique within the H2020 FocusAfrica project
Muhammad Naveed Arshad	Aberystwyth University	Landscape Decision System through spatial modelling tools to achieve UK net zero target
Nick Nash	University of Bath	The 'spillover' effect: Encouraging adaptation to climate change through water-saving behaviour
Nicole van Maanen	Climate Analytics	Scenarios of Sustainable Irrigation Expansion in the 21st Century
Noor Jahan Punam	Phd Candidate, University of Lapland	Arctic Indigenous Peoples and International Climate Law Framework
Pedro Beltran-Alvarez	University of Hull	Towards understanding molecular mechanisms of adaptation
Philippe Blondel	University of Bath	Listening together - Arctic environment resilience through underwater acoustics
Prof Hayley J Fowler	Newcastle University	A review of climate change impacts on design rainfall and flood guidance
Raihanatul Jannat	University of Eastern Finland, Center for Climate Change, Energy, and Environmental Law (CCEEL)	The relationship between gender responsive adaptation and climate resilience under the transnational climate regime.
Raphaëlla Montandon	University of Manchester (HCRI)/UK Med/Save the Children UK	Climate Change and the Humanitarian Sector
Rebecca Kariuki		Land use change projections to 2063 and potential impacts on biodiversity and livelihoods in East Africa
Ruth Wood	University of Manchester	Future proofing net-zero infrastructure: a climate risk assessment of carbon mitigation measures
Sally Brown	Bournemouth University	Land raising as a solution to sea-level rise: The case of the Maldives
Sam Bridgewater	East Devon Pebblebed Heaths	Promoting Adaptation to Changing Coasts: Creating a Model for Climate Change Adaptation of European Estuaries
Sarah Victoria Greenham	University of Birmingham	Quantifying the relationship between subway tunnel temperature and external temperature for operational resilience on the London Underground network
Sien van der Plank	University of Southampton	The role and responsibilities of households in English adaptation to coastal flood risk

Submitting author	Affiliation	Title
Susie Grant	British Antarctic Survey	Whole ecosystem science to support adaptation and resilience to climate change in the polar oceans
Tatenda Murigo	University of Zimbabwe	Gene Manipulation of Auxin Hormone to Promote Crop Improvement in Climate-Risk Regions
Tushar Narula	Imperial College Business School	Agro Biodiversity Adaptation Mechanism for Climate Change Resiliency of Small Holder Farmers in Africa
Victoria Ramey	Met Office	An urban climate service to manage heat risks in UK and Chinese cities
Virginia Somers	Cambridge Development Initiative	Contrasting Realities and Solutions for Flooding in Informal versus Formal Settlements in Dar es Salaam
Wenzhu Li	The University of Manchester	Early Warning Flood-Risk Maps for Electrical Substations in Malaysia

#### **ON-DEMAND PRESENTATIONS**

Submitting author	Affiliation	Title
Angela Khanali Mutsotso	Queen Mary University of London	Developing Adaptation Systems in Sub-Saharan Africa: The cases of South Africa and Kenya
Chloe Brimicombe	University of Reading	Borderless Heat Stress
David Vaughan	British Antarctic Survey	Understanding Antarctic ice-loss - a key to robust projections of global sea-level rise
Dewa Ayu Putu Eva Wishanti	University of Leeds	Mapping Climate-related Disaster Preparedness in Decentralised Ternate as Global Climate Change Adaptation
Dr Briony McDonagh	University of Hull	Risky Cities: Building climate awareness and flood resilience through arts and heritage interventions
Dr Catherine Chebet Sang	University of Nairobi	Understanding the Climate variability and change in the Development Corridors of Kenya: A Recipe for Adaptation and Resilience
Dr Rob Bellamy	University of Manchester	Social readiness of adaptation technologies
Elena Cristiano	University of Cagliari	Blue-green solutions for pluvial flood mitigation at urban scale
Enrico Ferrero	University of Piemonte Orientale, Italy	The effects of climate change on natality rates across Italian municipalities
Farzaneh Amirkavei	Politecnico di Torino, Dipartimento Energia	Is the clarity of on-Pack labels impacting the recycling behaviour of the citizens? A bottom-up survey
Joan Pauline Talubo	University of Surrey/ University of the Philippines Los Banos	Developing indicators of disaster resilience for small islands through a participatory approach: The Case of Batanes, Philippines
Kari Davis	Alliance for Global Water Adaptation (AGWA)	Upscaling & Mainstreaming Climate Resilience for Water Security in Asia and the Pacific
prof. christiano lepratti	University of Genova (UNIGE) department of Architecture and Design (dAD)	Considerations on Sea Level Rise and the Future of our Coastal Cities
Richard Randle-Boggis	University of Sheffield	Agrivoltaics: Harvesting the sun twice for clean energy and food security in the Global South
Rosario Carmona Yost	University of Bonn	From coloniality to international climate negotiations. Different understandings of vulnerability among indigenous people and the Chilean State.
Ryu Kojima	Kyushu University Faculty of Law	Interdisciplinary Perspectives on Urban Air Mobility - Ethical, Legal and Social Issues (ELSI)
Saket Sarraf	ps Collective	Climate Crisis, Cities and Gender
Sara Biscaya	University of Salford	Waterways: blue infrastructures and socio environmental resilience
Sarah Johnson	Loughborough University	Global assessment of flood impact on emergency service provision to vulnerable populations under climate change



The Paris Agreement highlighted the importance of 'making financial flows aligned to the climate targets'; since then, awareness and concern of the negative implications of climate, physical and transition risks for individual and systemic financial stability have increased. In this day, we will engage with leading experts in climate finance from academia, central banks and financial regulators.

The opening session will provide food for thought on mainstreaming standardised and science-based climate financial risk assessment, and for moving from managing risks to leveraging opportunities. Sessions will then explore disclosure and risk management, access to finance, macropolicy and novel financial instruments, as well as legal obligations within the Paris Agreement, and climate law and governance innovations. The day closes with a panel on opportunities within finance. The requirements of a rapid transition to a carbon neutral future offer a wide variety of opportunities for households, firms and society at large to avail of new consumption, investment and production practices. Speakers will draw on their experiences and articulate the necessary steps to be taken to make global finance work for climate and biodiversity. In this closing roundtable event, we will hear from practitioners, regulators, multilateral agencies, governments, third sector/NGOs and civil society how to meet the ambitious 2050 targets and support a just transition.

Finance and Regulation Organising Lead: Aled Jones, Anglia Ruskin University

09:00-09:30	On demand content / poster hall
09:30-10:30	Opening (Policy): Risk and finance roundtable  Chair: Irene Monasterolo, Vienna University of Economics and Business, Austria  Panel:  - Nicola Ranger, University of Oxford and World Bank, UK  - Laura Parisi, European Central Bank, Germany  - Stefano Battiston, University of Zurich, Switzerland and Ca' Foscari University of Venice, Italy  - Joseph Noss, Financial Stability Board, Switzerland
10.20 10.45	This session will introduce the theme of the day. It will engage with leading experts in climate finance from academia, central banks and financial regulators in a stock-taking exercise to critically discuss international examples of progress in climate financial risk assessment and the challenges associated which are currently faced by investors and supervisors.
10:30-10:45	Break

10:45-12:15	Disclosure and risk management	Access to finance	Climate law and governance
	Chair: Carmine Trecroci, Università degli Studi di Brescia Panel:  - Kira Henshaw and Wei Zhu, University of Liverpool  - Matthew Agarwala, Bennett Institute for Public Policy, University of Cambridge  - Stefano Battiston, University of Zurich, Switzerland and Ca' Foscari University of Venice, Italy  - Daniel Beunza, Cass Business School, City University of London  - Matthias Tager, London School of Economics  - Tanya Fiedler, University of Sydney Business School  - Sarah Perkins-Kirkpatrick, University of New South Wales  - Emily Bugden and Mia Sannapureddy, University of Cambridge  Standardised and transparent disclosure of investors' exposure to climate-related financial risks is crucial to decrease market uncertainty and support climate-financial risk assessment. This session will discuss experiences and challenges relating to financial and non-financial disclosure, their implications for climate-financial risk assessment and opportunities to overcome them.	<ul> <li>Aglaja Espelage, Perspectives Climate Research gGmbH</li> <li>Md Mofakkarul Islam, University of Greenwich</li> <li>Ellen Quigley, University of Cambridge</li> <li>This session will bring together research on financial access including the gender gap, inequality (including intra and intergenerational equality), urban vs. rural and the use of digital technologies. The session will explore how the issues associated with financial access overlap with climate finance and whether ther are opportunities to tackle both issues together.</li> </ul>	Sustainable Development Law, Germany - Chantalle Byron - Hafij Khan Discussants: - Ayman Cherkaoui - Barbara Janusz-Pawletta - Douglas Leys - Sumudu Atapattu

12:15-13:00	Lunch		
13:00-14:30	Chair: Charlie Larkin, University of Bath Panel: - Simon Dikau, London School of Economics and Political Science - Sarah Hafner, Zurich University of Applied Sciences (ZHAW) and Anglia Ruskin University - John Morris, University of Warwick - Theodor Cojoianu, Queen's University Belfast and Member o EU Platform on Sustainable Finance, EU Commission - Igor Shishlov, Perspectives Climate Research gGmbH - Irene Monasterolo, Vienna University of Economics and Business  Climate policies have been advocated to foster investments in mitigation and adaptation. Most debated policies include fisca measures, but recently, green monetary policies, green collaterals and macroprudential regulations have gained policy attention. The conditions under which such policies can contribute to align the economy and finance to sustainability, while preventing unintended effects on financial instability and inequality, have still to be assessed and limitations of traditional macroeconomic and financial risk models to assess these impacts could lead to a false sense of control on risk. This session will bring together research that quantitatively assesses the direct and indirect impacts of green fiscal, monetary and macroprudential policies (or ensembles) on investors' decisions and financial stability, considering the uncertainty and non-linearity of climate risks.	- Andrew Davis, Nomura International PLC - Emily Bugden, Mia Lakshmi and Ellen Quigley, University of Cambridge  Green bonds are fixed income financial instruments aimed at supporting investments that encourage sustainability I while supporting climate-related or other types of special environmental projects. This session will bring together	Student session - Global responsibility: \$100 billion annually for mitigation and adaptation, where should it go?  This session will cover global landscape funds and how experiences can inform modalities for climate investment going forward, as well as exploring how to manage and plan the scope for aid to the Global South.

14:30-14:45	Break		
14:45-15:30	COP26  Tracy Bach and Beth Martin, RINGO CFPs, will follow up on their Monday, May 17, primer on the climate negotiations at COP26 by holding a live Q&A for attendees. They will answer your questions on how	Chair: Fabiano de Correa, IUCN World Commission on Environmental Law, European University Institute, Belgium Panel: - Nilufer Oral, National University of Singapore, Director of Centre for International Law, member of the UN ILC - Christina Voigt, University of Oslo, Department of Public and International Law, and Co-Chair of the Paris Agreement Implementation and Compliance Committee (PAICC) - Petra Minnerop, Associate Professor of International Law, Durham University, Durham Law School  This session will address both legal obligations that already exist and those that Parties are still required to fulfil around our 5 conference themes, making a nice wrap-up to the week and link to COP26.	Localising the circular economy: Short green value chains for protecting the environment while catering for a growing population  Chair: Alex Venuto, City Leader Platform Secretariat, Urban Economy Forum Panel:  - Anantha Krishnan, Secretary General, Urban Economy Forum  - Edmundo Werna, Associate Professor, London South Bank University  - Camilla Ween, Director, Goldstein Ween Architects and LOEB Fellow, Harvard University  The session aims to bring key urban stakeholders together to establish dialogue on cities and circular economies. City leaders, urban professionals, financial institutions, community groups and academics will come together to present good and replicable examples and discuss practical approaches to implementing circular economies. The session will provide thoughts for decoupling economic activity from the consumption of finite resources locally and globally, and reducing waste out of the system - maximizing the value of resources by keeping them in use for as long as possible.

15:30-15:45	Break
15:45-16:45	Closing (Policy): Opportunity and finance roundtable  Chair: Aled Jones, Director of Global Sustainability Institute, Anglia Ruskin University, UK  Panel:  - Tom Kerr, Senior Advisor, International Finance Corporation (IFC), WBG, USA  - Lucia Alessi, European Commission Joint Research Center, Italy  - Monica Billio, Ca' Foscari University of Venice, Italy  - Neha Kumar, Climate Bonds Initiative, India  - Mark W. Grobmyer, Chairman, Global Solutions Institute, USA  The requirements of a transition to a carbon neutral future by 2050 and, in the case of the EU, a 55% reduction in greenhouse gas emissions by 2030, offer a wide variety of opportunities for households, firms and society at large to avail of new consumption, investment and production practices. This panel discussion will explore concrete, implemental policies and actions of how the global financial system can be mobilized to support this radical change and how global finance can work for the climate and biodiversity.
16:45-17:00	Break
17:00-17:15	Conference closing remarks  Chair: Alyssa Gilbert, Imperial College London, Chair of COP26 Universities Network, Co-Chair Climate Exp0  - Keynote speaker: Nigel Topping, UK COP High Level Climate Action Champion  - Closing: Roberto Buizza, Scuola Superiore di Studi Universitari e di Perfezionamento Sant'Anna and Rete delle Universita' per lo Sviluppo Sostenibile (RUS) and Co-Chair Climate Exp0

17:15-18:30

#### Conference closing panel discussion

Ask a Climate Change expert: How can we save our planet?

Chair: Emily Shuckburgh, Director of Cambridge Zero, University of Cambridge and Chair of Climate Exp0 Panel:

- Lord Deben, Chairman of the Committee on Climate Change
- Tamsin Edwards, Reader in Climate Change, Kings College London
- Brighton Kaoma, Global Director of UN Sustainable Development Solutions Network-Youth Initiative

Members of the public from across the world are invited to submit their climate change-related questions to a diverse panel of experts, who will answer them live at a public panel debate.

This is an opportunity to ask how we as individuals can make a difference now to help us move towards net zero; and to find out directly from experts what we can do to change our behaviours and live more sustainably.

From biodiversity loss and energy futures, to youth voice and behaviour change, our panellists will decipher the latest in climate science, and inspire how – as individuals, groups and nations – we can take action and contribute to advancing a more resilient, sustainable, net-zero future.

The time for action is now. Please join us to find out how you can play your part.

Submitting author	Affiliation	Title
Dr. Amy Burnett	University of Surrey	Operationalising performance measurement and incentives for 'Regenerative Value' to cultivate sustainability outputs
Elsa Allman	Baruch College	External Reviews and Green Bond Credibility
Jacqueline Peel	Melbourne Climate Futures, University of Melbourne	Investor Leadership on Climate Change? Signs of building momentum in Australia
Jay Everett	Imperial College London	Discounted Cash Flow Analysis with Climate Scenarios
Katharina Erdmann	Free University of Berlin	Do investors value corporate ESG disclosure in Latin America? An empirical analysis of ESG disclosure and information asymmetry
Mindy Fox	Solar Cookers International	Economic savings through solar cooking
Yuxia(Sarine) Zou	University of Cambridge	Business Strategy, Carbon Mitigation Activities and Investors: Assessed Emissions Valuation Penalty

## **ON-DEMAND PRESENTATIONS**

Submitting author	Affiliation	Title
Ania Zalewska	University of Bath	Market risk on the path to net zero
Catherine Mei Ling WONG	National University of Singapore, LRF Institute for the Public Understanding of Risk	Temporalities of green finance: Reconciling the temporal logics of financial and non-financial actors in the case of green bonds
Dr Irene Sotiropoulou	University of Hull - Energy & Environment Institute	Sustainable finance and our modes of distribution
Edward Leigh	Smarter Cambridge Transport	The why and how of road pricing
Grant Rudgley	University of Cambridge Institute for Sustainability Leadership	Climate change is only one cause of nature-related financial risk
Jean-Francois Mercure	Global Systems Institute, University of Exeter	The institutional and geographical ownership of energy-related transition risks
Marco Quatrosi	Department of Economics and Management, University of Ferrara	Financial Innovations for Sustainable Finance: an exploratory research
Rachel Austin	CISL	Insights for TCFD Aligned Reporting from The ClimateWise Principles
Roli Martin	Director	Financing a sustainable built environment for Placemaking
Susana Campos Martins	Nuffield College, University of Oxford	Geoclimate, Geopolitics, and the Geovolatility of Carbon-Intensive Equity Returns

#### THANK YOU FOR JOINING



17-21 MAY 2021

A FUSION OF SCIENCE AND POLICY ADVANCING A RESILIENT, ZERO-CARBON WORLD