



China-UK Scoping Workshop:

Optimizing net-zero policy options for air quality and health

The China-UK scoping workshop on air quality and health effects of carbon neutrality (CN) or net zero (NZ) policies offers a unique opportunity to shape future research directions in this field. The workshop will be held online on 27 April 2022 from 08:00 - 12:40 UK time (15:00 - 19:40 China time).

This workshop will provide an interactive platform for knowledge exchange between UK and Chinese scientists studying the impacts of CN/NZ policies on air quality and human health. The central theme of the scoping workshop is how to optimize the CN/NZ policies to maximize the benefits on air quality and health equality.

By the end of the workshop, we will develop an agenda for future research and innovation to optimize CN/NZ policy strategies for air quality and health, which will be recommended to UK and China funding bodies for consideration of future funding opportunities.

Background

China and the UK aim to achieve net zero GHG emissions in the next 30-40 years to address climate change, but air pollutant emission targets have not been defined. CN/NZ policies represent a great opportunity to address climate change and air quality together. To achieve net zero GHG targets and maximize the co-benefits for air quality and health, the design of these policies requires the support of scientific evidence which includes identifying solutions to reduce GHG emissions and air pollutant levels, improving current understanding of how climate change affects air quality, highlighting carbon policies that could have adverse impacts on air quality, and identifying measure for air pollutants which cannot be addressed by CN/NZ strategies.

Organization

This workshop is organized by the UK-China Collaboration to Optimize net zero Policy options for Air Quality and health (COP-AQ) project team. COP-AQ is funded by the Department for Business, Energy & Industrial Strategy (BEIS) and Natural Environment Research Council (NERC). A key deliverable of the COP-AQ project is to identify research priorities to optimize CN/NZ options to maximize co-benefits for air quality and health building upon the complementarities between China and the UK.

Format

The workshop will open with an overview of interdisciplinary research given by the National Natural Science Foundation of China (NSFC) and NERC, followed by presentations given by invited high-profile speakers providing current knowledge on CN/NZ strategies in China and the UK, and their implications on air pollutant emissions, air quality and health. The second part of the workshop will include presentations by working groups on six topics in the broad area of net zero and air quality and a final discussion session to define synergies between the different topics.

Participation

Registration to attend the event is now open on [Eventbrite](#). During the workshop, participants are encouraged to ask questions in the Q&A box. The chair of each session will choose and read out questions to the speakers. Questions will be recorded and taken into consideration while preparing the final COP-AQ report which will be submitted to BEIS and NERC.

Programme (UK time = China time -7 hours)

08:00 - 08:10	Opening by NERC and NSFC Sophie Durrans - Deputy Director of UKRI China Jin Xu - Programme Manager of European Division, Bureau of International Cooperation, NSFC		
08:10 - 08:20	NSFC Funding Layout for Carbon Neutrality and Air Quality Research Zhe Liu - Director of Division V, Department of Earth Sciences, NSFC		
08:20 - 08:30	UKRI Strategies in Funding Net Zero and Air Quality Research Caroline Culshaw - Head of Research-Environment and Health, NERC		
Invited Talks			
Time	Speaker	Institution	Title
<i>Chair: Huan Liu – Tsinghua University</i>			
08:30 - 08:50	Kebin He	Tsinghua University	China's Carbon Neutrality Strategies and future air pollutant emissions
08:50 - 09:10	Tong Zhu	Peking University	Maximizing co-benefits to health and economy in climate and clean air actions
09:10 - 09:30	Hong Liao	Nanjing University of Information Science & Technology	Coordinated actions to tackle climate change and air pollution in China
<i>Chair: Oliver Wild – Lancaster University</i>			
09:30 - 09:50	David Reay	University of Edinburgh	Climate change, net zero policies and carbon offsetting
09:50 - 10:10	David Fowler	UK Centre for Ecology & Hydrology	Effects of net zero policies and climate change on air quality: a UK perspective
10:10 - 10:40	<i>Break</i>		
Presentations by COP-AQ working groups			
Time	Speakers	Topics	
<i>Chair: Ally Lewis – Chair of DEFRA Air Quality Expert Group, University of York</i>			
10:40 - 10:55	Zongbo Shi, Pinhua Xie	Evolving observational and data science need for air quality and GHG to attribute Net Zero/Carbon Neutrality co- or dis-benefits	
10:55 - 11:10	Oliver Wild, Keding Lu	Net Zero/Carbon Neutrality impacts on chemistry of atmospheric oxidants and their precursors	
11:10 - 11:25	Roy Harrison, Shuxiao Wang	Net Zero/Carbon Neutrality impacts on physics and chemistry of airborne particles	
11:25 - 11:40	Ruth Doherty, Lia Chatzidiakou	Net Zero/Carbon Neutrality, indoor air pollution and health	
11:40 - 11:55	Frank Kelly, Tong Zhu	Maximizing Net Zero/Carbon Neutrality benefits on air quality, health, and health equalities	
11:55 - 12:10	Dabo Guan, Shu Tao, Jing Meng	Maximizing Net Zero/Carbon Neutrality benefits on economy	
<i>Chair: Roy Harrison – University of Birmingham</i>			
12:10 - 12:40	Discussion on synergies between strands		
12:40	Close		

For any queries, please contact Clarissa Baldo (c.baldo@bham.ac.uk) project administrator of COP-AQ. Follow the updates on the [COP-AQ website](#) and register to the event using the following link: <https://www.eventbrite.co.uk/e/309446903017>