Changing minds or changing systems
to avert dangerous climate change?

INTRODUCTION

The latest assessment reports of the UN's Intergovernmental Panel on Climate Change (IPCC) are stark in their warnings. The world needs to make immediate and radical cuts in greenhouse gas emissions to keep global warming to below 1.5°C. All regions of the world are being severely affected by the climate crisis, with droughts, floods and heatwaves becoming more frequent. Negative impacts on both human and natural systems, including a serious loss of biodiversity, are being triggered. Urgent responses are needed in both urban and rural areas, and international cooperation is critical to climate change mitigation.

The science is clear. Yet there is hesitance by politicians, the media and the public to prioritise the climate issue and take the necessary actions. How do we achieve the changes that are needed in our society and economy, in ways that are fair and inclusive? Do we rely on innovation and new technologies? Or does it need a change in attitudes and mindset towards the environment? If so, how, and by whom? Can we engage with and involve the public? Is it possible to generate active participation across the wider society?

You can watch a recording of the webinar on our YouTube channel.

Key themes

Change is not happening fast enough, or at sufficient scale and depth. New approaches are needed. Climate change is a complex problem, requiring multidisciplinary and multi-societal solutions. It is a global challenge that requires global thinking. It requires a global social contract, global capabilities and networks. Sustainability is essential *now*, not in twenty years. At the same time, we have a duty to negotiate on behalf of future generations, who are not represented here today.

Our public spheres are polarised. They mirror conflicting interests in society, and sometimes even irrational opinions. We have to convey what are 'inconvenient truths' that involve a changed lifestyle for many in the Global North.

Change is needed in both systems *and* minds. From the perspective of science, technology and innovation, it is clear what needs to be done; the question is *how*. It requires new behaviours and norms. The digital revolution and AI are enablers, but we also have to reduce waste, embrace the circular economy, use our land differently, and employ nature-based solutions in agriculture. We should look at system change through societal agents. Social drivers are vital, and require a better understanding of the variety of human agency that can be mobilised, such as social movements and corporate players.

Change needs to be ethical and just. Inclusiveness is key; we must involve all scientific disciplines and a wide variety of stakeholders. The social contract is essential for a just and equitable future.

We are deeply connected. We are deeply connected in terms of shared meaning, values, language and emotions. This encourages us to think of climate change not as a separate problem but as a relational issue. We might think of three spheres of transformation: the practical, the political and the personal. These are interrelated, but the personal sphere often gets overlooked. This is about beliefs and values, including our own. The potential for radical transformation lies in each of every one of us and we matter more than we think.

Education is important. We have been taught that we are separate from nature, but we are not. An education in science and sustainability is essential from an early age. Media and climate literacy are vitally important.

More communication is not the answer. Instead, we need the 'right' communication. Journalism is important but we should also seek other forms of communication, such as corporate communication, entertainment and storytelling. The narration behind change is important; stress the multiple benefits of change and present a positive message. Audience segmentation is important; we have to adapt the message to the receiver. Communication is not just about evidence and rationality; it's also about responsibility, fairness and justice.

Pathways to participation. We need to find ways for *all* citizens to engage in debate and action. Make change more actionable, and bring it to closer to the people. The example of the mobile phone, which is now ubiquitous, shows us how transformative technology can work.

What sort of world do we want to live in? Let us all ask ourselves, 'what sort of world do we want to live in?'. Technological optimism is good but in tandem with effective communication, governance and economic incentives and actions that produce equitable and sustainable results, given our challenging situation.

PANELLISTS

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- Professor Nebojsa Nakicenovic, Emeritus Scholar at the International Institute for Applied Systems Analysis (IIASA) and Professor at TU Wien; Deputy-Chair of the Group of Chief Scientific Advisors to the European Commission

- Professor Antje Wiener, Professor of Political Science, especially Global Governance and Programme Chair at the Excellence Cluster 'Climate, Climatic Change, and Society (CLICCS)' at the University of Hamburg, & By-Fellow at Hughes Hall, University of Cambridge

- Professor Matthias Karmasin, Director of the Institute for Comparative Media and Communication Studies (CMC) of the Austrian Academy of Sciences and the University of Klagenfurt

Chaired by Professor Ole Petersen CBE MAE ML FRS, Cardiff Hub Director and Honorary Vice-President of Academia Europaea, the webinar was co-organised between the Cardiff Hub and Academia Europaea's Environmental Taskforce. A video introduction to the Taskforce is available here.

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