

THE HUTTON SERIES

SESSION ONE REPORT

Tuesday 6th October 2020

14:00-16:00

OVERVIEW & AIM

The Hutton Series on Climate Change is a series of events taking place across 2020-21 at Adam Smith's Panmure House, bringing together a diverse cross-section of experts, business leaders, scientists, and concerned citizens in the service of one simple aim:

to identify ten key priorities, innovations & actions to mitigate the climate crisis.

Our keynote speakers for this inaugural session were the environmental and polar scientist Professor Sir Ian Boyd, former chief scientist at DEFRA & member of SAGE, who spoke on 'adaptation for resilience', and the CEO of Natwest Group, Alison Rose, who spoke on 'achieving net zero: a business leader perspective'. Each spoke for 15-20 minutes, before taking questions and participating in a debate panel, led by Professor Mercedes Maroto-Valer (Director of the Industrial Decarbonisation Research and Innovation Centre) and Professor John Ludden (Bicentennial Research Fellow at the Lyell Centre).

The event was hosted virtually by Panmure House and simultaneously livestreamed as an interactive webinar via Facebook and the Panmure website. The broadcast is available on the Panmure House website. Over 500 people watched the first session across various platforms.

Write-ups will be produced after each session by the Lyell Centre and the Research Centre for Carbon Solutions, and published on the Panmure House Global Gateway website. A final write-up will be produced ready for distribution at COP26 in November 2021.

Hosted by Dr Caroline Howitt, Programme Director: Panmure House Chaired by Professor John Ludden, Lyell Centre, Heriot-Watt University Introduced by Professor Richard Williams, Vice Chancellor, Heriot-Watt University

THE PANEL:

Professor Sir Ian Boyd, St Andrews University

Professor Mercedes Maroto-Valer, Associate Principal (Global Sustainability) and Director of Research Centre for Carbon Solutions (RCCS)

Ms. Alison Rose, CEO NatWest Group

FRAMING THE CHALLENGE:

The vice-chancellor of Heriot-Watt University asked for the development of a coherent response to "what should we (HWU) and we (globally) be doing to address the issues that are facing in this world where the climate is changing"? He charged the Hutton Series to develop ten key actions that are ethical, equitable and just, in order to have a real impact.

We need a whole-system approach that involves innovation in technology and in social, economic and political spheres and we must address this problem now as there are inherent social and economic costs in not transitioning to a zero-C as quickly and as justly as possible.

- Trade-offs: Carbon reduction is only part of the problem; we must consider other environmental damage that climate action or inaction might provoke (e.g., resource and societal demands).
- **Digital tools:** Through digital technology, we need to put intelligent and interactive systems in the hands of consumers that allow them to make choices to reduce their environmental footprint.
- Behaviour: We need to change our behaviours as consumers to reduce the stress on global resources
 and to reduce waste resulting from consumption. As improvements in technology will probably not move
 at the rate needed to curb demands for natural resources, lifestyle changes, both physiological and
 psychological, will be required.
- Future generation: Provide the younger generation with a platform (a national conversation) for discussion on solutions on how their lifestyles can and will change in the future in order to achieve zero-C consumption.
- Demand side: Demand-side policy levers, including selected taxes coupled with regulation must be introduced by governments to induce a change in public-habits. This needs to be coupled with financial incentives from government and the finance sector for industry to adapt to new ways of working and for people to change the ways in which they value goods.

- Culture: Embed a culture of climate and environmental action in the public's mind and in business practices. Provide the public with the tools that allows easy access to environmental information about their consumption (e.g., product labelling, real-time carbon footprint trackers etc).
- Financial levers: Through bold and impactful choices, the financial sector should think beyond its traditional sphere and expand investment in green and social and sustainable bonds globally, and ensure that it does not underwrite projects that do not have a credible transition plan in line with the 2015 Paris agreement.
- Supply chains: Business, governments and public bodies must ensure that their move to zero-C includes not only their own activities, but extends to ensuring that their supply chains follow good environmental practice and that products, especially for those of the hydrocarbons industry, are net zero-C.
- Leadership: The UK should lead by example on zero-C actions, but these actions must be global. There is a risk in going it alone. Despite a consistent European policy and a highly credible set of SDGs, the G7 and G20 have been unable to provide a common voice in leading the transition. Can another more effective global group/mechanism be established?
- Talent: The Zero-C targets must be achieved within a generation. We will need to nurture the talentpool across schools, universities and business so that it enables this transition to a zero-C economy. We
 must provide our workers with the skills needed to make the transition happen swiftly and we can expect
 to export these skills globally.
- Innovation: Technological innovations must ensure a balance between supply-side and demand-side investment and engage with consumer's choices via citizen's assemblies (housing, energy, food, transport etc..). These informed consumer and citizen choices will provide the political headroom for governments to enact policy reforms to drive the transition.
- Investment: Focus investment on reduction to zero-C on the difficult innovation challenges, assuming that the low-hanging fruit will be easily taken. These might include aviation fuels, heavy industry (cement, metals) carbon capture, data centres. Use a regional corridor approach that includes the entire system and the trade-offs and benefits of zero-C solutions.

CONCLUDING STATEMENT: The UK can lead by innovation in policy, technology, financial solutions and social behaviour using demand-side levers. We must put information in the hands of consumers that allows them to refine their choices and reduce consumption.

HUTTON SERIES STRUCTURE

This debate will be followed by five events over 2020-2021 and leading up to the COP26 meeting in Glasgow in November 2021 in which the outputs are refined.

Event #	Content/Objective	When
1	Inaugural session. Explain objectives and process of Series. Ask speakers and	Oct 6 2020
	audience to come up with a list of radical solutions. Must cover three main	
	stakeholder groups: science, business, citizens.	
2	Response from the financial sector. What can we realistically afford, what	Dec 1 2020
	are the financial tools at our fingertips; how do we mobilise the tools; how	
	do we ensure trust between stakeholders?	
3	Response from the science sector. What are the disruptive technologies that	March 9 2021
	we can put in place, what pace can we achieve change? Include industry (big	
	energy, technology).	
4	Response from concerned citizens. What is the level of trust, how can	April 2021
	citizens support actions? What would they do that has not been proposed?	
5	What are the Engineering solutions?	May 2021
6	Concluding event: presenting the solutions and their feasibility.	July 2021