

Net-Zero America: What will it really take?

18 May 2021 - 09:00 -10:00 BST

A ground-breaking study of decarbonisation pathways for the US – <u>Net-Zero America: Potential</u> <u>Pathways, Infrastructure and Impacts</u> - was released in mid-December by Princeton University.

Net Zero America (NZA) stands apart from previous studies in examining various pathways to net zero that include different proportions of renewables, different degrees of electrification, roles for nuclear and fossil fuels (with CCUS) that vary from zero to significant and use of carbon land sinks and bioenergy with CCS (to provide negative emissions). It analyses the implications of decarbonisation (e.g. for landuse, project development, employment and financing) in unprecedented detail and granularity.

It shows that net zero by 2050 is affordable, though will encounter significant risks, including social licence challenges. The scale of energy-sector capital investment required is unprecedented, but the impact on the cost of energy services is similar, as a share of economic output, to current levels.

Net Zero America has been well received by the <u>New York Times</u>, <u>Washington Post</u>, <u>Axios</u> and <u>Bloomberg</u>, and drew this praise from John P. Holdren, former Presidential Science Advisor and Director of the White House Office of Science and Technology Policy in the study's foreword:

Net Zero America... sets an entirely new standard in this genre.... Everybody seriously interested in the crucial question of this country's energy-climate future—not least the new Biden-Harris administration—needs to understand the findings of this extraordinary study.



Chris Greig is the Walton Senior Research Scientist at Princeton University's Andlinger Center for Energy and the Environment.

At Princeton he leads the Rapid Switch Initiative, an interdisciplinary research collaboration combining engineering, business, and social sciences to explore the challenges of rapid, deep decarbonization for different regions, industries, and companies. Chris was a lead author of Princeton's recent ground-breaking Net-Zero America study.

Prior to joining Princeton, Chris was a Professor in Chemical Engineering, Director of the Dow Centre for Sustainable Engineering Innovation and Director of the UQ energy Initiative at the University of Queensland. Chris is a fellow of the Australian Academy of Technology and Engineering. His 10-year academic career follows a 25-year career in industry including senior executive roles in the energy and resources sectors.





Registration: www.icheme.org/net-zero-america
This webinar is free of charge and open to all.