

Media are welcome to attend the AARES annual conference at the Grand Chancellor Hotel Brisbane. Please contact [Cathy Reade](mailto:Cathy.Reade@AARES.org.au) 0413 575 934 to arrange interviews or to register to attend. The conference program is [here](#), with Australian and international specialists making over 200 presentations across a broad range of energy, agriculture, development and environment issues.

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THE WORLD WILL NOT ACHIEVE NET ZERO BY 2050: New Economic Analysis Backs Most Recent Scientific Report

Globally, model results show reductions in fossil fuel carbon emissions overall must decrease by at least 5.7% per year, globally, on average, to meet a minimal Paris Agreement target of less than 2°C warming, and domestic coal consumption must fall continuously going forward. New economic modelling backs recently released scientific reports that a less than a 2°C warming outcome by 2100 (less alone 2050) appears very unlikely.

Professor Tom Kompas, Distinguished Fellow of the Australasian Agricultural and Resource Economics Society and an expert in environmental economics and biosecurity at the University of Melbourne, will release this new analysis at *Meeting the Challenges of Transition to a Sustainable Future*, the Australasian Agricultural and Resource Economics Society (AARES) Conference, 11-14 February in Brisbane. AARES is the pre-eminent society promoting research relevant to Australasia in agricultural, environmental, food, and resource economics and agribusiness.

“Meeting the Paris Agreement Target and Path (PTP) is vital to protect humanity from the worse impacts of global warming. Our new analysis has provided sobering results that back the very recently published scientific analysis by renowned climate scientist Prof James Hansen and his esteemed colleagues, and their reported conclusion that the international 2°C target is “dead” – I would have to agree,” said Professor Kompas, whose research specialises in large-dimensional economic modelling for trade and climate change.

“Using a large dimensional and unique Global Trade Analysis Project model for energy and trade, we calculated the needed change in the energy mix and fall in carbon emissions to meet a minimal PTP of less than 2°C warming.”

“Covering 30 countries/regions and 31 sectors, the model shows the PTP in annual time steps to 2100 rather than 2050 in terms of emissions reduction and the shift in energy mix allowing for changes in energy intensity, renewables growth, and rising carbon prices.

“By 2050, model results show carbon emissions must decrease on a compound basis by at least 5.7% globally, per year, on average, coal consumption must fall continuously from 2025 complemented by large increases in renewable energy that allow for continued economic growth.”

We find that global carbon emissions must decline to almost 40% in 2030 and 80% in 2050 to meet a less than 2°C warming path by 2100. Coal consumption must decline between 85-99% by 2050 among the key emitters (China, the USA, and India), compared to 2019 (the model baseline) complemented by a continuous transition to renewables.”

“For Net-Zero Emission Targets, carbon sequestration, such as from re-forestation and land use change, is also essential, although with substantial uncertainty. Model results indicate a net-zero outcome even with carbon sequestration occurs no earlier than 2058.”

“Based on our analysis, backed up by the most recently released scientific analysis by the Hansen team at Columbia University, a less than a 2°C warming outcome by 2100 appears very unlikely,” he concluded.