

Questions to IPCC

Question from the United States of America

In the US there were a series of model runs undertaken to look at energy technology policy and energy policy more widely, and they sought to do some model runs that evaluated 450ppm, and they couldn't cope with that, they were being asked to do things like divide by zero. I'm interested in the 28 model runs that they put up - we'd like to know what kind of assumptions are built into those. If there are constraints it would be useful to know them. They are listed as stylized models - what does that mean?

Response from IPCC

First, some background information: The 28 low stabilization scenarios mentioned reach a CO₂ concentration of 400ppm or below. Please note that this is CO₂ and not CO₂-equivalent. The scenarios assessed in the SRREN were the result of an open call for scenario submissions. In this call a number of data was requested from the detailed models.

The scenarios assessed are all based on quantitative modeling. All of the scenarios use data from integrated assessment and energy-economic model runs presented in peer-reviewed publications. These publications may have more detail on specific assumptions. All models that produced these scenarios are large-scale, integrated models that take a systems approach to the analysis of mitigation and mitigation options. The models capture interactions between competing energy technologies of the energy system (at the minimum at an aggregate scale). Further, all models have a basis in economics (i.e. decision making is largely based on economic criteria), and the scenarios are long-term and global in scale, but with some regional detail. Also, they include policy levers necessary to meet emissions outcomes and they have sufficient technology detail to explore RE deployment levels at both regional and global scales.

Please see SRREN, section 10.2.1.2, page 800, <<http://srren.ipcc-wg3.de/report>>, for a discussion on strengths and weaknesses of quantitative scenarios. You further find a generic classification of models in box 10.1 on page 799. Four short descriptions of the types of scenarios and underlying models that have been assessed in the SRREN are presented in Box 10.2 on page 815.

It is unclear what is meant by "listed as stylized models" as we do not know where they are listed as such. In the presentation we did not speak about "stylized models". As we spoke about "stabilization" numerous times in the talk, there might also have been a misunderstanding.