



Webinar David Hone, Shell

The Energy Transformation Scenarios

April 13th, 2021

Q&A's

Question	Answer
The covid 19 pandemic has a strong influence on the scenarios planning. How different would your outlook be if that hadn't happened?	I think the main difference is now being able to see a potential pathway towards a Paris type outcome. A version of Sky existed prior to the pandemic, but it was always a struggle to see what was going to trigger the change in direction required to get it to happen. While such a change in direction isn't a given, the pandemic provides a more plausible basis for change than just wishful thinking.
Can you analyse what the role of the soil and underground will be in the scenario's	Discussed in the webinar
biofuels need land and thus increasing biofuels means an increase in land use change, how are the effects calculated? what does it mean in changes in biodiversity?	This is still work in progress, but in broad terms the land based impact is assessed as part of the MIT modelling of the scenarios in their integrated assessment model. This modelling is done to assess the temperature outcome, but the model itself also accounts for land changes and must be feasible.
Thanks for your presentation. Is there a common preference scenario from your shareholders?	Discussed in the webinar
are you also looking at negative emissions via reaction of CO2 with olivine/silicates	Not specifically. However, it is important to recognize that all the technologies we have used, but particularly the CO2 management technologies, must be scalable quite quickly. Conventional CCS has reached that point, it just lacks economic models to drive it forwards. Other ways of sequestering CO2 still need considerable development which means they may not be rapidly scalable.
how to deal with competition to food production/prices and CO2 release from soil when land use change and risk for soil quality in case of intensive crop production	See the other answers. But in Sky 1.5, where land use is most challenged, don't forget that this is a world where many things are happening. For example, some people may choose to shift their diet, which frees up pasture land (less meat). Also, there is greater international cooperation so best practices in farming can be disseminated much faster.
great presentation David, did the scenarios consider big positive feedback loops like thawing of permafrost etc?	Discussed in the webinar