## Message

From: Niemeyer, Bruce L [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=34BC8CA3FA164A7EBA525C4BCA5469C0

Sent: 12/21/2020 4:38:59 PM

To: Wirth, Mike [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=bcff47d5f2894af58a0481ec8d9663

Subject: RE: How Do You Make Flying Carbon Neutral? - The Atlantic

McKinsey has used RCP 8.5 in other settings. Might be worth a short conversation at our next 1-on-1. A few immediate comments which might help as a frame of reference.

RCP 8.5 is associated with a global temperature rise of  $5-6^{\circ}$  C rise by 2100. By comparison, the United Nations Environment Progamme (UNEP) estimates that with current Nationally Determined Contributions (NDCs) the world will by 15 GtCO<sub>2</sub>e above a  $2^{\circ}$  C aligned path as of 2050. In their estimate this takes the world to  $3^{\circ}$  C in 2100. This sort of outcome is more consistent with modelling from RCP 4.5 or 6.0.

The UNEP 2020 Gap report notes that NDCs will have to triple to get on a 2° C path. To get on a 1.5° C will require NDCs expand fivefold. Recent government pronouncements of net zero are not in past NDCs. The UN's <u>preliminary</u> estimate of recent net zero declarations (including an assumed net zero 2050 US commitment) takes temperature rise projections to 2.5-2.6° C in 2100.

From: Wirth, Mike < @chevron.com>
Sent: Friday, December 18, 2020 1:45 PM

**To:** Niemeyer, Bruce L @chevron.com> **Subject:** How Do You Make Flying Carbon Neutral? - The Atlantic

Worth a glance to see how United's 100% green pledge is being received, and also some provocative statements out of McKinsey (e.g. RCP 8.5 is the scenario people should be utilizing)...

https://www.theatlantic.com/science/archive/2020/12/united-airlines-wants-have-its-carbon-and-eat-it-too/617399/