From: Douglas Grandt answerthecall@mac.com

Subject: Marine Cloud Brightening and much more (#1 initial)

Date: April 18, 2023 at 4:36 PM

To: Dave Borlace justhaveathink@gmail.com **Cc:** Rebecca Bishop rebeccab9@gmail.com



Dear Dave.

This is a follow-up to **Rebecca Bishop**'s recent messages to you (she and I are on opposite sides of the earth (Sydney AU and Vermont US).

Sunday, there was a Substack piece* by Hannah Ritchie titled "Climate deniers and climate doomers are more alike than they'd like to think."

I took the opportunity to broaden the narrow focus on [negative] **Deniers** and **Doomers** to raise awareness of two others: [constructive] **Decarbonisers** and **Disciplined Deliberating Doers**— the latter being comprised of innovators who are debating, planning and preparing to deploy demonstration outside-the-box projects based on their scientific understanding of complex Earth Systems.

The following draws upon my comment on that piece, posted Sunday:

To make a complex long story short, Sunday (coincidentally), I discovered PBS's movie "Beneath the Polar Sun" (pbs.org/show/beneath-polar-sun seems to be accessible only in the U.S.) which illustrates what drives me and my colleagues (scientists, engineers, professors, economists, authors and other experts representing a variety of disciplines, interests and skills).**

There is no way to mitigate what the movie graphically shows but to #CoolTheArctic quickly in the very near term.

Thirty years is all it took to deteriorate the Arctic ice cap to this point, and it will take another 30 years to decarbonize (or reach Net Zero) and by that time the dreaded tipping points will have come and gone, irreversibly. If we just wait for CO2 and CH4 emissions to cease, it will be way past too late.

Emergency triage intervention (think CPR and tourniquet) is required to directly #CoolTheArctic to restore the sea ice albedo.

(Recall your 25 November 2018 chat with Peter Wadhams youtu.be/g8-dTG3H434)

Urgent extraordinary action to sustain life until long-term mitigation efforts ramp up include #RemoveCO2 and #RemoveCH4 to get atmospheric concentration back to pre-industrial concentrations and survivable, sustainable 300ppm.

(**James Hansen** et al. suggested 300ppm—at least no greater than 350ppm—which is less than 0.5°C above pre-industrial, and far below 1.5°C or 2°C levels that are a death sentence to humanity, because of tipping points).

Hansen's <350ppm admonishment was the basis for the group **Bill McKibben** and seven Middlebury College (VT) students founded and named <u>350.org</u>.

Five Google Groups** with overlapping membership (four meet fortnightly) deliberate the gamut from highly technical minutiae to policy and communication strategies. **We target 300ppm (0.0°C)**.

We would love to answer questions you may have about our message and include you in one of the zoom meetings, which are all conveniently scheduled on Monday, Thursday and Saturday **evening (UK)**, afternoon (US east coast), noon (US west coast), and morning (Australia).

Cheers, Doug Grandt Putney, Vermont, USA

- * https://open.substack.com/pub/hannahritchie/p/climate-deniers-doomers
- ** Healthy Climate Alliance (zoom meetings fortnightly Saturdays)

 Healthy Planet Action Coalition (zoom meetings fortnightly Thursdays)

 Planetary Restoration Action Group (zoom meetings fortnightly Mondays)

 Nature-based Ocean & Atmospheric Cooling (zoom meetings fortnightly Mondays)

 Carbon Dioxide Removal (no zoom meetings)

Reference websites:

HPAC home page: https://HealthyPlanetAction.org
PRAG home page: https://PlanetaryRestoration.net

PRAG archives: <u>Bit.ly/PRAGarchive</u> & <u>Bit.ly/PRAGfundamentals</u>)