NO

"IT'S TOO MUCH OF R GAMBLE."

SHOULD WE HACK THE **CLIMATE?**

HE5

"IT COULD BE OUR ONLY WAY OUT."

SRM-0-

GEOENGINEERING Q

CDR(CO₂)

Solar radiation management can lead to global cooling by techniques such as:

- Icreasing reflectivity of earth's surface
- Injecting aerosols into the atmosphere
- Space mirrors
- Cirrus cloud thinning (g:128)

Geoenigineering (GE) describes technologies that counteract climate change by either reflecting the sunlight (SRM) or marine, biotical and chemical techniques such as: removing CO2 from the atmosphere (CDR) (a:135)

Is this intervention into the ecosystem a way to engineer our way out of the problem or is it a hack, which will bring more harm than good? (f:213)

Carbon Dioxide Removal has serveral terrestrial,

- Afforestation, BECCS, biochar
- Ocean-fertilization
- Direct air capture
- Enhanced wheathering (g:126)

THE MORAL DILEMMA

ARE WE TOO ARROGANT?

The relationship of human and nature is coined by domination. (c:2) Even thought the harm does not only concern humans but also non-humans. (c:245)

WE CAUSED IT, SHOULDN'T WE FIX IT?

According to the IPCC (2013), there is a consensus that climate change is induced by humanity. Still, mitigation strategies have not been sufficiently effective . (g:16)

THE GOVERNANCE

REGULATION

Some treaties that adress GE but are not sppecifically for GE:

The London Protocol focuses on marine environement CBD focuses on biodiversity UNFCCC focuses on minimizing harm (g:133) Do we need GE specific, international guidelines?

IS THE RISK TOO HIGH?

The longterm and short-term risks can't be calculated, because GE is not testable on large scale. (a:137) Estimated risks are myriad like droughts, reduction of freshwater, disruption of regional weather patterns etc. (h:245)

SHOULD WE EXPERIMENT?

There are findings about the side-effects that researchers can see through experimentation (still highly restricted) (c:3) and observations e.g. injections of sulfate aerosols as in volcanic erruptions. (g:128)

DEMOCRATIZATION

legitimacy order reach representatives of all countries should be present. But wouldn't this come at the cost of effectiveness? (b:542)

TERMINATION SHOCK?

Discontinuation of GE could lead to a more rapid global warming (h:245) and therefore create a dependency on GE (a:138) not only for us but also future generations. (e:200)

WILL IT BUY US TIME?

GE allows us to avoid the need to take action right away, since it buys us time to fight the real causes. (b:540)

PRIVATISATION

could become a threat in individuals or private entities could cause demages for many. Could this turn into a new form of terrorism? (b: 548)

ARE AVOIDING THE REAL PROBLEM?

enabler becomes our unsustainable society.(a:138) So, there is no change in our culture of consumerism but our dysfunctional ways remain. (ibid.)

AREN'T THEY SUFFERING RIGHT NOW?

Right now the global north emits more CO2 than the global south. The global south has to carry the same risks and consequences of climate change with a higher vulnerability. (d: 6)

WOULDN'T IT BE EASIER?

It is harder to mobilize society and economy to change their ways long-term, because it is more inconvenient and intrusive compared to GE. (e:201)

WHO WILL SUFFER THE MOSTA

One country could implement GE and others could carry the consequences. (a:140) The global north keeps their unsustainalbility, while the global south bears the higher vulnerability. (ibid.) If so should there be a compensation? And who should compensate what to whom? (g:132)

MILITARIZATION

The ETC group asks the question of "who has the right to set the global thermostat". What if this is answered by rogue states militarizing GE? (a:140)