1. Climate Solutions? It's Matter of Perspectives





A recent article in the New York Times¹ draws attention to a growing interest among fossil fuel companies to invest in Carbon Engineering, a small Canadian company that is working on technologies to take carbon out of the atmosphere. This has the potential to become a booming industry. As the article states:

Investing in Carbon Engineering and other carbon-reduction initiatives is part of an emerging effort by fossil-fuel industries to remain relevant and profitable in a warming world. With electric cars and solar and wind power becoming increasingly affordable, executives acknowledge that business as usual could put their companies at risk.

There is indeed money to be made in geoengineering: "...in case of an acute global climate emergency, governments would probably have to step in to hasten removal of carbon from the atmosphere. Mr. Oldham said the cost of capturing and sequestering all the carbon needed to stop climate change would require trillions of dollars."

There are, however, alternatives to an acute global climate emergency. For example, some political leaders in the United States have introduced the Green New Deal, which focuses specifically on the issue of how to avoid catastrophic climate change.² This deal lays out a vision for shifting the entire energy supply of the United States to renewable sources within a decade and establishing a "zero emissions transportation system." The vision of the deal stretches beyond specific climate concerns to also include things like "guaranteed" federal jobs, "universal health care," and "food security." Responses to this new deal has been varied across the political spectrum, as well as among the general public, with many people pointing to its perceived costs and impracticalities. Geoengineering, in contrast, has been enthusiastically backed by investors such as Bill Gates.

The editor of your local newspaper heard that you have been taking *Environment and Society*, and has asked you to write an essay to help readers to understand what might be behind these two very different responses to climate change. Bringing in insights from the SGO2302 lectures and readings, your essay should use these two cases as examples to help readers to understand the factors that influence the different approaches. Your essay should highlight the role of discourses, including how an integrative discourse can contribute to the discussion of climate change solutions.

¹ https://www.nytimes.com/2019/04/07/business/energy-environment/climate-change-carbon-engineering.html?action=click&module=Well&pgtype=Homepage§ion=Business

² https://www.gp.org/green_new_deal_

2. To invest or not to invest, what is your reason?



The Norwegian Government Pension Fund Global, whose wealth comes from the country's oil and gas revenues, is the world's largest sovereign wealth fund. The Fund recently decided to divest from fossil fuels in its investment portfolio. This is ground-breaking news and seems to mark the beginning of a shift towards investments in renewable energy. However, upon closer look, it appears that the reasons for the decision were more economic than environmental. Carbon emissions reductions and meeting the Paris Accord's goal of keeping global temperature rise to 1.5 degrees Celsius were notably not among the board's decisions. Even their investments in renewable energy is based on investment opportunities, rather than climate concerns. Many NGO's are wary of such approaches, arguing that they are still based on the logic of the current system. Indeed, a recent report titled "Banking on Climate Change" showed that the lending and underwriting from 33 global banks to the fossil fuel industry amounts to \$1.9 trillion since the Paris Agreement was adopted (2016–2018), with financing on the rise each year.³

You have been asked by the board of the Government Pension Fund Global to write an essay to help them understand why the NGOs are so critical of their approach. In your essay, be sure to include both the positive impacts of such a divestment decision and the reasons for the critiques. Drawing on the *Environment and Society* lectures and readings, include an analysis of what is driving carbon emissions and why renewable energy production has been limited in comparison to its potential. Explain whether—and if so, to what extent—divestment and investment decisions based on price projections of oil and gas on the global market are a viable way to limit greenhouse gas emissions. Present and justify an alternative strategy and rationale to the board that could accelerate investments in renewable energies while also decreasing the exploitation of fossil fuels.

³ https://www.ran.org/wp-content/uploads/2019/03/Banking on Climate Change 2019 vFINAL.pdf





"Let us make no mistake: the climate crisis is also a crisis of culture, and thus of the imagination," writes Amitav Gosh in *The Great Derangement: Climate Change and the Unthinkable*. If Gosh is correct and we are indeed facing a crisis of the imagination, we will need a different approach to sustainability.

Nowhere is the crisis of culture and imagination more visible than in today's dominant narratives of climate change impacts, vulnerability, and adaptation. Hurricane Idai, which was describe by the UN as one of the deadliest storms on record in the southern hemisphere, devastated the city of Beira, Mozambique in March 2019. Floods contributed to the loss of lives, the outbreak of cholera, and widespread hunger and insecurity. ReliefWeb has linked the storm to climate change, arguing for the need to help developing countries become better prepared for disasters in the future:

As we look towards a shared future in southern Africa where events like Cyclone Idai become more likely, it's incumbent upon us in the international community, just as for national governments, to boost key investments and innovations that will make countries like Mozambique, Zimbabwe and Malawi more resistant to the worst impacts of disasters. Even so, the immediate health and development priorities which countries must deal with on a daily basis also need to be understood in part as a way to reduce the costs of trade-offs between present needs and future risks.⁴

Imagine that a Norwegian humanitarian NGO has just hired you as a consultant to look into ways to increase resilience to climate change in southern Africa. This is your opportunity to make a difference! Please write an essay to the board of directors to draw attention to the limits of the biophysical discourse, while also highlighting key insights from an integrative discourse on climate change. In your essay, be sure to describe the role of culture and imagination in opening up alternative pathways for addressing climate change impacts, vulnerability, and adaptation. In your essay, emphasize the potentials (and barriers) for transforming international responses to climate-related disasters.

⁴ https://reliefweb.int/report/world/rethinking-disaster-preparedness-southern-africa-after-cyclone-idai