

EcoSocialism and the Technoprogressive Perspective



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Back in 1983, while I was working in Sri Lanka, the German Greens were first elected to the Bundestag. As a post-Marxist social theorist, interested in ecological thinking, and someone looking for a way to connect spirituality, new social movements and the traditional Left, I began following Green politics closely. When I got to graduate school

the US Green Party had organized, and I started the short-lived *EcoSocialist Review* (1988–1994) to discuss the overlaps and tensions between Green and social justice politics, around themes like environmental racism and how to build labor support for climate policies. But a more central philosophical question motivated my engagement with the red-green dialogue: is it possible to have an environmental politics that did not see human beings as a cancer on the planet, but had a more attractive, high-tech vision of a sustainable, equitable future?

While I was publishing *EcoSocialist Review* I was also teaching and writing about bioethics, and I began to see similar philosophical issues in the two domains. While I saw utopian possibilities in sustainable technologies and the biosciences, both environmental politics and bioethics were dominated by anti-technology biases. The joke in our bioethics shop was that you only needed to learn one word: no. When I discovered the transhumanists in the 1990s I was excited by their techno-utopian enthusiasms, which I embraced, but dissatisfied with their inattention to social justice and sustainability. This was the origin of the arguments I would express in *Citizen Cyborg* for a social democratic version of transhumanism, and that work fed into the small band of us trying to develop technoprogressivism as a distinct ideological and political perspective.

Technoprogressivism

In 2014 a dozen futurists met at the Paris Transvision conference to write and ratify the Technoprogressive Declaration, which eventually had more than a hundred individual and organizational endorsements. The Declaration sketched out how technoprogressives should stitch together the futurist and transhumanist communities with progressive social movements, from reproductive rights to disability rights. It outlined our historical self-understanding, as partisans of the egalitarian Enlightenment positioned between right-wing futurists and left-wing Luddites. It did not directly address the climate emergency, but called on technoprogressives to

join with movements working to reduce existential risks, educating them about emerging threats they don't yet take seriously, and proposing ways that emerging technologies can help reduce those risks. Transnational cooperation can meet the man-made and natural threats that we face.

Today the term “technoprogressive” is only used by a few thinkers, such as David Wood in his 2018 *Transcending Politics: A Technoprogressive Roadmap to a Comprehensively Better Future*. But there are many thinkers who exhibit, or are adjacent to, the technoprogressive tendency, which has been a central thread in Enlightenment thought for 250 years. Technoprogressives include feminists arguing for the right to reproductive technology, and disability activists working for assistive and therapeutic access. The “postcapitalists” or “cyborg socialists” like Aaron Bastani, Nick Snricek, and Paul Mason, who argue that expanding automation and a universal basic income is the path to a more sustainable and just future, are in the technoprogressive neighborhood.

As to ecological politics I believe there is now an emergent technoprogressive, or technoGaian, or cyborg ecosocialist, or Viridian perspective, which lies at the intersection of two philosophical movements, ecosocialism and ecomodernism.

What is EcoSocialism?

Ecosocialism today encompasses a wide range of thinkers and writings (Saito, 2017; Angus, 2017; Wallis, 2018; Lowy, 2018; Foster, 2020;). The core arguments of ecosocialism are:

- The path to ecological sustainability requires a stronger social safety net, environmental regulations, industrial planning, massive investments in infrastructure, and ultimately the nationalization of resource industries.
- The environmental failures of both Communist regimes and social democratic regimes demonstrate that these 20th century socialisms did not give sufficient attention to ecological sustainability, focusing instead on economic growth and employment. That’s why ecosocialism is an advance over those previous kinds.
- “Overpopulation” is not the problem, and population control involves a usually pernicious, Malthusian focus on the fertility of the poor rather than on the economic system. The best way to speed the transition to a lower birth rate is by educating women and giving them access to reproductive health technologies.
- Ecosocialists reject “deep ecology,” and calls to value “nature” more than human interests. Ecosocialism is distinct from an argument, for instance, that all lands should be protected by their ancestral owners.

The introduction of omnibus Green New Deal legislative packages in the US and abroad represent the fruition of climate justice and ecosocialist politics. By linking climate mitigation policies to massive investments in the social safety net, job retraining, and new jobs in the Green economy, the Green New Deal argues for a better, more prosperous sustainable future. While most ecosocialists reject China's authoritarianism, and many see mixed results from China's ecological policies in practice ([Holzman and Grunberg, 2021](#)), the capacity of the Chinese state to use industrial planning and infrastructure investments to achieve their ambitious sustainability goals is seen as supporting the ecosocialist argument for a strong state. While the construction of nuclear power plants has generally stopped in the West, China intends to expand nuclear power to reduce reliance on coal ([Stringer and Koh, 2021](#)).

Ecosocialists do not agree about many other issues. For instance the revolutionary Left and radical ecologists tend to see climate collapse as so dire and imminent that ecosocialists should be preparing for the collapse of the ecosystem and capitalism. Some ecosocialists see modern technologies like nuclear power as irredeemably shaped by their corporate, imperialist and racist origins. Democratic ecosocialists and most environmental activists believe a path to a better future still lies through citizen mobilization, innovation and electoral change. Ecosocialists are also divided about the utility of nuclear power, genetically modified crops and other technologies. Some ecosocialists see these technologies as potential answers to the climate crisis when separate from their corporate owners and lobbies ([Frase, 2017](#)), while others believe these technologies are too dangerous and must be rejected as part of a faux-ecological, corporate "greenwash" propaganda campaign.

EcoModernism

Parallel to the emergence of ecosocialism, there were also environmentalists arguing that Greens should embrace technological innovations. One exemplar was the science fiction writer and provocateur Bruce Sterling, who in 2000 launched his intervention into ecological activism. His [Viridian Manifesto](#) focused on the image problem that kept ecological sustainability from being more popular: the future being depicted was dour and pastoral, a future with less abundance. Greens needed to present an exciting, sexy, high-tech vision of a sustainable future. Sterling argued for instance that a high-tech, Net-based culture could be more sustainable by shifting consumption from things to

immaterial experiences. Work could be whittled down, and public health and medicine expanded, so that we have longer lives with more time for aesthetic pursuits.

The Viridian document was a little ahead of its time, and a little too focused on the transformative possibilities of an art movement. By 2010 environmental politics was ready for a more vigorous debate about the risks and benefits of a range of emerging technologies. Stewart Brand's 2010 *Whole Earth Discipline* made four bold claims: (1) Cities are more sustainable than sprawling, decentralized populations, since they preserve more ecosystem and use fewer resources per person. (2) Nuclear power is a necessary and desirable component of our energy future, alongside expanded renewable energy sources. (3) Genetically modifying crops to use less fertilizer, water, pesticide and herbicide, and to be more resilient under chaotic climate conditions, is essential for making agriculture sustainable and able to feed 10 billion people. (4) Geoengineering methods, such as spraying reflectant dust into the stratosphere to cool the planet, should be researched and may become necessary.

Needless to say these proposals met with outrage and incredulity from many environmentalists. By 2015, however, Brand and dozens of other contrarian environmental activists had coalesced around the policy proposals of the [Breakthrough Institute](#), and issued the [EcoModernist Manifesto](#) (Nijhuis, 2015). The ecomodernists argued that

both human prosperity and an ecologically vibrant planet are not only possible, but also inseparable. By committing to the real processes, already underway, that have begun to decouple human well-being from environmental destruction, we believe that such a future might be achieved. As such, we embrace an optimistic view toward human capacities and the future.

For the ecomodernists, humanity has already entered the Anthropocene, and we need to take responsibility for environmental engineering, rather than indulging in pastoralist fantasies.

Intensifying many human activities — particularly farming, energy extraction, forestry, and settlement — so that they use less land and interfere less with the natural world is the key to decoupling human development from environmental impacts. These socioeconomic and technological processes are central to economic modernization and environmental

protection. Together they allow people to mitigate climate change, to spare nature, and to alleviate global poverty.

In particular the ecomodernists have argued for

agricultural intensification, genetically modified and synthetic foods (for their reduced usage of herbicides and pesticides), fish from aquaculture farms, desalination and waste recycling, urbanization, and replacing low power-density energy sources (e.g. firewood in low-income countries, which leads to deforestation) with high power-density sources ... (nuclear power plants, and advanced renewables). (Wikipedia, 2021)

The ecomodernists have faced many criticisms from technoskeptic ecologists and the Left, who see them as the latest peddlers of technofixes that delay necessary reform (Monbiot, 2015; Hamilton, 2015; Trainer, 2019; Boehnert and Mair, 2020). It is certainly true that the ecomodernist ideas received a warm reception from corporate interests, climate denialists, and economic conservatives, who reject the need for significant changes to the economy. Environmentalists believe the ecomodernists downplay the contributions of renewable energy in order to make a stronger case for nuclear (Tuhus-Dubrow, 2021), and are too quick to dismiss imminent ecological catastrophe (Bliss, 2020). One of the core ecomodernists, Michael Shellenberger, has tacked increasingly to the Right, leading many of his former associates to distance themselves from his polemical work, such as his 2020 *Apocalypse Never: Why Environmental Alarmism Hurts Us All* (Bliss, 2020). Another core ecomodernist, Ted Nordhaus, separated from the Breakthrough Institute accusing the project of having been misled by a “nuclear zealot wing” that threatened to turn ecomodernism into a “nuclear cargo cult.”

While the ecomodernists may have had little success in changing environmental politics, at the level of mass politics their techno-optimism has a lot of backing and a political plurality. Techno-optimism about climate solutions is reflected, for instance, in the environmentalism of Elon Musk, the cocky boy genius and entrepreneur who ignores politics and delivers electric cars and high speed rail. Bill Gates has pursued more a liberal, internationalist NGO approach to environmental issues, as expressed in his 2021 book *How to Avoid a Climate Disaster: The Solutions We Have and the Breakthroughs We Need*. Gates gives more attention to public policy to encourage ecological innovation, but

is still solidly in the techno-optimist camp ([Heinberg, 2021](#)), embracing nuclear power ([Clifford, 2021](#)) and genetically engineered crops ([Boyle, 2020](#)).

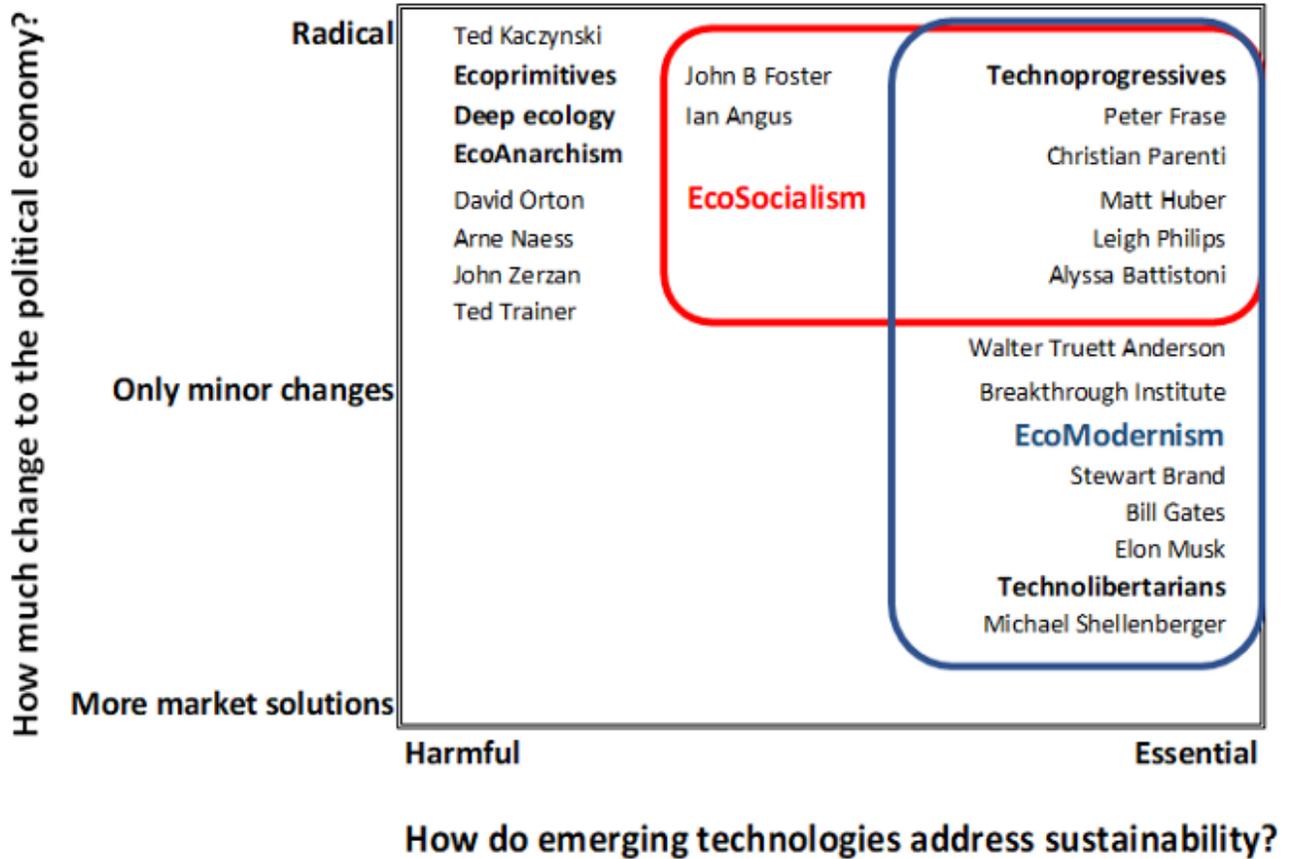
Not only is ecomodernism the default position of liberal capital ([Kallis and Bliss, 2019](#)), it is also the default position of most people, people who reject both climate denialism or climate apocalypticism for the hope that, regardless of how severe the crisis is, technological innovation and regulations will allow us to muddle through. A [2020 poll by Pew](#) found that, despite the political polarization in the United States, there is overwhelming support for government policies to regulate emissions, plant trees, develop new energy sources, and many see an inescapable role for nuclear power ([Hill, 2020](#)).

So the ecosocialists have broad agreements about the radical political economic changes that are called for, and have largely rejected the mysanthropic and anti-technological views of some radical ecologists. But the ecosocialists differ on what role nuclear power and emerging technologies should play under a Green New Deal. The ecomodernists broadly agree on the importance of nuclear and emerging technologies, but their impact has been muted by their association with corporate “greenwashing” and neoliberal technofix apologias for free markets and boy geniuses. As in other policy domains the technoprogressive perspective represents a unique stance at the intersection of these two trends.

Technoprogressive Ecology = Ecosocialism + EcoModernism

If we see ecological politics as having one axis from market to state solutions, and another from anti-technology to pro-technology, it is clear that the technoprogressives would be at the intersection of the ecosocialist and ecomodernist schools of thought, and there are already people working in that space. In 2015 Leigh Philips published *[Austerity Ecology & the Collapse-Porn Addicts: A Defence Of Growth, Progress, Industry And Stuff](#)*, which argued for a socialist ecomodernist position. A 2017 issue of the socialist *Jacobin* magazine presented a number of articles from the position of ecomodernist socialism, arguing for [geoengineering](#), [nuclear power](#) and [carbon removal](#). These articles, and their suggestion that the growing democratic Left might tilt towards ecomodernism, received vigorous rebuttals from ecologists ([Pineault, 2018](#); [Leonardi, 2018](#); [Barca, 2018](#); [Vansintjan, 2018](#)) and ecosocialists ([Foster, 2017](#); [Angus, 2017](#)).

Ecological Politics, Technology and Political Economy



The pushback against socialist ecomodernism from the Left is especially interesting, since techno-optimism was central to the Marxist tradition. Lenin famously said “Communism is Soviet power plus the electrification of the whole country” (Lenin, 1920). In *Literature and Revolution* Leon Trotsky sounds strikingly ecomodernist:

Faith merely promises to move mountains; but technology, which takes nothing “on faith,” is actually able to cut down mountains and move them. Up to now this was done for industrial purposes (mines) or for railways (tunnels); in the future this will be done on an immeasurably larger scale, according to a general industrial and artistic plan. Man will occupy himself with re-registering mountains and rivers, and will earnestly and repeatedly make improvements in nature. In the end, he will have rebuilt the earth, if not in his own image, at least according to his own taste. We have not the slightest fear that this taste will be bad. (Trotsky, 1924)

Or as socialist Michael Parenti recently put it:

we cannot retreat from our role as environment makers. Humans have always been remaking “nature.” Today, we do so as reckless, marauding somnambulants. But this is not inevitable or “natural.” (Parenti, 2019)

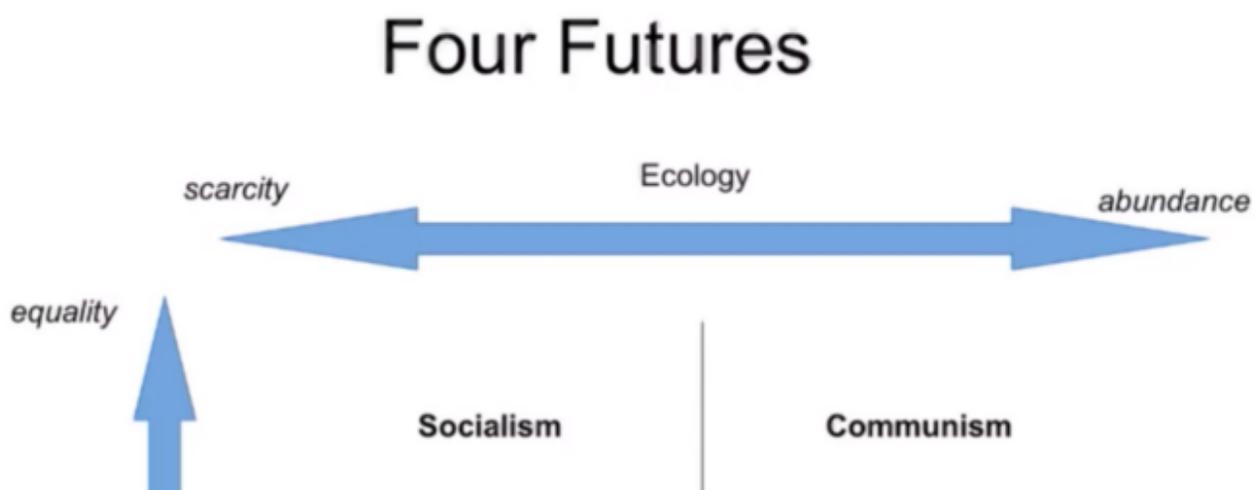
The ecosocialist dilemma is whether the Promethean techno-optimism of Marxism can be separated from the productivist, anti-ecological sins of Communism and social democracy. Is the goal for humans to democratically manage the Anthropocene, as traditional Marxism argued, or is socialism only for the democratic control of the human sphere while Nature must be left to its own laissez-faire? Even those, like myself, who reject the distinction between the human and the natural, and embrace Promethean ambitions, believe that a consciously designed future should focus on controlling the “commanding heights,” while leaving many processes to self-organization. Nonetheless

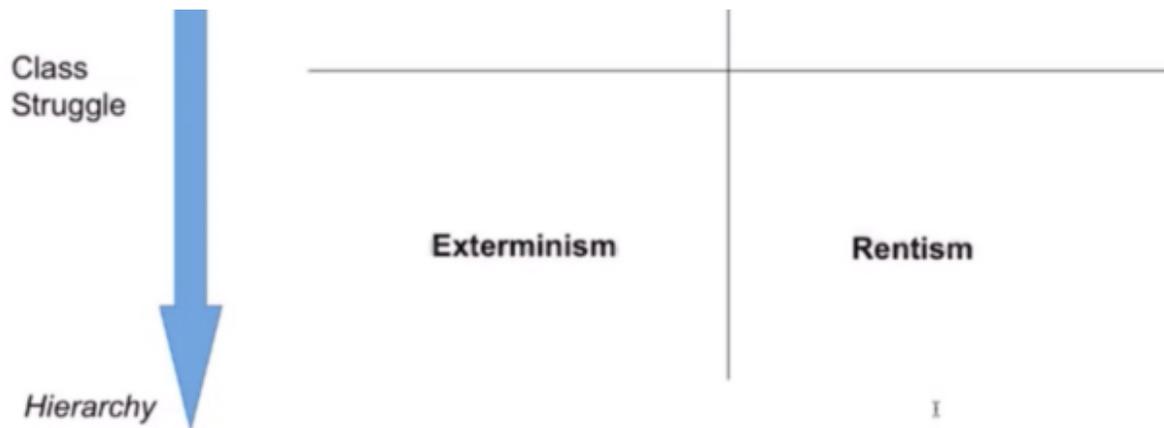
any democratic planning of the human economy is at the same time a democratic planning of the Earth system. Global democratic planning is not merely necessary for the good Anthropocene — it is the good Anthropocene (Philips and Rozworski, 2017)

Whether we only macro-manage, or also micro-manage, it is time *To Govern Evolution* (Anderson, 1983).

Peter Frase’s Four Futures

One of the Left ecomodernists is Peter Frase, whose 2016 book *Four Futures* provides a futurist scenario planning model for thinking about the impacts of technological innovation and climate crisis (Galluzzo, 2017). The four scenarios are combinations of scarcity or abundance on one axis, and equality or hierarchy on the other.





(Moran, 2019)

A future with the same or worse levels of inequality, and without technological abundance and successful solutions to the climate crisis, will be a very scary place indeed, with migrants turned away at the border and the poor left to suffer (exterminism). In an unequal future that achieves an abundant economy and liveable climate (the right-wing ecomodernist goal), Frase suggests that automation and UBI will reduce work, and increasingly concentrated intellectual capital will extract rents for the use of their patents and copyrights (rentism).

On the other hand, rising inequality and climate crisis could tip us towards more egalitarian futures. An egalitarian future that has to face climate collapse, and the failure of emerging technologies to reduce scarcity, would be focused on the equitable sharing of limited or shrinking resources (socialism). The far more attractive option, Frase argues, is the fully automated luxury communism future, where we have democratic management and equitable distribution of high-tech abundance, allowing new forms of social organization we can't even yet imagine (communism). Frase's scenario model is an excellent starting point for technoprogressives to begin fleshing out the implications of all emerging technologies, from genetic enhancement to brain-computer interfaces.

The Viridian Declaration

In 2020 the French technoprogressive group [AFT-Technoprog](#) published the [Viridian Declaration](#). Their proposals include:

Green Industrial Policy Massive investments in scientific research and technological innovation, and policies that reduce emissions, capture carbon, and shift away from non-renewable and polluting resources.

Some Nuclear Power “A pragmatic limitation of the use of nuclear energy” This appears to be an understandable dodge, given the controversiality of nuclear energy and France’s heavy reliance on it. Clearly we need to wade through a lot of contested science to understand how much nuclear energy we will need, and how safe it can be. It may be that some safer forms of nuclear power, like the thorium reactors advocated by Andrew Yang among others ([Oberhaus, 2019](#)), need public investments because the private sector sees them as unprofitable. I side with those who see a role for some form of nuclear power as part of the climate solution.

High-Tech Agriculture “A return to the agriculture of our grandparents’ time would almost certainly mean the death of tens or even hundreds of millions of people, starting with the poorest! We need modern organic agriculture. Among the means to feed citizens while leaving space for biodiversity we can list automation, robotization for targeted and diversified crops and to facilitate the reuse of all biocompostable waste, soil-less cultivation, and the creation of food (“clean meat”) in vitro and without animal suffering.” ([Viridian Declaration, 2020](#))

These are all great ideas for making agriculture more sustainable, but this passage noticeably sidesteps the issue of genetically modified crops, which are much more controversial in France than in the United States ([Meyer, 2021](#)). The science seems pretty clear that GMOs are safe ([Garland, 2020](#)) and necessary for protecting food security in the future ([Marris, 2020](#)). Technoprogressives can both condemn the intellectual property overreach of firms like Monsanto, and the uses of GMO technology that increase reliance on fertilizer, insecticide and sterile seed, while endorsing their role in sustainable agriculture.

Geoengineering “Use of geoengineering techniques only when we know that the means envisaged can be reversible without new technology.” Again, yes, while technoprogressives reject the precautionary principle, they do want all technologies to be thoroughly researched, and ideally reversible. But we need to be pursuing research into geoengineering now if it is to be ready when needed.

The Declaration also pitches some ideas from a transhumanist POV. Healthy longevity can be reframed from contributing to overpopulation (a common charge, despite the crashing fertility rates worldwide), to a way to further reduce fertility (fertility tends to fall as longevity rises) and consumption (older people consume less). Neurotechnologies like psychedelics might be applied to human moral enhancement, boosting our sense of connection to nature and reducing our obsessive consumption.

The [AFT-Technoprog's Viridian Declaration](#), and [their conference to discuss it March 16–17](#), are an important step towards the goals outlined in the Technoprogressive Declaration six years ago: to articulate distinct technoprogressive positions that situate us in ongoing policy debates, and argue for these positions in our futurist and progressive communities with the goal to stitching together the disparate forms of technoprogressivism. As this dialogue develops we will need to review the debates between the ecosocialist and ecomodernist camps, and develop ties to the emerging group of thinkers that lie at their intersection.

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