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A Degrowth Response to an Ecomodernist Manifesto

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A group known as the “ecomodernists,” which includes prominent environmental thinkers and development specialists such as Ted Nordhaus, Michael Shellenberger, Stewart Brand, David Keith, and Joyashree Roy has recently published a statement of principles called [An Ecomodernist Manifesto](#) (2015). Many of the authors of the *Manifesto* are connected to an influential think tank called [The Breakthrough Institute](#).

The *Manifesto* is an attempt to lay out the basic message of ecomodernism, which is an approach to development that emphasizes the roles of technology and economic growth in meeting the world’s social, economic, and ecological challenges. The ecomodernists “reject” the idea “that human societies must harmonize with nature to avoid economic and ecological collapse,” and instead argue that what is needed is a reliance on technologies, from nuclear power to carbon capture and storage, that allow for a “decoupling [of] human development from environmental impacts.”

The *Manifesto* has already received strong criticism from an array of commentators, but none of these assessments has yet critiqued it from the perspective of “degrowth,” which is an approach that sees the transition to sustainability occurring through less environmentally impactful economic activities and a voluntary contraction of material throughput of the economy, to reduce humanity’s aggregate resource demands on the biosphere. From a degrowth perspective, technology is not viewed as a magical savior since many technologies actually accelerate environmental decline.

With these disagreements in mind, a group of over fifteen researchers from the degrowth scholarship community has written a detailed refutation of the *Ecomodernist Manifesto*, which can be read [here](#). The following is a summary of the seven main points made by the authors of this critique:

1. The *Manifesto* assumes that growth is a given. The ecological economists associated with degrowth assume that growth is *not* a given, and that population growth, inequalities, and the decline of cheap and abundant fossil fuels, which spurred the unprecedented growth of the global economy over the past century, means that the limits to growth are either being reached or will be reached in the very near future. The ecomodernists, by contrast, scoff at the idea of limits to growth, arguing that technology will always find a way to overcome those limits. Graham Turner, Ugo Bardi, and numerous others have shown through empirical research that many of the modeled scenarios, and the fundamental thesis, of the Club of Rome remain as relevant as ever—that is, that the human endeavor is bumping up against natural limits. Richard Heinberg has shown that the production of conventional oil, natural gas, and heavy oil all peaked around 2010, despite, but also due to, continued global reliance on fossil fuels, which still make up over 80% of the world's primary source of energy. The history of industrialism to date suggests that more growth will be coupled with increasing environmental costs. Thus the *Manifesto* does nothing to question and rethink the growth fetish that has preoccupied (and negatively impacted) the world since at least the 1940s.

2. Ecomodernists believe in the myth of decoupling growth from impacts. Long the fantasy of neoclassical economists, industrialists, and many futurists decoupling is the idea that one can have more of the “good stuff” (economic growth, increased population, more consumption) without any of the “bad stuff” (declines in energy stocks, environmental degradation, pollution, and so forth). Yet to date, there has been no known society that has simultaneously expanded economic activity while reducing absolute energy consumption and environmental impacts. In terms of carbon-dioxide emissions, the only periods over the past century in which global or regional emissions have actually declined absolutely have occurred during periods of decreased economic activity (usually a political crisis, war, or a recession). While it is true that many countries have reduced their carbon intensity in recent decades, meaning that they get more bang for their energy buck, efforts to decouple GDP-growth from environmental degradation through technological innovations and renewable energies have failed to achieve the absolute emissions reductions and reductions in aggregate environmental impacts necessary for a livable planet. In short, absolute decoupling has not occurred and has not solved our problems.

3. Is technology the problem or the solution? The ecomodernists cannot decide. The *Manifesto* is open and honest about the impact that modern technologies have had on the natural world, and especially emissions from fossil-fueled machines. However, as an act of desperation, the ecomodernists retreat to the belief that risky, costly, and underachieving technologies, such as nuclear power and carbon capture and storage, will solve the climate crisis and energize the sustainable society of the future. The reality, however, is that nuclear power provides less than 6

percent of the world's energy needs while creating long-term storage nightmares and present-day environmental hazards. We cite Chernobyl and Fukushima as obvious examples. From the point of view of degrowth, more technology is not (necessarily) the solution. The energy crisis can be addressed only by reductions in throughput, economic activity, and consumption, which could then (and only then) create the possibility of powering global society via renewables.

4. Ecomodernism is not very “eco.” Ecomodernism violates everything we know about ecosystems, energy, population, and natural resources. Fatally, it ignores the lessons of ecology and thermodynamics, which teach us that species (and societies) have natural limits to growth. The ecomodernists, by contrast, brazenly claim that the limits to growth is a myth, and that human population and the economy could continue to grow almost indefinitely. Moreover, the ecomodernists ignore or downplay many of the ecological ramifications of growth. The *Manifesto* has nothing to say about the impacts of conventional farming, monoculture, pesticide-resistant insects, GMOs, and the increasing privatization of seeds and genetic material. It is silent on the decline of global fisheries or the accumulation of microplastic pollution in the oceans, reductions in biodiversity, threats to ecosystem services, and the extinction of species. Nor does it really question our reliance on fossil fuels. It does argue that societies need to “decarbonize,” but the *Manifesto* also tacitly supports coal, oil and natural gas by advocating for carbon capture and storage. Far from being an ecological statement of principles, the *Manifesto* merely rehashes the naïve belief that technology will save us and that human ingenuity can never fail. One fears, too, that the ecomodernists support geoengineering.

5. The *Manifesto* has a narrow, inaccurate, and whitewashed view of both “modernity” and “development.” The *Manifesto*'s assertions rest on the belief that industrialized modernity has been an undivided blessing. Those who support degrowth have a more complex view of history since the 18th century. The “progress” of modernity has come at a heavy cost, and is more of a mixed blessing. The ecomodernists do not acknowledge that growth in greenhouse gas emissions parallels the development of industry. The core assumption is that “development” has only one true definition, and that is to “modernize” along the lines of the already industrialized countries. The hugely destructive development path of European and Neo-European societies is the measuring stick of Progress.

6. Ecomodernism is condescending toward pre-industrial, agrarian, non-industrialized societies, and the Global South. The issue of condescension is particularly stark in the *Manifesto*. There is not a word about religion, spirituality, or indigenous ecological practices, even though the authors throw a bone to the “cultural preferences” for development. Pre-industrial and indigenous peoples are seen as backwards and undeveloped. The authors go so far as to say that humans need to be “liberated” from agricultural labor, as though the production of food, and small-scale farming, were not inherent goods. There is no adoration for simple living, the small scale, or bottom up approaches to development.

7. The *Manifesto* suffers from factual errors and misleading statements. The *Manifesto* is particularly greenwashed when it comes to global deforestation rates. It suggests that there is currently a “net reforestation” occurring at the international scale, which contradicts the 2014 *Millennium Development Report* that shows that afforestation and reforestation have, in fact, slowed deforestation rates, but that the world still suffered a net loss of forested land between 2000 and 2010 by many millions of hectares. Research by the United Nations Food and Agriculture Organization and the World Wide Fund for Nature confirms the reality of net forest losses. Further, the *Manifesto* makes dubious claims about net reductions in “servitude” over the past few centuries, and the role played by pre-historical native peoples in driving the megafauna to extinction.

In sum, the ecomodernists provide neither a very inspiring blueprint for future development strategies nor much in the way of solutions to our environmental and energy woes.

The [full critique document](#) was authored and endorsed by Jeremy Caradonna, Iris Borowy, Tom Green, Peter A. Victor, Maurie Cohen, Andrew Gow, Anna Ignatyeva, Matthias Schmelzer, Philip Vergragt, Josefin Wangel, Jessica Dempsey, Robert Orzanna, Sylvia Lorek, Julian Axmann, Rob Duncan, Richard B. Norgaard, Halina S. Brown, Richard Heinberg. Read the full document [A Degrowth Response to an Ecomodernist Manifesto](#).

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