

Why Green Capitalism Will Fail

by Pete Dolack

Green capitalism is destined to fail: You can't keep doing the same thing and expect different results. We can't shop our way out of global warming nor are there technological magic wands that will save us. There is no alternative to a dramatic change in the organization of the global economy and consumption patterns.

Such a change will not come without costs—but the costs of doing nothing, of allowing global warming to proceed, is far greater. Therefore it is healthy to approach with a dose of skepticism the Intergovernmental Panel on Climate Change (IPCC) report that concludes the annual reduction in “consumption growth” on a global basis would be only 0.06% during the course of the 21st century. Almost nothing!

The “Summary for Policymakers” supplement of the IPCC's *Climate Change 2014: Mitigation of Climate Change* report, a dense 33-page document, estimates (p. 15) that the annualized reduction in consumption growth would be 0.04 to 0.16%, with the median value of various models at 0.06%. This estimate is based on projected global annual growth of 1.6–3.0% per year during the full course of the 21st century.

Nonetheless, the summary does acknowledge that greenhouse gas emissions accelerated during the 2000–2010 decade as compared to the 1970–2000 period. It declares, with “high confidence,” that half of all anthropogenic carbon dioxide emissions since 1750 (the dawn of the Industrial Revolution) have been discharged in the past 40 years. Worse, population and economic growth have outstripped gains in efficiency; thus, greenhouse gas emissions have increased despite increased efficiency and conservation in energy usage. Continuing on this trajectory will have potentially catastrophic consequences, the summary says (p. 9):

The IPCC is asserting that there need be no fundamental change to the world's economic structures.

This estimated cost is what the IPCC believes is what would be required to hold the atmospheric concentration of carbon dioxide equivalent to 450 parts per million, the level at which the IPCC believes total global warming would be 2 degrees Celsius by the year 2100, which in turn is seen as the maximum temperature rise to avoid catastrophic damage to Earth.

In sum, what the IPCC panel is asserting is that the cost of bringing global warming under control will be negligible, no more than a blip noticed only by statisticians. And, best of all, there need be no fundamental change to the world's economic structures—we can remain on the path of endless growth. We can have our cake and not only eat it but make more cakes and eat them, too.

Alas, there are no free lunches, nor are there limitless cakes. On the current path, you'll need scuba gear to get around.

Hundreds of climate scientists from around the world (collectively, the IPCC Working Group III) contributed to the report, but it does appear to have been watered down to some extent for political reasons. Indeed, the Mitigation 2014 web site's front page says the Summary for Policymakers “has been approved line by line by member governments.” Since most of the world's governments are reluctant to do more than talk about global warming, a note of caution is surely warranted.

Without additional efforts to reduce emissions beyond those in place today, emissions growth is expected to persist driven by growth in global population and economic activities. Baseline scenarios, those without additional mitigation, result in global mean surface temperature increases in 2100 from 3.7 °C to 4.8 °C compared to pre-industrial levels (median values; the range is 2.5 °C to 7.8 °C when including climate uncertainty) (high confidence).

Many of the world's cities would be under water, or well on their way to being under water, should such heating occur. The temperature range of the preceding paragraph represents atmospheric concentrations of 750 to 1,300 parts per million of carbon dioxide equivalent. To instead hold that concentration to 450 ppm will require a monumental undertaking—the concentration is already 400 ppm. The IPCC thus concludes that

the level of greenhouse gases will actually rise above the 450 mark, then be brought down to that level under its scenario for capping the concentration at 450 ppm in 2100.

To achieve a goal of 450 ppm in 2100 would require that greenhouse gas emissions be “40 to 70% lower globally” in 2050 than in 2010 and “near zero” in 2100. How to achieve this? The report makes these recommendations:

... greenhouse gas emissions accelerated during the 2000–2010 decade ...

- Further rapid improvements of energy efficiency.
- Reduce the carbon intensity of electricity generation.
- Increase the use of renewable energy technologies, which would require subsidies.
- Increased use of nuclear energy.
- The development of carbon dioxide capture and storage technology, in particular “bioenergy with carbon dioxide capture and storage” (BECCS) by the year 2050.

There are significant costs associated with carbon-capture technologies

The last of these is the key to the IPCC’s belief that techno-fixes are the way to save the day. But there is ample reason to throw cold water on this optimism.

Bioenergy likely to increase global warming

BECCS is defined as the capture and sequestration of the carbon produced by bioenergy processes. The carbon dioxide would be “captured” before it escapes into the atmosphere and “permanently” stored underground or underwater, thereby removing it from the air and negating its greenhouse effects. One problem with BECCS is that the technology is not yet viable. Another is that the very idea that BECCS would lead to reduced atmospheric carbon dioxide is a false premise.

A Biofuelwatch study prepared by Rachel Smolker and Almuth Ernsting reports that there are significant costs associated with carbon-capture technologies. They write (p. 2):

High costs are associated with capturing ... compressing and transporting [carbon] (including building new CO₂ pipelines) and pumping it underground, and major technical challenges are associated with the majority of [carbon dioxide capture and storage] proposals. Storing CO₂ below ground requires access to underground spaces, beneath both ocean and land areas. Current mapping of geological formations, with the expectation that these spaces will be accessed, is setting the stage for a new form of “underground” land grab. Resistance has already begun with communities opposing the injection of CO₂ into the ground beneath them.

The Biofuelwatch study reports that the IPCC, among others, counts flooding oil reservoirs with carbon dioxide to extract otherwise inaccessible oil as BECCS. Hardly “carbon-neutral!” The authors write (p. 2):

Crucially, the promotion of [carbon dioxide capture and storage], including BECCS for climate change mitigation and geo-engineering, coincides with the oil industry’s fast-growing demand for cheap continuous supplies of CO₂. ... [F]looding oil reservoirs with CO₂ allows for the recovery of a far higher proportion of oil than would be possible with conventional means.

In a separate report, Ms. Smolker, writing in *Truthout*, challenges the science behind assumptions that BECCS projects will reduce greenhouse-gas emissions:

Virtually nobody still contends that corn ethanol is “carbon neutral.” Yet the premier BECCS project that is often referred to is an ADM corn ethanol refinery in Decatur, Illinois. In fact, when emissions from indirect impacts are included in analyses, along with a complete assessment of the impacts from growing, harvesting, fertilizer and chemical use etc., most bioenergy processes actually cause more emissions even than the fossil fuels they are meant to replace. ... [W]e know already from the current scale of biofuel and biomass demand—that just look at the current corn ethanol debacle—that it is driving loss of biodiversity, higher food prices, land grabs and other damages. Scaling up bioenergy to the extent that would be required to supposedly reduce global CO₂ levels would be a disastrous backfire.

A Partnership for Policy Integrity study found that biomass electricity generation, which relies primarily on the burning of wood, is “more polluting and worse for the climate than coal, according to a new analysis of 88 pollution permits for biomass power plants in 25 states.” The partnership’s director, Mary Booth, wrote:

The biomass power industry portrays their facilities as “clean.” But we found that even the newest biomass plants are allowed to pollute more than mod-

Economic growth of 2.5% is necessary simply to maintain the unemployment rate where it is ...

ern coal- and gas-fired plants, and that pollution from bioenergy is increasingly unregulated.

The problem here is far deeper than wishful thinking. Optimistic scenarios such as the IPCC report rest on assumptions that the world can reduce its greenhouse gas emissions, cut pollution and enjoy another century of consumer-fueled economic growth *while business as usual goes on*. But that is not possible.

Short-term scramble for survival trumps the long term

The capitalist system requires continual growth, which means expansion of production. Its internal logic also means that its incentives are to use more energy and inputs when more efficiency is achieved—the paradox that more energy is consumed instead of less when the cost drops. Because production is for private profit, growth is necessary to maintain profitability—and continually increasing profitability is the actual goal. If a corporation doesn’t expand, its competitor will and put it out of business.

Because of the built-in pressure to maintain profits in the face of relentless competition, corporations continually must reduce costs, employee wages not excepted. Production is moved to low-wage countries with fewer regulations, enabling not only more pollution but driving up energy and carbon dioxide costs with the need for transportation across greater distances. Economic growth of 2.5% is necessary simply to maintain the unemployment rate where it is, and “substantially stronger growth than that” is necessary for a rapid decrease, according to a former White House Council of Economic Advisers chair, Christina Romer.

Under capitalism, all the incentives are to continue business as usual, no matter the dire future to which business as usual is leading humanity. Richard Smith, in a tour de force paper published in the *Real-World Economics Review*, “Green capitalism: the god that failed” (March 2011, p. 121) summed up the dilemma:

[T]he problem is not just special interests, lobbyists and corruption. ... [Under] capitalism, it is, per- versely, in the general interest, in everyone’s im- mediate interests to do all we can to maximize growth right now, therefore, unavoidably, to maxi- mize fossil fuel consumption right now—because practically every job in the country is, in one way or another, dependent upon fossil fuel consumption... There is no way to cut CO2 emissions by anything like 80% without imposing drastic cuts across the board in industrial production. But since we live under capitalism, not socialism, no one is promising new jobs to all those ... whose jobs would be at risk if fossil fuel use were really seriously curtailed... Given capitalism, they have little choice but to fo- cus on the short-term, to prioritize saving their jobs in the here and now to feed their kids today—and worry about tomorrow, tomorrow.

“Green” enterprises will not be granted an ex- emption. They, too, will be pushed by market forces the same as any other enterprise. Dr. Smith writes:

Biofuels, windpower and organic crops—all might be environmentally rational here or there, but not necessarily in every case or forever. But once in- vestments are sunk, green industries have no choice but to seek to maximize profits and grow forever

regardless of social need and scientific rationality, just like any other for-profit business” (p. 142).

A duty to shareholders, not humanity

Putting the environment first in a capitalist economy is not realistic, and doing so anyway would be very costly due to capitalist dynamics. The IPCC is taking a head-in-the-sand approach with its claim that reversing global warming will be nearly cost-free. The more honest approach would be to ac- knowledge the high cost of saving the planet—and that the cost of not doing so, of continuing business as usual, will be far greater.

The European Commis- sion estimates the cost of global warming in Europe could reach 4% of gross do- mestic product and estimates that almost 350,000 people per year will be displaced by

flooding by mid-century. The National Resources Defense Council estimated that the US government spent about \$100 billion cleaning up natural disas- ters in 2012—one-sixth of the federal budget’s non- defense discretionary spending and three times what private insurers paid out. Fifty billion tons of carbon dioxide equivalent is being thrown into the atmos- phere yearly, and a US government working group estimates each ton will cause \$37 in future harms in today’s dollars.

And what would the cost be of abandoning many of the world’s cities if the ice caps melt? Of the world’s bread baskets turning into deserts? Of dead oceans? Such costs are not calculated by the IPCC.

The IPCC’s flawed approach does not derive from whatever political pressures have been exerted on it. The fundamental issue is that it can’t imagine a world without capitalism. It has much company in that. But a future in which we live in harmony with nature, rather than destroying nature for profit, can only be a very different world.

Pete Dolack writes about the ongoing economic crisis on the Systemic Disorder blog. His book *It’s Not Over*, an analysis of 20th century attempts to create alternatives to capitalism, is due to be published by Zero Books in late 2015.

Putting the environment first in a capitalist economy is not realistic.
