

Large-scale planning may sound terrifying, given how badly earlier attempts turned out, such as the Soviet Union's. On the other hand, Cuba has made the jump out of carbon addiction faster than any other society thanks to planning. Or just compare the well-planned and executed evacuation of Havana during Hurricane Katrina in 2005, to utter chaos in capitalist New Orleans. State-led innovations ranging from municipal water systems to the internet (a product of Pentagon R&D) are so vital to daily life that, unless denied them, we don't think twice about their public sector origins and status as public goods.

And after all, is there any other way to achieve the power shift required to overcome a climate disaster, than to build a movement for democratic state decision-making?

To do so, though, requires a somewhat longer-term perspective than the average activist and NGO strategist has scope for, in sites like the AMI.

If we do not make that leap out of the silos into which all of us have sunk, we will perish. We are so

overly specialized and often so isolated in small ghettos of researchers and advocacy networks, that I'm not surprised at the AMI's conceptual impotence. Even our finest extractives-sector activists and strategists are not being given sufficient scope to think about the full implications of, for example, where our electricity supply comes from, and why mining-smelting corporates get the lion's share; how climate change threatens us all; and how the capitalist economy makes these crises inevitable.

The solution? A critical part of it will be to think in ways that intersect, with as much commitment as we can muster to linking our class, race, gender, generational, environmental and other analyses of the oppressed. Action then follows logically.

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Renewable Energy Isn't a Shortcut to Reversing Global Warming

by Pete Dolack

Denmark has distinguished itself as the country moving the fastest toward the eventual replacement of fossil fuels. Its goal of 100% renewable energy by 2050 is laudable, but the assumption that this path will reverse global warming while otherwise continuing business as usual is unrealistic.

At first glance, Denmark has made remarkable strides. The country's intention to totally eliminate fossil fuels by the midpoint of the 21st century appears to be realistic. Already, Denmark is the world leader in wind energy and it intends to also exclude all use of nuclear power. At the start of 2015, the country's energy agency, Energistyrelsen, said renewable energy sources account for 25% of Denmark's total energy consumption, and more than 40% of its electricity comes from renewable sources.

The Danish government acknowledges that continuing consumption patterns based on "cheap and easy access to coal, oil and natural gas" is a "road [that] is not an option." True enough. But the switch to renewable energy is promoted as cost-free. The Danish government says:

Business ... stands a great chance to move into the heavy league of successful super green companies. For instance, the energy efficiency measures a company makes are often paid back within [a] few years. Onwards, the savings on the energy bill can be unleashed to strengthen the core business of the company. Likewise, there is an enormous global market for green technology, services and systems. This market is only going to grow once more governments follow in the carbon-light footsteps of Denmark.

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But of course such a strategy would come at a great cost to Danish society? The answer is a resounding no.

[T]he transition is relatively cheap, and business competitiveness not harmed. The government's estimates are a price tag of approximately 10 euro pr. household pr. month at the highest (2020), a price tag that will only slowly increase to this level. In the opinion of the Danish government this is a reasonable insurance policy against unexpected increases in fossil fuel costs and a solid investment in Denmark's future energy security.

Enthusiasm for renewable commitment

An expected rising efficiency of renewable energy sources will ultimately lead to lower costs, more than offsetting the investments in renewable-energy infrastructure and reversing the present-day higher costs, the government says. So no change in consumption patterns after all. This enthusiasm is shared by environmental institutions that have be-

come large nongovernmental organizations. Greenpeace, for example, issued a brief paper in October 2014 that reads like a press release. In this paper, “Denmark’s commitment to 100% renewable energy,” Greenpeace agreed that no changes in consumption will be required. It wrote:

Denmark’s emissions reductions have not affected the economy negatively. The decoupling of economic growth from energy consumption is partially due to Danish companies being subsidised for using renewable energy and increasing energy efficiency, which in turn increases their creativity and prompts energy savings. Job creation is an explicit objective of the Danish Climate Plan, and because Denmark has invested heavily in research and promotion of renewable energy, energy-efficient technologies and renewable heat supply systems, the climate and energy system has already created thousands of jobs. The full transition to 100% renewable energy is expected to generate at least 30[,000] to 40,000 new jobs in a country of 5.5 million people.

Moreover, this will come easy, Greenpeace says:

Although Denmark’s roadmap to fossil fuel independence and 100% renewable energy is specific to the Danish context, many of the recommendations are relevant and applicable to other nations around the world. One finding may be of particular interest: The costs of phasing out fossil fuels are expected to be almost equivalent to or only marginally more expensive than a “business as usual” scenario.

Too good to be true? Unfortunately, yes. That global warming and the accelerating damage to the global environment can be reversed without cost — and without any alteration to the high-impact consumerism of the global North’s advanced capitalist countries — echoes the unrealistic conclusions of the Intergovernmental Panel on Climate Change report issued in 2014. The IPCC concluded the annual reduction in “consumption growth” on a global basis would be only 0.06% during the course of the 21st century. Nothing more than a statistical blip!

In actuality, the IPCC assertion that we can remain on the path of endless growth is a fantasy argument that we can have our cake and not only eat it but make more cakes and eat them, too.

Bioenergy not necessarily a savings on greenhouse gases

When we look past the cheerleading for a bright renewable future, two problems immediately pop up: Renewable energy is not necessarily clean nor without contributions to global warming, and the limits that living on a finite planet with finite resources presents are all the more acute in an economic system that requires endless growth.

Denmark’s phaseout of oil, gas and coal is dependent on wind power and biomass, and to a lesser degree on solar energy. But just because energy from biomass is classified as renewable, that doesn’t

make it sustainable or environmentally friendly. Denmark is the biggest per capita user of bioenergy, with Germany and Britain significant users as well. But the primary source of bioenergy is wood, and much of this wood must be imported. British plans for expanding bioenergy, if brought to fruition, could consume nine times more wood than can be supplied internally. Denmark is already a heavy importer of wood pellets.

Increased logging is surely not a route to reducing global warming. A paper by the British watchdog group Biofuelwatch reports:

Increased demand for bioenergy is already resulting in more intensive logging including very destructive whole tree harvesting or brash removal and replacement of forest and other ecosystems with monocultures. Expansion of industrial tree plantations for bioenergy is expected to lead to further land grabbing and land conflicts. At the same time, communities affected by biomass power stations are exposed to increased air pollution (particulates, nitrogen dioxide, sulphur dioxide, dioxins etc.) and thus public health risks. Meanwhile, a growing number of scientific studies show that burning wood for energy commonly results in a carbon debt of decades or even centuries compared with fossil fuels that might otherwise have been burnt.

Renewable energy is not necessarily clean nor without contributions to global warming

A Partnership for Policy Integrity study published in April 2014 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 [US] 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 modern coal- and gas-fired plants, and that pollution from bioenergy is increasingly unregulated.

Even the wind (energy) has toxicity

Wind energy has its environmental issues as well. The turbines used to produce electricity from wind increasingly are built with the “rare earth” element neodymium, which requires a highly toxic process to produce. Turbine magnets using neodymium are more expensive than those using ceramic, but are also more efficient. The US Geological Survey estimates that an additional 380 metric tons of neodymium would be necessary if the United States is to generate 20% of its electricity from wind by 2030. That’s just one country.

Most rare earths are mined in China because the mines are so environmentally destructive they had been shut down elsewhere. Production has been restarted in other countries, lessening demand on Chinese exports, but increasing rare earth mining means more pollution and toxic waste. Renee Cho, a blogger for Columbia University's Earth Institute, provides a sobering picture of this:

All rare earth metals contain radioactive elements such as uranium and thorium, which can contaminate air, water, soil and groundwater. Metals such as arsenic, barium, copper, aluminum, lead and beryllium may be released during mining into the air or water, and can be toxic to human health. Moreover, the refinement process for rare earth metals uses toxic acids and results in polluted wastewater that must be properly disposed of. The Chinese Society of Rare Earths estimated that the refinement of one ton of rare earth metals results in 75 cubic meters of acidic wastewater and one ton of radioactive residue.

Just because it's renewable, doesn't mean it's environmentally friendly. As Almuth Ernsting, a founder of Biofuelwatch, summarized in a *Truthout* article:

Defining methane-spewing mega-dams, biofuels, which are accelerating deforestation and other ecosystem destruction, or logging forests for bioenergy as "renewable" helps policy makers boost renewables statistics, while helping to further destabilize planetary support systems. As long as energy sources that are as carbon-intensive and destructive as fossil fuels are classed as "renewable," boosting renewable energy around the world risks doing more harm than good.

Increased efficiency in energy usage hasn't resulted in decreases in greenhouse-gas emissions. A study by 10 scientists led by Josep G. Canadell found that the growth rate of atmospheric carbon dioxide is increasing. The growth rate in anthropogenic carbon dioxide was higher in the 2000s than in the 1990s. Not only has economic growth contributed to this rate increase, but the carbon intensity of gross world product began to increase during the decade of the 2000s. Adding to this sobering picture, the efficiency of natural carbon sinks (such as forests and oceans that remove carbon dioxide from the atmosphere) is declining.

The study said a growing global economy, an increase in the carbon emissions required to produce each unit of economic activity, and a decreasing efficiency of carbon sinks on land and in oceans have combined to produce unprecedented increases in atmospheric carbon dioxide.

Beyond renewables, fundamental change is necessary

The conclusion necessary to be drawn isn't that we shouldn't switch from fossil fuels to renewable energy sources as quickly as reasonably possible. Of course that should be done. But it is a delusion to believe that doing so in itself is a magic wand to

wish away the growing crises of global warming, environmental degradation and resource depletion. There is no alternative to drastically reducing consumption of energy and material goods, an impossibility under capitalism, and bringing into existence a sustainable economic system.

All incentives in capitalism are for endless growth; it can't function without it. Because of this expansionary imperative, that production is for private profit rather than human need and that enterprises are able to externalize environmental costs, decreases in energy prices are an incentive to in-

...an ever expanding economy will ultimately use more energy, more resources.

crease energy usage, which is what has been happening. An economy that must expand will do so — introducing efficiencies can slow down the increase in energy consumption and resource depletion, but an ever expanding economy will ultimately use more energy, more resources.

A former White House Council of Economic Advisers chair, Christina Romer, says that economic growth of 2.5% is necessary to maintain the unemployment rate where it is and "substantially stronger growth than that" is necessary for a rapid decrease. In addition, energy usage due to transportation is increased from the movement of production to countries around the globe. Raw materials and component parts are shipped from all over the world to an assembly point, then the finished products are transported back.

This enormous contribution to global warming is another product of capitalism, specifically the dynamic of relentless competition that induces corporations to move production to the places with the lowest wages and weakest regulation, and to stretch supply lines around the world. These competitive "innovations" must be copied by competitors, thus increasing this tendency. (And are a catalyst for "free trade" agreements that incentivize the expansion of transnational rootlessness.) As the depletion of natural resources accelerates, an inevitable by-product of competitive pressures and the never-ending scramble for bigger profits, more energy and capital will be required to extract resources more difficult to exploit.

Carrying on with business as usual, with changes to the mix of energy production, is an illusion that "green capitalism" will save the world. Liberals and social democrats, in their own way, can be as unrealistic as conservatives. Conservatives correctly see that measures to combat global warming will come with a cost, so they screech that global warming doesn't exist, despite the enormity of the evidence all around us. Liberals and social democrats readily acknowledge the real danger of global warming but, no more willing to tamper with the machinery of capitalism than conservatives, promise that the changes will be cost-free.

The changes won't be. But the cost of doing nothing, of letting a runaway global warming take hold — the very path humanity is treading — will be much higher. The limits of the planet, of nature, will assert themselves. Yielding to natural limits now will come with much disruption, but having limits

imposed on us in the future will surely be much worse.

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.

Climate Justice: Uniting Struggles Across Latin America

by Cory Fischer-Hoffman

With the conclusion of the United Nations Conference of the Parties (COP20) in Peru, nearly 20,000 people filled Lima's streets on Wednesday, December 10 to join in the people's climate justice march. As the climate justice movement unites and builds new sources of power, one of its greatest potentials lies in creating a politically viable framework for demanding reparations for over 500 years of extraction, contamination and abuse in Latin America and the developing world.

The core issues tied to climate change in Latin America today, such as mining, petroleum exploitation, deforestation, agriculture, indigenous rights, land rights, gender equity, and self-determination, have their roots in the process of European conquest and colonization of the Americas. The demand for climate justice weaves these struggles together by demanding fundamental system-change and providing a glance towards the past as a means of charting out a new future. The movement for climate justice is unifying struggles across Latin America and seriously advancing the call for reparations to indigenous communities, even if it is not directly using that language.

Even within the framework of the United Nations Framework Convention on Climate Change (UNFCCC), the theme of "historical responsibility" has opened up a space to discuss the repercussions of centuries of resource extraction, uneven development and the consequences of industrialization fueled by colonization.

Mining: Gold, no! Water, yes!

Just over a year before Lima hosted the UN Climate Change Conference, Peru's capital city hosted the Latin American Mining Summit. The website for the Summit announced "Latin America is Now the Primary Destination for Mining Exploration Investment in the World!" and then asked, "Are You Ready to Capitalize on the Boom?" Similar enticements were used to recruit during the conquest of Peru (the world's 6th largest gold producer today) and Mexico (the world's 8th largest gold producer). The conquest of Latin America is inextricably linked

responsibility." The report highlights how an open-pit mine in Guatemala, owned by a subsidiary of the Canadian company Goldcorp Inc., contaminated the water supply and resulted in structural damage to people's homes from the use of explosives. Since the indigenous communities did not give free and prior consent to the mine before it began its operations, they began to protest the mine after they were faced with devastating impacts. Popular protests have been met with violent repression.

In Peru, the conflict around the proposed Conga mines continues to grow in the northern Andean region around Cajamarca. Local community members are fighting the proposed project, which would contaminate the water of a largely agricultural region of Peru, but the US-based Newmont Mining Corporation is pushing forward along with its partners Peruvian-based Buenaventura and the International Finance Corporation of the World Bank. There has also been an increased criminalization of dissent, as leaders in the fight against the Conga Mine have been arrested and charged with trumped up crimes.

During the people's climate march, delegations from Cajamarca wore "No Conga" hats and people chanted, "Gold, no! Water, yes!" demonstrating that the two stand in conflict with one another, that it is impossible to extract gold without contaminating the water supply. The fight for clean water is a serious public health concern that comes up whenever mining projects are proposed. Transnational corporations have not only been contaminating water supplies through mining. In some cases large corporations have purchased the entire water supplies of cities as part of a move towards privatization of public services.

The movement for climate justice is seriously advancing the call for reparations to indigenous communities.

to the search for gold: over 500 years later the hunger for gold continues to ignite human rights violations across the region.

Canadian mining companies are responsible for 50–70% of gold mining in Latin America, according to a May 2014 report called "The Impact of Canadian Mining in Latin America and Canada's Re-