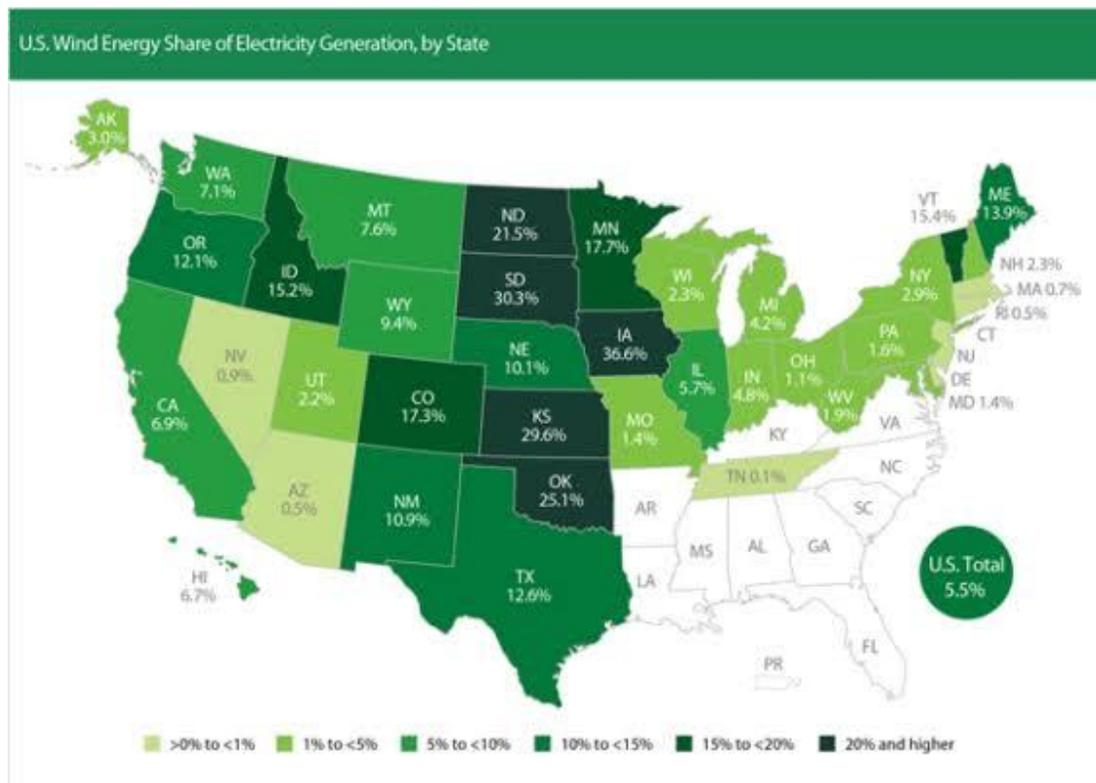


Restoring the Heartland and Rustbelt through Clean Energy Democracy



By
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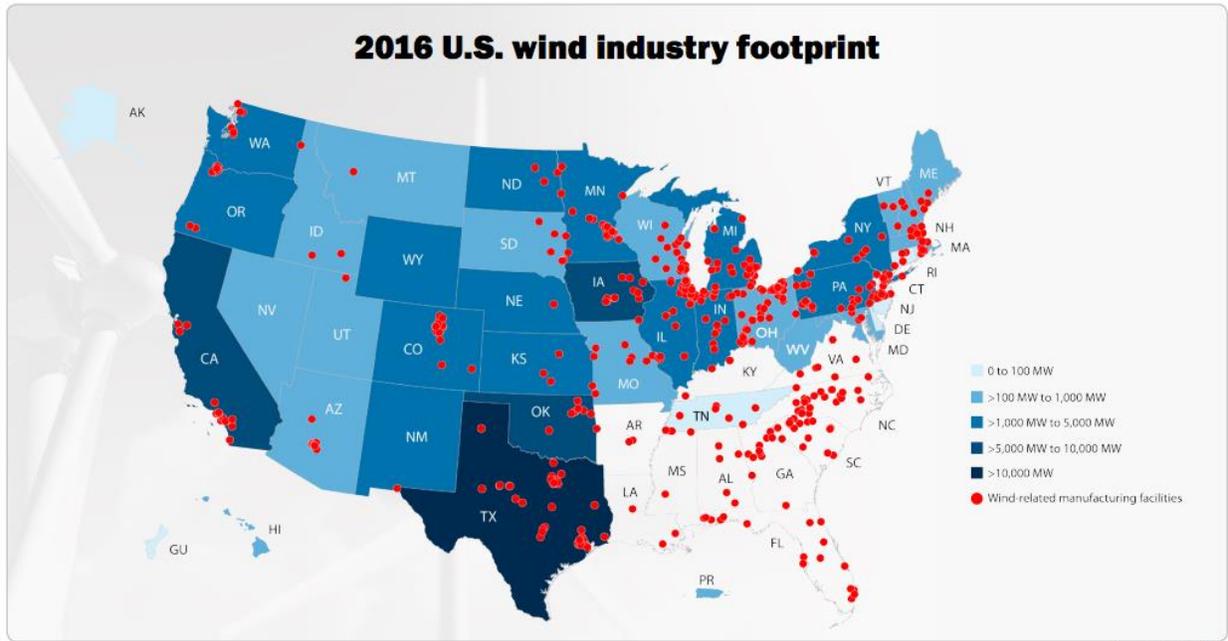
^a Disclaimer: The views expressed here are not the official position of the IWW (or even the IWW's EUC) and do not necessarily represent the views of anyone but the author's. For more information about the IWW Environmental Unionism Caucus, visit <http://ecology.iww.org>

^b A note on footnotes and endnotes: items that are purely citations are relegated to endnotes, due to the high volume of works cited, whereas items that include additional explanation are included in the body as footnotes.

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Introductory Summary:

The world faces a crisis of enormous proportions. Global warming, caused by the continued burning of fossil fuels, threatens life on Earth as we know it, and yet, those most responsible for causing the crisis, the fossil fuel wing of the capitalist class, seems hell bent on doubling down on business as usual. In the United States of America, whose corporate overlords are among the worst offenders, they are led by the recently elected Donald Trump, whose cabinet is bursting at the seams with climate change denialists and fossil fuel capitalist industry representatives. Instead of transitioning to a clean energy economy and decarbonizing society as quickly as possible, as climate scientists overwhelmingly recommend, Trump and his inner circle would seemingly rather not just maintain the status quo; they've signaled that they intend to make the worst choices imaginable, putting all of the US's energy eggs into the oil, natural gas, and coal basket. Worse still, Trump claims to enjoy a good deal of support for such moves from the Voters who elected him, which includes a good portion of the "White working class" who have traditionally supported the Democratic Party, whose policies are just barely more favorable to addressing the problems of global warming (which is to say, still woefully inadequate). Meanwhile, the leadership of the AFL-CIO, pushed principally by the Building Trades unions, have doubled down on their efforts to continue to serve as capital's junior partners, even as the latter continues to liquidate them in their ongoing campaign of systemic union busting. Just recently, science teachers across the country began to find packets in their school mailboxes, containing a booklet entitled "Why Scientists Disagree About Global Warming", a DVD, and a cover letter urging them to "read this remarkable book and view the video, and then use them in your classroom," courtesy of the climate change denialist Heartland Institute.¹

One might think, given all of these situations, that...well, to put it mildly...we're doomed. However, nothing could be further from the truth. In fact, in spite of the bleakness of these circumstances, a deeper look behind them reveals that fossil fuel capitalism is in terminal decline, that their hold over our lives hangs by a thread, so much that we the people, the workers and peasants of the world, have the ability to transform the human existence to one based not on plundering the Earth and exploiting the masses for the profit of a few, but one based on true grassroots democracy, free of suffering and want, and one that exists in harmony with

the Earth. The key to making this transformation lies with clean energy, and the people who can make this transformation are the very people who helped elect Donald Trump themselves. One may justifiably ask, how is this even remotely possible?

The Current Political Moment

By now hundreds of articles and thousands of words have been published on the election of Donald J. Trump as the 45th President of the United States. Many analyses correctly place that historical event in the greater context of the collapse of neoliberal capitalism, the continued subservience of class collaborationist trade union bureaucracies, and the filling of the resulting political vacuum by extreme right wing white nationalist forces in the US, Europe, and elsewhere. Certainly, a predominant factor is the despair and rage experienced by the working class in those nations resulting from the crushing austerity programs enacted by the forces of neoliberal capitalism and the lack of a coherently organized genuine left, anti-capitalist alternative^c and/or revolutionary union movement. On the surface, it may appear that this represents an unequivocal and historical triumph of extreme reactionary forces over both pragmatic centrism and the left, perhaps once and-for-all, and with it the absolute defeat for organized labor and environmentalism. If that is indeed true, then the age old question, “socialism or barbarism” will have been settled in favor of the latter, and, since Mother Nature bats last, the end of humanity is all but assured. Such an assessment would be grossly mistaken, in my opinion, and in fact, the opposite may well be true, but if and only if those of us on the left seize this moment in history and organize accordingly.

The key to accomplishing this seemingly impossible task centers on one aspect of this supposed neo reactionary tide that far too many commentators have overlooked and that’s energy transition. In the last three years, the price of oil has crashed, due to a glut in supply brought on by overproduction, spurred on by rapid development of tar sands combined with a massive upscaling in natural gas “fracking” operations. Between October 2014 and the present, the price of oil crashed from a high of \$114 per barrel on the Brent Crude Index to as low as \$27 in early 2016 (it has since rebounded to roughly \$50-55 in the interim, but there are no serious prognosticators who envision a return to anything close to its high of \$114, and even the most rosy scenarios argue that \$70 per barrel is likely the ceiling for the foreseeable future). Meanwhile, coal markets are rapidly drying up, due to many factors, not the least of which is the aforementioned abundance of cheap oil and natural gas. At the same time, growing concerns about climate change and mounting scientific evidence suggests that in order to avoid the worst case scenarios, global warming must be limited to absolutely no more than 2°C (and ideally should be limited to 1½°C instead), thus meaning that at least 80% of known fossil fuel reserves (of any sort) must be kept in the ground.² Simultaneously, the cost of clean renewable energy (wind and solar primarily) have plummeted to the point where they’re cost competitive with conventional sources of energy, are being deployed far more widely and rapidly than anyone predicted, and already employ five times as many workers as do conventional sources.

While this massive upheaval in the world’s energy economy is far from the *only* contagion that has cast capitalism into a major crisis (indeed, this is a latecomer to the whole affair, since the crisis of capitalism really unfolded in Fall of 2008), it has greatly intensified an already volatile situation. Almost 172,000 oil workers have lost their jobs between the Fall of 2014 and the present. Meanwhile 10,000s of coal mine workers have also

^c For the purposes of this document, “left” is defined as encompassing all varieties of anti-capitalism, including most forms of socialism and anarchism, but is distinct from reformist social democracy (usually described as “progressive”, though some transitional demands and stages of this proposed campaign may include features of a social-democratic agenda), contemporary liberalism (kinder, gentler neoliberal capitalism), and also ultra-left sectarianism (general encompassing any and all movements who believe that their movements must be ideologically pure and utterly uncompromising in their stances, and adhere to a strict and rigid “party line”).

been laid off. Such job losses exacerbate the already devastating deindustrialization of the “Heartland”, “Appalachian”, and “Rust Belt” states and regions that comprise what is considered to be “Trump’s base”. Another factor that played heavily into the collapse of the Democratic Party, particularly in Appalachia, the Heartland, and the so-called “Rust Belt” was the decline of heavy industry unions, a trend that has actually been ongoing now for several decades, due to a number of factors, including the outsourcing of jobs to other nations where labor protections are far less favorable to workers (or are nonexistent).³ Finally, in many instances, especially in the case of coal mining, rightly or wrongly, the job carried with it more than just a means of subsistence; it also represented a cultural identity and a source of pride for the workers involved.⁴ For these reasons, in particular, Donald Trump’s candidacy represented a perceived means (no matter how illusory) by which many of these workers could hang on to, or even recapture livelihoods that have been taken from them. *In spite of this, these workers’ loyalty to Trump is likely to be short-lived, in most cases.*

The Reactionary Right’s “Power” is Mostly an Illusion

Let’s begin by establishing, factually, that Donald Trump has no mandate, his electoral “victory” is in no sense overwhelming, and that his “support” among the white-working class (such as it is in the US) may seem thousands of miles wide, but is in fact barely fractions of an inch deep.⁵ Donald Trump’s primary opponent, Hillary Rodham Clinton actually “won” the Popular Vote by 2,865,075 votes (65,844,954 to 62,979,879), even though However, Trump “won” the Electoral College vote 306 to 232. Just *three* key swing states, representing 46 electoral votes (Michigan with 16, Pennsylvania with 20, and Wisconsin with 10) represent the margin of victory for Trump. Furthermore, these three states were expected to vote for Clinton, but voted for Trump by very narrow margins (11,612 votes in Michigan; 68,236 in Pennsylvania; and 22,871 in Wisconsin). Trump’s vote total represents barely more than 27% of the electorate (and likely his percentage is lower due to many voters who were disenfranchised due to racist policies of legalized voter suppression in states dominated by Republican governorships and legislatures).

Many of these voters chose Trump, *not* because they thought *he* was a good choice, but rather, in their opinion, Hillary Clinton was an *even more* deeply flawed candidate. Clinton represented the neoliberal capitalist status quo, whereas Trump represents the promise of “something different”.⁶ Trump won handily in rural “heartland” states, the north-central “rust belt” (including the aforementioned states of Michigan, Pennsylvania, and Wisconsin), and states with economies heavily dependent upon the extraction of fossil fuel resources (coal, gas, and oil).⁷ Contrary to corporate media spin, however, Trump didn’t so much “flip” Obama voters so much as Clinton’s campaign discouraged many of them from voting in this election for either of the two major party candidates or any presidential candidate at all.⁸ Also contrary to corporate media spin, the vast majority of voters think that the Democrats have moved too far to the *right* politically, not the other way around, and a majority of younger voters, many of whom supported the candidacy of Clinton’s Democratic Party challenger, Bernie Sanders, consider themselves to be socialists, a fact that has caused no shortage of consternation among the capitalist oriented leadership among the Democrats.⁹

In the year or so leading up to the election, there has been a massive jobs upheaval in fossil fuels. The price of oil reached a high of \$114 per barrel on the WTI (“Brent”) index in October 2014, but then declined to as low as \$27 per barrel in March 2016; it has since recovered to roughly \$55 per barrel since then, but is unlikely to exceed between \$60-70 per barrel until at least 2018 by even the most optimistic projections¹⁰, and most of the rosier forecasts are based on what is likely wishful thinking and flawed methodology by fossil fuel interests seeking to bolster confidence in their investments.¹¹ 441,371 oil jobs worldwide have been cut since then. Of the more than 440,000 layoffs, 178,466 (40 percent) are in the United States; 124,000 (28 percent) are published UK North Sea job losses; and 46,000 (10 percent) are published Canadian job losses.¹² This

crash has had worldwide implications (it has, for example, completely broken the so-called “Pink Tide” in Latin America, and though that was largely the result of neoliberal coup attempts and propaganda, it was the crash of oil markets that weakened the resistance to such efforts). China’s economic growth has also slowed, resulting in a major slowdown in the construction of coal plants and the manufacture of steel (for which coking coal is used as a source of the material and for heating purposes). Combined both of these factors have depressed coal and oil jobs as well as indirectly related jobs (such as railroad jobs hauling coal, for example) throughout the US and worldwide.

Understandably, this has hit the working class in these industries in particular especially hard. The neoliberal status quo response has been to talk vaguely about replacement jobs, but calls and demands for actual, meaningful “just transition” has been largely the province of a handful of more forward thinking environmentalists and unions, whose influence in resource extraction communities has hitherto been next to zero. The tensions in resource extraction communities is worsened by the fact that these workers often see environmentalists as blockading their job sites (due to unpopular fracking, mining, etc.). The weakening and decline of labor unions, even such as they have been since the days following World War II, when class struggle unionism was quashed by more conservative, class collaborationist elements within the labor movement, has created a political void among the working class, making it possible for demagogues, such as Trump, to gain popularity.¹³

Trump’s False Promises

Donald Trump’s campaign promises included restoring lost coal jobs¹⁴ (part of his “make America great again” campaign rhetoric which evolved into his “America First” energy plan¹⁵), but these promises are either empty and meaningless or unrealizable.¹⁶

Coal

Trump promised to revive the declining coal industry; this is not possible.¹⁷ Contrary to pro-coal rhetoric, the decline in coal has little to do with stricter regulations on coal, curbs on emissions, or his predecessor, Barack Obama’s policies.¹⁸ The market for coal has declined significantly due to global economic shifts¹⁹, including particularly China²⁰ and India²¹, which were assumed to be potential drivers of coal expansion for years to come, but also Europe as well.²² Domestically, coal production has also shifted from Appalachia to Wyoming and jobs have been lost due to automation.²³ The biggest challenge to coal has actually been cheap natural gas, brought on by fracking.²⁴ Fracking was made possible largely due to the Haliburton loophole instituted during the George W Bush administration. Trump’s easing of coal regulations may result in a mild, short lived “recovery” for coal prices, but shrinking coal markets worldwide will stifle any long term recovery.²⁵ Even if Trump removes all existing regulations on coal, the increase in coal supply will depress prices further, thus negatively impacting the market.

In spite of the Republicans’ steady rhetoric about the “Obama led Democratic Party’s ‘War on Coal’”, it is the Republicans who are actually doing the most to harm coal miners by cutting retirement funds and rolling back black lung protections.²⁶ Kentucky Senator, Mitch McConnell, a Republican, who was largely responsible for promoting the myth that Barack Obama had declared “a war on coal”, and argued that coal jobs could be restored if a President “more friendly to coal” were elected in his place, not more than two days after Trump’s election, walked back all promises he made about restoring coal jobs.²⁷ Trump and coal industry capitalists continue to promote so-called “clean coal” (essentially the gasification of coal, which would, in theory reduce carbon emissions, somewhat) as a means to bolster failing coal markets and preserve mining jobs, but

the technology remains largely theoretical, and in fact the only existing gasified coal plant in the US, the Kemper plant in Mississippi, has proven to be a financial boondoggle and a technological failure.²⁸ Likewise, Trump, the Republican Party, and the coal industry will lose a lot of political capital when they are forced to admit that they cannot deliver on their promises to “make coal great again.”²⁹ Expectations among coal dependent communities and states, nearly all of whom heavily voted for Trump are very high.³⁰ Indeed, one Wyoming coal mine worker put it bluntly by stating: “If (they don’t) do what (they) said (they’re) going to do, why are people going to vote for Republicans again?”³¹ Indeed, Mitch McConnell has already faced angry constituents who have berated him for breaking his promise about coal jobs, now that he has walked these promises back.³²

Oil and Gas

Trump’s promotion of natural gas will depress coal further, because natural gas is coal’s primary competition currently.³³ Trump’s pick of Rex Tillerson, the former Exxon CEO, whose financial interests in Russia are clearly motivated by a desire to further develop and profit from cheap natural gas.³⁴ The crash in oil prices made the development of some fossil fuel sources, including much of the Alberta tar sands, far less economically viable, and as a result, some fossil fuel interests are liquidating their interests in these oil patches.

However, even Trump’s plan to create jobs through the construction of infrastructure designed to benefit gas and oil interests (which, if done, would undermine his promise to revive coal jobs, because these sources are in direct competition with each other), such as by authoring executive *memos* (not orders) to revive the Keystone X-L and Dakota Access Pipelines (both previously halfheartedly “blocked” by the Obama Administration—though not in any meaningful way that assured their absolute and ultimate cancellation) are based on the projects’ developers’ *rhetoric and lies* about job creation—designed primarily to convince politicians and Building Trades union officials to back these projects and divide them from the forces that oppose these projects—rather than any actual job creation³⁵, mainly because the actual permanent jobs created by either project would number in the paltry dozens, and the temporary jobs that would be created by their construction and are typical of Building Trades Unions’ work could just as easily be created by repairing existing infrastructure, such as decaying water mains in polluted cities, such as Flint, Michigan, but of course, such efforts would not facilitate the further profiteering by fossil fuel capitalists.³⁶ Regardless of Trump’s executive memo, the Keystone X-L Pipeline may not get built anyway, because it still faces numerous legal hurdles and economic disincentives for its completion (especially since the cost of oil has declined since it was once deemed economically viable).³⁷

In fact, the bulk of President Donald Trump’s rhetoric about “Making America Great Again” as far as infrastructure goes is merely that: rhetoric. Much of it parrots the claims of the fossil fuel industry, who argue that they can facilitate “American Energy Independence” and create thousands of jobs in the process, but study after study shows these claims to be utterly false.³⁸ Even if there should be a miraculous recovery in the price of oil beyond \$60-70 per barrel, this will not be accompanied by a recovery of the lost oil jobs, because, in their efforts to cut costs as the price of oil crashed, the fossil fuel bosses slashed the workforce much more quickly than they did production by introducing new technology and implementing automation and efficiency measures along the entire supply chain, not just the oil rigs themselves. At the time of this writing (February 2017), a mere five workers are now needed to perform the work that only three years ago required twenty, a 4:1 reduction in jobs. The job losses in Texas, alone, the most productive oil-producing state, totaled 98,000.³⁹ Nearly 90% of surveyed workers who lost their jobs during the oil bust either remain unemployed or opted to leave the oil and gas sector entirely, according to an ongoing study being conducted by University of Houston researchers.⁴⁰

Infrastructure in General

There are vigorous debates about the future trends of energy consumption patterns, but most agree that—global warming or not—fossil fuel consumption will decline due to a combination of increased efficiency, increased regulations on GHG emissions (in spite of the fossil fuel capitalists’ attempts to hold these back), falling costs of renewables, increased deployment of renewables, economic realities, introduction of new clean energy technologies, public pressure, and future crashes in fossil fuel markets. The reliability of these predictions depend upon a number of factors, including whether or not those conducting the study have connections with fossil fuel capitalist interests (whose studies generally lowball the future potential of renewable energy technologies⁴¹) and to what extent they factor in all aspects of a decarbonized smart grid, including the potential for electric vehicles and energy storage to greatly enhance the resilience and reliability of renewable energy sources. In fact, one study, carried out by *Carbon Tracker*, suggests that electric vehicles, distributed solar could help quash fossil fuel growth by as early as 2020!⁴²

President Trump bases his claims on job creation on the widely believed, but actually false claim that environmental regulations kill jobs, when in fact studies show the *opposite* to be true.⁴³ According to Joe Romm of *Think Progress*, “As Bureau of Labor Statistics data make clear, the recent two-term presidents who were in favor of regulation, especially environmental regulation (Obama and Clinton) created vastly more net jobs than the anti-regulation Presidents (Reagan and George W. Bush). ‘Businesses have added jobs at a nearly 2.5 times faster rate under Democrats than under Republicans, on average,’ the U.S. Congress Joint Economic Committee reported in June.”⁴⁴ Thus far the Trump Administration’s policy directives have included initiatives which will actually result in the *elimination* of jobs, many of which will impact the rural communities in the heartland and rust belt states hardest.

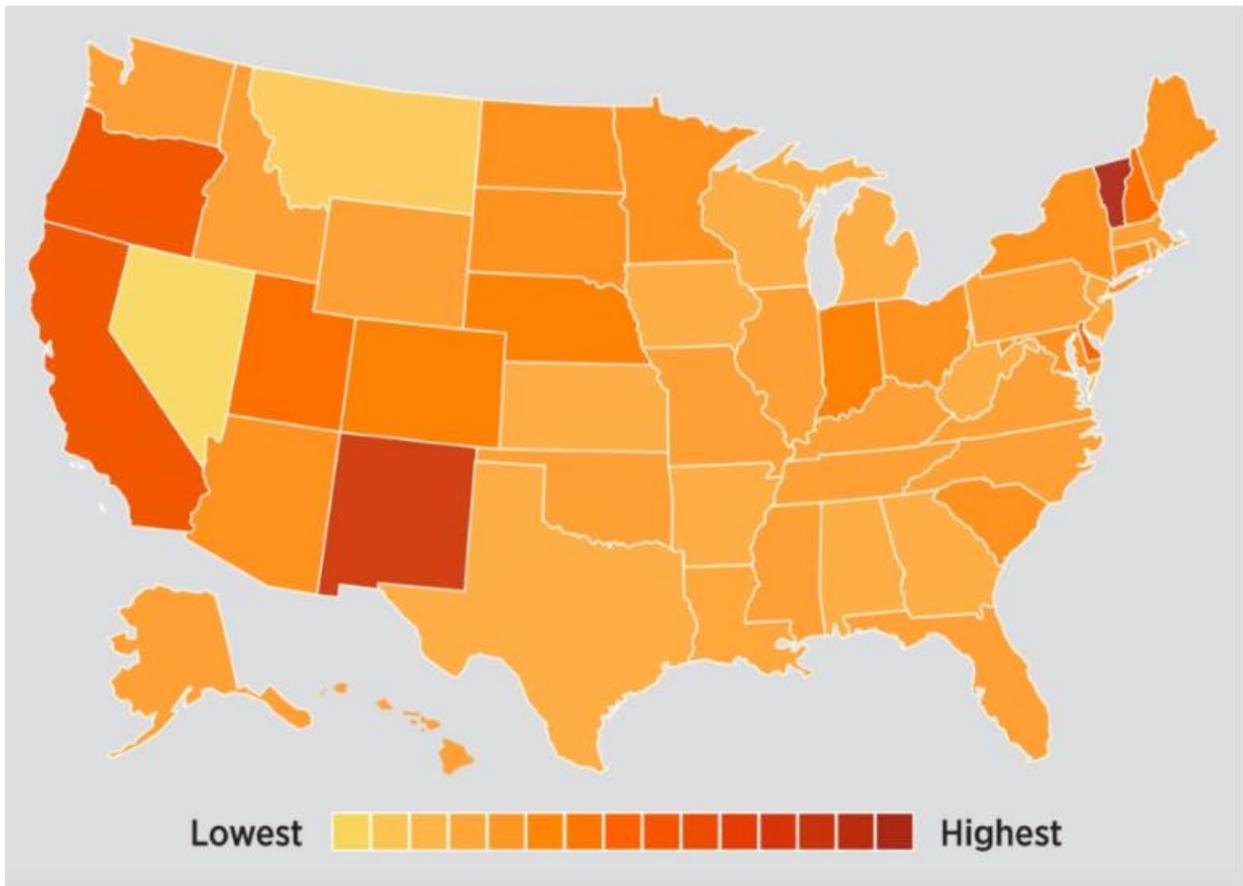
According to a report, published by *The Alliance for a Just Society*, who publishes an annual report as part of its Job Gap Economic Prosperity Series and has done so since 1999, released its 2017 report specifically to challenge the claims made by Trump. Titled, “Prosperity, Not Poverty,”⁴⁵ the report revealed that there is an urgent need for living-wage jobs, defined in the report as jobs that pay a national average of \$17.28 per hour. That’s the wage the report says a single adult needs to earn in order to meet basic needs without public assistance, with enough left over to save for an emergency, and that there are seven job seekers for every job opening that pays at least that wage, leaving six out of seven job seekers unable to secure employment that allows a single adult to make ends meet, much less support a family. The report further emphasizes that a good jobs program,

“(S)hould not perpetuate structural inequities and it must not lead to the privatization of public goods. It should move us away from dependence on the fossil fuels that are worsening climate change. Finally, how we choose to pay for infrastructure matters as much as the plan itself.”

However, Donald Trump’s proposed infrastructure plan does *precisely* what the Alliance for a Just Society says shouldn’t be done!⁴⁶ In fact, most economic analyses suggest that Trump’s proposed infrastructure plans—almost all of which are dependent upon a combination of tax cuts and tax incentives to corporations who will represent the “private” interests in public-private partnerships—will result in higher user fees for the use of essential public infrastructure (such as roads, highways, bridges, utilities, and the like) and the acceleration of transferring of wealth from the working class to the employing class, thereby exacerbating the economic difficulties that many of those who voted for Trump seek to escape!⁴⁷

Meanwhile, the mainstream labor unions, including especially the Building Trades, in spite of Trump’s clear intent to assist the anti-labor Republican Party in destroying unions by enacting national Right-to-Work laws, undermine living wage laws at the state level, and remove protections for union contractors, such as the Davis-Bacon Act (a move that would hurt the Building Trades more than anyone else), have thus far cozied up to Trump, hoping to get a few crumbs of a good deal in exchange for their subservience.⁴⁸

TOP STATES WITH DEMAND FOR SOLAR WORKFORCE DEVELOPMENT



An Infrastructure Plan that Will Work: Clean Energy Democracy^d

Contrary to Trump’s rhetoric, Clean Energy Democracy⁴⁹ represents the best hope for jobs as well as rural and rust belt economies:⁵⁰ Renewable energy already provides 15.3 % of the US electricity generation capacity.⁵¹ More jobs are required to provide wind and solar electric power than conventional sources. In fact, already more jobs exist in renewable energy and efficiency than conventional energy by a factor of 5:1.⁵² 1 out of 50 new US jobs came from the solar industry in 2016⁵³ Renewable energy is already creating jobs 12 times faster than the remainder of the US economy; meanwhile fossil fuel jobs continue to *decrease* in number.⁵⁴ At

^d For the purposes of this document “democracy” means direct, participatory, grassroots democracy, in which rank and file people participate in *all* facets of decision making, including in the workplace at the point of production, their organizations, and at the local neighborhood, town, city, township, county, state, and federal level at any time rather than simply passively taking part in limited, periodic elections of government, union, and organizational officials and questions over ballot initiatives, though all of the latter *can be included* as part of the much *broader*, process described in the former.

the moment of the transition from Obama to the Trump administrations, the fastest growing blue collar job *in all industries*, is wind tech.⁵⁵ As of the preparation of this report, over 3 million employees already work in the clean energy sector.⁵⁶ The number of clean tech and clean energy jobs is rapidly increasing, and at a faster pace than most predicted.⁵⁷ Many of these jobs exist in “Rust Belt” states.⁵⁸ Most of these jobs are location-based, such as wind tech, solar installer, linesman, etc. which cannot be exported or offshored or easily automated.⁵⁹ Many of the skills currently retained by workers in the fossil fuel industry are transferable to the renewable energy industry, and some workers are already making the transition.⁶⁰ Renewable energy technology could be manufactured in abandoned rust belt factories

Again, according to “Prosperity, Not Poverty,”

“A public infrastructure plan should also move the nation more rapidly toward a green economy, which would open up even more opportunities that range from manufacturing solar panels to retrofitting public buildings to make them more energy-efficient. In “Greening the Global Economy,” economist Robert Pollin finds that every \$1 million spent in clean energy in the United States creates more than twice the number of jobs created by \$1 million spent on fossil fuels – nearly nine jobs per \$1 million versus fewer than four jobs per \$1 million.”⁶¹

Trump is Unlikely to Support Clean Energy Democracy

Trump is not likely to provide meaningful support for a just transition to renewable energy, however, because he ultimately serves the needs of fossil fuel capital. Trump’s cabinet picks represent the most reactionary and extreme anti-environmental and climate denialist forces. As such, they are generally hostile to renewable energy, public transit, and energy conservation. While the Koch Brothers, and their front organization ALEC, did not support Trump’s campaign, they do support many of Trump’s cabinet picks. The Kochs are generally hostile to clean technology in favor of continued dominance of fossil fuels. Reactionary forces that have often included the Kochs have contributed to efforts to hold back or roll back renewable energy and clean technology in numerous instances, and this is led at the state level, in states that voted for Trump, by right wing Republicans. Trump has threatened massive cuts at various government agencies responsible for advancing clean energy technology through R&D funding. Trump has threatened to pull the US out of the (admittedly problematic) Paris Climate Agreement. Trump’s and the reactionaries attempts to stifle clean energy and climate activism will not ultimately stop the transition to a post-carbon economy worldwide, since other nations will likely continue to pursue the decarbonization course, but they will leave the US in a disadvantaged position, especially if the US opts not to manufacture and produce the technology domestically.

And, in actual fact, *the fossil fuel wing of the capitalist class*, led principally but not exclusively by the Koch Brothers through their lobbying vehicle, ALEC, are pushing their bought-and-paid-for “elected” officials (in almost every single case, members of the Republican Party) to pass legislation at the state and local level to hold back the tide of renewable energy, because it threatens the hitherto almost guaranteed profit margins from coal, oil, and gas extraction, refining, transport, and sale.⁶²

Among other things, these moves, which are hardly coincidental or uncoordinated, are a very clear indication that the fossil fuel wing of the capitalist class knows that its days are numbered, that their assets risk becoming stranded, and their ability to make a profit through the continued reliance on old, dirty, polluting fuels is quickly sun-setting. As if these direct attacks on the growth of renewable energy are not enough, these same interests, with President Trump’s approval, are also attempting to outflank the growth of renewable energy by passing laws restricting and/or eliminating incentives for the purchase of electric vehicles in as many as two dozen US states.⁶³

Meanwhile, the AFL-CIO officialdom, in particular the Building Trades, have largely marched in lockstep with the fossil fuel capitalists, almost uncritically accepting the bosses' rhetoric that proclaims that these fossil fuel infrastructure projects are essential for providing "jobs" and "energy security." No doubt this is why the Building Trades (and AFL-CIO President Richard Trumka) slavishly praised President Trump's intention to approve the Keystone XL and Dakota Access Pipelines (in spite of vast opposition from as many as 32,000 union members). Yet, in reality, renewable energy provides substantially more jobs than fossil fuels *already*. While it's true that most of these jobs are currently nonunion, it's incumbent upon the unions to attempt to organize them, because these jobs will be created, union or not. Fortunately, according to Naomi Klein, the union officials that have made common cause with Mr. Trump represent less than a quarter of all unionized workers. And many other unions see the enormous potential in Clean Energy Democracy, but ironically, it is the building trades who would likely benefit from a Clean Energy Democracy infrastructure plan the most!⁶⁴

Trump and the Republican Leadership Stand at Odds With their Base

In spite of this, however, the vast majority of Trump's base supports renewable energy and as many as half of those who voted for Trump believe that global warming is not a hoax.⁶⁵ *In fact many who voted for Trump are already concerned that he will have a negative impact on the growth of renewable energy and the economic benefits it provides.*⁶⁶ According to a recent study conducted by Yale University, about half of Trump voters (49%) think global warming is happening, while fewer than one in three (30%) think global warming is not happening. Almost half of Trump voters (47%) also say the U.S. should participate in the international agreement to limit global warming. By contrast, only 28% say the U.S. should not participate. More than six in ten Trump voters (62%) support taxing and/or regulating the pollution that causes global warming, with nearly one in three (31%) supporting both approaches. In contrast, only about one in five (21%) support doing neither. *More than three in four Trump voters (77%) support generating renewable energy (solar and wind) on public land in the U.S. even though 72% support more drilling and mining of fossil fuels on public land in the U.S.* Seven in ten Trump voters (71%) support funding more research into clean energy and providing tax rebates to people who purchase energy efficient vehicles and solar panels (69%). Over half of Trump voters (52%) support eliminating all federal subsidies for the fossil fuel industry, nearly half (48%) support requiring fossil fuel companies to pay a carbon tax and using the money to reduce other taxes by an equal amount, and almost half (48%) support setting strict carbon dioxide emissions limits on existing coal-fired power plants to reduce global warming and improve public health, even if the cost of electricity to consumers and companies would likely increase. Half of Trump voters say transitioning from fossil fuels toward clean energy will either improve economic growth (29%) or have no impact (21%). *Nearly three in four Trump voters (73%) say that, in the future, the U.S. should use more renewable energy (solar, wind, and geothermal). One in three (33%) say that the U.S. should use fossil fuels less in the future.*⁶⁷

These numbers more or less match the opinions of all other voters^e (except in the case of the Trump voters who favor additional drilling and mining, where the other voters are considerably less supportive of such acts, favoring them by more than 40% but less than half⁶⁸), 80% of whom favor renewable energy, and wish to see its use increase.⁶⁹

^e Trump voters are generally typical Republican voters, with little—though some—variation from previous elections. While their favorable views towards continued fossil fuel extraction represents a small challenge to this proposal, which includes decarbonization, it by no means represents an insurmountable one. These voters generally see fossil fuel extraction as a job creator, but in reality further extraction of such resources will depress jobs by further driving down prices due to supply gluts, which will, in turn, further push fossil fuel capitalist interests to automate their practices thus continuing the process of job elimination.

The reasons why renewable energy enjoys highly favorable support even in states that voted for Trump are many, but can be summarized thusly: As indicated by the aforementioned poll numbers, some Trump voters do believe that climate change is real and that renewable energy technology represents the best solution for addressing the problem, but beyond that; Renewable energy provides numerous economic benefits to rural, Heartland, and Rustbelt communities, including not just jobs, but also supplemental income, particularly to farmers, in the case of wind power.⁷⁰ In Heartland and Rustbelt communities, where issues such as “environment” and “climate” are often greeted with skepticism or even hostility, residents nevertheless value renewable energy because of the economic benefits and the independence such benefits provide, thus resonating with deeply held cultural values of these regions.⁷¹ In at least one case, in Greensburg, Kansas, after the town was almost entirely wiped out by a tornado, the town rebuilt itself and pledged to use 100% renewable energy, which not only allowed them to rebuild more quickly, the economic advantages have helped them restart their economy more quickly as well.⁷²

It's no coincidence that these levels of support for renewable energy, even among Trump voters, are as high as they are. Consider the following facts: Low carbon technologies are now cost competitive with fossil fuels.⁷³ Wind capacity has now exceeded that of hydro-power to become the most plentiful in the United States.⁷⁴ Renewable Energy is growing rapidly in so-called “red” states, in some cases faster than in so-called “blue” states⁷⁵, for example: Texas ranked third in the nation for most solar capacity installed in the third quarter of 2016, following Utah and California.⁷⁶ Renewable energy can replace existing fossil fuel generated energy and provide more jobs in the process.⁷⁷ This is hardly surprising, given the *economic* sense that renewable energy makes, and it is largely as this author predicted in 2004 when George W Bush was reelected for his second term.⁷⁸

The Carbon Bubble: Why Trump Cannot Advance Clean Energy Democracy

Much ink has been spilled analyzing how a complete buffoon and strategic imbecile such as Donald J Trump, who had very little actual support among the capitalist class, particularly the neoliberal wing, could have won the 2016 US General Election, and much of that commentary rightfully agrees that pundits and prognosticators alike vastly underestimated the anger of the so-called “white working class” voters in the US Heartland and Rustbelt who's economic desperation, at the hands of the neoliberal wing of the capitalist class, and their chosen candidate, Hillary Rodham Clinton, has reached crisis proportions. (That most of the eligible voters among this demographic simply chose to sit out the election, thus handing the victory to Trump by default doesn't change the fact that the source of that discontent was the crushing economic weight of a decadent neoliberal capitalism that largely hollowed out the economic sphere of their communities).

Less talked about, but likely equally significant is the fact that decarbonization of the world's energy systems is proceeding much faster than anyone predicted. While it's certainly true that the use of fossil fuels is still increasing, and it's far too early to declare the battle to decarbonize “won”, that continued growth primarily results from the momentum of long term economic trends that do not simply reverse overnight or even in a span of years. The fact remains that the growth of renewable energy and the transition away from fossil fuels (which, in spite of their continued growth, are decreasing in the overall *proportion* of the total energy mix) is happening much faster than anyone predicted, and this is having a major disruptive effect on world markets and capitalism in general.⁷⁹ While one would be correct to argue that the crash in oil prices and the decline in coal consumption mostly resulted from typical market cycles, namely the inevitable boom-and-bust that results from bursting bubbles that happen with overproduction (and the unconventional oil and gas booms certainly caused *that*), it would be absolutely shortsighted to ignore the possibility that the drive to overproduce didn't have at least some pressure laid upon it by the faster-than-expected growth of renewable alternatives!

Fossil fuel capitalism faces pressures from multiple angles, including: (1) geopolitical pressures on US capitalism to develop domestic sources to counter the dominance of fossil fuel sources in contested territories (namely the Middle East, Latin America, and Russia); (2) The glut of supplies resulting from a race to produce sources everywhere; (3) The introduction of additional supply streams, such as Iran, resulting from geopolitical maneuverings; (4) The impending climate crisis and the looming possibility that known assets could soon become “stranded” as a result of policies enacted to prevent the worst scenarios due to climate change (such as the knowledge that 80% of known fossil fuel reserves of *any* sort must be left in the ground); (5) A growing, climate justice led “divestment” movement that seeks to accelerate the carbon bubble by encouraging those with fossil fuel investments, including pension funds, to divest them⁸⁰; (6) interregional conflicts between nations, including petrostates, as capitalist forces seek to exploit, control, and dominate the fossil fuel sources within⁸¹; and (7) the rapidly accelerating growth of renewables as well as the implementation of increasingly sophisticated energy efficiency measures which represent a growing competitive rival to fossil fuel energy sources. For nation-states whose economies are heavily dependent upon fossil fuels, such as Russia or Venezuela, decarbonization represents a potentially earth-shattering doom.

As with the election, many heated debates (on the left and otherwise) have centered around the possibility that Russia, led by Vladimir Putin himself, somehow interfered in the recent US election in order to help Donald Trump win, because some evidence exists that Trump has ties with Putin, including especially business ties that include fossil fuel interests. While it may be true that this is mostly hype and very little substance, largely fabricated by the CIA and other elements within what some are calling the “deep state” sections of the US capitalist class, there is no doubt that Russia is a petro-state who has a strong incentive to engage in climate denialism and to lend support to heads of state elsewhere, including the US, who advance fossil fuel capitalist interests.⁸² Whether there is any truth to the rumors that Russia and Putin did interfere in the US election and have employed Trump as a modern-day Manchurian candidate, the fact remains that Trump and members of his cabinet, particularly Rex Tillerson, and the interests of Putin and Russia mesh quite well. Even Trump’s (as it turns out, mostly empty) “promise” to mandate that the revived Keystone XL Pipeline project be built using US manufactured steel⁸³ was in fact designed to benefit a company owned by Russian capitalists!⁸⁴ On the other hand, a great many other members of Trump’s cabinet, as well as just about all of the most reactionary elements within the Republican Party as well as most of the establishment Democrats, favor the continued encirclement of Russia by NATO. This represents a major split within the capitalist class that has at least part of its roots in the aims of the fossil fuel wing of capitalism to remain hegemonic. It’s no coincidence that those nation-states, states, regions, and communities that are most heavily dominated by fossil fuel capitalist extractivism are also those that are the most politically reactionary (with rare exceptions, such as Venezuela under Hugo Chavez).⁸⁵

As many have astutely pointed out, the current political moment is not specifically about Trump, but what he represents, and that is the most extreme, racist, sexist, reactionary, anti-worker, anti-environmentalist, climate denialist, fossil-fuel wing of capitalism, an economic system that has mostly lost its power to manufacture consent. Trump spearheads the wing that is most desperately trying to maintain hegemony over the system, and that’s fossil fuel capital, yet Trump’s so-called “base” is composed of many rank and file workers who only support fossil fuel capital in as much as it provides them economic security. If the fossil fuel capitalists lose that support, they have nowhere to turn for support. Clean Energy Democracy represents a substantial threat to that hegemony.

At least some of the animosity towards the neoliberal wing of capitalism by the wing that Trump represents is due to the unmistakable beginning of fossil fuel capitalism’s decline. While it would be false to assume that the neoliberalism had any intention of abandoning fossil fuel capitalism altogether, it had at least signaled that it was going to begin attempting to embrace alternatives to fossil fuel capitalist dominance. While Obama’s

and much of the Global North’s continued embrace of an “All of the Above” energy strategy, if left unchallenged, would have still likely led to climate catastrophe, and their largely theatrical hype over the “revolutionary” achievements reached at COP21 to “regulate” climate change, would have still condemned the world to a disastrous 3.7°C increase, it nevertheless opened the door to competition, and to those who maintain absolute hegemony for as long as fossil fuel capitalism has, any competition, no matter how insignificant it might seem at first, is not to be tolerated. No doubt the more intelligent among the fossil fuel capitalist class know all too well that renewables could bring about an end to their reign, once-and-for-all. To those of us who know full well what the continued use of fossil fuels will bring about, that reign couldn’t end soon enough! Nothing less than Clean Energy Democracy is essential for the continued survival of human civilization—and quite possibly life itself—on Earth.

Indeed, renewables have become so plentiful and are being deployed so rapidly at an accelerating pace, while it’s far too premature to say that the world is decarbonizing, it’s not wildly fanciful to assertively declare that the transition to renewables is inevitable and cannot be reversed, no matter what Trump, the fossil fuel industry, or anyone else who opposes renewables declares or has in mind.⁸⁶ Even Trump’s threats to pull the US out of the (largely ineffectual) COP21 treaty and roll back the Clean Power Plan are unlikely to alter that reality.⁸⁷ However, even if Trump can’t stop the process of decarbonization, he and the fossil fuel capitalists surrounding him in his cabinet and Congress can create enough disincentives for the manufacturing of the technology in the US, such that other nation-states, such as China continue to fill that void⁸⁸, a process that will contribute to the further erosion of the already weak US economy.⁸⁹ His administration’s zeal to roll back environmental protections will likely exacerbate that process.⁹⁰ Doing so, of course, will risk further alienation of many members of the so-called “white working class” that may have voted for him.

Clean Energy Democracy Can’t Easily Be Coopted by Liberals Either

One may counter by pointing out that the rapid and widespread deployment of clean renewable energy substitutes one dominant tendency within capitalism (fossil fuels) with another (green capitalism), the latter of which is largely palatable to the neoliberal wing of capitalism, represented primarily by the Democratic Party in the United States, and there are compelling reasons to accept this argument. Many of these “green” jobs are not union jobs and the wages and benefits of the green jobs are often not comparable or commensurate to those of the unionized fossil fuel extraction jobs. Also, there is no guarantee that those with union seniority and job security in conventional jobs will retain it in their new jobs (generally they don’t retain such benefits). Also, green jobs are not necessarily equally concentrated in areas experiencing job loss in conventional energy industries. Overall, unionization has declined in the US to under 11 percent over all, and even less in the private sector. Much renewable energy technology is manufactured outside the US. The renewable energy technology isn’t always produced in a “green” way either (for example, the materials sourced to make them can be environmentally destructive, and the technology can be produced in unecological manners. Further, the technology can be deployed in environmentally sensitive locations or in violation of indigenous sovereignty).

However, these problems are not inherent in the technology *itself*. While it’s true that renewable energy and green technology is currently the province of green capitalists, its rapid growth is creating contradictions within capitalism that cannot be easily resolved. While there are certainly a great many capitalists whose direct economic interests do not involve fossil fuels who’ve embraced renewables, some of whom may even support full decarbonization, they still face a dilemma, and that is the fundamental, structural change that a renewables based energy economy will inevitably force upon the world. While there are many anti-capitalists who understandably fear that substitution of renewable energy for fossil fuels represents the replacement of

dirty fossil fuel capitalism with green capitalism, the latter of which would be no less exploitative of workers, and possibly still destructive enough towards the environment to continue to threaten the survival of life on Earth, those fears are unfounded for the following reasons:

- One cannot simply substitute fossil fuel energy with renewable energy; the two sets of technologies do not scale the same way. Conventional energy generation (fossil fuels, nuclear fission power, and large-scale hydro-electric) are centralized, capital-intensive, and large scale, and cannot be distributed any which where. Renewables, by contrast, are far more scalable and modular, so that the distribution of energy generation can be decentralized much more easily and spread out over enormous distances—and yet still linked through smart energy grids. While one can certainly construct large scale, centralized concentrations of wind and solar power (as well as other renewable energy generation technologies, such as wave, tidal, and water current energy sources, as well as the aforementioned large-scale hydro-power), it is likely that the vast majority of such installations will be small scale and distributed, thus making it far more difficult for the monopolistic tendencies characteristic of capitalism to take root;
- Because renewable energy technologies are thus scalable, it is much harder to create choke points upon the overall energy grid, thus making monopolization of energy grids more difficult (though a nationalized grid would be ideal for the sake of efficiency and resilience);
- Distributed generation of renewables encourages energy conservation (due to the cost of scaling) which contrasts with centralized, for profit, conventional energy generation, which enables waste;
- Because of the high initial capital costs faced by those who seek to install renewable energy equipment in a distributed fashion, there is a high incentive among those doing so to enact energy efficiency measures prior to scaling their system to their peak load demand, but conservation is not only beneficial to the environment, it also reduces the potential profit of capitalist investor owned utility systems;
- Distributed energy systems, to work in the most efficient manner possible, require much greater cooperation and horizontal coordination between individuals participating in the process of electricity and energy generation, or—failing that—much stronger regulation than is favorable to capitalism, which seeks to reduce regulations for the sake of profits. Capitalism does not tolerate horizontal coordination among the many and prefers that they remain passive consumers;
- Renewable energy is job intensive; and the jobs are not easily exportable, because many of them are required at or near to source of energy generation and transmission. In fact, to decarbonize the world's energy systems effectively and rapidly enough to avoid the worst aspects of global climate change would require near full employment. However, capitalism cannot function effectively with full employment. If there isn't a "reserve army of unemployed workers" (to paraphrase Marx and Engels) the capitalists have no easy way to replace workers who engage in coordinate job-action at the point of production to improve their collective lot.

In short, while the widespread deployment of renewable energy and even full-scale decarbonization does not inevitably bring about the abolition of capitalism, there are inherent differences in the technologies which make post capitalist reorganization of society much easier with renewables, especially given the labor intensive and decentralized nature of renewables relative to conventional energy sources. Therefore, Clean Energy Democracy also represents a threat to the neoliberal, internationalist wing of capitalism as well, for *different* reasons. While the collapse of neoliberal capitalist centrism created a political void filled by the reactionary right wing, *the latter's lack of action on climate and renewable energy jobs will create yet another political vacuum that neo-liberalism cannot easily fill.* No doubt the neoliberal wing of capitalism recognizes that reality as well, therefore, they, themselves must realize they're in a bind, or if they don't they soon will.

Whether We Know it or Not, the Left Holds the Long Term Advantage

All of these facts present a very clear path forward for the anti-capitalist, revolutionary-ecological left (however that manifests: social democratic, syndicalist, socialist, communist, anarchist, or some amalgamation of all), but not without organization. And that organization must not fall prey to the pitfalls that have hitherto doomed the left.

Many readers will likely have doubts that anything like the effort proposed here can achieve any success at all in predominantly rural, extractive economies, but in fact, there are some examples of left-labor-environmental coalitions successfully organizing—at least partially—in solidarity with workers employed by the very extractive capitalist forces that the coalition sought to challenge, and that’s the example of Judi Bari and “Earth First! – IWW Local #1” in northwestern California’s old growth Redwood forests between 1988-97 (and to some extent, after Judi Bari passed away due to cancer in March of 1997).^f

Much more recently, the “Indivisibles” Movement, building upon previous movements, such as Occupy, Black Lives Matter, Fight for \$15, and others, but also acting as sort of an anti-Tea-Party of progressive left-Democrats has, since day one of Trump’s administration, has absolutely overrun many Republican congressmen and senators (and some establishment Democrats as well) demanding that they actually represent their constituents wishes on matters of healthcare, jobs, and environmental issues.⁹¹ This largely self-organized movement has been so successful, that the aforementioned Republicans are absolutely afraid to appear in public—*not* because the Indivisibles are violent or destructive in any way, but because the movement is actually tactically boxing these politicians into a rhetorical corners forcing them to admit that their rhetoric is not representative of their constituents and that their plans are based on lies. By doing this, the movement is showing that these politicians truthfully serve the profiteers inhabiting the “swamp” that Trump promised to “drain”, and attempts by these targeted representatives to claim that the Indivisibles are an Astroturf, false front group (which the Tea Party largely actually *was*) have dramatically fallen flat. It’s too early to assess what lasting effect this movement will have, but it has already shattered illusions that the rabid right wing Republican dominance over Washington DC and the statehouses of the Rustbelt and Heartland represent anything remotely resembling a mandate. To be certain, the Indivisibles *do* represent an organized force by voters considerably to the left of those that voted for Trump in these states, but it’s likely that some of them are also citizens who voted for Trump out of disgust towards the Democratic Party establishment who regret their choice.⁹²

A similar movement, oriented towards the Energy Democracy and Just Transition campaign outlined in this proposal, composed of local working people (including clean energy workers), indigenous people, environmental activists, landowners, religious leaders, union organizers, social justice activists, and other likeminded individuals could be one vehicle to move this proposal forward.

In all likelihood there will be skepticism from the targeted audience (“Trump’s base”) at first, especially if this plan is presented in a heavy handed, elitist fashion.⁹³ At least one key to success is emphasizing the economic benefits of Clean Energy Democracy, and somewhat downplaying the Global Warming angle (without ignoring it completely, of course), due to the higher support renewable energy receives among Trump voters than climate action.⁹⁴ Even if introduced by “insiders”, it won’t necessarily catch on like wildfire at first. Facts don’t change attitudes, and old habits die hard. Just like any union organizing campaign, it’s essential to seek

^f For a more thorough explanation of this effort, readers are encouraged to see Appendix A. (below)

out sympathetic insiders with some degree of respect in their communities and encourage them to lead these efforts.

However, as Trump's economic promises fail to materialize, which they must, because—when taken together—they're completely contradictory and cannot be reconciled with each other, let alone good sense, much of his base will be alienated. In fact there's some indication that this is already happening.⁹⁵

How Will We Fund This Operation?

“There's just one thing,” my father used to ask me each time I would propose similarly visionary, grandiose ideas when I was much younger and more naïve (and the reactionaries had significantly less power), “where are you going to get the *money* to make this happen?” I hated that question, but it's a valid concern. Much of this proposal is still capital intensive, and it's a fair bet that most capital is owned by the capitalists, or else we wouldn't currently be in this predicament. Fortunately, this challenge is not insurmountable, but it does have potential pitfalls.

The creation of the infrastructure being proposed in this plan must be financed in such a manner that it doesn't further foster inequality and the disempowering of the communities it's intended to benefit.⁹⁶ In spite of the potential to undermine the repressive grip that capitalism retains on the economic fortunes of the rest of us renewable energy brings, it is still, nonetheless, currently largely dependent upon capital investments to finance it.

Capital investments usually come in the form of bank loans or venture capital, which can be very useful in making things happen, but not without various social costs. For example, it would do no good to deploy thousands of megawatts of solar panels on roofs throughout the Rust Belt and Heartland if none of those panels are actually owned by the owners of the buildings upon which their distributed! If instead, all of these solar panels were instead owned by capitalist interests, then most of the long term financial benefits of their deployment are lost to the communities in which they're meant to revitalize, even though their deployment will nevertheless create the aforementioned promised jobs. While this is an extreme hypothetical case, it is certainly true that the capitalist class will not surrender their power over our economic lives without a fight, and one possible means for them to retain their economic stranglehold, should they become fully cognizant that the transition to a post carbon energy economy be inevitable and fully displacing fossil fuel capitalism and investor owned utilities, they may very well seek to transfer their economic power of ownership to an absentee ownership of energy generation, even if in a distributed generation paradigm. In fact, during the early years of the current century, as solar-electric energy generation was beginning to take off, one option for financing the purchase of solar panels for individual home owners and commercial real estate involved “renting” the panels, sometimes from investor owned utilities, or other financial interests, and paying a monthly fee in lieu of capital expenditures. The “renter” of the PV panels would still benefit by having a zero or near-zero cost electric bill, but would, at no time, ever obtain ownership of the panels, even after the costs had been fully amortized. (To be fair, there are reportedly some plans where the equipment is “mortgaged”, with interest, and eventually acquired by the mortgager upon amortization).

One may well question quibbling over such details, and urge us not be so hasty to condemn capitalist financing models if they facilitate the decarbonization of the economy, because, after all, the fate of life on Earth may well be at risk of extinction if we don't decarbonize as rapidly as possible, and this is a fair point, except that there is ample evidence that capitalism, an economic system that depends upon growth for growth sake (what Ed Abbey once described as “the ideology of a cancer cell”), and an increasing rate of profit by an elite

few, cannot be reconciled with ecological sustainability. No matter how benevolent certain capitalist processes may seem at first, they will eventually lead to destructiveness and waste, due to the economic system's very nature.⁹⁷

That means that Clean Energy Infrastructure can be funded by the following methods, but doing so undermines the overarching goals of this proposed movement:

1. Sales Taxes;
2. Property Taxes on single homeowners;
3. Public/Private "partnerships" (essentially still privatization);
4. For profit private ownership;

Financing through the sale of bonds is somewhat more benign, in that working people are not directly and immediately adversely affected, but ultimately when the bonds mature, the money to pay the dividends come from public funds, so, essentially, bonds also fall under this category of undesirable financing options.

Fortunately, there are alternative financing options, and they quite nicely dovetail with the goals of this project, of restoring democracy, rebuilding community, creating jobs, and healing the environment. Alternative modes of financing include, but are not limited to:

1. Crowdsourcing;
2. Charitable Grants;
3. Progressive Taxes with funds earmarked for renewable energy projects (and said taxes could specifically be designed to create *disincentives* for fossil fuel profiteering);
4. Excess Profit Taxes;
5. Carbon Extraction Taxes (but not carbon *use* taxes);
6. Public Banking.

This last option bears closer investigation. It has been largely assumed that banks, owned by private shareholders, are the only viable model of banking (outside of credit unions), however North Dakota has a state owned bank which is financially solvent (though, unfortunately it facilitates its share of destructive projects, such as the Dakota Access Pipeline). There is no reason, however, why such institutions cannot facilitate ecologically beneficial projects that fit the goals of this plan. A public bank, owned by a local community, such as in a Heartland State, even in a largely rural area, could issue reasonably low interest loans to finance the capital expenditures of clean energy buildouts, and it would have the additional advantage of raising funds for other community needs, such as goods and services normally associated with government funds normally financed through bonds, fees, and taxes. This creates yet *another* political advantage, in that it would likely bifurcate those whose economic conservatism is largely based on ideological opposition to taxation from those who cynically manipulate the aforementioned economic libertarians into unwitting ground troops for the furtherance of real estate finance capitalism, whose economic system ultimately winds up being anything *but* libertarian in nature.

In fact, Public Banking represents a vastly overlooked opportunity for the left to solve the vexing problem that reliance on taxation (for public utilities and social safety nets) constantly creates. While it is unlikely that taxation (or user fees) can ever be entirely avoided as long as full libertarian-communism does not as yet exist (in which case, there would be no need for money at all, if such a system is, in fact, achievable—and this author believes it ultimately is—at least in theory, but not likely in the current moment, or perhaps our lifetimes), we can greatly reduce the need for them, especially income, sales, and use taxes, by substituting interest from public banking loans. (There will still, of course, be a place for excess profits taxes, which serve the

same function as the higher rates in graduated income tax schedules, and one cannot be certain that all income, use, or sales taxes can be eliminated).

Public Banking actually fits very nicely into building Clean Energy Democracy, and this idea has been explored at great length. For example, in Canada, Naomi Klein and others have proposed a system of *Postal-Banking*, in which the function of the Canadian post offices would be expanded from mail delivery and pick-up to include banking, as well as electricity generation (from solar panels, of course!), electric vehicle charging, and a variety of other public goods and services.⁹⁸ This plan was proposed as a serious alternative to the privatization of the Canadian Postal service and had the support of more progressive elements within the Canadian Union of Public Employees (CUPE) and offers a well thought out model of Clean Energy Democracy and Just Transition. While this plan was not implemented (though CUPE *was* able to beat back much of the privatization efforts, at least for the time being), it nevertheless could be modified, as needed, for the United States, particularly in rural Heartland states where the US Postal Service has been under constant threat of downsizing and consolidation, if not privatization. Similarly, Public Banking could also be linked to public transit, in which both postal service and publically financed rail transit, specifically Amtrak (or a feeder bus service, where Amtrak is not viable) could be interlinked. Indeed, one could travel between communities (and send their mail—such as it is in this increasingly digital communications age—along with them), while their electric vehicle (or bicycle) charges at the station, and all of this can be financed by loans that facilitate the further build out of the infrastructure that powers this entire system. Meanwhile, these same banking institutions could issue loans to small farmers engaged in restorative, agro-ecology based organic farming and/or animal husbandry, all of which further create meaningful, living wage jobs and further the process of decarbonization. Best of all? All of these ideas and projects would actually and meaningfully restore the dignity and cultural identity that was once enjoyed by most citizens of these regions, but at the same time could, and likely would jettison all of the negative baggage embedded in that history, including colonialism, racism, sexism, religious intolerance, and environmentally destructive activity. In a very real sense that would make “America” great again.⁹⁹

How We Can Organize to Win

One may well ask, where exist the material forces to see such a campaign through? If the sheer numbers of people who “felt the Bern” are any indication, there are millions of people who could move this cause forward, and it would require scarcely more funding than did the Sanders campaign. At the very least, many of the 31,000 plus who “like” the Labor for Standing Rock Facebook page could be inspired to be part of this effort. Still another possibility is a U.S. analogue to the Iron and Earth⁹⁹, an organization of current and former Canadian tar sands workers who seek to facilitate a Just Transition to Clean Energy Democracy.¹⁰⁰

For the most part, though, the people to lead this effort will be the everyday people who live in the “Heartland”, “Rust Belt” and elsewhere themselves (though, of course, many of them belong to the aforementioned groups).

A more important question to answer is, who will *lead* this effort?

⁹⁸ Having said this, the author wishes to make it clear that he is not attempting to claim that “America”, meaning the WASP dominated, European-settler-colonial-empire, with all of its brutal genocidal and racist tendencies, was ever actually “great” in any actual sense. Quite the contrary, it was not, but even within that warped and twisted vision, there does exist the seeds of a promise of an actually great “America”, or better yet, “Turtle Island” in which indigenous values are restored and seamlessly blended with African, Asian, and whatever positive European enlightenment values exist where all of the parts enhance the whole. And if there is any skepticism that “white” Euro-Americans would shed their racist and privileged baggage, historically, that tends to be precisely what happens through the process of genuinely democratic union organizing, which this plan includes as part of its organizing model, as will be seen.

Above all else, it's absolutely crucial that any revolutionary movement be led by those most impacted by the negative aspects of the current paradigm; of course that's just about everyone in the so-called 99%, but more specifically for the purposes of this mobilization, the principle constituencies include:

1. Workers, particularly those already working in renewable energy jobs, those working in fossil fuel jobs; those working in indirectly related jobs; and unemployed workers;
2. Indigenous Peoples, especially those whose lands are negatively affected by extractivism (fossil fuels or otherwise);
3. Environmentalists;
4. Landowners;
5. The families of each

And, again, it's important to note that these categories sometimes overlap.

Additionally, this cannot be accomplished unless the movement democratic and rank-and-file controlled. Therefore, this movement cannot be led by:

1. Capitalists—especially the powerful ones;
2. Small business owners;
3. Union officials;
4. Environmental NGOs;
5. The Democratic Party;
6. The Republican Party;
7. Sectarian left sects (socialist, anarchist, or otherwise);
8. Tribal Councils;
9. Politicians;
10. A privileged few;

It must be led by the people, in a democratic fashion. Individuals from just about every one of the above categories would be welcome to participate, following what Staughton Lynd and Andre Grubacic described as “the Politics of Accompaniment” in the book *Wobblies and Zapatistas*. Naturally, this organizing strategy rules out leadership by an elite, technocratic leadership class. It also precludes leadership by a “revolutionary vanguard” (which, all too often, once the “revolution” is “won”—if it happens at all—*becomes* an elite, technocratic class).

Also, this mobilization cannot fixate on a specific strategy for achieving the goals of Clean Energy Democracy and forging a new, post capitalist, ecologically sustainable society, within the shell of the old. There will be some instances where this mobilization will involve some or all of the following strategies (in no particular order, but ranked from less-to-more militant “phases” of escalation, which may or may not proceed in the order given, depending on the situation)^h:

A. Phase I

1. Forming local groups to take on this campaign;
2. Holding public meetings to further flesh out and specify the details of this proposal;
3. Producing campaign literature;

^h Undoubtedly, there are many *more* ideas that exist and these can be crowd-sourced at public meetings held in the effected, targeted communities. Much of this plan will develop through such methods, and well that it should, because these ideas must ultimately come from the working class masses, not solely from an eccentric visionary such as myself (wink, wink).

4. Defending existing labor laws, civil liberties, and environmental laws (limited and flawed though they may currently be) that are threatened by Trump, et. al.
5. Holding press conferences and rallies demanding renewable energy jobs and funding for same;
6. Demanding that elected officials enact more favorable policies;
7. Organizing large constituencies to address elected officials at town hall meetings, similar to the indivisibles movement;
8. Organizing rank and file democratic caucuses within unions and/or NGOs and taking leadership at the grassroots;
9. Demanding that abandoned factories, such as in the Rust Belt be retooled and repurposed to manufacture renewable energy equipment, such as solar PV equipment, wind turbines, energy storage technology, etc.

B. Phase II

1. Electing and/or running more favorable candidates for NGO or Union leadership;
2. Electing and/or running as favorable candidates to public office;
3. Passing local and/or statewide ballot initiatives;
4. Organizing rank and file democratic unions, where unions don't currently exist;
5. Organizing unions in renewable energy oriented workplaces;
6. Engaging in workplace actions that make demands on the bosses to enact more favorable working conditions and/or policies;
7. Nonviolent civil disobedience up to and including blockades of destructive projects;
8. Reforming laws to allow for residential solar installation jobs to exist as part of a Project labor Agreement (PLA);

C. Phase III

1. Engaging in mass marches, or mass strikes;
2. Taking over electric utility coop boards;
3. Establishing community owned banks to finance renewable energy projects;
4. Demanding that existing factories which produce non utilitarian items, such as military hardware, be retooled and repurposed to manufacture renewable energy equipment, such as solar PV equipment, wind turbines, energy storage technology, etc. (following the example of the British Lucas aerospace workers' strikes of 1976)¹⁰¹

D. Phase IV

1. Occupying factories and transforming them into worker run operations that manufacture renewable energy technology;
2. Nationalization or municipalization of the electricity grid and/or privately owned utilities;

Of course, working people's willingness to engage in such efforts will depend on how much stake they have in the outcomes of them. If organized by groups including them, addressing their needs, advancing their goals, the willingness will likely be high, but only after a steady, escalating process of radicalization of direct struggle.

Naturally, these ideas will work in "deep blue" states as well as "deep red" or "purple swing" states, though the targets, actions, and goals will vary by location.

ⁱ This needn't follow the traditional, bureaucratic model of NLRB sponsored union elections, but instead could follow the "Fight for \$15" model, or—better yet—the principles of "Solidarity Unionism" as outlined by the IWW and Staughton Lynd here: <https://iww.org/about/solidarityunionism>

The beauty of this plan is that it accomplishes the following goals, if done successfully:

1. It takes advantage of contradictions between Trump's inner circle (which is dominated by fossil fuel capitalist interests and climate change denialists) and his "base" (most of whose commitment to Trump is shallow at best; in fact there's some evidence that this is already happening¹⁰²);
2. It circumvents the coopting impulses of the establishment Democrats who seek to sheepdog the working classes back to neoliberal capitalism;
3. It forces the Republicans in the Heartland, Appalachia, and the Rust Belt to accommodate potentially revolutionary demands or lose support;
4. It further erodes support for fossil fuel capitalism;
5. It undermines the conditions by which capitalism remains dominant;
6. It facilitates alliances between workers, landowners, indigenous peoples, and environmentalists (where these categories do not currently overlap).
7. It necessitates to building of a mass based mobilization (and likely organization) that can be a left wing alternative to both the ascendant neo reactionary tide as well as the discredited and moribund neo-liberal establishment.

All of the above fits nicely into a greater program of decarbonization that must occur to keep global temperatures from rising beyond 2°C, which includes, overall:

1. Deployment of energy conserving technologies and building techniques for everyday use.
2. Deployment of renewable energy technology both in decentralized and locally centralized fashion
3. Phasing out of existing, dirty energy generation equipment and facilities.
4. Decarbonization of transportation through the replacement of autocentric transportation with public transportation whenever and wherever possible, and the electrification of all modes of transportation (where human powered transportation cannot provide primary needs).¹⁰³
5. Reversing the trend of suburbanization of communities towards smart urban design which emphasizes density, but not mechanized, compartmentalized living.
6. Integration of natural, greenspace within urbanized areas.
7. Replacement of fossil fuel, chemical-intensive industrial monocultural farming with locally produced, organic agroecology.
8. Full lifecycle use of material goods in which reduce, reuse, recycle is pursued.
9. Production of durable goods that are made to last rather than with planned obsolescence.
10. Restoring wetlands and riparian environments;¹⁰⁴
11. Wherever possible and convenient, the emphasizing of resource sharing instead of individual ownership of less heavily used, resource intensive items (such as automobiles, boats, trucks, major appliances (such as washing machines and dryers), etc).

Decarbonization would incorporate many benefits which strengthen the economic position of the working class (white and otherwise):

1. Decarbonization is labor and job intensive, thus the acceleration of the process will create additional jobs.
2. In fact, in order to decarbonize on the scale needed to avoid catastrophic global warming, near full employment will be required.

3. The closer a society moves towards full employment, the better the bargaining positions of the workers employed relative to the employer.
4. Likewise, decarbonization requires the reskilling of many trades, thus making workers more specialized and again making them less replaceable. Also, the reskilling requires training, itself a skilled job.
5. Decarbonization, if carried out effectively, can bring together currently divided sections of the so-called 99%, women, indigenous communities, students, people of color, LBGTQ, white workers (or workers of any ethnicity), immigrants, citizens, etc. (and it's a foregone conclusion that these categories are not mutually exclusive or always easily defined).

This plan provides a concrete set of strategies and goals as called for by Jeremy Brecher, of Labor Network for Sustainability.¹⁰⁵

Of course, those of us who oppose both Neoliberalism and Neoreactionaryism must act quickly, because both forces, if left unchecked, will condemn the Earth to irreversible, catastrophic global warming. Most experts suggest that we have 10 years, if that, to act to counter the worst effects of the crisis, and the sooner we implement this and other similar plans, the better our chances of survival, to say nothing of liberation from the oppression that the masses of us face under the yoke of capitalism.¹⁰⁶

It is for these reasons that the crisis we now face represents our greatest opportunity. In fact, whether we may realize it or not, the anti-capitalist left holds all of the cards and the keys to survival. If we organize and don't let ourselves be distracted by the shadowplay now unfolding within the squabbling wings of the capitalist class, though we may suffer defeats along the way there is no doubt that we can win, because our continued survival on earth dictates that we must! But, the course we must take conveniently places us in the position of having the upper hand, because the change must take place at the point of production, and the changes that we seek offer a means for all of the forces that are currently exploited by capitalism to unite and build a much better, much fairer, much more ecologically sustainable world and to heal much of the damage that capitalism has foisted upon it. The future is in our hands, fellow workers! Let's get to work and organize!

Appendix Aⁱ

Earth-First! – IWW Local #1 and the organization of rural resource extraction workers.

Between 1988-98, there was a coalition of environmentalists and union organizers based in northwestern California. In spite of the fact that the environmental wing of this coalition was led principally by Earth First!, who were considered “terrorists” by many of the timber workers (albeit unfairly, because the “terrorist” label was created through a propaganda campaign, manufactured by the right wing “Wise Use” movement, which was a front group for timber, mining, and other extractive capitalist interests), one of the coalition’s leading organizers, Judi Bari, who had a working class background and rank-and-file union organizing experience, ensured that this particular section of Earth First! adopted a high degree of working class consciousness and counter the divide-and-conquer tactics that the employers used to pit the worker against the environmentalists with overtures of solidarity with the workers, who they did *not* regard as the enemy. By not only challenging the timber corporations for clear-cutting, but also for job elimination (through exports, offshoring, and automation) and lax safety practices, Bari, et. al. were able to win over some of the timber workers, most of whom were “under-the-table” allies, but a few of whom openly pledged their opposition to their bosses and denounced their bosses’ ecocidal practices and capitalist greed. One logger even conducted a tree sit (in 1993)!

The ongoing campaigns led by Earth First! – IWW Local #1 had a union organizing element to it (under the banner of the IWW). Led by Bari and a few others with union organizing experience, or direct connections to workers in the community, they fought against layoffs of (nonunion) millworkers and the outsourcing of their jobs by the Louisiana-Pacific corporation (in 1988-93); filed grievances on behalf of (union) Georgia Pacific millworkers injured by a chemical spill in the mill (one which the workers’ legally recognized union, the IWA, *took the company’s side!*) (in 1989); exposed how Louisiana-Pacific’s profiteering resulted in the death of a millworker (Fortunado Reyes) and fought to get damages paid to the deceased workers’ family (in 1989-90); published an underground dissident newsletter jointly with disgruntled Pacific Lumber millworkers (in 1989-91); fought against raw log exports, a practice which contributed to the loss of jobs locally (constantly); and renounced the tactic—commonly associated with Earth First! but hated by timber workers due to its perceived danger to them—known as “tree spiking”. All of these actions helped convince no small number of the workers that the radical, direct action environmentalists were not their enemies—in spite of an intense propaganda campaign waged by the bosses, usually through astroturf front groups, to the contrary.^k

ⁱ The name, Earth First! – IWW Local #1, requires some detailed explanation. There were a number of Earth First! groups that formed in the 1980s throughout the Redwood region of northwestern California—often referred to the locals by the name “the North Coast”, and by back-to-the-land environmentalists as “Ecotopia”, in honor of the book that bore that same name by Ernest Callanbach—usually focused primarily on the preservation of old-growth Redwood forests. Bari, a one-time union organizer and carpenter brought an element of class struggle unionism to the group, and suggested that their direct action campaigns—which *already* attempted to treat the timber workers as *not* being the enemy (the actual adversaries being the *employers*)—go a step further and actively include worker organizing, which couldn’t be done under the banner of Earth First!, obviously. For that reason, Bari and many of the others signed up into the IWW (some sympathetic timber workers did so as well). While there was always a clear objective of compartmentalizing the IWW activity (worker organizing) from the Earth First! activity (direct actions to stop clear cutting and other destructive corporate lumber extraction), which were both, themselves, compartmentalized from the legal challenges (carried out principally by the Sierra Club and the Environmental Protection and Information Center), since much of the membership overlapped, it was simply easier to use the name “Earth First! – IWW Local 1. To complicate matters further, there was a major season long campaign of all of the above themes actions modelled after Mississippi Freedom Summer that involved a substantially larger, broader coalition, called “Redwood Summer”, in 1990 (the latter coalition was eponymously named “the Redwood Summer Coalition” and it included the abovementioned organizations, minus the Sierra Club, but plus several others, including Seeds of Peace, Greenpeace, and the Peace and Freedom Party). For the sake of clarity, for this document, the name “Earth First! – IWW Local #1” should suffice.

^k This continued to be the case, in spite of the fact that on May 24, 1990, in Oakland, a car bomb exploded in Judi Bari’s vehicle while she and her co-organizer Darryl Cherney were en route to an organizing event in Santa Cruz, and the FBI and Oakland Police subsequently tried to claim, in spite of contrary evidence, some of which both law enforcement agencies deliberately covered up or tampered with as court proceedings later established, that Bari and Cherney were knowingly transporting the device to use in some unspecified act of “eco-terrorism”. Bari and Cherney survived the blast, though—as the bomb was placed under the drivers’ seat—Bari was severely crippled as a result—but Bari died of cancer on March 2, 1997. Cherney filed a suit against the FBI and OPD on behalf of himself and Bari for discrimination, wrongful arrest, and a host of other violations of civil liberties, a case which they prevailed in 2002.

Even while the union organizing efforts and solidarity campaigns were taking place, the environmental wing (as well as local watershed groups, Greenpeace, Sierra Club, et. al.) continued filing law suits against clear cut timber harvest plans, held public protests, and even engaged in nonviolent direct action in direct opposition to the timber corporations' rapacious harvesting practices. Earth First! – IWW Local #1 (and its less radical, and often critical allies) reframed the divide as “sustainable logging versus cut-and-run-logging instead of the bosses' propagandistic campaign “spotted owls versus loggers' jobs”. Some timber workers remained unconvinced and continued to swallow the company rhetoric (these were primarily the middle-level management and contract logging firm owners), but enough timber workers publically supported the environmentalist coalition to undermine the bosses' propaganda.

Bari & Co even began to propose what we now call “Just Transition” for the timber workers, and even attempted some demonstration models, including attempting to form a sustainable logging coop (organized in part by the logger who conducted the Tree Sit), but the damage to the local timber economy due to the years of the timber corporations' greed was a little too extensive, and by the mid-to-late 90s the industry experienced major contraction in the region (plus, Bari died of cancer and though many of her comrades shared her vision, few understood it as deeply and extensively as she), and so the vision remains a dream, still, to this day. However, all was not for nothing, though. The Teamsters & Turtles coalition and the links forged during the famous “Battle of Seattle” in 1999 as well as the Blue-Green Alliance (for all of its many flaws) owe some of their direct roots to Bari's efforts.¹

In the case of energy democracy and transition, the economic forces that currently exist are far more favorable to a similarly styled, spirited, and organized campaign, and the benefit of history can help us avoid some of the mistakes that the Earth First! – IWW Local #1 coalition made along the way.^m

¹ The Blue-Green Alliance has its very first roots in fall of 1998, an effort by two Earth Firsters and the author to forge an alliance between environmentalists—who were trying to preserve Headwaters Forest in southwestern Humboldt County, California (a campaign that predates even Bari's initial presence in these struggles in 1988) from the attempts by the Maxxam controlled Pacific Lumber to clearcut it—and striking Kaiser Aluminum workers, represented by the USW—who's union busting employer happened to be the very same Maxxam corporation. The alliance was successful, and the strike was not without some partial victory for the steelworkers (the areas of defeat can be traced to the union officials giving up too easily), and as a result, a more formal, enduring alliance originated, called “the Alliance for Sustainable Jobs and the Environment”. Unfortunately this alliance was quickly coopted by the union officials and environmental NGOs. The ASJE begat the Apollo Alliance, which later morphed into the Blue-Green Alliance. Unfortunately the Blue-Green Alliance remains largely ineffectual, often giving blue-green cover for the DNC Democrats or tame business union initiatives. The Alliance hasn't even taken stands on issues such as the Dakota Access Pipeline (due to the fact that some affiliates support the project) and has shown little—if any—initiative whatsoever in creating the type of rank and file Just Transition movement this proposal calls forth.

^m The details of Earth First! – IWW Local #1 are far too many to even begin to discuss in any meaningful detail here, though readers who wish to take a (much) deeper dive can read my book on the first period of this campaign, Redwood Uprising, here at <http://www.judibari.info>, and additional documents by Bari or concerning her campaign can be found at <http://www.ecology.iww.org> and <http://www.judibari.org>. Readers are also strongly encouraged to view Darryl Cherney's excellent documentary about Judi Bari called “Who Bombed Judi Bari?” at <http://www.whobombedjudibari.com>.

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⁹⁹ <http://www.ironandearth.org/>

¹⁰⁰ Iron & Earth: Oil Sands Workers Ready For Renewable Energy Shift - <http://nawindpower.com/iron-earth-oil-sands-workers-ready-for-renewable-energy-shift>

¹⁰¹ For more on this subject, see <https://ecology.iww.org/search/node/lucas>

¹⁰² For example, see Easy as Two Plus Two: How to Regain our Democracy <http://www.greenenergytimes.net/2017/02/19/easy-as-two-plus-two/>

¹⁰³ America United for Public Transportation - <http://voicesforpublictransit.org/blog.aspx?id=01-28-2017>

¹⁰⁴ The Infrastructure Opportunity Nobody Is Talking About – Yet - <http://mississippiriverdelta.org/the-infrastructure-opportunity-nobody-is-talking-about-yet/>

¹⁰⁵ How Labor and Climate United Can Trump Trump - <http://www.counterpunch.org/2017/02/13/how-labor-and-climate-united-can-trump-trump/>

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