

A regional place-based strategy for the Green New Deal: Breaking the Trumpist coalition

Don Goldstein
Emeritus Professor of Economics, Allegheny College
dgoldste@allegheny.edu

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Abstract. This paper proposes a place-based strategy to help break the political impasse over proposals for a Green New Deal (GND) and win broad working-class support. Researchers have shown that a GND can be designed to create major economic benefits for the United States and working-class Americans. But little attention has been paid to the importance of small regions—where climate impacts, potential mitigative and adaptive responses, and related economic debates are based—for building GND support and anchoring its component parts. A regional approach can counter GND opposition lodged in a Trumpist coalition based on racist sectionalism, glorification of a mythical fossil-fuel America, and selectively “anti-government” authoritarianism—all in the context of widespread labor-market precarity and acute social distress. A methodology is proposed for developing regionally based plans that can act as important building blocks for a coherent GND at national scale, via local projects that offer re-employment and re-skilling and intrinsically cannot be outsourced or offshored. And a national GND can significantly resolve the problem faced by public and private actors locally who must make mitigative/adaptive choices whose eventual viability will depend significantly on choices made by others. Penetrating the Trumpist discourse and marshalling broader support for a GND will require crafting its possibilities in terms of regional natural-political-economies and reframing its vision around that which is practical, needed, and broadly beneficial. A GND rhetoric grounded in locally-defined economic opportunity will be an important part of any successful national advocacy campaign.

1. Introduction

Efforts to mitigate the relentless advance of climate change at the level of federal policy have stalled and even reversed since the mid-2000s in the US. The lack of progress is a function of an ongoing hard right turn in the Republican party that has controlled Congress since 2010 and the Presidency during 2016-2020. Although support has built among progressives in Congress and nationwide for a Green New Deal (GND)—an aggressive program of public investment and complementary steps toward dramatically lower-carbon technologies and other sustainable development goals—its prospects are dubious as of the start of 2021. Lockstep opposition by congressional Republicans and very mixed support among Democrats is anchored by the lures of climate-change denial and fossil-fuel dependency among voters.

This paper proposes a place-based strategy to help break that impasse and win broad working-class support for a GND.¹ Researchers have provided considerable evidence that a GND can be designed to create major economic benefits for the US and working-class Americans (for example, Pollin et al. 2014). But little attention has been paid to the importance of small regions—where climate impacts, potential mitigative and adaptive responses, and related economic debates are based—for building GND support and anchoring its component parts.

The focus here is on those GND elements aimed directly at addressing climate change. Those elements include (Ocasio-Cortez 2019):

- Low-carbon, renewable power sources and a smart electricity grid
- A transportation system with dramatically lower-carbon vehicles, expanded and lower-carbon mass transit, and a lower-carbon freight system
- An agriculture sector with lower-carbon production technologies, product mix, and production-to-consumption geography
- Increased building energy efficiency
- Expanded US manufacturing of renewable energy technologies
- Upgraded infrastructure for adapting to climate risks

All of these link directly to provision of good, stable GND jobs, and that will also be a focus in this study.

By “region” is meant an area with sufficiently shared economic, social, and natural features to distinguish the impacts it faces from climate change—both direct impacts and those arising from broader societal changes induced by climate change—and the natural and socioeconomic resources it has that can contribute to mitigating and adapting to climate change. Regional investments that mitigate climate change by moving toward lower-carbon technologies (in energy, transportation, agriculture, and the built environment) will be generally supportive of the aims of a GND; and national adoption of a GND will sharpen the focus for choosing such investments while alleviating many uncertainties they would otherwise face at a regional level.

Although it would generate good jobs across a broad range of industries and regions, the GND is mired in a fractious politics that alienates it from much of its potential base. Mainstream

¹ The proposed framework accepts the desirability of addressing climate politics within the context of continued economic growth. For a debate on this approach, see Pollin (2019) and Schor and Jorgenson (2019).

Democrats often oppose it because it threatens entrenched capitalist interests, and many unions shy away from GND-compatible proposals in favor of the bird-in-the-hand of oil and gas-related development. But the core of the opposition, feeding and animating objections like the above, is lodged in a more fundamentally opposed formation.

A premise of this paper is that the electoral power of GND opponents is now rooted in a coalition that can be called “Trumpist.” For present purposes, Trumpism can be understood in terms of its racist sectionalism, glorification of a mythical American past (including multidimensional fossil-fuel dominance), denigration of science as a basis for societal problem solving, and naked manipulation of the levers of political power. This suite of tenets appeals to only a minority of voters, often sufficient to wield power but nevertheless vulnerable to carefully crafted and executed progressive countermoves. The battle for a GND can be a case in point.

Another, related premise of this paper is that effective GND advocacy will require responding to the specifics of our Trumpism-dominated US socioeconomic moment: First, job and labor-market precarity have become the norm across almost all sectors, driven by stagnant wages, runaway capital, scheduling and workflow technologies, gig work, labor-protections dismantling, and terminal de-unionization. Second, the scope and depth of acute social distress have grown, spreading beyond historically marginalized communities and feeding a desperate sense of economic and political abandonment. Third is the rise of more and less openly virulent forms of exclusionary, zero-sum politics. Fourth is a hardening of a selectively “anti-government” authoritarianism, which readily supports military and police/prisons expenditure while cutting high-end taxes to starve other public investment. Finally, the growth of progressive activism has accelerated in response, especially at state and local levels.

These are critical features of the political landscape in which Trumpism thrives and which it fosters, and, it is argued below, are salient in choosing strategic pressure points in fighting for a GND.²

Section 2 states the argument for a major focus on designing GND initiatives at the level of small regions, section 3 summarizes a northwestern Pennsylvania case study, and a final section provides a discussion and conclusions.

2. The regional-level promise of a GND

A considerable research literature suggests that a well-designed GND could generate more jobs and income than lost in the economic activity it would displace, while shifting the United States to a qualitatively lower-carbon path. Galvin and Healy (2020) find the major GND proposals’ reliance on Keynesian demand-side economics credible in projecting significant employment and income gains. Potenza et al. (2020) argue that with appropriate labor and social policies, a GND can achieve its goals while providing a “just transition” for displaced workers. Pettifor (2019) links the economic potential of a GND with the need for radical redistribution, while

² The state of affairs as outlined above suggests the likelihood that neoliberalism, as we have known it since the 1980s, has morphed into a different systemic formation. To pursue that likelihood is beyond the scope of this paper.

Pollin et al. (2014) take a more institutionally delimited approach in projecting broad employment gains.

But national-level arguments about the stimulative potential of a GND can seem like pie in the sky when viewed from the perspective of struggling workers and communities, making a Trumpist appeal to a familiarly mythic normalcy sound more compelling. To counter this, two studies have brought the case for a GND to the state level: Pollin, Garrett-Peltier, and Wicks-Lim (2017a, 2017b) on New York state and Washington state.

These less aggregated studies are a welcome contribution. The argument presented here is that this approach can be taken even further. Much of the potential of a GND exists at the level of regions defined according to likely climate-change impacts, economic assets, and mitigation/adaptation opportunities intrinsic to their natural-political-economies. This requires a much smaller scale than the continental “regional” breakdowns often used (for example, in IPCC Working Group II 2014 and Kriegler et al. 2014). The specific geophysical and socioeconomic characteristics of smaller regions, often missed by more macro-level analyses (Rosen and Guenther 2014), can be highly salient. A smaller unit of regional analysis permits attention to how the direct and indirect impacts of climate change will affect both the need and the possibilities for transformations in technologies, infrastructure, workforce, and patterns of production and consumption.

Regionally based analyses and mitigation/adaptation plans can act as important building blocks for a coherent, effective GND at national scale. Similarly, a national GND can significantly resolve the coordination problem facing such regional programs on their own, as they must anticipate not only local climate impacts *per se* but also climate-induced changes happening in broader markets and policy frameworks. Thus public and private actors locally must make mitigative/adaptive choices whose eventual viability will depend significantly on choices made by others. With the kind of planning envisaged by a GND, this uncertainty can be sharply reduced locally while the requisite regional components of a robust national plan are put in place.

The proposed methodology is as follows; details can be found in Goldstein (2015), and a case application is provided here in section 3. Regional opportunities for GND-relevant development depend on the expected local impacts of climate change and on the regional resources available for addressing them. Both the likely climate impacts and the regional-response options must be broadly defined to incorporate the direct and indirect climate-driven effects transmitted to regions.

The likely direct impacts of climate change can affect both the identification and urgency of particular kinds of regional investments and also the potential level of local support for such initiatives. Down-scaled climate models project likely regional temperature, precipitation, extreme-weather events, and related impacts (Cooney 2012). Often these are still at scales larger than needed for application to socioeconomically coherent regions, but that can be at least partly overcome by careful interpolation and extrapolation of these modeling results.

In addition to the direct climate impacts expected, the opportunity set for regional response and GND contributions will also be defined by likely indirect climate impacts. A myriad of wider

public and private-sector responses will increasingly transform the macroenvironment within which regional decision makers act and economies evolve (Moss et al. 2010). Regional projects will have to anticipate climate-relevant changes in related supply chains, intra- and inter-sector demand relationships, and policy frameworks (IPCC Working Group II 2014: 24). As noted above, a national GND will go a long way toward delineating the basic directions such changes will be following.

Regionally specific resources will in turn define the possible range of local mitigative, adaptive, and GND-consistent responses to these direct and indirect climate impacts. Such resources may include:

- Renewable energy production resources—wind, solar, sustainable biomass, low-impact hydro, and geothermal.
- Location along existing and/or potential transportation corridors—rail and waterways shipping.
- Location, infrastructure, and other factors important for lower-carbon power grid buildout nationally.
- Industries capable of efficiently supplying services and capital and intermediate goods for these investments and activities.
- Labor force skills, existing and/or potential, appropriate to these investments and activities.

The relevant regional resources are likely to offer opportunities for significant complementarities. These may take the form of “clusters”: “...geographic concentrations of interconnected companies and institutions in a particular field” (Porter 1998: 77). Clusters may incorporate firms in a given industry, specialized labor and suppliers, important customers, makers of complementary products or inputs, and institutions such as governments and universities that provide related research and education. Plugging into a GND may allow a region to exploit existing clusters, foster the emergence of new ones where promising, or simply take advantage of mutually supportive relationships among resources like those listed above.

Crafting GND-based strategies will also create openings to address long-standing workforce and community disparities. Almost any foreseeable regional GND investment path will entail shifts in skill and occupational structures. In many cases the scale of the required investments will make it possible to involve not only the skilled trades and technical workers who comprise a small part of most regional workforces, but also to expand good job opportunities through targeted training and employment programs. Section 4 will explore the class and political implications for winning support for a GND.

Many region-based research studies have explored possibilities that point in the directions suggested above. For example, regarding central California’s industrial agriculture—relevant to the GND target of a lower-carbon agricultural system—Jackson et al. (2011) present a case study in which IPCC and state climatic/socioeconomic scenarios are used to project alternative futures for Yolo County agriculture – based on existing economic assets, likely climate impacts and possible adaptations, and potential indirect impacts from changing agricultural markets,

population, and land use patterns. Another example (Bergdoll et al. 2011) addresses expected sea-level and storm-surge rises around New York City, proposing changes in architecture, land use, infrastructure, and industry mix that might exploit NYC's assets in responding to climate risk, also as envisaged in the GND.

What these studies and a myriad of others indicate is the potential commonality among the extraordinary diversity of climate impacts and possible responses based on small regions' specifics. The next section illustrates how these dynamics might play out, and the kind of GND analysis and advocacy suggested by this study, by looking at the possibilities for another single, small region.

3. The case of northwestern Pennsylvania³

This section describes the case-study region, summarizes the direct climate-change impacts it is now experiencing and likely to in the future, looks at the regional resources that might be deployed in the context of broad GND-related external changes, and suggests a regional mitigation/adaptation scenario that could both support and be supported by a GND.

The NW-PA region is bounded on the north by a short strip of Lake Erie coastline, all in Erie County. There are five other contiguous counties whose topographies, economies, demographics, and histories make it reasonable to group them with Erie as a single region: Crawford, Forest, Mercer, Venango, and Warren. Much of this case analysis can apply to a considerable degree to the broader southern Great Lakes region from Milwaukee to Rochester, making it relevant for thinking about a GND whose geographical building blocks would certainly be larger than NW-PA.

NW-PA shares Pennsylvania's humid continental climate, but its proximity to Lake Erie makes it cooler, cloudier, and wetter than the state overall. Average summer temperatures approach only 70 degrees (Pennsylvania State Climatologist 2012). Precipitation (approximately 40 inches annually) has historically been more frequent and less intense than elsewhere in the state. Global projections of changes in temperature and precipitation suggest that the southern Great Lakes are part of a zone that is expected to get wetter and warmer overall (IPCC 2007, pp. 46-47). But small regions must adapt to climatic variations affected by local topographies, bodies of water, land use patterns, and other factors not captured by global models. "Downscaling" climate projections into higher-resolution regional models (Cooney 2012) has been applied to the larger Northeastern and Great Lakes regions, at whose intersection NW-PA stands (GLRA 2000, Frumhoff et al. 2007, ClimAID 2011).

Interpolation from these studies predicts that the region's annual precipitation can be expected to increase on the order of 10% by mid-century from a late-20th Century baseline, and this author's calculations from state data (Pennsylvania State Climatologist 2012) show that in fact NW-PA'S average annual precipitation had already increased by 26% from the 1930s to the 2000s.⁴ All three large-region studies predict snow and Lake Erie ice cover diminishing in

³ This case study is based on a long-term research project conducted by the author (Goldstein 2015).

⁴ Interpolating the results from large-region climate models also predicts that by mid-century average temperatures in NW-PA will rise by 4-5 degrees Fahrenheit. But the author's calculations from state data for these

amount and duration. Another potentially significant direct climate impact is the likelihood of increasing frequency and severity of heavy precipitation events, a trend that has been evident for decades in the Northeastern U.S. (Karl et al. 2009, pp. 30-32) and in NW-PA particularly (Goldstein 2015). Storm water systems are being stressed already, and this will intensify over time (Kessler 2011).

Before considering how these impacts may be important for GND-linked NW-PA regional scenarios, it is necessary to examine the region's potentially relevant resources. Located near Pittsburgh's iron and steel and half-way between New York and Chicago, NW-PA was an important central point on Great Lakes shipping and east-west rail lines, hosting major rail yards and work crews through the mid-20th Century. Manufacturing was also important; General Electric's locomotive division in Erie and Talon Zipper in Meadville anchored deep metal-working supply chains and skilled workforces. Deindustrialization hit the area hard, and all of the biggest firms have shuttered their regional sites. Nevertheless, the region retains a mix of manufacturing as well as a nationally prominent cluster of mostly small tool and die and precision machining companies (Onyeiwu 2009).

The decline of Midwest manufacturing and the rise of trucking shrank rail and shipping volumes and brought infrastructure decay. Numerous short-haul rail carriers closed or consolidated. Port Erie on the Great Lakes-St. Lawrence Seaway (GL-SLS) declined for decades due to broader steel industry shifts (Lake Carriers' Association 2012)—but unlike rail, which has seen a comeback nationally, GL-SLS shipping has continued to languish (U.S. Department of Transportation N.D.). Nevertheless, Port Erie retains major deep-draft dock, crane, shipbuilding, dry-dock, and warehousing facilities (World Port Source 2012). And despite these changes, transportation and manufacturing remain important regional industries.

Finally, NW-PA has significant renewable energy resources. These include biomass supply—an estimated 3.4 million acres of high-quality hardwood forest within 75 miles of Erie with ongoing logging on many small holdings but lacking demand for waste cuttings and pulpwood since Erie's International Paper mill closed (GFR 2011); substantial infrastructure and a labor force with the requisite skills, equipment, and organizational know-how to provide raw material; and sustainable forestry expertise from a variety of sources.⁵ Lake Erie and its southern shores also have a commercially viable wind resource, estimated offshore at 18 mph at 90 meters above water level and onshore at 15 mph at 80 meters high (U.S. Department of Energy N.D.). Erie is the shallowest and most construction-accessible among the Great Lakes and is estimated to be capable of siting thousands of megawatts in offshore capacity (Pollack 2020).

A last step before proposing a regional GND scenario is to look at the broader changes that are likely to occur, along with a GND and more generally as the world struggles to slow climate change. These climate change-induced shifts in markets, technologies, and policy frameworks—which from a local perspective can be considered indirect impacts of climate change—will act as parameters within which regional activists and policy makers can plan and push for

northwestern counties shows no trend, at least through 2010. The available state data is grouped for a 10-county northwestern region that contains the six analyzed in this case study.

⁵ Although there are concerns about the environmental impacts of forest biomass energy, with appropriate sourcing and management it can deliver “strong net benefits” (Wear and Bartuska 2020).

investment in locally feasible, GND-consistent projects and programs. The focus here will be on the intersection between likely changes associated with GND elements listed in the introduction and those relevant to the regional resources discussed above.

These expected shifts include pressures toward alternative energy and transportation technologies, infrastructure upgrades to ameliorate rising climate risks, and a push to increase domestic manufacturing of renewable-energy technologies:

- Falling renewable energy costs, likely to continue as wind, solar, and geothermal scale up.
- Changes in the legal and regulatory framework, possibly including carbon cap and trade and tax regimes, tougher emissions standards for coal-fired power plants, more hospitable state wind-power siting regulations, and policies to encourage renewable energy adoption in the United States and the European Union (particularly biomass).
- Continued growth in rail as a lower-carbon freight alternative to trucking; rail container-system infrastructure expansion has already included port intermodal investment (TEMS 2008) and new long-haul corridors, including two near NW-PA (Heerwagen 2009).
- As another lower-carbon freight alternative, new growth in domestic waterway shipping, with warming shortening the annual period during which Lake ice halts GL-SLS traffic; this could dovetail with European biomass export and an increased Lakes role in intermodal container and bulk shipping (Chambers 2010, Vickerman 2012).
- Increased federal resources for stormwater infrastructure upgrades, to cope with intensifying extreme-weather events.
- New federal resources and policy frameworks to encourage domestic renewable energy manufacturing.

Given these expected direct and indirect climate impacts and shifts, and the NW-PA region's resources that could be mobilized in response, the following scenario is plausible as an interconnected set of local GND components. Each would also provide regional benefits that, together, could amount to a political platform for winning local support for that GND:

Develop lakeshore wind power. (GND element: lower-carbon power sources.) Utility-scale onshore and offshore wind projects along Pennsylvania's Lake Erie shoreline would contribute directly to GND renewable energy goals. Wind projects in the hundreds of megawatts involve staging, assembly, and installation of big turbines and employ people in logistics, transportation, construction trades, and for offshore projects, shipping and port operations. Beyond installation, smaller but still significant revenue streams from operation and maintenance continue. Supplies and services of many kinds are required.

Expand biomass processing and export. (GND element: lower-carbon power sources.) Regional hardwood waste cuttings and pulpwood could support at least 1 million tons of pelletized wood annually while meeting EU sustainable-forestry certification criteria. Pellet production facilities would need to be scaled up and provided suitable transportation access. For export, rail transport to East Coast ports is costly, but sufficient economies could be achieved by direct waterway shipping from Erie and nearby ports and out the GL-SLS (GFR 2011). US demand could also rise with a GND boost to renewable energy domestically. Existing, scalable

supporting resources include upstream infrastructure and labor force for raw material sourcing and deep local sustainable forestry capabilities in academia and the private sector.

Enhance and expand intermodal freight capacity. (GND element: lower-carbon transportation system.) Biomass export and wind-farm construction require trucking-rail-port intermodal connections. The loading, storage, dockage, drydock, and ship-building capabilities around Port Erie are important resources that could be strengthened. In rail, Marcellus fracking has (ironically, for present purposes) led Class I lines to boost western PA operations and add rail-truck transload and railcar storage capacities, while short-haul lines have done likewise between regional east-west Class I corridors. US container corridors pass through major nodes in north-central Ohio and southwestern PA; it is possible that new terminals in NW-PA could be attractive inter-connectors given suitable regional intermodal enhancements (EDC 2011).

Upgrade stormwater management infrastructure. (GND element: Strengthened climate-risk infrastructure.) Climate change has increased the frequency and severity of extreme precipitation events in NW-PA over many decades (Goldstein 2015). What were once 100-year storms are now 50-year storms, and FEMA floodplain and NOAA precipitation maps have changed accordingly. Bridges, culverts, and other infrastructure once built to adequate specifications need to be upgraded.

Deepen metalworking industry links. (GND elements: Expanded renewable energy manufacturing; support for other scenario components.) NW-PA's metalworking cluster (Onyeiwu 2009) would extend firms' existing capabilities to enter the equipment supply chains for the other scenario activities. Local precision-machining firms would join peers throughout the southern Great Lakes in making parts for wind turbines (Sterzinger and Svercek 2004). In structural iron and steel, the scenario's transportation, lakeshore wind, and stormwater management pieces will generate substantial infrastructural product demand for products like stanchions, culverts, under- and overpasses, bridgework, gratings, and weirs. Precision machining and structural metalwork would feed into each other, because rail and port facilities, wind farms, and storm water systems also incorporate gauges, gears, controls, fasteners, and other machined components.

The latter point suggests that, as predicted by cluster theory, these five GND-relevant scenario elements would benefit from powerful complementarities. Just as regional demand for metalworking products would be boosted by the other activities, offshore wind would create demand for port and shipping providers; biomass export would provide demand for rail and port shippers; and all of these activities would benefit from the growth of services like logistics and construction as they are stimulated by the entire suite.

These kinds of individual and complementary dynamics show the thus-far underexamined promise of a GND at the level of small US regions. Each of the single activities would generate new jobs and income in NW-PA; the complementarities would broaden and deepen those impacts, and a national GND would provide the stability and staying power to allow local decision makers to commit.

But differential class and political interests will be at work in any local implementation efforts. A GND can provide a framework within which to navigate these countercurrents. But addressing

them may not be possible if the local debate cannot be framed tightly in terms of the concrete economic opportunities a GND will create close to home. The final section explores these dynamics.

4. Discussion

This paper raises the question of how to break through the polarized conversation about a GND. Its premises are that this conversation has been captured by a Trumpist politics of zero-sum divisiveness and mythologization of a fossil-fuel past in the context of spreading economic precarity and desperation. It has become difficult for supporters to break through the resulting noise mocking the GND as an intrusive, tax-sucking, job-killing, big-government giveaway to elites seeking to impose their vision of a US lifestyle of deprivation and foolish impracticality.

The argument advanced here is that penetrating that Trumpist discourse and marshalling broader support for a GND will require bringing its promise close to home for voters in every region of America. Crafting GND possibilities in terms of the natural-political-economies that characterize small regions will allow advocates to reframe its vision in terms of that which is practical, needed, and broadly beneficial. Rhetoric will be key. Within the political lexicon now spoken by millions of white working-class voters, “Saving the planet” is easy to dismiss as an abstract luxury of elitist crystal-ball gazers who have little concern for holding down a job and putting food on the table. A GND rhetoric grounded in locally defined economic opportunity will be an important part of any successful national advocacy campaign.

The NW-PA case summarized above offers an instructive example. In the early to mid-2010s, the years leading to Erie County flipping from its traditional Democratic roots into the Trump column, a campaign for lakeshore wind power was underway. Erie County had partnered with an “Icebreaker” pilot project aiming to place six wind turbines in Lake Erie north of Cleveland (LEEDCo 2020, Pollack 2020). Pennsylvania’s Clean Air Council had established a NW-PA task force to marshal local support. The prospects for lakeshore wind seemed good due to Icebreaker, the 2014 election of Democratic Governor Tom Wolf, and an active commercial development effort for onshore turbines in North East, PA (Myers 2015). But officials in the region’s labor unions avoided any engagement with wind advocates; meanwhile, western PA labor was mobilizing for jobs building Shell Oil’s planned fracking-fed ethane cracker plant in Monaca (Stonesifer 2016). Capitalists from the region’s dominant metalworking sector showed no interest in tooling up for wind-turbine supply chain work, instead parroting criticisms of purportedly high wind-power costs, government subsidies, and killing fossil-fuel jobs. Some environmentalists were skillfully manipulated by wind opponents. The Governor’s staff quickly backed away, and the campaign failed. Yet, by patiently staying with the local-opportunities pitch, local advocates had been able to make some inroads, including support from the Erie County Executive and Council, a few local state legislators, and the ownership of Port Erie’s largest shipbuilding company.

One of neoliberalism’s fruits is the disconnect between most local capital and the economic vibrancy of its home communities. A GND offers the prospect of a new prosperity broadly shared with now increasingly extruded segments of the population. But as neoliberalism sinks into economic and environmental crisis, the political-economic orientations of regional capital will tend to channel any changes that do occur in more atomistic, less regionally integrative

directions. Key firms in NW-PA and regions across the country—large and small, local and transnational—have evolved competitive strategies based on global linkages and cheap local labor rather than regional vitality. Even small companies deploy capabilities around globally integrative accumulation processes, winning contracts and sourcing inputs internationally. These operations provide jobs, but in most cases the local manufacturing or retail footprint is light; global integration means that this footprint could be removed and placed elsewhere at any time. In NW-PA, the region's skilled but low-cost labor, not its full complement of potentially cross-fertilizing assets, activities and capabilities, is the local resource of strategic interest. What is globally integrative for capitalists is dis-integrative for the region.

In contrast, the kinds of regional, GND-linked climate-change mitigation and adaptation projects discussed here are intrinsically place-based. They respond to local climate impacts and mobilize and build local resources. They cannot be outsourced or offshored.

In addition, this kind of local realization for a national GND will entail substantial re-skilling and re-deployment of currently underemployed and unemployed workforce segments in marginalized communities. Skilled, relatively privileged workers will have expanded opportunities as well. This strengthens the potential for a regionally rooted GND strategy to help pierce the armor of Trumpism's exclusionary appeal, which indeed is necessary for a GND to have any chance at all. Such local initiatives could give that national push traction in working class communities across the country. And, despite all politics being local, this can aggregate up to a winning electoral coalition.

A strong, national GND campaign could provide impetus and teeth to regional efforts to force a re-orientation. With regions' mitigative/adaptive investment paths defined in terms of their expected climate impacts and place-specific resources, GND planning can both provide a national framework for regional development and incorporate regions' individual plans into a coherent whole. The approach illustrated in the NW-PA case can underpin similar analyses for other regions. It is at this level of disaggregation that the Trumpist politics of climate-change denial and cost-shifting can be confronted.

Ultimately, confronting climate change through a holistic GND is a political, not a technical, problem. Different technological possibilities for reducing and spreading risks, and for seizing and sharing opportunities, will allocate costs and benefits differently within regions. Representatives of capital not only perceive and pursue opportunities according to their class interests, but also use their myriad forms of influence to shape regions' adaptive paths in their own image. It is up to working class and environmental movements to force the terms of debate around climate change and a GND onto a more favorable terrain.

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