



SOLAR PIONEERS: The Frontier Entrepreneurialism of a Sluggish Energy Transition

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The year 2050 looms large in the emergent imaginary of the U.S. renewable energy transition. Scholars, activists, politicians, and pundits often christen this and other decadal years as the decisive dates by which the United States must dramatically reduce its fossil fuel consumption to stave off catastrophic climate change. This temporal frame employs a mnemonic strategy popular in scientific communication: the rendering of phenomena in “major round numbers” to engrain important empirical data in the general public’s consciousness (Bell 1994, 53). The number 2050 also taps into the fear of demise in a society organized according to linear time (Greenhouse 1996), attempting to cultivate a sense of urgency by simulating an accelerated mortality. Thus, in both its quantitative facticity and apocalyptic undertones, 2050 aims to move hearts and minds to overhaul energy infrastructure, evincing what Chloe Ahmann (2018, 160–61) calls *moral punctuation*: “an explicit marking of time . . . registering ‘a moral demand for a difference between the past and future.’”

This moral punctuation accented Steve’s desk, where a copy of New York City’s sustainability plan—OneNYC—sat next to his keyboard. OneNYC established the city’s goal to reduce greenhouse gas emissions by 80 percent by 2050 relative to 2005, primarily through decarbonizing buildings. Steve, the founder of a residential clean-energy company, often cited the 2050 deadline

to underscore the urgency of his work. His company's motto spoke to this importance: "Saving the planet . . . one building at a time!" This phrase conjoined moral punctuation with a contrasting temporality that Ahmann labels *incrementality*, as its "one building" clause bespeaks a "gradual buildup" (Ahmann 2018, 154) ostensibly at odds with the urgent temporal break signaled by planetary saviorhood. Indeed, given the considerable time it takes to develop and finance a single weatherization or rooftop solar project, decarbonization on a building-by-building basis—as opposed to an aggregated building stock basis—likely would not achieve the 2050 goal that, in this context, metonymized a saved planet. When I pressed him on this, Steve conceded that decarbonizing "one building at a time" does not entail the "rapid" energy transition that the "urgent" 2050 metrics demanded. But then, in a contradictory move, he asserted that "we do one or two buildings at first and then that . . . snowballs, and . . . soon we're at 80 [percent reductions] by [20]50," linking the moral punctuation of this deadline with the incrementality of a building-by-building approach. Trying to hide my incredulity, I asked how an incremental approach could practically "snowball" into dramatic emissions reductions—a question that annoyed him. He waited a beat, then pointed out his window at the NYC skyline and spoke with the cadence of an inspirational speaker: "Look at that: that's a lot of buildings, and a lot of opportunity for emissions reductions—we just gotta roll up our sleeves and get to it!"

This performance of enterprising initiative shed light on why he had agreed to speak with me; despite my best efforts to tell him otherwise, he clearly thought I was there to profile his success as a clean energy entrepreneur, so he was disinterested in scrutinizing his company's motto. He reached out to shake my hand and, with a forced smile, said, "It's been a pleasure. I have work to do, but feel free to stick around and talk to my associates." I spent the rest of the day shadowing one of his young employees, Mira, as she worked on a proposal to install a forty-kilowatt solar system on a co-op building's roof. Lacking Steve's entrepreneurial zeal, she commented, "this is pretty boring stuff, LOL," highlighting the slow pace of trying to shepherd a co-op board through the technocratic process of securing solar financing. While Steve appealed to the moral punctuation of 2050, Mira attested to the slog of incremental action. Yet despite this sluggishness, Steve stylized himself as a planet savior vis-à-vis incrementality, because the scale of this gradual pace aligned with his entrepreneurial narrative. Put differently, the "one building at a time" framework implies a *pragmatic* approach to climate action, allowing him to market himself as a doer who "roll[s] up [his] sleeves" and gets things done. Thus, when he pointed to the skyline, he positioned it as an emergent frontier of sustainability ripe for a man of resolve.

Along these lines, this article argues that the everyday people, activists, and workers leading the U.S. energy transition embrace a teleology focused more on personal enterprise and improvement than planet end times and implosion. I am referring specifically to the temporality of “frontier entrepreneurialism” (Scott 2021)—an individualistic orientation to change that is misaligned with the pace and scale of climate scientists’ urgent warnings. As a concept, frontier entrepreneurialism calls attention to the affective intersection of the self-sufficient, enterprising spirit of American capitalism and the long-standing frontierism of the U.S. settler colony (see Miller 2002)—that which I began to detect in Steve’s pioneering swagger amid the skyline’s untapped opportunity. *Entrepreneurialism* here refers to “not simply a mechanism of self-employment” or “an economic matter of business” but also “a subtler, generalized way of being and way of feeling in the world. . . [that] connects market practices with self-making” (Freeman 2014, 1). Drawing from three years of ethnographic research on solar projects in NYC, I will show how this mode of market-based self-making is informed by settler imaginaries of societal progress vis-à-vis spatialized transformations when what is known as “the narrative structure of the frontier myth” (Smith 2021, 111) organizes “entrepreneurial affects” (Freeman 2014).

The historian Frederick Turner is credited with introducing this myth. His 1893 “frontier thesis” theorized that the westward expansion of the U.S. settler state unleashed a “dominant individualism,” as the colonization of the “savage” North American wilderness required a practical strength, restlessness, and exuberance productive of American freedom and prosperity (Slotkin 1992). He further contended that when the “Western frontier” had been fully settled at the end of the nineteenth century, it threw into crisis this distinct way of life, demanding a search for a new frontier forged through the ingenuity of enterprising men. Historians, politicians, artists, and social movements have iterated this “frontier thesis,” arguing that various social phenomena hold the promise of a new American frontier (Slotkin 1992). The U.S. solar industry is often branded as one such frontier (Mulvaney 2019),¹ rendering the energy transition in ways that privilege entrepreneurial ambitions over environmental projections.

In this article, I focus not on the specific origin story of the American frontier but rather on its *individualist narrative structure*: the pioneer advancing civilization by leaving his mark on uncharted space. This trajectory animates energy-transition efforts as laypeople, activists, workers, and executives like Steve fashion themselves as clean energy pioneers in search of undeveloped terrain—vacant rooftops, for instance—to forge sustainable futures through their enterprising spirit. In the process, this frontier entrepreneurialism normalizes a

market-based approach to energy transitions that lacks the rapid pace of aggressive decarbonization timelines, as Mira's work demonstrates. Even stalwart champions of these timelines like Steve uncritically endorse energy transition work that is nowhere near this pace when they position themselves as pioneers of the clean energy market, demonstrating the counterintuitive compatibility of moral punctuation and incrementality amid capitalist responses to climate change.

I therefore consider the frontier teleology to contextualize a U.S. energy transition misaligned with apocalyptic climate deadlines.² In doing so, I aim to not endorse these deadlines or critique people's failure to abide by them, but, rather, to elucidate the imaginary processes through which a range of individuals excitedly take part in a market-based energy transition often misleadingly couched as a necessary response to urgent climate precarity. While many studies identify various social catalysts of renewable energy adoption (e.g., [Bollinger and Gillingham 2012](#)), my analysis of frontier entrepreneurialism suggests that these inquiries fail to grasp the insidious enterprising individualism—the underlying affective texture—of energy transitions in a capitalist context, in which “the market” is often understood as an accelerator of change. American capitalism has historically worked through a feeling of individual initiative and innovation ([Benke 2023](#))—a pioneering swagger—that, I argue, simultaneously animates renewable energy adoption, on the one hand, and naturalizes a fragmented energy transition, on the other. Specifically, this article offers three ethnographic portraits—two focused on community solar campaigns and one focused on blue-collar solar installers—to illustrate how many of the everyday people implementing market-based decarbonization strategies are arguably more focused on individualist trajectories than imminent demise teleologies.

This discussion of frontier entrepreneurialism ethnographically illuminates the energy transition “impasse” that [Mark Simpson and Imre Szeman \(2021\)](#) theorize. They contend that the very concept of energy transition tacitly endorses infrastructural upgrades that leave intact capitalist structures of power, “updating neoliberal governance with the shiny surfaces of renewable energy,” such that “transition” actually amounts to “a continuation of the same” ([Simpson and Szeman 2021](#), 80). They further argue that the temporality of solar obfuscates this stasis; “energy from sunlight . . . is minutes old” in contrast to “the ancient sunlight collected in fossil fuels” ([Simpson and Szeman 2021](#), 86), misleadingly signaling a disruption of petroculture. Yet in a settler context in which the capitalist status quo partly operates through imaginaries of progress via settlement, the spatiality—not just the temporality—of renewable energy shapes this “continuation of the same.” In this article, I suggest that the colonial concept of “the

frontier” can elucidate the spatiotemporal dynamics that simultaneously transition settler landscapes to new infrastructure and maintain the “energopolitical” (Boyer 2019) status quo. For the “frontier” concept has informed American settlers’ teleological ambitions across historical contexts (Slotkin 1992), generating a reflexively spatialized sense of futurity compatible with a renewable energy market often framed as a corrective to impending end times. This linkage between the frontier’s affective texture and contemporary energy infrastructure is important, because settler colonialism relies on imagined trajectories that disingenuously relegate it to the past (Simpson 2008). As Mark Rifkin (2017, 2) argues, “U.S. settler colonialism produces its own temporal formation . . . that powerfully shapes . . . possibilities” in contemporary settled spaces, such that we can locate settler impulses in the everyday trajectories and imagined futurities of Americans pioneering the sustainable technologies of tomorrow.

As a homegrown New Yorker and former sustainable energy practitioner, I initiated this research when I noted how working-class communities of color resembling the one I grew up in—neglected urban areas with no trace of putative nature—were being reimagined as sites of both environmental conservation and economic opportunity because of their preponderance of unobstructed rooftops. My study therefore contrasts with anthropological literature on the frontierist pursuits of large-scale renewable energy projects on rural and (allegedly) undeveloped land (Rignall 2016; Folch 2019; Boyer 2019; Howe 2019). I focus instead on the quite different supposed frontier of small- and medium-sized residential buildings in a dense metropolis, as smaller solar projects enable practitioners to imagine themselves leaving their personal mark on the landscape, offering a unique lens into the frontier entrepreneurialism of the renewable energy industry. I contend that this decisively un-nature-like terrain demonstrates how environmental imaginaries maintain American rugged individualism, illuminating how individuals become vested in incremental climate action despite their fervent calls for moral punctuation.

SOLAR PIONEERS

Deirdre tweaked a PowerPoint on solar in NYC that she had seemingly presented a million times. But, as always, she didn’t touch the PowerPoint’s first eight slides, which constructed an urgent climate teleology. Underscoring the importance of the city’s goal of “net zero” emissions by 2050, the slides argued that we need an expansive energy transition *now* to avoid deadly flooding, heat waves, and food shortages. While Deirdre presented these apocalyptic slides to all of her various audiences, the slides that followed these were audience-specific,

focusing on a *particular* multifamily residential co-op with the potential for solar. Specifically, these slides offered information on the costs, government subsidies, bureaucratic logistics, and roof work necessary for solarizing co-op buildings.

Tweaking the PowerPoint was a routine part of her job at a solar technical assistance organization that recruits multifamily co-ops for solar installations in partnership with solar contractors. Deirdre regularly presented this PowerPoint, selling the benefits of renewable energy to co-op owner-tenants, while proposing a building-specific plan for adopting solar. This sales pitch is essential to a market-based approach to energy transitions in which renewable energy is a commodity that individuals can purchase—as opposed to a government entitlement or a civic tool in collective responses to climate change. The city, state, and (until recently) federal governments have adopted this approach, offering financial incentives such as tax breaks to “move the renewable energy market,” as well as tools to help consumers choose a solar contractor. But these incentives and tools make the solarizing process in NYC incredibly complex, because they require that consumers carefully consider many data points before installing solar, including: how different government incentives offset different components of installations; the legal specifics of building ownership structures; the size of a planned installation; energy-usage data and projected energy savings; electricity ratepayer payment structures; and a building’s socioeconomic demographics, among other things. For multifamily co-ops with dozens, sometimes hundreds of occupants, the complex process of compiling, considering, and acting on this data can take years, such that many need technical-assistance experts like Deirdre to walk them through a labyrinthine, government-subsidized solar “marketplace.” Deirdre’s slides distilled this complexity into clear steps—specific to each building—that she would nonetheless need to reiterate continuously if a co-op decided to go solar. Her PowerPoint was therefore indicative of a market-based energy transition that develops renewable infrastructure on an inefficient building-by-building basis, requiring the initiative of individual consumers and promotional professionals, as opposed to broad-based public sector action. There are, of course, other approaches to ramping up solar that require neither consumer initiative nor this protracted financing process. For instance, NYC’s government could amend their Façade Inspection Safety Program and the building code to mandate that building owners install fully subsidized rooftop solar with a government-funded solar installation corps if their roofs meet certain specifications. Highly subsidized mandates like this can spur energy transitions without the protractedness of consumer-oriented contracting. Indeed, Deirdre’s market-based efforts to recruit co-op boards have not activated the rapid transition from fossil fuels that her PowerPoint endorses.

Yet she always displayed an enthusiasm for this consumer-oriented work despite its misalignment with immediate-term, large-scale climate action. This enthusiasm was most evident when she would scan Google Maps' aerial views of neighborhoods she was targeting, identifying roofs without shadows, vents, pipes, and other things that could obstruct an installation. From this panoptic perspective, she focused less on rooftops in the aggregate and more on specific rooftops, each of which appeared as its own opportunity: a potential co-op client, a potential contractor connection, a potential solar project. She would then plot out each potential project with a sense of pride, pulling up available tenancy and ownership information, Department of Buildings data, and contacts for potential local partners while scoping a community outreach plan. The market-based approach to residential solar requires this sort of granular attention to potential consumers' specific needs—a marketing imperative that presented her with an engaging analytical challenge. How would she draw from multiple data points to develop a site-specific outreach and contracting plan? She enthusiastically grappled with this line of inquiry, focusing her attention on contracting out individual projects, rather than on large-scale decarbonization. But crucially, her panoptic perspective of the landscape informed this affective orientation to the market. For Deirdre, the ability to see a terrain of untapped potential creates an ever-expanding space through which she imagines herself leaving a mark on society, animating the “spirit of social and ecological entrepreneurialism” that [Jamie Cross \(2019, 49\)](#) argues is endemic to the solar industry. While Deirdre champions a rapid energy transition, the decentralized spatiality of solar's residential market inspires in her a far narrower teleological fixation: an enterprising morale focused on “closing the deal,” as her boss puts it—the “deal” being individual projects, not large-scale transformation. Over drinks after work, she revealed that she felt she *should* be—but wasn't really—“scared shitless” of the apocalyptic teleology in her slides, as her deep emotional investment in her job seemed shaped more by the process of activating consumer excitement than the prospect of eluding environmental collapse (a hypothesis she endorsed when I cautiously shared it a few drinks in).

On finishing her tweaks to the PowerPoint, she packed up her laptop and traveled uptown to a mid-sized co-op in a gentrifying neighborhood to present it to a co-op board. After breezing through the apocalyptic slides, she made her sales pitch, explaining, enthusiastically, that the co-op could be one of the first in their community to jump-start “the clean energy economy of tomorrow.” She illustrated this point with an aerial shot of the building and its community, highlighting the dearth of local solar and the opportunity to blaze a new trail in the

renewable energy economy. If frontiers are the space between settler civilization and the yet-to-be-settled (Turner 1920), developed with the ingenuity of path-breaking individuals (as I further explain below), then the entrepreneurial zeal with which Deirdre presented a simulation of vacant rooftops created such a space, promising to bring the progress of clean energy to the community's underexplored, sun-exposed surfaces.

This sales pitch and its frontier entrepreneurialism resonated. "We can be pioneers here!" exclaimed Darren, a white, middle-class retiree, attempting to sell Deirdre's proposal to his fellow board members. A former environmental lawyer, Darren strongly supported decarbonization, but he hadn't said a word before Deirdre emphasized that their building could be a solar trailblazer. Darren's "pioneer" characterization had a domino effect, as Marsha, another white, middle-class owner-tenant, chimed in: "Doing this makes us pioneers!" Two other members also referred to themselves as pioneers, performing a hokey excitement before the board approved Deirdre's proposal. They knew that their mixed-income tenancy would make solar financing complicated, but this didn't temper their enthusiasm for jump-starting the community's solar economy, charting a new way forward.

Deirdre's trailblazing pitch clearly added lightness to something otherwise presented as a technical market matter to stave off apocalypse. Becoming pioneers seemed far more exciting to the co-op board than the grueling process of securing financial incentives and navigating the solar contractor market. Yet it was precisely this market that created the affective terms for them to imagine themselves as pioneers; market-based policy that empowered individual consumers to spearhead energy transitions positioned said consumers—not the collective public—at the forefront of the clean energy frontier. While solar's utility bill savings enticed them, those savings did not inspire the sense of purpose immanent in the board members' self-interpellation as pioneers. For Darren, solar's environmental impact also proved key, but he explained to me that "the pioneer" persona felt more inspiring, as it offered a framework for him to say,

Hey, we're . . . groundbreakers, . . . innovators, and we're showing the way of the future to other co-ops in our area. We can make solar the norm . . . and when other people see it on our roof, then they might start to take climate action too. . . . I think that's really fun, being the first one. . . . Anyone can change their light bulbs or shop organic, but I wanna show the way of the future . . . it feels like I'm bringing . . . change to the neighborhood.

Here Darren speaks to a sense of personal ingenuity that, for him, comes with the status of being the first co-op in a traditionally poor (but gentrifying) community to install a beacon of sustainability. This sense of ingenuity animated the citational force of *pioneers* at the meeting, evincing the imaginary process through which individual consumers participate in solar markets and thereby enact a market-based energy transition. The thought of being an innovator thus inculcates the co-op board in a building-by-building approach to overhauling infrastructure that is misaligned with the rapid pace of Deirdre's 2050 teleology. Indeed, the solar industry concedes that this approach requires that a subset of everyday people stylize themselves as pioneers of sorts—what they call “early adopters”: the first consumers in an emergent market to adopt an innovative commodity (Wolske, Stern, and Dietz 2017).

But I want to suggest that Darren's specific pioneer citation is notable because it directly links the frontier entrepreneurialism that Deirdre evoked with U.S. settler colonialism. This linkage hinges on the spatial meanings of *pioneer*. While Darren was consciously referring to himself as “a person who goes before others to prepare or open up the way . . . an innovator, a forerunner,” *pioneer*, according to the Oxford English Dictionary, also refers to “a person who is amongst the first to explore or settle a new country, territory, or region; an early . . . settler.” Put differently, *pioneer* always is a temporalized concept, but it often is also an explicitly spatialized—and, by extension, settler-colonial—one. In the United States, this spatiality is decisively racialized, as the pioneer is a central character in the white supremacist myth of the American frontier, settling unruly geographies marked by savage otherness (Taylor 1998). Turner (1920, 3) conceptualized the frontier as the “meeting point between savagery and civilization,” and American mythology situates the pioneer in this spatialized interstitiality, reifying a figure who tames the other's lawlessness with the order of white society (Blomley 2003).

Darren clearly was not positing himself as the white antidote to savagery. But as Max Liboiron (2021, 2) points out, the distinction between pioneer-as-forerunner and pioneer-as-settler is specious: “The use of pioneer to mean innovation simultaneously normalizes frontierism and the forms of erasure, dispossession, and death frontierism requires to make its terra nullius.” Liboiron (2021) contends that Indigenous land dispossession is foundational to any effort to improve settler society, such that innovations that don't entail the rematriation of Indigenous land reproduce the white supremacist colonial project. Liboiron thus argues that the very discourse of the pioneer legitimizes the myth that there exist new horizons of settler progress—a myth that requires the continued occupation of Indigenous land—sustaining American frontierism.

But this doesn't mean that a co-op board lauding their own initiative in adopting solar is simply an extension of such frontierism. Instead, the board's "pioneer" citations demonstrate how entrepreneurialism on settler land reconfigures the erasure and dispossession that constitute frontierism, putting a new spin on a long-standing white supremacist orientation to space. More specifically, this novel frontierism has two interrelated characteristics that both build on and distinguish it from prominent narratives of American settlement.

First, the board's zeal for trailblazing a consumer response to environmental challenges through rooftop development evinces an entrepreneurial pursuit of vacant space focused not on extending the settler nation-state but rather on settler governance vis-à-vis a consumer market. While the pioneering pep of Darren and his ilk reproduces a long-standing settler pride in developing space that is in fact Indigenous land, their seemingly innocuous aspiration to become early adopters of market responses to environmental problems is not the same thing as ruthlessly claiming unsettled land as part of imperial expansionism. The entrepreneurial affect here—and its market locus—ostensibly distances their pioneering initiative from a traditional frontierism.

This *ostensible* distance leads to the second distinguishing characteristic: their frontier entrepreneurialism entrenches a racialized organization of settler space that nonetheless lacks the unabashed white supremacy of the frontier myth. The co-op in question was once entirely occupied by Black and Latino owner-tenants in what was then a working-class community of color. But the co-op has gentrified over the past decade, and is occupied by a slim majority of white middle-class owner-tenants who barely meet the income threshold to live in officially designated "affordable housing." It was these newcomers who called themselves "pioneers," celebrating their entrepreneurial ingenuity in a system of private property that simultaneously positions owners at the forefront of energy transitions and displaced many of their erstwhile neighbors of color. In this way, their excitement for pioneering a consumer market undermines a politics opposed to recent forms of racialized displacement that are a vestige of Indigenous land dispossession.

Furthermore, the novelty of bringing the solar market to a poor Black neighborhood that is not usually affiliated with technological innovations clearly animated the board's rendering of themselves as pioneers. This rendering, then, is symptomatic of the ways in which settler colonialism enables certain white subjects to leave their mark on marginalized spaces with a sense of personal ingenuity encapsulated in a mythic pioneer figure that continuously animates white settler forays into putatively undeveloped terrain. In celebrating the settling of

new markets, their frontier entrepreneurialism overlooks the processes through which even environmentally oriented market-based governance reproduces the racialized stratification of settler cities (Checker 2021). The point here is not that white settlers like Darren are “bad” for solarizing their buildings, but, rather, that the “racialized assemblage” (Weheliye 2014) of property ownership, vacant space, and colonial imaginaries in the U.S. settler colony create the material-semiotic conditions under which white settlers like him continue to reproduce their shared positionality. Furthermore, as co-ops are sites of collective—not individual—action, this frontierism resembles that of the space race, centered not on the individualist pioneer but rather on the *collective* pride of developing underutilized space (Slotkin 1992).

This pride is essential to a consumer-oriented energy transition, as it keeps people like Darren invested in a drawn-out financing process that impedes progress toward the aggressive decarbonization timelines endorsed by climate scientists. While Darren supports these timelines, a settler sense of ingenuity infuses excitement into an otherwise lethargic market-based energy transition, activating his entrepreneurial initiative in ways those timelines cannot.

Nonetheless, when we note how a consumer market both depends on and gives form to this sense of ingenuity, the sort of polemical moralizing at the core of much anthropological scholarship on energy (High and Smith 2019) becomes untenable. For while this market perpetuates a settler orientation to space that is misaligned with rapid energy transition timelines, it also offers an avenue for Darren to concretely act on his hopes and dreams, and therefore to counteract the sense of powerlessness that apocalyptic climate teleologies often inspire. This, then, attests to the capaciousness of the American frontier project—the ways in which its narrative forms and enterprising sensibilities at once undergird settler colonialism and animate the everyday ethics of caring people who seek to “bring . . . [positive] change to the neighborhood.”

SOLARIZING THE FRONTIER

Solar Pioneers, a community-based solar project in a poor Black community, epitomizes the affective alignment between frontier entrepreneurialism and a market-based energy transition. Launched by a local non-profit, Solar Pioneers was primarily—but not exclusively—a so-called solarize campaign: a grass-roots effort to grow solar markets in residential communities. Solarize campaigns are led by local organizations that use community-organizing tactics to form solar “purchasing pools”: groups of homeowners who collectively procure solar installation services from a contractor who commits to reducing prices locally for a limited

time. Participating homeowners recruit their neighbors to expand the purchasing pool and thereby further reduce prices. Solarize campaigns, then, transform everyday people into a promotional service for corporations, leveraging the affective bonds of community residents to seed local solar markets. Crucially, market-based energy-transition policy incentivizes and even funds such community-based projects, orienting the transition around consumer demand and marketing.

Solar Pioneers took this marketing imperative even further. Under the enterprising veneer of “the pioneers” brand, the non-profit and its partnered solar contractor paid poor Black teenagers a monthly stipend to promote the company through door-knocking—labor that the non-profit heralded as preparation for becoming “entrepreneurs and sustainability leaders.” This entrepreneurial focus infused the weekly “boot camps” that the young “pioneers” were required to attend. Here, Damien, the non-profit’s founder, and a white salesman representing the company, lectured these poor Black teenagers on the importance of hard work, explaining they could “change the world” by marketing a “sustainability giant.” The pioneers were told that the more homeowners they recruited, the greater their chance of launching careers in renewable energy, uplifting themselves while selflessly bringing sustainability to the “hood.” Centered on both the individual and the community, this “win-win” rationale employed the narrative structure of the American pioneer myth, which positions one’s personal initiative as part of a historical trajectory that is greater than the individual self (Prasad 1997).

Damien explicitly spelled out these connections when I asked him about the pioneers brand: “I wanted a name that was synonymous with innovation and entrepreneurship. And . . . when I think of pioneers, I think of those individuals who ventured into the American West and expanded our country. Solar energy can be considered the new age gold rush, especially in regards to workforce development for low- and moderate-income communities.” In conceptualizing solar as a contemporary gold rush, Damien rendered his community as a frontier ripe for technological development and jobs. In this way, the pioneer narrative highlights the social promise of a market-based energy transition, invoking individual initiative in service of collective upliftment vis-à-vis corporate marketing.

Damien’s invocation of “individuals . . . ventur[ing] into the American West” also serves as a reminder that the frontier myth creates a narrative structure for environmental protection in the United States, as an imaginary of settlers enacting their rugged individualism through the wilderness gave shape to American conservationism (Cronon 1995). While NYC is the antithesis of wilderness, as a metropolis saturated with rooftops in an era of solar technology, it is arguably no less ripe for reflexive environmental action. But in the context of *consumer-oriented*

decarbonization policies, this potential proves meaningless if it's not felt by the individuals who own and live beneath those rooftops. Thus, the decentralized spatiality of residential solar and market-based decarbonization strategies collectively necessitate provocative appeals to individual initiative—narratives that affectively cohere with the frontier myth. Consequently, some renewable energy champions like Damien attempt to generate enthusiasm for “the clean energy economy” by positing solar entrepreneurs as the twenty-first-century iteration of yesteryear's westward-bound pioneers.³ Such efforts to infuse the solar market with a sense of excitement, then, overlook the colonial violence of the settler origin story, evincing “the desire on the part of the subject of political modernity both to create the past as amenable to objectification and to be at the same time free of this object called ‘history’” (Chakrabarty 2007, 244).

Yet the Solar Pioneers' door-to-door marketing work did not prove as exciting as Damien's frontierist narrative made it seem. Far from rugged individuals traversing unsettled terrain, the Pioneers were responsible for ringing doorbells, reciting a script, sharing the solar contractor's propaganda, collecting income data, helping homeowners begin financing paperwork, and scheduling roof assessments. This is tedious, often thankless work that requires tremendous patience, as most homeowners don't come to the door, and those who do are often disinterested in unsolicited sales pitches. The pioneer here seems less like a rugged individual bringing civilization to untamed outdoors, and more like a door-to-door knife salesman—entrepreneurial but not groundbreaking. So when Damien employs the pioneer trope, he aims to inject a sense of purpose and moral gravitas into work that might feel as though it's run-of-the-mill corporate marketing.

Some of the teenaged pioneers indeed found this work boring, but others took inspiration from the pioneer brand, which created the affective space for them to articulate a sense of initiative. These contrasting dispositions became evident when I canvassed with the pioneers for several weeks; the non-profit had enlisted me as an accomplished “doctor” who could demonstrate Black excellence to the young people. Six of the ten pioneers comported themselves as teenagers simply doing a minimum-wage job; they recited the door-knocking script without gusto, often slouching as they waited on doorsteps with a vacant stare, appearing like they were doing what they were supposed to do, rather than something they felt called to do. The white representative of the solar company would periodically prod them to be frontier entrepreneurs, reminding them that we were doing “the work of pioneers” by “taking the lead” in “bringing the future to your friends and family.” These reminders never landed for the less

enthusiastic pioneers, who explained to me that while they supported solar energy, they joined the program to make some summer money.

Conversely, the pioneers who enthusiastically recited the company line about innovation and personal grit during the boot camps engaged in door-knocking with a sense of purpose, memorizing the sales pitch, standing upright with a smile before it was even clear if anyone was home, serenading their interlocutors with hyperbolic appeals about the solar innovations that would both save the planet and uplift the community. One of these pioneers, Randall, seemed intent on conveying to me his ingenuity, performing the pioneering entrepreneur as we marched between homes, clipboards in hand. Much like Steve, Randall passionately gestured to the unobstructed roofs of several small, nondescript houses. “You know what I see here? Opportunity. Opportunity for jobs for my community, opportunity for businesses . . . opportunity to make some serious paper.” As he said these words, he appeared to inflate his chest, speaking with the rhetorical comportment of a visionary—a man ahead of his time.

I don’t want to hear that we can’t do whatever we set our sights on . . . The first week we touched 491 houses and got 30 leads. . . . These numbers show that we can scale things up and . . . bring solar power to the ‘hood. When I told a person who doubted [us] . . . they couldn’t believe it. We’re pushing more houses to go solar every day.

The collective “we” here refers not to Randall’s community but to a cohort of pioneering individuals who, like him, see “opportunity” in destitute spaces and audaciously reject conventional wisdom. This opportunity spiel directly echoed Damien’s rumination on “pioneers” during the boot camp that preceded door-knocking that day; Damien had instructed his young ilk to see their community’s homes as “an untapped gold mine,” evoking the “gold rush” frontier. Thus, Damien’s frontier entrepreneurialism enabled Randall to discursively endow his work with a sense of purpose, de-situating it from rote clipboard canvassing. While Randall also harped on the need to “protect Mother Earth from collapse,” the frontier easily overshadowed such climatic urgency.

Unsurprisingly, Randall and the other pioneers who embraced the gold rush metaphor recruited more homeowners for solar than the pioneers who couldn’t care less about proving their worth through door-knocking. While I can only speculate as to whether the frontier narrative truly inspired the enthusiastic pioneers to invest themselves wholeheartedly in their work, it seemed evident that this narrative licensed an enactment of personal ingenuity vis-à-vis the pioneer

label, lending some excitement to canvassing. This narrative, then, was affective and thus effective (Mazzarella 2008), enabling a marketing approach that is integral to market-based energy transitions. Residential solar markets are often driven by local neighbor endorsements (Bollinger and Gillingham 2012), such that consumer-oriented decarbonization often relies on community outreach. This, in turn, requires a charismatic presence capable of growing a consumer base in local settings—a competent promoter who speaks with a sense of personal conviction, tailored to a specific geography. A market-based energy transition therefore demands a localized entrepreneurialism, regardless of whether one frames this spirit in terms of pioneers or not.

That said, for many of my interlocutors like Deirdre, this entrepreneurialism was evidence not of an ideological commitment to market-based solutions but rather of a pragmatic approach to navigating the structural realities of racial capitalism. Yet even in the absence of an explicit neoliberal ethos or frontierist discourse, Deirdre's work relied on a feeling of entrepreneurial swagger (epitomized by Darren) that resonated with Randall's enthusiasm for market-based economic development—that which both he and Darren branded with the pioneer label.

I want to suggest, then, that “pioneers” offers a particularly apt framework for cultivating this entrepreneurialism in the residential solar industry because of solar electricity's decentralized spatiality: the fact it can be generated on rooftops and everyday spaces as opposed to centralized power plants. As Randall's ruminations on the “opportunity” of his community's homes suggest, this decentralized spatiality lends itself to a conception of the residential landscape as an untapped frontier, affectively transforming contiguous dwellings into a united front of possibility. In other words, solar's decentralized spatiality, combined with the fragmented homeowner engagement of a market-based energy transition, enables one to apprehend the underutilized rooftops of rugged spaces in terms of future prosperity, giving affective form to a frontier of sorts. Indeed, the settler imaginary of the enterprising man leaving his mark on untamed space resonates with a solar marketing program in which young “pioneers” are tasked with transforming a poor Black community's residential landscape into a gold rush through their individual initiative. Although these poor Black people are differently positioned than the white gentrifiers of Darren's co-op, the frontierism of their respective solar projects points to the ways in which solar's decentralized spatiality, market-based energy transition policy, and settler imaginaries work together to instill entrepreneurial affects in the renewable energy industry across intersectional lines. While Liboiron reminds us that their shared “pioneer”

citation is significant, that very word is less important than the structure of feeling that that word alludes to: the entrepreneur ushering in the future by leaving his mark on uncharted space.

This frontier entrepreneurialism can simultaneously cultivate an energy-transition politics inattentive to raced, classed, and gendered power—a politics in which any individual can summon the grit to transform vacant space—and an “energy ethics” (High and Smith 2019) through which the most marginalized have the power to transform their lot, complicating critical energy analyses that overlook how new configurations of settler infrastructure can inspire a sense of economic agency among people whom the fossil-fuel economy has left behind.

Even so, for all its frontierist bluster, Solar Pioneers yielded fewer than two dozen solar installations in two years. While these installations appreciably lowered local residents’ electricity bills, they were nowhere near the scale and pace of a rapid decarbonization plan (like NYC’s 2050 net zero goal). The Solar Pioneers therefore suggest that market-based residential energy transitions are animated less by an environmental teleology than an enterprising one: entrepreneurs making something of themselves through the frontier of sun-exposed rooftops—a rather slow trajectory when viewed in relation to ambitious decarbonization goals.

SOLAR INSTALLERS’ RUGGED INDIVIDUALISM

I walked onto the rooftop expecting to see workers installing solar panels. Instead, I found the opposite: an installation crew removing already installed panels. The crew’s foreman explained to me that the panels’ racking system had been installed improperly, so they needed to start again. As this was a large rooftop, it would take a couple of days to undo the work already done, slowing down not only this project but also their company’s other solar projects. The foreman explained that the workers who installed the racking system had very little training and experience, and they were hired from a day-laborer center to make up for unforeseen labor shortages. The company preferred to contract with individual laborers instead of hiring more full-time workers to keep their labor costs low. The company’s HR director explained that this was necessary to match fluctuating consumer demand for solar. If they expanded their full-time workforce too rapidly when demand was high, it could raise their overall labor costs, affecting their ability to secure new customers with competitive prices. Yet insofar as this market rationale led to underqualified workers and thus delays in their projects, it slowed down the work of the energy transition, evincing one of the ways in which market logics can impede rapid decarbonization ambitions. I encountered numerous solar projects plagued by an unorganized workforce,

the product of companies' efforts to keep labor costs low to compete in the market, thereby hampering progress toward climate goals. Thus, market-based energy transitions require blue-collar solar installers committed to working within a disorderly, sometimes chaotic labor market centered on maximizing profits. While many installers have tried to unionize to address the low pay, lack of occupational safety protections, and lack of job security in this chaotic market, I encountered no shortage of workers who were alright with what they, too, perceived as suboptimal working conditions.

A frontier entrepreneurialism enables this acceptance, giving form to decarbonization strategies that partly operate through exploited workers' pride and grit. In interviewing and observing more than thirty solar installers, I encountered an individualist teleology of work that resembled that of the Solar Pioneers: enterprising men advancing society by leaving their mark on an emergent space. Much like Damien and Randall, these installers were committed to realizing their individual potential through the gold rush of a nascent industry, sensing personal opportunity in their efforts to transform the city's rooftops. More specifically, on these rooftops I observed a blue-collar entrepreneurial spirit enmeshed in the solar industry's particular frontier ambitions—the self-stylized strength and ingenuity of manual laborers, manifested amid a corporate imaginary of sustainable horizons.

The sheer physicality of solar installation work is foundational to this frontier entrepreneurialism. At its most physically draining, this work entails scaling a steep pitched roof for hours in 95-degree weather with direct sun exposure, precariously harnessed, sweating in thick construction garments, skin chafing, while delicately keeping your balance as you carefully drill and install racking. It's no more pleasant on flat roofs, where you might have to carry an eighty-pound ballast block up seven flights before running down to the ground floor to get another block, and then back up again before grabbing yet another, the scalding sun greeting you with every return to the roof. While there are some temperate days, there's also snow, sleet, hail, and freezing winds at the top of twenty-story buildings in the dead of winter, to say nothing of intermittently rainy days and air pollution—advisory days. Even when it's not so physically taxing, this work can be incredibly tedious. While using power tools, installing your first array, or learning the workings of electrical inverters can be edifying initially, after a while, these practices become boring, mind-numbing. None of the installers I followed—some of whom had been installing solar for a few months and others for a decade—enjoy the physicality of installation. Yet most of them claimed to love their jobs, mobilizing entrepreneurial discourses to demonstrate their commitment to hard labor.

Specifically, they regularly espoused upwardly mobile narratives focused on the power of the individual to shape his own destiny, linking their solar careers to their personal guile. “When we was coming up in the projects, everything around you tells you that you’re a nobody, that you can’t make it, like there’s nothing out here for young Black males,” explained Shane, a forty-five-year-old installer of three years who had worked as a construction laborer and repairman for decades.

So my mission every day, when I . . . come to the jobsite, is to prove them wrong, to show them what I’m made of . . . that I can use *my own two hands* to make something of myself, to provide for me and my own. No matter what you ask me to do—like, you want me to install . . . [the wire management system] in a few hours? Done. . . . I got a fire in me for excellence; everything I touch: excellence.

In Shane’s telling, his physical labor indexes his personal ingenuity in the face of structural barriers—a testament to his ability to prosper despite the odds. For Shane, his manual exertion is evidence that he is not beholden to societal constraints—his hands a cipher of self-sufficient individualism. Crucially, this hands-on dexterity is not particular to Shane’s solar-installation work. In his assessment, the manual labor of his erstwhile construction and repair jobs was just as symbolic of his personal ingenuity. Most of the installers who I spoke to echoed Shane’s ethos; the physical challenges of (solar *and* non-solar) blue-collar employment demonstrated their individual perseverance as working-class men (mostly of color).

The solar industry’s wages infuse this sense of personal ingenuity with entrepreneurial airs. *Relative to their previous jobs*, solar installation pays well. “It’s good money and they let us work overtime,” explained Bobby, an installer, when I asked why he subjects himself to what he characterized as the everyday physical discomfort of his job. “I don’t see myself doing this forever, but for now it’s a decent living compared to . . . my other options.” According to Glassdoor, NYC-based solar installers make about \$59,000 annually, a figure that aligns with the hourly wages my interlocutors shared with me.⁴ For many of the working-class men employed by the solar industry, installation work represents a source of (relative) prosperity that they couldn’t find elsewhere. Installation projects on local government-owned properties pay especially well—prevailing wages, which are three times the workers’ normal wages, considerably more than what many of them could earn doing anything else in the formal job market. While the

men strive to earn more, these wages buttress many workers' sense of self-sufficiency—that they have used their corporeal skills to escape precarious lives—installing in them entrepreneurial ambitions (described below).

The fragmented, rudimentary organization of NYC's solar industry fuses this entrepreneurialism with the frontierist ethos of sustainable energy professionals. Despite remarkable growth in recent years (due to government investment), the industry remains embryonic; the city's diversity of buildings, rooftop particularities, different ownership/tenancy arrangements, and bureaucratic codes make for challenging business conditions. As a result, many companies fold within a few years, no company has established a stronghold on the market, and solar entrepreneurs aspire to overcome structural hurdles to success. It is in this context that many installers with general industry knowledge aspire to start their own company, subscribing to a gold rush mentality that regards empty rooftops as the next frontier. While many laborers in the (non-solar) construction trades are similarly entrepreneurial, the solar industry's incipience and fragmented character generate a particularly strong entrepreneurialism among even the lowest-level workers. They regard solar's rapid commercial growth as a means of not greater collective labor power but of personal advancement and business ownership.

"I like being in a new industry, a growing industry, 'cause there's lots of opportunity to move up in the working world," explained Igor, a former installer who had advanced to crew foreman.

People [working] in disruptive businesses and disruptive technologies [i.e., white-collar tech professionals] are there for the same reason: opportunity to move up the corporate ladder. [Conversely] if you're in a [more] established industry, the steps to career progression are slow, so career progression is a key reason why I do solar.

Igor here draws a parallel between his own employment trajectory and that of corporate professionals, eschewing a labor politics predicated on blue-collar solidarity. Gabriel, a long-time installer, expanded on this sentiment by espousing a go-it-alone entrepreneurialism that many other installers echoed in our conversations:

I want to be working by myself. I want [to] . . . own my own small business. And [solar] . . . is the only way I see it for me to start my own shop. . . . One of my dreams is to be working for myself and be caring for myself.

Self-sufficiency through ownership is at the core of many installers' imagined trajectories, as the solar industry's decentralized landscape of small businesses affectively activates an entrepreneurialism that strives to counter structural disadvantages. Straying from a collectivist ethic, most installers I spoke to posited accumulation and enclosure as a corrective to their precarity—a sentiment that Kevin, a carpenter-turned-installer, aptly synthesized:

I've been coming up [from poverty] for a while in the construction and real estate game, and now [that I'm doing] solar, one of my goals is to create my own town—start a solar real estate empire and eventually buy a town that I own powered by solar. . . . So the information I'm learning from doing solar is gonna help me build my town.

In this statement, Kevin shares far more than personal advancement aspirations. His desire to start a corporate “empire” that enables him to not merely own property but to more specifically “buy a town” bespeaks the frontier logics of settler colonialism. For Kevin and many other installers, this frontier entrepreneurialism aligns with the corporeal work of solar installation, as the sense of personal sacrifice and resilience that animates physical labor among many working-class men of color coheres with capitalist dreams of overcoming their classed position with the master's tools—dreams that are particularly amenable to a nascent industry like solar, a new frontier.

Solar's environmental impacts further align this orientation to work with frontierist ambitions by rendering individual ingenuity as a means to societal progress. Specifically, installers often situate their labor in teleologies of climate action, articulating their sense of initiative by alluding to sustainable horizons. As Michael, a thirty-year-old installer, put it, “[I'm] proud to be out here sweating, lifting, fine-tuning—just busting my ass—for something that matters: sustainability tomorrow”—an assessment he offered on a muggy summer day in which he struggled to hoist several hundred-pound ballast blocks up five flights of stairs. While I cannot speak definitively about Michael's psyche, his narrative suggests that his work's environmental implications infuse the grueling experience of physical labor with a broader purpose, magnifying his sense of individual initiative.

For many installers from marginalized backgrounds, those environmental implications converge with an intersectionally situated pride in their craft: the sense of making something of oneself against the odds and being a responsible man. In other words, installers' environmentalist ethic is inseparable from a classed and gendered affect of sacrifice and commitment that accompanies the

act of physically installing solar: a high-minded selfless machismo—the pride in “busting my ass for something that matters: sustainability tomorrow.” Consider the zealous testimony of Kendall, a fairly inexperienced installer:

I’m doing this job because I can provide for my family and because we need it for the planet. This solar stuff, man, this is how we fight global warming, and we need that if our kids are gonna grow up and live on this planet. So I’m proud of my work every day, because when I wake up and go to work, I know I’m helping the planet, helping my kids survive, and my grand-kids too, doing something positive for the community. And if that wasn’t enough, I’m lowering the community’s energy costs, too. Saving [on] your energy bills and saving the environment at the same time.

In this statement, solar’s environmental impacts burnish a gendered personal responsibility—the imperative to be the male provider—situating Kendall’s labor in a trajectory of societal progress wrought by individual initiative.

The environmental facets of installers’ work also make their oft-exploitative employment more bearable, thereby normalizing an energy transition that operates at the whims of corporate profits. Although I did speak to one installer who tied his relatively low pay and lack of job-site safety to the broader moral imperative of “climate justice,” most installers performed an environmentalist ethic that legitimized installing solar irrespective of working conditions. I do not mean to suggest that these installers were indifferent to their employment terms, but, rather, that the pride of helping the environment engendered feelings of personal ingenuity that often did not translate to collective labor grievances.

In calling attention to the affective intersections of the solar industry’s nascent and environmental impacts, on the one hand, and solar installers’ sense of personal initiative, on the other, I aim to highlight how solar activates the imagination in ways that particularize a broader frontier entrepreneurialism, magnifying the pioneering imperative to make something of oneself in a consumer market through unsettled terrain. This affective constellation is integral to a market-based energy transition, normalizing the challenging physical work of a disorganized labor arrangement geared to profit-oriented decarbonization. While workers in many blue-collar industries perform entrepreneurial ambitions, my point here is that such individualistic trajectories are an essential component of *consumer-oriented* decarbonization plans because they enable workers to proudly take part in the *volatility of a fragmented labor market*—*volatility that doesn’t accompany large-scale, public-sector solarization policies* (Luke et al. 2017). Indeed, in

a settler colony built on racial capitalism, the energy transition is arguably more directly enmeshed in the pioneering temporality of blue-collar workers—their desire to leave their personal mark on spaces ripe with potential—than an urgent climate teleology espoused by people who don’t do physical labor.

That said, these workers’ ambitions, values, and orientation to the city differ considerably from those of the other “pioneers” I encountered. The entrepreneurialism of a working-class Black man pragmatically navigating the city’s blue-collar labor market differs from the “solutionism” (Lennon 2024) of Deirdre, the spatial imaginaries of unwitting green gentrifiers like Darren, or even the altruistic “gold rush” mentality of Randall. What ties together these very different comportments is an affective structure conditioned by the residential solar market: an enterprising excitement that is essential to the success of a consumerist, building-by-building approach to energy transitions.

CONCLUSION

When many climate advocates frame the energy transition in terms of an urgency pegged to the Gregorian calendar, they wield a universalizing linear temporality as an affective tool, using “big round numbers” to disrupt the masses’ sense of futurity. Thus, calendrical appeals for climate action exemplify what anthropologists call “time-reckoning,” instrumentalizing chronology to exercise social control (Munn 1992). As Nancy Munn (1992, 104) argues, such “time-reckoning is only one mode of temporalization,” but often this chronological instrumentality is affiliated with “market time,” while other coexisting temporalities are affiliated with “personal” phenomena not primarily shaped by capitalism (Bear 2016). As I have shown, though, the lived temporalities of the everyday people driving the energy transition are at once animated by the market and not exemplary of top-down time-reckoning. Capitalism doesn’t only “reduce time to a medium for the short-term generation of capital and the evaluation of worth” (Bear 2016, 490); it also works closely with entrepreneurial norms in the context of the American settler colony to produce temporal schemas centered on one’s personal growth through the development of untapped terrain.

The pioneer trope narrativizes this temporality, providing a shared language for imagining American trailblazers who establish themselves through unsettled space. This language informs how a range of American settlers situate themselves in the energy transition, as the untapped potential of sun-exposed surfaces is often rendered explicitly and implicitly as an emergent frontier. In other words, American capitalism gives form to a decarbonization temporality centered on individual success as opposed to climate collapse, as solar advocates transform energy infrastructure through a pioneering sensibility. The entrepreneurialism at

the heart of the pioneer myth also animates how blue-collar workers experience the temporality of solar installation in a market economy, inspiring a self-made-man trajectory that normalizes the solar industry's disorderly, extractive labor market. In these ways, differently positioned subjects enact the energy transition similarly by privileging a personal improvement trajectory over a planet implosion teleology, as the market creates the affective conditions for one to focus on their personal goals, even when they're trying to address climate change. This is partly why environmentalists like Darren enthusiastically participate in a market-based energy transition misaligned with climate scientists' urgent timelines.

Thus, efforts to address climate change must question the temporality through which we normatively realize futurity, mindful of the settler-colonial pasts that freight our apprehension of linear time. For when we challenge hegemonic renderings of temporality—colonial teleologies—we better “understand [how] the current state of ecological crisis” is “inherently invested in . . . pro-to-capitalist logics based on extraction and . . . dispossession” (Davis and Todd 2016, 764). This move, in turn, can enable us to heed Mark Rifkin's (2017, 2; emphasis original) call to supplant “time as an abstract, homogeneous measure of universal movement” with non-linear, anticolonial “temporalities.” A multi-temporal energy transition could simultaneously (1) prioritize *immediate-term* efficiencies through public-sector investments that aggregate—not individualize—energy upgrades, (2) embrace the *cyclicity* of organic energy by integrating solar with regenerative land stewardship (Lennon 2025), and (3) secure *long-term* resilience by deploying off-grid solar to strengthen long-standing communal governance infrastructures (e.g., mutual aid networks), de-situating energy from commodity frontiers by tying together the past, present, and future.

ABSTRACT

Scholars, activists, and politicians attempt to provoke urgent climate action by christening 2050 as the decisive date by which the United States must transition from fossil fuels. But I contend that calendrical teleologies do not actually motivate the everyday people, activists, and workers leading the U.S. energy transition. This article explores another temporal schema seemingly unrelated to climate: the American pioneer settling the frontier, realizing his destiny through individual initiative. I contend that this origin story works in tandem with contemporary entrepreneurialism to affectively animate a market-based approach to energy transitions that is anything but rapid. Thus, consideration of frontier temporalities can contextualize the sluggish pace of decarbonization. While many studies identify various catalysts of renewable energy adoption, my analysis of “the renewable energy frontier” suggests that these inquiries overlook the insidious individualism of energy transitions in a capitalist context, in which “the market” is misunderstood as an accelerator of change. [climate change; solar energy; settler colonialism; frontierism; market governance]

NOTES

1. See also Barack Obama, "Remarks by the President Challenging Americans to Lead the Global Economy in Clean Energy," White House website, 2009, <https://obamawhitehouse.archives.gov/the-press-office/remarks-president-challenging-americans-lead-global-economy-clean-energy>, last accessed August 1, 2022; "Opening a New Frontier: Duke Energy Renewables' 200-Megawatt Oklahoma Wind Project Delivering Power," Duke Energy, 2017, <https://news.duke-energy.com/releases/releases-20170209>; and National Park Service, "Innovation on the Oregon Trail: American Solar Challenge 2022," 2022, <https://www.nps.gov/articles/000/innovation-on-the-oregon-trail-american-solar-challenge-2022.htm>
2. Rachel Waldholz, "A Year In, Landmark U.S. Climate Policy Drives Energy Transition But Hurdles Remain," NPR, August 16, 2023, <https://www.npr.org/2023/08/16/1193726242/a-year-in-landmark-u-s-climate-policy-drives-energy-transition-but-hurdles-remain>
3. See also Barack Obama, "Remarks by the President Challenging Americans to Lead the Global Economy in Clean Energy," White House website, 2009, <https://obamawhitehouse.archives.gov/the-press-office/remarks-president-challenging-americans-lead-global-economy-clean-energy>, last accessed August 1, 2022; National Park Service, "Innovation on the Oregon Trail: American Solar Challenge 2022," 2022, <https://www.nps.gov/articles/000/innovation-on-the-oregon-trail-american-solar-challenge-2022.htm>
4. "Solar Installer in New York City, NY," Glassdoor, https://www.glassdoor.com/Salaries/new-york-city-solar-installer-salary-SRCH_IL.0,13_IM615_KO14,29.htm. Last accessed August 1, 2022.

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