A green economy promises to bring with it thousands of jobs—many more than will be lost because of the regulation needed to mitigate and adapt to climate change. But a green economy is also likely to magnify wealth inequality in some parts of the United States. The reason is that the people who lose jobs when pollution rules tighten are not going to be the same ones getting them when the green economy blooms. The kiln operator laid off from a cement plant in Virginia will not be installing rooftop solar panels in Albuquerque, and the next machinist hired at the Tesla plant in Grand Rapids will almost certainly not come from a strip mine in Appalachia. Job loss will almost certainly cause disproportionate harm to those on the lower end of the income scale. Based on their representation in today’s fossil-fuel industry, we can expect such job losses to affect whites, Hispanics (white and non-white), and African-Americans in significant numbers.1

At one time, environmental advocates would have been concerned with the fate of people losing their jobs, whatever the cause. Environmentalism at this earlier time understood environmental protection as also including social and economic wellbeing. The ideal assumed a collaboration between what we might call the regulatory state and the social welfare state. Through wise regulation, a robust social safety net, and checks against discrimination and exploitation, Americans would prosper in the marketplace, participate in civic life, and be able to cope with life’s inevitable struggles. To be sure, some people would stumble badly, or grave situations would swallow them up. No one is immune to those realities. But with proper safeguards and a fair playing field, the expectation was that most people would be able to recover from misfortune and return stronger. This notion, we emphasize, was the ideal, not the reality. But for many politicians and policy makers, it was a broadly shared source of motivation.

We think the term that best reflects this way of thinking today is social resilience, which we define as a population’s capacity to survive, adapt, and grow in the face of misfortune and change.2 One goal of this article is to recover the

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1 See infra note 113 and accompanying text.
2 We further develop our definition of social resilience in Part V, A. But we want to acknowledge early on that the word resilience can take on different meanings depending on the disciplinary context. An evolutionary biologist, for instance, might not understand
ideal of a united regulatory and social welfare state, and—in the spirit of social-resilience thinking—show how that union can be adapted for today’s challenges and encouraged to grow in ways that help Americans prepare for the social, technological and, economic changes ahead.

For reasons explored in this article, environmentalists and human welfare advocates lost track of each other, and environmentalism turned away from its earlier concern with distributional issues. For example, witness the response of today’s environmentalist when a business leader thunders against “job-killing” regulation. Our environmentalist will first argue that regulations aren’t really responsible for many layoffs, which is true. She’ll then say that environmental regulation showers serious benefits on millions of people by extending their lives, quelling their kids’ asthma attacks, or allowing clear views of the Shenandoah. Among those benefits could be a slate of new jobs as industry re-tools to clean up its act—so many jobs that often they will exceed the number of jobs lost. All of that is true too.

But environmentalists do not usually take the third step: the one where they would consider how regulation-induced job loss (whatever the offsetting benefits) will harm localized populations and how government might work to avoid or assuage that grief. As we will show, it is possible to adopt equally protective regulations that help contain job loss. In addition, environmentalists can advocate for programs that will assist workers who lose their jobs to move to new ones and that foster economic development in communities hit hard by unemployment.

By ignoring this third step, environmentalists miss an opportunity to strengthen social resilience. There are exceptions, of course. Prompted by the environmental justice (EJ) movement, environmentalists have at times widened their circle of concern to include distributional inequalities and non-environmental aspects of community well-being. In supporting home-renovation programs for lead abatement, they’ve pushed for community jobs too. They have joined marches in Flint, Michigan, where residents have championed voting rights and resilience as including an “adapt and grow” element—it being enough for a species or organism to assume any “steady-state” after experiencing a disturbance. See generally Lance H. Gunderson, Ecological Resilience: In Theory and Application, 31 ANN. REV. OF ECOLOGY & SYSTEMATICS 425 (2000). But in the study of social resilience—that is, resilience within human communities—elements relating to adaptation, transformation, and growth are widely acknowledged. See Keck, infra note 114.

3 See ARLIE RUSSELL HOCHSCHILD, STRANGERS IN THEIR OWN LAND: ANGER AND MOURNING ON THE AMERICAN RIGHT 259 (2016) (noting, according to Mass Layoff Statistics kept by the Bureau of Labor Statistics, that from 1987 to 1990, only 0.1 percent of all layoffs were “environment and safety-related” and that more recently in 2012, layoffs attributed to “government regulations/intervention” made up only 0.28 percent of the year’s total).

4 See infra notes 80-81.
government accountability, as well as safe drinking water. Short on resources, but rich in the understanding of social resilience, EJ advocates have long sought to fuse the welfare and regulatory states.

When environmentalism fails to consider distributional consequences like job loss, it drifts from the progressive ideals that American leaders have long extolled. Addressing Congress soon after the beginning of the Civil War, Abraham Lincoln declared it to be the “leading object of government” to “lift artificial weights from all shoulders—to clear the paths of laudable pursuit for all,” and, in words often quoted, “to afford all an unfettered start and a fair chance in the race of life.” When regulators protect people from preventable illnesses, injuries, and early death, they are helping to support that fair chance. But when they ignore the negative effects that some regulations have on workers, their families, and their communities, they retreat from this moral commitment.

Then there is political reality. The kiln operator, the miner, and others disadvantaged by environmental regulation, or scared of the loss of potential jobs because of it, will oppose regulatory commitments. As we have seen, this voting bloc has supported politicians who deny climate change or at least drag their heels addressing this looming threat to our country and the world. In the voters’ well-being calculus, jobs are simply more important than addressing climate change or mitigating its consequences, and the failure of environmentalism outside of the EJ community to acknowledge their plight has led these voters to entrench their resentment of what they see as elitist progressive politics and the government programs this group supports.

In this article, we argue that environmentalism—as expressed in regulation and advocacy—must seek ways for the regulatory state and the social welfare state to work together. The best way for this to be done, we think, is by looking at communities in terms of their overall social resilience, as opposed to focusing on the maximization of narrow measures across a national population. Our call for explicit cooperation is one not usually discussed in legal scholarship, particularly in the environmental field. And, as we’ve suggested, environmental advocates are only marginally better at this. But a cooperative approach is important. Since environmentalists and human-needs advocates are working for a common purpose, their joint efforts would increase the likelihood that everyone has a fair chance in the race of life. In addition (and more practically), environmentalists cannot expect a fair hearing from disgruntled voters in rural Ohio or hard time Mississippi, until their concerns resonate with communities in those places.

7 See HOCHSCHILD, supra note 3, at 21 (describing the opposition of residents in Lake Charles, Louisiana, a hub of the petrochemical industry, to federal environmental protections).
Our argument has four parts. Part I shows that social welfare has been a central aspiration of American government since the founding and links that ideal to notions of collective positive liberty and to a widely shared narrative about nature and the American landscape. Part II shows how environmentalism in the twentieth century originally embraced and supported the aspirations of the social welfare state, but gradually drifted away from that and toward a model dominated by narrow goals, technocratic standards, and an emphasis on producing aggregate benefits for a national population. Part III finds hope in the counter example of the EJ movement, which highlights distributive equality and non-environmental factors that also affect community wellbeing and social resilience. The lessons of EJ are the key to expanding the goals of environmentalism to include the concerns of both the regulatory and social welfare state. Part IV takes social-welfare thinking, environmentalism, and the EJ movement and positions them within the frame of social resilience. In this discussion, we suggest how advocates of environmental regulation can increase their effectiveness by actively supporting goals of the social welfare state. Then we suggest how that might be done in preparing for the transition to the green economy.

I. A FAIR RACE

Throughout most of the nation’s history, Lincoln’s “fair chance in the race of life” has in some form existed as a national commitment, but there are caveats. Commitments like these inevitably ebb and flow with politics, and even Lincoln was careful to qualify government’s leading object as subject to “partial, and temporary departures.” More significantly, any talk of America’s historical ideals must be tempered by the reality that the nation’s rapid development was made possible by the plunder of land and labor on epic scales. That history, from which so many current ills can be traced, will be considered in our prescription for reform. But before that, we explain why environmentalism is key in promoting a fair chance in the race of life.

A. The Paradox of Liberty

It may seem surprising that the nation’s commitment to social welfare dates back to the beginning of the country. After all, the framers fretted continuously over the scope of federal power. But they were not anti-government. To the contrary, Thomas Jefferson declared in the Declaration of Independence that government is instituted to secure “Life, Liberty and the pursuit of Happiness,” rather than adopting Locke’s definition of fundamental rights as

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8 Id.
9 DECLARATION OF INDEPENDENCE para. 2 (U.S. 1776) (emphasis added)
“life, liberty and property.”

Jefferson’s replacement of “property” with “pursuit of Happiness” signals that “people empower government in the expectation that it will help them realize or achieve security and happiness.” Since 1776, Congress has passed countless laws to protect Americans from economic, social, health and safety risks, producing a mixed economy of private markets and government intervention. These laws are aimed at Lincoln’s fair chance in the race of life.

Lincoln’s dedication to a fair chance in the race of life recognized the two sides of freedom discussed by Isaiah Berlin in his essay, *Two Concepts of Liberty.*

Berlin started with the concept of “negative liberty” which he defined as the absence of obstacles that are external to a person, which would include the absence of government restraints. There is also “positive liberty” which Berlin defines as the availability of meaningful choice and the capacity to exercise it. Positive liberty refers first to “the range of issues or problems over which one can exercise control” and second to the “resources, both material and non-material, that enable one to envision alternatives and carry them out.”

An exclusive focus on protecting negative liberty misses the ways that unregulated markets deny less advantaged individuals control over their own lives, limiting their positive liberty. When individuals lack meaningful choice through no fault of their own, they lack positive liberty in the sense that they do not have meaningful choice or the capacity to exercise it. When government removes such obstacles, as for example, by reducing the cost of education or training for those who cannot afford it, despite their best efforts, government increases their positive liberty.

Berlin is not the only political philosopher to find that freedom requires meaningful opportunity and choice. John Rawls argues that for citizens to be free and equal, reasonable and rational, they required a set of “primary goods” that include both various negative liberties and “positions of authority,” “income and wealth,” and the kind of social recognition that “gives citizens a sense of self-worth and the confidence to carry out their plans,” which are positive liberties.

Amartya Sen, whose theories now animate human-rights assessments at the United Nations, grounds the ability to exercise personal freedom in a bundle of real-life “capabilities” that allow individuals to “lead the kind of lives they value—and have

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13 See id. at 121-22. This concept of negative liberty clarifies “’what is the area within which . . . a person or group of persons . . . is or should be left to do or be what he is able to do or be, without interference by other persons?’ Id. 
14 See id. at 131-34.
15 Id.
reason to value.” At minimum, the bundle includes things like “being able to avoid such deprivations as starvation, undernourishment, escapable morbidity and premature mortality, as well as . . . being literate and numerate, enjoying political participation and uncensored speech and so on.”

Government can help people build these capabilities by facilitating affordable access to safe housing, workplaces, health care, and the like. Efforts to boost positive liberties en masse, whether effected through regulation or redistributions of wealth, often come at the expense of docking the negative liberties of those more powerful. “Freedom for the pike is death for the minnows.” The ultimate question is what mix of government and markets we ought to have in our country. Significantly, we must avoid the idea that there is some optimal arrangement of negative and positive liberties that is true for all time. The best we can do is to maintain what Berlin, in a later essay, would call a “precarious equilibrium,” always striving for a better outcome as our understandings of individuals and societies change.

As long as the mix between negative and positive liberty is determined in a democratic system, the majority of citizens, subject to constitutional constraints, are entitled to choose this mix as they define the type of society in which they wish to live. In other words, “government . . . is [a] central area in which members of society choose and legitimate . . . their collective values.” For this reason John Dewey described democracy as a “moral idea” rather than “as something institutional and external.” In other words, democracy “calls on men and women to build communities in which the necessary opportunity and resources are available for every individual to realize his or her particular capacities and powers through full participation in political, social and cultural life.”

17 AMARTYA SEN, DEVELOPMENT AS FREEDOM 18 (1999).
18 Id. at 36. For a deeper discussion of Sen’s “capabilities” approach and social resilience, see generally Robert R.M. Verchick, Disaster Justice: The Geography of Human Capability, 24 DUKE ENVTL. L. & POL’Y FOR. 23 (2012).
19 Berlin, supra note 12, at 12 (quoting R.H. Tawney) (quotation marks omitted).
21 These choices, of course, are subject to constitutional limitations on the scope of government. Even if it would somehow increase positive liberty, Congress is not permitted, for example, to unreasonably restrict freedom of speech. Richard Andrews, Cost-Benefit Analysis as Regulatory Reform, in COST-BENEFIT ANALYSIS AND ENVIRONMENTAL REGULATION: POLITICS, ETHICS AND METHODS 107, 112 (David Swartzman, Richard A. Liroff & Kevin Croke eds., 1982). Andrews elaborates: “The principal purposes of legislation are to weigh and affirm social values and to define and enforcing the rights and responsibilities of members of society, through representative government.” Id.
B. Positive Liberty as a Collective Value

The use of the democratic process to tag government with establishing positive liberty dates back to the founding era and continues to this day. The framers’ dominant aim in writing the Constitution was not to prevent positive government as some have suggested, but to ensure that government would serve the public interest rather than the interest of some faction. As James Kloppenberg explains, ours was “a constitution designed to bring order and to secure the common good by channeling popular sentiments into productive political engagement.” In fact, the idea of the “common good” was a constant concept in nineteenth century political and legal thought, and was widely discussed in American society. This does not mean the founders agreed about what constitutes the common good or how best to pursue it, but they were committed to using government to improve the lives of the country’s residents.

At the same time the importance of negative liberty has never been far from center stage in our political life. The history of government’s support of positive liberty has been one of cycles between periods of government expansion and longer periods of relying on the market system to promote liberty.

This yin and yang of America’s political values can be seen first in the election of Andrew Jackson and the long period of laissez-faireism (from the 1820s to the 1880s) that he helped establish.

Nevertheless, the country during this time also elected Abraham Lincoln, who supported government investment in economic infrastructure as a way of supporting the “right to rise” and of bringing “economic opportunity to the widest possible circle of hardworking Americans.” And Lincoln opposed the South’s secession from the union because, among other reasons, it was an effort to establish an independent nation based on the denial of opportunity to African-

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28 See id. at 41-42.
29 See id. at 10.
30 For a discussion of the scope of these disagreements, see SHAPIRO & TOMAIN, supra note 26, at 18-21.
Americans. As one of us has observed, “[f]ighting the Civil War was President Lincoln’s greatest achievement in establishing a fair chance in the race of life.”

The progressive era was a reaction to the excessive negative liberty that preceded it. Thus, Theodore Roosevelt supported regulation of monopolies and business trusts in order to create conditions of fair economic progress and achieve what President Roosevelt called a “genuine democracy.” The minnows were getting even. Hebert Croly, one of the most significant progressive writers, harked back to Lincoln’s call for a fair race when he wrote, “It would be absurd to claim that, because all the rivals toed the same mark, a man’s victory or defeat depended exclusively on his own efforts.”

The United States again turned to government for positive liberty in the New Deal when the Great Depression left the country reeling from its economic woes. Franklin Roosevelt’s Four Freedoms speech made the connection between democracy, the role of government, and fair opportunity:

For there is nothing mysterious about the foundations of a healthy and strong democracy. The basic things expected by our people of their political and economic systems are simple. They are: Equality of opportunity for youth and for others. Jobs for those who can work. Security for those who need it. The ending of special privilege for the few. The preservation of civil liberties for all.

It was not until the 1960s when the country again turned to government to establish a fair chance in the race of life by addressing racial and other

33 See id. at 3 (Lincoln largely fought the Civil War over . . . establishing a role for government in securing and guaranteeing economic opportunity for its citizens.”); JILLSON, supra note 11, at 99 (observing that “Abraham Lincoln’s American Dream was of a nation in which every man, by which he came almost to mean men and women of every color, had an unobstructed chance to rise in society by dint of their own preparation, strength and effort.”)


37 Franklin Delano Roosevelt, President of the U.S., Four Freedoms Speech, State of the Union Message to Congress (Jan. 6, 1941) (transcript available at http://www.americanrhetoric.com/speeches/fdrthefourfreedoms.htm). Four years later, in his last State of the Union address, President Roosevelt pressed for an “Economic Bill of Rights” that would commit the country to ensuring that Americans earned enough for adequate food, clothing, shelter, medical care and education, as well as protection in old age. See Franklin Delano Roosevelt, President of the U.S., State of the Union Message to Congress (Jan. 11, 1944) (transcript available at http://www.fdrlibrary.marist.edu/archives/address_text.html.)
discrimination, an unhealthful environment, deep poverty, and dangerous products and workplaces, among other threats to a fair chance. Echoing Jefferson’s words in the Declaration of Independence, Lyndon Johnson explained his Great Society legislation as ensuring “the happiness of our people.”

Although the country has largely been focused on negative liberty since 1980, Barack Obama, like President Roosevelt, reminded Americans of the relationship between democracy, government, and fair opportunity:

What makes us exceptional—what makes us American—is our allegiance to an idea articulated in a declaration made more than two centuries ago: “We hold these truths to be self-evident, that all men are created equal; that they are endowed by their Creator with certain unalienable rights; that among these are life, liberty, and the pursuit of happiness.”

. . . [H]istory tells us that while these truths may be self-evident, they’ve never been self-executing; that while freedom is a gift from God, it must be secured by His people here on Earth . . . . Together, we determined that a modern economy requires railroads and highways to speed travel and commerce, schools and colleges to train our workers. Together, we discovered that a free market only thrives when there are rules to ensure competition and fair play. Together, we resolved that a great nation must care for the vulnerable, and protect its people from life’s worst hazards and misfortune.

C. Nature as a Foundation for Liberty

As this breed of liberty galloped from the Enlightenment to Progressivism and beyond, it carried with it an ecological narrative distinct from the European philosophies that animated the country’s founding documents. This narrative often resembled more myth than fact. It also either ignored or marginalized the continent’s indigenous peoples by supporting initiatives that would divest many generations of their native lands. Still, the symbolic meaning of liberty in the

40 For a detailed account of how U.S. conservation law “functioned to dispossess Tribes of
United States was—and remains—bridled to this particular understanding of nature. In this understanding, the exceptionalism of American liberty relies, in part, on the exceptionalism of the American landscape, whose bounty, splendor, and scale provide both the material resources and moral inspiration for building a better future.

Thus, Thomas Jefferson rhapsodized about the nation’s small farmer-landowners—“the chosen people of God”—whose surroundings provided not only food and shelter, but also a quasi-sacred space where “labor in the earth” would nurture “substantial and genuine virtue.”41 The journalist Horace Greeley “portrayed the great natural monuments of the West, such as the ancient redwood groves of the Pacific coast, as unique icons of democratic civilization far grander than any built monument of ancient Greece or Rome.”42 Walt Whitman found in the grandeur of natural cycles a template for his characteristic American credo. (“I swear there is no greatness or power that does not emulate those of the earth!/I swear there can be no theory of any account, unless it corroborates the theory of the earth.”)43 Frederick Law Olmstead’s vision of the virtuous mix between urban and rural landscapes is memorialized in resplendent parks and university campuses across the country.44 Theodore Roosevelt, who as president used his authority to set aside 230 million acres of public land in an array of national parks, monuments, and forests, believed that universal access to “the hardy life of the open” was both a pre-condition and an entitlement of American civic life.45


43 Walt Whitman, A Song of the Rolling Earth, in LEAVES OF GRASS 177, 181 (1892).


45 The phrase comes from an oft-cited quotation inscribed inside the Theodore Roosevelt Memorial Rotunda at the American Museum of Natural History in New York City:

There is a delight in the hardy life of the open.
There are no words that can tell the hidden spirit of the wilderness, that can reveal its mystery, its melancholy and its charm.
The nation behaves well if it treats the natural resources as assets which it must turn over to the next generation increased; and not impaired in value.
Conservation means development as much as it does protection.

IAN TYRELL, CRISIS OF THE WASTEFUL NATION: EMPIRE AND CONSERVATION IN THEODORE ROOSEVELT’S AMERICA 251 (2015) (quoting the inscription). But North America was not the only place where Roosevelt delighted in the “hardy life of the open.”
The point is that this version of national identity envisioned the natural world as more than a storehouse of goods: it was an inspiration and a template for the founder’s democratic experiment. It was a heritage. And, though not always expressed this way, the bounty of nature was central to both negative and positive liberty. In the negative sense, the expanse of the landscape was thought to promote self-reliance and provide room for more diverse activities and ways of organizing without undue oversight. In the positive sense, nature offered access to the material, aesthetic, and cultural resources for living the kind of multi-dimensional life that one has reason to value.

In the twentieth century natural and ecological principles started to influence how thinkers and writers understood human communities. John Dewey, for instance, sometimes viewed social systems through the lens of natural systems. He reflected upon how the environment influenced the activity of human “organisms” and how human activity, in turn, transformed the environment. And, as Michele Dauber notes, Franklin Roosevelt sought to rally the nation behind government efforts to lift the country out of the Great Depression by equating threats to nature (the natural environment) and threats to community (the human environment):

The strong arm of the Nation is needed not in immediate relief alone. We all grant that. It is needed in taking measures of prevention before the natural disasters occur. It is needed equally in taking measures to prevent economic disasters, which are not natural but are made by man.

She also explains how Roosevelt “went even further, melding ruined landscapes and ruined lives into a single vivid metaphor, almost as if visually overlaying one another.” Describing the extensive drought that had turned the West into a “national dust bowl,” the President pointed out that “through the years of this depression we had destruction even more tragic than that—waste in men and women. . . . Of all the appalling waste of the days of false prosperity, human erosion has been the most calamitous.” The President concluded by equating government efforts to respond to natural and man-made disasters as promoting the same positive liberty, whether it results in the restoration of the

He had earlier used the phrase to describe his hunting adventures in Africa. See THEODORE ROOSEVELT, AFRICAN GAME TRAILS: AN ACCOUNT OF THE AFRICAN WANDERINGS OF AN AMERICAN HUNTER-NATURALIST ix (1910) (“There is delight in the hardy life of the open, in long rides rifle in hand, in the thrill of the fight with dangerous game.”)

46 See generally JAMES CAMPBELL, UNDERSTANDING JOHN DEWEY 22 (1995).
48 Id.
49 Id.
natural environment or the human environment: “We no longer believe that human beings hit by flood, drought, unemployment, or any other national disaster should be left to themselves with the sole help of such charity as may be available to them.”

D. The Hope for Liberty

In Part II, we will argue that the pillar of liberty we described above is slowly melting in the mind of the modern environmentalist. But before doing that, we must briefly confront a historical reality. As we suggested earlier, the pillar of liberty was never as thick or as high as it needed to be. Lincoln’s “fair chance” and Theodore Roosevelt’s “hardy life of the open” wilts when measured against a national history of slavery, genocide, and female oppression. Against that triple sin, is there any hope for a claim based on old-fashioned, American liberty? The answer is yes, as long as we stress the aspiration and not the practice. And as James Baldwin wrote in 1959, we really have no choice:

Any honest examination of the national life proves how far we are from the standard of human freedom with which we began. The recovery of this standard demands of everyone who loves this country a hard look at himself, for the greatest achievements must begin somewhere, and they always begin with the person. If we are not capable of this examination, we may yet become one of the most distinguished and monumental failures in the history of nations.

Those who love this country are required to look within themselves in order to recover America’s promise of human freedom. That is the first step toward making the promise a reality. As Martin Luther King, Jr. taught, “Democracy transformed from thin paper to thick action is the greatest form of government on earth.”

Winona LaDuke, an environmental activist and member of the Ojibwe Nation, twice represented the Green Party as its nominee for Vice President of the United States. Known for the slogan, “I am not a patriot to a flag; I’m a patriot to a land,” LaDuke galvanized tens of thousands of activists over the years by presenting environmentalism as a reflection of both Native American values and U.S. ideals. Invoking Jefferson’s words, she argued that common access to “air,

50 Id.
52 Martin Luther King, Jr., The Montgomery Bus Boycott, in RIPPLES OF HOPE: GREAT AMERICAN CIVIL RIGHTS SPEECHES 210, 211 (Josh Gottheimer ed., 2003).
water, and sunlight”—a principle she associates with Iroquois philosophy—is elemental to “life, liberty, and the pursuit of happiness.” Our mission going forward will be to reclaim America’s promise of liberty and integrate it into our work for the planet. But first we must see how environmental law lost its way.

II. ENVIRONMENTAL LAW LOSES ITS WAY

As Franklin Roosevelt’s words suggest, the protection of the natural environment and the human environment are both necessary to ensure citizens have a fair chance in the race of life. True to this insight, environmentalism in its formative years (the 1950s and 1960s), was concerned with “power, equality, and the human environment.” For these “old environmentalists,” the environment included “where we live, where we work, where we play and where we learn.” The aim was to create a healthy environment and a fair economy. This perspective produced “a multifarious set of research, reform and activist agendas, concerned with urban neighborhoods, industrial health, and economic power.”

Then, as Jedediah Purdy has documented, environmental advocacy in the 1970s abandoned its concern with the holistic approach. The “mainstream environmentalists” narrowed the spotlight to a more limited part of the stage, namely the “natural world, such as waterways, forests, and non-human species.”

As an initial matter, Purdy argues this shift is associated with the robust economic growth that occurred prior to 1970, created a perception that a growing economy had been successful in reducing economic inequality. Environmental advocates at the time were aware that, despite the more inclusive economy, some populations, particularly African Americans and the Appalachian poor, had been excluded from the “rising tide raises all boats” economy, but they attributed the

56 Id. at 8.
57 Id. at 6.
58 See id. at 3.
59 Id. at 8 (citing LUKE W. COLE & SHELIA FOSTER, FROM THE GROUND UP: ENVIRONMENTAL RACISM AND THE RISE OF THE ENVIRONMENTAL JUSTICE MOVEMENT 17 (2001)).
60 See Purdy, supra note 55, at 13-14.
situation of these groups to structural injustice and overt discrimination. They therefore assumed that civil rights enforcement and social welfare programs were necessary to reduce this economic inequality. In other words, the task of fostering more economic equality was someone else's job.

Purdy identifies a second reason for this blinkered view. Since the mainstream environmental movement used litigation and elite advocacy as their tools for advancing environmental policy, advocates did not create ways for disadvantaged populations to inform their advocacy. Beyond this constraint, litigation is (and remains) a playing field that privileges wealth and expertise, both in short supply among those who are disadvantaged. If environmental justice depends on poor people suing, the likelihood of addressing distributional impacts is limited. Even if disadvantaged people do manage to mount a lawsuit, litigation became a less useful tool after the Supreme Court held that plaintiffs must show actual discriminatory intent to establish a violation of the Equal Protection Clause or to assert a private cause of action under Title VI of the Civil Rights Act. Proof of a disparate impact is not enough.

To these reasons we would add that environmental advocates have had their hands full fending off the better-financed and fiercely determined opponents of environmental regulation. The same has been said for human needs advocates. Constantly under fire, the two groups of advocates have been preoccupied defending their immediate concern—respectively the regulatory and social welfare states.

We also see another reason and perhaps today the most influential reason: the dominant role of economics, particularly cost-benefit analysis, in assessing regulatory policy. The fact that every administration since Ronald Reagan has

63 See id. at 18.
64 See id. at 22, 24.
65 See Cole & Foster, supra note 59, at 121-22.
66 See Purdy, supra note 55, at 18; Washington v. Davis, 426 U.S. 229 (1976) (dismissing a claim by applications for the Washington, D.C. police department that an exam given to prospective employees violated the equal protection clause because of its disparate impact on minorities); Pers. Adm’r of Mass. v. Feeney, 442 U.S. 266 (1979) (holding that the foreseeable disparate impact of legislation is a violation of the equal protection clause only if legislators were motivated by a desire to cause the impact).
required executive branch regulatory agencies to assess proposed and final rules in terms of their costs and benefits indicates the institutionalization of this methodology in the policy assessment process of the government.\textsuperscript{69} And, in light of this long-standing practice, the Supreme Court has identified cost-benefit analysis as a “standard part of the background of administrative law practices,” leading the Court to declare that an agency’s failure to undertake such analysis generally constitutes an “unreasonable” action.\textsuperscript{70}

The importance of cost-benefit analysis in regulatory policy assessment has led to a defense of environmental regulation using this analysis, which in turn has created a blind spot concerning the distributional impacts of the regulations that environmentalists support. To appreciate this cause and effect, it is necessary to look at the logic of cost-benefit analysis. Since it is not economically rational for the government to invest in public works projects whose costs exceed the benefits, it is also not rational for the government to require regulatory entities to invest in protecting the public and the environment when the costs exceed benefits.\textsuperscript{71} Then the government only takes actions in which the benefits equal the costs, a cost-benefit test that satisfies Pareto efficiency. Pareto efficiency is achieved when at least one person is better off and no one worse off.\textsuperscript{72} Since those who gain from an action can afford to pay off those who have economic losses and still be better off, a cost-benefit test insures that no money is wasted on actions where someone is made worse off as an economic matter, which would make the action inefficient.

As applied in the context of government policy, however, actual Pareto optimality cannot be satisfied. Every government project has winners and losers and compensating the losers is usually not feasible. The solution proposed by Nicholas Kaldor and John Hicks is to use a hypothetical form of Pareto optimality.\textsuperscript{73} Under this approach, a governmental policy should be undertaken if the economic gains to the beneficiaries are sufficient that those who benefit could compensate those who suffered economic losses because of the project, even


\textsuperscript{70} See Michigan v. EPA, 135 S. Ct. 2699, 2707-08 (2015).


\textsuperscript{72} Id. at 449 n. 91.

though no compensation is actually paid.\textsuperscript{74} In this way, Kaldor-Hicks efficiency disregards the actual fate of those who suffer losses because of government efficiency. To Kaldor and Hicks, their fate is irrelevant in economic theory because the government’s action increases total economic wealth.\textsuperscript{75}

The appeal of cost-benefit analysis to environmental advocates is based on its usefulness in defending robust environmental protections.\textsuperscript{76} While not all environmental advocates have abandoned their opposition to the use of cost-benefit analysis,\textsuperscript{77} all pretty much have accepted this methodology for purposes of defending environmental regulation. One reason is the dominance of the methodology. As a practical matter, environmental advocates have been forced into a “when in Rome do as the Romans do” position. Another reason is that in using cost-benefit analysis, environmentalists have a great story to tell. There is ample evidence that environmental regulation creates more benefits than costs.\textsuperscript{78}

Because cost-benefit analysis offers no avenue to discuss distributional impacts, it pulls environmental advocates away from discussing economic equality. This dynamic can be seen in the response of environmentalists to the critics’ charge that regulations are “job killers.”\textsuperscript{79} The response of environmental advocates has been that regulation has a neutral impact on jobs or actually increases the number of jobs.\textsuperscript{80} Cary Conglianese and Christopher Carrigan, for

\textsuperscript{74} Shapiro & Schroeder, supra note 71, at 449 n. 91.

\textsuperscript{75} See John Mendeloff, The Dilemma of Toxic Substances Regulation: How Overregulation Causes Underregulation 33 (1988) (“It is inevitable that public policy will create losers who are beyond the reach of compensation.”); Sidney A. Shapiro & Thomas O. McGarity, Not So Paradoxical: The Rationale for Technology-Based Regulation, 1991 Duke L. J. 729, 740 (1991) (noting that economic analysts reply to distributional issues by answering that these issues “are beyond their bailiwick”).

\textsuperscript{76} See Richard L. Revesz & Michael A. Livermore, Retaking Rationality: How Cost-Benefit Analysis Can Better Protect the Environment and Our Health (2008) (arguing environmentalists would be more successful if they accepted the dominant influence of cost-benefit analysis and defended their objectives in those terms).

\textsuperscript{77} See, e.g., Sidney A. Shapiro & Robert L. Glicksman, Risk Regulation at Risk: Restoring A Pragmatic Approach (2003); Amy Sinden, Cost-Benefit Analysis, Ben Franklin, and the Supreme Court, 4 U.C. Irvine L. Rev. 1175 (2014); Shapiro & Schroeder, supra note 71.


\textsuperscript{80} See, e.g. Shapiro, Ruttenberg, & Goodwin, supra note 78, at 15-17; Josh Bivens, Congressional Testimony: Impacts of Federal Rules on Jobs and Wages, ECON. POLICY INST. (Mar. 2, 2016), http://www.epi.org/publication/congressional-testimony-triple-
example, report that “[n]otwithstanding [the] political rhetoric, the existing empirical research suggests that regulation does relatively little to reduce or increase overall jobs in the United States.”\footnote{81} A key reason for this neutral (and sometimes positive) impact is that when firms are regulated, they spend money on equipment and services that they need for regulation, and this economic activity creates jobs.

The environmentalists’ response, while accurate, adopts the language and perspective of economics. Environmental regulation is desirable because it produces greater benefits than costs, including a net increase in jobs or at least no decrease in jobs. In short, regulation satisfies Kaldor-Hicks optimality. This conclusion, we are confident, offers little solace to the workers and their families who have lost jobs because of more stringent regulation. Nor does it honor the country’s commitment to a fair chance in the race of life. That requires efforts to mitigate this issue of regulation-induced job loss. In contrast to this sort of environmentalism we find hope in the EJ movement, which emphasizes distributional equality and the role that non-environmental factors play in supporting community wellbeing and social resilience.

III. THE ENVIRONMENTAL JUSTICE MOVEMENT

The failure of mainstream environmentalists to consider distributional consequences gave rise to the EJ movement, which opposed the exclusion of human habitats as a concern of environmentalism, the failure to take distributional consequences into account, and the exclusion of vulnerable communities from having influence over environmental decisions that impact their human environments.\footnote{82} The problem, in a nutshell, is that mainstream environmental organizations “focus on things; rather than people.”\footnote{83} EJ advocates attribute this restricted orientation to the economic focus just discussed, noting that “[p]eople are treated as a homogeneous mass: if one benefits, all benefit.”\footnote{84} They also blame “a cultural attachment to defining environmentalism in terms of the nature world and “[r]acism and other prejudices.”\footnote{85} The EJ community in response has reconstructed the concept of nature to fit a more inclusive democratic vision. For EJ advocates, Theodore Roosevelt’s vision of nature as “hardy life of the open” is connected to a narrow class dominated by white, propertied men, nationalist, and

\footnote{81} Cary Coglianese & Christopher Carrigan, \textit{The Jobs and Regulation Debate, in DOES REGULATION KILL JOBS?} 1, 2 (Carey Coglianese, Adam Finkel & Christopher Carrigan eds., 2014).
\footnote{82} See Purdy, \textit{supra} note 55, at 7-8.
\footnote{83} EDWARD LAO RHODES, \textit{ENVIRONMENTAL JUSTICE IN AMERICA} 30 (2003).
\footnote{84} \textit{Id.}
\footnote{85} COLE & FOSTER, \textit{supra} note 59, at 30.
even racist.\textsuperscript{86} They therefore seek to turn the tables. Instead of using a vision of the environment to inform democracy, EJ activists used their vision of democracy to define environmentalism. In their view, environmental issues should focus on the things that were practically important to democratic life—fair distribution, rights of participation, community welfare, and the dynamics of power.\textsuperscript{87}

This reconstruction reflects insights from many theoretical approaches, from critical race theory, to feminism, to post-colonial theory.\textsuperscript{88} But it also bears a strong resemblance to John Dewey’s philosophical pragmatism. Pragmatists subscribing to Dewey’s school of thought stress context (i.e. “situatedness”) in developing substantive political goals.\textsuperscript{89} The idea is to choose the best combination of principles, “partly joined, partly disjoined,” rather than to choose the best single philosophy to set priorities.\textsuperscript{90} This is what EJ activists are doing when they fold real-world concerns like health, jobs, and safety into claims for environmental protection.

Like Dewey, EJ advocates also believe that democracy requires the whole community to participate. It works from the ground up. Deweyan democracy “empowers people to work together, initiate action, experiment, learn facts, and solve problems. It holds that empowerment is the key to resolving every kind of social problem.”\textsuperscript{91} EJ activists believe that too. They follow the precepts of community organizing which puts people up front and lawyers and other experts on tap.

Finally, Deweyan pragmatism pays heed to empowering the marginalized and the dispossessed. He strongly rejected the libertarian creed of negative freedom as the sole means of human fulfillment. That, he argued, only liberates power “that happens to be distributed by past accidents of history.”\textsuperscript{92} Rather Dewey insisted “the attainment of freedom conceived as power to act in accord with choice depends upon positive and constructive changes in social arrangements.”\textsuperscript{93} As previously discussed, Dewey believed democracy authorized, and indeed charged, citizens to choose the type of society in which they wished to

\textsuperscript{87} See id.
\textsuperscript{90} WILLIAM JAMES, \textit{PRAGMATISM} 79 (Harvard Univ. Press 1978) (1907).
\textsuperscript{91} Shutkin, \textit{supra} note 86, at 585.
\textsuperscript{93} Id.
live, and then, using their electoral power, to choose leaders who would use
government to achieve these aspirations. Thus, democracy at its best is a
regenerative force, moving those at the bottom of the heap to positions of political
agency. Like pragmatism, EJ requires us to watch the allocation of power and to
keep it fair and balanced.

The EJ movement has had some success in reconnecting the old
environmentalism with mainstream environmentalism. In Purdy’s assessment,
“No environmental group or agency will profess indifference to environmental
justice, and groups such as EarthJustice and NRDC have made significant
commitments to it.” And “[e]nvironmental justice claims have entered into the
lexicon of advocacy, where their uses range from mobilizing constituents to
drawing media attention, and anecdotal evidence suggests that such claims have
made a difference in siting and funding disputes that a review of the Federal
Register would reveal.”

In turn, these changes have produced policy results. Some states have
adopted environmental justice legislative mandates. At the federal level, Bill
Clinton issued an executive order that requires agencies to “make achieving
environmental justice part of [their] mission by identifying and addressing . . .
disproportionate high and adverse human health or environmental effects . . . on
minority . . . and low-income populations.” In the Obama administration, EPA
evidenced that it had heard the EJ advocates. It may be the only agency to
determine that an EJ issue exists, not only if an action would “create new
disproportionate impacts on minority populations, low-income populations, and/or
indigenous peoples,” but also if a rulemaking “[p]resent[ed] opportunities to
address existing disproportionate impacts” on such groups. EPA also instructed
rule makers to consider non-environmental stressors (including “nutritional or
health status, smoking, or other factors”) when considering community impacts.
This suggests a shift toward a holistic approach in understanding capabilities
(that is, the lack of positive liberties like health care).

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94 See supra notes 21-24 and accompanying text.
95 See CORNEL WEST, THE AMERICAN EVASION OF PHILOSOPHY: A GENEALOGY OF
PRAGMATISM 148-49 (1989) (finding in Pragmatism an emphasis on the fair allocations of
power).
96 Purdy, supra note 55, at 12.
97 Id.
98 See id. at 11.
100 ENVTL. PROT. AGENCY, GUIDANCE ON CONSIDERING ENVIRONMENTAL JUSTICE
DURING THE DEVELOPMENT OF REGULATORY ACTIONS 10 (2015),
https://www.epa.gov/sites/production/files/2015-06/documents/considering-ej-in-
rulemaking-guide-final.pdf (emphasis added) [hereinafter EPA GUIDANCE].
101 Id. at 14.
Yet, as the limited character of these developments suggest, there has not been a clear return to the old environmentalism. Purdy therefore asks about EJ, “[I]t a supplemental consideration mainly relevant to implementing familiar goals, or a continuing challenge to the identity and priorities of environmental law and politics?”102 Without trying to answer Purdy’s question, which is outside the scope of this article, we would say that one way in which mainstream environmentalism has not fully committed to taking into account environmental justice is found in its failure to acknowledge how regulation can cause some job losses and to offer solutions to help affected households and communities—while at the same time guaranteeing high levels of environmental protection. In the next part, we imagine how mainstream environmentalism might take up this banner.

IV. THE WAY FORWARD

A green economy promises to bring with it millions of jobs and many more than will be lost because of government efforts to reduce greenhouse gases, improve energy efficiency, and adjust to the changes in climate that cannot be prevented. Many studies make the point that the green economy is good for American jobs overall.103 But some researchers are now digging deeper and trying to understand the likely employment trade-offs at the state level. One of the most comprehensive studies of this type was recently published by Mark Jacobson, a professor of civil and environmental engineering at Stanford, and nine co-authors. Entitled 100% Clean and Renewable Wind, Water, and Sunlight (WWS) All-Sector Energy Roadmaps for the 50 United States,104 the study presents “roadmaps” for each U.S. state to convert its whole energy system (including transportation) to run only on “wind, water, and sunlight.”105 The good news is that the authors believe

102 Purdy, supra note 55, at 13.
105 Id. at 2093, 2093. The plans aim for the replacement of 80-85% of non-WWS energy by 2030, with total replacement by 2050. Id.
this can actually be done by 2050 with, as they characterize it, “little downside.”

The unsettling news is that in the employment markets of every state there will be a lot of churning. With a sum total of two million additional 40-year jobs at the end of this hypothesized transition, most states will be net winners. But some won’t. And even within those winning states, hundreds or thousands of people will lose their paychecks.

By this reckoning, California will gain 458,135 jobs, but lose 413,097 jobs. (Net gain: 45,038 jobs) Texas, will lose 571,429 jobs, but manage to claw back only 504,310. (Net loss: 67,119 jobs) States as diverse as Utah, Louisiana, and New York will net thousands of jobs. The states of Hawai‘i, Colorado, and Kansas will experience net losses. All told, Jacobson et al. foresee a nationwide gain of 5.9 million new jobs in the green transition and a loss of 3.9 million old jobs. That is a net increase of 2 million jobs.

While it is possible that some workers who lose a brown-sector job will find a green-sector job, switches like these seem unable to counter the overall trends described. Many skills are not so easily transferable, and opportunities will not necessarily pop up in the same part of the state where jobs are being lost. Job loss will almost certainly disproportionately harm those on the lower end of the income scale. Based on their representation in today’s fossil-fuel industry, we can expect such job losses to affect whites, Hispanics (white and non-white), and African-Americans in significant numbers.

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106 Id. Jacobson’s claim that existing technology could replace 100 percent of U.S. energy needs by mid-century has sparked considerable debate. See Christopher T. M. Clack, Staffan A. Quist, Jay Apt, Morgan Bazilian, Adam R. Brandt, Ken Caldeira, Steven J. Davis, Victor Diakov, Mark A. Handschy, Paul D. H. Hines, Paulina Jaramillo, Daniel M. Kammen, Jane C. S. Long, M. Granger Morgan, Adam Reed, Varun Sivaram, James Sweeney, George R. Tynan, David G. Victor, John P. Weyant & Jay F. Whitacre, Evaluation of a Proposal for Reliable Low-Cost Grid Power with 100% Wind, Water, and Solar, 114 Proc. of the Nat’l Acad. of Sci. 6722 (2017). We’ll stay out of that debate. It is enough for our purposes to show that any substantial progress toward a carbon-free economy will involve dramatic employment gains and losses. Jacobson’s critics do not really question that. If anything, their argument suggests that the effects of a substantial green transition would be more disruptive for the economy than Jacobson and his co-authors imagine.

107 The study includes both construction jobs and “operation jobs for the energy facilities alone.” Jacobson, et al., supra note 104, at 2093.

108 Id. at 2111-12 tbl.9.

109 Id.

110 Id. (Utah: 3,902; Louisiana: 183, 040; New York: 82, 216).

111 Id. (Hawai‘i: -1,120; Colorado: -6,040; Kansas: -425).

112 Id. at 2093.

113 For instance, according to 2015 data, “Hispanic or Latino” (white and non-white) workers represented 16.9% of the “oil and gas extraction” sector and 13.8% of the “coal mining” sector. Employed Persons by Detailed Industry, Sex, Race, and Hispanic or Latino
While everyone shares in the benefits of mitigating climate change and the reduction of climate-related problems it creates, the green economy will, nonetheless create both economic winners and losers. If the country is to be true to its long-time commitment to ensure that everyone has a fair chance in the race of life, we must do more than tolerate the loss of jobs because the winners exceed the losers.

To suggest a way forward, we propose to take the innovations of the EJ movement and add to them new developments in “social resilience” thinking. Doing this will give EJ a more universal dimension that should make it more practically effective. Then we need to apply this new vision as we seek a just transition to a green economy.

A. Social Resilience

One way of understanding the long-term goals of old environmentalism and modern EJ, as they apply to the human population, is that both are trying to build “social resilience.” By this we mean a population’s capacity to survive, adapt, and grow in the face of misfortune and change. The term resilience, which gained prominence more than a decade ago in the field of disaster studies, provides a helpful way of assessing human welfare of many kinds in the context of the surrounding environment.¹¹⁴

¹¹⁴ For an introduction to resilience thinking in the disaster studies literature, see generally THE WORLD BANK, INVESTING IN URBAN RESILIENCE: PROTECTING AND PROMOTING DEVELOPMENT IN A CHANGING WORLD (2015), https://openknowledge.worldbank.org/bitstream/handle/10986/25219/109431-WP-P158937-PUBLIC-ABSTRACT-SENT-INVESTINGINURBANRESILIENCEProtectingandPromotingDevelopmentinaChangingWorld.pdf?sequence=1&isAllowed=y; Markus Keck & Patrick Sapidapolra, What Is Social Resilience? Lessons Learned and Ways Forward, 67 ERKUNDE 5 (2013); Susan L. Cutter et al., A Place-Based Model for Understanding Community Resilience to Natural Disasters, 18 GLOBAL ENVTL. CHANGE 598, 599 (2008). For discussions of social resilience and law, see generally Craig Anthony (Tony) Arnold, Resilient Cities and Adaptive Law, 50 IDAHO L. REV. 245 (2014); Verchick, supra note 18; ROBERT R.M. VERCHICK, FACING CATASTROPHE: ENVIRONMENTAL ACTION FOR A POST-KATRINA WORLD 105-195 (2010). Note that we are using the term “social resilience” in its most general and straight-forward sense. In social science literature, the term sometimes implies more specialized meanings. See Cutter et al., supra, at 599 (“[M]ultiple definitions of resilience exist within the literature, with no broadly accepted single definition”) (citations omitted)).
At the most basic level, resilience is about withstanding and recovering from disruption. For human beings, the quality has both a geo-physical and a social side. The geo-physical aspect describes the things in the environment—the presence of high ground near flood plains, the accessibility of evacuation routes, or, in the case of environmental protection, the availability of clean air, healthful drinking water, and parks to play in. The social aspect describes the people in the environment—their baseline health, their education and training, their race and ethnicity, their class, their gender, their age, and more.

The opposite of social resilience is social vulnerability, which must be identified and redressed if communities are to become stronger. In the disaster literature, important factors of social vulnerability include wealth, race, ethnicity, age, gender, and occupation. For a community faced with disruption, both the geo-physical and social aspects of the vulnerability-resilience continuum are vital. For instance, a study of flood losses in Texas showed that a higher level of social vulnerability was associated with much higher rates of death and injury in counties that shared many geo-physical characteristics.

An important insight from the EJ movement is that physical and social vulnerabilities interact: a community’s geo-physical amenities can be polluted or destroyed when residents are too politically powerless to do anything about it. And a community’s poverty can lead community members to exploit their surroundings or imperil their health in ways that they would other not choose to do. In this sense—despite the nomenclature—both aspects of vulnerability are tied to social realities.

Using a method called “aggregate analysis,” social scientists can now assess the hazard risk of a whole community by combining a series of variables related to geo-physical and social vulnerability, from geography to climate, from income and education levels to race and age. Geographer Susan Cutter, a leader in the field of “vulnerability science” used such techniques to develop a national “social vulnerability index” (SoVI), which has inspired similar research throughout the world. As an index, this method measures deviation from a statistical norm. Thus vulnerability, as captured in Cutter’s analysis, always returns to a central feature of American social life: inequality.

The Agency for Toxic Substances and Disease Registry (an office within the Centers for Disease Control) maintains a publicly available national “Social

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115 See Verchick, supra note 18, at 47-48 (describing studies by Susan Cutter using these indicators).
116 Sammy Zahran et al., Social Vulnerability and the Natural and Built Environment: A Model of Flood Casualties in Texas, 32 DISASTERS 537, 552 (2008) (finding in the examination of 832 floods in Texas from 1997 to 2000 that a one-unit increase in the level of social vulnerability in a county raised the odds of death or injury by 42.4%).
Vulnerability Index.” The index ranks U.S. Census tracts according to fourteen variables, including poverty, employment, education level, age, disability, minority status, English proficiency, car ownership, and more. The information is intended to “help local officials identify communities that may need support in preparing for hazards, or recovering from disaster.”

In 2015, EPA released its own version of a vulnerability-mapping tool as part of its environmental justice strategy. The tool, called EJSCREEN, draws from a national dataset of “environmental” and “demographic” indicators. These indicators include traits like proximity or exposure to hazards like air pollution, lead paint, or Superfund sites. The demographic indicators are tied to income, minority status, education level, linguistic isolation, and age. How, and to what extent, the agency uses this tool is not clear. Enigmatically, EPA says it does not use EJSCREEN “[a]s a basis for agency decision-making.” But given the inclination, one imagines the mapping tool could help inform many agency processes including grant-making, enforcement, permitting, and even rulemaking.

B. Insights for Environmentalism

Social-resilience thinking offers three insights that can be used to strengthen and expand environmentalism. First, social-resilience thinking identifies and expands the human factors of concern. The progressive and environmental movements of the past might have generally understood the social and economic pressures felt by certain groups, but they were not fastidious in their taxonomy. For reasons that were both philosophical and strategic, the EJ

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120 See id. at 1.
124 EPA’s website says the EJSCREEN helps “screen for areas that may be candidates for additional consideration, analysis or outreach as EPA develops programs, policies and activities that may affect communities.” How Does EPA Use EJSCREEN?, EPA, https://www.epa.gov/ejscreen/how-does-epa-use-ejscreen (last visited Nov. 10, 2017).
125 Id.
movement generally emphasized the role of race, ethnicity, and income, over other social variables. And federal policy defines EJ as affecting only “minority” (defined by race or ethnicity) and “low-income” populations. While these factors can be strong markers of community vulnerability, the social-science literature confirms they are not the only ones. In addition, as EJ advocates have strongly argued, social vulnerability often gets amplified when factors like gender, pregnancy, disability, age, or English proficiency are added to the mix.

Second, the expanded scope of social-resilience thinking emphasizes the universality of human vulnerability. Martha Fineman, whose more recent work delivers a fascinating analysis of human vulnerability and law, underlines what should be an obvious, but often forgotten point in political theory: being vulnerable and dependent on others is part of the universal human experience. No one gets along in life alone. We enter the world as dependent infants. In the course of life, we fall ill, we have accidents, we are misunderstood, we feel anxiety, and we grow old. Very many of us will lose a job, have to care for a loved one, or develop a permanent infirmity.

Within this truth, Fineman finds another. “This basic premise of a universal vulnerable subject,” she writes, “forms the foundation for the assertion that human vulnerability must be at the heart of our ideas of social and state responsibility.” Noting the variety of services that human vulnerability demands (think here of medical care, of education, of safety standards, and so on), Fineman argues “there is a link between these various types of resources and state responsibility.” Then finally: “Many of the institutions providing resources that give us resilience can only be brought into legal existence through state mechanisms.” The universal need for human vulnerability and the scope and complexity of the services it demands makes social resilience a primary mission of the state.

Even though human vulnerability is universal, a third insight of social-resilience thinking is that vulnerability is also particularized in the details. While we may all be subject to things like illness or unemployment, for most people many of these experiences are temporary. But vulnerabilities tied to characteristics like race, ethnicity, gender, and generational poverty become permanent drags on persons so affected, hobbling their communities as well.

128 Id., supra note 127, at 266-67.
129 Id. at 272.
130 Id.
EJ advocates deserve great credit for cataloguing and mapping the ways that such particularized traits are associated with place-based environmental risks. Disaster experts like Susan Cutter have further exposed the unequal geographic patterns of social vulnerability through their mapping techniques. In this way, as Fineman explains, we are all “differently situated within webs of economic and institutional relationships that structure our options and create opportunities.” Further, as Fineman argues, because state mechanisms have a basic responsibility to support human resilience, it follows that they also have a responsibility to redress the effects of unfair distributional patterns of vulnerability. The state should thus “ensure a more equitable access to institutional assets by adjusting unjust distribution of privilege and opportunity across society.”

The last insight from social-resilience thinking implies that we must move beyond a model of justice based mainly on negative liberty toward a model that more fully recognizes positive liberty. By emphasizing the universality and local particularity of social vulnerability we can make the case for a more robust and active government in general. Fineman refers to such a government as a “responsive state.” It’s a government that takes responsibility for the structure and distribution of community strengths and weaknesses and attempts to balance the scales. It’s a government that recognizes the vulnerabilities of people in all stages and stations in life and positions them for a fair race.

C. Steps Toward a Just Transition to a Green Economy

The lessons of social resilience help us describe what a “just transition” to a green economy should look like. As the economy builds toward a more sustainable energy path, it is up to society to make sure that community resilience is enhanced for everyone. The work requires paying attention to the broad range of vulnerabilities that affect people during their lives, affirming the universal nature of human interdependence, and recognizing the particularized vulnerabilities of some groups for reasons of chance, life stage, or prejudice.

The first practical step toward a just transition is to acknowledge the wedge we are driving between the haves and the have-nots and to stop pounding on it. The utilitarian approach to public welfare, which showers net benefits on winners but ignores the losers, must be modified to make sure vulnerable groups are not repeatedly singled out to “take one for the team.”

Second, environmentalists should focus on how EPA and other regulatory agencies can use their regulatory authority both to fulfill their statutory mandates

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131 Fineman, Beyond Identities, supra note 127, at 1755.
132 Fineman, The Vulnerable Subject and the Responsive State, supra note 127, at 274.
133 See Fineman, The Vulnerable Subject and the Responsive State, supra note 127, at 260.
134 See id. at 274 (urging state involvement that “actually empowers a vulnerable subject by addressing existing inequalities of circumstances that result from undue privilege or institutional advantage”).
and address the plight of those who will lose their jobs as a result of that effort. We need to return to the old environmentalism and resist leaving social justice to the human-needs advocates.

Recent history offers a few glimmers from which we might learn. For instance, President Obama’s promise to create five million green jobs prompted regulators at the EPA to insure that its training-and-certification program for workers performing home renovations in the presence of lead-based paint would be easily accessible and would not shut out less advantaged laborers. When developing the “Clean Power Plan”—EPA’s Obama-era proposal to limit carbon emissions at power plants—the agency predicted early on that market forces would likely steer renewable technologies to affluent locations while leaving minority and low-income communities with a disproportionate share of older plants which would continue to expose residents to soot and dangerous chemicals. Working under EJ guidelines, which as of this writing remain in effect, the agency sought to offset this distributional unfairness with a subsidy program specifically designed to encourage construction of renewable facilities in minority and low-income communities. While some advocates believe the Clean Power Plan should have offered even greater protection to EJ communities, this example shows that an agency can be steered toward distributional goals affecting the local economy. But significantly, such innovation requires institutional leadership—a president’s personal stake in the outcome, a pre-existing commitment in an agency’s guidance document, or something else. Change like this rarely happens on its own.

Finally, since regulatory agencies can only do so much consistent with their statutory mandates to promote social resilience, environmentalists must support the efforts of human-needs advocates to obtain federal support for programs that can assist workers who lose their jobs, their families and their communities. Put another way, public policy advocates should conceive of the regulatory state and the social welfare state as sharing the same broad purpose—to promote positive liberty in the form of social resilience. This last step has some nuances, so we take it up further below.

D. Strengthening the Alliance Between Regulatory and Welfare Advocacy

Environmental advocates have slighted the distributional impacts of environmental regulation because of the dominance of economic analysis as the language of policy argumentation, among other reasons. This blinkered...
approach fails to recognize that both the regulatory state and the social welfare state have the same aim of increasing positive liberty, with the result that environmentalists and human-needs advocates refuse to join forces when regulation imperils jobs. This siloing of advocacy weakens support for social resilience in two ways.

First, siloing keeps each advocacy group from investigating the full range of solutions respecting social resilience. Environmental advocates are less likely to argue for social needs programs that assist those who lose their jobs because of the move to the green economy, and human-needs advocates are less likely to argue for regulatory solutions that do the same.

Second, siloing increases political opposition to the transition to the Green Economy in those areas of the country where the job losses will occur.139 By being seen as advocating for regulatory policies that put workers, such as miners, out of work, “environmentalists must contend with significant political pressure on federal, state, and local governments to overrule or amend environmental legislation or tie up regulation through costly court battles.”140 Moreover, efforts by environmentalists to point out that the loss of coal jobs is largely due to the low costs of natural gas and renewable sources of energy has not stilled this opposition. And now, seeking to capitalize on the opposition, the Trump administration’s solution to job loss is to avoid efforts to reduce greenhouse gas emissions.141

There is another political ramification that weakens support for regulatory policies that can speed the transition to a green economy. As Inara Scott has identified, environmentalists end up labeling miners (and other workers) as the opponents of environmental regulation instead of “someone who simply wants to be able to provide for his family and make a decent living.”142 As a result, because “the environmentalist and the coal miner are seen as enemies, both lose the opportunity to work together for solutions that simultaneously advance their interests.”143

The political opposition of coal miners (and others who lose their job) to environmental protection results in the miners being double losers. The miner loses because he or she has no job, and because the failure to find solutions that can achieve a green economy and not sacrifice the interests of the miners, their families, and their communities.144

139 See HOCHSCHILD, supra note 3.
142 Scott, supra note 140, at 10,344.
143 Id.
144 See id. at 10343 (suggesting a carbon tax as a solution that would reduce green house gas emissions and provide the revenue to fund social welfare and educational support for miners who have lost their jobs).
We acknowledge that both environmental advocates and their human-needs counterparts lack the funding and resources to fight the good fight in their own areas, making expansion of their advocacy a challenge. Still, neither can afford to not join forces, at least in some circumstances, if we are to make a just transition to a green economy.

We end by emphasizing that, to be effective and fair, progressivism’s next stage must envision a strong role for government protections and give voice to ordinary Americans. For this reason, a growing movement led by wealthy technology entrepreneurs on the left gives us some pause. Executives in the C-Suites of Silicon Valley and elsewhere know the next leap in green technology could vault past many unskilled workers. To balance that out, they urge government to strengthen safety-net programs and make taxation more progressive (prescriptions we endorse). Going further, a cadre of technology leaders, including Mark Zuckerberg (co-founder of Facebook), Elon Musk (founder of Tesla), and Pierre Omidyar (founder of eBay), are now advancing a “universal basic income” (UBI), generally defined as a program in which all citizens receive a standard amount of money each month to cover basic expenses. Floating the idea in his 2017 commencement address to Harvard graduates, Zuckerberg assumed an air of gravitas. “Every generation,” he intoned, “expands its definition of equality. Now it’s time for our generation to define a new social contract.”

Programs like the UBI—which have been embraced by liberals and conservatives alike—seek outcomes that satisfy Pareto optimality rather than the Kaldor-Hicks version. While this approach is better than doing nothing, it cannot achieve the social resiliency that we seek. Rather than ensuring a fair chance in the race of life, this approach takes the recipients out of that race by putting them on the sidelines. Rather than helping them to better themselves, it pensions them off, effectively saying you can no longer make a valuable contribution to our economy or more broadly to our democracy.

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146 Haselton, supra note 145.
147 Prominent UBI advocates have included Milton Friedman, the renowned libertarian economist; David Frum, a former speechwriter for President George W. Bush; and Yanis Varoufakis, a Greek economist and politician whose views align with the radical left. See Helen Razer, It’s Just a Dream: UBI Is Just a Bedtime Story Elon Musk Tells Himself to Help the Super-Wealthy Sleep, QUARTZ (July 13, 2017), https://qz.com/1024938/ubi-is-just-a-bedtime-story-elon-musk-tells-himself-to-help-the-super-wealthy-sleep/.
148 To be sure, UBI advocates do not exactly see it this way. Mark Zuckerberg, for instance, told his Harvard audience that a guaranteed income would free them up “to try new ideas.”
In addition, when the conversation turns to the vital role of protective regulation, Zuckerberg and his colleagues regularly fall silent. In fact, a recent survey of 600 technology leaders in the United States found the same asymmetry. The study, conducted by researchers at Stanford’s Graduate School of Business, showed that although wealthy technology entrepreneurs tend to support liberal redistributive, social, and global policies, they generally oppose government regulation.\textsuperscript{149} (The researchers speculate that skepticism of regulation is grounded in both self-interest and a faith in markets to contain externalized harm).\textsuperscript{150}

But cutting government safeguards—even if offset by a stronger safety net—still creates social inequality by further endangering our workplaces, our food, and our surrounding environment. Because reduced regulation is rarely associated with a net increase of jobs,\textsuperscript{151} such rollbacks cannot be justified on the basis of boosting economic resilience in any broad way. Nor can rollbacks justify even resilience for specific communities, such as coal miners, since the corresponding long-term risk threatens the gain. A household’s freedom goes down, not up, when a loving parent and breadwinner is diagnosed with black lung. Add to this the fundamental unfairness of allowing employers or other institutions to transfer the risk of mining or chemical production or what-have-you from their ledger (in the form of either preventative action or later compensation) to that of a struggling family.

The lesson is that both the Welfare State and the Regulatory State must rise together. Our government can’t become a “responsive state” with one hand tied behind its back. And a responsive state is necessarily one that is supported and informed by citizens as the grassroots level. The feats of the Musks and Zuckerbergs of the world are surely inspiring and, yes, liberating. But there is no reason to think that today’s business elites have any special insight into the needs of the poor or into the nation’s overall social interest. Still, the politics here deserve scrutiny since technology moguls have a tremendous ability to sway political campaigns, influence their employees’ political behavior, and mobilize the public.\textsuperscript{152}

\textit{See} Haselton, \textit{supra} note 145 (quoting Zuckerberg). But the larger message implied by UBI, we think, is something very different from this. Even on narrower economic terms, the UBI is open to criticism. By increasing the buying power of everyone at the same time, a UBI could cause inflation, which would have an economically regressive effect, limiting the choices of those most in need while opening the choices of the affluent. \textit{See id.}\textsuperscript{149} \textit{See} David E. Brookman, Gregory Ferenstein, & Neil Malhotra, \textit{Wealthy Elites’ Policy Preferences and Economic Inequality: The Case of Technology Entrepreneurs} (Stan. Graduate Sch. Bus., Working Paper No. 3581, 2017), https://www.gsb.stanford.edu/faculty-research/working-papers/wealthy-elites-policy-preferences-economic-inequality-case.\textsuperscript{150} \textit{Id.} at 30-34.\textsuperscript{151} \textit{See generally} Coglianese & Carrigan, \textit{supra} note 81.\textsuperscript{152} \textit{See id.} at 9.
VI. CONCLUSION

In this article, we argue that environmentalism—as expressed in regulation and advocacy—must look for ways for the regulatory state and the social welfare state to work in concert. To show an example of what we mean, we open a conversation about improving social resilience in communities that will struggle on our way to the green economy. We harbor no illusions regarding the practical and political difficulties of this achievement. But the history of this country is one of constantly trying to provide a fair chance in the race of life, albeit in fits and starts, and so far without adequate success. We may never arrive at the ideal balance between positive and negative liberty. Immanuel Kant, a moral perfectionist if there ever was one, tells us that “[o]ut of the crooked timber of humanity no straight thing was ever made.”153 To which Isaiah Berlin once replied, “We can only do what we can: but that we must do, against difficulties.”154

153 IMMANUEL KANT, 8 GESMAMELTE SCHRIFTEN 23 (1900).
154 Berlin, supra note 12, at 16.