This we know: Man did not weave the web of life, he is merely a strand in it. Whatever he does to the web, he does to himself.

Passage commonly attributed to Chief Seattle

Author
Pedro Henriques da Silva, GEM

Contributors
Georges Dyer, IEN
Renee Morgan, Adasina
Tracy Gray, The 22 Fund
Paul Rissman, Rights CoLab
Kaede Kawauchi, Ceres
Lindsey White, Ceres
Kelly Major Green, Graystone
Madeline Clark, Cambridge
Carol Jeppesen, UNPRI
IEN's
Net Zero
Endowments Initiative
is supported by

generation foundation

With special thanks to the sponsors of the IEN Net Zero Endowments Initiative
Abstract

In recent years, the concept of net zero has gained traction. One interpretation of net zero calls on organizations and economies to emit no more greenhouse gases than they remove from the atmosphere by 2050, consistent with a maximum temperature rise of 1.5°C above pre-industrial temperatures. However, roadmaps to achieving net zero have been poorly defined, and, like the broader environmental movement, have seldom acknowledged the importance of justice in mitigating climate change and reversing harm. Furthermore, the justice framework and the net zero framework have at times been placed at odds with each other.

The Intentional Endowments Network (IEN) is the leading mission-aligned investing network for higher education and other endowed institutions. It provides resources and tools to help investors mobilize capital for an equitable, low-carbon, and regenerative economy. In 2021, IEN launched the Net Zero Endowments Initiative, which brought together 20 leaders from across the industry to support endowments in learning about, enabling, and participating in an equitable and just transition.

Recognizing the limitations of current climate efforts and the opportunity presented by a rights focus, a subcommittee was formed to center the conversation on climate justice. This group collaborated to develop this paper.

We believe that to be successful, any net zero approach must be reimagined, and redefined, to center on justice. We explore Climate Justice not only as a moral cause, but as a highly efficient tool for combating pollution, climate change, and their effects on human health and global ecosystems. And we explore how intentional investors can leverage these tools to better achieve those goals.

This paper will do three things: First, it will provide a brief background and working definition of climate justice (Pages 1-3). Second, it will argue that using a climate justice framework is central to achieving the stated goals of net zero (Pages 3-8). In the same section, it will highlight emerging research suggesting that incorporating climate justice considerations into investment diligence may serve as a financial risk mitigant for investors. Finally, the paper will provide practical methods for asset owners and allocators to implement climate justice, informed by a series of conversations with asset owners, investors, and activist practitioners (Pages 8-17). In doing so, we seek to demonstrate that by centering on frontline communities, investors can more quickly, equitably, and efficiently achieve the broader goals of the environmental movement–harm mitigation, resilience, and ecological restoration.

A note: while the architects of this paper discuss some of the global aspects of climate justice, we apply a primarily North American lens. We acknowledge the limitations in doing so and are aware that global environmental justice transcends American frameworks. We believe the United States and American investors have a responsibility to lead on this subject. We hope that by situating its geographical scope, this paper can serve as a resource for helping to drive change in North America and beyond.
Background

While climate change affects us all, it does not affect us equally. In the United States today, white Americans benefit from what reporter Doyle Rice calls "pollution advantage," breathing in 17% less pollution than they put out. Meanwhile, African Americans inhale 56% more pollution than they cause, while Hispanic and Latino Americans inhale 63% more. In other words, the harm is felt most by those who contribute to it least.

Black communities, First Nations and Indigenous communities live on the front lines of the climate crisis—where negative health, quality of life, and economic outcomes of global pollution are felt hardest, and are expected to worsen.

In the United States, African Americans are 75% more likely than white people to live in “fence-line” communities—the areas near commercial facilities that produce noise, odor, traffic, or emissions that directly affect the population. Although African Americans make up 13% of the US population, 68% live within 30 miles of a coal-fired power plant, compared to 56% of white Americans. Residents near these plants breathe in the most associated pollutants, which can lead to a range of health problems, including cardiac arrest, birth defects, and asthma. As a result, more than twice as many African American children suffer from asthma compared to white children.

Black and Native American communities are also on the front lines of the seafood industry. The oyster, clam, and scallops industry accounts for nearly $400 million in the United States, and an increase in ocean acidification could cost the industry nearly $480 million—more than its total. This is especially serious for coastal Native American tribes in places like Washington State, and Black communities in the South, where seafood is often an integral part of the economy, as well as cultural life.

Meanwhile, community reinvestment has exacerbated inequity. A study by Rice University and the University of Pittsburgh found that after a natural disaster, a predominantly Black or Latino county will see its average wealth decrease, while predominantly white counties will see their wealth increase. This is because, following natural disasters, white communities see higher levels of reinvestment than communities of color. The greater the damage, the more pronounced the disparity: white families living in areas with about $10 billion in damages saw a wealth increase of nearly $126,000. Black families living in areas with $10 billion in damages saw a wealth decrease of about $27,000.

These outcomes transcend socioeconomics; in other words, poverty alone does not explain the racial disparity. However, low-income populations are, in themselves, another frontline community. Like populations of color, low-income populations are more likely to live near industrial facilities and are therefore at a higher risk for chemical spills and toxic leaks resulting from tropical storms.

In the United States, those who are poor are more vulnerable to heatwaves, extreme weather events, environmental degradation, and subsequent labor market dislocations. This is especially true for low-income Black, Indigenous, and Hispanic populations. Across the globe, the disparity is even more pronounced between the wealthy nations of Europe and North America, and those of the global south.
Perhaps it is no surprise, then, that Indigenous communities and communities of color around the world have moved with such urgency on this topic—even as nation-states and capital allocators have inched towards half-action. Investments made in and informed by frontline communities not only help to fortify the communities themselves but could accelerate the march towards net zero and environmental restoration for all.

**A working definition of climate justice**

We define climate justice as a holistic approach that includes and transcends data, seeks to change existing power structures, and ensures that climate contributions and conversations are led by and centered on those most impacted.

**Centering on justice to advance the goals of net zero**

Net zero will take longer to achieve, or may not be achieved at all, without centering on frontline communities.

While much talk has been made of human contribution to climate change, outcomes that were once theoretical are becoming increasingly visible. We now know that changes in average global temperature, by as little as half a degree Celsius, can have meaningful ramifications for vegetation, water, and livability. Today, we are seeing an unprecedented loss of sea ice, accelerated sea level rise, and longer, more intense heat waves. But perhaps more importantly, our patterns of consumption and production are materially and irreversibly affecting our planet and our lives. Today, clear links have been established between polluting activities and a substantial rise in respiratory illnesses, water-borne disease, and food-related illnesses. Chemicals found in plastic are now suspected to have far-reaching consequences for sexual and reproductive health, women’s health, human fertility, human brain development, and may be a leading contributor to cancer. These same chemicals can now be observed in human food, water systems, and an estimated 93% of American adults. Perhaps this is why, even in a world faced with the unyielding presence of COVID-19, the World Health Organization has dubbed climate change the “single greatest threat” to human health.

Of course, these same production and consumption patterns contribute significantly to global greenhouse gas (GHG) emissions. These GHG emissions, in turn, contribute to global temperature rise. This temperature rise has some effects that could be seen as positive. One commonly cited example is that some regions that previously had to contend with frost will see frost-free agricultural seasons. However, this is part of a broader set of regional dynamics; while some regions will no longer see frost, others will experience extreme heat waves and droughts. Meanwhile, global temperature rise has many more negative effects. These include: warmer oceans, which will contribute to millions of deaths in aquatic life and have a significant impact on food supply chains; more droughts, extreme heat, and a drier United States than has been observed in over 1,000 years; more frequent and stronger Category

---

The World Health Organization has dubbed climate change the “single greatest threat” to human health.
4 and 5 hurricanes; significant flooding and several feet of coastal sea rise; significantly altered weather and precipitation patterns.\textsuperscript{xix} Over time, these conditions are expected to contribute to billions of dollars in property damage, mass migration by millions of people living near coastal areas, water and food shortages in regions that have not had them before, and severely disrupted economies.\textsuperscript{xx}

In short, many will die, many will lose property or see drawdowns in capital investments, and human life will never be the same.

Since the dawn of mass industrialization, global average temperature has already risen by 1.1°C.\textsuperscript{xxi} The Intergovernmental Panel on Climate Change (IPCC) is an independent coalition of over 1,300 scientists from several nations, including the United States, that leads international efforts to study, understand and inform governments of the state of the global ecological system. Following years of research, the IPCC concluded that to avert catastrophic health impacts, irreversible changes to our oceans, forests, and air quality, and to prevent millions of climate change-related deaths, the world must limit further temperature rise to 1.5°C.\textsuperscript{xxii} Even global heating of 1.5°C is still not considered safe; every additional tenth of a degree of warming will take a serious toll on people’s lives and health.\textsuperscript{xxiii} This is why the United Nations and several non-governmental organizations and businesses are investigating ways to limit their emissions. One approach that is growing in popularity is net zero.

Net zero refers to achieving balance between the amount of greenhouse gases (GHGs) emitted into the atmosphere and the amount removed. In other words, producing no more GHG pollution than is being reduced. For investors, a commitment to net zero means transitioning the investment portfolio to net-zero GHG emissions by 2050 consistent with a maximum temperature rise of 1.5°C above pre-industrial temperatures, taking into account the best available scientific knowledge, including the findings of the IPCC, and regularly reporting on progress, including establishing intermediate targets every five years in line with Paris Agreement Article 4.9.\textsuperscript{xxiv} The concept itself is contentious. Some argue that net zero is a way to continue causing harm, while not effectively changing the ways of life that are contributing to pollution, ecosystem death, and human health risks.\textsuperscript{xxv} While it may, in its current form, have the potential for harm, we believe the deeper goal of net zero is the same as that of the broader climate movement: halting and reversing the effects of human-driven climate change.

Existing strategies for halting and reversing the effects of climate change are proving too slow or ineffective. Recent estimates suggest current efforts may be insufficient to prevent 1.5 or even 2 degrees of warming, with global temperatures on track to rise by as much as 5 degrees Celsius by 2100.\textsuperscript{xxvi} If countries successfully execute on the pledges made at COP26 in Glasgow, they may mitigate this dramatic rise to 2.1 degrees—still well above the 1.5-degree maximum to prevent disaster.

However, if history is any indicator of success, it is unlikely all targets will be met, and all pledges upheld.\textsuperscript{xxvii} Low-carbon energy technologies, environmental policy, and non-governmental agents have not yet been able to slow our march to climate catastrophe.\textsuperscript{xxviii}

On the other hand, \textbf{frontline communities have been offering alternative solutions for some time—which data now demonstrate can be both more effective and faster-acting.}
One 28-nation study found that investing in Indigenous communities is the single most efficient way to protect forests—the best natural mitigant of emissions. Indigenous communities were found to invest heavily in conservation, despite having limited means to do so. And, importantly, Indigenous approaches to conservation were found to be more effective than non-Indigenous or technocratic methods. In the Brazilian Amazon, for example, forests situated in Indigenous territory saw a deforestation rate of less than 1%, while those situated elsewhere saw a deforestation rate more than 7x higher.

Even in areas with similar levels of development, land developed by Indigenous people in Indigenous communities degrades at a slower rate than non-Indigenous developed land. For example, industrialized modes of agriculture usually mean hundreds of acres of one or two cash crops, or monoculture, a practice that places significant strain on soil fertility and harms surrounding wildlife. Indigenous agroforestry, on the other hand, will often consist of gardens containing over 300 species of flora. This mode of agriculture, a complex form of polyculture (growing different types of crops in the same space), leads to significantly better ecological and human health outcomes. It also eliminates the need for many of the pesticides used in industrial agriculture—because the ecosystem itself consumes the pests that are otherwise harmful to the crop. Finally, it may be a pollution mitigant. While industrialized food production takes up 50% of habitable land on earth and makes up 26% of global greenhouse emissions, polyculture naturally removes carbon from the atmosphere, while requiring much less space to deliver a more varied and healthy diet.

One common argument positioned as a counterpoint to sustainable farming practices like small-scale polyculture is efficiency. Many believe that to feed the world, vast reserves of monocrop farmland are required to provide enough corn and wheat for a growing global population. However, we contend this view is misguided at best, and harmful at worst. In fact, smallholder farmers—individuals who run small-scale, localized farms, often in Indigenous communities—provide more than 70% of food calories to the world. Some of the regions where these farmers cultivate face the highest risk of drought and degradation. As a result, smallholder farmers in these regions have been able, with limited resources, to engage in agroforestry, drought resistance, and soil restoration—some of the most sustainable agricultural practices available.

These community and Indigenous-led models of sustainability extend to land conservation efforts as well. In Africa, community-based and local models of conservation are proving more effective at generating positive ecological outcomes than government or technocratic, NGO-centric ones, while driving positive socioeconomic outcomes for local communities. In Kenya, for example, the Il-Ngwesi, an Indigenous-owned eco-lodge, has seen continued success with conservation efforts, while the country’s national parks have experienced a 56% surge in illegal poaching. This may be because Indigenous-run eco-lodges in Sub-Saharan Africa are grounded in pastoralist modes of living, interdependent with the land in which they are based.

But methods of change needn’t harken back to the pastoral or the ancient to promote just, ecological outcomes. In the United States, immigrant farmers from Latin America and Africa are bringing a wealth of alternative agricultural practices that may be more sustainable and regenerative than mainstream methods of farming. Meanwhile, a small movement of Black farmers has quietly been pushing back

---

Investing in Indigenous communities is the single most efficient way to protect forests.
against historical disenfranchisement and antagonistic policymaking and practices. Generational Black farmers carry a long history of knowledge of the land, while Black agricultural leaders have often been the first to address unsustainable farming practices overlooked by industry. For example, famed Black inventor and agriculturalist George Washington Carver contributed significantly to human understanding of cover crops, which can help restore soil following the damage caused by monocropping.\textsuperscript{xxxix} He did this in response to the severe land damage instigated by American agricultural practices that relied heavily on enslaving Black people to monocrop cotton.

Beyond agriculture, Black leaders and communities have been at the front lines of the environmental movement through decades of environmental injustice.\textsuperscript{xi}

- For example, in 1982, a landfill in Warren County, North Carolina became the proposed site for dumping toxic soil filled with polychlorinated biphenyls—chemicals that were commonly found in electrical equipment with a known range of adverse health impacts. At the time, Warren County was one of the only majority African American counties in the state. In response, Black communities staged a sit-in to stop the dump and protect the community from harmful pollution. Although the dump was ultimately greenlit, this event is seen by many as the beginning of the environmental justice movement.

- Similarly, in 1968, residents of West Harlem, in New York City, fought against the siting of a sewage treatment plant in their community. The protests marked the first instance of an environmental protest by people of color that garnered widespread national media attention.

- More recently, in Flint, Michigan, community activists have decried, and successfully brought national attention to the systemic failures that led to lead poisoning in residential water systems over a period of at least 4 years. Flint Michigan is a small city with 100,000 residents, more than 50% of whom are Black. Twelve people died, and several children remain at risk of neurological diseases. A subsequent lawsuit garnered a settlement in excess of $600 million for victims.\textsuperscript{xli} Several state leaders, including Michigan's former Governor, were charged with crimes in connection to the crisis. And, in 2021, United States President Joe Biden announced a bipartisan Lead Pipe and Paint action plan to protect communities from lead-contaminated drinking water and replace all lead pipes over the next decade.\textsuperscript{xlii} The plan is expected to benefit over 10 million American households and schools who are still serviced by waterways with lead components. These events are just one example of how the frontline activities of Black activists in the United States often benefit all communities.

Time and again, the link between physical, social, and economic health, and the relocation of corporate waste, have played a large role in America’s environmental justice movement. And time and again, Black Americans have rallied to call attention to these issues, to the benefit of all Americans, regardless of race.

Some believe that as technology advances and the world moves towards digitization, climate impacts will become less prevalent. However, a digitized world presents new ecological and social challenges. The mined minerals and metals the world relies on to build its data centers and devices—the hardware
behind our internet of things—come disproportionately from low-income miners in low-income countries and communities. Some of the most important materials used in screens, electronic batteries, and lasers—rare earth minerals and metals like Tantalum—come from central and south Africa and Asia.

Three of the world’s least developed regions, East Asia and the Pacific, Latin America, and Sub-Saharan Africa, together supply about 85% of the world’s minerals. South Africa and Zambia together output more than 80% of the world’s Platinum, while Rwanda and the DRC export 60% of its Tantalum. China alone exports around 90% of the world’s total supply of rare earth metals. And most of China’s own imports of rare minerals come from Asia, Latin America, and Sub-Saharan Africa. Economic pressure contributes to poor ecological and health outcomes from mining in these regions.

Failure to center sustainable mining practices at the front lines will not only harm the world’s air and waterways but could have devastating consequences for its technological supply chain. And failure to address the social challenges faced by people living in these regions, and the global system that benefits from them, prohibits the implementation of sustainable mining practices.

Fortifying frontline communities simultaneously advances several of the UN SDGs while strengthening the global economy, productivity, and food security. It protects our fragile technological ecosystem. And it accelerates our progress towards a society that is regenerative, rather than destructive and puts no more carbon into the atmosphere than it removes.

For investors, our choices of where to invest, and how to invest, have meaningful ramifications for these communities. And, in turn, meaningful ramifications for progress on climate. Frontline communities, who are hit first and hardest, are often the best positioned to effectuate change, but are consistently overlooked as a source of solutions.

While many questions remain, one thing is clear: investing in frontline communities is investing in climate resilience. It is also investing in harm mitigation and, in many cases, environmental restoration. The more investors move capital towards these communities, the more efficiently, effectively, and equitably we can transition to a net zero world.

**Justice as a potential risk mitigant**

While still incomplete, there is some research to suggest incorporating climate justice into investment diligence can have positive ramifications for investor portfolios.

Proprietary research by impact investment and advisory firm Adasina Social Capital found that Racial Justice movements and Climate Justice movements may offer early indicators of risk in public markets. Examining macro trends, the study found that in 2012, for-profit prison company stock CoreCivic outperformed the S&P 500 by more than 4x. The study tracked this performance against the start of the BlackLivesMatter movement in 2014. At the time, BlackLivesMatter was a fledgling, decentralized network of over 30 chapters across the United States. A component of the group’s activism was calling for an end to mass incarceration and for-profit prisons. By the group’s peak in 2020, calls for for-profit
prison divestment were a major focus, and garnered significant media coverage. By the end of 2020, CoreCivic stock had declined by more than 60% since the start of the year. This happened while the S&P 500 experienced a 16% rise.

Similarly, the study noted, in 1980, oil and gas represented 29% of the S&P 500, and 7 of the 10 largest stocks in the index. In 2014, the Fossil Fuel Divestment Movement gained traction, and 400,000 people participated in the People’s Climate March. Discerning readers will note that this coincided with a collapse in oil prices commonly attributed to over-investment in shale. But the researchers track the growth of the most recent divestment movement against decline of oil and gas stocks. By 2019, nearly 8 million people participated in the Global Climate Strike. By the end of the same year, oil and gas represented only 5.3% of the S&P 500 index, and energy stocks were found to be the single biggest losers of the year, and of the decade. Even when energy stocks regained momentum in 2021, certain securities, like the one discussed below, continued to underperform their peers. While the firm’s research does not claim a causal relationship, it is difficult to ignore the potential of social movements, like the climate justice movement, to provide early indicators of risk in public markets.

Meanwhile, investors and companies that fail to consider climate justice factors risk severe underperformance. Take the example of Energy Transfer Partners, who garnered controversy as the parent company of the Dakota Access Pipeline. The Dakota Access Pipeline is a 1,000-mile underground oil pipeline running across the central United States. It has faced significant opposition from Indigenous communities leading up to, during, and after construction.

Opponents argued the pipeline’s construction was inherently destructive, and damaged sites of great historical, cultural, and religious significance to Sioux tribes, while disrupting ecological and economic well-being. At the center of the controversy was Energy Transfer Partners (ETP), the parent interest in the pipeline.

One study by First Peoples Worldwide found that ETP’s stock price significantly underperformed relative to market expectations during the controversy, and that it experienced a long-term decline in value that persisted after the project was completed. “In fact,” write the authors, “from 5 August 2016 to September 2018, ETP’s stock declined in value by almost 20% whereas the S&P 500 increased in value by nearly 35%.” While several market factors may be at play, as of this writing, the stock continues to underperform both the S&P 500 and the S&P Global 1200 Energy Index.

While not claiming that social pressure was the sole source of the decline, the researchers found the correlation to be statistically significant. They concluded that “failure to conduct a risk assessment on projects inclusive of human rights and failure to disclose known social risks to investors correlates with the long-term downward trend of a company’s value.”

**What investors can do: insights from eight conversations on climate justice**

Implementing climate justice in an investment portfolio can take many forms. When well executed, it can accelerate progress towards mitigating the negative impacts of climate change and build resilience. It can restore ecosystems, and it can have meaningful positive impact not only on frontline communities, but on all communities. Therefore, we believe climate justice should be central to any approach to combatting climate change.
Integrate Your Thinking

The clearest narrative that emerged from our conversations with leaders with insight on climate, justice, and investing, was the importance of integrated thinking around climate and society. Valerie Red-Horse Mohl is a financier, business owner, philanthropist, and filmmaker of Cherokee heritage. A former investment banker, she is CFO of the East Bay Community Foundation, Board Chair of the Intentional Endowments Network, a lecturer at Stanford University, and the founder of Known Holdings, a financial services growth platform for the New Majority and the multi-trillion-dollar economy it powers.

“There has been a tendency,” Red-Horse Mohl says, “to create silos. To focus purely on air quality or water quality or emissions. You can’t take those things and separate them from racial justice.”

Red-Horse Mohl cites an example on the East Coast of the United States. There was a state whose political leadership decided it wanted to bring in wind turbines to boost the renewable share of the energy grid. The community where the wind turbines were set to be placed was a primarily Black community. Rather than foot the expense of creating local jobs and building the turbines themselves, the state leadership planned to import turbines from Europe. The community had reservations about the potential for pollution along the bay in which they lived. Leaders at the state level did not include members of that community at any stage of the decision-making process.

“They brought in big freighters from Europe carrying the turbines,” Red-Horse Mohl explains, “the freighters leaked oil and spewed fumes. There was pollution in the air and water.”

It’s an example of the wrong kind of engagement with frontline communities—a lack thereof. She says, “there was a problem identified related to climate: air and water quality in the community. But because this community was not involved in decision making, what was supposedly an environmental decision caused harm—to both the ecosystem and the community.”

Equipped with an understanding of the relationship between the environmental and the social, addressing the current challenge requires a systems approach. Gopal Dayaneni is a long-time grassroots organizer, writer, and lecturer at the San Francisco State University. He is the co-founder of Movement Generation: Justice and Ecology Project, and he is also a Fellow with the Center for Economic Democracy. He is one of the authors of Hoodwinked in the Hothouse.

The current mode of thinking about “climate,” Dayaneni argues, is misguided.

---

1 Quotes taken from these conversations are unedited except in a few cases to add clarity. Quotes do not necessarily present the views of the authors, other contributors, or organizations associated with contributors to this paper. Claims are not cited but are only included in cases where interviewees provided reliable sources. Further reading can be provided by the author upon request (please email Pedro Henriques da Silva at phdasilva@globalendowment.com).
“Climate is not about atmospheric concentrations of CO2,” he says. “Atmospheric concentration of CO2 is an emergent problem of a whole host of other problems. The degradation of human labor and living systems is the origin of the climate crisis. It is the emergent consequence, on a planetary scale of colonialism, slavery, and enclosure. Enclosure of land, people's bodies—it's all about entitlement.”

Dayaneni goes on to explain, “All commons is based on consent. We live in a world of privatization and enclosure. Enclosures are typically enforced through violence. That's why we have laws that say you can shoot somebody if they cross your fence... An example is land and housing. The privatization of land and housing means the only way you can access either is through those who control the enclosure. If we believe housing is a human right, all economic activity should be subordinate to that right. And this applies to any enclosure by any institution against resources that people have traditionally had access to and traditionally governed.

What got us here, with enclosures, is not the industrial revolution, or coal, or oil and gas. You can't control that pool of carbon, without controlling the other bodies of carbon: human beings and the rest of the labor of the living world."

One approach to addressing this, Dayaneni offers, is reframing the climate discussion away from one about climate, and towards one about health and well-being. Health allows us to focus on the most immediate and acute impacts and gives us a much more accessible and elastic frame: healthy child, healthy family, healthy community, healthy ecosystem—we can even talk about an economy that prioritizes health and well-being rather than industrial productivity.

“The problem with climate as a frame,” according to Dayaneni, “is it forces us to look up at the atmosphere and count atmospheric concentrations of CO2, rather than looking down at the economy at the exploitation of land and labor and the erosion of living systems.”

Dayaneni believes that “the problem with net zero is about offsets, and technocracy. If you make childhood asthma the focus, net zero doesn't work. CO2 is actually the co-pollutant, as Martha Dina Arguello of Physicians for Social Responsibility points out. The problem with fracking is the pollution of groundwater, not just the release of new fossil fuels and CO2 emissions. It's the devastation of communities. The problem of net zero, is it accepts that offsets are legitimate. Offsets are wrong. They don't work. The vast majority do not do what they say they will do in terms of reducing emissions, and do continue polluting activity in some communities. In other words, most offsets are excuses for other types of degradation. The fundamental premise of an offset is 'it's okay to pollute over there, as long as you reduce pollution over here.'"

“At best,” he continues, “it keeps CO2 constant, while accepting polluting on some people and their health. And we know that, currently, pollution disproportionately affects Black, Indigenous, and brown communities. This is a red line for the climate justice movement. If you accept that it is illegitimate to pollute the bodies of young Black children or Latinx families living near power plants, then you must eliminate offsets.
Another strategy people try to implement is geoengineering. Geoengineering is not about addressing the climate crisis; it is about preserving the nature of the economy and the system that brought us the climate crisis. If we center free, prior, and informed consent (FPIC), you have to recognize that something like geoengineering, like stratospheric aerosol injection on a planetary scale, is impossible to perform FPIC due diligence on. It affects everybody over generations, and is entirely untestable. The term they use to describe the consequence of their own proposal is termination shock. Stratospheric aerosol injection is temporary—you have to have jets pumping these for 100 years while you figure out something else to do about the atmospheric carbon loading.

For some reason, despite the potential for catastrophe, many think that seems easier, smarter, and more viable than simply transitioning to a non-exploitative economy. Moreover, it should be a warning sign that the number one financiers of geoengineering are the fossil fuel industry.”

The current mode of thinking, Dayaneni points out, enables and at times encourages, more of the same problem.

**INVEST FOR A DIFFERENT KIND OF ECONOMY**

For investors, implementing systemic change requires investing for the world we want. And doing that requires leveraging capital to transition away from an economy that enables ecological collapse for some and towards one that is grounded in ecology for all.

Dayaneni points out that the word economy stems from the Greek oikos, meaning home, and nemein, meaning management.

“Economy is literally the stewardship or care of the home. All economies are nested in ecosystems; the complex of relationships that make up the home. We are nested in economies. And we only ever experience the world through the economies in which we are in.

That’s why there is no such thing as a ‘natural’ disaster. A 5.0 earthquake in San Francisco will rattle dishes. In Bangladesh? It can level a sweatshop and kill 1,500 people.

An inequitable economy will inequitably distribute consequences. To address the problem, you have to address the economy that inequitably distributes consequences. Climate justice is not a win-win. It is the only way to win. Social inequity is a source of ecological imbalance. Unfairness in our relationships is an imbalance in the relationships of home that will directly degrade all our relationships with home over time.”

When asked what he would say to those who question if something like this could ever work, and whether he thought there was a concrete answer to “what do we do about it?” Dayaneni’s response was simple: “Lean into the kind of economy we want. Lean into the peasant food web. Peasants feed over 75% of the world’s population, while the industrial food system only feeds 25%. Research suggests small farmers also help cool the planet.

Lean into energy democracy. Investing in—if you are a large wealth holder—creating a mechanism for community-owned solar projects through tax equities. Somebody has to have enough of a tax burden that they can take enough of their equity in a write-off.
It's also about housing justice. We do all these plans around transit-oriented development in cities without addressing the fact that gentrification forces people out of the city. If you’re serious about energy and climate action protection in the city, you have to talk about renter protection, and more.

Finally, remember that the scale of the problem does not dictate the scale of the solutions. Even if you can’t liberate your imagination from the idea that the scale of the problem is the planet, you can understand that you get bigger faster through processes of decentralization. We can create community-controlled energy everywhere at once, because we are everywhere at once."

LEVERAGE SMALL SOLUTIONS FOR BIG OUTCOMES

Like the decentralization Dayaneni speaks to, some of the most effective forms of investing for climate justice are small in scope. Tracy Gray is the Founder and Managing Partner of The 22 Fund, an early growth venture capital firm focused on increasing the export capacity of U.S manufacturing companies. She is the Lead Partner at Portfolia’s Green & Sustainability Fund, Founder of gender lens non-profit We Are Enough, former Executive-in-residence at the Los Angeles Cleantech Incubator and a Board Trustee of California State University-Dominguez Hills. Prior to her investment work, she has extensive experience that ranges from computer science and aerospace technology to economic development, and her investment career has spanned both fund management and service as a philanthropic trustee.

Gray explains why it’s crucial for investors to focus on their locus of control.

"My approach as I try to grapple with climate change and this frustration with government that we see as an affixed thing, is to take a sector approach.

There is a lot of activism on the ground around water, energy and food. People say, ‘oh it's so big, how do we fix it?’ The answer is: focus on where you are.

My fund focuses on capital in private equity, with a specialization in manufacturing. Manufacturing is pretty dirty. But it’s quite straightforward to make it more efficient from both bottom line and top line. And as equity investors, we have quite an impact on companies in which we invest. The key is to focus on areas you can influence, and don’t get distracted everywhere else.

I know I can do my part to clean up existing manufacturing and help set up innovation in the sector, and sell this technology to buyers in the emerging markets to leapfrog existing processes. I’m thinking about what I can do personally and professionally. I'm not going to someplace like COP [Conference of the Parties; United Nations Climate Change Conference] just to speak. I’m going to look at my sector and see what I can do in my industry and this sector to drive change."

Just as it’s important for investors to center their efforts on their locus of control, it’s important to contextualize these efforts.

Nili Gilbert, CFA, CAIA, is Vice Chairwoman of Carbon Direct, a leader in scaling carbon management into a global industry through both climate-related investments and client advisory. She is also chair of the Advisory Panel of the Glasgow Financial Alliance for Net Zero, and a board member of the David Rockefeller Fund & Synergos Institute. Her career has spanned portfolio management, quantitative investment research, and economic policy. Her TED Talk, The crucial intersection of climate and capital, has been viewed over 1 million times.
Gilbert explains that to successfully implement a climate transition, constituents must contextualize their approach.

“There is a lot of private investment that needs to be made either directly into the climate transition or in order to advance the climate transition. Justice 40[^1] has an imperative to ensure communities of color are included in the financial benefit that arises from this transition. There will be money gained, as well as money lost. Previously marginalized communities want to know that they’ll be included in the economic opportunity that comes from the climate transition. There will be new jobs, new opportunities, and ultimately, an entirely new economy.”

A key question in all of this is, ‘Who will benefit?’ In this case, Gilbert argues, it’s difficult to separate the economic factors from the social ones.

“That is why job training is crucial. Not just training people for the jobs, but also training them for jobs located in the places where they are. I feel passionately about inclusiveness in economic opportunity, where and how investments are made, who is involved in these investments, and the future of work.”

Gilbert’s investment experience has spanned the evolution of ESG investing across several organizations, and ranged from direct investments as a fund manager, to manager selection as a foundation trustee.

“In traditional investment strategies, you’ll increasingly see a lot of investors looking at environmental and social risks, but as separate considerations.

When I was doing ESG integration, what we found is that ESG risk compounds. If you take a company that is doing poorly in 5% of environmental and 5% of social, it doesn’t add up to just 10%. It actually compounds. Since people and resources are not strictly quantifiable, these categories often overlap and have combined consequences that actually affect each other.

It comes down to management, at the end of the day. It means looking for management teams who are thinking about ESG risk in a different way. A company that is a little harmful in a lot of areas is not better than a company that is very harmful in just one area. Environmental justice is a structural way of seeing these issues as implicitly correlated. Companies that are excellent at this approach are multi-solving. And multi-solving is what environmental justice calls for as well.”

At the David Rockefeller Fund, Gilbert’s team is thinking about how to solve for diversity goals and climate goals at the same time. One way they are discussing doing this, is to seed new strategies with diverse managers. This is challenging in a world where it’s common practice to look for portfolio strategies with long track records.

“If we want to include people of color in the future economy in different ways,” Gilbert argues, “We need to take different measures in giving these groups a chance to get started. This is exactly what we are doing at Carbon Direct. We are diverse at all levels and it is part of our strength as an organization. It is

[^1]: Justice 40 is a collective of leading environmental justice movement leaders, academics, and advocates committed to working with the Biden Administration to fulfill the Administration’s Justice 40 promise of directing 40% of climate and clean infrastructure investments to frontline communities.
not just about making a diverse hire, so to speak, but also providing that person with responsibilities, mentorship, and opportunities to prove themselves.

Importantly, many of the solutions are related to economics. I think about infrastructure and where it is placed – place-based environmental justice issues. There is a jobs piece to it as well—there are strategies for job creation, but how do we make sure to build the new economy in places where the old economy existed, and in a way that doesn’t perpetuate the problems of the past?

By focusing on multi-solving and incorporating key justice factors like geography and demographics, investors, company leaders, and asset owners can make common approaches like jobs training and infrastructure investment more effective tools for positive change.

When I was doing ESG integration, what we found is that ESG risk compounds. If you take a company that is doing 5% bad at environmental, and 5% bad at social, it doesn’t add up to 10%. It compounds.

**INVEST IN FRONTLINE COMMUNITIES**

This kind of integrated thinking requires an approach that is different from conventional wisdom. And for organizations, this can mean investing in a different set of leaders.

In practice, Valerie Red-Horse Mohl explains, “communities of color have always been more impacted. It has a lot to do with the existing power dynamic, and a white savior complex. To see real change, people of color have to be in leadership positions, and have to be the ones making decisions for their communities.”

**Vanessa Roanhorse** is CEO, Portfolio Lead, and Founder of Roanhorse Consulting. She is a Fund Advisor to Angels of Impact, and has extensive experience with ecosystem building, access to capital, and community-led economic development activities. A collaborator and community leader with a nonprofit background, Vanessa is a founding member of the Zebras Unite Co-op, and sits on the boards of Zebras Unite, Delta Institute, and Groundworks New Mexico. Vanessa is one of 8 co-founders of Native Women Lead, an organization dedicated to growing Native women into positions of leadership and business. Vanessa is a Diné (Navajo) citizen and resides in Tiwa Territory (Albuquerque, NM).

She explains:

“What is needed if we’re really going to address the climate crisis, is to put the money towards the solutions that have always been there, just often overlooked. Today, there are a lot of new initiatives and strategies refocusing on mechanisms that have been around for a long time.

Frontline communities are the most impacted, and have the most solutions. But considering how money works and moves, these communities have never been allowed to leverage investments in a way that allows for that movement. Today, 80% of the earth’s remaining biodiversity is being stewarded by Indigenous people. That’s a meaningful statistic.”

A lot of Roanhorse’s work centers on land stewardship and community power. When asked what this means, she explains:
“It’s really about the relationship people have with the living world around them. Stewardship means actually acknowledging it’s a reciprocal relationship and one we are entrusted to care-take and give back to. When we impact the land, we impact ourselves. Most environmentalists approach it tactically. But really, it’s about a relationship and a responsibility to protect and return to the land the gifts we receive. Our purpose as humans is to rebuild our relationship with the land.

When we say building power in place or working to build power in communities, we acknowledge that there is existing knowledge and resources already there. Investors can support by offering opportunities and pathways for those folks to decide what opportunities they want.”

When asked about some concrete examples of things she’s seen work, Roanhorse suggests “figuring out what are the existing mechanisms. For example, lending to small businesses that are the backbone of our local economies and families. How do we help them access the patient and equitable capital needed to get to where they are going? I can tell you one important way is to start by getting rid of the 5’Cs of credit, and returning to relationship-based lending—when people knew one another, and financial institutions were grounded in their communities with aligned values.

Working with financial institutions to develop these types of relationship-based lending programs in the US is a small step that can have huge ramifications, such as new ways to underwrite investments to people who would otherwise not be able to access capital because of the 5C’s. Despite its international prevalence, relationship-based lending and microfinance in the United States is still considered too costly with little return on the investment, yet when people are able to access capital the ripple effect of increased confidence and agency can permeate a family and community. Taking this step also means acknowledging a different return on investment that credit unions or banks can leverage, which is long-term customers moving toward more traditional lending products.

We have major disparities in our human culture in how we treat people. With climate change, it's exacerbated. In this time of transition, we have to be bridge builders and translators to be able to promote collective social and physical health as a value while towing the line on how investment has worked to keep so many people and communities out of the decision-making circle. Our work is to build these bridges so our grandchildren can create the world in which we return back to the land as whole human beings.”

Applying this strategy at the institutional level requires reframed thinking. Paul Rissman, Ph.D. is the Co-Founder of Rights CoLab, a platform for advancing human rights through innovative strategies connecting civil society, technology, business, and finance. He serves as a board director at the Sierra Club Foundation, former board member at the Archaeological Institute of America, and a fellow at the Open Society Foundations. Prior to his philanthropic work, he spent 20 years at AllianceBernstein.

Rissman argues that “the climate transition cannot function without social license to operate. Start from a Rights Framework. Center Human Rights in just transition, and you will have a just transition.

At the Sierra Club Foundation, that means partnering with tribal leaders. “We partner with community leaders, and have investment and advocacy partnerships with tribes. We don’t come in unless asked to. We also need to leverage Public-Private partnerships—playing a catalytic role in providing early
capital that can then unlock public funds. To us, “Return on Investment” is a blend of net financial returns along with societal benefits, including climate justice.

“If investors aren’t partnering with grassroots communities,” Rissman contends, “then they shouldn’t be in the business.”

**INVEST WITH A RACIAL EQUITY LENS**

In the same vein as incorporating new strategies and escaping the siloed thinking described by Red-Horse Mohl, investors should understand that applying a racial equity lens to investments—whether portfolio investments or hiring investments—isn’t just about diversity or social value add. It can have meaningful climate ramifications.

Tracy Gray explains that to do this, “Allocators need to trust people of color. People of color don’t need to be included at the table. Your space was not made for us. How can these spaces ever be inclusive if they were not made by or for us?

We need a new table. Trust the people who are affected by these events, and partner with them so you can hear what needs to be heard, what needs to happen.

If people really dug deep into their sectors, they would see this clearly throughout history. When women and people of color were allowed on the manufacturing floor, white men fled to the suburbs. Then manufacturing companies moved to the suburbs to be where the white men were. When that happened, we saw a 12% increase in the wealth gap between black and white men—just from that movement from city to suburb.

These are the jobs that pay well, provide healthcare, and are the jobs of the future. Just within manufacturing, you have climate, race, and gender all affected. That’s why we call ourselves “holistic investors” and focus on our sector at The 22 Fund. If we focus on the areas we know well, and try to solve it there, there are larger network effects.

Trust women and people of color, and take a sector approach to climate justice, and we can solve this.”

Similarly, a climate justice approach often requires refocusing efforts to be people-first. **Anthony Rust** is a Trustee and Chair of the Investment Committee at Warren Wilson College. He is also the Impact Fund Manager of the Business Equity Fund, which is an innovative program and initiative designed to finance, invest, and focus on BIPOC businesses, a business sector that often has had a difficult time accessing the requisite capital for growth.

When asked how his organization approaches climate justice, he underscores the importance of racial equity.

“When we think about climate justice, we think about two things. Katrina, and how it impacted mostly poor, Black communities in New Orleans, and how preparations and responses were woefully insufficient. Second, clean water and Flint, Michigan, and surrounding communities—the folks mostly in communities of color who don’t have access to clean water in our own country [are] constantly overlooked or dismissed. No one can foresee either crisis happening in Greenwich, Connecticut. That’s
the stark reality and disparities which has at its core racism and socio-economic factors. It’s inseparable. And it only changes when the people making decisions are either incentivized or threatened with potential punishment."

In practice, Rust explores how to push investment managers to incorporate diversity and racial equity investment criteria into their diligence processes. “From a portfolio standpoint, in addition to shareholder engagement and proxy voting, we’re trying to get investment managers to incorporate racial equity criteria into their evaluation processes of companies both on the bond, equity, real estate, and other asset classes as well. Even with a small endowment.

We sent out surveys to find out if managers incorporate racial equity criteria. Most said they didn’t. We then had a follow-up question: ‘are you willing to start incorporating these criteria?’ Some of the responses we received included: ‘have not in the past, but open to a discussion.’ That gives you a place to start.”

The most effective way for investors to do this, Rust says, is to start with their investment policy statement (IPS). “You have to make sure your investment policy reflects your investment philosophy and your institutional culture and values. For example, environmental sustainability and racial equity. Research and data have shown the financial benefits to companies that incorporate these two criteria into their respective business models, which for us can translate into more alpha and better returns for our endowment fund on a risk-adjusted basis over various time periods. That’s where we started, and it’s usually where you can be the most direct and explicit at getting everybody on the same page. We developed an addendum to our investment policy that laid out the strategies we wanted to incorporate to carry out our investment policy mandates and investment philosophy. And that made a big difference.”

**RE-EXAMINE YOUR IPS**

Of course, an IPS can hurt as much as it can help. Valerie Red-Horse Mohl says asset owners and trustees should take a careful look at their investment policies to determine whether they may be hindering progress towards climate justice.

“I would call to action to almost every endowment and foundation to take a look at their IPS. These are documents that often are written ten to fifteen years ago, and for whatever reason may not have been properly updated. What that means is, there usually will be terminology that, in effect, limits investing into ESG and BIPOC [Black, Indigenous, and People of Color] fund managers.

This process has to be thoughtful. You have to make a huge effort to change how your foundation has historically viewed their fiduciary duty. For us, we implemented a requirement of not only financial reporting, but impact reporting. Impact is as important to us as financial return. We want to make sure we’re not investing in a fund that’s greenwashing. While this can look different across organizations, we hire external consultants to help us build a separate impact reporting budget into our overall budget. This helps ensure that those parties involved in the additional reporting process are compensated for their time.”

Fiduciary duty also plays a central role. As Nili Gilbert explains, “I would say to other asset owners, this stuff matters for the long-term performance of our economy, and the systemic risks and opportunities
for the assets we all own. On the current path, estimates suggest an 18% hit to global GDP arising from climate change.

It’s not possible to find the necessary solutions without addressing the social issues that are implicitly tied up with the environmental economy.

If you feel your fiduciary duty is to maximize the long-term performance of the pool of capital you oversee, then we have to address the issue of climate. And the most effective way to do that incorporates the social aspect as well.”

**REDEFINE DUE DILIGENCE**

At the center of implementing climate justice is how investors conduct their due diligence.

**Carla Fredericks, JD**, is CEO of the Christensen Fund, a private foundation working to support Indigenous people in advancing their inherent rights, dignity, and self-determination. She is a seasoned leader in sustainable economic development, human rights, business and finance, Indigenous Peoples law, and federal Indian law. She has served in several capacities, including serving as of counsel to the Standing Rock Sioux Tribe in bringing their opposition to the Dakota Access Pipeline to international fora and financial institutions, assisting the Maya peoples of Southern Belize in implementing the affirmation of their land rights, and developing a model for Indigenous-driven consent processes and remedy. In 2020, she led the organizing of investors representing $630 billion AUM that helped to achieve the Washington Football Team name change. She is a proud, enrolled citizen of the Mandan, Hidatsa, and Arikara Nation of North Dakota.

Fredericks explains that procedure is central to implementing climate justice.

“All my work is in Indigenous communities. Where Indigenous people have the ability to engage in self-determination, projects go well. Where they are not respected, or allowed to have sovereignty, it does not go well.

Tribal Nations in the United States have not been able to exercise self-determination over their own resources. This results in a passive relationship to tribal projects, at best. In the worst case, it results in really harmful decision-making for tribal communities. Investors might believe that because they’re doing renewable energy, they don’t have to consider Indigenous communities. But a just transition requires full alignment with Indigenous communities.

My own community, the community where my father grew up, was flooded for a hydro project, and the community was dislocated. There are consequences, and it’s why a do no harm approach is crucial. In addition, an approach that recognizes that those impacted have rights is critically important.

The operative global policy says, for Indigenous peoples, that if you are impacted, you have the right to say ‘no’ to a project. You also have the right to say ‘yes’ to a project. And communities are only really going to say ‘yes’ if the project is beneficial to the community.

One project that has had this baked in from the beginning is Navajo Power. From the beginning, there was strong opposition to coal, what it primarily produced. And the nation closed its power operations to focus on renewable projects.
Of course, all this is not without its challenges. There is need to recognize that the practices, from the beginning of the project through to its end, are not crafted for the results we want to see. Disruption at every stage is important.”

All this, Fredericks argues, boils down to ESG and due diligence.

“If you really probe at the outset of wherever you are in the investment cycle, you learn a lot about the proposed behavior and whether or not it was approached with a rights framework or not. To make it work, every cog in the investment machine needs to incorporate it into their diligence. An asset owner can ask their allocator to report back on diligence they’re doing when selecting managers. Then the allocator can ask fund managers to report back on how they are engaging communities. Then the fund managers can ask the companies on the ground to report back.

And it doesn’t have to be cumbersome—this would slide right in as another practice to report on. It’s translatable to diversity or climate risk.

Ultimately this isn’t about only the moral case, but about risk. If these projects are not properly diligenced from the start, it poses tremendous financial risk to the investor. There was a Dakota Access Pipeline study that found that the project cost $12 billion more than it should have because communities didn’t like the project. If that project had been diligenced from a rights perspective by all the folks who went into the master limited partnership, it never would have been financed.”

“When it comes down to it, it doesn’t have to be complicated, and it's not that hard. There are a lot of different activated experts at each level of the engagement. You don’t have to start from scratch anymore. A lot of these practices on the finance side, people act as though it needs to be new. But if you have an investment consultant or OCIO that’s with you, it will really make things easier. Willingness is the place to start from.”

**Conclusion**

This series of conversations highlights the opportunity a climate justice framework presents to environmental investors, and the movement to combat climate change. Climate justice is not a large, intangible concept to be grasped at by investors, but a state that can be strived for through a collection of practices that span the investment value chain.

It means changing your investment approach to one that leverages integrated thinking and leans into the economy we want, rather than perpetuating the one we have. It means focusing on your locus of control, contextualizing your investments, and leveraging small solutions to garner big outcomes. To drive it means to invest in frontline communities and invest with a racial equity lens. To enable it means to revisit investment policy statements and to be willing to enhance the due diligence process.

In summary, climate justice is not only a moral imperative. It provides the opportunity to address several of the world’s most pressing challenges at once. It may serve as a potential risk mitigant. And above all it may be the most significant and overlooked way—if not the only way—in which investors, fund managers, and asset owners can achieve net zero and the broader goals of the climate movement.
Attribution

This project was a collaboration between representatives from Global Endowment Management, LP, The Intentional Endowments Network (IEN), Adasina Social Capital, The 22Fund, Rights CoLab, Ceres, Graystone Consulting, Cambridge Associates, and the UN Principles for Responsible Investing (PRI).

The views and opinions expressed in this paper are those of the contributors and do not necessarily reflect those of Global Endowment Management, LP (“GEM”).

Paper Author: Pedro Henriques da Silva, Global Endowment Management, LP

Contributors:

Georges Dyer, Intentional Endowments Network
Renee Morgan, Adasina Social Capital
Tracy Gray, The 22 Fund
Paul Rissman, Rights CoLab
Kaede Kawauchi, Ceres
Lindsey White, Ceres
Kelly Major Green, Graystone Consulting
Madeline Clark, Cambridge Associates
Carol Jeppesen, UN Principles for Responsible Investment
Endnotes


5 PSCI


World Integrated Trade Solution. World Bank.