

Community-Centric Climate Resilience Investing is Critical for COP28

Dr. Sharron L. McPherson, Dr. Fred A. Yamoah and Anna Kanze Hamilton
The Green Jobs Machine, USA

Summary

The United Nations launched the Conference of the Parties (COP) in 1992 to tackle climate change. Thirty years later, climate change continues to accelerate, and companies and countries are missing targets or not setting them at all. Inaction is not an option – climate change-driven natural disasters will only increase in frequency and severity as the earth's temperature rises. To make people and the planet better off, global political and business leaders need to move from compliance and short-term thinking to long-term, strategic systems thinking. These stakeholders must focus on resilience and build a bridge between the needs of impacted communities, businesses' investment strategies and continuity plans. Key to tackling the complexity within the stakeholder groups is the need to forge the right public-private partnerships with empathy and compassion. We can do a lot without it, but we can never unlock the tremendous potential of proximate leaders that sit within the most marginalized, and therefore vulnerable to climate change, communities without the belief that members of these communities should participate in the cycle of innovation needed to address the existential crises driven by climate change. Governments and communities need businesses to go beyond compliance and business continuity and to become real partners in tackling the climate crisis. Businesses need a community-centric climate resilience investment framework and better tools to meet global net-zero targets.

What is Community-Centric Climate Resilience?

Community-centric climate resilience is the ability to predict, plan for, adapt to, and thrive in adverse climate-related events at the community level, where the impacts are felt the most. Community-centric climate resilience investing involves assessing how climate change will create new or alter current climate-related risks and opportunities and investing in ways that measurably improve a community's capacity to survive long enough to become sustainable.

According to Cutter, et al., (2008,p.2) resilience is 'the ability of a social system to respond and recover from disasters and includes those inherent conditions that allow the system to absorb impacts and cope with an event, as well as post-event, adaptive processes that facilitate the ability of the social system to re-organize, change, and learn in response to a threat.' Indeed, resil-

ience refers to coping in the face of adversity - to recover and return to normality after confronting an abnormal, alarming, and often unexpected threat. This is essential for humanity and is founded on our primordial survival instinct. In our definition, resilience means building the necessary systems that move beyond mere recovery to overcoming challenges, adapting and flourishing in the "new normal". To tackle climate change, our society must bring together both public and private investment capital to fund the frontline because we know that over \$4.2 can be saved if we do (The World Bank, 2019), not to mention the lives and livelihoods and that can be positively impacted (Rigolini, 2021). But more innovation is required if we are to properly unleash this capital for maximum positive impact. First, we must address the supply side issues and develop a framework for investing that allows us to meet the needs of the three main categories of actors: government, society/community and business/industry. This top-down approach can be enabled by a globally accepted resilience investing framework. Next, we tackled the demand side issues. Marginalized communities have been starved of investment. It is, in part, why they are marginalized. Accordingly, we need a bottom-up process that builds on existing capital absorption methodologies and that leverages AI and hyper-local data so that we can quickly learn what is working (and what isn't) in the communities where the impacts of climate change are most devastating.

Why Care about Climate Resilience Investing?

Climate change exacerbates existing risks, creates new security challenges, forces the displacement of millions of people, and endangers livelihoods, property, infrastructure, and ecosystems necessary for our survival (House, 2007). In order to address these risks, we must reduce emissions to keep global warming at or below 1.5°C, as stated in the Paris Agreement (Dimitrov, 2016). Sadly, we are not on track to meet that goal, according to a UNEP October 2022 Emissions Gap Report (Baptista et al., 2022), which means more frequent and severe weather events and climate-driven catastrophes are likely in the near future. And even if we reached Net Zero today, we would still suffer adverse climate events for the foreseeable future. According to the World Bank, 216 million people are at risk of displacement by 2050 unless

we act fast to significantly reduce emissions and invest in making communities more resilient to the climate crisis (The World Bank, 2021). Climate change is displacing other species too. This destruction of biodiversity and wetlands contributes further to the increase in the Earth's temperature and drives together species in ways that increase the spread of disease and pandemic risks. The primary scientific input to COP28, the March 2023 Intergovernmental Panel on Climate Change's (IPCC) sixth assessment report, emphasizes that humans are driving current temperature increases by producing the greenhouse gas emissions that cause global warming. However, not all humans are equally responsible or affected in the same ways. Frontline communities are those that are often located in already disproportionately degraded environments. Often these communities have contributed the least in terms of emission, but are more exposed to climate change than more affluent communities, and accordingly need more resources and agency to become more resilient.

Globally, 2022 saw Europe's worst droughts in 500 years and the most devastating floods in Pakistan's history. In the US, Hurricane Ian was one of the strongest hurricanes in Florida's history, leaving some communities decimated and causing \$100 billion in total losses. These increased losses from natural disasters have led property insurers to stop providing insurance in California and Florida (as of June 2023). These types of adverse climate events hit frontline communities the hardest and accelerate growing inequality because wealthier communities can repair and rebuild, while frontline communities deal with already weakened and outdated infrastructure. Additionally, the mental toll brought by the increased frequency and uncertain timing of repeated weather events, plus the lack of agency in addressing them, further reduces the ability of frontline communities to build systemic resilience.

Why Prioritize Community-Centric Climate Resilience Investing?

Behind the backdrop of the disastrous impact of climate change across the world in the twenty first century, it cannot be overemphasized that there is an urgent need for investment in climate resilience and adaptation, not just mitigation. Every \$1 invested in more resilient infrastructure yields a \$4 benefit both economically and from reduced disruptions, like loss of electricity or damaged roads, per a 2020 World Bank and Global Facility for Disaster Reduction and Recovery (GFDRR) report. It is not just a matter of physical assets like property and infrastructure; it's people who can't get to work, the hospital, or childcare. People benefit from having more resilient buildings, roads, and systems, and the investment that prepares for climate-induced calamities and adapts to the new normal in their aftermath. For example, after Hurricane Ian, one community emerged from the historic winds and

rain relatively unscathed. In the United States, Babcock Ranch in Southern Florida was intentionally planned to be climate-change resilient. The community prevented power outages and flooding by implementing solar power and preserving wetlands. Real estate demand in the community increased by almost 50% in October 2022 compared to the previous year. It is however important to recount that this community is affluent by comparison to most.

Despite the benefit of investment in adaptation and resilience, mitigation investment still makes up 90% of total climate finance (Climate Policy Initiative, 2021). The climate policy initiative report further indicates that for every \$1 invested in climate-resilient infrastructure, investors spend \$87 on infrastructure projects that do not consider climate resilience. To mainstream climate resilience investing at the scale necessary to meet the interconnected global crises, we must build a bridge between those businesses structuring complex transactions, like the construction of climate resilient housing developments and adaptation of oil and gas pipelines, and the frontline communities most impacted by these deals. Today, almost every successful business knows it needs to be resilient. By leading with business resilience and using data to make clear the value to business of investing differently in community resilience, we can unlock a market worth trillions of dollars.

How do we Invest in Climate Resilience?

Resilience investing is complex and requires a systems lens to understand root causes, vulnerabilities, and connections to critical infrastructure and community needs. So, the logical place to start is an index that measures and identifies what makes an investment and a community "resilient." We launched the Green Jobs Machine because we recognized that achieving humanity's goals of global community resilience requires hyper-local data and advanced technologies, like artificial intelligence, machine learning, and predictive analytics, to process this data. We set about building a powerful new solution that combines emerging technologies with established methodologies to define, measure, and rank resilience for businesses operating in a community.

Our solution is ResilienceAI - an index that integrates aggregated, granular, timely, community-centric data across seven sub-domains: 1. economic; 2. political and regulatory; 3. environmental and ecological; 4. Critical infrastructure; 5. financial; 6. scaling infrastructure; and 7. vulnerability of populations.

The only way sustainability efforts work is when resilient systems underpin them. This includes scaling infrastructure factors - like access to hospital and school systems - plus factors related to the vulnerability of a population - like gender and income equity. Many of these factors fall outside of a business resilience index and therefore, businesses struggle to analyze the

impact of this investment in its business continuity planning. However, our index brings together factors that are relevant to business, government and community, making it unique in this regard. The linkages between resilience at the community level and corporate level is what enables more impactful and scalable climate resilience investing. Similar to how credit scores and ratings unlock lending and asset ownership, the resilience index and score for communities and businesses will guide community-centric climate investment.

With ResilienceAI, we measure things that matter to create a production line for resilience investing that is capable of moving trillions of dollars into the ideas and communities where this investment is most needed. The industrial scale shifting of climate resilience investing is our aim. The Green Jobs Machine builds the bridge that aligns business incentives to the needs of the communities in which they operate. The number of sustainable and quality jobs that we create using this approach to Resilience Investing is just one of the ways we measure impact. Next, community-centric climate resilience investment needs buy-in and concrete actions from businesses. The business sector drives 72% of GDP and as much as 85% of technology investment and labor productivity growth. And CEOs recognize the need for resilience, with many ranking its importance so high that they link it to the company's financial performance. But while most companies have now set net-zero targets, very few have set strategies to meet them, and even fewer have committed to phasing out fossil fuels. A significant barrier to achieving net zero targets is that companies need more internal capacity and skills on climate change and reducing emissions. Another problem is insufficient quality community-centric data to make informed investment decisions to create measurable climate resilience outcomes. Because these issues are complex, companies tend to focus on short-term compliance and reporting rather than developing and implementing long-term resilience strategies requiring modifying or updating their activities to adapt to climate change. Most investors and companies are focused on avoiding risks to minimize losses and continue practices that lead to climate change and environmental degradation because they are still making a profit. Businesses intent on only increasing shareholder profits in the short term lack the incentives to invest in solutions that make communities greener, wealthier, and more resilient. This mismatch is unsustainable for people and the planet. It is also incompatible with the companies' profit-maximizing goals. Making communities resilient is an opportunity for financial returns and social and environmental impact because taking on a resilience mindset is profitable: Companies evaluated as more resilient generated more shareholder value than less resilient peers, according to a 2022 McKinsey study.

Businesses need guidance and a framework for climate resilience investing. Businesses need a resilience index with the right community-centric data to enable critical, meaningful, and effective business decisions.



Conclusion: Why Now and Who are We?

Lives and livelihoods depend on climate resilience investing. Every minute that we delay deploying capital and human resources to address climate resilience is a minute lost. We also believe that business pragmatism has an important role to play in how we deploy capital at scale to derisk climate resilience investing. COP28 is being held in the UAE beginning November 23, 2023. While the UAE is one of the leaders in global emissions, it is also determined to achieve its mission of inclusive growth. This is also the first time in the history of COP that the CEO of a major business is at the helm, which underscores the UAE's desire to lead with business needs. However, solving the interconnected problems inherent in creating inclusive growth through climate resilience requires cross-collaboration, intersectionality, and driving public-private partnerships between business and government with empathy and compassion. COP28 offers the perfect opportunity to demonstrate the power of resilience as a bridge, and businesses implementing community-centric climate resilience are perfectly positioned to move beyond intent to action.

We are the Resilience People - The Green Jobs Machine is a global collective of committed innovators and experts in business incubation, acceleration, finance, strategy, behavior tech, engineering, neuroscience, climate action, and community building. Our mission is to use humanity's most advanced technologies to enable scalable, sustainable investment in community-centric climate change resilience and wealth creation in the world's disadvantaged, exploited, and marginalized communities.

References

Cutter, S. L., Barnes, L., Berry, M., Burton, C., Evans, E., Tate, E., & Webb, J. (2008). A place-based model for understanding community resilience to natural disasters. *Global environmental change*, 18(4), 598-606.

The World Bank (2019). \$4.2 Trillion Can Be Saved by Investing in More Resilient Infrastructure, New World Bank Report Finds, <https://www.worldbank.org/en/news/press-release/2019/06/19/42-trillion-can-be-saved-by-investing-in-more-resilient-infrastructure-new-world-bank-report-finds> (accessed 20/07/2023).

Rigolini, J. (2021). Social Protection and Labor: A Key Enabler for Climate Change Adaptation and Mitigation, Discussion Paper No. 2108, December 2021.

House, Q. E. (2007). Environmentally displaced people: Understanding the linkages between environmental change, livelihoods and forced migration. Refugee Studies Centre, University of Oxford.

Dimitrov, R. S. (2016). The Paris agreement on climate change: Behind closed doors. *Global environmental politics*, 16(3), 1-11.

Baptista, L. B., Schaeffer, R., van Soest, H. L., Fragkos, P., Rochedo, P. R., van Vuuren, D., ... & Qimin, C. (2022). Good practice policies to bridge the emissions gap in key countries. *Global Environmental Change*, 73, 102472.

The World Bank (2021). Millions on the Move in Their Own Countries: The Human Face of Climate Change, September 13, 2021, <https://www.worldbank.org/en/news/feature/2021/09/13/millions-on-the-move-in-their-own-countries-the-human-face-of-climate-change>.

World Bank and GFDRR (2020). Bringing Resilience to Scale, World Bank and Global Facility for Disaster Reduction and Recovery Report (2020).

Climate Policy Initiative (2021). Global Landscape of Climate Finance 2021, <https://www.climatepolicyinitiative.org/publication/global-landscape-of-climate-finance-2021/#:~:text=In%20terms%20of%20uses%2C%20mitigation,dual%20uses%20accounted%20for%202%25> (accessed 19/07/2023)