

IMPACT REPORT 2022

Greenbacker Development Opportunities Fund



Greenbacker
DEVELOPMENT OPPORTUNITIES™



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A LETTER FROM OUR MANAGING DIRECTOR

To our investors and partners in the sustainable investment community,

We are pleased to issue our first annual Greenbacker Development Opportunities (“GDEV”) Impact Report for the calendar year 2022. As a firm, Greenbacker has dedicated itself entirely to investing in the energy transition and has built a reputation over more than a decade for its commitment to the environment. Over the past three years, we at GDEV have been building a private equity franchise from this foundation.

Whether investing in solar, hydro, battery storage, energy efficiency, or other subsectors, our approach to mitigating climate change is people-centered. It starts with our mission-driven GDEV team who come to work each day to make a difference in the energy transition. Our approach continues with our partners. We identify the best management teams in their respective fields and create durable partnerships based on shared values. We then work with our partners to create cultures and aligned incentives that can attract the best employees in the industry. These companies go out into communities across the US (and sometimes Canada) and engage directly with landowners, towns, counties, school districts, utilities, and other critical members of the energy ecosystem.

As an investment business focused on the energy transition, our goals are to create economic value, improve the resilience of our power and energy systems, and reduce the impact these systems have on our environment.

As a people business, we strive to make an impact on many groups of stakeholders. But everything we do is ultimately in the service of the most important stakeholders: our kids and the generations that will follow them.

Climate change is here, and its impact is dire. Although global efforts have fallen short to date, we may yet avoid the most devastating impacts with rapid, unified action. And there is reason today to find hope. The cost of critical technologies, like solar, wind, and storage, has dropped dramatically in the past 10 years, becoming accessible to many more people. Last year alone, the sustainable investment industry saw \$20+ billion invested in startups, a significant increase from prior years despite volatility in other sectors.¹ In August 2022, Congress passed the Inflation Reduction Act, landmark legislation making unprecedented investment in renewable energy, green transportation, clean water access, and the sweeping job creation necessary to support this effort. None of these steps alone will quell climate change, but they reflect a growing wave of committed action.

One of the clearest ways in which we define GDEV’s values is through our unwavering commitment to clear and actionable ESG policies to guide our decision-making. We are proud to showcase the impact we are creating across our funds, and we are setting our sights on a brighter, greener future.

¹Griffin, E. “Recession Resilient Climate Start-Ups Shine in Tech Downturn.” Jan. 30, 2023. *The New York Times*.



SINCERELY,
Benjamin Baker

Managing Director
Greenbacker Development Opportunities Fund

A handwritten signature in black ink, appearing to read 'Ben Baker'.



WHO WE ARE



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02



OUR PEOPLE AND OUR MISSION

We make growth capital investments across a wide range of sustainable infrastructure and renewable energy technologies. Across our portfolio and within our own team, we're committed to making the landscape of energy transition investment more equitable, accessible, and sustainable—starting with our own organization.

This commitment is foundational to everything we do at GDEV and, more broadly, as part of Greenbacker. As we support our portfolio management teams in their sustainability efforts, we know that change begins at home.



Our investment team lives our values. When we make decisions, we're not only accountable to our investors and our portfolio companies, but also to each other. We believe in practicing what we preach, and that means making sure there are enough seats at the table and that every voice is heard."

Trixie Blair
Principal

AT A GLANCE



2020

Founded



13

Sustainable infrastructure platform investments



8

Dedicated professionals



29%

Of investment professionals are women



38%

Of team members are from diverse racial and ethnic backgrounds



8

Established ESG policy goals



BUILDING A UNIFIED HUB FOR THE SUSTAINABLE DEVELOPMENT COMMUNITY

Historically, lower middle market sustainable infrastructure platforms have faced barriers to entry in our industry. Successful energy transition demands technical insight, operational expertise, and long-term, large-scale investment in infrastructure. At GDEV, we are committed to investing in growth stage energy transition companies to build the infrastructure platforms of the future. We provide them the resources and guidance needed to help them reach their goals. Supporting smaller businesses leads to job creation and innovation, critical to the goal of successful and equitable global energy transition.



GDEV Team (left to right): Trixie Blair, Joe Nano, Ben Baker, Dan Drucker, Jerome Briens, Alex Worthy, Cindy Wei, and Quinn Pasloske



Growth capital

to support sustainable jobs and help smaller organizations scale their mission



Operational support

to help companies access otherwise out-of-reach expertise, resources, and economies of scale



Infrastructure funding solutions

that allow our companies to thrive in capital-intensive sectors



The growth stage companies we invest in have big plans, but it takes a lot of resources to break into this industry. We're able to give them access to resources they wouldn't have otherwise, and that means they can create green jobs and scale to meet their vision. The more innovators we can bring onto the playing field, the more likely we are to mitigate climate change."

Alex Worthy
AVP

WHAT “IMPACT” MEANS FOR GDEV



Environmental

Climate action

GDEV supports sustainable development and mitigates climate change by investing exclusively in the developers and operators of renewable energy and sustainable infrastructure assets. Despite palpable momentum, renewable energy development is still in its early stages. We’re committed to leading industry efforts to mitigate the most devastating effects of climate change.



Social

Our people

We prioritize equitable treatment of our team members through intentional, inclusive talent development and a commitment to fair compensation. Beyond our walls, we maintain active community engagement and support for these values across our portfolio teams.



Governance

Policy

Our focus is establishing the right corporate policies to guide just, informed decisions for ourselves, our portfolio, our investors, and our stakeholders. GDEV promotes diversity of thought and independence on the boards of its portfolio companies.



All of the decisions we make are one small but critical piece of the sustainability ecosystem. We recognize that mitigating the effects of climate change and supporting the health of the renewable energy industry requires more than values, and we’re rigorous in establishing and implementing ESG policies that create a positive impact for our portfolio and our investors.”

Quinn Pasloske
Principal



HOW WE INVEST



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- 10 ESG throughout the investment process

03



OUR THESIS AND INVESTMENT THEMES

Despite a rapidly expanding landscape of investment in energy transition, there has been a noted lack of investment in the lower middle market. At GDEV, we identify leading developers and operators, and we provide the growth capital they need to help them scale successfully. We leverage the extensive network and technical capabilities of Greenbacker to support management teams and help companies reach their full potential.



Delorean Power team at the groundbreaking of their 25 MWh battery storage installation in Danville, VA

SECTORS

We're focused fully on energy transition, investing in companies within the following primary subsectors where our team has niche expertise and operational insight:

Renewable power generation

Solar, wind, hydropower, and geothermal

Grid services and mobility

Energy storage, energy efficiency, microgrids, virtual power plants, and fleet electrification

Sustainable technologies at the forefront of climate innovation

Waste-to-value, renewable natural gas, green hydrogen, and carbon capture

ESG THROUGHOUT THE INVESTMENT PROCESS

Investing in and enabling the development of renewable power generation and the transition to a carbon-free electrical grid is fundamental to our mission, and this focus extends its reach to every decision we make throughout the lifespan of an investment. Our commitment to the elements of ESG, both at our firm and beyond, informs our processes from screening to diligence to monitoring and reporting.





ESG CONSIDERATIONS AT EVERY TOUCHPOINT

At each touchpoint of the investment process, our team considers ESG factors through both formal protocols and thoughtful, collaborative decision-making.

We prioritize alignment of values and a shared vision for enacting change.



Screening

We originate and evaluate all opportunities as a team, and we consider ESG attributes as part of our formal screening process.

- We actively originate ESG-forward opportunities
- A company's ESG attributes are a key consideration in its viability for investment
- ESG is one of our six equally weighted evaluation categories. We only pursue companies that score above our formally established thresholds



Diligence & Investing

As we perform due diligence and initiate investments, we prioritize ESG-related metrics and incentives for portfolio management.

- ESG metrics are critical to our formal evaluation and diligence protocols during the underwriting process
- We negotiate and implement incentive plans for portfolio management teams that incorporate ESG performance factors
- We collaborate with portfolio management teams to incorporate ESG as a core pillar of strategy



Monitoring & Reporting

Our team is committed to supporting our portfolio's ESG efforts and to reporting transparently to our investors.

- Each portfolio company targets ESG improvement points identified during the diligence process as part of their 100-day plan post investment
- Our team monitors all ESG metrics on a quarterly basis
- We publish and deliver quarterly reports to investors detailing ESG measures and progress

OUR PORTFOLIO AND ITS IMPACT



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OUR PORTFOLIO AT A GLANCE²

In 2022, our portfolio partners made steady progress toward their goals for environmental and social impact. We're proud to support their work and to work alongside them toward our shared vision for the future of the industry.

Environmental offsets³



250 MW+
Renewable energy projects developed, financed, owned or operated as of 2022



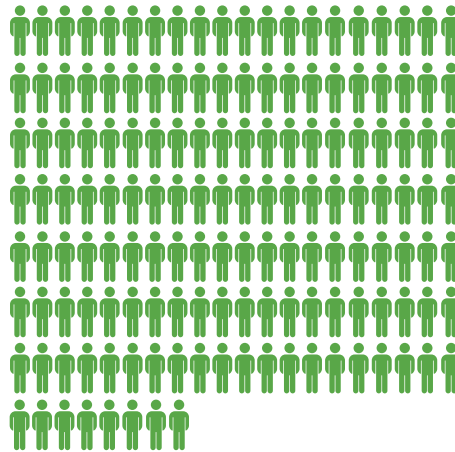
330 GWh+
Clean energy generated in 2022



23,000+
Equivalent homes powered for a year



200,000 MT+
Carbon abated in 2022



148
Net new jobs created since GDEV's initial investment

13
Platform investments across several areas of renewable energy



Combined pipeline

8 GW+

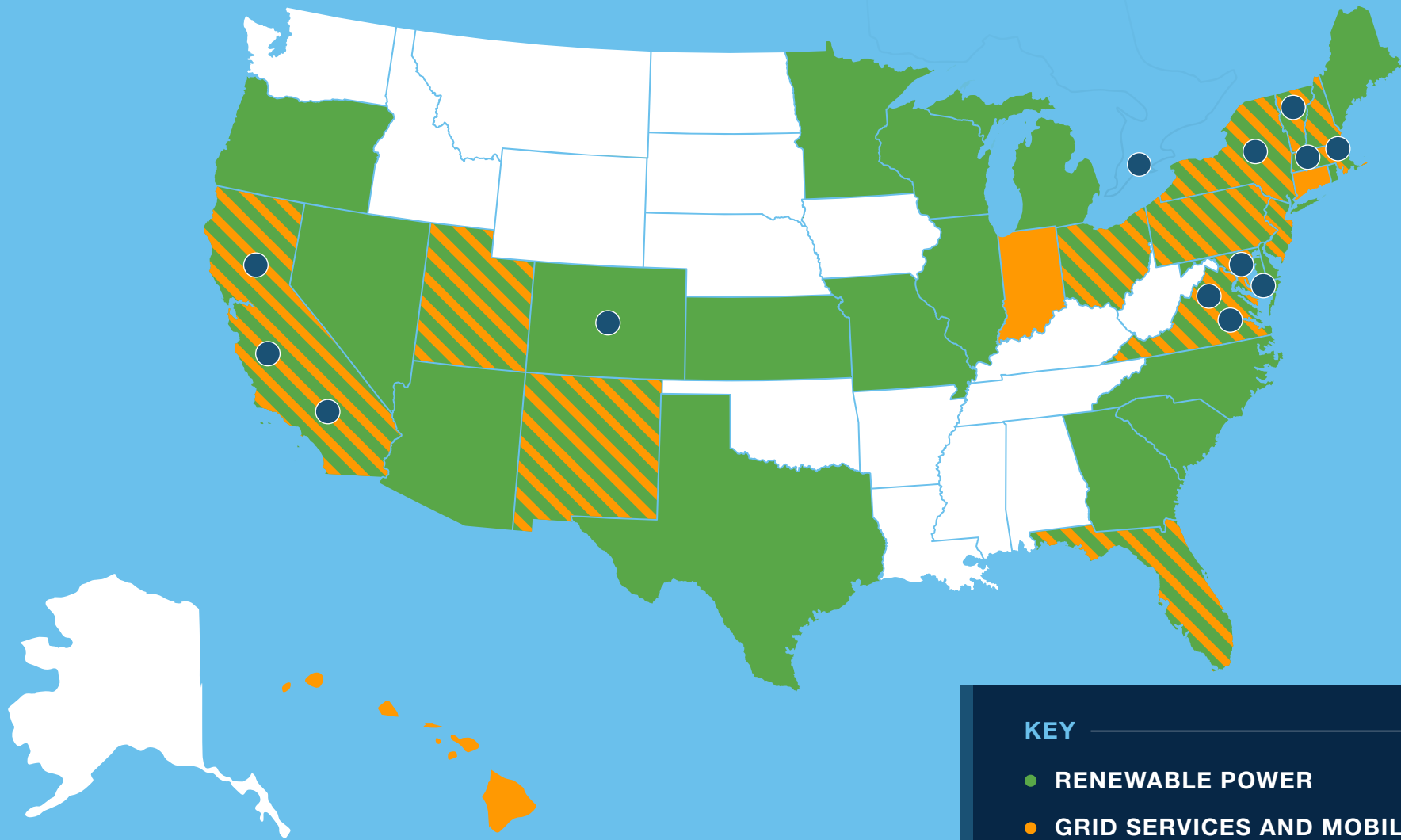
REVOLUTIONARY TECH FROM OUR PARTNER

Noria Energy, a creator of adaptive water and solar energy solutions, recently partnered with BASF Alabama to install a **first of its kind floating solar energy system**, using renewable energy to improve water quality. Read the full report [here](#).

²Data based on self-reporting per respective portfolio company.

³Carbon abatement is calculated using the EPA Greenhouse Gas Equivalencies Calculator which uses the Avoided Emissions and generation Tool (AVERT) US national weighted average CO2 marginal emission rate to convert reductions of kilowatt-hours into avoided units of carbon dioxide emissions.

ACTIVE PROJECTS IN 33 STATES











KEY

















- RENEWABLE POWER
- GRID SERVICES AND MOBILITY
- PORTFOLIO COMPANY HQ

ALIGNMENT WITH THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS (SDGs)

The 17 SDGs outlined by the UN provide an actionable framework for organizations across the globe to advance equity and unified climate efforts. At GDEV, we look to these SDGs as a way to compare efforts across our portfolio, and we're committed to further action across all areas of impact. We're proud to report the following UN SDG alignment in this first annual report.



Portfolio company ⁴	Mission	UN SDG alignment
	<p>Chaberton Energy develops sustainable infrastructure and renewable projects, from project conception to full operations, with a primary focus on distributed energy generation and community solar projects.</p>	
	<p>Dichotomy Power owns, operates, and maintains hydroelectric facilities and works with stakeholders, agencies, and surrounding communities to enhance the value of the projects for both the community and the environment.</p>	
	<p>ClearEnergy Hydro acquires and upgrades small, distributed hydro sites, integrating them into a platform for social, environmental, and economic prosperity.</p>	
	<p>OYA Renewables is a leading clean energy developer and independent power producer bringing solar energy and other renewable energy to communities across North America.</p>	

Portfolio company ⁴	Mission	UN SDG alignment
	<p>Commonwealth Energy Partners collaborates with landowners, communities, and customers to develop solar and storage projects across Virginia, delivering long-term economic and environmental benefits to the Commonwealth.</p>	
	<p>Delorean Power develops energy storage projects that are critical to achieving the country's decarbonization goals and preparing the grid for increasing supply of intermittent renewable energy generation.</p>	
	<p>Noria Energy collaborates with customers to provide adaptive solar and water solutions, including a first of its kind floating solar system, empowering organizations and communities to realize their cleantech goals.</p>	
	<p>Sunrock Distributed Generation partners with solar developers and installers to acquire, originate, and finance commercial solar and storage assets at various stages of development.</p>	
	<p>Renew Energy Partners provides turnkey solutions for funding, installing, and managing energy-efficiency and on-site clean energy projects.</p>	
	<p>Swell Energy helps homeowners and businesses achieve total energy security and independence from rising energy costs through cutting-edge, smart energy technology.</p>	
	<p>Sunstone Credit finances renewable energy projects through a proprietary underwriting process, giving SMB borrowers access to simple, affordable solar loan products with flexible terms to reach their energy goals.</p>	
	<p>Revolv Global provides full-service solutions for fleets transitioning to electric, from financing EVs to building charging infrastructure, contributing to a zero-emission future and improving community air quality.</p>	

PORTFOLIO SPOTLIGHTS



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SUNSTONE CREDIT

Baltimore, MD

Climate tech and commercial solar financing



OVERVIEW

Sunstone Credit is on a mission to democratize access to solar for businesses of all sizes. They've built a streamlined, proprietary underwriting process, and they've partnered with leading financial institutions and a national network of solar developers to provide business borrowers access to simple, affordable, and easy-to-understand solar loan products with flexible terms and a streamlined application process.

IMPACT

Businesses know that transitioning to clean energy can save money and make

a real climate impact, but between rising utility prices, increased tax incentives, and a need for resilient power access, most businesses have not had access to loan financing for solar installations.

As a result, they've had to either pay the entire upfront cost out of their own pocket, lease a third-party-owned system, or simply forgo their renewable energy project. Financing through Sunstone allows businesses of all sizes to accomplish their energy goals, own their solar system outright—and reap the benefits, like cost savings, a reduced carbon footprint, and a step toward a clean, green future for all.



Solar can be a simple and impactful way for companies to access a cleaner, more resilient energy source, improve their ESG performance, and enjoy substantial energy savings. However, most businesses are being left behind when it comes to transitioning to solar because financing is hard to get. Sunstone is tackling this issue by providing flexible financing for companies of all sizes and industries, helping them reduce their carbon footprint and contribute to a greener future.”

Josh Goldberg, CEO, Sunstone Credit

SUNSTONE IS ALIGNED TO THE FOLLOWING UN SDGS:



Ensure access to affordable, reliable, sustainable and modern energy for all



Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation



Take urgent action to combat climate change and its impacts



BROWNE FAMILY VINEYARDS

SUNSTONE CREDIT BY THE NUMBERS



50 states

Hundreds of solar developers onboarded nationwide



\$300+ million

Loan applications initiated in the platform



\$20 million

Series A funding round announced January 2023



50%+

Commitment to diverse hiring and gender parity



IMPACT HIGHLIGHTS

Democratization of solar energy access

Sunstone is committed to simplified, easy-to-understand products and underwriting, making the transition to solar accessible and affordable for small businesses.

Inclusive hiring practices

Sunstone has committed to a goal of gender parity and over 50% diverse hires going forward.

Sunstone Women's Achievement Network (SWAN)

SWAN was launched with the mission of supporting and advancing female members of the Sunstone team as they seek to attract and retain the highest level of female talent with the goal of gender parity at the company.

CHABERTON ENERGY

Rockville, MD

Community solar and distributed generation



OVERVIEW

Chaberton is a team of renewable energy developers focused on bringing sustainable, renewable energy solutions to as many communities as possible. They take a proactive approach to community engagement, working with neighbors, stakeholders, regulators, and the community as a whole. Chaberton also prioritizes education, informing communities about the benefits of solar and helping people gain access to clean energy.

A 2022 HIGHLIGHT: PROJECT FRIENDSHIP

In 2022, Chaberton developed, constructed, and completed two adjacent solar projects in West Friendship, Howard County, Maryland, totaling 6.25 MW. In addition to serving local residents and small businesses, the projects feature a pollinator habitat, which helps restore the bee population and grow productivity of surrounding farms.

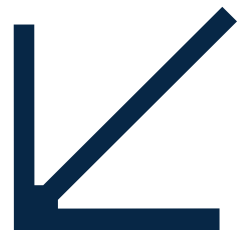


At Chaberton Energy, we have a passion for renewable energy, and for bringing sustainable, environmentally friendly energy solutions to our communities. We hope that our work will contribute to making the world a better place.”

Stefano Ratti, CEO, Chaberton Energy



CHABERTON ENERGY IS ALIGNED TO THE FOLLOWING UN SDGS:



Ensure access to affordable, reliable, sustainable and modern energy for all



Make cities and human settlements inclusive, safe, resilient and sustainable



Take urgent action to combat climate change and its impacts



Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation, and halt biodiversity loss

CHABERTON ENERGY BY THE NUMBERS



11 states

Growing geographic footprint



25 MW+

Developed community solar projects



500 MW+

Current project pipeline



690,000 MT

CO₂ offset over lifespan of projects

WHAT IS COMMUNITY SOLAR?

Community solar is a mechanism which allows those who cannot directly access solar energy to participate in their community's renewable energy goals and enjoy the savings provided by solar energy.

Research has identified that nearly 80% of Americans cannot access solar from their rooftop. Community solar grants solar energy access to a variety of energy users including homeowners or renters who may not have an appropriate roof or land space to install solar panels and low-to-moderate-income families who may not have the resources to invest in a residential solar installation.

Community Solar programs allow utility customers to receive a savings credit on their electric bill by subscribing to a solar energy project located off-site in their community. These programs are designed for a single, remote array to simultaneously provide a utility cost offset through community solar subscriptions. Chaberton develops community solar farms that are economically friendly, supporting the local economy in various ways including via local taxes, community hosting agreements, and by creating local employment opportunities.

RENEW ENERGY PARTNERS

Boston, MA

Commercial and industrial decarbonization



RenewEnergy PARTNERS



OVERVIEW

RENEW Energy Partners is a decarbonization firm that provides turnkey solutions for funding, installing, and managing energy efficiency and on-site clean energy projects. The company helps building owners meet regulatory and consumer demands to reduce their carbon footprint, while saving money and making their buildings cleaner and more resilient. Upgrades and retrofits are funded by future savings.

IMPACT

Commercial buildings waste 30% of the energy they consume due to inefficient equipment, in total contributing 10 GT per year of CO₂ emissions. RENEW's mission is to speed carbon reduction and help mitigate climate change by making it financially compelling and effortless to implement energy efficiency upgrades in commercial and industrial buildings. RENEW's vision is to help accelerate to a world where a building's carbon footprint is continuously improving without ever making a capital investment.

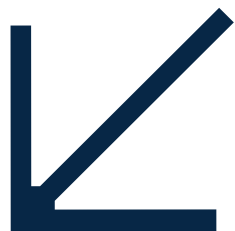


Over 30% of required CO₂ reductions by 2030 will need to come from energy efficiency improvements. RENEW is committed to help make that happen in a way that is financially and environmentally attractive to the commercial and industrial sector."

Steve Pritchard, Principal and Co-founder, Renew Energy Partners



RENEW ENERGY PARTNERS IS ALIGNED TO THE FOLLOWING UN SDGS:



Ensure access to affordable, reliable, sustainable and modern energy for all



Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation



Take urgent action to combat climate change and its impacts

RENEW ENERGY PARTNERS BY THE NUMBERS



\$1 Billion

3-Year planned capital deployment toward decarbonization



63,485 MT

2022 CO₂ Emissions reductions



8,000

Equivalent homes powered in 2022



1,088,897 MT

CO₂ Emissions reductions since inception

IMPACT HIGHLIGHTS

Projects spanning all of North America

RENEW has active projects underway across both the US and Canada.

Decarbonization of commercial and industrial markets

RENEW has built projects in many sectors, including manufacturing, healthcare, multifamily, commercial office, education, data centers, cold storage, transportation, and more.

Complex projects

Many large, complex projects require niche technical expertise and flexibility, and RENEW is uniquely positioned to accomplish these undertakings, making them a long-term partner for reaching carbon reduction goals.

LOOKING AHEAD



25 Closing words



THANK YOU FOR JOINING US IN DRIVING THE ENERGY TRANSITION



[Handwritten signatures]

Alberto S. Weathly

Cindy Wei

Quinn Pasleske

[Other illegible signatures]

We recognize that the effects of climate change are here, and we also believe that our work can support the global effort to mitigate the most devastating of impacts. As we continue to invest in renewable energy and sustainable platforms, we are continuously evaluating our own mission and process. In the coming year, we plan to focus more intently on measurement and reporting of our impact. We are undertaking two primary efforts in this area.

First, we have partnered with Metric ESG & Impact Management, a platform that will help the GDEV team track ESG metrics both internally and across our portfolio. More accurate data will assist in our understanding of our own impact and will help to identify actionable areas for improvement across GDEV and all of our partner companies. With clearer data, we hope to expand the scope of future reporting.

Second, we plan to implement the principles outlined by the Task Force on Climate-related Financial Disclosures (TCFD) to improve our reporting of climate-related financial information. We believe that formal adherence to the TCFD guidelines will facilitate risk assessment and contribute to strategic, climate-focused long-term planning.

To our partners in these efforts: thank you, and we look forward to working with you toward a more sustainable future.

SINCERELY,
The GDEV team



Greenbacker
DEVELOPMENT OPPORTUNITIES™

Questions?

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