

# IMPACT REPORT

3Q|4Q 2022





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# ABOUT US

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*Greenbacker is empowering a sustainable world by connecting individuals and institutions with investments in clean energy.*

*Our vision as long-term owner-operators is to stay ahead, anticipate new opportunities, offer adaptable investment solutions, and build durable partnerships to create the future of energy.*

Environmental sustainability is the bedrock foundation of our business model. We're committed to facilitating society's move toward a renewable energy future, while seeking to generate strong financial results for our investors. We aim to make this transition a reality by raising and deploying capital, educating financial professionals, and broadening investor appetite for sustainable infrastructure

We also recognize that sustainability isn't only about environmental impact. We take our social responsibilities seriously and consider corporate governance an essential component of a successful operation. From day one, we have fostered an environment that keeps these concerns at the forefront, while establishing practices and setting ambitious targets to ensure we grow as a market leader in a sustainable corporate culture.

*"When you consider the rising costs of traditional fossil fuels and the ongoing depletion of our finite natural resources, clean renewable energy clearly stands out as the most effective and easily applicable solution to the world's energy issues."*

**CHARLES WHEELER**  
CEO, GREENBACKER RENEWABLE ENERGY COMPANY  
PRESIDENT, GREENBACKER CAPITAL MANAGEMENT



*"We believe that these kinds of investments represent a way to generate steady and dependable monthly distributions, while at the same time advancing vital environmental goals."*

**DAVID SHER**  
CEO, GREENBACKER CAPITAL MANAGEMENT  
DIRECTOR, GREENBACKER RENEWABLE ENERGY COMPANY

# BUSINESS MODEL

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*Greenbacker is leading the transition to a clean energy economy by investing in and operating a diversified portfolio of income-producing renewable energy facilities, energy efficiency projects, and other sustainable investments.*

We buy renewable energy assets and other long-term contracted income-producing assets with the goal of professionally managing them to increase both energy production and investor return.

Today, these assets make up a portfolio that strives to provide investors with predictable, safe, and reliable performance.

## INVESTING WITH GREENBACKER



## REVENUE FROM LONG-TERM CONTRACTS

## CORPORATE GOVERNANCE

Responsible business practices are essential to creating value for—and fulfilling our fiduciary duty to—our shareholders. They’re also the best way to protect our employees and assets. We advocate accountability and transparency, with a corporate governance strategy designed to:

- Ensure decisions at every level are compliant with relevant regulations.
- Provide avenues to report concerns or misconduct.
- Protect information with a comprehensive cybersecurity management program designed for modern-era risks.



# CORPORATE RESPONSIBILITY

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*Our Corporate Social Responsibility (CSR) Committee is dedicated to creating a workplace that embodies the values of our mission. The group manages the policies that shape our internal environment and drive our social impact. We aspire to be an active community partner and to maintain equitable standards of diversity and inclusion across our organization.*

## DIVERSITY, EQUITY & INCLUSION (DEI)

We increase our competitive edge with a workplace that encourages a supportive and inclusive culture. The unique perspectives each individual brings to Greenbacker allow us to uncover opportunities and work more effectively. Team members can meet their highest potential in an atmosphere where they are respected and valued regardless of age, gender identity, sexual orientation, nationality, ethnicity, religion, ability, marital status, and pregnancy or parenthood status.

In 2021, Greenbacker employees founded the DEI Committee, a group dedicated to facilitating bold initiatives and advocacy across our organization. One of its initiatives is promoting opportunities in the renewable energy sector for underrepresented students.

## LEADERSHIP

Greenbacker has also partnered with Firefly Inclusion Solutions to further expand our commitment to sustainability into DEI initiatives. Firefly, a DEI firm focused on organizational culture transformation, has worked with senior team members and executives to help define and articulate our firm's core values. They've also helped us lay the path to embed these values across the Greenbacker ecosystem to achieve courageous growth in the areas of diversity, equity, and inclusion.

## EDUCATION, SCHOLARSHIP & INTERNSHIPS

The DEI Committee has partnered with Spelman College, a historically Black college in Atlanta, to fund a four-year scholarship and create an internship program offering well-paying positions to help students gain a holistic understanding of our organization and industry. The Committee has established a similar program with City University of New York (CUNY) schools, providing Greenbacker internships to a pool of diverse applicants from the CUNY network of colleges.

The DEI Committee is also refining Greenbacker's hiring process, with a more intentional focus on recruiting high-quality candidates from a range of backgrounds. This includes identifying areas to reduce bias in the hiring process and ensuring a diverse cross-section of decision makers on hiring committees.

# SPOTLIGHT ON GCE

**Global Citizenship Experience (GCE) Lab School** is a small, independent high school with a real-world learning curriculum grounded in the United Nations Sustainable Development Goals (SDGs). Through experiential education, the GCE model helps students answer the question “Why do I have to learn this?” Every week, students are given the opportunity to connect with industry professionals to learn about future careers in the sustainability sector and to help ignite their interest.

Together, GCE and Greenbacker Capital developed a three-part course series, *Imagining a Sustainable Future*, to help students explore one of the fastest-growing job sectors and jump-start their early workforce development. The long-term plan is to use these courses to engage teachers and students in those communities across the country where Greenbacker has made sustainable infrastructure investments. This is an authentic CSR investment, where Greenbacker employees, investors, and vendors have the opportunity to participate as industry experts in helping to educate—and inspire—our youth.

*“This gave me a great overview of a complex and robust approach to learning and teaching! I’m excited and inspired to bring this approach into my classroom.”*

**SERIES PARTICIPANT,**  
IMAGINING A SUSTAINABLE FUTURE

**IMPACT UPDATE:** GCE has successfully piloted these courses, with middle school and high school students from around the world participating virtually. Additionally, the school has hosted teacher training workshops for dozens of global educators seeking to expand their knowledge of real-world, project-based learning.

Greenbacker and GCE have also brought the program to the international Venice Biennale exhibition. Together, we co-hosted three panels that dove into the content of the three courses, offering participants the opportunity to engage with industry professionals and providing avenues to expand their understanding of sustainable development. To date, the sessions have been downloaded by thousands of students across the globe.



## ReFueling the Future

*This Mastery Project introduces sustainable energy systems using science and math.*

[ACCESS COURSE DETAILS](#)



## ReDesigning the Future

*This Mastery Project explores sustainable systems using design and engineering.*

[ACCESS COURSE DETAILS](#)



## ReMobilizing the Future

*This Mastery Project explores civics, policies, and changing mindsets about a sustainable future.*

[ACCESS COURSE DETAILS](#)





# GUIDING PRINCIPLES





# SUSTAINABLE DEVELOPMENT GOALS

The SDGs are a collection of 17 global goals set forth by the United Nations in 2015. These goals and their related actionable targets aim to end poverty, fight inequality, and tackle climate change by 2030.

Developing strategies and modes of operation that coincide with the SDGs allow us to benchmark our progress toward a sustainable future. Below are the five SDGs that most closely align with Greenbacker’s business objectives.



## 7 CLEAN ENERGY

Investments in Greenbacker directly support the development of clean and affordable renewable energy. Since 2016, our fleet of renewable energy projects has grown to a total generating capacity of 3.12 GW<sup>1</sup>, and produced over 6,140,652 MWh of clean power.



## 8 DECENT WORK & ECONOMIC GROWTH

As we deploy more capital into renewables, we create productive green jobs and promote sustainable economic growth. Our projects create ongoing high-paying jobs, particularly at the local level, supporting employment in the communities around our project sites.



## 9 INDUSTRY, INNOVATION & INFRASTRUCTURE

Our business actively promotes innovation, spurring the transition to a clean energy future. The construction and maintenance of our assets make up an essential, and increasingly significant, part of the US energy infrastructure, creating supply-chain demand that helps sustain and expand the burgeoning renewable power industry.



## 11 SUSTAINABLE CITIES & COMMUNITIES

The renewable energy facilities we own provide sustainable energy options for cities, rural communities, utilities, schools, and manufacturing facilities. A number of our projects also include community solar gardens, which provide free energy to income-qualified households.



## 13 CLIMATE ACTION

Our business model and the renewable energy projects we acquire play a direct role in helping to reduce humanity’s carbon footprint. We provide investment vehicles for clean energy projects, and also educate financial professionals and investors about the opportunities available in the sustainable infrastructure industry.

*Greenbacker portfolio metrics are unaudited and subject to change.*

*<sup>1</sup>Prior to 3Q20 the Company did not formally track total asset and capacity statistics for projects the Company had contracted to acquire but had not yet closed.*



# INTEGRITY IN THE WORKPLACE

The value and performance of our company is directly correlated with the character of our employees. We believe it's essential to recruit the best candidates for our jobs and to create an environment where they can thrive.

In service of that belief, Greenbacker has instituted policies and benefits to prioritize talent retention, assist working parents, allow work/life balance, and accommodate the needs of employees from all walks of life. The firm also subsidizes continuing education

courses, certifications, external training, conferences, workshops, and seminars that support our employees' career goals.

A Lunch and Learn program promotes information-sharing between departments. Presentations highlight how individual and group roles, responsibilities, and efforts contribute to the firm's overall mission. Greenbacker has also welcomed guest speakers to discuss topics pertaining to mental health resources, work/life balance, and heritage recognition months.

**OPEN-DOOR,  
OPEN-OFFICE  
CULTURE**

**HIGHLY  
COMPETITIVE  
BENEFITS**



**TOP TALENT  
RECRUITED AT  
EVERY LEVEL**

**ONE  
SUSTAINABLE  
MISSION**

# INTEGRITY IN THE INDUSTRY

As an industry leader, Greenbacker collaborates with professional organizations that champion sustainable power through education, advocate greater inclusivity across clean energy sectors, create clean energy jobs, and work to expand the market for renewables.



# COMMUNITY ENGAGEMENT

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Greenbacker is committed to being an active, equitable community partner by participating in initiatives and activities that uplift and empower our neighbors and others—and we encourage our employees to do the same.

## PAID TIME OFF TO VOTE AND VOLUNTEER

We've implemented a company-wide Volunteer Time Off policy, in which employees can take up to eight hours of paid time off each quarter to volunteer with an approved organization of their choosing. We also encourage employees to fulfill their civic responsibility by voting in their local, state, and national elections. Those unable to reach their polling place outside of work hours may take additional paid time off to vote.

## DAY OF SERVICE

Greenbacker's offices also plan annual Day of Service events. The Montpelier office sponsors Green Up Vermont, where volunteers pick up litter in local towns. The New York office donates to My Brother Vinny, a group that distributes furniture, housewares, food, and clothing to US veterans around New York City. The Maine office participates in an annual beach cleanup with Friends of Casco Bay.

## COMMUNITY PARTNERS

Greenbacker is proud to partner with organizations that give back to their communities.





# COMMUNITY ENGAGEMENT (CONT'D)

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## THE DONOR ADVISED FUND

In 2021, Greenbacker's CSR Committee created the Donor Advised Fund (DAF), partnering with ImpactAssets to create a vehicle for administering employee donations. To celebrate the launch of the DAF, Greenbacker participated in a two-to-one matching campaign, donating two dollars for every dollar an employee gave to one of the following four nonprofit organizations.

1



Spelman College®

**Spelman College**, the country's oldest higher education institution for Black women, is committed to academic excellence and inspiring positive social change through service.

2



**GOSO** is a reentry program dedicated to reducing recidivism in the New York City area through education, employment, and emotional well-being.

3



**New Farms for New Americans** is a community gardening and agricultural education program that helps refugee and immigrant households harvest food, with a focus on sustainable growing practices.

4

**Equality Maine** works to secure full equality for lesbian, gay, bisexual, and transgender people in Maine through education, collaboration, and community organization.

# ENVIRONMENTAL STEWARDSHIP

## SUSTAINABLE DESIGN STANDARDS

Greenbacker takes a holistic approach to low impact design across our fleet. We prioritize nature-based land management solutions at every stage of a project's life cycle—contracting, permitting, development, construction, and power production, taking steps to:

- Ensure that panels will be high enough for native plant species to grow beneath them.
- Install advanced monitoring systems to minimize the impact on wildlife.
- Collaborate with communities on innovative dual land use, such as allowing community access and walking paths on our project sites.
- Plant pasture mix for local livestock to graze at our sites, which can improve soil stability and reduce mowing costs.
- Establish pollinator-friendly groundcover, a flora that offers operational benefits while also supporting declining bee and butterfly populations.

## PARTNERING WITH OUR NATION'S LEADING RESEARCHERS

Greenbacker is interested in a science-based approach to determining how our fleet—and the overall renewable energy industry—can incorporate agrivoltaics (i.e., using a site for both solar photovoltaic power generation and agriculture). We're working with the country's top researchers to identify and help promote the specific benefits this dual land use can offer.

<sup>1</sup>Evaluation of Economic, Ecological, and Performance Impacts of Co-Located Pollinator Plantings at Large-Scale Solar Installations.

## THE InSPIRE PROJECT

Greenbacker is collaborating with the US Department of Energy's National Renewable Energy Laboratory and Argonne National Laboratory on the Solar Practices Integrated with Rural Economies and Ecosystems (InSPIRE) project. This study seeks to explore the benefits that pollinator-friendly solar projects have on local agricultural yields, as well as how low-impact solar can improve a site's soil quality, carbon storage, stormwater management, microclimate conditions, and solar efficiencies.

## GUIDANCE FOR SOLAR-POLLINATOR PROLIFERATION

Our 88-acre solar project in Sturgis, Michigan is part of a three-year study by Argonne National Laboratory and the Energy Resources Center at the University of Illinois at Chicago.<sup>1</sup> The purpose of the research is to develop informed decision-making tools for solar-pollinator habitat projects. Guidance such as planting manuals, cost/benefit calculators, and native seed-mix selection tools can help address critical stakeholder concerns such as project cost, return on investment, and site-specific constraints. The study will also explore the potential for pollinator vegetation to improve panel efficiencies, whether by generating a cooler microclimate or through the light reflectivity of specific plant species.







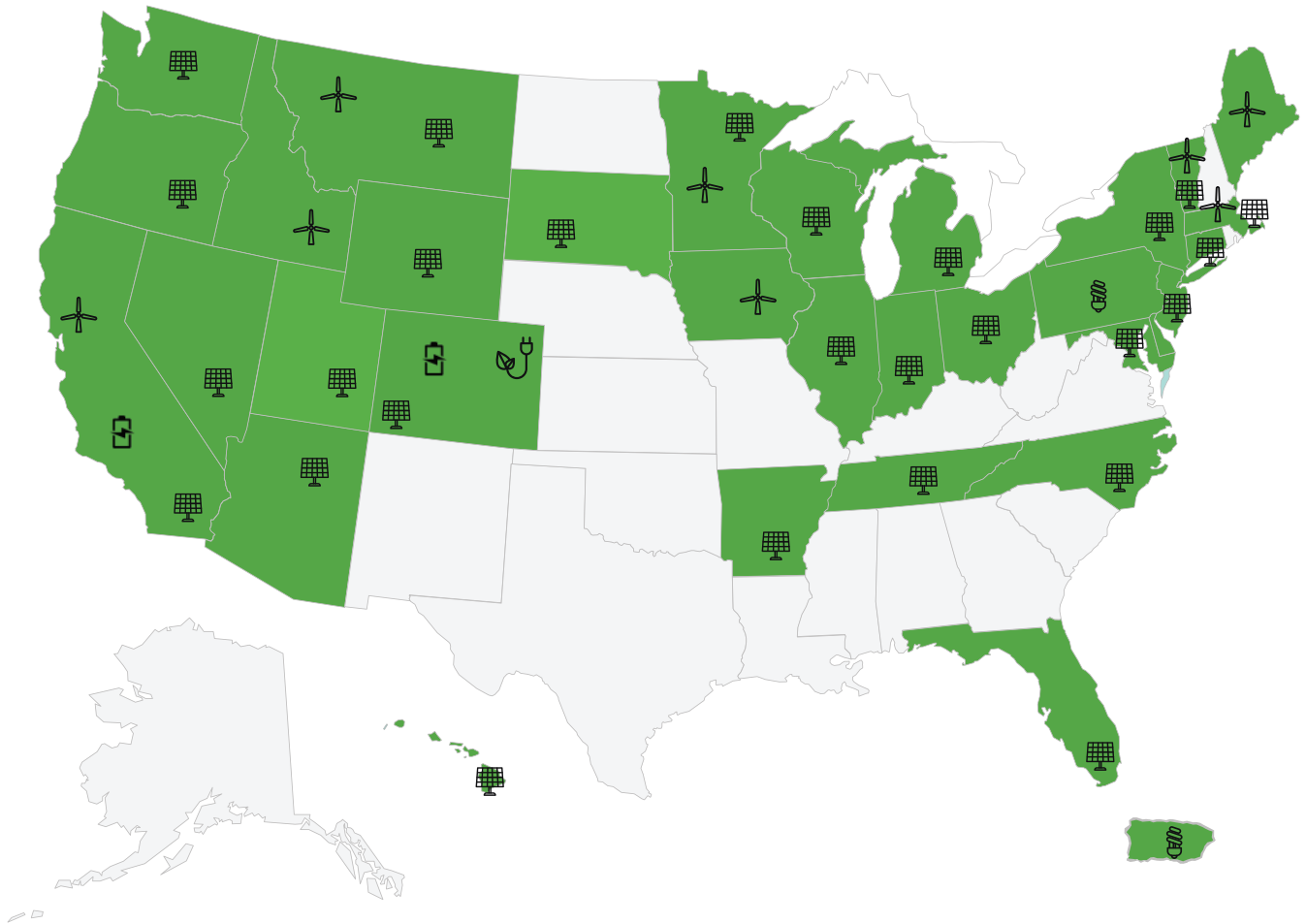
IMPACT





# CLEAN ENERGY FLEET

456 ENERGY PROJECTS<sup>1</sup>  
AS OF DECEMBER 31, 2022



Our fleet of renewable energy, energy efficiency, and other sustainability projects comprises energy generation capacity equal to:

6,140,652

MWH OF ENERGY GENERATED SINCE 2016

3.12

GW OF GENERATING CAPACITY OWNED<sup>1</sup>

790,867

HOMES POWERED IN ONE YEAR

The electricity generation of our fleet has a direct environmental impact through the abatement of greenhouse gas emissions.

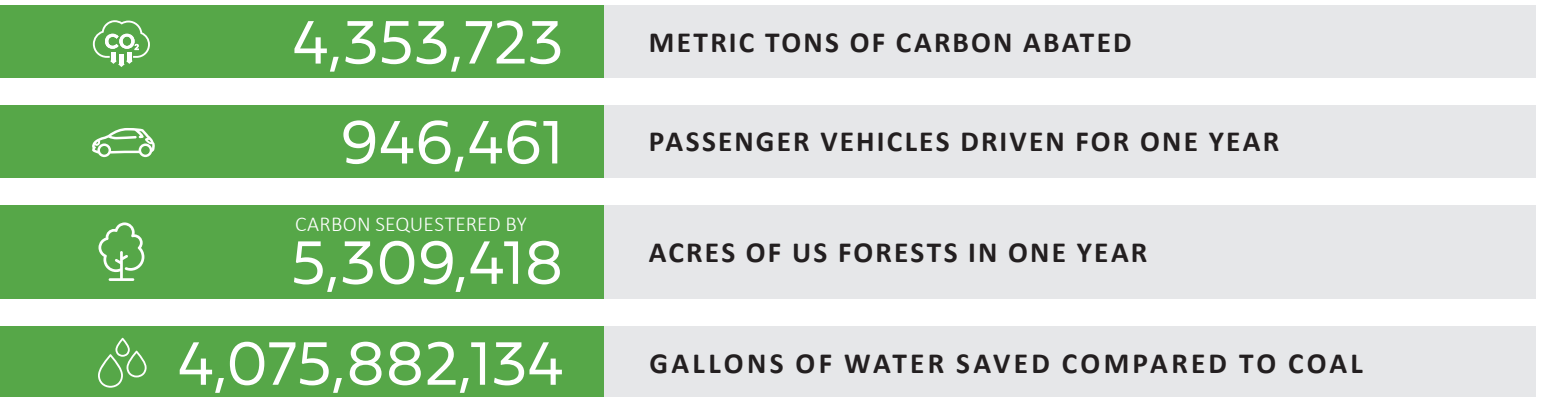
*Greenbacker portfolio metrics are unaudited and subject to change.*

<sup>1</sup>Prior to 3Q20 the Company did not formally track total asset and capacity statistics for projects the Company had contracted to acquire but had not yet closed.



# ENVIRONMENTAL IMPACT

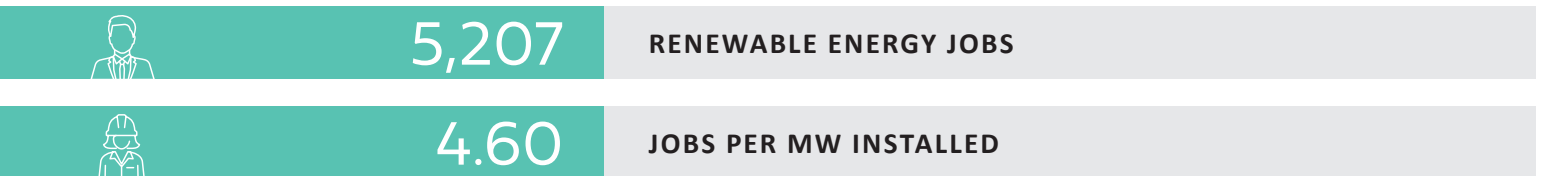
Greenbacker’s cumulative energy production as of 4Q 2022 is equivalent to:



Source: <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>

# JOB CREATION

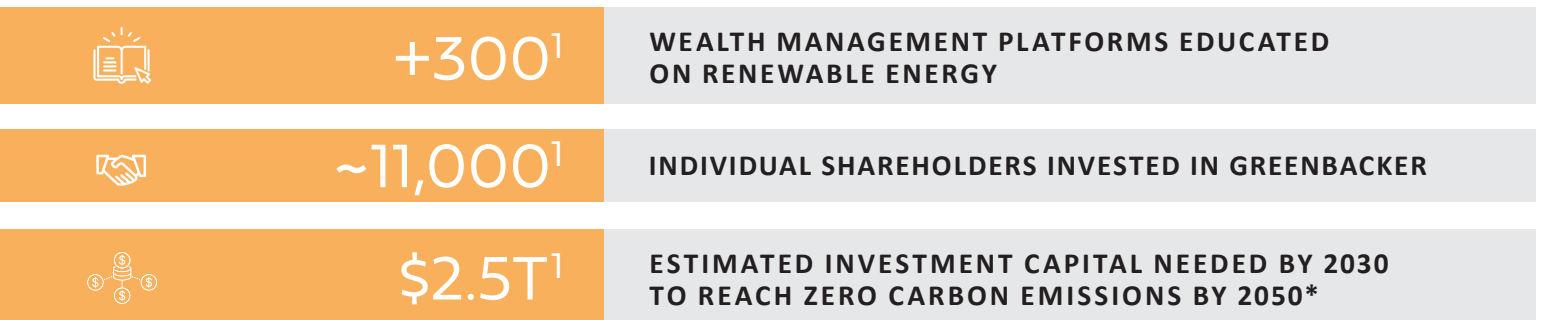
Greenbacker’s projects currently support:



Source: International Renewable Energy Agency and National Renewable Energy Laboratory

# EVANGELIZING THE STORY OF RENEWABLES

One of Greenbacker’s key traits is our passionate advocacy for renewables. We believe investors will play a pivotal role in the energy industry’s revolutionary transition from conventional fossil fuels toward more sustainable power sources. Greenbacker provides a profitable avenue for our investors to participate in this shift to renewables as the solution to the world’s energy needs. Current examples of our progress include:



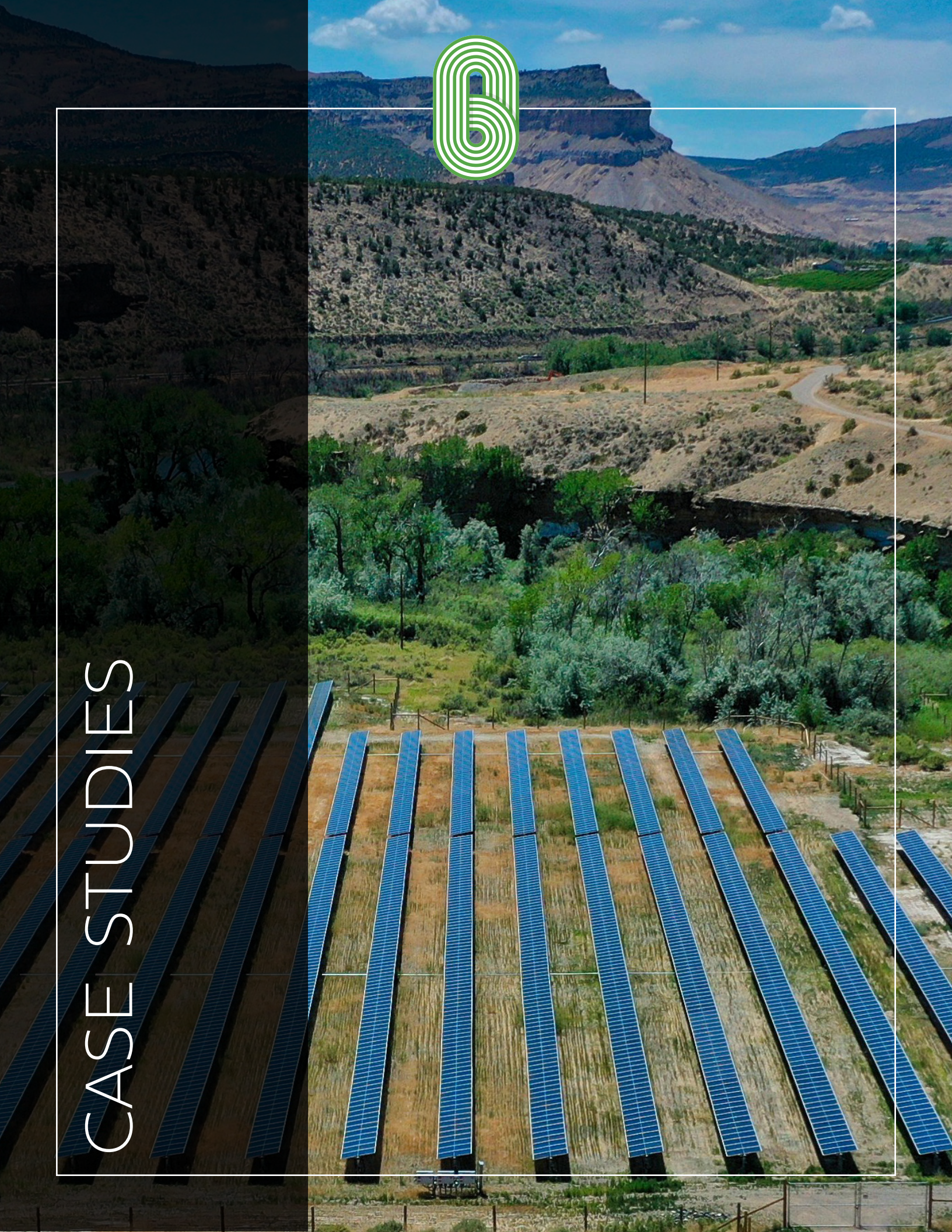
\*Bloomberg Green, [www.bloomberg.com](http://www.bloomberg.com), December 15, 2020.

<sup>1</sup>This number is an estimate and subject to change.





# CASE STUDIES





# POWERING THE ENERGY TRANSITION

**As coal plants become too expensive to operate safely and efficiently, cheaper renewable power is taking their place\*.**

- Carbon County, once home to Utah's oldest coal plant, now hosts one of Greenbacker's largest solar projects.
- The 104 MWdc Graphite Solar will provide clean energy to Meta's nearby data center.
- With this project, the county supports economic development while modernizing its legacy of power production.

*Graphite Solar, 104 MWdc/80 MWac in Carbon County, UT*

*"Large projects like Graphite will increasingly be necessary to meet growing energy needs and provide carbon-neutral alternatives to traditional power sources."*

**CHARLES WHEELER**  
CO-FOUNDER, GREENBACKER CAPITAL

\*"Coal will account for 85% of US electric generating capacity retirements in 2022," US Energy Information Administration, January 11, 2022.

# POWERING THE ENERGY TRANSITION

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## AT THE CROSSROADS OF THE ENERGY TRANSITION

Coal plants across the country are being retired in greater numbers, aging out of profitability and facing increasing competition from cheaper renewables.<sup>1</sup> In place of coal, many areas are turning to clean energy sources for regional power generation.

Carbon County, Utah, a place named for its coal mines and history of fossil fuel-burning power production, was once home to the state's oldest coal plant<sup>2</sup> until it was retired after being deemed too expensive to safely maintain. Last year, 2021 was the first year that coal was not commercially harvested in the county.

## MODERNIZING A LEGACY OF POWER PRODUCTION

In May 2021, Greenbacker broke ground on one of its largest renewable energy assets to date in Carbon County. Graphite Solar, a 104 MWdc/80 MWac utility-scale solar farm, has a long-term contract in place to sell power to the utility PacifiCorp, on behalf of Meta. The deal was developed under Rocky Mountain Power's Schedule 34 green energy tariff, which allows large customers to purchase renewable energy generated on their behalf.

The project will provide clean power to the social media giant's data center in nearby Eagle Mountain, Utah, contributing to the company's goal of running its operations using 100% renewable energy<sup>3</sup>.

With the construction of this solar facility, the Carbon County community diversifies its energy infrastructure, while boosting local employment, supporting the region's economic development, and continuing its legacy of energy production.

<sup>1</sup>"Coal will account for 85% of US electric generating capacity retirements in 2022," US Energy Information Administration, January 11, 2022.

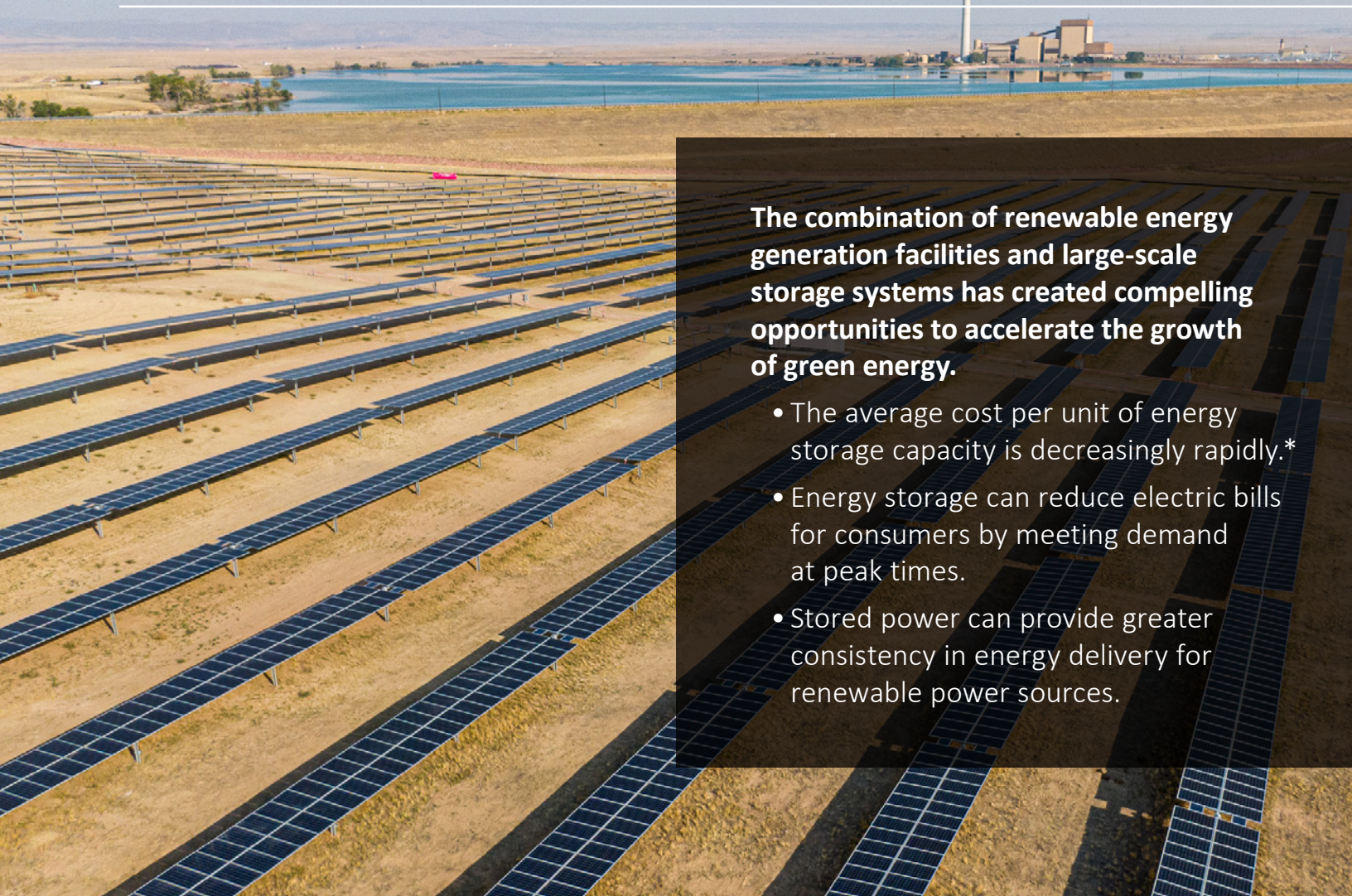
<sup>2</sup>"Utah's Oldest Coal Plant Retired in Face of New EPA Standards," Salt Lake Tribune, April 18, 2015.

<sup>3</sup>"On our way to lower emissions and 100% renewable energy," Meta website, August 28, 2018.



# INVESTING IN INNOVATION

## BATTERY STORAGE



**The combination of renewable energy generation facilities and large-scale storage systems has created compelling opportunities to accelerate the growth of green energy.**

- The average cost per unit of energy storage capacity is decreasing rapidly.\*
- Energy storage can reduce electric bills for consumers by meeting demand at peak times.
- Stored power can provide greater consistency in energy delivery for renewable power sources.

*Rawhide Prairie Solar, 29 MWdc/22 MWac with 1.3 MWh storage*

*"We believe it's highly likely that storage solutions will soon emerge with sufficient capacity to make renewable energy available around the clock on a scale that can support entire municipalities—with much more compelling economics than fossil fuel sources, but none of the harmful emissions."*

**DAVID SHER**  
CO-FOUNDER, GREENBACKER CAPITAL

\*"Battery Storage Trends in the United States: An Update on Market Trends," US Energy Information Administration, August 16, 2021.

# INVESTING IN INNOVATION

## BATTERY STORAGE

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### A FAVORABLE COST CURVE FOR POWER STORAGE

One of the main criticisms of renewable energy is that it does not offer “base-load generation.” That is, since wind and solar are intermittent resources, they cannot generate power at all times. Thus, sizable systems that rely on renewable energy sources often supplement with a backup power source (i.e., a fossil fuel).

Large-scale power storage systems offer to solve this problem by stockpiling excess energy when the sun and wind are available, and then distributing it when they’re not. Unfortunately, systems with sufficient capacity to support whole cities have historically been cost prohibitive. That’s why it’s been so encouraging to see power storage costs begin to show the same sustained declines that solar power equipment underwent a decade ago.

The US Energy Information Administration (EIA) has reported that the average cost per unit of energy storage capacity decreased roughly 72% between 2015 and 2019 (from \$2,152 per kWh to \$589 per kWh)—and accelerating deployment followed. According to the EIA, the number of solar and wind power generation sites paired with battery storage systems increased from 19 in 2016 to 53 in 2019. By 2023, that number is expected to double<sup>1</sup>.

The combination of renewable energy generation facilities and large-scale storage systems has created compelling opportunities to accelerate the growth of green energy. Major investors have noticed and begun allocating capital to these storage-linked projects.

<sup>1</sup>“Battery Storage Trends in the United States: An Update on Market Trends,” US Energy Information Administration, August 16, 2021.

### STRATEGIC EXPANSION INTO POWER OPTIMIZATION

Last June, Greenbacker ventured into its first energy storage allocation, investing in Pacifica Storage, a portfolio of 16 behind-the-meter energy storage systems in California. These systems allow offtakers to manage energy costs by charging the storage battery during off-peak times and then discharging it to consumers during peak hours. This reduces the need to draw electricity from the grid during periods of peak demand and higher prices. Advances like this are contributing to the long-term cost competitiveness of renewable energy.



# RESTORING LOCAL ECOLOGY

## POLLINATOR PLANTING



**In 2020, Greenbacker began planting pollinator-friendly ground cover on 800 acres across 14 project sites around the country.**

This allows for a number of site benefits, including:

- Increased biodiversity and ecosystem health, with lower operations and maintenance costs.
- Deeper root systems that sink carbon into the earth.
- Plants generate cooling microclimates that can increase panel efficiency.

*Planting at Catholic Charities solar site in Washington, DC*

*“When we can be thoughtful about our landscape design in order to improve our local ecology and community, while also driving down our overall O&M costs, we consider this a win-win.”*

**MATT MURPHY**  
COO, GREENBACKER RENEWABLE ENERGY COMPANY



# RESTORING LOCAL ECOLOGY

## POLLINATOR PLANTING

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### BUILDING HEALTHY ECOSYSTEMS AT OUR SOLAR SITES

Pollinator-friendly vegetation creates habitats beneath our solar panels to support pollinator populations—like bees and monarch butterflies—that have been declining due to insecticide use, climate change, and human encroachment. At the same time, these plants improve soil stability, as their longer root systems help mitigate erosion, storm water runoff, and frost heaves.

Financially, this project also offers the dual advantages of reduced operating costs and increased site efficiency (which more than offsets the upfront costs of the planting). These plants require less maintenance than turf grass, which needs frequent mowing, and studies have shown that the cooler microclimates this vegetation generates can improve solar panel efficiency<sup>1</sup>.

### BEYOND THE FENCE LINE

Being a good steward of the land is a top priority. That's why we're excited to see the benefits of our landscape strategies extend beyond the acreage of our projects. It's not uncommon for farmers near pollinator-friendly solar sites to gain increased crop yields thanks to the greater number of pollinators venturing over to fertilize their crops.

On sites where pollinator-friendly plants won't optimally benefit the land, we look to introduce flora alternatives that will. For example, planting native grasses can provide similar ecological and operational benefits, while also introducing new ones. These sites can act as grazing lands for local livestock, which can help keep mowing costs down.

With a number of potential sites and projects in our pipeline, Greenbacker is looking forward to expanding our thoughtful, communal, and symbiotic stewardship initiatives.

*"This agreement is the perfect example of a successful triple-bottom-line endeavor."*

**CHAD FARRELL**

FOUNDER & CEO, ENCORE RENEWABLE ENERGY  
ON THE POSITIVE SOCIAL, ENVIRONMENTAL, AND FINANCIAL IMPACT  
OF POLLINATOR PLANTING ON SOLAR SITES

<sup>1</sup>"The Power Environment: What is "pollinator-friendly" solar generation?" Power Technology, February 10, 2021.

# POWERING COMMUNITIES

## WIND TURBINE LEASES

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**Farmers and small businesses can lease land to wind turbines to generate reliable income.**

- Because wind turbines don't occupy much space, most of the land can still be farmed.
- Land lease payments can subsidize cash flow in a historically volatile industry.

*Georgia Mountain Maples in Milton, VT*

*"Wind turbines and farms can be a wonderful partnership, creating reliable income to subsidize crop yields that are subject to a number of risk factors."*

**CHARLES WHEELER**  
CO-FOUNDER, GREENBACKER CAPITAL

# POWERING COMMUNITIES

## WIND TURBINE LEASES

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### LAND LEASES CAN PROVIDE RELIABLE INCOME TO FARMERS

When wind turbines are constructed on privately owned land, all parties involved stand to benefit. That's because renewable energy companies looking for wind farm sites will pay landowners to lease portions of their land, often for decades at a time. Because wind farms typically require large, open areas in order for sufficient wind resource to reach the turbines, farmland can make for ideal project sites.

Farmers who lease their land for wind turbine use can enjoy a significant supplement to their earnings. In an uncertain industry often at the mercy of the weather, climate change, and volatile crop prices, this can go a long way toward relieving financial stress. This reliable source of additional income can also contribute to less risky property succession planning, which can—in some cases—help keep family land in the family.

What's more, much of the land beneath the turbines can still be used for crops and livestock. Some studies show that there are even agricultural benefits related to the movement of the turbine blades (e.g., their impact on temperature, moisture, and CO<sub>2</sub> levels)<sup>1</sup> and the shade provided by the turbine towers.<sup>2</sup>

### GEORGIA MOUNTAIN MAPLES OF VERMONT

Greenbacker leases land from farmers across the country as well as from local businesses, like Georgia Mountain Maples (GMM), to use as wind farms. GMM is a family-owned maple farm in Vermont, whose operation employs 150 people and covers thousands of acres. The company wanted to help provide sustainable energy to its community and in 2017 reached an agreement with Greenbacker to lease the land along its ridgeline for windmills. Today, that project powers nearly 6,000 homes in the area, and GMM continues to benefit from monthly lease payments from Greenbacker.

*"We believe in renewables and think it's a great use of the property...we couldn't be happier."*

**JIM HARRISON**  
GEORGIA MOUNTAIN MAPLES

<sup>1</sup>"Iowa State University Research Finds Wind Farms Positively Impact Crops," Iowa State University, March 5, 2018.  
<sup>2</sup>"Wind energy gives American farmers new crop to see in tough times," USA Today, February 20, 2020.



# BRATTLEBORO, VERMONT

**Twenty-five acres of land with heavy development restrictions found new life as the site of a community solar garden.**

- Brattleboro now provides a clean energy option that is also cost effective for nearby towns.
- Optimizing the facility created—and continues to support—local jobs.

*Solar garden built on a capped landfill in Brattleboro, VT*

*"[We] had a 25-acre brownfield—landfill—that the community couldn't do anything with. And now it's a revenue generator for 20 years. That changed the district...we've been able to afford equipment that we needed for our food-composting operation, which is now the second largest in Vermont."*

**BOB SPENCER**

EXECUTIVE DIRECTOR, WINDHAM SOLID WASTE MANAGEMENT DISTRICT

# LANDFILL PROJECT BRATTLEBORO, VERMONT

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## A SOLAR GARDEN ON A FORMER LANDFILL

In November 2019, Greenbacker acquired a community solar garden built on a former landfill in Brattleboro, Vermont. The project consists of 16,000 solar panels sitting atop 25 acres of capped landfill, a brownfield site that is legally restricted from most uses. The solar array provides electrical service—and revenue—to subscribers in 18 towns across the Windham Solid Waste Management District.

The project had previously reached its commercial operation date in 2018, and when Greenbacker took it over, we worked to improve the infrastructure and efficiency of the project. We hired local contractors to perform maintenance, update aspects of the electrical systems, address system safety and production issues, make improvements to the site's drainage, conduct regular inspections, and submit their findings to the state's Department of Environmental Conservation.

As of 2020, the 5.7 MW solar array was Vermont's largest net-metering project, offering subscribers the ability to participate in creating clean energy while saving substantially on their power bills (net metering allows solar energy system owners to receive credits for the power they add to the grid).

## GREENBACKER'S INVOLVEMENT MULTIPLIES BENEFITS

The Brattleboro Landfill Project is estimated to have saved its subscribers nearly half a million dollars and abated almost 5,000 metric tons of carbon emissions in 2019 alone.<sup>1</sup>

When Greenbacker first became involved with the project, we conducted an "as-built" survey, and determined that since the project encompassed more acreage than initially planned, the town of Brattleboro was owed a greater lease payment than originally thought. This revenue helps reduce taxes for the town's residents. The town and school district also both enjoy power purchase agreements with the solar site, while at the same time Greenbacker seeks to provide its investors with capital appreciation and steady income via long-term contracts with high-quality municipalities and schools.

*"Brattleboro community solar is a great example of how renewable energy can extend—and renew—the usefulness of a site."*

**CHARLES WHEELER**  
CO-FOUNDER, GREENBACKER CAPITAL

<sup>1</sup>"Greenbacker reports on progress of solar project at closed landfill," *Brattleboro Reformer*, July 20, 2020.



# MAKING THE SOLUTION VIABLE

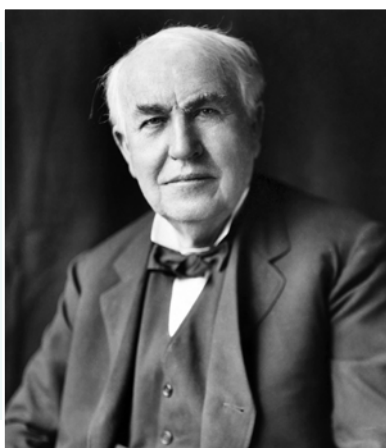
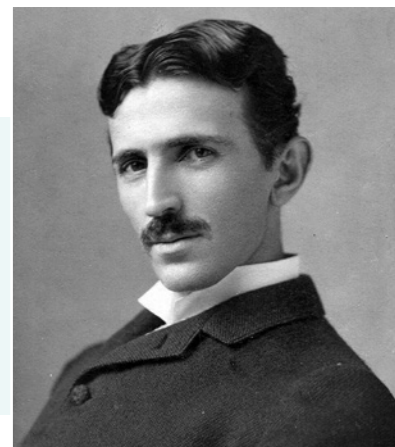
The major catalyst of the current climate crisis is the emission of carbon dioxide into the atmosphere when people and companies burn coal, natural gas, and oil for electricity, heat, and power. And though renewable energy has not yet reached the point where it can affordably compete with fossil fuels in all scenarios, significant progress has been made toward that goal.

We believe that Greenbacker's true value lies in facilitating this transition away from emissions-heavy power sources and ensuring that renewables can become both a lucrative business opportunity and a viable solution to our energy needs.

We support the sustainable energy revolution by pairing investor capital with opportunities to fund valuable renewable energy projects. In doing so, we're helping build the necessary momentum to ensure that renewables can—someday soon—outpace and outcompete fossil fuels indefinitely.

*"Electric power is everywhere present in unlimited quantities and can drive the world's machinery without the need for coal, oil or gas."*

**NIKOLA TESLA, CIR. 1931**



*"I'd put my money on the sun and solar energy. What a source of power! I hope we don't have to wait until oil and coal run out before we tackle that."*

**THOMAS EDISON, 1931**  
*TO FRIENDS HENRY FORD AND HARVEY FIRESTONE*

*Greenbacker follows in the footsteps of electrical power visionaries in our belief that renewable energy is an amazing source of power that should play a larger role in meeting humanity's energy needs—and in eliminating the need for fossil fuels. Our investors have the opportunity to drive this transition toward clean energy while, at the same time, we aim to provide them steady income from their sustainable power investments.*



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