WELCONE



OPENHOUSE

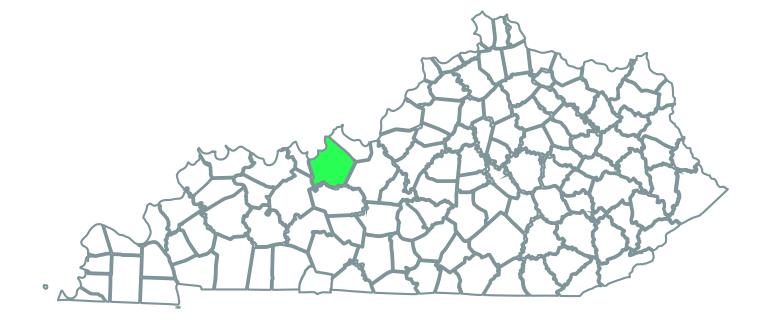




Breckinridge County, KY

New Frontiers Solar Park will be located in Breckinridge County, Kentucky, near the town limits of Hardinsburg. The privately owned land that the solar park will occupy has historically been used for farming or cattle grazing. This solar park project would mark EDPR's first solar park located in the state of Kentucky.









New Frontiers Solar Park would generate enough electricity to power the equivalent of approximately 16,600 Kentucky homes."1



New Frontiers Solar Park would save more than 177 million gallons of water each year and would prevent the air pollution that causes smog, acid rain, and climate change.²

Economic Benefits

All economic data reflects the estimated amount throughout the life of the project.



CAPITAL INVESTMENT

Approximately \$200 million



\$35 million

WOULD BE PAID TO LANDOWNERS



PERMANENT JOBS⁵

Multiple jobs would be created



Approximately \$7+ million

WOULD BE PAID TO THE LOCAL GOVERNMENT



Millions of dollars

WOULD BE SPENT LOCALLY⁴



CONSTRUCTION JOBS⁵

250+ jobs would be created

1 Power generation calculated using a 25% capacity factor. Household consumption based on the 2022 EIA Household Data monthly average consumption by state 3 Assumes utility fixed-tilt projects are \$1.02/Wdc, and single-axis tracking projects are \$1.11/Wdc. Based on Q3 2023 SEIA U.S. Solar Market Insight ⁴Includes vendor spending, property taxes, landowner payments and wages from site jobs.

⁵Full-time equivalent jobs calculated by dividing number of contractor hours worked during construction by 2080.

⁶ Based on Solar Energy Industries Association, Solar Data Cheat Sheet, 2023.



Power generated by New Frontiers Solar Park would support Kentucky's electric grid.

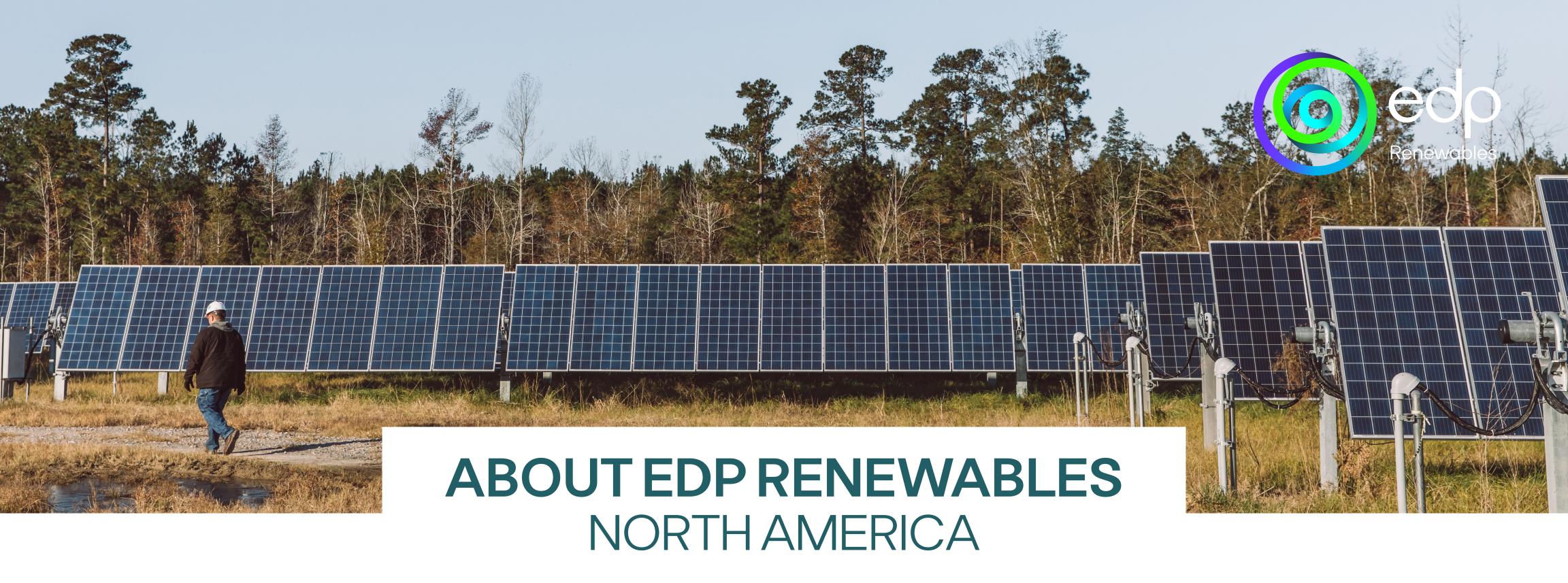


Lease agreements from New Frontiers Solar Park would support local landowner property rights.

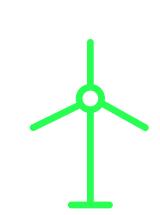


New Frontiers Solar Park would help strengthen energy security for the state of Kentucky and the United States, while helping to diversify domestic supply.





OPERATIONAL PROJECTS



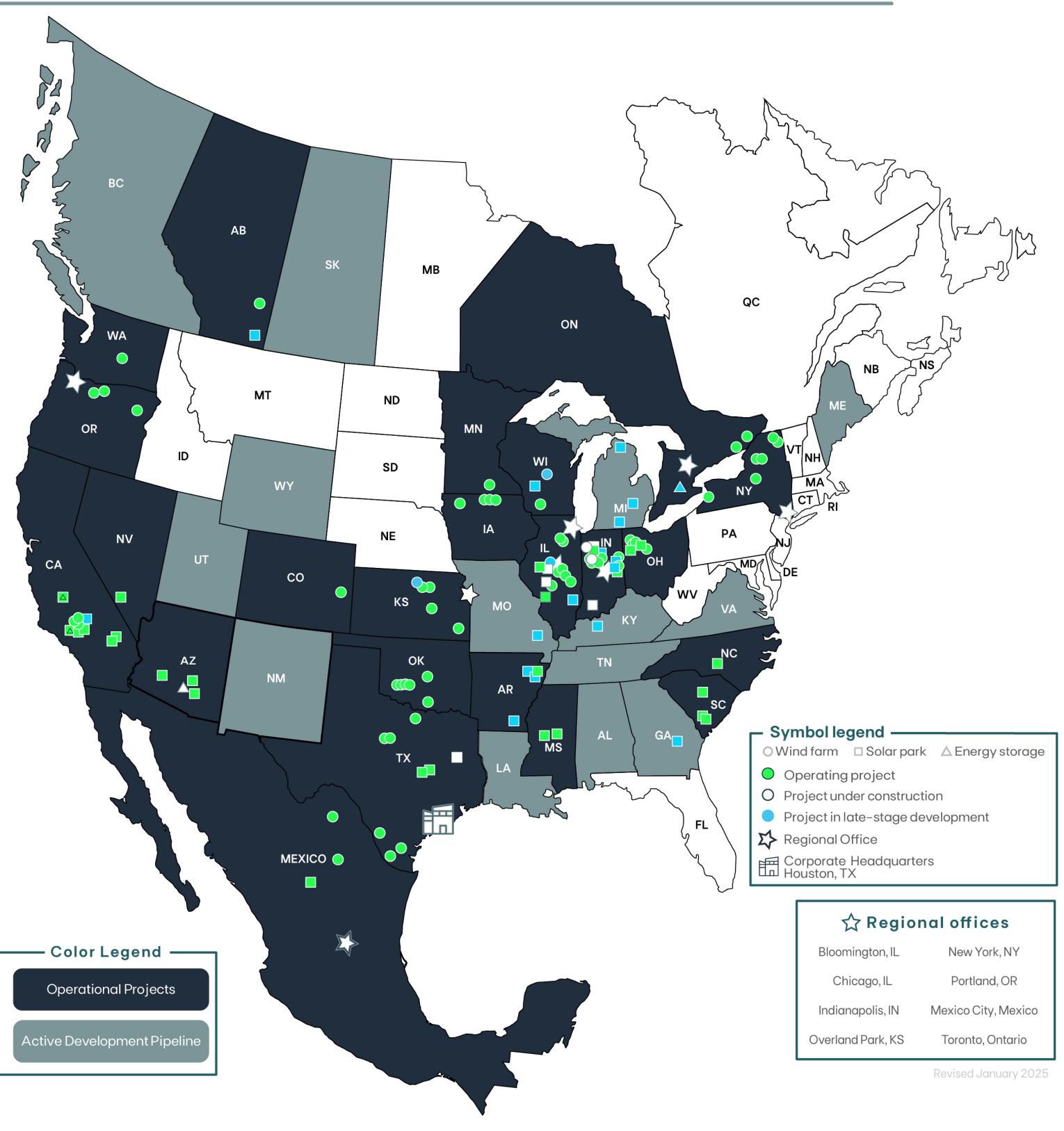
61 WIND FARMS



26 SOLAR PARKS



11,400+ MEGAWATTS



EDPR NA'S OPERATIONAL PROJECT IMPACTS



CREATED

650+ permanent jobs¹
10,000 construction jobs¹



GENERATED the equivalent of

2.7 million+ homes'

energy consumption²



MAINTAINED

278+ million hours

of operational history³



PAID

\$550+ million to landowners⁴ \$520+ million to local governments⁴



SAVED

17+ billion gallons of water 5 AVOIDED

15+ billion pounds of CO_2^6



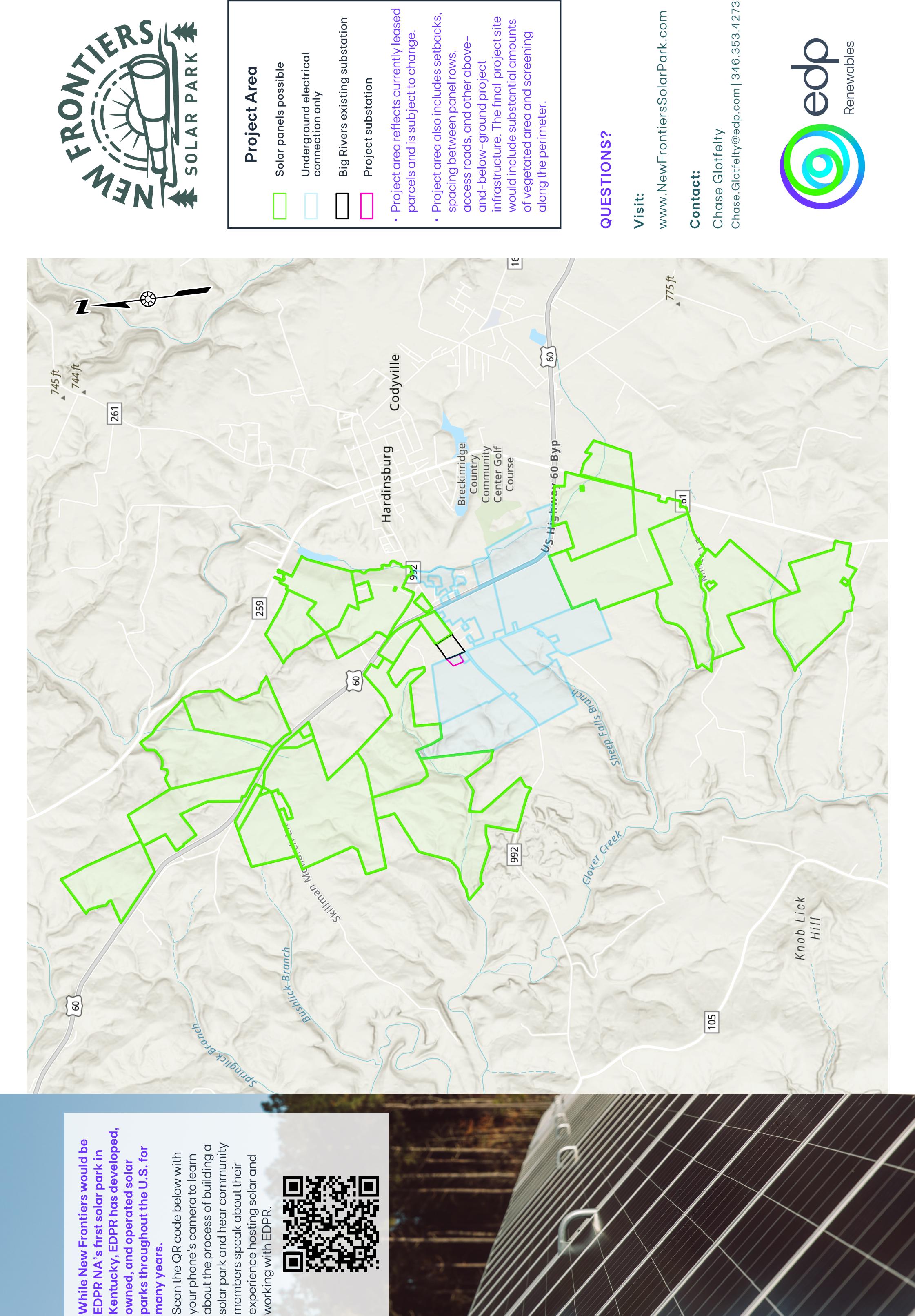
INVESTED

\$16+ billion (approx.) in capital⁷

Full-time equivalent jobs calculated by dividing number of contractor hours worked during construction by 2080.
 Power generation calculated using a 35% capacity factor for wind based on 2019 AWEA Wind Powers America Annual Report. Solar power generation calculated using a 25% capacity factor. Household consumption based on the 2022 EIA Household Data monthly average consumption by state.
 Calculated based on each turbine in EDP Renewables North America's fleet and the hours of operation from 2007 to 2019.
 Cumlative landowner payments and local government payements through 2023.

^{5.} Assumes 0.58 gallons of water consumed per kWh of conventional electricity from Lee, Han, & Elgowainy, 2016.6. Based on the U.S. Environmental Protection Agency (EPA) Greenhouse Gas Equivalencies Calculator, Januarary 2024.

^{7.} Assumes the average cost of an installed wind farm is \$1.7 million/MW for projects built after 2018. Based on U.S. DOE 2015 and 2019 Wind Technologies Market Report. Utility fixed-tilt solar projects are \$1.02/Wdc and single-axis tracking projects are at \$1.11/Wdc based on Q4.2023 SEIA U.S. Solar Market Insight





Project Area

- Solar panels possible
- Underground electrical connection only
- Big Rivers existing substation
- Project substation
- Project area reflects currently leased parcels and is subject to change.
- Project area also includes setbacks, infrastructure. The final project site would include substantial amounts of vegetated area and screening access roads, and other above spacing between panel rows, and-below-ground project along the perimeter.

QUESTIONS?

Visit:

www.NewFrontiersSolarPark.com

Contact:

Chase Glotfelty



SOLAR ENERGY:

Powering Local Economies



Explore the town below to see how the economic benefits of an EDP Renewables North America solar park flow through a community.

PROVIDING STABLE INCOME

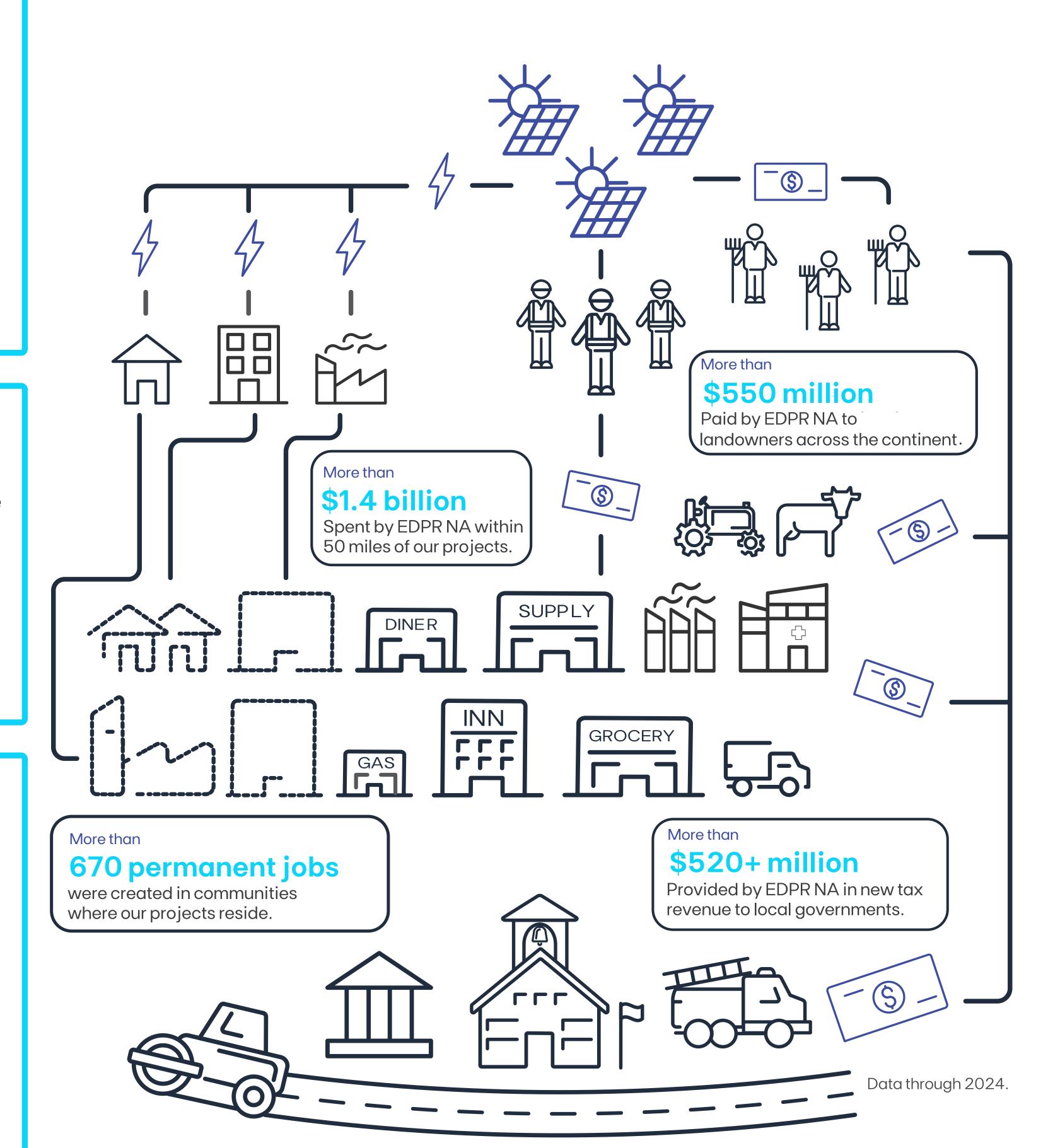
The reliable revenue stream provided by a solar park lease agreement can give landowners the financial freedom to expand their business, save for retirement, or pay for college.

REINVESTING IN THE COMMUNITY

With the additional income from a solar park lease, landowners have greater resources to reinvest in the community by increasing their spending at area businesses.

ATTRACTING GROWTH

Companies are increasingly interested in powering their operations with clean energy at a fixed price. The availability of clean power generated by the solar park can help attract further business development to the area.



STRENGTHENING LOCAL INFRASTRUCTURE

Taxes paid by the solar park, as well as increased economic activity from landowners and local businesses supported by the solar park, help fund essential services such as roads, schools, and fire departments.

SUPPORTING LOCAL BUSINESSES

Solar park construction generates an economic boost for the project area, with hundreds of workers relying on local businesses for food, lodging, materials, and contractor services. Once the project is in operation, the solar park continues to count on local businesses for ongoing maintenance needs, such as vegetation management, panel washing, and equipment.



GUARANTEED TAX REVENUE
NO ADDITIONAL STRAIN ON

LOCAL SERVICES

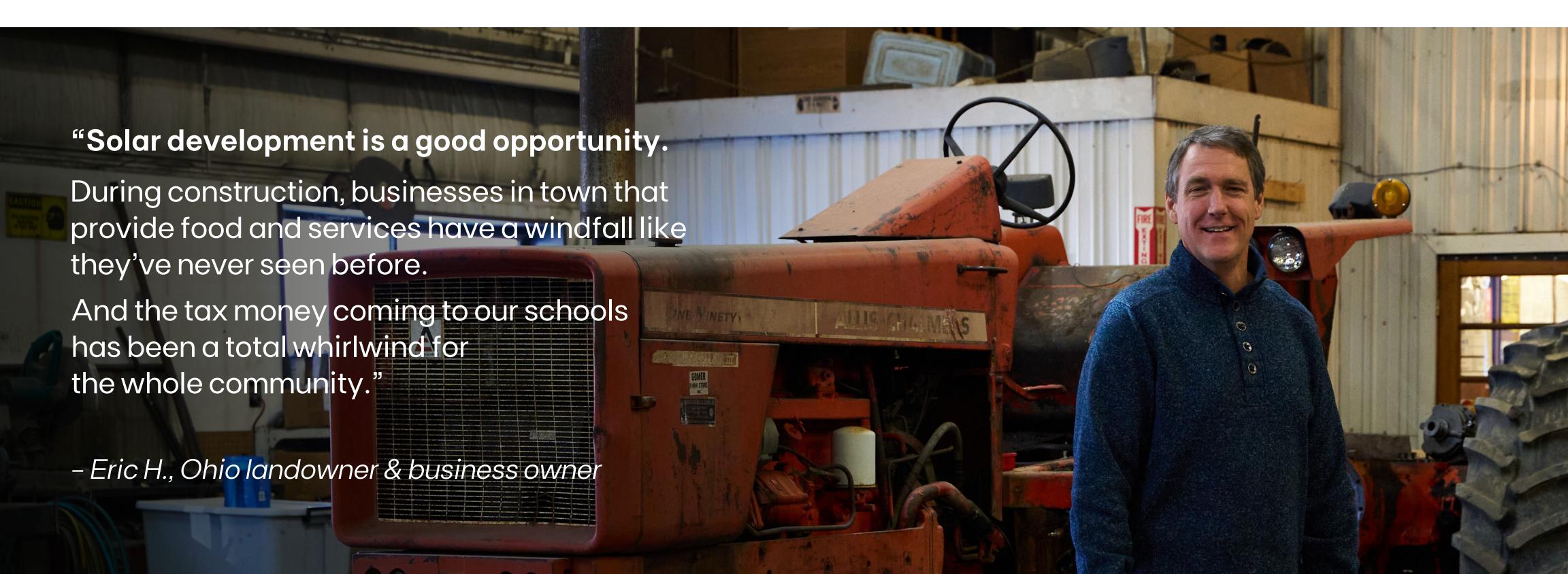


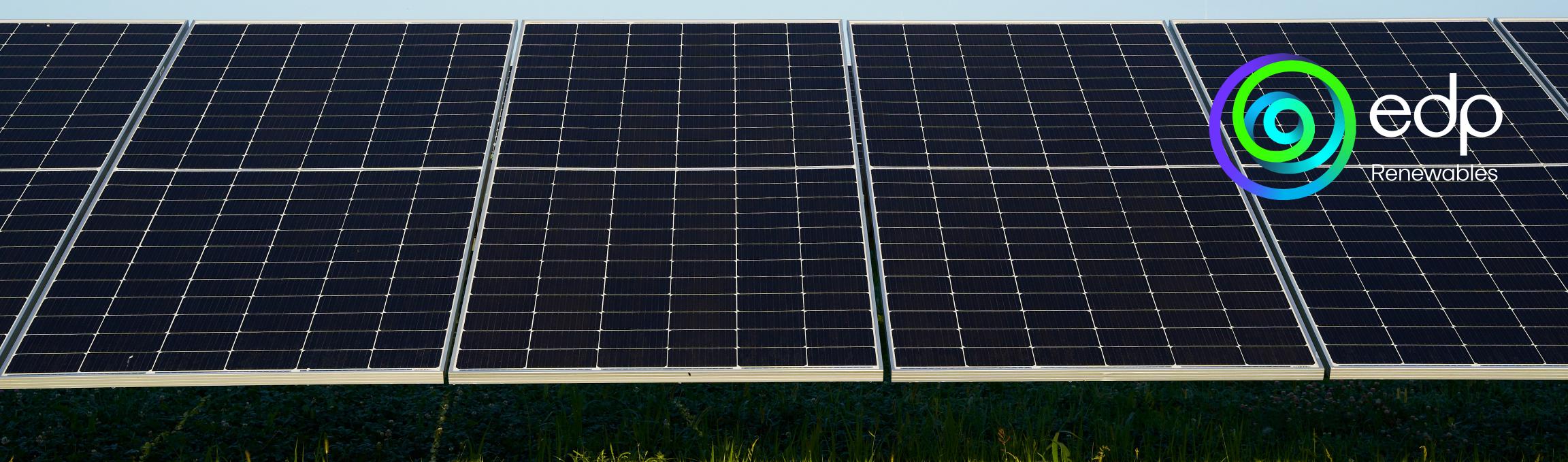
New Frontiers will contribute at least \$5.6 million in additional funding to the local government over the project's 35-year life. This includes at least \$135,900 directly to Breckinridge County School District in the first year alone.

There are two potential tax scenarios outlined below—standard taxes and Industrial Revenue Bond (IRB) + Payment in Lieu of Taxes (PILOT). They represent guaranteed tax revenue, based on current rates, that would be paid by the New Frontiers Solar Park directly into the County. No IRB or PILOT has yet been agreed upon between Breckinridge County and New Frontiers. These figures are assumptions the New Frontiers team has made in the case that Breckinridge County intends to accept an IRB + PILOT agreement. The figures are based on payments equaling \$1,200 per MW. Those payments are guaranteed and would not depreciate.

PROJECTED TAX PAYMENTS TO BRECKINRIDGE COUNTY

	NO NEW FRONTIERS PROJECT (Project land's current tax payments without project, classed as agricultural)		NEW FRONTIERS PAYING STANDARD TAXES (real estate + personal property)		NEW FRONTIERS PAYING IRB +PILOT (Industrial Revenue Bond + Payments in Lieu of Taxes)	
County Taxing District	County Revenue in Year 1	Total Lifetime Revenue (35 years)	County Revenue in Year 1	Total Lifetime Revenue (35 years)	County Revenue in Year 1	Total Lifetime Revenue (35 years)
School District	\$14,616	\$511,566	\$135,900	\$3,465,000	\$179,800	\$4,992,200
Fiscal Court	\$3,546	\$124,100	\$32,900	\$840,500	\$43,600	\$1,211,000
Extension Services	\$3,077	\$107,705	\$28,600	\$729,500	\$37,800	\$1,051,000
Public Library	\$1,949	\$68,204	\$18,100	\$461,900	\$23,900	\$665,500
Health Department	\$812	\$28,424	\$7,500	\$192,500	\$9,900	\$277,300
Total	\$24,000	\$840,000	\$223,000	\$5,689,400	\$295,000	\$8,197,000



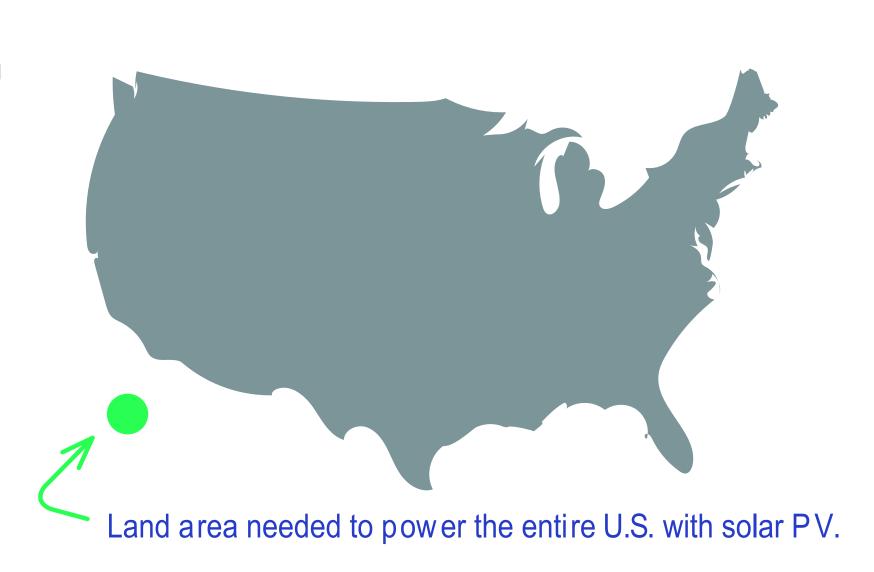


About Solar Technology

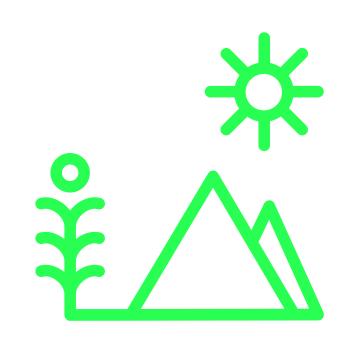
Solar is a critical and rapidly growing part of America's electric grid, producing enough energy to power more than 35.8 million homes nationwide and counting.¹

Solar projects are safe, clean, and have minimal impact on the land while providing a valuable economic boost to the rural economies that host them.

It would take less than 0.6% of total U.S. landmass to power the entire country with solar PV.² This represents half as much land as is currently being used to grow corn for ethanol production.³



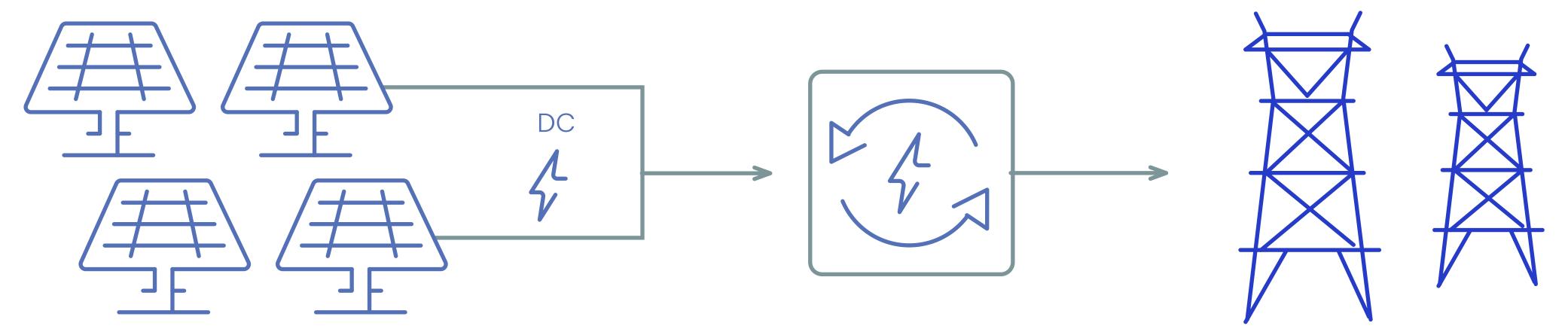
Solar is affordable to build and maintain, helping boost America's energy independence in the process. The price of solar has been falling for years, dropping by about 70% since 2010. Average operation and maintenance costs have fallen nearly 60% since 2011. Utility solar energy is cheaper than traditional forms of generation,⁴ giving utilities and corporate off–takers access to reliable, cheap energy at a fixed price. These guaranteed rates help keep consumer costs low and stable.



Requiring no water to generate power, solar energy saves 136 billion gallons of water each year that would otherwise be consumed by the traditional power industry.⁵

U.S. solar also avoids 224 million metric tons of carbon pollution annually, which is the equivalent of removing 53 million cars from the road.⁶

HOW A SOLAR PARK GENERATES ENERGY



The solar panels absorb sunlight and generate direct current (DC) electricity. Many have trackers installed to tilt toward the sun as it moves across the sky.

The electricity goes through an inverter, converting it to alternating current (AC) electricity.

Then it flows into the grid, supporting the region's energy needs.

¹Solar Energy Industries Association. "What's in a Megwatt?" 2023.

² Paul Denholm, Robert M. Margolis. "Land-use requirements and the per-capita solar footprint for photovoltaic generation in the United States." 2008. ³U.S. Department of Agriculture Economic Research Service. "Feed Grains: Yearbook Tables." June 15, 2021.

⁴ Lazard. "Lazard's Levelized Cost of Energy Analysis – Version 14.0." October 2020.

⁵Calculated using the Environmental Protection Agency's AVERT tool. ⁶ Solar Energy Industries Association. "Solar Data Cheat Sheet." 2023.



Solar as a neighbor

Solar energy powers millions of businesses, schools, and households every day with clean electricity safely produced on American soil.

PANEL RESILIENCY

Solar panels are built to withstand extreme weather and are very resilient against high winds and hail.

EDPR projects are designed to withstand 11 strikes of hailstones 2.2 inches in diameter. If an extreme weather event harms the solar park, EDPR will quickly clean up any damaged equipment and the surrounding area, and replace broken components as needed.

Projects are monitored 24/7. The local Operations team is on-site during the day, and our continuously staffed Remote Operations Control Center inside our Houston headquarters monitors at all times including throughout the night, receiving nearly real-time data for the entire operating fleet, allowing them to identify issues and respond appropriately.

AREA EFFECTS



Solar panels are nearly silent neighbors. Inverters are typically at least 100 feet from the nearest dwelling, and the sound of inverters from this distance is quieter than a refrigerator hum. As inverters only make sound when they are working, no noise is typically emitted at night.¹



Solar panels are designed to capture light, not reflect it. Most solar panels have antireflective coatings and are less reflective than water or windows. Any reflected light would be wasted potential energy!²



The ground beneath and around EDPR solar projects is maintained with a vegetative ground cover suitable to the local environment, which helps mitigate the possibility of heat increases. Any heat increases that do occur are very small and dissipate completely as you leave the solar park's immediate area.

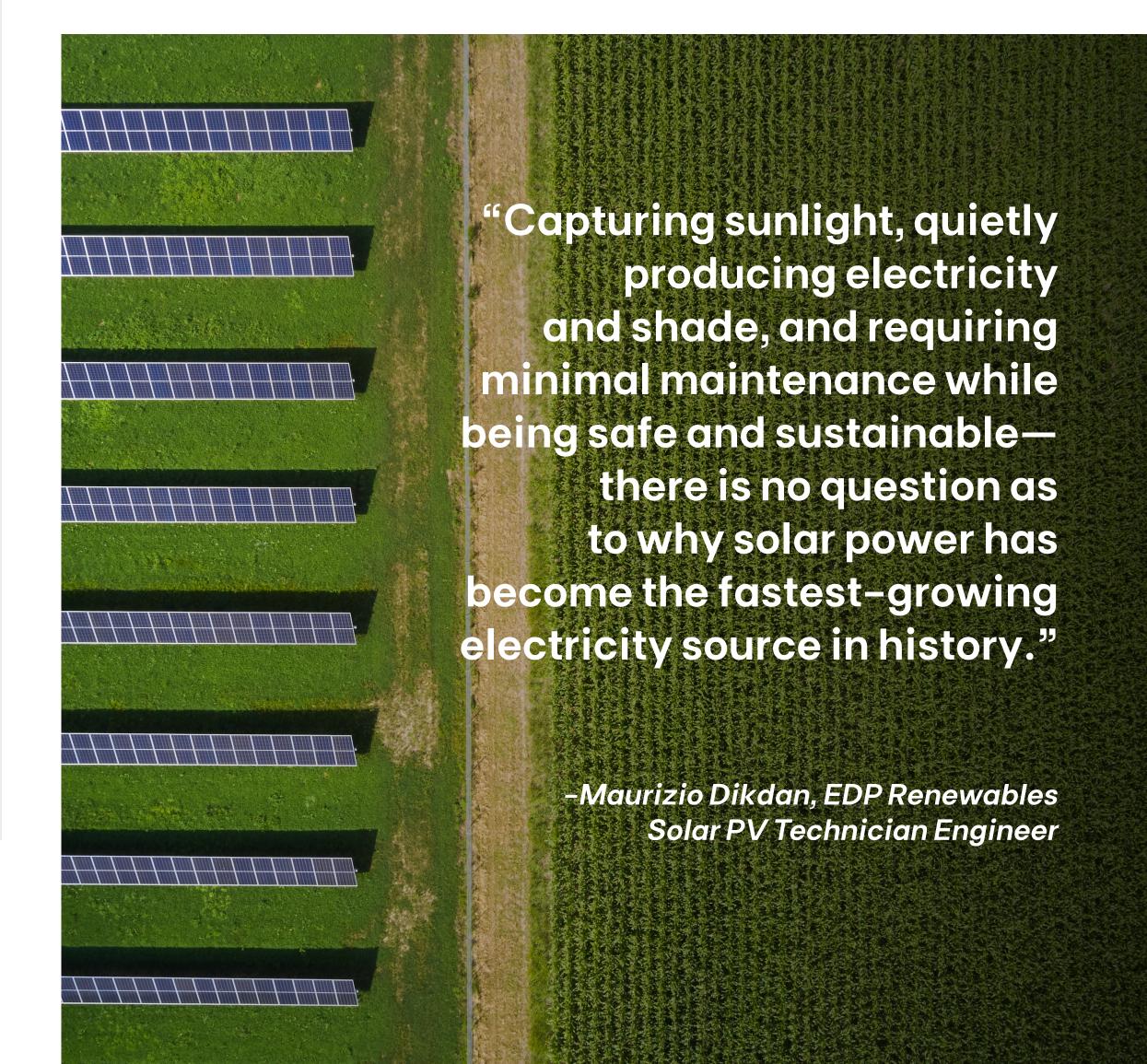
PROPERTY VALUES

Research from multiple academic institutions and project–specific assessments have shown little to no negative property value impacts from solar parks on surrounding homes.⁴

Property value experts agree upon the criteria that typically correlate with decreases in property value — increased noise, odor, and traffic—none of which result from having a solar park as a neighbor. Solar parks are very quiet facilities that do not emit odor or pollution, and once construction is complete, they have minimal impact on traffic in the area.⁴

What helps improve property values – quality schools, roads, and local services – are further strengthened by projects' contributions into the local tax base, funding those very services.

Visual appearance also plays a role. This is one area where solar parks could have an impact, depending on neighbors' preferences, as we are visually changing the landscape. However, there are many tools to mitigate visual impact, which typically include setbacks and screening. New Frontiers Solar is a heavily screened site, with dense existing vegetation and, in certain areas, new proposed evergreen trees to obscure the view of the solar park.



¹ American Clean Power Association. "Solar as a Neighbor: Living Near a Solar Project." July 2024.

² National Renewable Energy Laboratory. Research and Analysis Demonstrate the Lack of Impacts of Glare from Photovoltaic Modules. July 2018.

³ V. Fthenakis and Y. Yu. IEEE 39th Photovoltaic Specialists Conference. "Analysis of the potential for a heat island effect in large solar farms." 2013.

⁴ Gaur, V. and C. Lang. (2020). Property Value Impacts of Commercial–Scale Solar Energy in Massachusetts and Rhode Island. Submitted to University of Rhode Island Cooperative Extension. September 29, 2020.

The University of Rhode Island study's conclusion that there may be an impact to non-rural communities is surmised is that "land is abundant in rural areas, so the development of some land into solar does little to impact scarcity, whereas in non-rural areas it makes a noticeable impact.

Solar Panel Contents & Durability



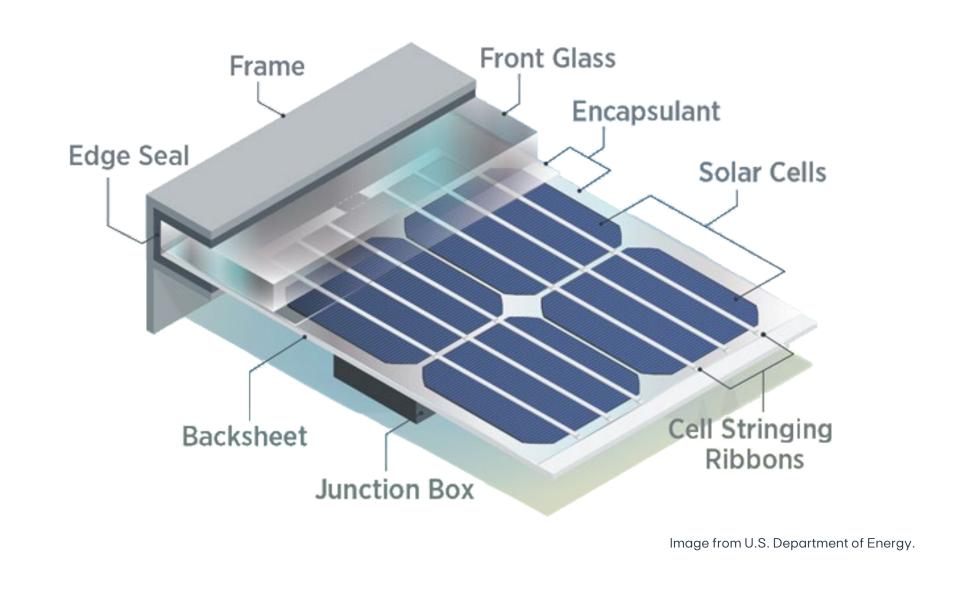
Photovoltaic cells | PANEL COMPOSITION

Modern commercial solar panels do not contain sufficient hazardous materials to pose a danger to the environment and human health when in operation or at their disposal.

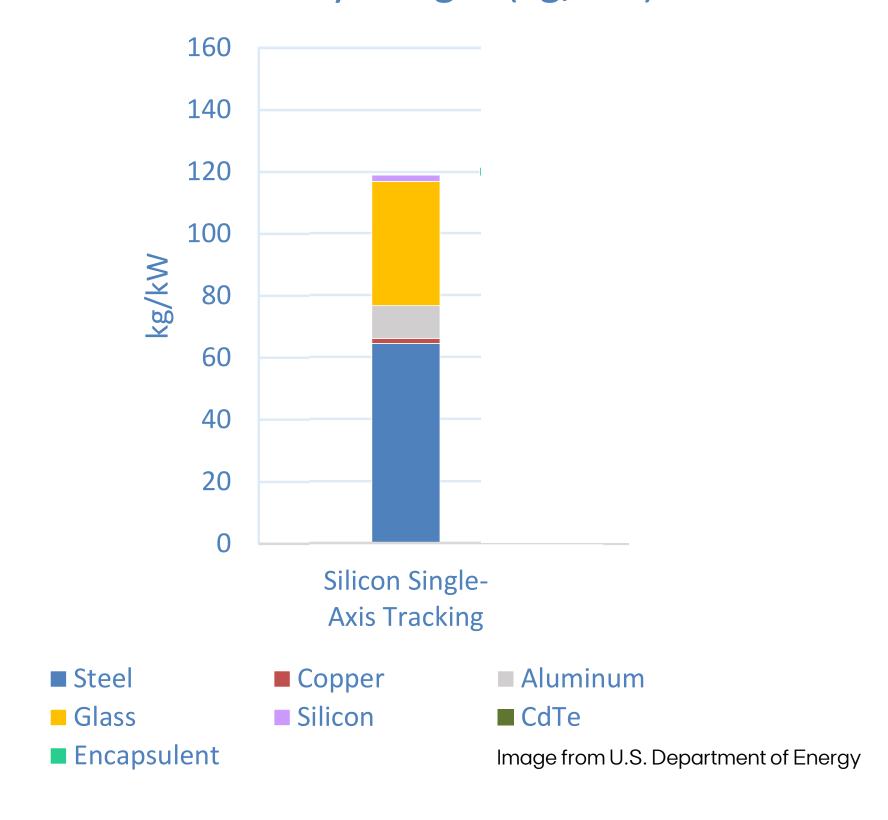
Photovoltaic cells, the part of a panel that generates electricity, are largely made of silicon. Silicon is the second-most common element on earth, which is also found in most consumer electronics, from cell phones to computer chips.¹



The thin layer of solar cells is sealed on both sides and covered with glass and an aluminum frame. Solar panels are designed and manufactured to withstand extreme weather conditions and events. Panels use a fully sealed technology that blocks trace metals from entering surrounding soils, even if cracked, similar to phone screens. Solar panels do not contain any liquid, so nothing is able to leak out.¹



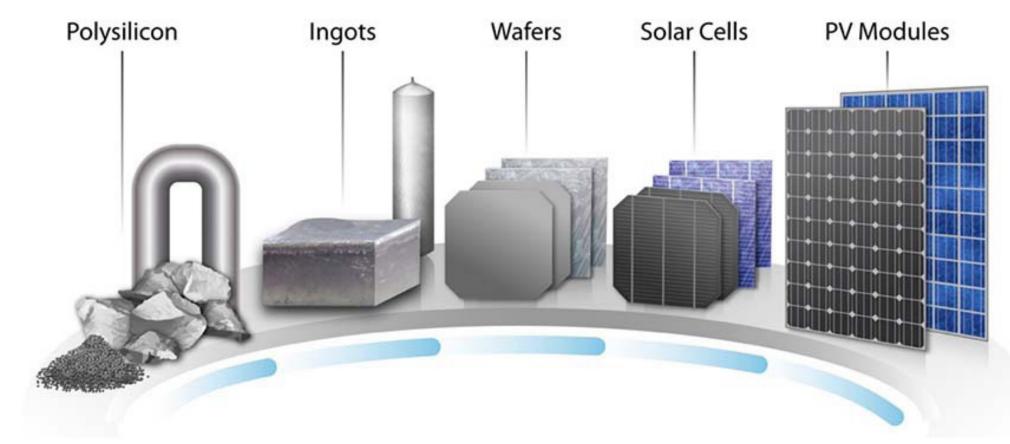
20 MW PV Plant Component Materials by Weight (kg/kW)



FROM RAW SILICON TO PV MODULES

The extraction of silicon from quartz and sand is followed by reduction into ingots, which are further refined into wafers. Fragments of silicon are melted together to form polysilicon wafers. Solar cells are fully sealed by encapsulants, then protected by tempered glass.







WHAT ABOUT LEACHING?

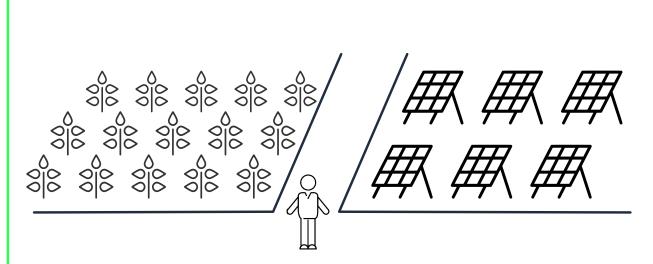
EDPR requires Toxicity Characteristic Leaching Procedure (TCLP) reports from all panel manufacturers it collaborates with. This testing procedure simulates the conditions a solar panel would face in a landfill over an extended period, to ensure hazardous levels of substances do not leach from the panel. New Frontiers will source panels that pass TCLP testing.

EDPR's Close the Loop program will ensure solar panels from New Frontiers Solar Park are kept out of landfills through robust recycling initiatives, during all phases of the project.



today's economy and energy landscape, that now includes hosting solar alongside crops.

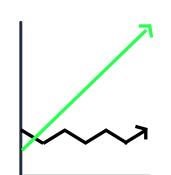
It's what property rights are all about—farmer landowners supporting their families by making their own decisions for how to most effectively use their property.



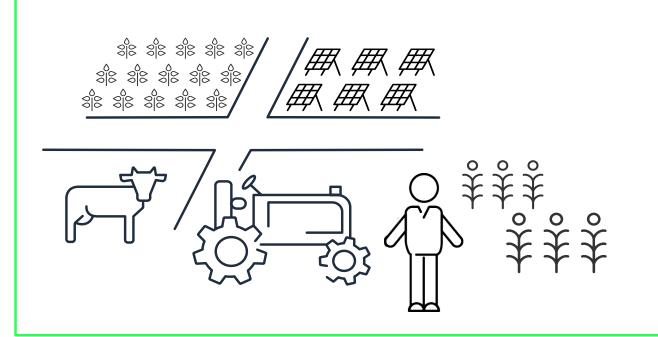
When farmers choose to lease part of their land to host solar panels, they receive a guaranteed, steady income that can go back into their overall ag operation.

\$560 million

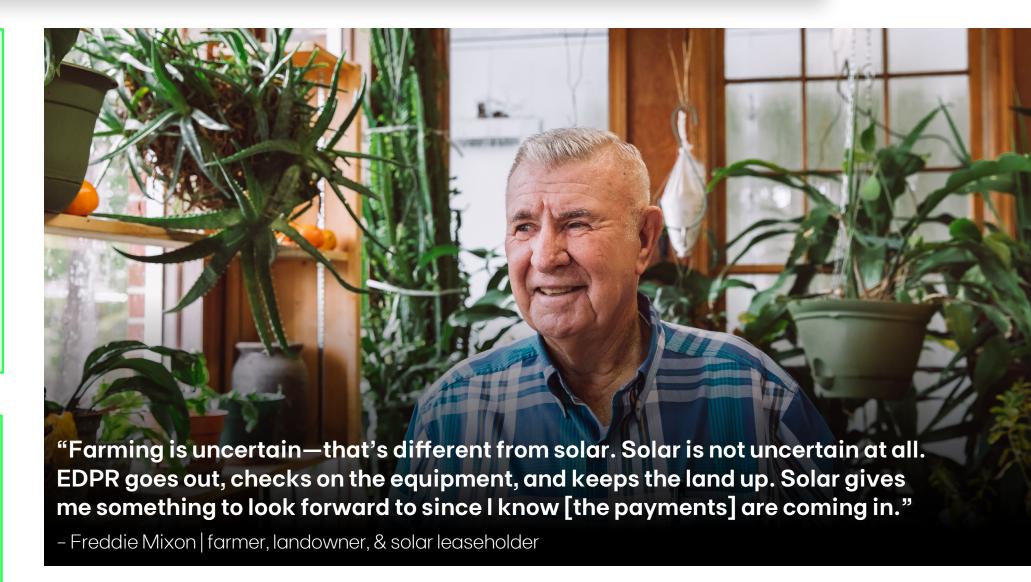
paid to landowners so far by EDPR's clean energy projects¹

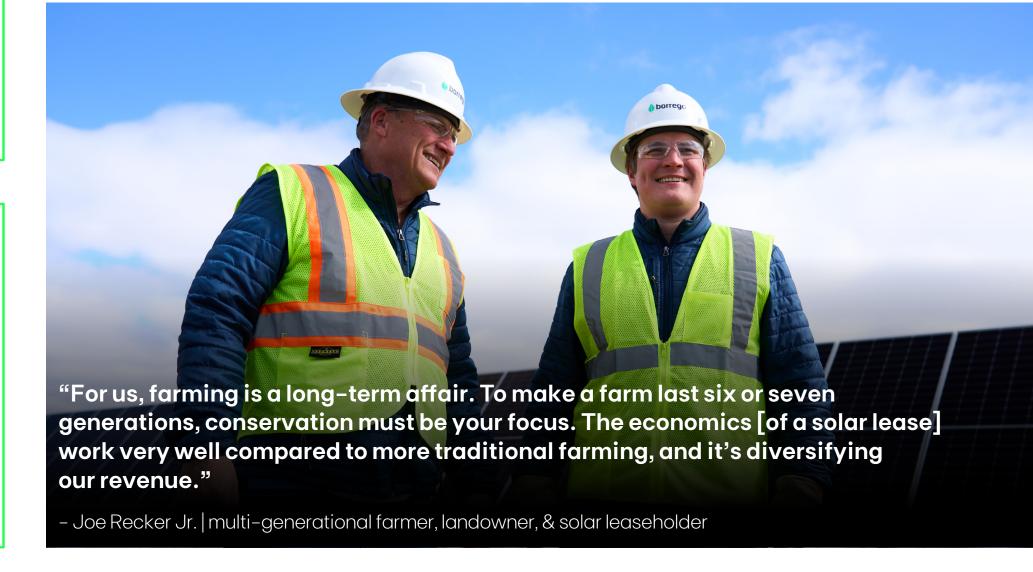


This extra guaranteed revenue helps **balance out** the ups and downs of crop prices, farming expenses, and weather impacts, keeping their farm secure.



Beyond keeping a landowners' farm afloat, solar income can help the farm grow — buying new equipment, expanding into a new crop, buying more land.





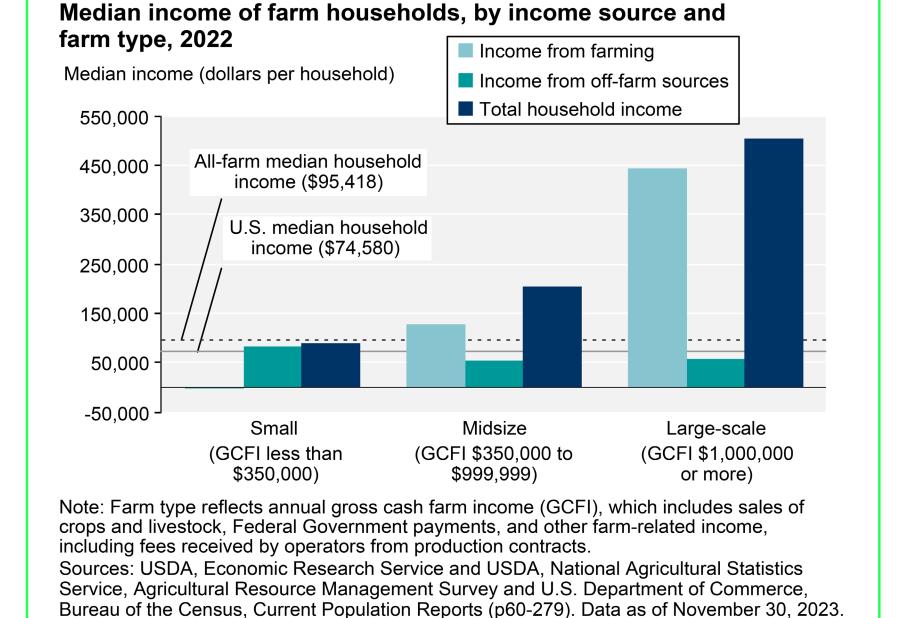
U.S. Department of Agriculture:

"Most farmers receive off-farm income, and small family farms depend on it"

Managing multiple revenue streams has always been a vital part of agribusiness, and continues to be vital in today's economy. Farmers know not to put all their eggs in one basket:



88% of American farms are small family farms.²





The majority of small family farms' household income is from something other than farming, such as solar leases.²



About 84% of all U.S. farm households earn the majority of their total household income from non-farming sources and often use non-farming income to cover some portion of farm expenses. 3



Many farmers face pressures to stop farming and sell their land to commercial or residential real estate developers. But commercial or residential development means permanent conversion of land to non-agricultural uses.



PRE-PROJECT: SITE DESIGN & ENVIRONMENTAL DUE DILIGENCE

• The development of New Frontiers Solar Park has been in accordance with local, state, and federal permitting standards and industry best practices. Numerous surveys and studies are being conducted to minimize or avoid impacts to wildlife, wetlands, natural vegetation, and cultural resources. We are actively coordinating with the relevant state and federal agencies including the Kentucky State Board on Electric Generation and Transmission Siting and the U.S. Fish and Wildlife Service.

FIELD SURVEYS (COMPLETED, IN PROGRESS, OR UPCOMING):

- Protected Species Assessment
- Geotechnical (Soil Sampling) Study
- Hydrologic and Hydraulic Study
 Wetlands & Waters Delineation
- Phase I Environmental Site Assessment

Cultural Resources Survey

Bat Habitat Assessment



OPERATIONS: EQUIPMENT & LAND MAINTENANCE

- The land under and around the solar park will be planted with a locally suitable seed mix. This mix is designed for the local climate and soil type and will aid in keeping ground temperatures cool. EDPR is responsible for managing the project area's vegetative ground cover, and often employs local services to assist.
- During the 35-year lifespan of the project, the land is able to rest. The soil replenishes nutrients and increases its biodiversity, boosting soil fertility for its life after the solar park.
- The project is monitored 24/7 and is maintained by a local operations team. Additionally, our Remote Operations Control Center is staffed around the clock at our Houston Headquarters, receiving real-time performance data on every solar park in our fleet, allowing for immediate awareness and response for any abnormalities that arise.



DECOMMISSIONING: REMOVING & RESTORING

- At the end of the solar park's useful life, the solar park will be decommissioned or repowered. During decommissioning, the solar panels, inverters, and other related equipment will be safely removed, and recycled as much as possible. Project leases obligate EDPR to remove all equipment after the project life and restore the land to as close to its original, pre-construction state as possible. The decommissioning process will follow all regulatory guidelines, ensuring safe disposal or recycling of equipment, in compliance with environmental standards.
- New Frontiers is required to provide financial assurance in the form of a bond or other security to cover the estimated
 cost to decommission the project. The decommissioning estimate will be updated every five years during the project
 life, and the financial security will be increased to reflect any changes. EDP Renewables is committed to being a
 good neighbor and steward of the land and will ensure that decommissioning efforts restore the land at the end
 of the project's life.

"My land is very important to me.

EDPR hasn't done anything that can't be removed off the land.

They've planted grass on it to keep it from eroding. They really respect the land and the landowners."

– Walt P., South Carolina landowner





Building a solar park is a major construction project that takes approximately a year to complete and employs hundreds of people. Here are some of the goods and services we can source locally:

TECHNICAL & CONSTRUCTION EMPLOYMENT

- Civil contractors
- Concrete supply and delivery
- General laborers
- Safety staff
- Excavation and restoration
- Gravel supply and delivery
- Heavy equipment operators

SERVICES

- Accommodations and catering
- Vehicle and equipment maintenance
- Vehicle and equipment rentals
- Security
- Fuel supply

Throughout the construction process, we work closely with local stakeholders and officials to ensure everyone is informed and construction activities are minimally disruptive.

SITEPREPARATION

To prepare a site for a new solar project, vegetation and large rocks are first removed. In some cases, a grading technique is employed to provide a level foundation for the construction of the solar modules. As required in our lease agreements, great care is taken to salvage topsoil, prevent erosion, and maintain natural drainage patterns.

2 SECURITY FENCE

To protect the public during construction activities, as well as to prevent trespassing and vandalism, a fence is erected around the perimeter of the project location.

3 DRIVING & DRILLING PILES

Following site preparation, metal beams (typically steel or aluminum) are spaced out and inserted into the ground using piledrivers to serve as the foundation for the solar modules.

INSTALLING TABLES, TRACKERS, & PANELS

A typical solar park is comprised of thousands of photovoltaic (PV) panels that are mounted to racks that are supported by piles driven directly into the ground. In most cases, trackers are installed to aim the panels toward the sun and increase power production throughout the day.

LAYING UNDERGROUND CABLES

Buried electrical collection cables are installed to connect the solar arrays, inverters, and transformer. The buried lines are contained within the project location and buried to a minimum depth of three feet.

INSTALLING INVERTERS & TRANSFORMERS

The electricity generated by the PV panels is in the form of direct current (DC). Inverters are installed to convert the DC output of the PV cells into alternating current (AC) suitable for supplying the electrical grid. The AC power then goes through a transformer to increase the voltage before connecting to the electrical grid.

INTERCONNECTION

The power then passes from the project substation, where the voltage was increased, to a substation owned by the utility. From the utility substation, the power will flow to the closest location where the supply is needed.

8 FULLY OPERATIONAL

Once the solar project is complete, it will be monitored on a continuing basis to ensure all components of the system are operating properly. Vegetation within the project area will be maintained, often by local landscaping contractors.





WHAT WILL THE SOLAR PARK LOOK LIKE?

Solar parks typically look different than what was there before, which can take some getting used to.

Since solar panels are mounted on top of metal piles driven into the ground, the vast majority of the ground within a solar park is covered in well-maintained vegetation, meaning plenty of green space. New Frontiers will also plant additional vegetative screening comprised of two rows of evergreen trees in certain locations near homes and other areas with potential viewshed impacts.



ARE SOLAR PARKS SAFE NEIGHBORS?

Solar parks are very safe neighbors. Silicon-based PV panels are made of safe, well-tested materials commonly used in building and household products. The panels are fully sealed, do not contain any liquids, and cannot leak. We work with local emergency service teams before a project becomes operational to ensure there is a plan in place should any unforeseen emergencies arise on-site.

People are surrounded by electronics, electromagnetic frequencies (EMF), and radio frequencies every day. Residents outside of the fenced perimeter of a solar facility, including sensitive populations like those with pacemakers, are not exposed to significant EMF from the solar facility as the EMF levels outside the fence are less than 1/1000th of the level at which manufacturers test these medical devices for EMF interface. Therefore, there is no negative health impact from the EMF produced in a solar park.



WHERE DOES THE POWER GO?

The power grid isn't like a pipeline that carries electrons from point A to point B — it's more like a bathtub, where water can be added and taken out, but it's impossible to know which exact water molecules those are. The power itself will connect into the local grid, boosting the immediate area's electricity supply. The electrons will move along the path of least resistance to where they're needed first, typically closer to where they're generated, whether that be immediately in Breckinridge County, or to various parts of Kentucky and beyond.



ARE THE PANELS RECYCLABLE?

Yes, panels are recyclable and EDPR has committed to keeping all of New Frontiers Solar's panels out of the landfill through robust recycling initiatives. Close The Loop is EDPR's circular economy program, which aids in minimizing the use of natural resources, optimizing and efficiently managing products and services, maximizing the recovery of waste, and promoting a circular economy among our customers. EDPR is collaborating across the solar, wind, and energy storage sectors with over 19 recycling partners throughout North America to ensure solar panels, products, and components are managed responsibly both during and at the end of their useful life.

Protecting our planet and contributing to its regeneration is one of EDPR's environmental, social, and corporate governance commitments. In order to achieve this ambition, EDPR aims for 85% waste recovery along the project value chain (including construction, operations, and dismantling of solar and wind farms) by 2026.



IS THIS PROJECT FUNDED BY THE GOVERNMENT?

The costs of the equipment and construction are funded from EDP's own balance sheets. We do receive some level of government support, as do all forms of energy generation. The energy industry—not just renewables—is incentivized by the U.S. and state governments because energy independence and energy security are so important for the country. The tax incentives we receive for building projects drive down the overall cost of electricity, which is something that benefits everyone.



A solar farm provides you peace of mind with a stable income.

After the solar farm checks started coming in, that income allowed me to purchase more land and start a tree nursery.

It really helps you be able to expand your business and do more."

Landowner & Farmer | Orangeburg, SC Walt Pooser





coming in, I don't have to worry about my situation. The income from the solar park has helped me and my family considerably."

Landowner & Farmer Hampton, SC Freddie Mixon





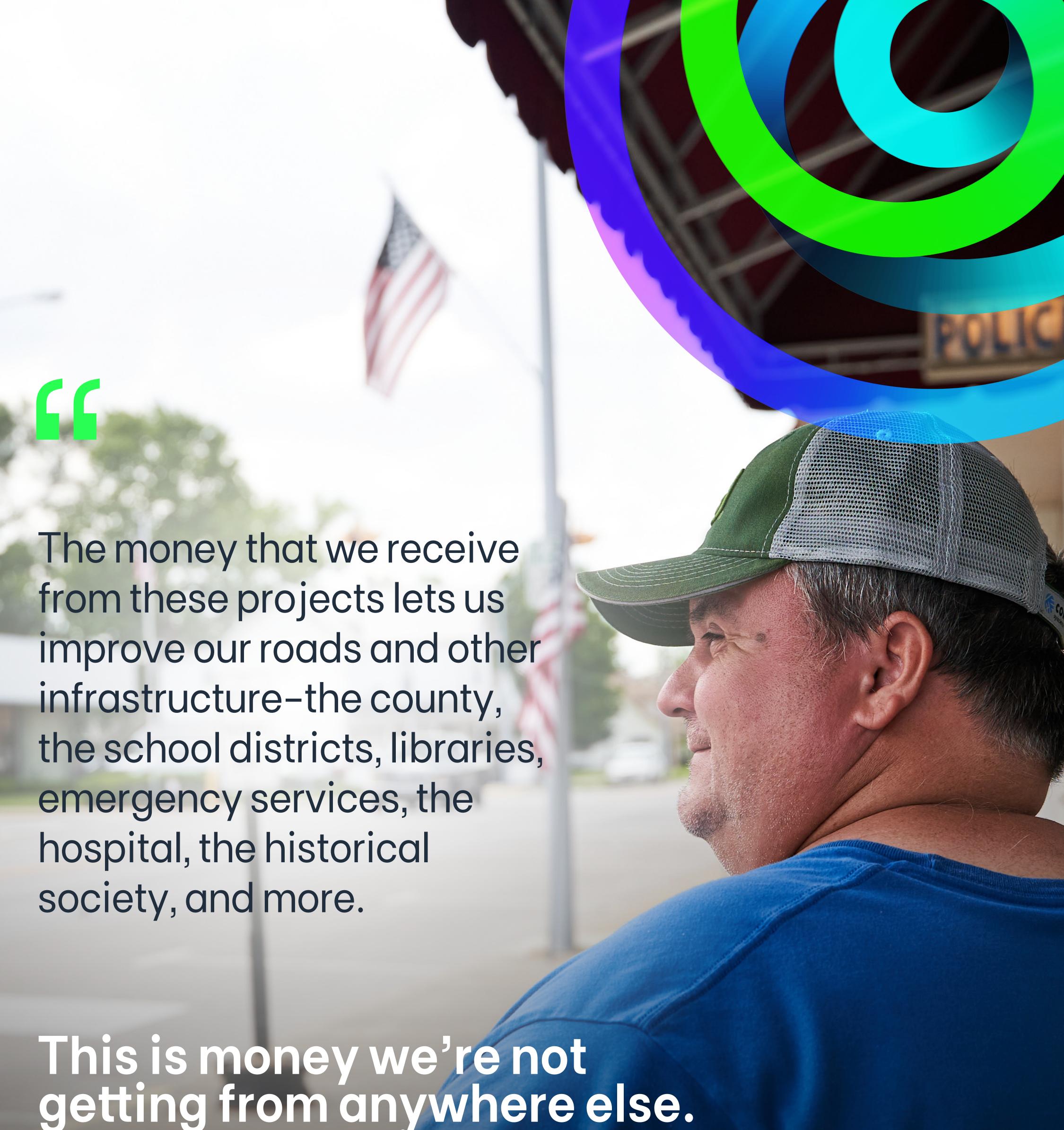


In terms of what you can do with your land, I think clean power is a very attractive option.

It's really neat to put something like food on the table for the American people, as well as power in the homes of people in these local communities."

Landowner & Farmer | Blue Harvest Solar, OH Joe Recker Jr.





This is money we're not getting from anywhere else. It's had a great impact on the whole community."

Township Trustee | Harrison Township, OH Bob Young

