EDF renewables

THANK YOU

for attending the
July 27, 2022

Ridge View Solar + Storage Public Meeting

We enjoyed meeting you!

www.ridgeviewsolar.com

Our Commitment to **Ethical Development**

These principles reflect our promise to our host communities, landowners, and other stakeholders.

EDF RENEWABLES IS COMMITTED TO:

- Honest and transparent development activities
- Engagement with all stakeholders and openness to receive input that will improve projects and mitigate impacts
- Be present and accessible in the community to ensure all voices are heard
- Fair and equitable treatment of landowners, host communities, and stakeholders.

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OUR PURPOSE

To build a net zero energy future with electricity and innovative solutions and services, to help save the planet, and drive wellbeing and economic development.

OUR MISSION

Delivering renewable solutions to lead the transition to a sustainable energy future.

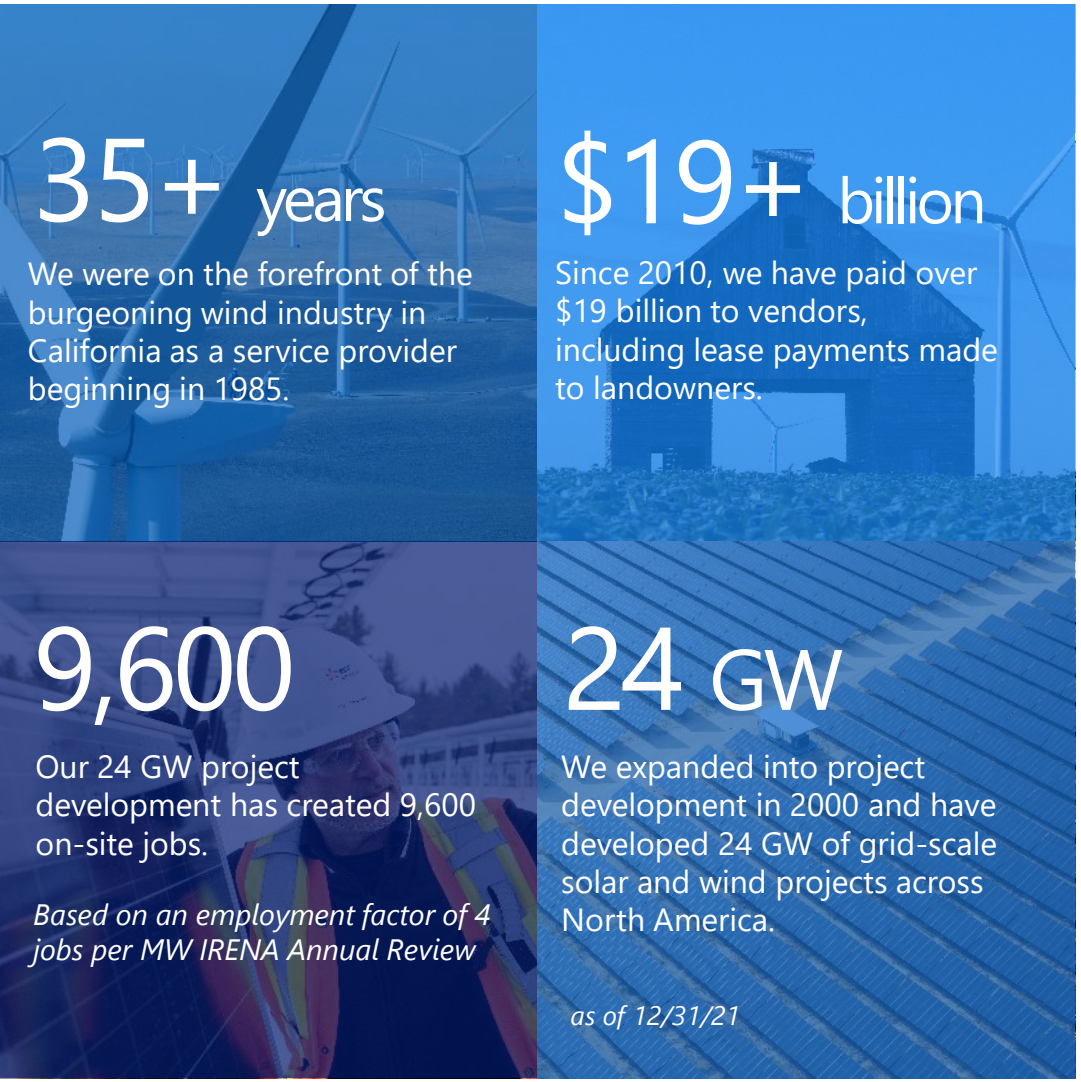
OUR CORE VALUES

- Safety
- Good Sense
- Accountability
- Transparency
- Teamwork
- Respect
- Passion

Our Company Diversity, Equity & Inclusion Statement

We are committed to diversity and aim to ensure that each one of our employees has a full sense of belonging within our organization. They are empowered to express their opinions and contribute to our success. All have the responsibility to create and sustain an inclusive environment.

Diversity, equity, and inclusion are fundamental to our culture and core values. Our unwavering dedication to this pursuit makes us more innovative and creative, which helps us serve our clients and communities better.



35+ years

We were on the forefront of the burgeoning wind industry in California as a service provider beginning in 1985.

$19+ billion

Since 2010, we have paid over $19 billion to vendors, including lease payments made to landowners.

9,600

Our 24 GW project development has created 9,600 on-site jobs.

Based on an employment factor of 4 jobs per MW IRENA Annual Review

24 GW

We expanded into project development in 2000 and have developed 24 GW of grid-scale solar and wind projects across North America.

as of 12/31/21

GRID-SCALE POWER

Leading the way in renewable energy

EDF Renewables' Grid-Scale Power team; provides **origination, development, transaction and construction** services for large-scale wind (offshore and onshore), solar power generation and storage projects across North America.

Our team of leaders solve energy challenges for businesses and communities no matter the size or complexity having developed over 24 GW of wind, solar and storage projects with some of the world's top corporates and utilities.

35+
Years' Experience

15 GW
Pipeline

1,500+
Employees

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ASSET OPTIMIZATION

Accelerate Operational Excellence.

The Asset Optimization team offers a full range of services for all phases of renewable energy projects – **operations, management, procurement, routine and emergency maintenance, retrofits and upgrades**.

Our experienced on-site team of over 400 full-time technicians, supervisors, managers, and support staff, means EDF Renewables is fully equipped to manage the balance-of-plant and day-to-day operations of your wind or solar project.

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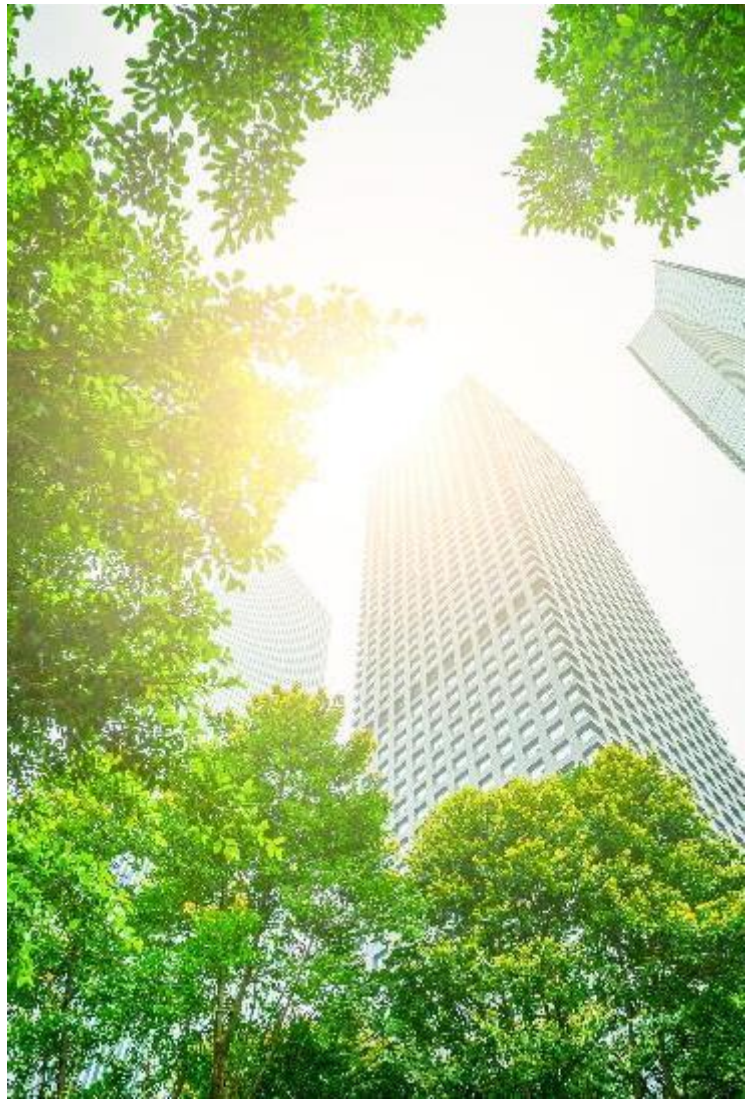
We take pride in the impact of the **1,163 MW** that we put into service in 2021.

395,040
equivalent homes powered

2,174,819
avoided metric tons of carbon dioxide annually

472,979
cars off the road

Data: EPA Greenhouse Gas Equivalencies Calculator



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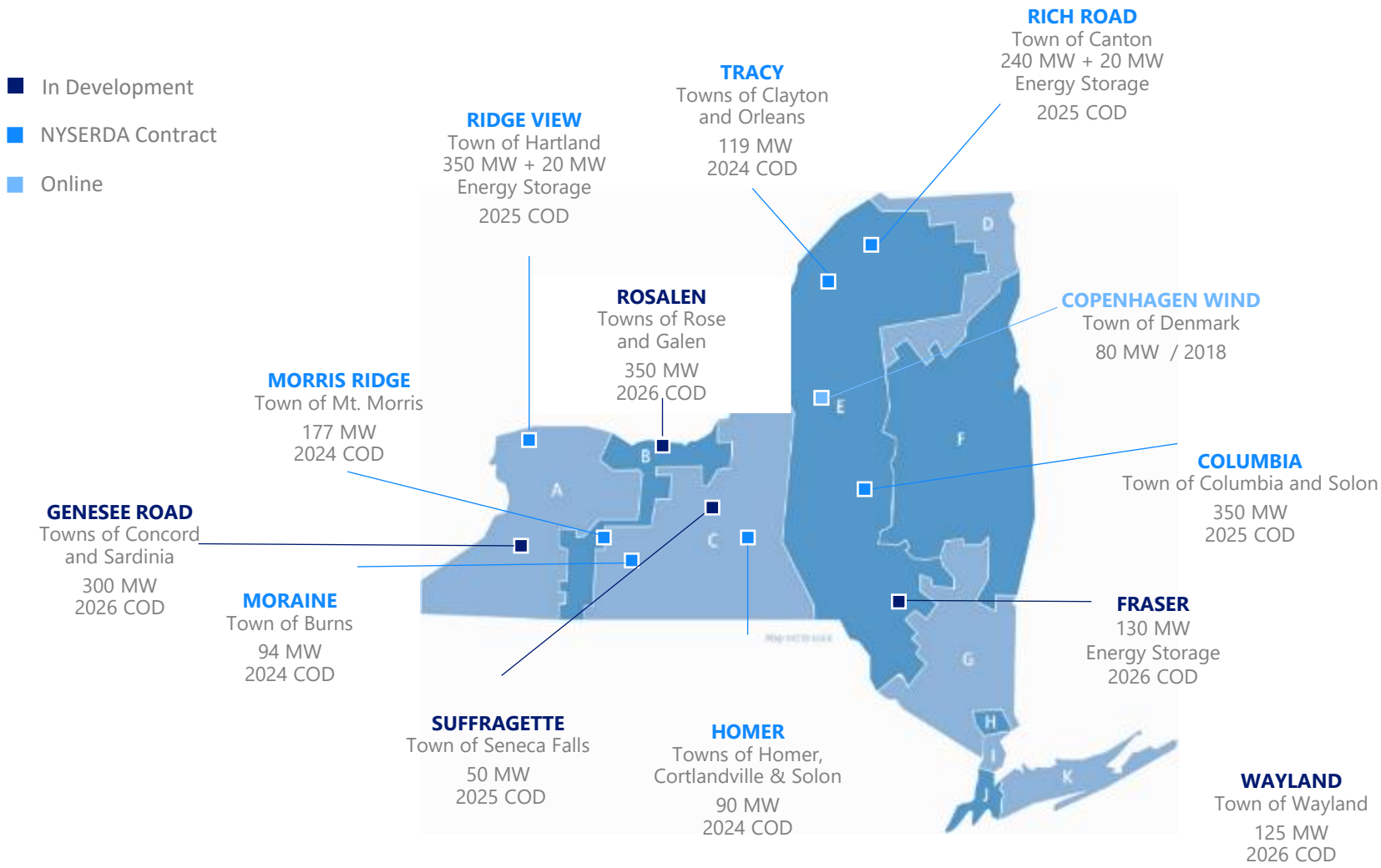
Statewide Development Pipeline



Project Financial Backing

New York's Renewable Energy Goals

NYSERDA (New York State Energy Research and Development Agency) manages annual procurements for renewable energy projects to help the state meet its 70% renewable electricity goal by 2030

- Project awarded a 20-year NYSERDA contract at fixed power price, securing project investment
- Ridge View intends to continue operating for 10 to 20 years additional years after the NYSERDA contract ends, generating revenues from the NYISO (New York Independent System Operator) wholesale market or other sources

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Project Overview

Host Town: Town of Hartland
Host County: Niagara County
Proposed Capacity: 350 MW Solar
(may include 20 MW Energy Storage)
Proposed Land Use: 2,000 acres

Proposed Connection Point

345 kV transmission line that originally connected to the Somerset Coal facility

Connection Line

A short (< 0.1 mile) 345 kV line proposed from the project substation to the proposed connection point, located on private property

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Facility Area

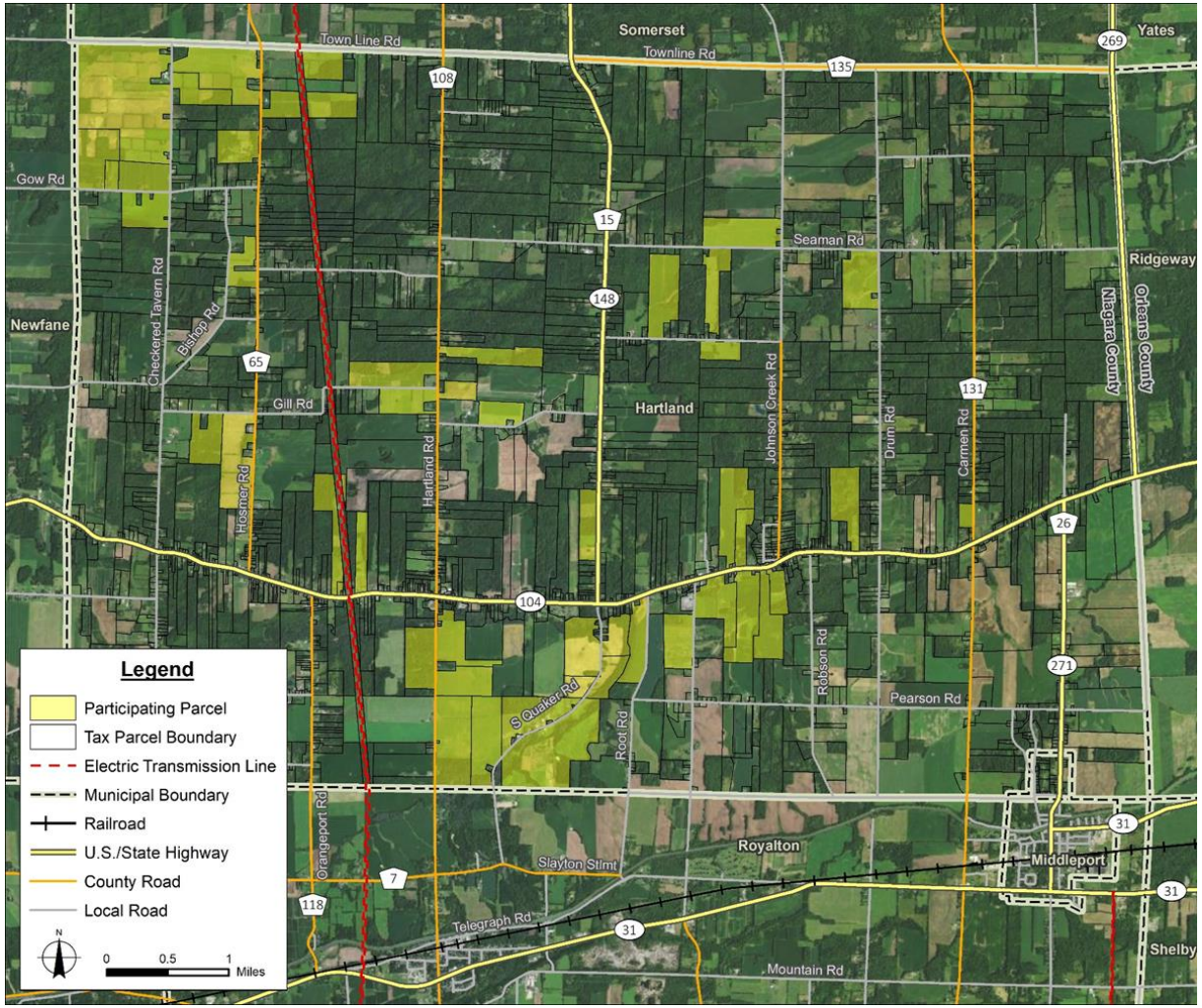
The participating parcels depicted in yellow represent areas where solar panels and/or the substation may be sited

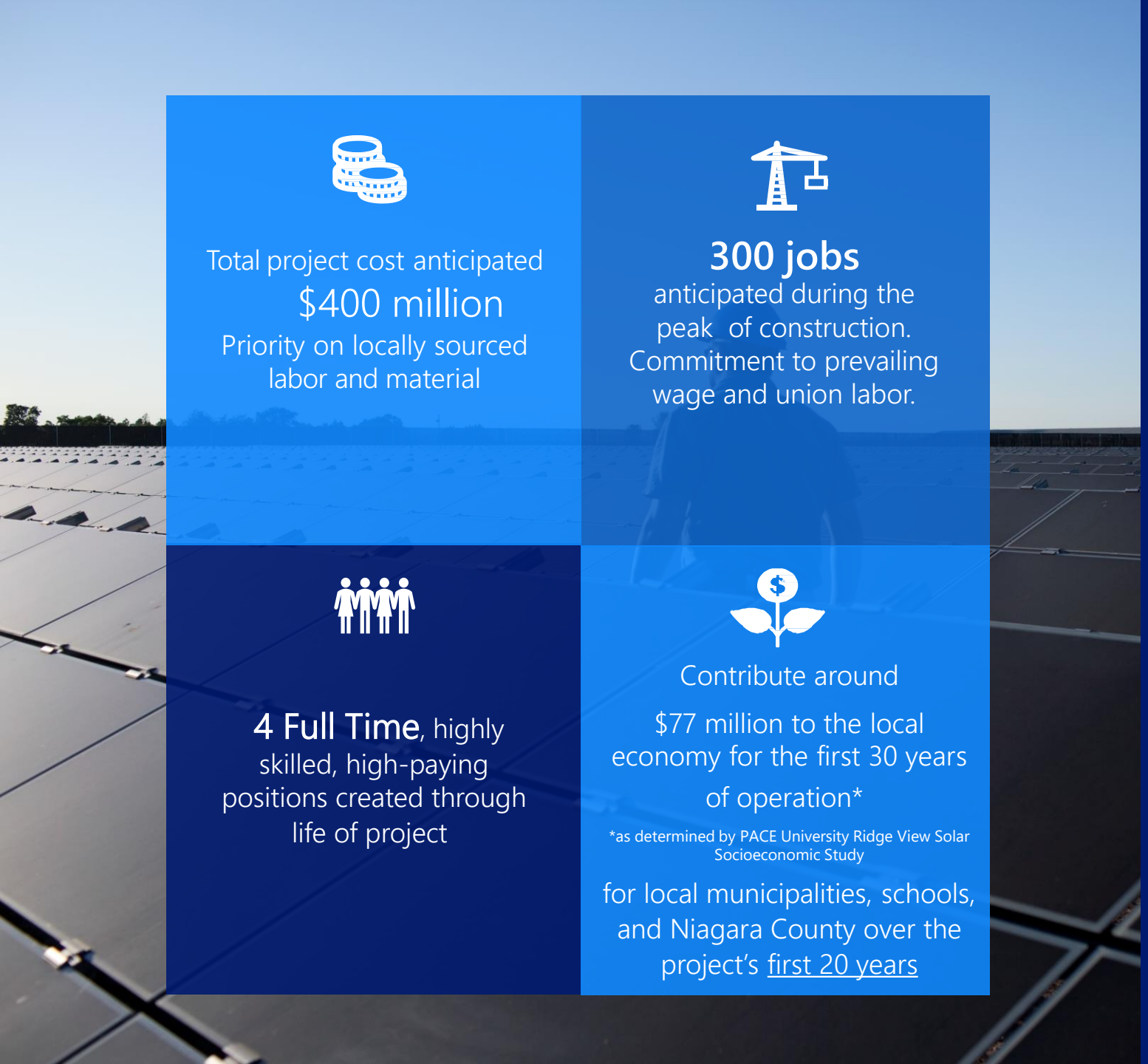
The solar panels and substation will be fenced; these fenced areas will occupy ~1,800 acres (or 50%) of the parcels depicted in yellow

EDF Renewables is in the process of signing easements to connect the proposed solar areas to the existing 345 kV transmission line. This area is to be determined and these parcels are not identified on the map

If energy storage is a part of the project, the facility will be located on about an acre of land near the project substation (location TBD)

The final design will be based on community feedback, various setbacks, design parameters, and the result of field studies





Total project cost anticipated

$400 million

Priority on locally sourced labor and material

300 jobs

anticipated during the peak of construction. Commitment to prevailing wage and union labor.

4 Full Time, highly skilled, high-paying positions created through life of project

Contribute around

$77 million to the local economy for the first 30 years of operation*

*as determined by PACE University Ridge View Solar Socioeconomic Study

for local municipalities, schools, and Niagara County over the project's first 20 years

LOCAL BENEFITS

DIRECT BENEFITS:

- Surveying, civil engineering, mechanical work, electrical work, road construction, transportation equipment, earthwork activities, maintenance of vehicle fleet, maintenance paths, snow removal and other related services.

INDIRECT BENEFITS:

- Meals and accommodation for construction personnel; products, services and supplies.

Pace University Socio-economic Study

Key Findings

- $177 - $229 million contributions to the local economy during construction and 30 years of operation – higher number assumes construction wages paid to local workers
- Half of the contributions go to the community and half to participating landowners
- Equivalent to $2,949 - $3,824/acre/yr

CONDUCTED BY → Pace Energy and Climate Center, ELISABETH HAUB SCHOOL OF LAW

FUNDED BY → EDF renewables

SUPPORTED BY → RIDGE VIEW solar + storage project

Visit this link to see the study: https://bit.ly/solar_farming_study

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New Revenues For The Community

Sharing the Sun Fund

- $40,000 per year during construction and first 10 years of operation
- Supports local groups and initiatives; recipients determined by members of the community through the application process

Host Community Benefit Program

- $100 per year/ residential household electricity rebates for initial 10 years of operation (mandated by Public Service Commission Host Community Benefit Program)
- Based on $175,000 ($500/MW) shared between each household in the Town of Hartland

Long Term Stable Tax Agreements

- Over **$1 million per year** in new revenues to Hartland, Niagara County, RoyHart and Barker School Districts through PILOT and Host Community Agreements (to be negotiated)
- Can be used to support services, infrastructure, or lower taxes

Special District Taxes

- Project will pay its share of special district tax rolls, ex: fire, refuse, and water

Landowners

- **>$2 million annually** for landowners providing diversified stable revenue stream for many decades

Education

- Offering **$2,000 in annual scholarships** for Royalton Hartland and Barker School Districts

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Solar Farm Equipment

- **Modules:** 750,000 crystalline silicon solar panels
- **Single Axis Trackers:** panels are mounted on single-axis tracker racking system supported by driven steel piles, with **no concrete expected**. Panels track the sun from east in the morning to west in the evening.
- **Invertors & Transformers:** Inverter/transformer units convert DC electricity from modules to AC electricity for grid injection.
- **Collector Line:** underground cable buried 36-48" below ground. Connects inverters to the substation. Deeper burial and specialized methods to cross roads and/or wetlands. Overhead lines may be used when not on farmland.
- **Substation**: Combines all collector lines and increases voltage to grid-level; connects to existing transmission lines. Located as far as practical from homes to mitigate sound and visual impact.

Racking mounted on piles

Panels installed on racking

Project substation (grid tie)

Inverter/transformer skid

Aerial view of project

Land is revegetated

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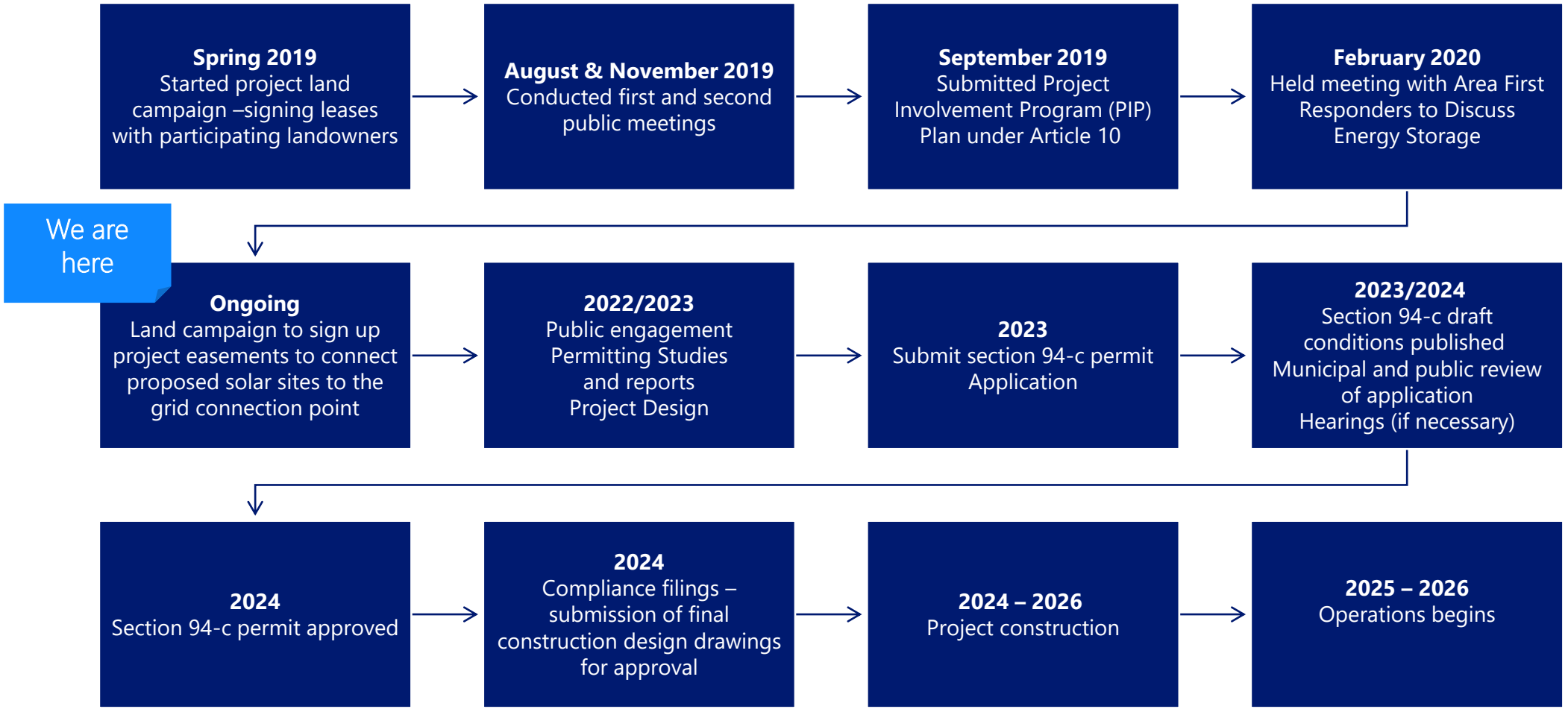
Project Timeline



Section 94-c is the New York State approval process for renewable energy projects
Compliance filings is Part of Section 94-c approving final construction drawings and reports prior to start of construction

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Facility Example Photos

EDFR's Panton Project in Construction in VT

EDFR's Pendleton Project in Ontario Modules facing West towards the sun around 4pm
~ 6-month-old vegetative buffer in foreground

Driven pile foundations being installed at EDFR's project in Jacksonville FL

One section of array at EDFR's Project in Flambeau, WI

Fencing, Roads & Setbacks

- Required for solar facilities for safety and security purposes
- Fencing is around the solar panels and substation
- Fence styles are typically based on examples within the local community so installed fencing will blend into the existing visual setting
- The facility is designed to avoid and/or minimize environmental impacts
  - Wetlands
  - Wildlife
  - Stormwater
  - Road use
- Designing for New York State ORES mandated setbacks minimizes the overall project land use
- EDFR looks forward to engaging with the community about siting, setbacks, and visual buffering.

Agricultural Style Wire Knot Fence (Array Areas)

Galvanized Chain Link W/ Barbed Wire (Substation Only)

Typical Access Gate for Array Areas

Typical Access Road for Array Areas

Setback Type (NYS Mandated)	Solar Facility Setback
Non-participating residential property lines	100 feet
Centerline of Public Roads	50 feet
Non-participating property lines (non-residential)	50 feet
Non-participating occupied residences	250 feet

Solar Energy = Emissions-Free Power

Safe and non-toxic materials

- The modules are comprised of silicon, copper, and aluminum between glass and plastic with an aluminum frame.
- These types of solar modules cannot release any toxic materials.

No risk for the environment

- Inverters and Transformers used to condition power for use on the grid do not contain heavy metals or toxins. Even during a malfunction or when damaged, no environmental risk is present.

Minimal use of pesticides or herbicides

- Only used in solar array areas if mandated by environmental agencies. For example; if invasive plant species were to develop in the area
- Use of herbicides at substations is required by code to ensure plants do not grow into electrical equipment & cause a fire.

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Hunting Around a Solar Facility

Hunters are safe and responsible, and we trust them around our facilities

There are setbacks from inverters and transformers, but they typically don't extend outside the project fence area. Hunting can take place outside of the fenced area of our facilities

Maintain best practices and use common sense to prevent firing into the project

Communication is key – contact phone numbers posted in visible areas to reach our operations team 24/7/365 and speak to a live voice

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New York State Permitting Process for Large Scale Renewable Energy Projects

Is achieved through Section 94c and the **Office of Renewable Energy Siting (ORES)**

- Standardized conditions for solar projects to meet
- Full suite of environmental studies and approval of project design
- Adherence to substantive provisions of local zoning laws is still required but a waiver for those deemed unreasonably burdensome.
- Funding for host town and other intervenors to cover costs to hire consultants and engineers to review and provide feedback on application materials
- Approval typically 12-18 months after application submission

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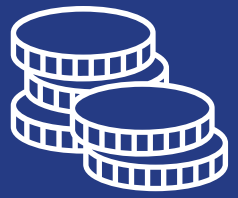

Intervenor Funding

- Under Section 94-c*, EDF Renewables is required to provide funds for intervenor participation
  - $1,000/MW at filing of application – total $350,000
- Funds distributed for town and other intervenors to hire consultants & attorneys to provide feedback on application
- At least 75% of the funding is reserved for municipalities
- EDF Renewables proactively offering escrow agreement to cover town's consultant and attorney costs prior to filing application

*94-c is the New York State Renewable Energy Process

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Environmental Agency Coordination

EDF Renewables will be coordinating with regulatory agencies to ensure that potential environmental impacts are fully considered.

Studies provide information to EDF Renewables and coordinating agencies to help avoid and minimize potential environmental impacts.

EDF Renewables will coordinate with many agencies and local government, including but not limited to:

- NYS Department of Public Service (NYSDPS)
- NYS Department of Environmental Conservation (NYSDEC)
- NYS Department of Agriculture and Markets (NYSDAM)
- State Historic Preservation Office (NYSHPO),
- NYS Department of Transportation (NYSDOT)
- U.S. Army Corps of Engineers
- Niagara County
- Town of Hartland

Environmental Studies

Environmental studies inform: the design process, avoidance and minimization of potential impacts, and evaluates the presence of wildlife and plant species.

Mapping of these features and reports of the studies will be submitted to ORES for evaluation.

Acoustic Studies

- Noise during construction and operation is minimal and mostly associated with electrical equipment such as invertors and transformers
- Substation and battery storage facility emit the most noise. Efforts will be made to locate as far from homes and other neighbors as possible
- Modeling studies will predict the combined background and project equipment sound levels in the vicinity and neighboring homes

Visual Assessment

- Visually sensitive areas identified with input from local stakeholders
- Significant viewpoints will be photographed, visual stimulations will be developed, and impact of facility will be evaluated. Mitigation such as visual buffering with vegetative plantings will be modeled and discussed.

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Environmental Studies

Archeology

- Areas of elevated archaeological sensitivity will be studied by pedestrian field surveys or shovel tests to evaluate the site for presence of cultural resources. Results are shred with and reviewed by the State Historic Preservation Office.

Wetlands

- Biologists identify and delineate wetlands and streams based on field observation of soil type, vegetation, and hydrology and record the boundaries of these features using Global Positioning System (GPS) Technology.

Rare / Threatened / Endangered Species

- Biologists conduct breeding bird surveys and winter raptor surveys to evaluate the site for the potential presence of threatened and endangered species.
- If threatened &endangered species habitat is identified, project design will seek to avoid or minimize impacts. If avoidance of occupied habitat is not feasible, habitat mitigation areas will be identified, in consultation with ORES.

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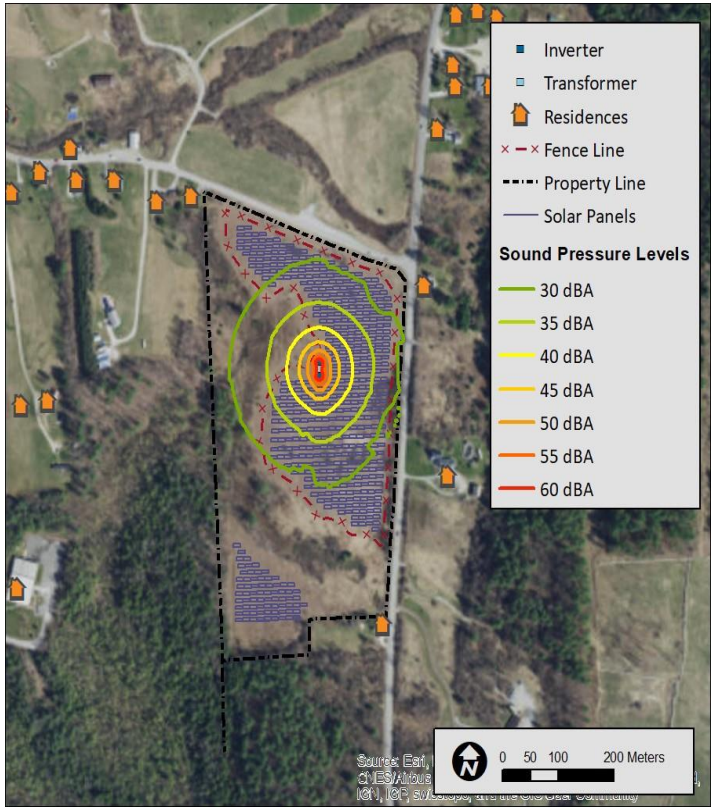
Noise Assessment



Sample Sound Map

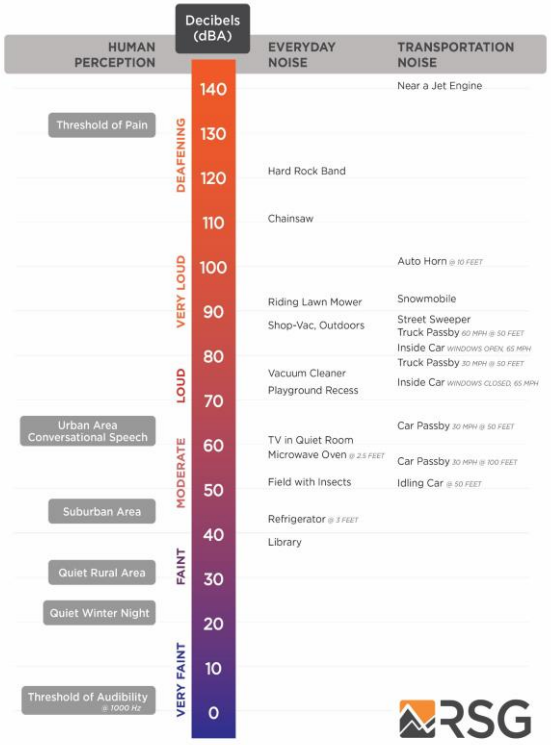
EDF Renewables will conduct a noise assessment to assure that the project is compatible with the surrounding area and compliant with regulations. The assessment includes:

- Background sound level monitoring to assess existing sound levels
- Sound propagation modeling to project future sound levels
- Development of mitigation recommendations to ensure that the project is in compliance with noise requirements

Noise limit 45 dBa around solar facilities, and 40 dBa for substation*

*if the equipment is tonal, this limit is reduced by 5 dBa

Sound Generation



Common Sound Sources

Equipment	Sound Generation
Solar Panels	The panels do not generate any sound
Inverters	These convert DC to AC current and generate some sound during the day
Transformers	These increase the voltage for collection and distribution and generate some sound day and night
Substation	Some noise day and night. Requirement to be 40 dBA or less* at non-participating residences

*if the equipment is tonal, this limit is reduced by 5 dBa

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Visual Mitigation

Year 2-3 Simulation

Year 7-9 Simulation

Approach to Visual Mitigation:

- Based on minimum requirements and feedback from community
- Focus on sensitive receptors like homes and public areas – trails, parks, etc.
- Maintenance and replacement plan is required

Agrivoltaics

- Common and successful agriculture practices include sheep grazing and foraging of bees and other pollinators
- Results in two revenue streams while sharing the same piece of land
- Sheep replace the need for herbicides, pesticides, and mechanical mowing
- Solar grazing allows the land to rest, improving carbon sequestration and returning nutrients back into the soil

Agrivoltaic Engagement

> We've been able to grow our flock every year, and in 2021, we took on a second site for EDFR. We expect to lamb 500+ ewes in 2022, which is wonderful!
>
> - Chris, Shady Creek Lamb

Arnprior Solar & Shady Creek Lamb Co.

- Site built in 2009 on 200-acres
- Young couple near Ottawa, Ontario wanted to grow flock by grazing outdoors – needed 400-500 animals to sustain business
- Solar grazing PILOT project in 2017
- Today, graze Arnprior and other sites – expect to lamb 500+ ewes in 2022
- Selling meat to local restaurants and wool to make blankets
- See virtual site tour: https://www.youtube.com/watch?v=6dvL_dvu9OA&t=7s

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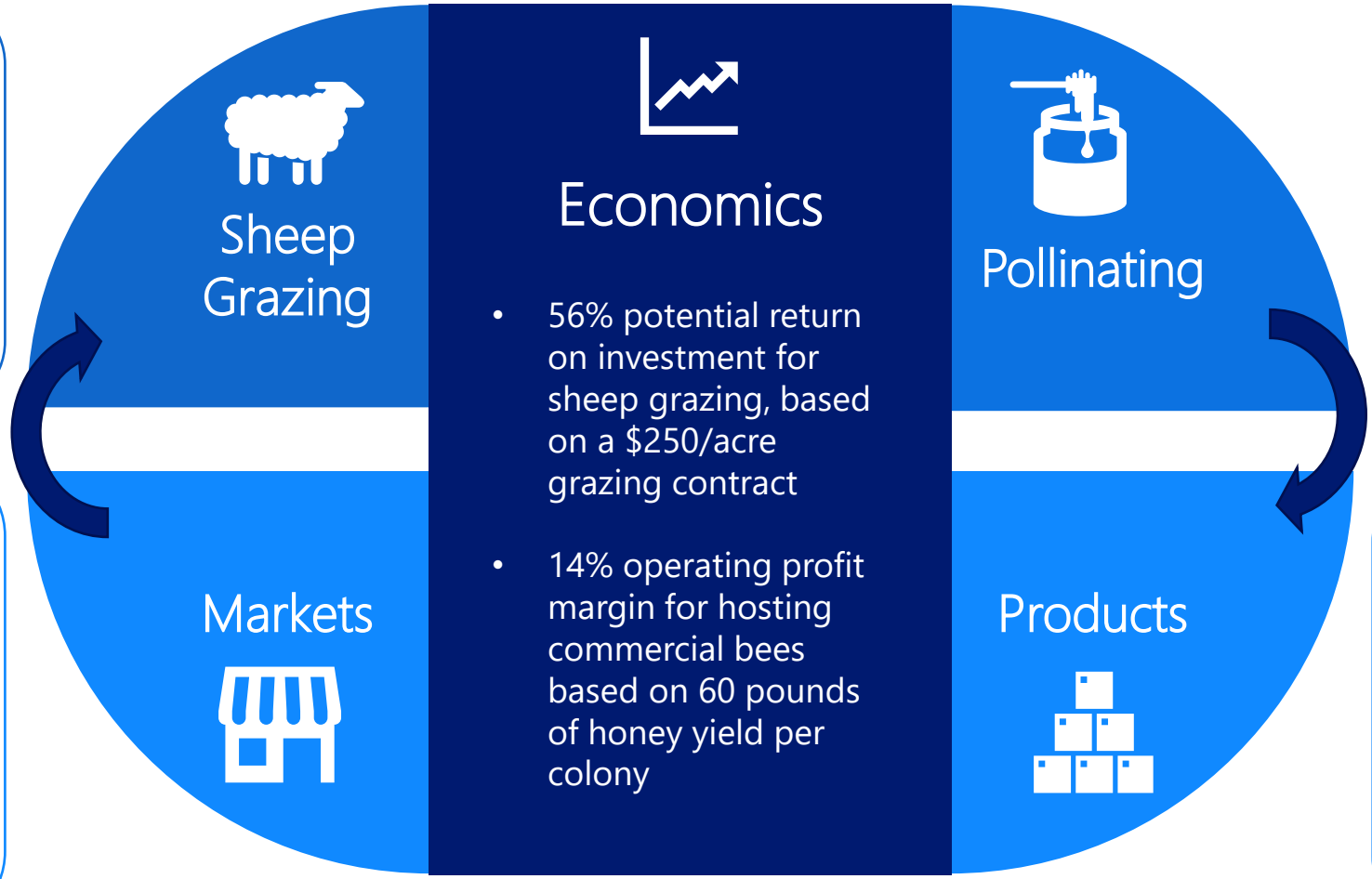
Mount Morris Agrivoltaic Study

- The U.S. imports the equivalent of 7 million sheep annually for consumption
- Sheep grazing can help strengthen domestic supply and create 5 full-time seasonal jobs per 1,000 acres of grazed land

- Retail dollar sales of lamb in northeast U.S. increased 22% to $148 million and pounds sold jumped 15% to 17.7 million pounds in 2021
- Manufacturers interested in sourcing local honey aligned with their sustainability goals



- 56% potential return on investment for sheep grazing, based on a $250/acre grazing contract
- 14% operating profit margin for hosting commercial bees based on 60 pounds of honey yield per colony

- Opportunity to produce 3,000 pounds of honey per 1,000 acres of solar land
- Achieving breakeven economics at 51 pounds of honey per colony

- Study assumes sale of lamb only for sheep; honey and wax from bees
- Additional value possible for wool, dairy, and other sheep products

View study here: https://bit.ly/mr_ag_study

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Jack's Solar Garden

- Located in Boulder, Colorado
- 1.2 MW community solar garden / 3,200 solar panels
- Agrivoltaic crop cultivation demonstration site
- Large pollinator habitat of 1,800+ shrubs, bushes, and trees located around perimeter creating local habitat for the birds and bees
- Investigating potential to incorporate similar practices within areas of Ridge View Solar
- For more information – visit www.jackssolargarden.com

Is there a potential to grow garlic, lavender, mushrooms, ginseng, pumpkins, or other crops within Ridge View Solar that could benefit the local economy?

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Decommissioning and Removal

- EDF Renewables is 100% responsible to decommission; remove equipment, and restore ground at the end of a project's life
- Equipment (solar panels, inverters, and transformers) and improvements (roads and fences) are removed, and land is returned to its original condition, including ready for agriculture
- EDF Renewables provides a bond or letter of credit to the Town of Hartland before starting construction, providing funds to pay for decommissioning; amount is reviewed every five years and adjusted if required

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Energy Storage & Safety

Battery storage, or battery energy storage systems (BESS), are devices that store solar electricity and injecting onto grid when customers need power most.

- Project may include about one acre of energy storage batteries located near the substation, installed in enclosures.
- Enclosures will include battery module packs made of lithium-ion batteries – same technology that powers cell phones and electric vehicles
- Each enclosure is equipped with a monitoring system and automatic shut-off systems for enhanced safety.
- Training provided for local response teams; any additional fire safety or emergency response gear required would be provided by EDF Renewables

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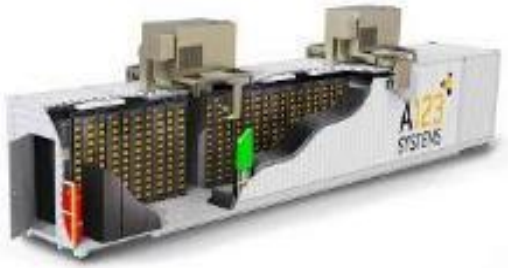
Basics of Lithium-ion Battery Storage Systems



- Individual lithium-ion modules form battery packs. These packs are aligned in rows in a container- similar shape and size to a shipping container
- Each container is equipped with HVAC, control systems, and fire suppression units
- Containers join to form Energy Storage Systems

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Operations Safety

- EDF Renewables will have a local team of operations personnel to monitor and maintain the system to the highest of standards.
- Site Security and Safety Response Plans will be prepared with feedback from the first responder community.
- Training of Local First Responders prior to installation and annually thereafter.
- The facility will be monitored 24/7 365 days per year from operations control center in San Diego California.
- Maintain electronic cyber and physical security perimeter requirements.
- Disaster Recovery plan in place to mitigate remote monitoring impacts, including redundant co-location servers, backup power to support 48-72 hours of power should there be a local utility outage and network connectivity redundancy.

EDF Renewables' 24/7 NERC-compliant operations control center, where remote monitoring, diagnostics, troubleshooting, and cybersecurity measures are implemented for all wind and solar power farms under operation

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The Opportunity of Renewable Energy

- Currently solar jobs support **more than 231,000 Families.** That number is expected to grow 4x
- Average **annual growth rate of 50%** of the last 10 years
- Generates enough electricity to power more than **18.6 million homes**
- Solar generation **offsets more than 116 million metric tons** of CO_2 emissions every year

Clean Energy Employment Growth

16%

2015 through 2019

3.2%

Between 2018 and 2019

3X FASTER than overall employment growth rate in New York

Nearly **3X FASTER** than national clean energy job growth rate

RIDGE VIEW
solar + storage project

WE WANT TO HEAR FROM YOU!

We can only have the best project possible for the community if your voices are heard.

STIMULATE LOCAL DEVELOPMENT

300+ jobs during construction and 4-5 jobs during operation

Generate **$177 million in revenues** for the local economy during construction and the first 30 years of operation

STABLE source of revenue for host landowners

COMMITMENT TO BIODIVERSITY

Let's talk about integrating complimentary uses for the project, like pollinators, grazers, other ideas (provided they are feasible).

CONTACT US

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