



ILLINOIS COAL TO
SOLAR +
& Energy Storage

RETIRE &
Renew

initiatives

Fleet Transformation Briefing

March 2023

Vistra's Decades-Long Commitment to Illinois:



















Vistra is taking steps to responsibly operate, retire, and transition its Illinois legacy coal fleet to be anchors of the state's new zero-emission, renewable energy economy.

Vistra is committed to the redevelopment of its entire Illinois legacy coal fleet, to provide economic and fiscal benefits to local communities, attain a Just Transition, and connect zero-carbon, utility-scale renewable generation assets to Illinois' grid.

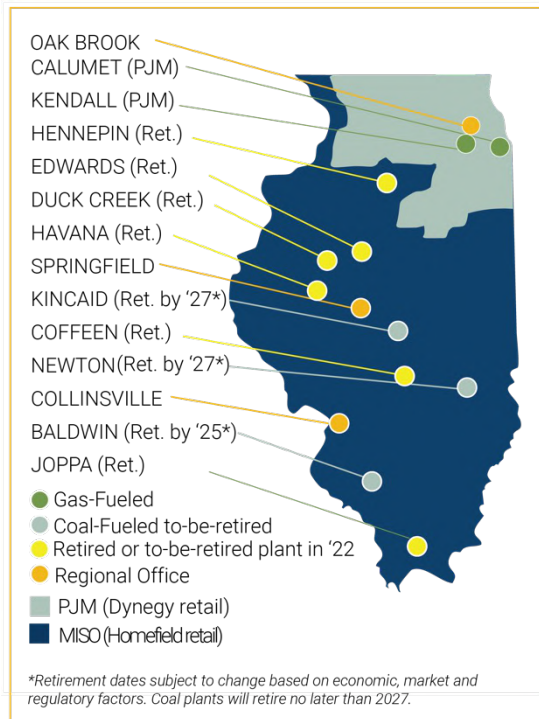




Coal to Solar & Energy Storage Initiative: Community Scorecard

	Legacy Plant	Utility-Scale Solar	Energy Storage	Proposed Capital Investment	Expected Operations
Baldwin		 68 MW	 2 MW	~\$135 M	Fall 2024
Coffeen		 44 MW	 2 MW	~\$110 M	Fall 2024
Duck Creek		 20 MW	 2 MW	~\$63 M	Fall 2024
Edwards			 37 MW	~\$73 M	Summer 2025
Havana			 37 MW	~\$73 M	Summer 2025
Hennepin		 24 MW	 2 MW	~\$70 M	Fall 2024
EEl/Joppa			 37 MW	~\$73 M	Summer 2025
Kincaid		 20 MW	 2 MW	~\$63 M	Summer 2025
Newton		 52 MW	 2 MW	~\$116 M	Fall 2024

A First-in-the-Nation Fleet Transformation:



Vistra has been diligently working to move all nine **Coal to Solar & Energy Storage Initiative** project sites from concept to reality. In 2022, the company:

- ✓ Executed contracts with the **Illinois Power Agency (IPA)** for the entity to buy electricity from the Coal to Solar & Energy Storage Initiative fleet sites from 2024 to 2044.
- ✓ **Obtained approval from MISO** to connect the projects to the grid. In total, we invested more than **\$15 million** to obtain regulatory approval for the nine projects.
- ✓ **Navigated unprecedented supply chain disruptions** and shortages to ensure that construction could begin in 2023 and projects would enter service in 2024 and 2025.

The Coal to Solar & Energy Storage Initiative:

Good for the economy & environment

Vistra's investment will create a one-time stimulus to Illinois economy. The multi-year program is expected to:



Create 2,192 Total Full-Time Job Equivalents Across Illinois –
Direct, indirect and induced full-time job equivalents



Generate \$183 Million in Total Earnings for Workers –
Investment supports direct, indirect and induced earnings in local communities and across the state



Add \$300 Million to the State's Economic Output –
The investment at plants will support the local and state economy

The image shows a vast solar farm with rows of solar panels stretching across a green field. The panels are tilted and arranged in a grid pattern. The sky is clear and blue, and the overall scene is bright and sunny. The text is overlaid on the center of the image.

Vistra's Utility-Scale Solar Development Experience

A Proven Track Record: Utility-Scale Solar Development

In Texas, Vistra has developed and is operating three utility-scale solar facilities with a total solar generation capacity of 340 MW. The company has four facilities with an additional ~600 MW of solar generation capacity under development in ERCOT.

In April 2022, the company opened its Brightside Solar Facility after commencing construction in January 2021. Situated on 430 acres in Live Oak County, Brightside is comprised of 147,732 photovoltaic solar panels that can generate enough electricity to power approximately 25,000 homes.



Illinois Development:

To complete the six utility-scale solar projects enabled by the Coal to Solar Initiative, Vistra expects to install more than **525,000 individual solar panels** over the next 24 months.



An aerial photograph of a large-scale battery energy storage facility. The image shows multiple rows of long, rectangular battery racks arranged in a grid pattern. Each rack is equipped with a cooling system, likely a liquid-cooled battery management system, as evidenced by the presence of large, square cooling units on top of the racks. The facility is situated in an open, flat area, possibly a desert or semi-arid region, with some sparse vegetation visible on the left side. The entire image is overlaid with a semi-transparent blue filter.

Vistra's Battery Energy Storage Development Experience

HOW ENERGY STORAGE WORKS:



**RENEWABLE SOLAR
AND WIND ENERGY**

ENERGY IN

EXCESS GREEN ENERGY COMES IN AND
CHARGES UTILITY-SCALE BATTERIES



**BATTERY ENERGY
STORAGE FACILITY**

ENERGY STORED

BATTERIES STORE EXCESS RENEWABLE
ENERGY UNTIL IT IS NEEDED



**CONNECTED TO
GRID**

ENERGY OUT

FACILITY RELEASES ENERGY DURING
PERIODS OF PEAK DEMAND

Battery Operations:

There is no higher priority at Vistra than the safe operations of our power plants.

For nearly 140 years, we have adapted to changes in technology to ensure our plants produced reliable electricity safely and in an environmentally responsible manner.

Vistra is one of the nation's leading operators of battery energy storage systems. We design our battery energy storage facilities to have multi-level detection systems, suppression and safety systems.



A Proven Track Record: Battery Energy Storage

Battery energy storage systems provide instantaneous-start, dispatchable generation to help balance the intermittency of renewable energy as the electric grid transitions to low-to-zero-carbon resources.

Vistra has developed and operates the world's largest battery energy storage facility in California. In May of 2022, the company opened the largest battery energy storage facility in Texas co-located at a natural gas peaker plant.

The DeCordova Energy Storage Facility in Granbury, Texas, is comprised of 22,360 individual battery modules. The facility stores enough electricity to power approximately 130,000 average Texas homes.





A Proven Track Record: Battery Energy Storage

Vistra has been a pioneer in the development and safe, reliable operations of co-located energy storage and utility-scale solar systems.

In Dec. 2018, the 10 MW/ 42 (MWh) energy storage facility located at the Upton 2 Solar facility entered commercial service. The renewable power plant is in Upton County, Texas.

The co-located energy storage system captures excess solar energy produced during the day and can release the power in late afternoon and early evening, when energy demand in ERCOT is highest. The battery system can also take advantage of low-priced grid power, during times of high wind output, for example, to charge the batteries to be available for higher demand periods.



“Each plant site is **unique**, and rather than taking a one-size-fits-all approach, we have spent years in a deliberative planning process to develop a **comprehensive closure and redevelopment plan** for all of our sites impacted by the transition away from coal-fueled generation.”

– **Claudia Morrow**, Senior VP of Development
Vistra



An Expanding Commitment

Vistra's **Retire & Renew Initiative** planning effort is a dedicated effort to develop an actionable pipeline of utility-scale solar generation and battery energy storage at or near its Illinois plant sites.

Under this effort, Vistra has already secured **2 additional projects** to develop **~60 MW of utility-scale solar** at Baldwin and Duck Creek. Vistra expects to **invest an additional \$125 million.**



Reclaiming Ash Ponds & Reusing Acres at Plant Sites

Each coal plant site has unique characteristics that guide the closure, retirement, and redevelopment process. Vistra has taken a site-by-site planning approach to determine the best path forward for the responsible retirement of each of its coal plants.

The proposed **Retire & Renew** projects will return thousands of acres of idled or underutilized property at plant sites to a productive use.



Preliminarily, Vistra believes its plants can support nearly two dozen additional utility-scale solar projects.

Vistra Initiated Legislative Discussions to Promote More Development at Plant Sites

SB 1588/HB 2205 reasonably modifies *existing renewable energy procurement programs* to facilitate the development of **additional zero-carbon energy projects** at sites that **historically operated as power plants**.

The minor changes to the brownfield procurement program allow the ***entire legacy plant footprint***, rather than specific parcels in an environmental remediation program to participate in the state's Brownfield REC program.



SB 1588 / HB 2205 Status & What You Can Do to Promote More Investment

Vistra is in active legislative negotiations on the proposal and will keep community leaders informed of progress.

Support from the local community for the legislation and our proposed projects will help unlock additional investment by Vistra at our plant sites.

We will let you know how you can show your support in the weeks and months ahead.



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Edwards Development Update

Edwards Redevelopment – Coal to Solar:

Expected
Development:

**37 MW Battery
Energy Storage**

*Enough electricity
stored to power
18,500 homes for
four hours.*

Expected
Capital
Investment:

\$73 Million

Expected
Commercial
Operation:

Spring 2025

The Local Economic Impact of the Coal to Solar & Energy Storage Initiative:

Vistra's \$73 million investment at Edwards will create substantial local economic benefits:



Create 88 Total Full-Time Job Equivalents Locally—
Direct, indirect and induced full-time job equivalents



Generate \$7.1 Million in Total Local Earnings for Workers —
Investment supports direct, indirect and induced earnings



Add \$11.7 Million to the County's Local Economic Output —
The investment will support the local and state economy

Edwards Potential Redevelopment – Retire & Renew:

Potential Future
Development:

**16.3 MW Utility-
Scale Solar**

*Generating
enough electricity
to power 8,000
homes*

Additional
Capital
Investment:

\$29 Million

Reclaimed and
Reused Acres
at Site:

91 Acres