



# 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.

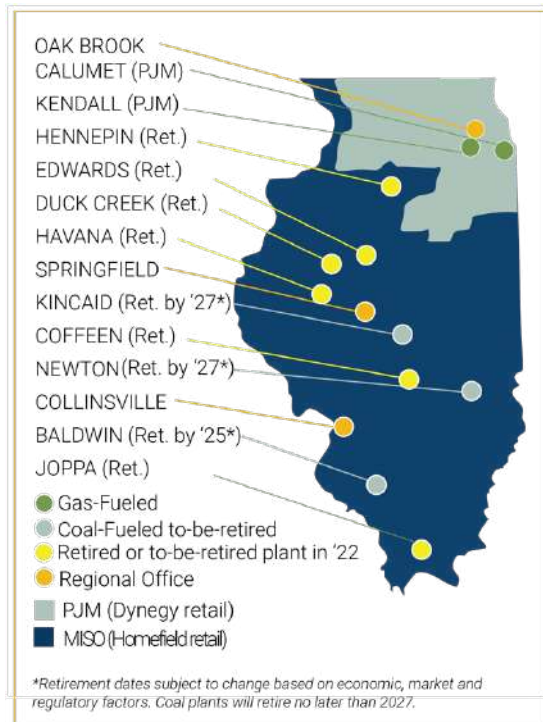




## Coal to Solar & Energy Storage Initiative: Community Scorecard

	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*



A large-scale solar farm is shown, with rows of solar panels stretching across a grassy field. The image is overlaid with a semi-transparent teal color. The sun is visible in the upper left, creating a lens flare effect.

# **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.







# **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 Energy Storage: A Proven Reliable, Dispatchable Electricity Resource

Battery energy storage systems provide instantaneous-start, dispatchable generation to help balance the electric grid.

Renewable zero-carbon resources such as wind and solar are intermittent resources and batteries can store this energy and put it onto the grid during periods of higher demand or need.

Battery energy storage systems can also take advantage of low-priced grid power, regardless of source, to charge the batteries to be available for higher demand periods.

# 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

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.



“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.



# Key Contacts for Follow Up:

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## Coffeen Development Update

# Coffeen Redevelopment – Coal to Solar:

Contracted  
Development:

**44 MW Utility-  
Scale Solar**

**2 MW Battery  
Energy Storage**

*Generating and  
storing enough  
electricity to power  
23,000 homes.*

Expected  
Capital  
Investment:

**\$110 Million**

Expected  
Commercial  
Operation:

**Fall 2024**



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

Vistra's \$110 million investment at Coffeen will create substantial local economic benefits:



**Create 66 Total Full-Time Job Equivalents Locally—**

*Direct, indirect and induced full-time job equivalents*



**Generate \$4.9 Million in Total Local Earnings for Workers —**

*Investment supports direct, indirect and induced earnings*



**Add \$7.3 Million to the County's Local Economic Output —**

*The investment will support the local and state economy*



# Coffeen Potential Redevelopment – Retire & Renew

Potential Future  
Development:

**~29 MW Utility-  
Scale Solar**

*Generating  
enough electricity  
to power 14,500  
homes*

Additional  
Capital  
Investment:

**\$53 Million**

Reclaimed and  
Reused Acres  
at Site:

**163 Acres**