# **COMMITTED TO CLEAN**

Keeping the grid reliable and resilient on the transformational path to net-zero carbon emissions



### 2022 Integrated Resource Plan Update

Carbon Emissions by 2045<sup>1</sup>

**Targeting Net-Zero** 

### Ameren's updated plan:

- Safeguards energy reliability and resiliency for customers while focusing on affordability.
- **Commits** to an accelerated goal of net-zero carbon emissions by 2045.
- Increases renewable solar and wind energy generation additions by 2030.
- Invests billions of dollars, creating thousands of jobs.

## **Details include:**

- Accelerating Ameren's companywide net-zero carbon emissions goal to 2045 while increasing the 2030 carbon emissions reduction target from 50% to 60% based on 2005 levels. The net-zero goal now encompasses both Scope 1 and 2 emissions including greenhouse gas emissions of methane, nitrous oxide and sulfur hexafluoride.
- **Retiring** more than 3,500 megawatts (MW) of fossil-fired generation by 2030, an increase from the 2020 IRP by more than 1,600 MW. By the end of 2030, three of the four Ameren Missouri coal-fired facilities are scheduled to retire.
- Adding 2,800 MW of additional new, clean, renewable generation by 2030 and a total of 4,700 MW by 2040.
- Building on an already solid base of Ameren Missouri's clean energy resources including nuclear, hydro, wind and solar.



\* Three-year average  $\mathrm{CO_2}$  emissions for 2019, 2020 and 2021

#### Timeline



**NOTE:** Final timing of Rush Island retirement is dependent on a revised order from the U.S. District Court, including consideration of MISO reliability assessment. The company continues to evaluate the potential for additional energy efficiency and demand response programs. Reductions are presented as of the end of the period indicated and based off 2005 levels. Wind and solar additions, energy center retirements by end of indicated year. **1.** Ameren's goals encompass both Scope 1 and 2 emissions including other greenhouse gas emissions of methane, nitrous oxide and sulfur hexafluoride.

## Learn more at AmerenMissouri.com/Clean

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## Focus on reliability

- Updated plan enhances reliability with dispatchable energy and provides greater flexibility to integrate new renewable resources.
- Ameren Missouri's current energy mix provides foundational, around-the-clock capability to meet customer energy needs.
- Existing generating units provide the base to integrate increasing amounts of renewable energy.
- Managed retirement dates of coal-fired fleet allows time for new clean and dispatchable resources to be developed.

## Focus on affordability

- Rates are 25% lower than the Midwest average and 29% lower than the U.S. average.\*
- Spreading out the addition of renewables while continuing low-cost existing generation helps keep energy costs more stable.
- The planning process places a heavy emphasis on minimizing energy costs impacts as we choose the best path forward to safely meeting our customers' needs.



**Preferred Plan Generation Mix** 

Achieving these goals dependent on a variety of factors including cost-effective advancements in innovative clean energy technologies, and federal and state energy and economic policies.

\* Average Residential Electric Prices - Edison Electric Institute Typical Bills and Average Rates Report for the 12 months ended June 30, 2021

\*\* Expected to include a combination of renewables, energy storage, nuclear generation and/or new technologies.

**†** Nuclear percentage reflects extended Callaway outage in 2021.