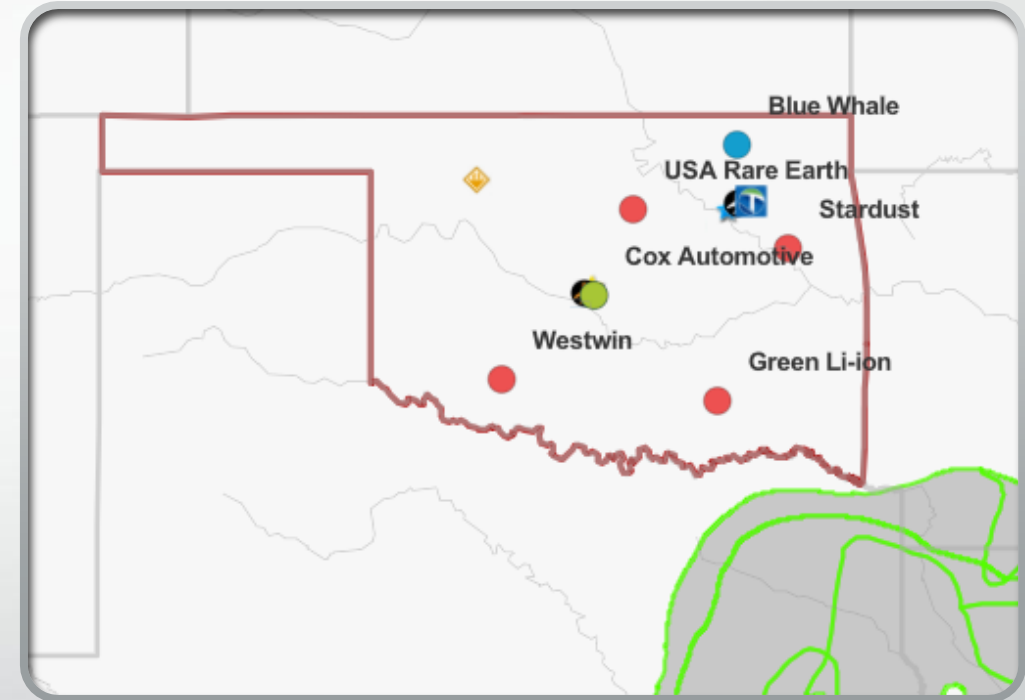




Robert D. Singletary
Executive Director
Oklahoma Department of Environmental Quality

Battery Recycling and Production

- 7 companies working with critical minerals in Oklahoma
- Companies perform one or more aspect of the closed-loop cycle
 - Recycling
 - Refining
 - Assembling
 - Battery manufacturing



Battery Recyclers

Blue Whale Materials, LLC

- In 2025, Blue Whale (in partnership with Call-2-Recycle) is launching the nation's largest battery recycling initiative in OK
- Specializes in recycling spent lithium-ion batteries
- Proprietary technology reclaims cobalt, nickel, and lithium

DEQ Permits

- Air Quality: Minor Source Construct & Operating Permits
- Water Quality: Construction Stormwater Permit



Battery Recyclers

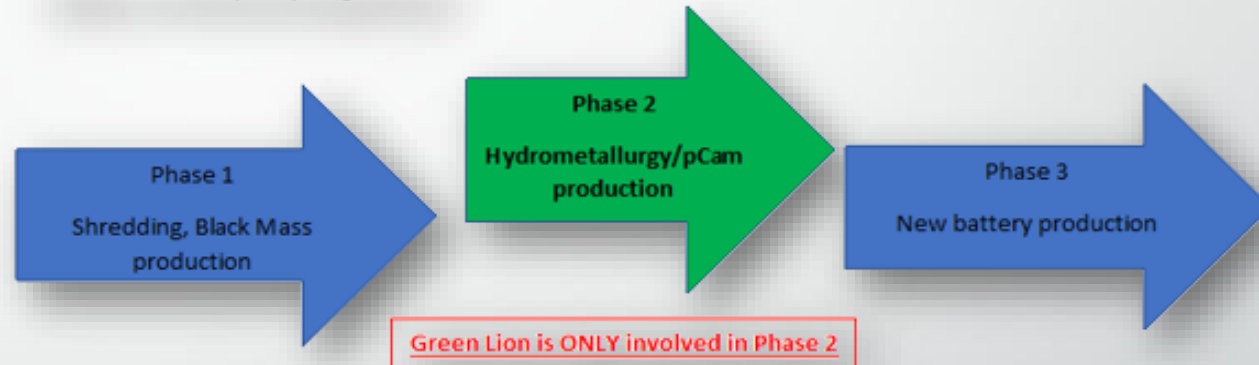
Green Li-ion

- Global provider of lithium-ion battery recycling technology
- Produces modular hardware solutions that convert spent batteries into cathode and anode materials
- Recycled materials are ready for integration into new battery manufacturing processes

DEQ Permits

- Air Quality: AD - Permit Exempt

Lithium-Ion Battery Recycling Phases:



Battery Recyclers

EV Battery Solutions

- Provides recycling, refurbishing, and repairing services for automotive lithium-ion batteries
- Spent batteries are recycled by disassembling and shredding battery pack, producing black mass
- Black mass is then transferred to Green Li-ion

DEQ Permits

- Air Quality: *De minimis* facility?



EV Battery Solutions
by Cox Automotive

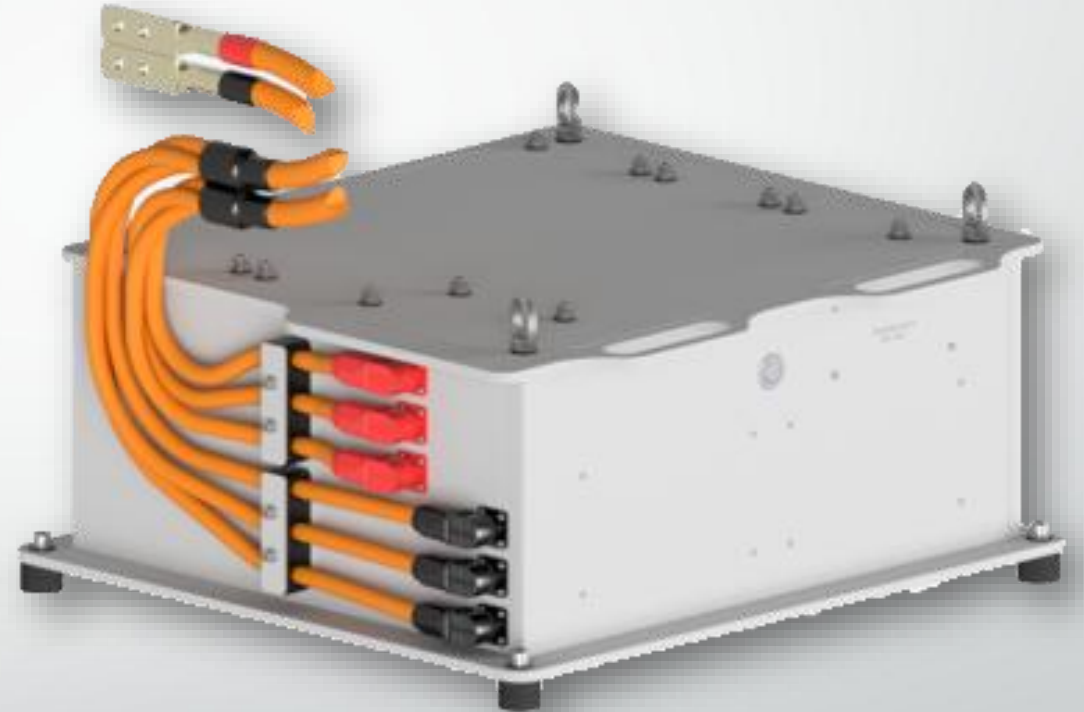
Battery Assembly

MLB Industrial

- In 2025, MLB Industrial selected Oklahoma for their first North American project
- Developed a lithium-ion battery to replace lead-acid batteries for railcars, cutting fuel use and emissions
- Parts are shipped whole and assembled on site in OK

DEQ Permits

- Air Quality: Permit Exempt?
- Water Quality: Construction Stormwater Permit



Critical Minerals

Westwin Elements

- Nation's first major nickel refinery
- Creates secure domestic supply chain

DEQ Permits

- Air Quality: PBR-EE Registration to Construct & Operate the pilot facility
- Water Quality: Construction Stormwater Permit
- Additional permits may be necessary for full scale operation



Critical Minerals

Stardust Power

- Developing a lithium refinery with a capacity of 50,000 metric tons per year of battery-grade lithium carbonate
- Sourcing lithium from U.S. brine supplies

DEQ Permits

- Air Quality: Synthetic Minor Source Construction & Operating Permits
- Water Quality: Construction Stormwater Permit



STARDUST POWER

Critical Minerals

USA Rare Earth

- Developing Nation's first rare earth processing facility (and only scalable sintered neo-magnet system in Western Hemisphere)
- Supplies critical materials for electric vehicles, green energy, electronics, defense, and advanced tech (such as semiconductors and 5G)

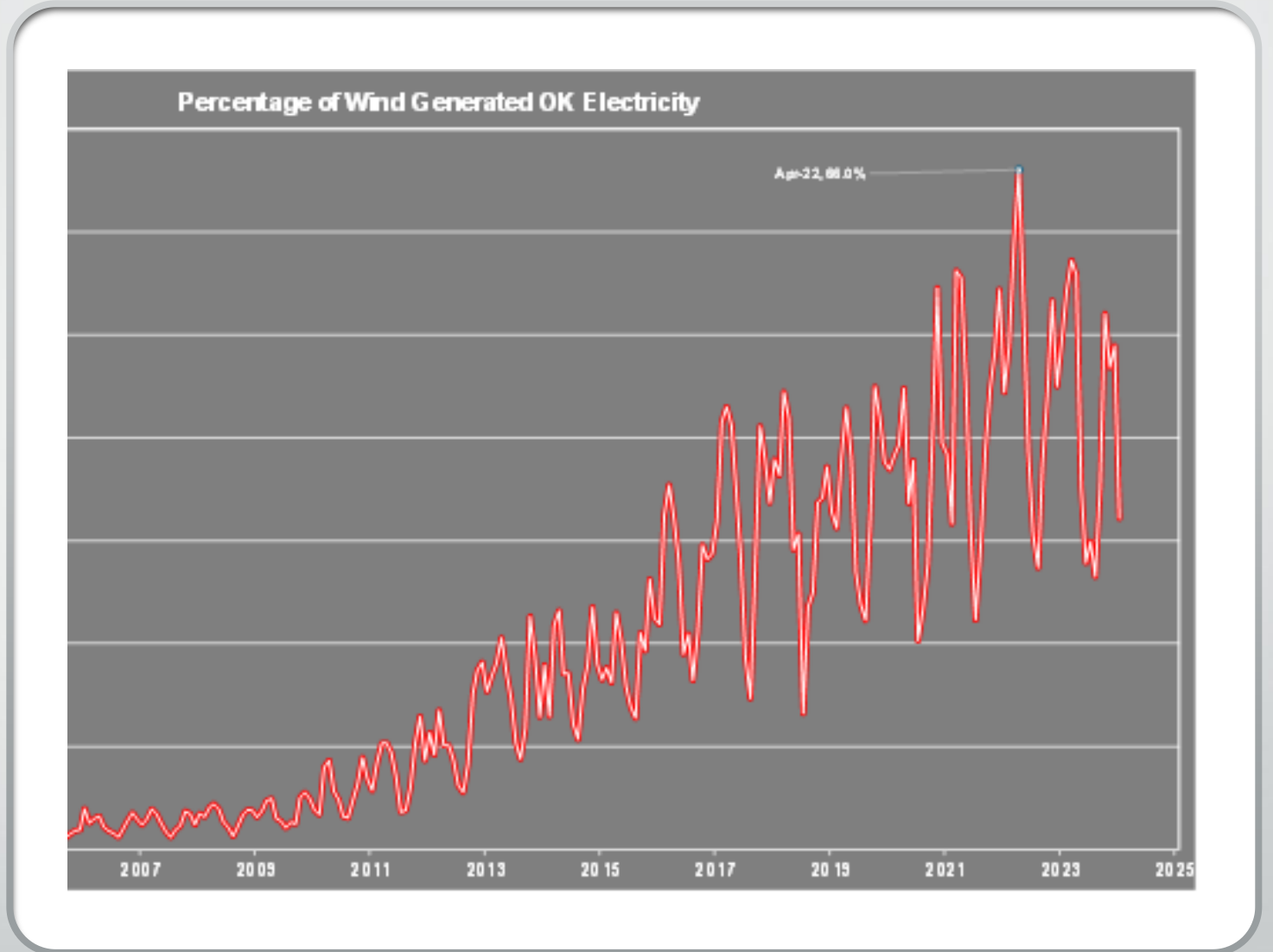
DEQ Permits

- Air Quality: Synthetic Minor Source Construction & Operating Permits
- Water Quality: Industrial Stormwater Permit



Oklahoma Wind Energy Generation

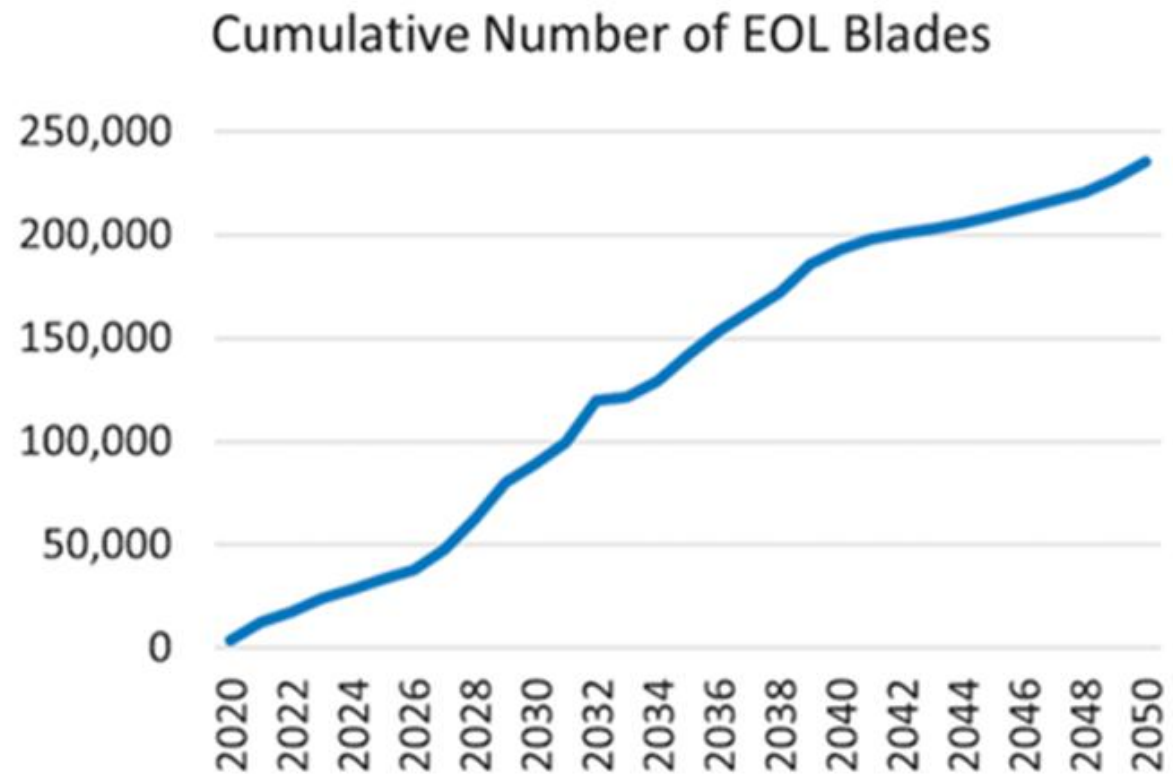
- Monthly average is frequently above 50%
- Monthly average has been as high as 66%
- Occasionally, daily production exceeds total demand



Wind Turbine End of Life



Increasing Number of Decommissioned Turbines



Wind Turbine Graveyards



90% Commercially Recyclable?

