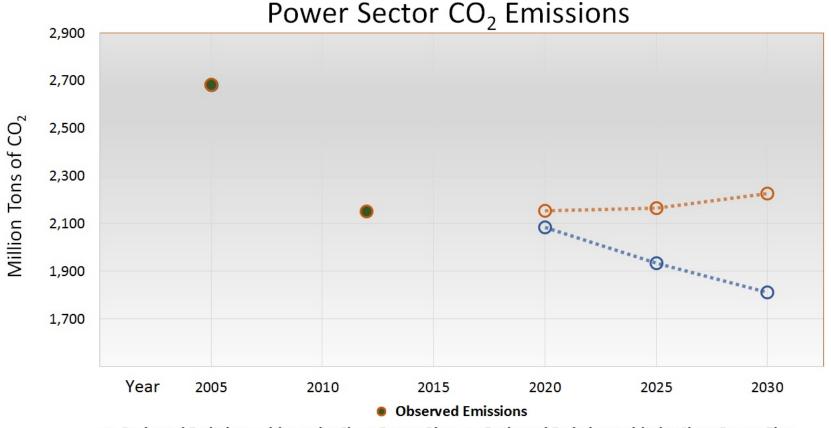




**Electricity Advisory Committee Meeting** September 30, 2015



#### Transition to Clean Energy is Happening Faster than Anticipated



- •O Projected Emissions without the Clean Power Plan •O Projected Emissions with the Clean Power Plan
- Carbon and air pollution emissions are already decreasing.
- The Clean Power Plan accelerates this momentum.
- When the Clean Power Plan is fully implemented, by 2030, carbon pollution from the power sector will be 32 percent below 2005 levels.

# Clean Power Plan Timeline

### Summer 2015

• August 3, 2015 - Final Clean Power Plan

1 Year

 September 6, 2016 – States make initial submittal with extension request or submit Final Plan

3 Years

 September 6, 2018 - States with extensions submit Final Plan

7 Years

• January 1, 2022 - Compliance period begins

15 Years

January 1, 2030 - CO<sub>2</sub> Emission Goals met



## **Two State Plan Designs**

#### States can choose a plan type:

**Emission Standards Plan** – state places federally enforceable emission standards on affected electric generating units (EGUs) that fully meet the emission guidelines

**State Measures Plan** – state includes, at least in part, measures implemented by the state that are not included as federally enforceable emission standards, along with backstop measures that would be federally enforceable if they are needed



## Many CO<sub>2</sub> Reduction Opportunities

- Heat rate improvements
- Fuel switching to lower carbon content fuel
- Integration of renewable energy into EGU operations
- Combined heat and power
- Qualified biomass co-firing and repowering
- Renewable energy (new & capacity uprates)
  - Wind, solar, hydro
- Nuclear generation (new & capacity uprates)
- Demand-side energy efficiency programs and policies
- Demand-side management measures
- Electricity transmission and distribution improvements
- Carbon capture and utilization for existing sources
- Carbon capture and sequestration for existing sources