

### What is Carbon Capture?

- Carbon Capture and Storage or “CCS” is a vital technology that combats climate change by removing CO<sub>2</sub> from the air and permanently storing it thousands of feet underground.
- Calpine is a champion for CCS and supports policies incentivizing the technology. We can deploy CCS to reduce CO<sub>2</sub> while ensuring a reliable supply of electricity and protecting and creating thousands of high paying jobs.

### The Steps



#### Step 1 Technology

Capture technology removes carbon dioxide emissions from industrial processes and the air. Capture equipment can be retrofitted to existing facilities or built into new facilities.



#### Step 2 Transportation

Captured CO<sub>2</sub> is transported from the emissions source to appropriate geologic formations.



#### Step 3 Transformation

The captured carbon is injected thousands of feet underground, where it is safely and permanently stored under layers of impermeable rock where it mineralizes and becomes rock.

### Our Baytown Carbon Capture Project:

Located in Baytown, Texas, the Baytown Energy Center is being actively assessed for a carbon capture project designed to capture 95% or more of CO<sub>2</sub> emissions from turbines and auxiliary boilers at this facility. Located less than 10 miles from Calpine's Deer Park Energy Center, this facility is near significant CO<sub>2</sub> storage resources along the Texas Gulf Coast. As a combined heat and power generation facility, carbon capture at this facility will enable it to provide low-carbon industrial heat to co-located facilities and low-carbon power to the Texas grid.

### More Details:

- About 740 megawatts of low-carbon power and steam.
  - Enough to power more than 296,000 homes.
- Up to 2.5 million metric tons per year in CO<sub>2</sub> offsets.
  - Equivalent to removing 538,673 cars from the road annually.
- FEED (Front End Engineering Design) study, permitting and preliminary development underway.
- Close to 150 gigatons (330 trillion pounds) of CO<sub>2</sub> carbon storage capacity in the Gulf Coast of Texas that can store the carbon dioxide safely and securely, permanently preventing it from entering the atmosphere and contributing to climate change.
  - Enough storage for the annual emissions of 40,150 coal-fired power plants.
- Supplies the adjacent Covestro complex with electricity and steam, as well as added power for the Texas grid.
- Potential employment benefits include 1.5 million construction hours (about 250 full-time employees for 3 years) in addition to 25-30 full-time, high-paying clean energy power plant jobs.

