

# COAL-FIRED PLANTS OF THE FUTURE

Coal, now and for the foreseeable future, is one of the most stable and prevalent sources of electricity in the United States. In fact, in 2017, about **30%** of the total power generated in the United States came from coal. In the same year, coal was the primary electricity source in **18 states**.



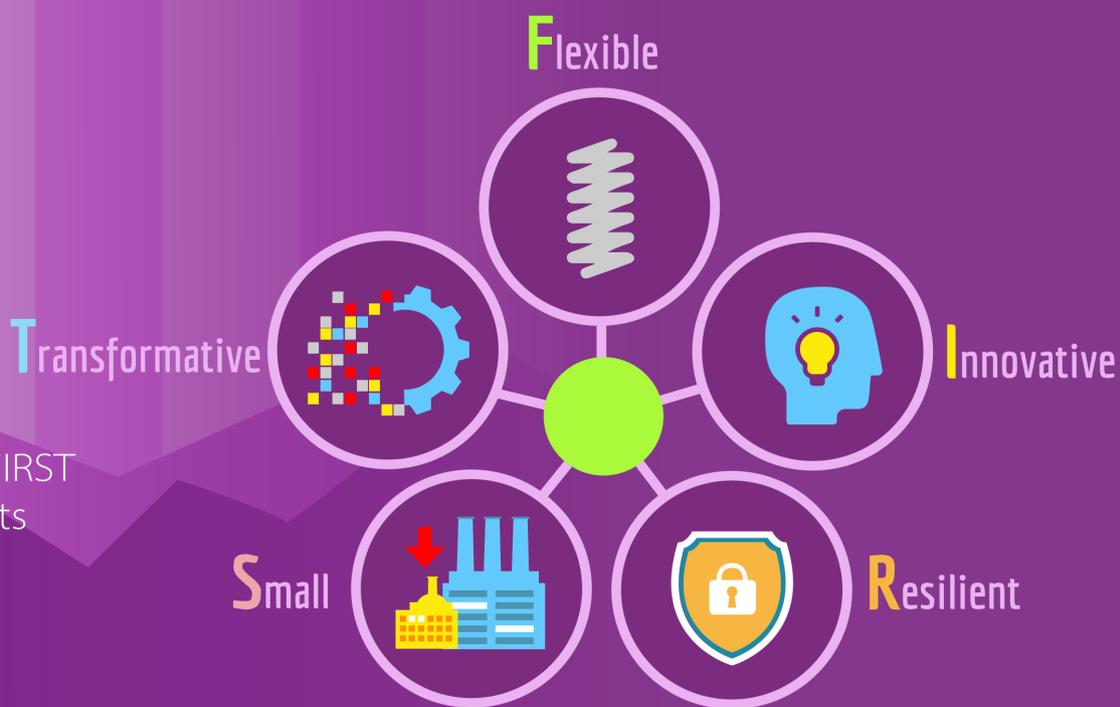
Although coal power generation has been a dependable power source for decades, it may not be readily available in the future. There have been more and more retirements of our aging coal fleet.

With the vast majority of these plants being around **40 years old**, plant efficiency and reliability represent real challenges going forward. If a fuel-secure generation source like coal goes offline, the resiliency and stability of the Nation's electric grid will be impacted.



To address these challenges, the Department of Energy is laying the groundwork to develop the coal plants of the future.

Under this effort, called the Coal FIRST initiative, these first-of-a-kind plants would be:



These plants would be small and modular, cost less to build, and could be located strategically to provide extra stability to the grid.

They would have **near-zero emissions**. So, the smaller power plant of the future would provide highly efficient, cleaner, stable power with operational flexibility to meet the needs of an ever-changing electric grid. And that's good news for our energy security and our environment.

SO<sub>x</sub> – sulfur oxides | NO<sub>x</sub> – nitrogen oxides | CO<sub>2</sub> – carbon dioxide | PM – particulate matter

