

Advancing the Technology Needed to Reduce Carbon Emissions

The issue of climate change has moved to the national forefront. One solution to climate change is advancing technology. New technologies such as carbon capture and sequestration can address climate change concerns while ensuring the continued supply of affordable electricity and the continued use of the most abundant domestic energy source — coal. **No other project like FutureGen is underway in the United States or around the world.**

FutureGen's Technology

The FutureGen project will design and build, in the United States, **a first-of-its-kind, commercial-scale, coal-fueled** power plant that will research and prove the capability of the technology to:

- **Capture and permanently store 90 percent or more of the plant's CO₂ emissions** — virtually eliminating coal-related greenhouse gas concerns at a rate of **one million tons of carbon dioxide per year**;
- **Reduce conventional emissions**, such as NO_x and SO_x to near-zero levels; and
- **Improve the efficiency and reduce the costs** of Integrated Gasification Combined Cycle (IGCC) and carbon capture and sequestration to make these technologies economically viable for **implementation in the United States and around the world.**

Addressing climate change requires an investment in new technology, and FutureGen is one investment that will research and test these technologies. Without the continued financial commitment to this project, the United States will have no other investment in the type of large-scale projects that will research, test, develop and prove the integration of IGCC, carbon capture and sequestration in deep geologic formations.

FutureGen's Domestic and International Support

Recognizing the international importance of this project to our energy, environmental and economic future, the FutureGen Alliance, a nonprofit consortium of twelve energy companies, is **providing nearly \$400 million** toward the cost of FutureGen. The companies anticipate that the knowledge gained from this research project will have broad benefits to the public, energy planners, policy-makers and environmental stakeholders at home and abroad.

The FutureGen Alliance is an international collaboration between United States-based companies and companies headquartered in **North and South America, Asia, Europe, Australia and Africa.** Through FutureGen, the United States is providing global leadership on the critical challenges of climate change and energy security. Additionally, the governments of **India and South Korea** have dedicated funds through a partnership with the U.S. Department of Energy. **FutureGen is the leading project to showcase to the world how these technologies can be integrated, advanced and replicated globally.**