



NATIONAL ENERGY TECHNOLOGY LABORATORY



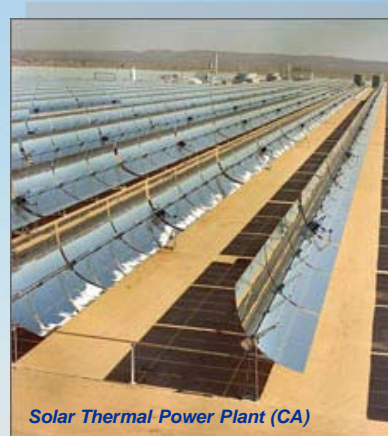
DOE Program Summary

TCEP NEPA Public Scoping Meeting

Office of Fossil Energy



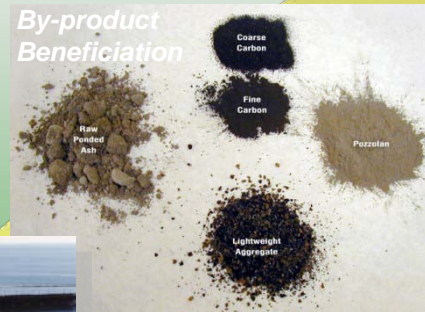
Wide Range of DOE Programs



FE R&D and Commercial Demonstrations

- **Environmental controls**
- **By-product beneficiation**
- **Energy conversion systems**

Existing Fleet



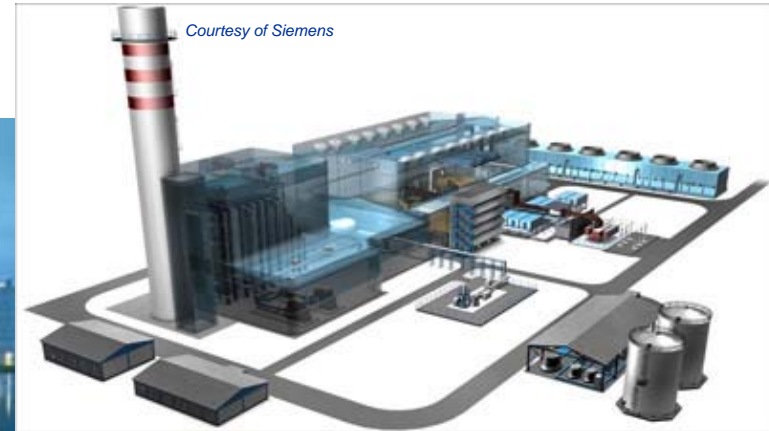
Next Generation

Financial assistance to encourage and accelerate commercialization

Building the Future

Tampa Electric

- 1997 Powerplant of Year Award*
- First dispatch power generator



“Poly-gen” IGCC



Pulverized Coal Plant



IGCC

Wabash River

- 1996 Powerplant of Year Award*
- Power Plant Hall of Fame, March 2000*
- Governor's Award for Excellence in Recycling

*Nation's first commercial-scale IGCC plants, each achieving
> 95% sulfur removal
≥ 90% NO_x reduction*

**Power Magazine*

DOE Carbon Capture and Storage (CCS) Demonstration Projects

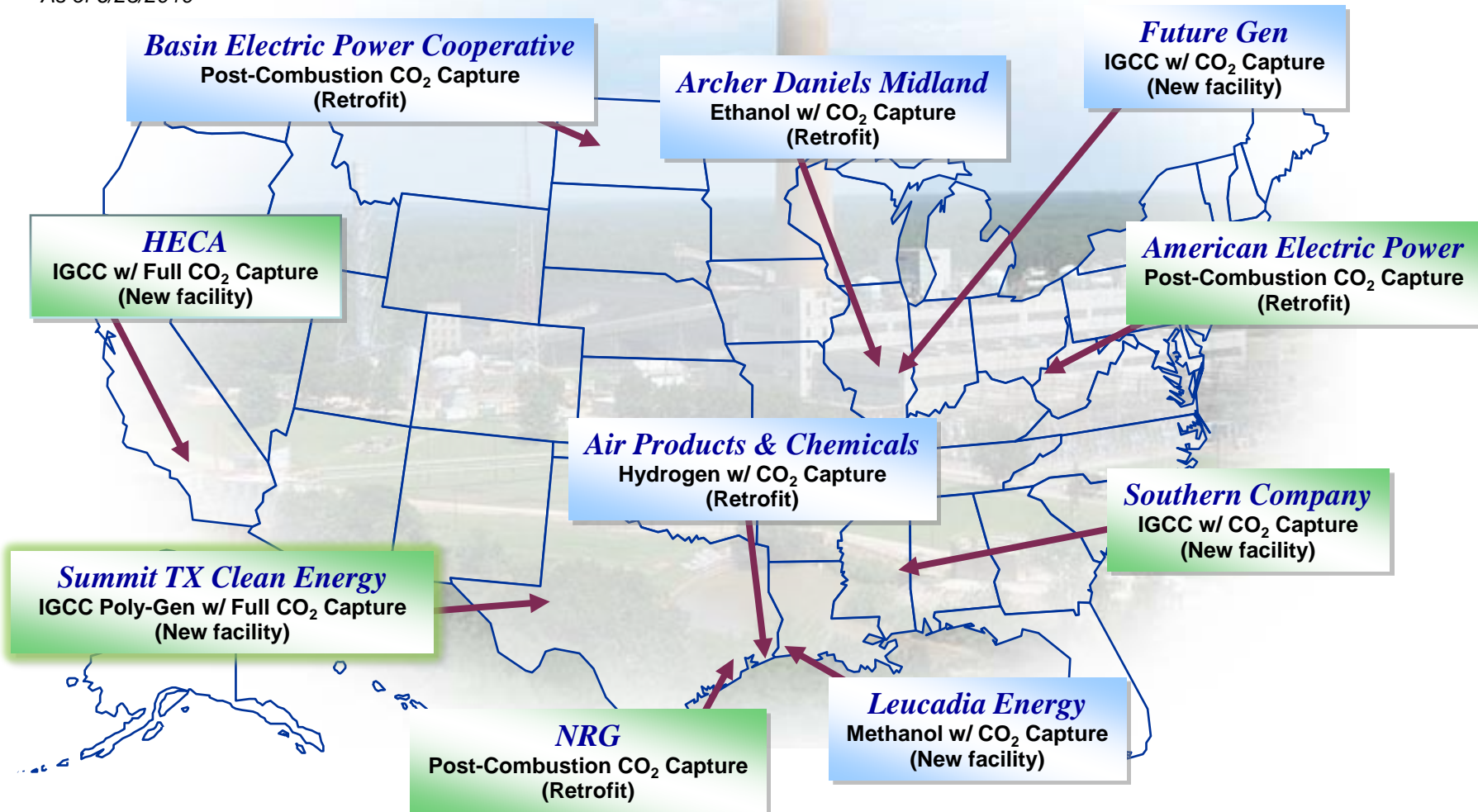


Awarded



In Negotiations

As of 6/23/2010



Program Basis

- **Commercial-scale lead-the-fleet demonstrations**
- **Financial Assistance...**
 - Established and funded by act of Congress
 - To achieve a public purpose (national objectives)
 - Through support or stimulation (co-funding)
 - With Federal monitoring (Cooperative Agreement)
 - To ensure government funds are spent appropriately and...
 - The project remains consistent with program objectives relative to technical scope, cost and schedule
 - Competitive selection process
- **Not a grant, loan or loan guarantee, or tax credit**
- **Projects are private enterprise**
 - With Federal reporting and oversight
 - Recipient manages day-to-day activities
 - Right to pursue successful business venture

Summary

- **Major Demonstrations**
 - Congressional authorization
 - Specific appropriated funds
- **Texas Clean Energy Project (TCEP)**
 - Selected through an open & competitive process
 - Is a private venture
- **Integrated Gasification Combined Cycle (IGCC)**
 - “One of the most promising technologies in reducing environmental consequences of generating electricity from coal.”
 - *EPA-430/R-06/006, July 2006, Final Report – Environmental Footprints and Costs of Coal-Based IGCC and Pulverized Coal Technologies*

