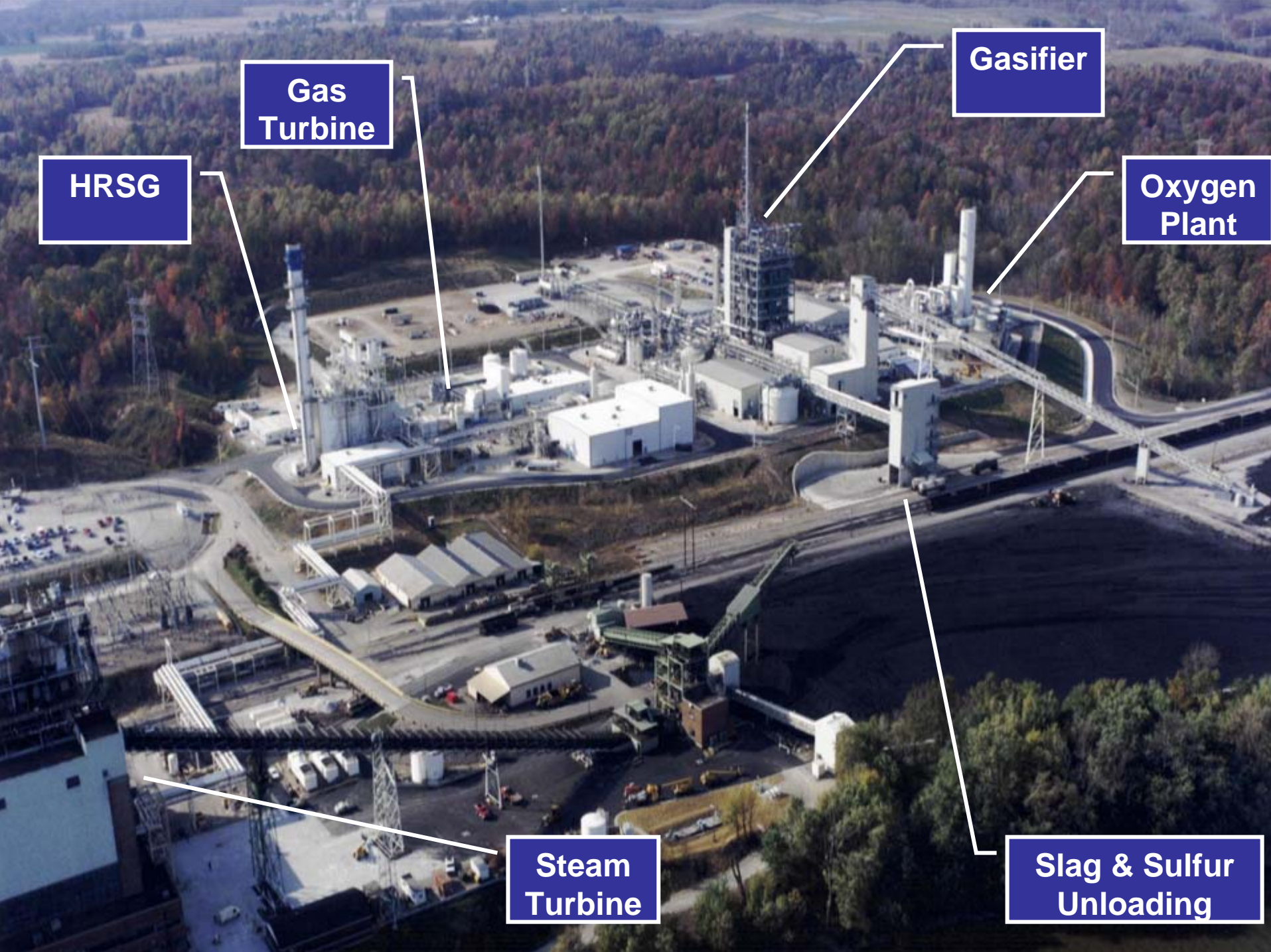


Workshop on Future Large CO2 Compression Systems

Gaithersburg, Maryland
March 30, 2009

Gasification Project Outlook

Phil Amick
Commercialization Director, Gasification
Phil.Amick@ConocoPhillips.com



HRSG

**Gas
Turbine**

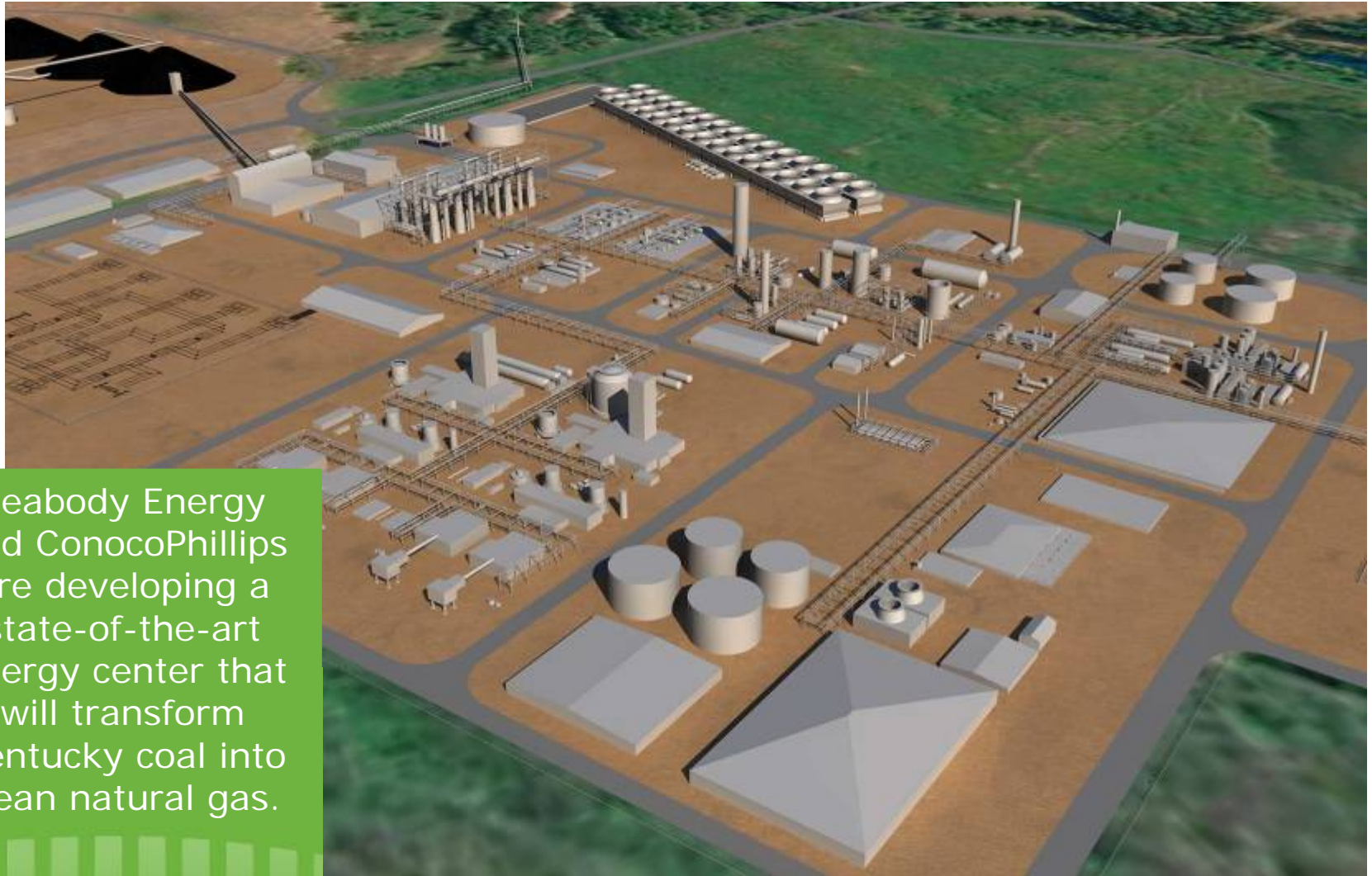
Gasifier

**Oxygen
Plant**

**Steam
Turbine**

**Slag & Sulfur
Unloading**

Kentucky NewGas Project

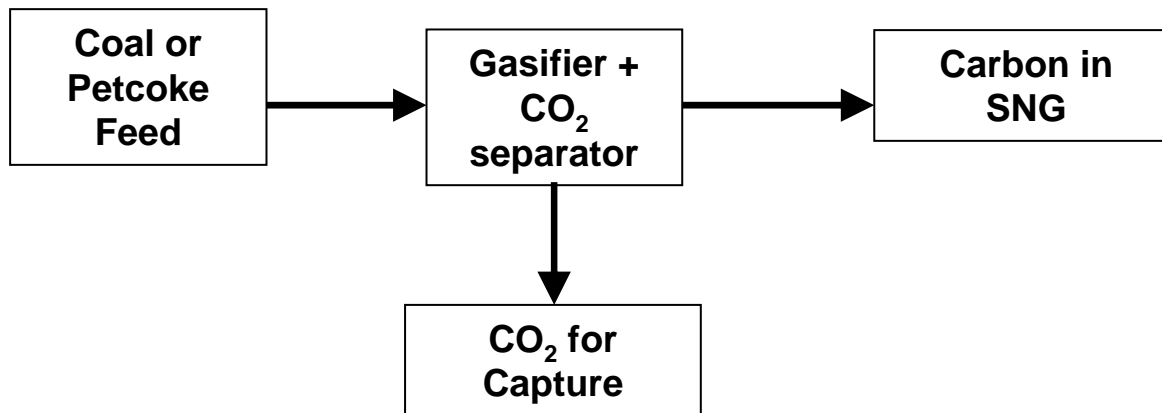


Peabody Energy and ConocoPhillips are developing a state-of-the-art energy center that will transform Kentucky coal into clean natural gas.

SNG Process Scrubs Carbon from Coal

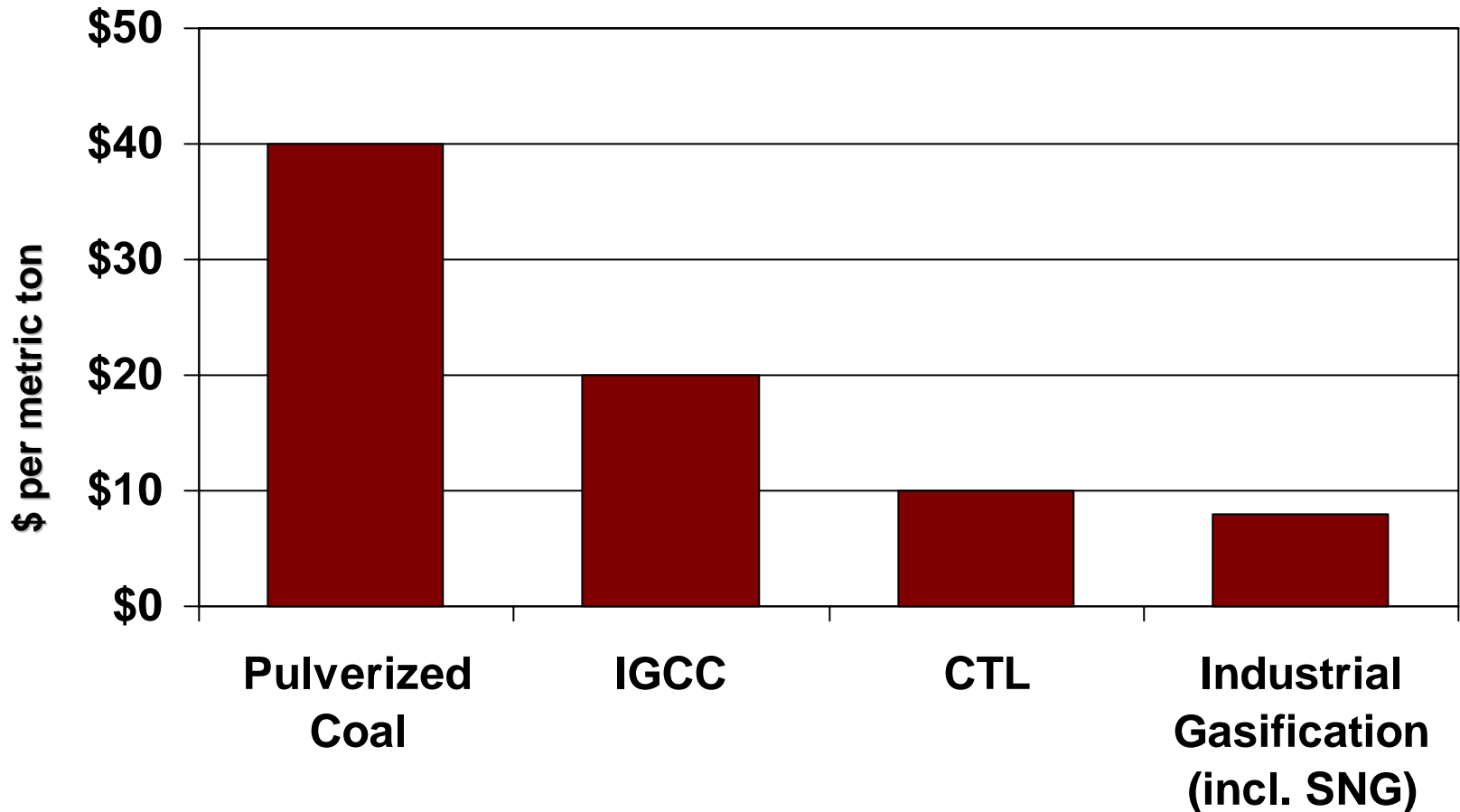
- Honest “storage ready” CO₂ and Substitute Natural Gas
- Scrubs carbon from the coal and petcoke as CO₂
- More than 90% of CO₂ generated in the process is captured
- Sequestration places coal on a similar CO₂ footing as natural gas

Carbon Balance



Greater than 90% CO₂ Capture

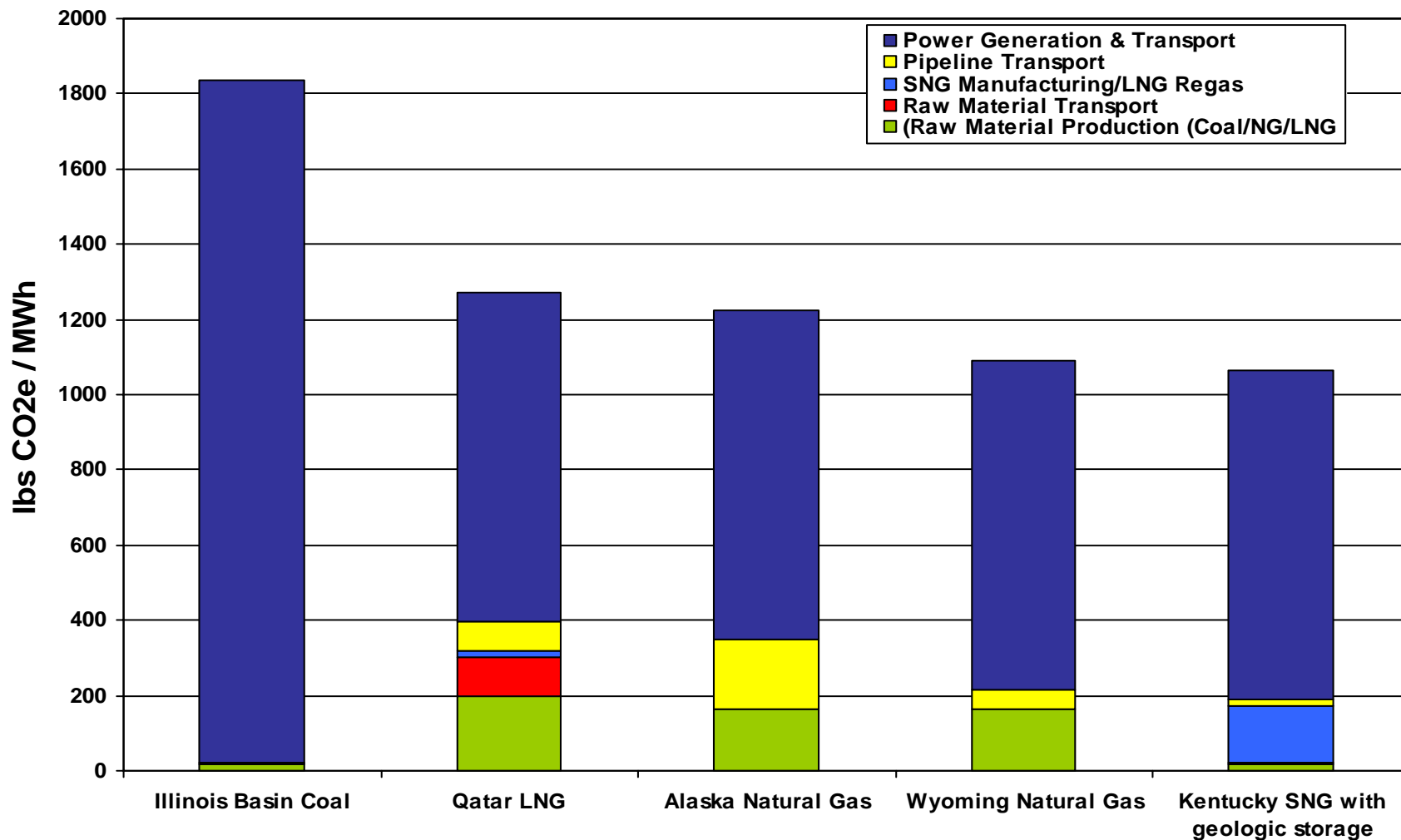
Carbon Capture & Compression Costs



Reference: Jim Childress, Gasification Technology Council,
Electric Power 2008 <http://www.gasification.org>

Sources: MIT, Eastman Chemical

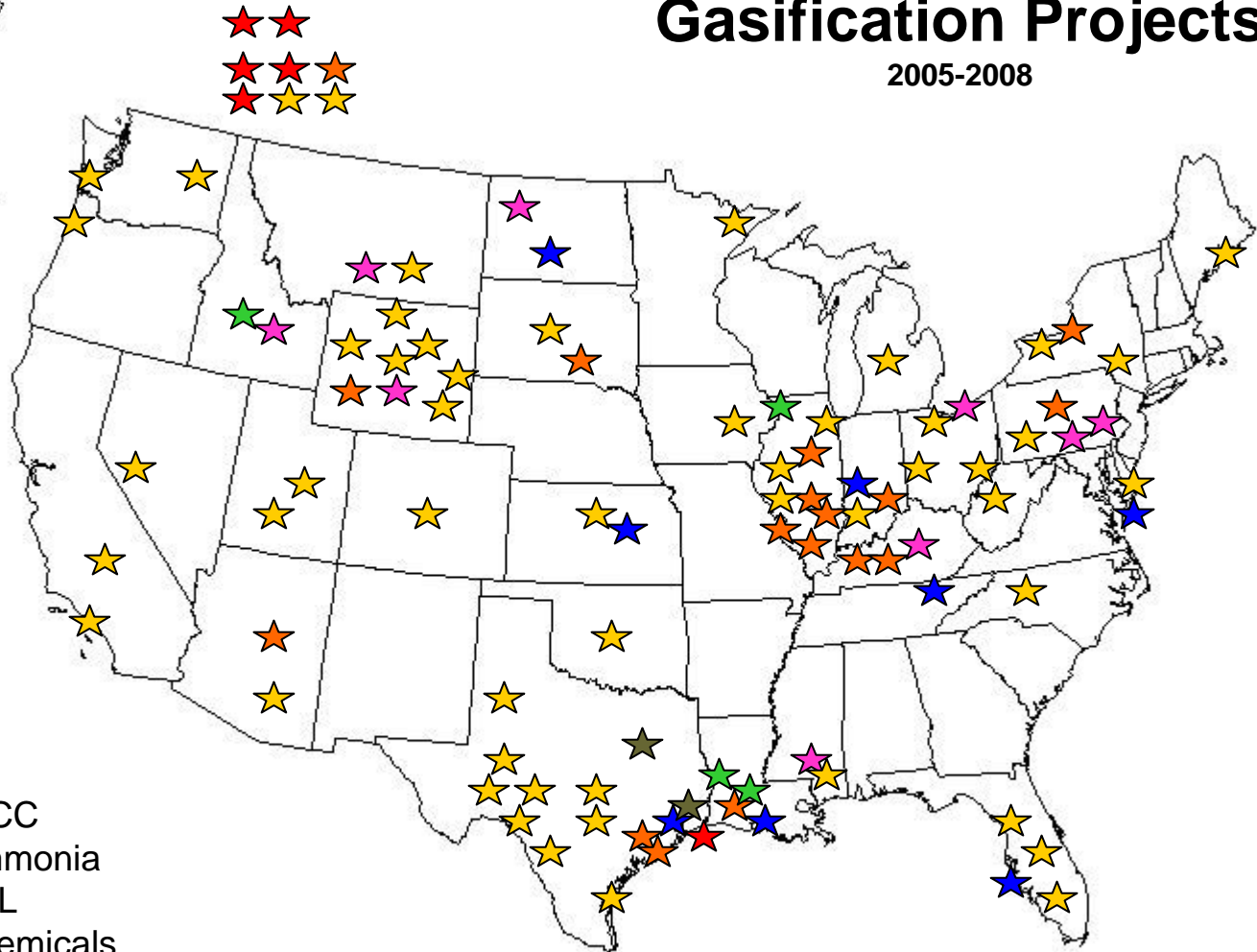
CO₂ Emissions from Electricity



Electricity produced from the projects gas results in lower CO₂ emissions compared to other fossil fuels.

North American Gasification Projects

2005-2008



Projects

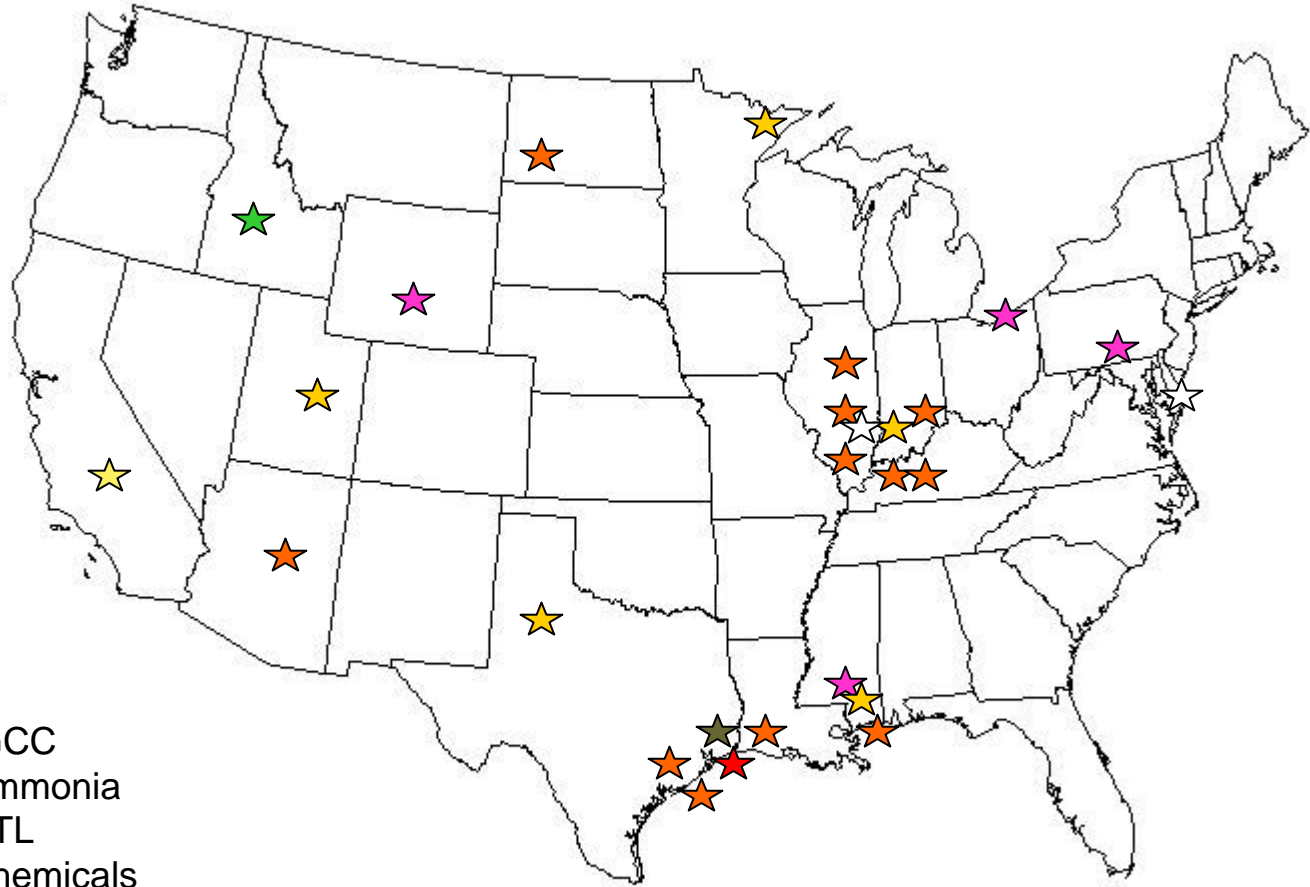
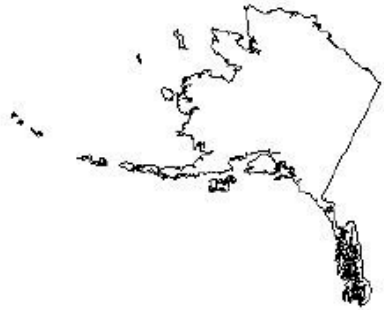
- ★ IGCC
- ★ Ammonia
- ★ CTL
- ★ Chemicals
- ★ Hydrogen
- ★ SNG

★ Existing Gasification Facilities

Source: Gasification Technology Council

North American Gasification Projects

Current Development Activity ?

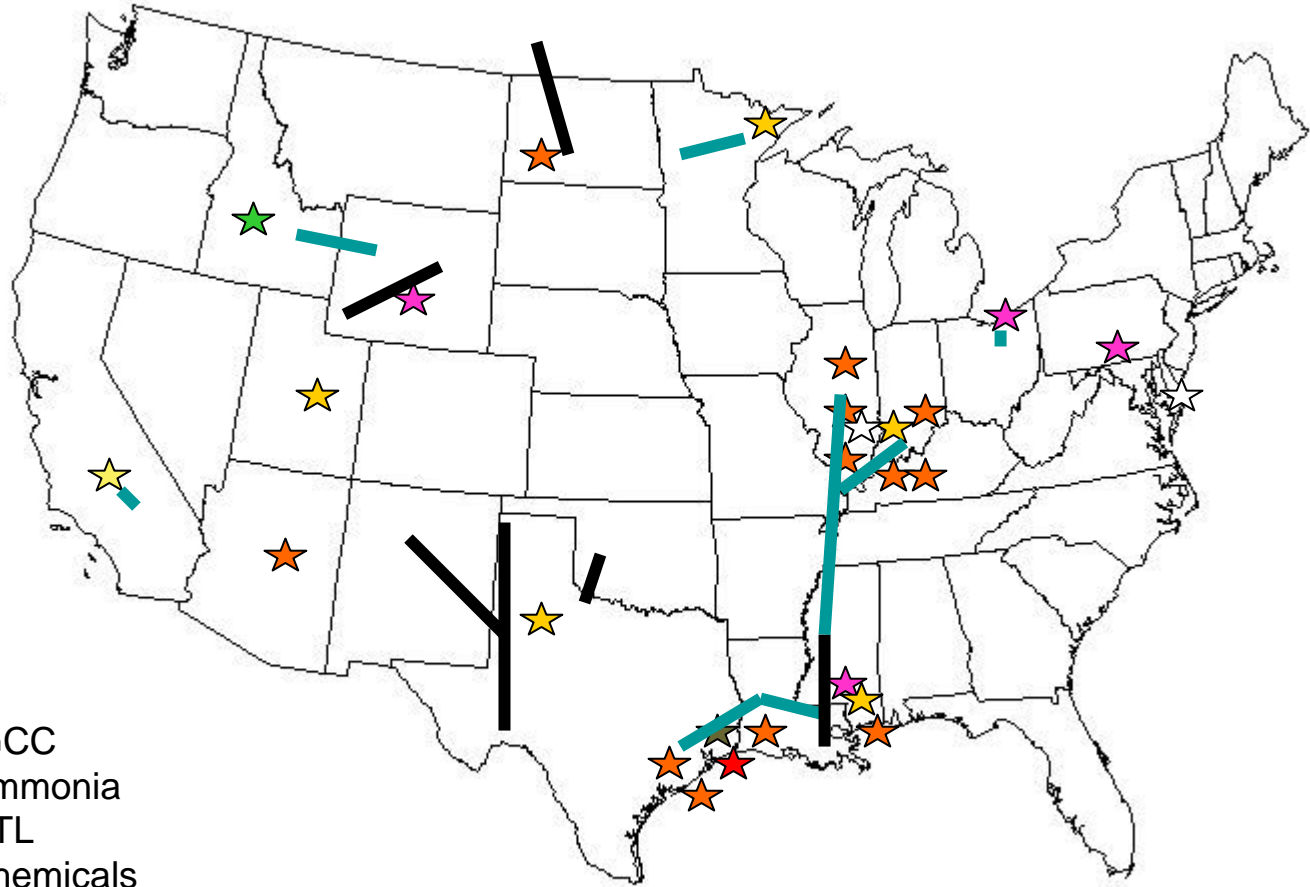


Projects

- ★ IGCC
- ★ Ammonia
- ★ CTL
- ★ Chemicals
- ★ Hydrogen
- ★ SNG

North American Gasification Projects

Current Development Activity ?



Projects

- ★ IGCC
- ★ Ammonia
- ★ CTL
- ★ Chemicals
- ★ Hydrogen
- ★ SNG

General areas of existing and proposed CO2 pipelines

Gasification The Enabling Technology

