The Institute strives to:
• Build policy support for CCS
• Increase commercial opportunities for CCS
• Improve public understanding and acceptance of CCS

The Institute Membership Includes:
• Industry
• NGOs
• Eight National Governments and Two Canadian Provinces

OUR MISSION IS TO
ACCELERATE THE GLOBAL DEPLOYMENT OF CCS
Members in the Americas

**Industry**
- Archer Daniels Midland
- Arch Coal
- ExxonMobil
- Jupiter Oxygen
- NETPower
- Occidental Petroleum
- Shell
- Southern Company

**Government**
- Province of Alberta
- United States Department of Energy
- Province of Saskatchewan
- Government of Mexico (SENER)

**ENGOs**
- Clean Air Task Force
- ClearPath
- Great Plains Institute

**Research Organizations**
- Battelle
- Electric Power Research Institute
- Canadian Clean Power Coalition
- Petroleum Technology Research Centre

**Industry Associations**
- Brazil Coal Association
- CCS Alliance
- **Southern States Energy Board**
- United States Energy Association
Carbon Capture Operational Milestones

- **Quest**
  Over one million tonnes of CO₂ captured and stored in a deep saline formation

- **Petrobras Santos Basin Pre-Salt Oil Field CCS Project**
  Three million tonnes of CO₂ captured and used mainly for enhanced oil recovery

- **Abu Dhabi CCS Project**
  World’s first operational CCS project in the iron and steel sector

- **Air Products Steam Methane Reformer EOR Project**
  Three million tonnes of CO₂ captured and used for enhanced recovery

- **Sleipner CO₂ Storage Project**
  20 years of successful operations, over 18 millions tonnes of CO₂ stored

- **Boundary Dam CCS Project**
  Over one million tonnes of CO₂ captured and used mainly for enhanced oil recovery

- **Petra Nova Carbon Capture Project**

- **Jilin Oil Field EOR Demonstration Project**
  Over one million tonnes of CO₂ injected
Carbon Capture Project Startups

- **ACTL**: Capturing CO\(_2\) from multiple industrial sources for EOR; late 2017 start
- **ROAD**: New storage site permitting, confidence for project progression heightened
- **Illinois Industrial CCS Project**: Nearing operations
- **Kemper County Energy Facility**: Operations imminent
- **Norway Full Chain CCS Project**: 2017 budget supports full-chain CCS project
- **Yangchang Integrated CCS Demonstration Project**: Approaching final investment decision
- **Tomakomai CCS Demonstration Project**: Japan’s first fully integrated CCS Project
- **Gorgon Carbon Dioxide Injection Project**: Operations anticipated late in the first half of 2017 (4 Mtpa)
Influence and Impact

- Attitudes
- Messages
- Facts
- Policy
Test Awareness and Attitudes Towards:
- Carbon Capture
- Climate Policy
- Future of Energy

Methodology:
- Audience: Congressional Staff and Influencers
- Two Congressional Staff Focus Groups
- 100 30-Question Interviews divided D/R, Regionally

Preliminary Results, Feb. 8, 2017
The “Business Case” vs. the Paris Agreement

**Q:** Whether or not one supports U.S. adherence to the Paris Agreement, the world is moving toward a lower-carbon economy. Therefore, the U.S. should still actively pursue lower-carbon technologies, or risk falling behind the rest of the world.

**Results:**
- **Strongly Agree:** 69
- **Somewhat Agree:** 81
- **Somewhat Disagree/Strongly Disagree:** 19
- **Undecided:** 3

*Strong support exists for pursuing the low-carbon economy, for business and competitiveness reasons.*
Despite significant increases in energy efficiency and renewables, the world currently derives more than three-fourths of its total energy demand from fossil fuels. Even with aggressive political, financial, and scientific support for clean energy, fossil fuels will continue to be a major source of power.

A strong majority expect fossil fuels will continue to be with us in the future.
What is Power Generation’s Future?

Q: Do you believe the future of electric power lies with renewables (wind and solar), a broader array of clean energy options (including nuclear, fossil fuels with CCS, along with renewables), or fossil fuels with no government support for clean energy?

A strong majority expects “all of the above.”
What is “CCS”? 

Q: Changing topics, are you familiar with the term CCS?

Answered correctly: 56

WRONG:
“Clean Coal and Shale”
“Certified Coding Specialist”
“Climate Change _____”

Yes: 63
No: 31
Don't Know: 6

“CCS” is not a popularly recognized term.
Does CCS “work”?

Q: Please rate how believable you find the following statements about carbon capture and storage (CCS).

CCS has been proven to work

Believables: 53
Not Believables: 6
Undecided: 31

“I’ve been on the Hill for 10 years, and they’ve been saying CCS was ‘almost there’ since I started.”

A slim majority believe CCS “works,” but a significant number remain unsure.
Is CCS “safe?”

**Q:** Do you believe CCS is safe? On a scale of 0 to 10 scale, where 0 is not safe at all and 10 is definitely safe.

Half of respondents think CCS is “safe,” nearly a quarter aren’t sure.
Concerns about specific safety issues

**Q:** Please indicate to what degree you believe each of the following activities associated with carbon capture pose a risk to the environment or public health.

- CO2 injection could lead to seismic activity
- CO2 transportation pipelines could leak
- CO2 could leak into the atmosphere after being stored underground

![Pie charts showing risk levels for each activity.](image-url)
Some believe the current federal tax credit for carbon storage has been essential to the construction of carbon capture facilities during the past decade. Do you support extending that tax credit?

There is narrow support for a carbon storage tax credit, but intensity is weak.
What is the fate of energy tax credits if tax reform advances?

There has been talk of a major tax reform bill. Some have proposed reducing the corporate tax while eliminating business tax credits, including energy-related tax credits.

Do you believe tax reform bill will reach either floor of Congress during this session?  
- Yes: 78
- No: 22

Do you expect tax reform might eliminate most energy-related tax credits?  
- No: 50
- Yes: 50
Other Congressional Focus Group Insights

**Investment**

“Why should we be wasting taxpayer dollars if the private sector is not supporting CCS with investment?”

**Jobs**

“Everybody talks about ‘job creation.’ But jobs is only a good argument if you can show them, not just promise them.”
Advocates for CCS should:

- Lead with demonstrating that **CCS “works.”**
- Be proactive in confronting all aspects of the safety of CCS.
- Make the **“business case”** for a low-carbon economy that includes CCS.
- Emphasize the **private sector commitment to investing.**
- Be specific and realistic about **job creation:** Where, when, and how much.