

Energy and Climate Policy Priorities for the Biden Administration and 117th Congress

Midwest Regional Carbon Initiative Virtual Meeting

February 18, 2021

UNIQUE MISSION

With a global focus on reducing emissions from fossil fuel utilization, CURC's nonpartisan, technology-driven mission ensures the long-term value of fossil energy resources in an increasingly carbon-constrained world.



CONSENSUS DRIVEN & TECHNICALLY INFORMED

CURC brings technology developers and end users together. Our recommendations represent the consensus of our membership, including cutting-edge technical experts from a diverse set of interests in power generation.



SKILLED FACILITATORS

CURC is an established facilitator and trusted authority on advanced fossil energy technologies. We maintain productive working relationships with Members of Congress and the Department of Energy, and these entities turn to CURC for the most recent, fact-driven expertise and recommendations on federal policies affecting technology.



PIONEERING RESEARCH & GLOBAL COLLABORATION

CURC collaborates with world-class U.S. and international research organizations, and has been a driving force behind the crafting and passage of federal legislation, creating financial incentives for fossil fuel technology development and Funding for research programs at the U.S. Department of Energy.



Carbon Utilization Research Council (CURC) Members

Equipment Suppliers

General Electric

Mitsubishi Heavy Industries America,
Inc. (MHIA)

Labor Unions

International Brotherhood of Boilermakers
International Brotherhood of Electrical
Workers

Producers

Consol Energy

Occidental

Peabody Energy

Technology Developers

Bloom Energy

Bright Energy

ION Engineering

Jupiter Oxygen Corporation

NET Power

Research Organizations

Battelle

Electric Power Research Institute (EPRI)

Gas Technology Institute

University of North Dakota Energy &
Environmental Research Center

State Organizations

Energy Policy Network

Kansas State Geological Survey

Southern States Energy Board

Wyoming Energy Authority

Trade Associations

American Coal Council

American Coalition for Clean Coal
Electricity (ACCCE)

Edison Electric Institute (EEI)

Lignite Energy Council

National Rural Electric Cooperative
Association (NRECA)

Universities

Lehigh University

Ohio State University

Pennsylvania State University

Southern Illinois University

University of Illinois/PRI

University of Kentucky/CAER

University of Texas – Austin

University of Wyoming

West Virginia University

Utilities

Basin Electric Power Cooperative

Duke Energy Services

Nebraska Public Power District

Southern Company

Minnkota

NGOs

ClearPath Action

EnergyBlue Project

Legislative Successes -116th Congress

- Energy Act of 2020
 - Reauthorization of Fossil Energy Research and Development Programs at U.S. Department of Energy (DOE)
 - \$6.71 billion authorization for Carbon Management/Removal programs over five years
- Utilizing Significant Emissions with Innovative Technologies (USE IT) Act
 - Streamlined CO₂ pipeline permitting
 - Direct Air Capture (DAC) R&D at U.S. Environmental Protection Agency (EPA)
 - Carbon Utilization demonstration and commercialization program
- Section 45Q Tax Credit for Carbon Oxide Sequestration
 - Two-year extension of commence construction date under tax credit program to January 1, 2026

Carbon Storage Authorization – Energy Act of 2020

- \$800 million authorization over five years, new program direction
- Large-scale carbon sequestration demonstration program, and program to transition large-scale sequestration demonstration projects into integrated commercial storage projects that can accept large volumes of CO₂ from multiple sources
- Continued support for RCSPs

Fiscal Year 2021 funding for DOE CCUS Program

| CCS & Power Systems (All Figures in \$ Thousands) | FY 19 Enacted | FY 20 Enacted | FY 21 Enacted |
|--|------------------|------------------|------------------|
| Carbon Capture | 100,671 | 117,800 | 126,300 |
| Carbon Storage: CarbonSAFE, RCSPs | 98,096 | 100,000 | 79,000 |
| Carbon Utilization | N/A | N/A | 23,000 |
| Advanced Energy Systems | 129,683 | 120,000 | 122,000 |
| Crosscutting Research | 56,350 | 56,000 | 72,000 |
| NETL Research & Development | 54,000 | 61,000 | 0 |
| Supercritical CO2 Technology (STEP) Program | 22,430 | 16,000 | 14,500 |
| Transformational Pilot Plan Solicitation | 25,000 | 20,000 | 10,000 |
| FEED Study Solicitations | 30,000 | 0 | 15,000 |
| COAL CCS & Power Systems Subtotal | 486,230 | 490,800 | 461,800 |

Biden Energy & Climate Plan

- National effort aimed at creating union jobs to build a modern, sustainable infrastructure and deliver an equitable clean energy future
- Electric Sector Plans
 - Net-zero CO₂ power sector by 2035
 - Proposes a clean electricity standard with emphasis on expanding solar and wind, including offshore
 - Recognizes IPCC modeling and that CCUS is necessary to achieve decarbonization targets
 - Proposes to leverage *existing* infrastructure and assets
 - Double down on RD&D and tax incentives for CCUS

Biden Climate Plan Priorities

| | |
|---|---|
| \$2T total investment | 40% benefits for <i>disadvantaged groups</i> |
| 4M building retrofits | 500K <i>electric vehicle</i> charging stations |
| 2035 carbon-free <i>electricity generation</i> | 2050 economy -wide net- zero emissions |

Biden Department of Energy Focus

- Carbon Capture efforts likely to shift towards carbon removal, industrial decarbonization, carbon utilization
 - Possible carbon management program office at DOE
- Significant advocacy effort will be needed to maintain program funding for power sector CCUS
- Policy objective: push administration on need for CCUS to back up renewable power generation

117th Congress

- Democratic majority of 51 in Senate will be the driving force of what can get done in Congress
- Senate Energy and Natural Resources – Chairman Manchin (D-WV)
 - Oversight of Energy Act of 2020 implementation which includes significant CCUS RD&D provisions
 - “Clean” hydrogen RD&D
- Senate Finance Committee
 - Chairman Wyden (D-OR) favors technology neutral tax credits
- Climate policy:
 - Clean Electricity Standard the only likely program that can garner bipartisan support

CURC Congressional Priorities

- Budget Reconciliation Legislation
 - Section 45Q Tax Credit (House legislation introduced Tuesday)
 1. Direct Pay (or “refundable” tax credits)
 2. Commence Construction Extension
 3. BEAT Fix
 - Section 48A Tax Credit
 - Possible expansion to include natural gas
- Federal Stimulus/Infrastructure Legislation
 - Grant Funding for CCUS Projects
 - Expanded funding for CarbonSAFE Projects
 - CCUS Infrastructure Legislation (SCALE Act)
- Annual Appropriations
 - Full funding of Energy Act authorizations

Thank You!

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