
Federal Issues and Carbon Capture Utilization and Storage

Subtitle

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- Global law firm created by the 2018 merger of Hunton & Williams and Andrews Kurth Kenyon, creating a one-stop shop for the energy marketplace
- More than 1000 lawyers in 20 offices worldwide
- Full-service capabilities, organized around teams and practices
- We have represented:
 - 90% of the Fortune 10
 - 70% of the Fortune 50
 - 60% of the Fortune 100
- Emphasis on client service and responsiveness
 - BTI Client Service A-Team member for 16 straight years (annual survey of Fortune 1000 GCs)
- Key practice areas: project finance, energy tax credits, environmental and regulatory (air, water, solid waste, infrastructure), public policy
- Preeminent energy and environmental practice and full-service private equity and infrastructure experience

- Partner, Washington, D.C. office
- 21 years in private practice
- Counsel, House Energy & Commerce (energy and environmental issues)
- Formed and led two CCUS policy groups:
 - Energy Advance Center, 2018 –
 - CCS Alliance, 2008 - 15
- Member, National Coal Council
- Lead Author, 2015 National Coal Council report, “Leveling the Playing Field: Policy Parity for Carbon Capture and Storage Technologies”

How CO₂-EOR is Viewed in Washington

Opportunity

- Broader center emerging in support of CO₂-EOR
- Bipartisan willingness to provide policy support
- Increasing recognition of need for carbon storage to meet climate goals

Challenge

- More vocal opposition to fossil fuels developing in parts of society
- Climate change increasingly viewed as an “existential” threat
- CO₂-EOR = more oil = more CO₂

**What about energy security,
geopolitical significance?**

Democratic Presidential Candidates on Climate Change and Fossil Fuels

| Candidate | Ban Fossil Exports | Ban Fracking | Green New Deal | Clean Energy Standard | CES Cost and Pay-Fors | Eliminate Fossil Subsidies | Public Lands Fossil Moratorium | Other |
|-------------------------|--------------------|--|----------------|--|---|----------------------------|-------------------------------------|--|
| Joe Biden | Yes | Increase fracking regulation | Yes | 100% clean energy by 2050 | Reverse tax cuts to corporations | Yes | Yes | Net zero carbon emissions by 2050 Carbon price |
| Elizabeth Warren | Yes | Yes Executive Order on Day 1 | Yes | 100% zero-emission electric generation by 2035 | Reverse tax cuts to the wealthy and corporations | Yes | Yes Executive Order on Day 1 | Net zero carbon emissions by 2050 Carbon price Zero emissions for all buses, passenger vehicles and medium duty trucks by 2030 |
| Bernie Sanders | Yes | Yes "Safe fracking is, like clean coal, pure fiction" | Yes | 100% renewable by 2030 Electricity virtually free after 2035 except operation costs | Make the fossil fuel industry pay for their pollution through litigation, fees, and taxes | Yes | Yes | Net zero carbon emissions by 2030 "Fossil fuel executives should be criminally prosecuted for the destruction they have knowingly caused." 100% renewable transportation by 2030 |
| Pete Buttigieg | | Ban new fracking and work to eliminate existing fracking | Yes | Double clean electricity by 2025 Zero emissions in electricity generation by 2035 | Federal investments that will trigger private, state and local investment | Yes | Yes | Net-zero emissions by 2050 Carbon price Net-zero emissions from industrial vehicles by 2040 |

Why does it matter?

- Investors are forcing action to address climate change
 - Edelman's [latest](#) Trust Barometer — a subset of the larger survey that the giant P.R. company [puts out](#) each January — polled 600 institutional investors in six countries, who collectively manage more than \$9 trillion.
 - 84% said that "maximizing shareholder returns can no longer be the primary goal of the corporation." — Axios, December 6, 2019
- Companies increasingly are making decisions based on climate impacts
 - ESG investing estimated at \$20 trillion, or one-quarter of professionally managed assets
- “Low carbon oil” is good. The risk: “no oil” becomes better.
 - European Investment Bank to end all fossil project funding in two years

And these are developments under the Trump Administration

Democratic Deputy Staff Director, House Select Committee on the Climate Crisis

“Just in the last couple of years, so many states have come forward with 100 percent clean energy goals, both mandates and aspirations. That’s been huge and has helped socialize and normalize that goal on Capitol Hill in a way that even six months ago was not there.

Cassady said she “can’t emphasize enough” how important that such a target “becomes just commonly accepted.”

- Atlantic Council Presentation
November 20, 2019

- Incentives
- Infrastructure
- Regulatory issues
- Climate issues

- 45Q tax credit for geologic storage of anthropogenic CO2
 - Major update enacted in February 2018. Key changes:
 - EOR credit rises to \$35/ton by 2026; indexed to inflation after that
 - 12 year credit period
 - Enhanced transferability
 - Available for use (EOR), storage, and now “utilization” of CO2
 - Guidance expected soon
 - Expected to cover partnership structures, commencement of construction
 - Regulations expected early next year
 - Key issues for CO2-EOR
 - Secure geological storage
 - Commencement of construction
 - “Otherwise emitted to the atmosphere”
 - Recapture
 - Partnership structures
 - Transferability

- Other incentives
 - DOE RD&D – EFFECT Act
 - Increase funding for CCUS research, development and deployment
 - Direct funding toward large large-scale pilots and commercial demonstration
 - Extend research to natural gas
 - Master limited partnerships
 - Private activity bonds
 - Contracts for differences

Can federal policy help get CO2 from new sources to the oil field?

- USE IT Act – S. 383
 - Streamlined infrastructure permitting for CO2 pipelines
- Investing in Energy Systems for the Transport of CO2 Act – H.R. 4905
 - DOT to provide credit instruments for common carrier CO2 pipelines
 - Covers trunk pipelines and feeder pipelines, and increased diameter
 - Not more than one project per census region (four regions)
 - Up to 80% of project cost; up to 35 years maturity
 - Loan guarantees
- Infrastructure addressed in upcoming NPC report
- Federal eminent domain authority

- USE IT Act
- NEPA reform
- NSR reform
- Class VI issues (CCS, not CO₂-EOR)
- Energy regulatory issues – resilience and fuel security

- Green New Deal
- House Democrats climate package

Climate action currently driven primarily at the international and private sector levels

We'll always have Paris

U.S. CO2 emissions have decreased more than the next 12 countries combined

September 21, 2017 request from Secretary Perry to

define potential pathways, including research and development, regulatory, and policy options, for integrating CCUS at scale into the energy and industrial marketplace, with specific emphasis on the petroleum industry. This study should address the entire CCUS value chain from capture through use and/or storage and consider technologies applicable to power generation, industrial processes, and enhanced oil recovery, as well as different fuel types or energy sources such as coal, oil, and natural gas.

Questions to be addressed

- Global future energy demand outlook and environmental benefits of CCUS
- R&D, technology, and infrastructure barriers to deploying CCUS at scale
- Definition of success
- Actions needed to establish an economic framework to stimulate investment
- Regulatory, legal, liability, or other issues to be addressed to progress commercial investment

NPC meeting to approve report on December 12

Thank you



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