



NATIONAL COAL COUNCIL ~ FEBRUARY 2015

FOSSIL FORWARD STUDY APPROVED

On January 29th in an inaugural webcast meeting event, members of the National Coal Council approved their latest report for Secretary Moniz entitled, "Fossil Forward – Revitalizing CCS: Bringing Scale & Speed to CCS Deployment."

In late Spring 2014, Secretary Moniz requested the NCC "conduct a study that assesses the value of DOE's Carbon Sequestration Program ... The assessment should answer the question – what is the industry's assessment of the progress made by the DOE and others regarding cost, safety and

technical operation of CCS/CCUS? ... how does industry see and accept major technical findings from the CCS/CCUS community and how do these relate to DOE programs and investments ... "

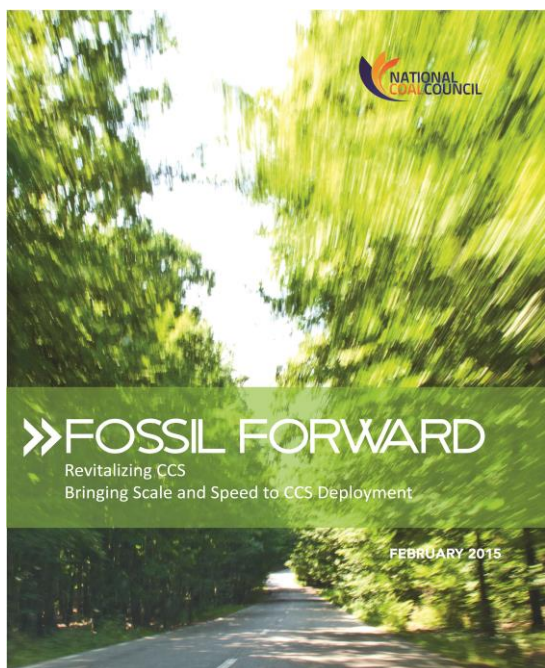
In response, the NCC study covers the following key topics:

- The CCS/CCUS Imperative
- Global Status of CCS/CCUS Programs
- Overview of Current DOE CCS/CCUS Programs – Status and Achievements
- CCS/CCUS Deployment Challenges
- Gap Analysis
- Recommendations

The six primary findings from the NCC assessment are:

- In order to achieve CCS at commercial scale, policy parity with other low/no carbon technologies is required.
- Technology and funding incentives must be significantly better coordinated to be effective.
- DOE program goals need far greater clarity and alignment with commercial technology and funding approaches.
- Funding for CCS RD&D is limited and must be enhanced/focused.
- Public acceptance continues to be a major hurdle.
- GHG control is an international issue in need of international initiatives.

Details on the recommendations made to the Secretary are included in the full report which can be accessed at ~ <http://www.nationalcoalouncil.org/studies/2015/Fossil-Forward-Revitalizing-CCS-NCC-Approved-Study.pdf>



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Hiranthie Stanford

Member & Meetings Manager
Legal Counsel ~ Hunton & Williams

NationalCoalCouncil.org

1101 Pennsylvania Ave. NW
Ste. 600
Washington, DC 20004
(202) 756-4524



NCC SPRING MEETING REGISTRATION NOW OPEN

Registration is now open for the National Coal Council's Spring 2015 meeting scheduled for April 7-8, 2015 at the Grand Hyatt Hotel, 1000 H Street, NW, Washington, DC. NCC Members and Guests may register on line at <https://www.etches.com/ehome/117190>. As always, there is no charge to attend the reception/meeting, but we do ask that you register in advance.

Our schedule of events is as follows:

Tuesday, April 7th, 2015

- NCC Communications Committee (1:15-2:15 pm) ~ All NCC members welcomed to attend
- New & Prospective Members Reception (5-5:45 pm)
- Welcoming Reception (5:30-7:30 pm) ~ NCC Members & Guest

Wednesday, April 8th, 2015

- Full Council Meeting (9 am-12:30 pm)
- Networking Lunch (12:30-1:30 pm)

IMPORTANT DATES

March 10th, 2015
NCC Members Travel
Reimbursement Request
Deadline

March 13th, 2015
Hotel Reservation Deadline

March 13th, 2015
Meeting Reservation
Deadline

NCC members requesting travel reimbursement from DOE must contact Ms. Kenni Shaw no later than March 10th at 301-903-9451 or kenni.shaw@hq.doe.gov. Requests received after March 10th may not be considered.

The Grand Hyatt is offering a special group rate of \$209/night. Rates are available April 4-10, 2015 but must be secured by March 13th. Mention the National Coal Council when making reservations at 1-888-421-1442 or register on-line at

<https://aws.passkey.com/event/13719115/owner/544/home>

Program development is underway; look for details in the near future regarding our agenda speakers.

Finally, we do encourage you to secure your hotel and travel arrangements early. The 2015 National Cherry Blossom Festival in Washington, DC is scheduled to begin the first day of spring, Friday, March 20th and continue through Sunday, April 12th. It's a lovely, but busy time to be in DC. Please plan accordingly.



COAL RESOURCES

U.S. Department of Energy
www.doe.gov
[Office of Fossil Energy](http://www.doe.gov/officeofenergy)

National Energy
Technology Laboratory
www.netl.doe.gov
[Coal & Power Systems](http://www.netl.doe.gov/coal)

EIA Coal Data Browser
www.eia.gov/coal/data/browser

US EPA Issues Final Coal
Combustion Residuals Rule
[A HaleyAldrich Resource](http://www.epa.gov/airquality/coalcombustion)

GOP Senators' Attacks on
EPA Climate Rules Could
Aid Future Challenges (see
pg. 7-8 for mention of NCC
Fossil Forward study)
[Inside EPA](http://www.epa.gov/airquality/coalcombustion)

NCC Member ARCTECH
Works to Recycle Munitions
[Shreveport Times 1-22-15](http://www.shreveporttimes.com)

SWEPSCO John W. Turk
Plant Video
[Institute for 21st Century
Energy](http://www.instituteofenergy.org)

Breaking Up With Fossil
Fuels is Hard to Do
[Big Green Radicals Video](http://www.biggreenradicals.com)

Winds farms paid £1m a
week to switch off
[The Telegraph 1-04-15](http://www.telegraph.co.uk)

Can We Find a Future for
Coal? (See opening post
for mention of NCC Fossil
Forward study)
[Bloomberg News 2-12-15](http://www.bloomberg.com)

Gellici Speaking Engagements

[Edison Electric Institute](http://www.edison-electric.com)
Washington, DC – March 3
[American Coal Council](http://www.americancoal.org)
Clearwater Beach – March 5
[Institute for Clean Air
Companies](http://www.instituteofcleanair.com)
Hilton Head – April 24
[ASME Power Energy
Conference](http://www.asme.org)
San Diego -June 30

National Coal Council
[NationalCoalCouncil.org](http://www.NationalCoalCouncil.org)

NCC Member Focus

Bill Brownell's calm demeanor belies the formidable legal skills and expertise he employs in fiercely defending energy companies in their litigation and enforcement actions.

Bill's depth of utility/coal industry knowledge is a tremendous asset to the NCC, especially in his role as Vice Chair of NCC's Coal Policy Committee. Having Bill on board is one "case" the NCC wins!

Bill Brownell is Chair of Hunton & Williams' Executive Committee and the former head of its administrative law and environmental practice groups. His practice focuses on environmental litigation, regulation and counseling, including climate change regulation and litigation, clean air regulation, environmental licensing and auditing, and waste management and clean water issues. Bill and his team represent clients in the U.S. and Europe.

Bill is a member of the American Bar Association and is AV® Peer Review Rated in Martindale-Hubbell. He is admitted to practice before the U.S. Supreme Court and the U.S. Courts of Appeals for D.C., Second, Fourth, Fifth, Sixth, Seventh, Ninth, Tenth and Eleventh Circuits.

In late 2014, Bill was named to Law360's 2014 MVPs, an annual series which profiles lawyers who are successful in high-stakes litigation or record-breaking transactions and contributed most to their practice area in the past year. Bill was acknowledged for his successful defense of Clean Air Act enforcement.

Bill earned a Master's Degree from Georgetown University's School of Foreign Service and a JD from Georgetown University Law Center. He has been a member of the National Coal Council since 2005.

HUNTON & WILLIAMS



**F. WILLIAM BROWNELL, ESQUIRE
CHAIRMAN & PARTNER
HUNTON & WILLIAMS**

Hunton & Williams LLP has more than 800 lawyers practicing from 19 offices across the United States, Europe and Asia. The firm represents clients across the full spectrum of industries that comprise today's global economy, from manufacturers, financial institutions, retailers, health care companies and professional services providers, to businesses and academic institutions developing renewable energy resources and new technology solutions.

Hunton & Williams has represented all of the Fortune 10 and nearly three-quarters of the Fortune 100, as well as thousands of other businesses and individuals in jurisdictions worldwide. Additionally, the firm contributes more than 50,000 hours annually to community service and charitable projects.

Founded in 1901, Hunton & Williams blends more than a century of experience in virtually every key legal discipline with a broad view of current business realities and a forward-looking perspective on emerging issues. Hunton & Williams is regularly named by legal and business publications as among the top law firms for client service and as a best place to work.

Bill Brownell - Hunton & Williams
2200 Pennsylvania Ave. NW, Washington, DC 20006
202-955-1555
bbrownell@hunton.com
www.hunton.com

**WELCOME CAC MEMBERS
THE LIST GROWS!**

The NCC is pleased to welcome four additional members to the 2015 Chair's Advisory Council, providing NCC with added expertise and financial support. In addition to Advanced Emissions Solutions, BNSF Railway, Clean Coal Solutions and Dominion Energy, the NCC thanks the following for their CAC memberships:



Mike Mueller



John Eaves



Jeff Wallace



Mike Sorensen

**SUPPORT THE NCC
JOIN THE CAC IN 2015**

The Chair's Advisory Council (CAC), organized through NCC, Inc., is comprised of committed, knowledgeable individuals who serve in an advisory capacity to the Council. The NCC leadership relies on CAC members for guidance and insights into opportunities for NCC to strengthen its programs, improve its management and evaluate its mission/services.

CAC members are consulted individually throughout the year and invited to participate in Strategy and Executive Roundtable Sessions ~ small-group discussions with key energy industry stakeholders. CAC members receive special recognition at NCC events and in NCC communications (newsletter/website).

If you are interested in joining or learning more about the NCC's CAC, please contact Janet Gellici at jgellici@NCCI.org.

WHO KNEW?*

U.S.-China

Clean Energy Research Center

The U.S.-China Clean Energy Research Center's (CERC) mission is to accelerate development and rapid deployment of critical technologies for clean energy in the U.S. and China. CERC works to generate a diversified energy supply and accelerate the transition to an efficient, low-carbon economy.



In November 2009, U.S. President Obama and then China President Hu Jintao announced the establishment of the \$150 million CERC. In November 2014, President Obama and China President Xi Jinping announced the extension and expansion of CERC to add a new technical track on energy and water research.

CERC's efforts in the coal sector are centered in the Advanced Coal Technology Consortium. Joint research areas include advanced power generation, clean coal conversion technology, both pre- and post-combustion capture; oxy-combustion capture; and CO2 sequestration and utilization (including EOR and algae).

James Wood (former NCC member and former DOE Deputy Assistant Secretary Clean Coal) from West Virginia University leads the U.S. consortium. Dr. Zheng Chuguang of Huazhong University of Science and Technology leads the China consortium. DOE through its various laboratories, including the National Energy Technology Laboratory (NETL), is a partner in this effort.

In its latest "Fossil Forward" report for Secretary Moniz, the NCC commended DOE for its continued engagement with CERC and recommended additional such initiatives be undertaken.

For further information

http://www.us-china-cerc.org/Advanced_Coal_Technology.html

***A regularly featured column on industry, university and government initiatives in support of clean coal technology development & commercialization.**

Coal Currents

Todd H. Cunningham, Contributing Editor

A brief survey of leading coal industry stories of the past month. Highlighted underlined text links to the cited articles. Right click on highlighted text and select the "Open Hyperlink" option to view the cited article.

CLIMATE CHANGE

President Signals Intent to Push Forward on Climate Agenda

Climate change represents perhaps the greatest challenge to future generations, and the Administration will not allow the GOP-controlled Congress "to turn back the clock" on efforts to address the threat, President Obama asserted in his State of the Union address. According to *National Journal*, the speech, which included no new proposals requiring Congressional action, suggested that the President sees little opportunity to find common ground with lawmakers on energy policy and climate change. Rather, the publication indicated, "[Nearly all of Obama's agenda is about pushing ahead with a series of executive actions on energy and climate policy.](#)" The President also highlighted the recent U.S.-China agreement on carbon emissions that he hopes will help lead to a meaningful international climate change pact at United Nations talks in Paris later this year. The *National Journal* quoted Heather Zichal, a former White House climate and energy aide, as saying that the reference was intended to counter GOP assertions that the U.S. would hinder its international competitiveness by reducing such emissions if economic competitors like China were doing nothing to rein in their own.

New Polls Find Significant Partisan Divides on Global Warming

Recent polls have found significant partisan divides on global warming. In [the Pew Research Center's annual policy priorities survey](#), 38% of respondents said dealing with the issue should be a top priority for the President and Congress, while 29% called it an important but lower priority and 31% said it was not too important. Responses varied significantly by political affiliation; 54% of Democrats viewed global warming as a top priority, as did 39% of independents. However, Pew reported, just 15% of Republicans rated it a top priority, with 21% calling it an important but lower priority and 31% terming it not too important. Another 31% of GOP respondents opposed action on the issue. Meanwhile, [a poll conducted by The New York Times, Stanford University and Resources for the Future](#) found "an overwhelming majority" of the public supports action on global warming. Sixty-three percent of Democrats said the issue was very or extremely important to them personally, as did 40% of independents and 18% of Republicans. Pollsters also found that 91% of Democrats, 78% of independents and 51% of Republicans said "the government should be fighting climate change," *The Times* reported.

Obama Offers India "Tough Love" on Need for Greenhouse Cuts

Wrapping up a three-day visit to India, President Obama offered what *The New York Times* termed "a tough-love message to his hosts," including the assertion that their country has "an obligation to curb greenhouse gases despite its economic challenges." The President acknowledged that some believe it is unfair for developed countries such as the U.S. to ask those with developing economies, like India, to reduce dependence on the fossil fuels that helped the richer nations power their growth. However, Obama emphasized, if developed countries curb emissions but developing ones "don't also embrace cleaner fuels, then we don't stand a chance against climate change." But despite an agreement with Indian Prime Minister Narendra Modi to cooperate in promoting cleaner energy, *The Times* reported, the President left New Delhi "[without the sort of specific commitment to curbing greenhouse gases that he won in China last year.](#)" As *The Washington Post* reported, Modi's government is pushing to double India's coal output to more than 1 billion tons annually, "with growth now set to outpace China's, according to several forecasts."

Todd H. Cunningham, who writes the "Coal Currents" column for the Council's monthly National Coal Advisory, is available for additional writing projects involving coal and other energy policy issues. For information on Todd's background and experience, see his LinkedIn profile at www.linkedin.com. To discuss your editorial needs, contact Todd via email at tcunningham03@comcast.net.

Coal Currents *(continued)***CLIMATE CHANGE** *(continued)***"Risky Business Project" Stresses Need for Adapting to Climate Change**

Members of the Risky Business Project are "an unusual collection of business and policy leaders determined to prepare American companies for climate change," *The New York Times* reported. They have different perspectives, with some advocating a national carbon tax, some calling for mandatory disclosure of companies' climate risks, some calling for pushing divestment from fossil fuel companies and at least one suggesting there be no mandatory rules at all, the publication noted. But they agree on one issue: ["Shifts in weather over the next few decades will most likely cost American companies hundreds of billions of dollars, and they have no choice but to adapt."](#) The group, led by hedge fund billionaire Tom Steyer, former Treasury Secretary Henry Paulson, and former New York Mayor Michael Bloomberg, has produced a report on how businesses would have to adapt to climate change, "while making a clear case for taking action," the newspaper said. Members are presenting it to business groups. While they "seem to have a long road ahead," *The Times* added, they hope to turn the tide incrementally, "bringing Congress around to the way that a majority of Americans feels."

ENVIRONMENTAL REGULATION**GOP Lawmakers Say****EPA's Coal Ash Rule Spawns Uncertainty**

House Republicans have expressed concern that [the Environmental Protection Agency's \(EPA\) rule setting out federal standards for coal ash management could lead to "increased litigation, uncertainty and expense"](#) for stakeholders. Accordingly, the lawmakers said they would pursue a solution based on legislation introduced by Rep. David McKinley (R-W.Va.) in previous Congresses. EPA's rule regulates arsenic- and lead-containing coal ash under the Resource Conservation and Recovery Act's (RCRA) Subtitle D nonhazardous waste provisions, a move backed by members of both parties. But speaking at a hearing of the House Energy and Commerce Subcommittee on Environment and the Economy, Chairman John Shimkus (R-Ill.) said that the rule contains "an entirely self-implementing program" that would lead to unpredictable regulatory interpretations regarding technical compliance by judges around the country. According to *The Hill*, Republicans' main concern was that [the rule "left open the door to later reclassifying coal ash as hazardous."](#) A legislative solution containing minimum federal requirements and allowing states to develop enforceable permit programs to implement the standards "is the best way to proceed," Shimkus suggested.

ON CAPITOL HILL**Senators Challenge President's Emissions Deal With China**

Sens. James Inhofe (R-Okla.) and Roy Blunt (R-Mo.) have challenged President Obama's agreement with China to significantly limit the nations' greenhouse gas emissions, [crafting a "sense of the Senate" amendment stating that the November accord has "no force and effect" in the United States.](#) Under the pact, the U.S. is aiming for emissions cuts of 26-28% below 2005 levels by 2025, substantially more than its existing goal of a 17% reduction by 2020. China, meanwhile, pledged to cap its greenhouse emissions -- the world's largest -- by 2030, or earlier if possible, while increasing the share of non-fossil fuels in its energy mix to 20% by 2030. The White House hopes that the deal will increase the odds of success at a UN climate conference in Paris later this year. *National Journal* indicated that any resulting pact would stop short of a formal treaty, which would require approval by the Senate, "a near-impossible prospect." But the nonbinding Inhofe-Blunt measure provides that both the U.S.-China pact and the prospective Paris deal would require Senate approval.

BY THE NUMBERS Domestic Coal Production Down, While Consumption Up: EIA

[U.S. coal production fell below 1 billion short tons in 2013 for the first time in two decades](#), according to the Energy Information Administration's (EIA) *Annual Coal Report*. Production for the year, 984.8 million short tons, represented a decline of 3.1% from 2012's 1,016.5 million short tons. Meanwhile, U.S. coal consumption increased 4.0% to 924.8 million short tons, an increase of 32.4 million short tons as compared with 2012, the Department of Energy (DOE) unit said. Platts reported that EIA attributed this increase mostly to electricity demand due to the "polar vortex" that gripped the nation. The electric power sector accounted for about 92.8% of total U.S. consumption during the year, EIA added. Total U.S. coal stocks decreased by 38.4 million short tons (16.1%) to 200.4 million short tons, with electric power sector coal stocks down by 20.1%, to 148.0 million short tons, at the end of 2013, EIA said.

Coal Currents *(continued)***MINING AND TRANSPORTATION****Proximity Detection Systems Rule Set for Underground Mines**

[Underground coal mine operators will be required to equip continuous mining machines with proximity detection systems](#) under a final rule announced by the Mine Safety and Health Administration (MSHA). Some mining companies already have adopted such systems, which use electronic sensors to detect motion or the location of one object relative to another, the Labor Department unit noted. They can be programmed to send warning signals to stop the machines before they injure or kill an underground coal miner; 35 have died in such accidents since 1984. Under the rule, to become effective March 16 and be phased in over 8 to 36 months, the system consists of machine-mounted components and components worn by each miner on the working section. The MSHA issuance sets performance and maintenance requirements for the systems and requires training for persons performing installation and maintenance. "The proximity detection final rule will save lives and has the potential to dramatically improve the safety of mining operations," said Joseph A. Main, Assistant Secretary of Labor for Mine Safety and Health.

INTERNATIONAL INTEREST**China Coal Production Drops For First Time in More Than a Decade**

China's coal production dropped by an estimated 2.5% in 2014, the first such decrease in more than a decade, according to the China Coal Industry Association. The forecast came after official data showed that the country produced 3.52 billion tonnes of coal in the first 11 months of 2014, down 2.1%, with mines under pressure to cut output in the second half of the year to prop up plunging prices, Reuters reported. While coal production data for the entire year is not yet available, China officially produced 3.7 billion tonnes in 2013, the news service said. It added that last year's Chinese power output growth was the slowest since 1998, while steel production growth was also the weakest in more than three decades, aggravating a supply glut. According to Reuters, [2014's decline supports a view that China is close to "peak coal" use, even though the International Energy Agency \(IEA\) recently said it expected the nation's consumption to continue going up until after 2020](#). Some experts said it was too soon to say whether this represented a turning point, the article added.

IN THE INDUSTRY**NMA Chief Quinn Notes****Upcoming Challenges for Coal Plants**

"If coal is not riding high, neither are we despondent," National Mining Association (NMA) President and CEO Hal Quinn commented in a presentation on the industry's 2015 outlook at a United States Energy Association (USEA) conference. ["Coal will hold its own in the domestic power generation market and continue its growth globally as it furnishes 40% of the electricity worldwide,"](#) he specified. At home, Quinn noted, a "painful restructuring as part of a rebalancing market" is taking place, with demand shifting to lower-cost mines. The NMA chief cautioned that the medium term will be challenging as coal plants retire in the aftermath of EPA's mercury and air toxics standard (MATS) rule. However, he pointed out, total demand should remain close to 1 billion tons annually. The forecast beyond 2020 is clouded by pending EPA proposals for regulating carbon dioxide (CO₂) emissions from the power sector, Quinn said. However, a GOP-led Congress, several consequential cases before the courts and "a growing wall of states questioning the wisdom of partnering with EPA in its costly power plan venture ... could deliver blows requiring EPA to revisit its plans."

Canadian CCS Unit**"Working Even Better Than Expected"**

The utility-scale carbon capture and storage (CCS) process at SaskPower's Boundary Dam Unit 3 in Saskatchewan, a 43-year-old coal-fired unit, "is working even better than expected," Mike Monea, president of the utility's Carbon Capture and Storage Initiative, reported in *International Mining*. Operators already have captured more than 1,000 tons of carbon at the facility, compressed it and sent it to nearby oil fields for enhanced oil recovery (EOR). The CO₂ will be pumped into the fields, brought back up with the oil, and then re-injected continuously, Monea said. The plant is now running at 80% efficiency, he said; operators expect to reach the full 3,200 t/d capture in the near future, and are on-track to capture up to 1 Mt this year. The power plant's Unit 3 has performed better than expected, the utility executive said, producing power for 100,000 homes and businesses while running about four times lower CO₂ emissions than a comparable natural gas plant. Coal is an important part of our economy, Monea said, and ["CCS is our way of bringing that fuel source into the 21st century."](#)