

ENERGY SECRETARY RICK PERRY TO KEYNOTE NCC SPRING MEETING



The National Coal Council is pleased to confirm that the **Honorable Rick Perry, U.S. Secretary of Energy**, will deliver the Keynote Address at the NCC's 2017 Spring Full Council Meeting on April 19th (8:30-9:15 am) at the Sheraton Suites Old Town Alexandria, Virginia. NCC is delighted the Secretary will be joining us during these early weeks of his leadership at the U.S. Department of Energy. {See page 2 for meeting details.}

DOE GUIDING DOCUMENTS

As Secretary Perry begins his tenure leading the U.S. Department of Energy, he'll be guided by directives from the White House. Principal among those directives is President Trump's "An America First Energy Plan" which emphasizes a commitment to energy independence and energy security through utilization of America's domestic energy resources.

On March 28, 2017, President Trump issued an Executive Order on [Promoting Energy Independence and Economic Growth](#) that highlighted several energy-related regulatory reform initiatives. {See page 6 for additional insights into this Presidential EO.}

These directives will serve as the foundation of the NCC's efforts in its capacity as an advisory committee to Secretary Perry. NCC looks forward to supporting President Trump and Secretary Perry in their efforts to advance energy independence and energy security as outlined in these guiding documents.

AN AMERICA FIRST ENERGY PLAN

Energy is an essential part of American life and a staple of the world economy. The Trump Administration is committed to energy policies that lower costs for hardworking Americans and maximize the use of American resources, freeing us from dependence on foreign oil.

For too long, we've been held back by burdensome regulations on our energy industry. President Trump is committed to eliminating harmful and unnecessary policies such as the Climate Action Plan and the Waters of the U.S. rule. Lifting these restrictions will greatly help American workers, increasing wages by more than \$30 billion over the next 7 years.

Sound energy policy begins with the recognition that we have vast untapped domestic energy reserves right here in America. The Trump Administration will embrace the shale oil and gas revolution to bring jobs and prosperity to millions of Americans. We must take advantage of the estimated \$50 trillion in untapped shale, oil, and natural gas reserves, especially those on federal lands that the American people own. We will use the revenues from energy production to rebuild our roads, schools, bridges and public infrastructure. Less expensive energy will be a big boost to American agriculture, as well.

The Trump Administration is also committed to clean coal technology, and to reviving America's coal industry, which has been hurting for too long.

In addition to being good for our economy, boosting domestic energy production is in America's national security interest. President Trump is committed to achieving energy independence from the OPEC cartel and any nations hostile to our interests. At the same time, we will work with our Gulf allies to develop a positive energy relationship as part of our anti-terrorism strategy.

Lastly, our need for energy must go hand-in-hand with responsible stewardship of the environment. Protecting clean air and clean water, conserving our natural habitats, and preserving our natural reserves and resources will remain a high priority. President Trump will refocus the EPA on its essential mission of protecting our air and water.

A brighter future depends on energy policies that stimulate our economy, ensure our security, and protect our health. Under the Trump Administration's energy policies, that future can become a reality.

**NCC 2017 SPRING ANNUAL MEETING
RESCHEDULED FOR APRIL 18-19
OLD TOWN ALEXANDRIA, VA**



The long-range weather forecast for Alexandria, VA is presently calling for seasonal daytime temperatures in the 60s ~ and **NO SNOW!** NCC regrettably had to postpone its 2017 Annual Spring Meeting originally scheduled for mid-March due to a late-season winter storm. We regret any inconvenience for those who had planned to attend.

Thanks to the great efforts of NCC's Meetings Director, Hiranthie Stanford and the outstanding management team at our host venue ~ Sheraton Suites Old Town Alexandria ~ we were able to quickly reschedule for April 18-19 and are pleased that more than 100 industry and Department of Energy representatives are now registered to attend.

In addition to Secretary Perry's Keynote Address, our program features industry presentations on leading edge coal technology developments:

Stephen Nelson, Chief Operating Officer, Longview Power LLC

"Longview Power – State-of-the-Art Clean Coal Technology for Reliable, Low-Cost Electrical Power"

Anthony Leo, Vice President of Applications & Advanced Technology Development, FuelCell Energy

"Fuel Cell Carbon Capture Pilot Plant: FuelCell Energy's DOE-Sponsored Program & Pilot Demonstration"

David Denton, Sr. Director Business Development Energy, RTI International

Advanced Technologies for CO₂ Capture & Utilization: Power & Industrial Applications

Jared Moore, Ph.D., Principal, Meridian Energy

Thermal Hydrogen: An Emissions Free Coal/Gas Economy

We hope you can join us in historic Alexandria, Virginia on the banks of the Potomac River.

Program and registration details are available on the NCC Events page:

<http://www.nationalcoalcouncil.org/page-NCC-Events.html>

Thank you sponsors!

EVENT SPONSOR: **SOAP CREEK ENERGY**

LUNCH SPONSOR: **CHARAH LLC**

BREAK SPONSORS:

**ADA-ES, Dominion Energy, Ferriera Construction
Headwaters, Savage Companies**

Sponsorships are still being welcomed. See page 4 for details.

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NCC Community News

NCC members are invited to submit news items regarding their companies and organizations to Janet Gellici at info@NCC1.org.

Holly Krutka

Peabody Energy's New VP of Coal Generation & Emissions Technology

Congratulations to Holly Krutka on her new position with Peabody Energy. In her new role, Holly will work to help protect and enhance the existing U.S. coal fleet as well as promote the use of high efficiency, low emissions (HELE) technologies. Congratulations, Holly!

Sharon Sjoström & Connie Senior
Advanced Emissions Solutions
Charlie McNeil, NexGen Resources
www.adaes.com

ADES announced the leasing of an additional Refined Coal facility to an existing investor through its joint venture partner Tinuum Group and its affiliates NexGen Resources and The Goldman Sachs Group, Inc.

<http://www.advancedemissionsolutions.com/News/press-release-details/2017/Advanced-Emissions-Solutions-Announces-the-Lease-of-an-Additional-Refined-Coal-Facility/default.aspx>

Kemal Williamson, Peabody Energy

<https://www.peabodyenergy.com/Media-Center/Newsroom>

Peabody announced on April 3rd that it had emerged from Chapter 11 protection with a transformed capital structure and will begin trading again on the New York Stock Exchange under the ticker symbol BTU.

Betsy Monseu, American Coal Council

[Washington Post Editorial 3-23-17](#)

Betsy Monseu responded to a recent Washington Post article on "Coal in the Trump age" defending the industry's recent multiyear trough.

Sarah Wade, Wade LLC

Jeff Erikson, Global CCS Institute

[GCCSI Webcast - Social Site Characterization](#)

The Global CCS Institute recently hosted a webinar series on Public Engagement, Education and Outreach for CCS. The March 23rd webinar focused on "Social Site Characterization," featuring among the presenters, NCC member Sarah Wade, Principal of Wade LLC.

Carbon XPRIZE Expanding Team

The NRG COSIA Carbon XPRIZE at the Wyoming Integrated Test Center is looking to hire a Engineering Operations Manager to support the project in all areas relating to the day-to-day scientific and engineering operations of the competition.

For more details on the job or to apply, click [here](#). To learn more about the NRG COSIA Carbon XPRIZE, visit carbon.xprize.org

COAL RESOURCES & NEWS

U.S. Department of Energy

www.energy.gov

[Office of Fossil Energy](#)

National Energy

Technology Laboratory

www.netl.doe.gov

[Coal & Power Systems](#)

Clean coal won't be commercially viable before 2030, energy analysis
[The Guardian 03-08-17](#)

Montana considers keeping coal-fired plant afloat with loans
[SFGate 3-10-17](#)

Protecting the coal industry – technology is key to securing a prosperous coal future (Gov. Matt Mead & Jay Faison)
[Washington Times 03-12-17](#)

Coal is not the enemy – Stachura/Solar Sources
[KPC News 03-17-17](#)

Trump advisers want concessions for coal if U.S. stays in climate pact
[Politico 03-17-17](#)

Plans for coal-fired power plants drop by almost half in 2016
[BBC 03-22-17](#)

Coal Ash: Why in the world would we be importing it?
[Associated Press 03-27-17](#)

Scientists made a detailed 'roadmap' for meeting the Paris climate goals.
[Vox 03-27-17](#)

How Captured CO2 Could Provide the Energy-Storage Solution Everyone is Looking For
[Forbes 03-26-17](#)

Cold weather kept Yorktown coal units running
[Daily Press 03-31-17](#)

Killing Coal Country: A documentary – Premiering April 11
<http://killingcoalcountry.com/>

National Coal Council
NationalCoalCouncil.org



2017 ANNUAL SPRING MEETING
April 18-19 – Old Town Alexandria, VA
SPONSORSHIP OPPORTUNITIES

The National Coal Council's Spring Meeting provides a number of Sponsorship Opportunities for those wishing to demonstrate their support for NCC and enhance the visibility for their organization at the meeting. We welcome and appreciate sponsorship support at any level.

Thank you to the following Annual Spring Meeting 2017 meeting sponsors:

Soap Creek Energy

Charah, Inc.

ADA-ES, Dominion Energy, Ferriera Construction, Headwaters & Savage Companies

If you don't see an opportunity that suits you, please let us know and we'll design something special just for you!

SPONSORSHIP SELECTION

- Event Sponsor ~ \$4,000
Program Sponsor ~ \$2,000
Reception Sponsor ~ \$1,500
Keynote Session Sponsor ~ \$1,000
~ Acknowledgement of Company during Keynote Session with DOE Secretary Rick Perry
Buffet Lunch Sponsor ~ \$600
Breakfast & Break Sponsor ~ \$500

Company:
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PAYMENT SELECTION

- Enclosed is my check for \$
Please invoice me for \$
Please provide me with bank wire transfer information.
I'd like to pay by credit card, please invoice me with a link to pay via secured credit card site.

Contact Hiranthie Stanford for Additional Information
202-756-4524 – hstanford@NCC1.org

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Fax: 202-688-2201

NCC Member Focus

Michael Karmis has been an active member of the NCC for more than a decade. He has served on various committees and working groups addressing CCS/CCUS initiatives and reports.

Thank you for your service, Michael!

Dr. Michael Karmis joined the Department of Mining and Minerals Engineering at Virginia Tech in 1978 as an Assistant Professor. Following promotions through the academic ranks, he was appointed the Stonie Barker Professor of Mining and Minerals Engineering in 1992 and served as head of the department from 1987 to 1998. He became the Director of the Virginia Center for Coal and Energy Research at Virginia Tech in 1998. His prior academic experience was with universities in Scotland and Greece.

Michael's expertise is in the areas of geomechanics and mine systems, health and safety, carbon management, energy planning, and the sustainable development of energy and mineral resources. He has authored or co-authored over 180 scientific papers and has directed more than 60 major research projects valued at more than \$55 million, funded by federal and state agencies, foundations and the private sector.

Michael has a B.S. (1971) and a Ph.D. (1974) in Mining Engineering from the University of Strathclyde in Scotland. A Professional Engineer (P.E.) in the USA and a *Eur Ing* in Europe, Michael is an active consultant to the global mining and energy sector, academic and research institutions, government agencies, engineering companies, and financial and legal firms. His international experience includes collaborations with universities, research organizations, energy and minerals industries, and operations and facilities throughout the world.

Michael served as the 2002 President of the Society for Mining, Metallurgy and Exploration (SME) and as the 2008 President of the American Institute of Mining, Metallurgical and Petroleum Engineers (AIME). He was the 2002 President of the international Society of Mining Professors (SOMP)-Societät der Bergbaukunde and served from 2005 to 2012 as the Society's Secretary General.

Michael has received numerous awards during the course of his career, including the first Award for Sustainable Coal Development from the Coal Industry Advisory Board (CIAB) of the International Energy Agency in 2003, "For his contributions to mining education and improved mining technologies ...contributions to mine health and safety... [and] contributions to improving the environmental performance of coal mining." He is an Honorary Member of AIME, a Distinguished Member of SME, a Fellow of the Institute of Quarrying, and a Fellow of the Institute of Materials, Minerals and Mining.



MICHAEL KARMIS **DIRECTOR VIRGINIA CENTER** **FOR COAL & ENERGY RESEARCH** **VIRGINIA TECH**

Virginia Tech is the Commonwealth of Virginia's most comprehensive public university and its leading research institution, with over 250 undergraduate and graduate degree programs, more than 33,000 students, and a research portfolio of \$504 million. The university fulfills its land-grant mission of transforming knowledge to practice through technological leadership and by fueling economic growth and job creation locally, regionally, and across Virginia.

The Virginia Center for Coal and Energy Research (VCCER) is a Commonwealth of Virginia research center created by an act of the General Assembly and located at Virginia Tech. The mission of the VCCER is to conduct interdisciplinary research and provide unbiased public information on all topics involving the coal, gas and the power generation industries, including consumer issues. The VCCER/VT has been conducting research in CCS/CCUS for almost 15 years.

The VCCER is the home of the Appalachian Research Initiative for Environmental Science (ARIES). Established in 2011, ARIES was created to investigate the impacts of energy production in the region and is funded and supported by industry, but directed solely by researchers. ARIES in turn funds an independent research program with a focus on the wide dissemination of results.



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PRESIDENTIAL EXECUTIVE ORDER

Promoting Energy Independence and Economic Growth

On March 28, 2017, President Trump issued an Executive Order (EO) on [Promoting Energy Independence and Economic Growth](#). In keeping with the President's America First Energy Plan, the EO advanced initiatives designed to enhance development of U.S. energy resources while avoiding regulatory burdens encumbering energy production, constraining economic growth and preventing job creation.

The U.S. Department of Energy (DOE) and other relevant agencies were called upon to immediately review existing regulations that potentially burden the development or use of domestic energy resources, including coal. The Agencies have 45 days to develop plans to comply with this directive and 120 days to submit a draft final report detailing actions to address these burdens.

The EO revoked numerous energy and climate-related regulatory actions established during the Obama Administration, including the Climate Action Plan, and called for a review of EPA's Clean Power Plan and related rules. The EO further mandated a review of estimates associated with the Social Cost of Carbon, NOx and Methane for regulatory impact analysis. The Secretary of the Interior was directed to amend or withdraw the Federal land coal leasing moratorium.

Various industry representatives and analysts have weighed in on their perspectives on the Executive Order, including:

Energy Ventures Analysis –
[President's Long-Awaited EO on Promoting Energy Independence](#)

National Mining Association –
[NMA Applauds EO Targeting Costly Power Plan and Coal Moratorium](#)

Brookings Institution –
[Trump's EO on Energy Independence](#)

Politico –
[The Hidden Impact of Trump's Energy Executive Order](#)

EPA -
[High Accolades Across the Country on Trump's Energy Independence EO](#)

Hoover Institute –
[Why Trump Was Right to Relax Energy Regulations](#)

POSSIBLY ENTERTAINING



**CENTER for
INDUSTRIAL
PROGRESS**

On May 2 from 4:10-4:35 pm Central (New Orleans), Alex Epstein, Founder & President of the Center for Industrial Progress will debate Terry Tamminen, CEO of the Leonardo DiCaprio Foundation on the proposition "We Can't Abandon Fossil Fuels." It will be the capstone event of the 20,000 attendee Collision Conference's "Planet Tech" feature. The debate will be streamed online via Facebook Live on the [Collision Facebook link](#).



NCC ACTIVITIES & NEWS

HOLD THE DATE ~ NCC FALL 2017 SEPTEMBER 26-27 ~ BIRMINGHAM, ALABAMA

NCC is pleased to announce that it will be hosting its 2017 Annual Fall Meeting, September 26-27 at the Ross Bridge Resort in Birmingham, Alabama. Southern Company has graciously offered to host us for an optional tour of the National Carbon Capture Center immediately following the NCC Full Council Meeting. Please hold these dates and plan to join us!

NCC SPEAKING ENGAGEMENTS



Upcoming presentations by NCC CEO Janet Gellici

- ~ **PRB Users Group/Electric Power Conference** – April 2017, Chicago
- ~ **Southern States Energy Board** – May 2017, Kingston, Tennessee
- ~ **Carbon Management Technology Conference** – July 2017, Houston

ONE STUDENT AT A TIME

NCC CEO Janet Gellici recently spent some time on the phone being interviewed by a high school student in New Jersey who was working on an energy presentation for his class. He was asked to discuss the advantages and disadvantages associated with using coal. It was incredibly gratifying to get the following email from Alex:

Dear Ms. Gellici – Thank you very much for helping me with my coal project. The presentation went very well and my teacher even said it changed her mind about coal. If it wasn't for our interview it would not have been as convincing. Thank you very much.

CHAIR'S LEADERSHIP COUNCIL MEMBERS TO MEET WITH DOE SENIOR STAFF

Members of the NCC's **CHAIR'S LEADERSHIP COUNCIL (CLC)** will be meeting with senior members of the U.S. Department of Energy's Office of Fossil Energy during the NCC's Spring Annual Meeting to discuss coal-related priorities under the new Administration and opportunities for NCC to enhance its assistance to DOE in meeting its goals. Thank you CLC members for your engagement on behalf of the Council.



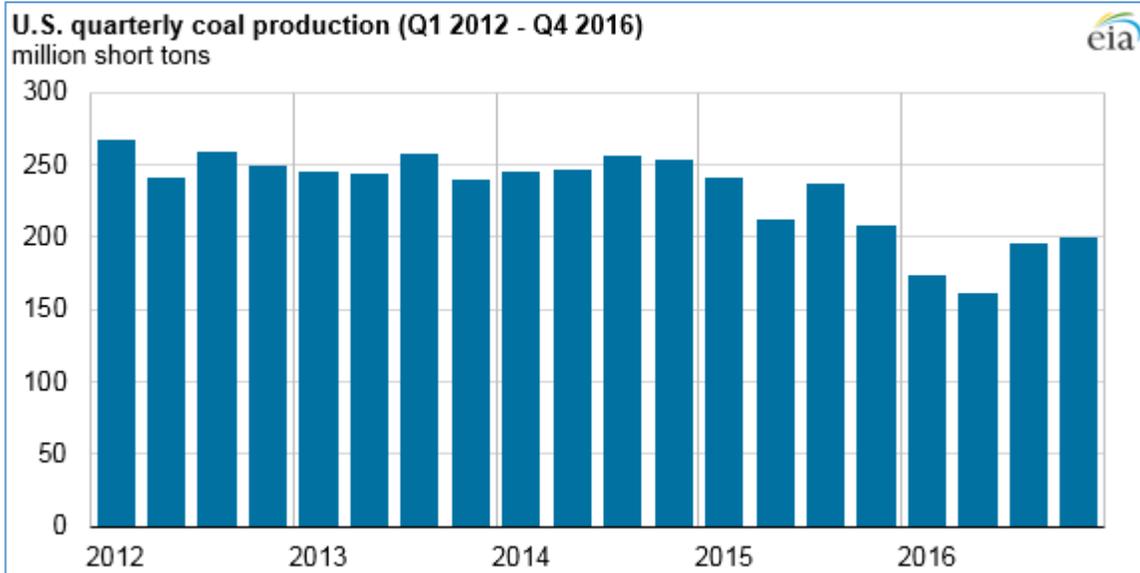
News Worthy from the Department of Energy

Coal Production Increases Second Half of 2016; Still Below 2015 Levels

<https://www.eia.gov/todayinenergy/detail.php?id=30552>



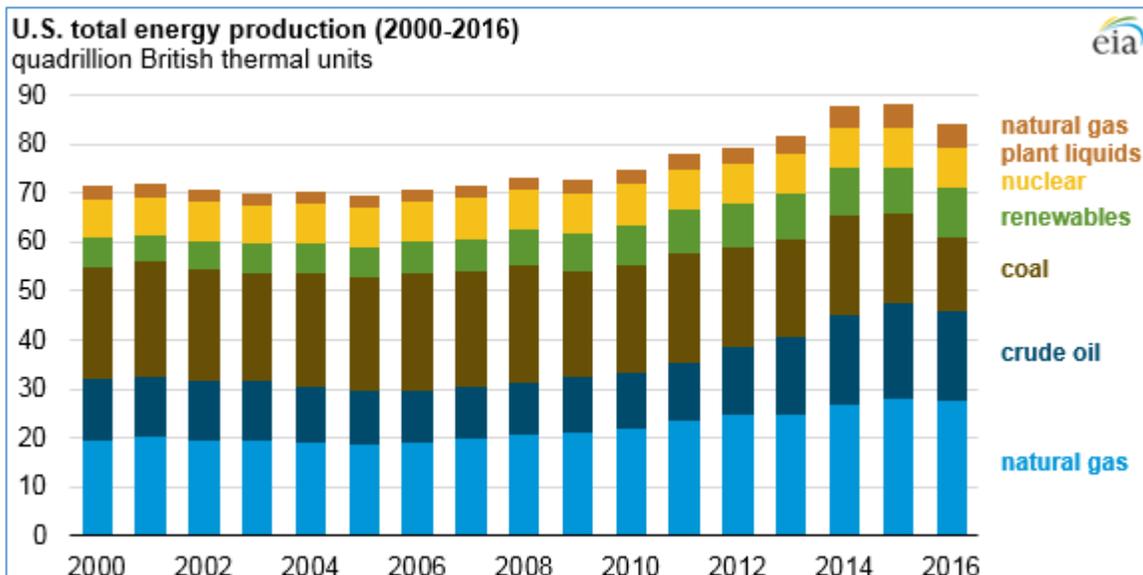
After falling in six out of seven quarters from mid-2014 to mid-2016, coal production rose in the third and fourth quarters of 2016. Among the coal supply regions, the Powder River Basin in Montana and Wyoming saw the largest increases in the second half of 2016. The increases in coal production were driven by an increase in coal-based electricity generation which occurred as natural gas prices increased.



Total U.S. Energy Production Falls in 2016 After Six Consecutive Years of Increases

<https://www.eia.gov/todayinenergy/detail.php?id=30592>

U.S primary energy production totaled 84.1 quadrillion BTUs in 2016, falling 4% from the 2015 level, the first annual decline in U.S. energy production since 2009. The decline in production coincided with an increase in both total energy imports and exports.



More News Worthy from the Department of Energy

Perry Rallies Energy Department Staff on Day One

<https://www.energy.gov/articles/perry-sworn-14th-secretary-united-states-department-energy>



Former Texas Governor Rick Perry was sworn in on March 2, 2017 as the 14th Secretary of the U.S. Department of Energy.

In addressing DOE employees on March 3rd, Secretary Perry praised the expertise and abilities of the agency, commenting that DOE was a “cool place to get up every day and go to work at.” He noted that DOE staff can change the world with the projects and activities underway at the Department.

“I’m proud to be an American every day,” said the Secretary. “But today, I am truly blessed and as proud as I’ve ever been to say that I am on a team of men and women who have the potential to change the world.”

Trump Picks Bush Veteran to be Rick Perry’s Deputy

<http://thehill.com/policy/energy-environment/327110-trump-picks-former-doe-official-to-be-deputy-secretary>

Early this month, The Hill reported that President Trump will nominate Dan Brouillette, a former Energy Department official under former President George W. Bush, to be the Department’s Deputy Secretary. Brouillette served at DOE from 2001 to 2003 as Assistant Secretary for Congressional and Intergovernmental Affairs. He was also a member of Louisiana’s State Mineral and Energy Board (2013-2016).

News Worthy from the Administration & Congress

House Subcommittee on Energy Hearing on Energy Tax Policy & Its Impacts on Markets, Prices and Consumers

<https://energycommerce.house.gov/hearings-and-votes/hearings/federal-energy-related-tax-policy-and-its-effects-markets-prices-and>



On March 29th, 2017, the House Subcommittee on Energy, chaired by Rep. Fred Upton (R-MI), held a hearing examining the support provided by the Federal government for energy development, production and use of fuels and energy technologies through the tax code and spending programs administered by the Department of Energy. Experts testifying included:

- Dr. Terry Dinan, Senior Advisor, Congressional Budget Office
- D. Ben Zycher, Resident Scholar & John G. Searle Chair, American Enterprise Institute
- Dr. Robert Murphy, Senior Economist, Institute for Energy Research
- Devin Hartman, Electricity Policy Manager, R Street Institute
- Joseph E. Aldy, Assoc. Professor of Public Policy, Harvard Univ. School of Government
- Steve Clemmer, Director of Energy Research and Analysis, Union of Concerned Scientists

One especially interesting factoid from Dr. Dinan’s testimony is worth noting: Referencing a National Academy of Sciences study, Dr. Dinan noted that NAS found that production and investment tax credits for renewable electricity generation reduced CO₂ emissions at an average cost of \$250 per ton. By comparison, the EPA and other federal agencies recently estimated that the value of damage avoided by a one-ton reduction in CO₂ emissions is \$40-\$65.

<http://docs.house.gov/meetings/IF/IF03/20170329/105798/HHRG-115-IF03-Wstate-DinanT-20170329.pdf>

WHO KNEW?*

CarbonSAFE

Carbon Storage Assurance & Facility Enterprise

<https://www.energy.gov/search/site/CARBONSafe>

The U.S. Department of Energy's CarbonSAFE initiative is intended to develop integrated carbon capture and storage (CCS) complexes, constructed and permitted for operation in the 2025 timeframe over a series of sequential phases of development.

Phase 1 CarbonSAFE: Integrated CCS Pre-Feasibility is soliciting and competitively seeking R&D projects that will provide a pre-feasibility study for a commercial scale geological storage site. Objectives include the formation of a CCS coordination team capable of addressing any regulatory, legislative, technical, public policy, commercial, financial, and other issues specific to commercial scale deployment of the CO₂ storage project.

The projects will develop a plan encompassing technical requirements, as well as both economic feasibility and public acceptance of an eventual storage project. In addition, selected projects will perform a high-level technical evaluation of the sub-basin and potential CO₂ source(s).

Phase II, CarbonSAFE: Storage Complex Feasibility FOA is soliciting and competitively seeking R&D projects to perform the initial characterization of a storage complex identified as having high potential. They will also establish the complex's feasibility for commercial storage (50+ million metric tons CO₂).

The objectives of this phase include and extend the pre-feasibility work under CarbonSAFE: Integrated CCS Pre-Feasibility, focusing on one or multiple specific reservoirs within the defined storage complex, and comprising efforts in data collection; geologic analysis; identification of contractual and regulatory requirements and development of plans to satisfy them; subsurface modeling to support geologic characterization, risk assessment, and monitoring; and public outreach.

Learn more about the Phase I funding opportunity [here](#) and the Phase II opportunity [here](#).



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