

78% of state legislators read one or more of *The Heartland Institute's newspapers*.

©2019 The Heartland Institute

TRUMP ADMIN. PROPOSES CUTTING, REFOCUSING ENERGY & ENVIRONMENTAL PROGRAMS
REDUCING SPENDING ON SPECULATIVE CLIMATE PROGRAMS WILL FREE UP FUNDS FOR CORE PUBLIC HEALTH PROTECTIONS, OFFICIALS SAY. — **P. 5**



CA BAN GAS-POWERED YARD TOOLS?
IN AN EFFORT TO REDUCE AIR POLLUTION, CALIFORNIA'S AIR RESOURCES BOARD IS CONSIDERING A COSTLY STATEWIDE BAN ON GASOLINE-POWERED LAWN EQUIP. — **P. 13**



ENVIRONMENT & CLIMATE

Vol. 23 No. 04 April 2020
NEWS

Heartland.org/EnvironmentAndClimateNews

HOT TOPICS

NH Coal Plant Saved

The largest remaining coal-fueled power plant in New England, New Hampshire's Merrimack Station, will remain open through at least May 2024 as a result of an agreement with the regional transmission operator. **Page 7**

LNG Expansion Approved

The U.S. Department of Energy approved four liquefied natural gas export projects to be built on the Texas Gulf coast.. **Page 17**

VA Renewables Push

Despite cost concerns expressed by the state's Attorney General, the newly minted Democrat-majority legislature in Virginia approved legislation to force the state's utility regulator to approve thousands of megawatts of renewable power in the state and to take Virginia into the Regional Greenhouse Gas Initiative. **Page 11**

NY Solar, Wind Support

To meet the state's goal of emitting zero carbon-dioxide emissions from electricity generation by 2040, New York's Public Service Commission ordered expedited expansion of solar and wind facilities and is creating more profitable financing options for them. **Page 19**

Oil Production on Federal Lands Reaches Record High

By Bonner R. Cohen

Production of crude oil on federally managed lands and waters reached a record high of one billion barrels in 2019, according to figures released by the U.S. Interior Department.

This is a 29 percent increase in oil production on federal lands since the end of the Obama administration.

Production is up by 122 million barrels, or more than 13 percent, from 2018, including oil extracted

from onshore and offshore parcels, and from lands managed by the Interior Department on behalf of native peoples. Approximately one quarter of the oil produced in the United States comes from federal lands.

Innovation, Regulatory Rollback

The steep rise in oil production is attributable to the

OIL, P. 8

Republicans Offer Bills to Fight Climate Change

By H. Sterling Burnett

Members of the Republican congressional caucus have offered a slate of bills to expand subsidies for and research into carbon-capture and sequestration.

The Republican bills do not propose carbon taxes, cap-and-trade schemes, or establish targets for reducing carbon dioxide emissions,

unlike climate change bills offered by Democrats.

Capture and Sequestration

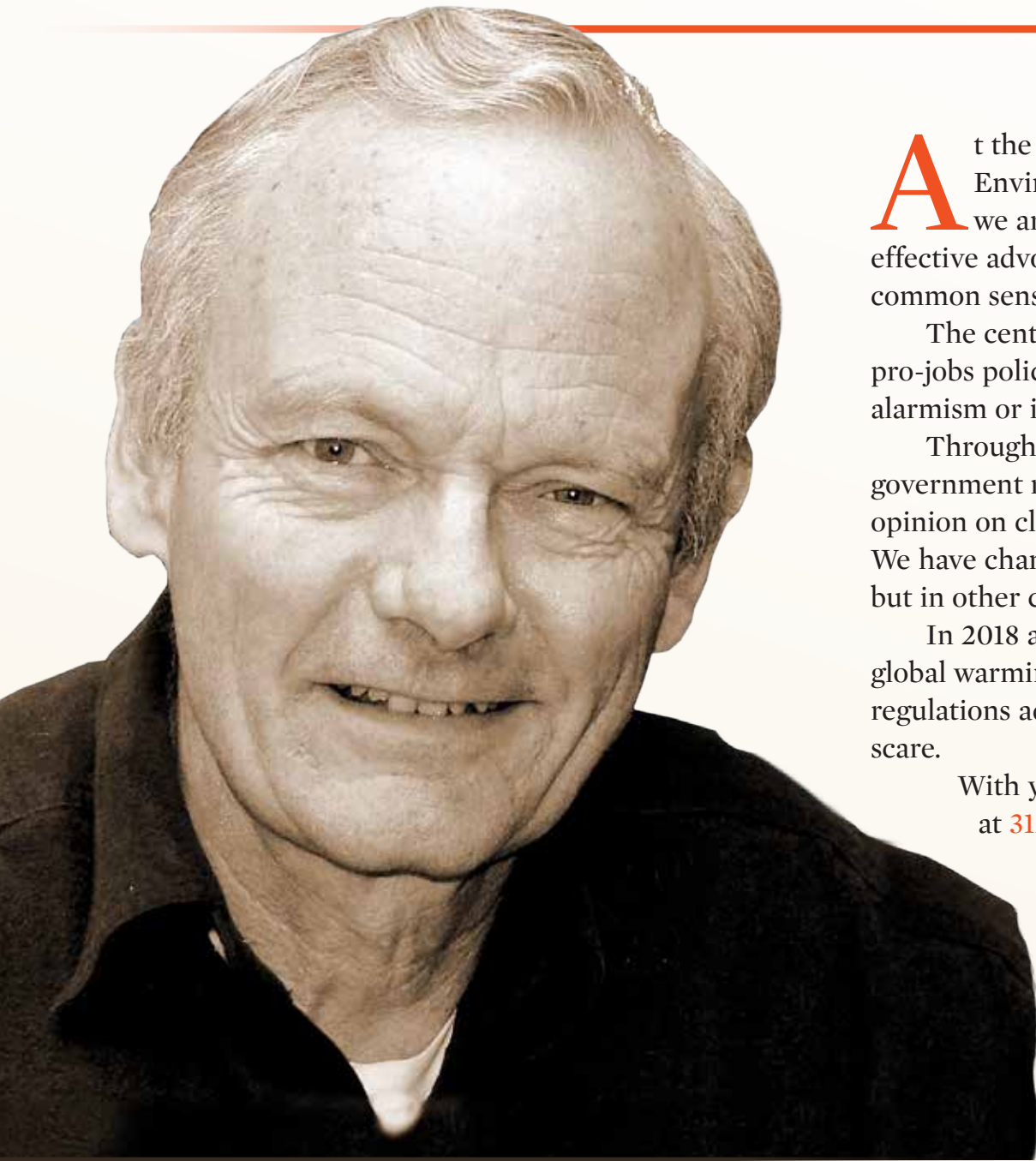
The idea behind carbon-capture and sequestration is to attach technologies and systems to fossil-fuel-powered electricity generating plants to cap-

CLIMATE CHANGE, P. 6

NON PROFIT
ORGANIZATION
US POSTAGE PAID
BEAVER DAM, WI
PERMIT NO. 412

The Heartland Institute
3939 North Wilke Road
Arlington Heights, IL 60004

Arthur B. Robinson Center on Climate & Environmental Policy



The center is named in honor of, and chaired by, Arthur B. Robinson, Ph.D., a distinguished chemist, cofounder of the Oregon Institute of Science and Medicine (OISM), and editor of the influential newsletter *Access to Energy*. He received a Ph.D. in chemistry from the University of California at San Diego.

THE HEARTLAND INSTITUTE 
FREEDOM RISING

The Heartland Institute is a national nonprofit organization based in Arlington Heights, Illinois. Its mission is to discover, develop, and promote free-market solutions to social and economic problems. For more information, visit our website at www.heartland.org or call 312/377-4000.

At the Arthur B. Robinson Center on Climate and Environmental Policy at The Heartland Institute, we are producing the research and conducting the effective advocacy needed to help restore sound science and common sense to efforts to protect the environment.

The center promotes pro-energy, pro-environment, and pro-jobs policies based on sound science and economics, not alarmism or ideology.

Through events, publications, social media, and government relations programs we have changed public opinion on climate change and other environmental topics. We have changed public policy not only in the United States but in other countries as well.

In 2018 and onward, we are focusing on winning the global warming war and repealing bad legislation and regulations adopted during the height of the global warming scare.

With your help, we can succeed. Please contact us at **312/377-4000** or think@heartland.org, or visit our website at heartland.org/Center-Climate-Environment.

“The Heartland Institute has published the work of many excellent scientists ... [and] has taken the fight right to the enemy with aggressive and highly effective campaigns aimed at elected officials and civic and business leaders.”

ARTHUR B. ROBINSON, PH.D.
APRIL 2017

Environment & Climate News

The Heartland Institute

3939 North Wilke Road
Arlington Heights, IL 60004
312/377-4000 voice • 312/277.4122 fax

Environment & Climate News is available on the internet. Point your web browser to heartland.org/environmentandclimatenews. Additional, regularly updated information on global climate change is available at heartland.org/topics/climate-change.

PRESIDENT
Frank Lasée

EXECUTIVE EDITOR
S.T. Karnick

ASSISTANT EDITOR
Emma Kaden

MANAGING EDITOR
H. Sterling Burnett, Ph.D.
hsburnett@heartland.org

ASSOCIATE PUBLISHER
Nikki Comerford

DESIGN AND PRODUCTION
Donald Kendal

ADVERTISING MANAGER
Nikki Comerford

CIRCULATION MANAGER
Tonya Houston

CONTRIBUTING EDITORS
Dennis Avery, Bonner Cohen
Robert Ferguson, Steve Milloy, Todd Myers
Joel Schwartz, S. Fred Singer, Tom Tanton

BOARD OF DIRECTORS
William Armistead, Diane Bast
Robert Buford, Jeré Fabick
Paul Fisher, Dan Hales
James L. Johnston
Jeffrey Madden, Harley Moody
Noah Robinson, Brian D. Singer

ADVERTISING: *Environment & Climate News* accepts display advertising and advertising inserts. For an advertising kit with rate card, contact Associate Publisher Nikki Comerford at **312/377-4000**, e-mail ncomerford@heartland.org.

Environment & Climate News is published 10 times per year by The Heartland Institute. Subscriptions are \$36 per year. Order online at www.heartland.org. Heartland is a nonprofit and nonpartisan public policy research organization serving the nation's federal and state elected officials, journalists, Heartland donors, and other opinion leaders. Its activities are tax-exempt under Section 501(c)(3) of the Internal Revenue Code.

© 2019 The Heartland Institute. Nothing in this issue of **Environment & Climate News** should be construed as reflecting the views of The Heartland Institute, nor as an attempt to aid or hinder the passage of any legislation.



Federal Judge Bars Arizona Copper Mine Approved by Federal Agencies

By Kevin Stone

A federal judge has overturned the U.S. Fish and Wildlife Service's (FWS) approval of a permit for Hudbay Minerals' proposed Rosemont copper mine in Arizona's Coronado National Forest.

Federal Judge James Soto, appointed to the United States District Court for the District of Arizona by President Barack Obama in 2014, ruled on February 10 in favor of environmental groups who had sued to halt the project. Soto ruled FWS improperly estimated the potential groundwater drawdown from the mine's operations and how that might impact several endangered species in the Santa Rita Mountains.

This is the second time in less than a year Soto has rejected a federal permit for the mine.

Minimal Environmental Impact

The planned open-pit mine would comprise 955 acres, with waste tailings or unused rock and soil covering an additional 2,447 acres of national forest land, amounting to less than 0.2 percent of the 1,780,000-acre Coronado National Forest.

To minimize the impact on the relatively small amount of the national forest Rosemont would affect, Hudbay proposed a dry stack method of storing tailings from the operation of the mine. By eliminating storage ponds, the mine would use between 50 percent and 60 percent less water than similarly sized mines, and 85 percent of the water it did use would be recycled for reuse on-site.

Rosemont has committed to replacing all the water used at the operation and, before the court's intervention, had already purchased and stored approximately 45,000 acre-feet of water, equivalent to the amount of water Rosemont would use in its first eight years of operations.

In addition, as part of Hudbay's efforts to mitigate any environmental impact, the company pledged to create a \$25 million fund dedicated to conservation, cultural, and recreational projects consisting of \$500,000 given



"The Forest Service approved the Rosemont project after more than 11 years of careful review and study by 17 cooperating agencies."

HUDBAY MINERALS

annually for 25 years to support conservation and environmental projects, and a total of \$12.5 million given to support cultural projects, education, job training, social services, and organizations that support military personnel and veterans.

'Arbitrary and Capricious'

In July 2019, in a case challenging an environmental permit the U.S. Forest Service granted to Hudbay, Soto ruled the agency's approval of the Rosemont mine was "arbitrary and capricious," and he overturned the permit.

At the time of that first ruling, Hudbay issued a press release saying the court had erred in its application of longstanding environmental law.

"Hudbay believes that the Court has misinterpreted federal mining laws and Forest Service regulations as they apply to Rosemont," stated Peter Kukielski, interim president, in Hudbay's press release. "We strongly believe that the project conforms to federal laws and regulations that have been in place for decades."

Joined by the U.S. Department of Justice, Hudbay has appealed Soto's decision in the USFS case to the 9th Circuit Court of Appeals and is considering appealing Soto's rejection of the FWS permit.

'Impacts ... Would Be Insignificant'

Hudbay's environmental review was extensive, and contrary to the judge's decision, further reviews are unnecessary, Hudbay said in a statement to *Environment & Climate News*.

"The ruling on the endangered species cases does not come as a surprise in light of the court's previous decisions on the Rosemont project," said Hudbay's statement. "While we respect the court's authority to remand the analysis and findings back to the agencies for further review, Hudbay believes this is unnecessary and remains committed to advancing the project which will benefit the region as a critical economic and employment driver."

"The Forest Service approved the Rosemont project after more than 11 years of careful review and study by 17 cooperating agencies," Hudbay's statement said. "The research and studies all concluded that the potential impacts to endangered species would be insignificant and would comply with the regulations set by these expert agencies."

If Hudbay receives all government approvals for the project and brings it online, the Rosemont Copper Mine is projected to earn \$6.9 billion in after-tax income over its 21-year lifespan, operating as the third-largest copper mine in the United States, with proven and probable reserves of 5.9 billion pounds of copper and 194 million pounds of molybdenum, respectably.

Kevin Stone (kevin.s.stone@gmail.com) writes from Dallas, Texas.

IN House Passes Bill Delaying Retirement of ‘Legacy’ Power Plants

By Kevin Stone

The Indiana House of Representatives passed a bill that would prevent public utilities from closing “legacy” power-generating facilities—any power plant considered a “reliable capacity” provider—without securing approval from state regulators.

Although coal is not directly named in House Bill 1414, it is aimed primarily at preventing utilities from prematurely closing existing coal-fueled power plants which have historically provided reliable baseload electric power—the minimum amount of electric power needed to supply the electrical grid at any given time—without adequately securing equally reliable replacement power and without accounting for the costs of power-shifting.

If the bill passes, utilities will have to provide the Indiana Utility Regulatory Commission (IURC) six months’ advance notice before announcing plans to cancel a contract to supply or purchase power from a legacy power plant, or closing or selling a legacy

power plant, most of which use coal for fuel. During that time, the IURC would determine the reasonable costs incurred by the public utility under its planned action and ascertain how the plan might affect electric power reliability in its service area.

Any planned closure, contract termination, or sale would also have to be at least three years in the future from the date when the utility formally notified IURC of the plan. Any rate changes or charges associated with the action would require IURC approval.

The bill is now in the state Senate, which has yet to act on it.

Coal Dominant

Coal remains the largest single energy source powering Indiana, accounting for 929.3 trillion BTU of the state’s 2,700 trillion BTU of annual energy consumption. Natural gas is the second-largest source of energy in Indiana, at 747.9 trillion BTU.

Providing approximately 60 percent of the state’s electric power, coal also

accounts for most of the electrical generation in Indiana, providing 5,391,000 MWh of the 8,991,000 MWh of electricity generated by all sources in the state.

This bill is about ensuring an orderly transition to renewable power supplies and that power switching doesn’t compromise reliability or come as a price shock to ratepayers, said Rep. Ed Soliday (R-Valparaiso) in explaining to the press why he introduced the bill.

“Whether that’s coal or rabbits on a treadmill, we need the lights to come on when we flip the switch,” Soliday said. “We’re in transition ... and [a]ll we’re asking to do is manage it.”

‘Time to Cool Off’

This bill provides a reasonable cooling-off period preventing Indianans from being stampeded into accepting less-reliable energy sources, says Jay Lehr, Ph.D., a senior policy analyst with the International Climate Science Coalition.

“These are not the power plants of your grandfather’s day,” Lehr said.

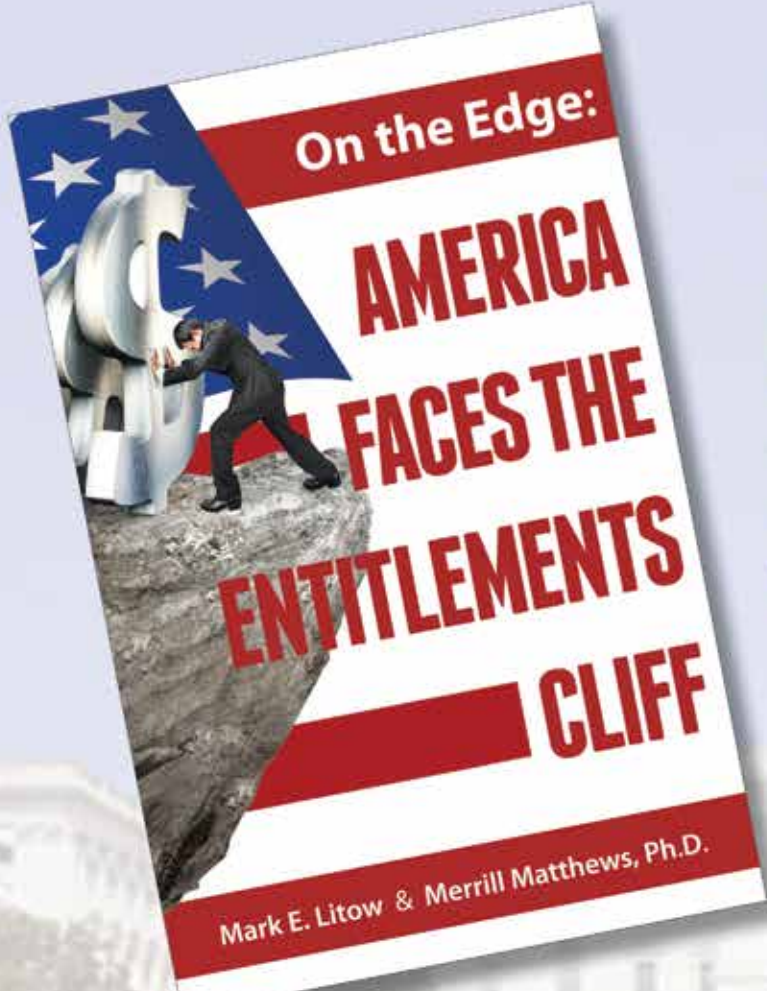
“They simply produce no contaminating emissions that are harmful to our environment or our own health.

“This new legislation makes all the sense in the world,” Lehr said. “Citizens need time to cool off and carefully consider the impacts the premature, unnecessary closure of coal power plants on Indiana’s economy.”

Kevin Stone (kevin.s.stone@gmail.com) writes from Dallas, Texas.

Official Connections:

Indiana state Rep. Ed Soliday (R-Valparaiso): <https://www.indianahouserеспублиcans.com/members/leadership/ed-soliday/>; https://www.indianahouserеспублиcans.com/forms/contact-your-representative/?formField_Representative=Rep.%20Ed%20Soliday%20%28HD%204%29



On the Edge:

AMERICA FACES THE ENTITLEMENTS CLIFF

Mark E. Litow & Merrill Matthews, Ph.D.

The United States is approaching an entitlements cliff.

Will we meander over the edge, be dragged down to the bottom—or will we recognize the imminent dangers and take a step back to fiscal security?

New from the Institute for Policy Innovation

IPI

Available at **amazon**

President Trump Proposes Reducing and Refocusing Environment and Energy Spending

By Duggan Flanakin

The Trump administration recently submitted its proposed fiscal year 2021 budget, which would significantly cut funding for certain climate change-focused programs at several government agencies.

The Environmental Protection Agency (EPA), the National Oceanic and Atmospheric Administration (NOAA), and the Department of Energy (DOE) would be affected by the plan, which would refocus regulatory and research efforts by the agencies away from climate change and alternative energy development and toward each of the agencies' core functions.

Protecting Public Health

The White House's proposal would cut EPA's budget by more than 25 percent, reducing the agency's Office of Science and Technology's budget to \$478 million, a 33 percent budget cut.

EPA Administrator Andrew Wheeler says the goal is to streamline operations by employing commonsense deregulatory actions to eliminate duplicative, sometimes contradictory regulatory requirements, while refocusing efforts on the agency's core function of protecting public health.

"For fifty years, EPA employees and our many partners have worked together to fulfill the agency's mission to protect human health and the environment," Wheeler said in a statement. "Today, Americans enjoy cleaner land, air, and water than ever before."

EPA's press release outlines the agency's redoubled efforts to protect children's health, including a newly established \$50 million flexible grant program to identify and address risks to children, including at older K-12 schools that may contain environmental hazards.

EPA's budget also outlines a new series of efforts to detect lead in drinking water and to remediate lead-based paint and lead-contaminated soil, including an additional \$45 million to support the Lead Exposure Reduction Initiative, a cross-media effort to reduce lead exposure, particularly among children.

Under the Trump administration's budget proposal, EPA would also dedi-



cate more than a billion dollars to Brownfields Projects, a program that redevelops formerly contaminated commercial and industrial sites for a productive use. The allocation includes \$18 million specifically to support projects in qualified Opportunity Zones, located primarily in low income and minority areas.

Emphasizing Commerce

For the third year in a row, the Trump administration proposes significantly reducing funding for the National Oceanic and Atmospheric Administration, which is part of the Department of Commerce. The proposal deemphasizes research on climate change, cutting funding for the Office of Oceanic and Atmospheric Research by more than 40 percent, to \$327 million, and refocusing the agency's efforts on research and activities aimed at improving the nation's economic competitiveness.

Neil Jacobs, Ph.D., Assistant Secretary of Commerce for Environmental Observation and Prediction, whom Trump has nominated to run the agency, says the administration's proposal supports NOAA's goals of reducing the impacts of extreme weather and water events to save lives, protect property, and maximize the economic contributions of ocean and coastal resources.

Although the Trump administration has proposed cutting NOAA's budget by 16 percent, it would significantly increase funding for key programs, including an increase of \$8,514,000

to support mapping the ocean within the U.S. exclusive economic zone, an increase of \$44,115,000 for the Space Weather Follow-On program, and an increase of \$3,200,000 to establish a Tornado Warning Improvement and Extension Program to improve the accuracy and timeliness of tornado forecasts, predictions, and warnings.

Promoting Energy Dominance

The proposed DOE budget cuts include eliminating the Office of Science's Advance Research Projects Agency-Energy (ARPA-E) and reducing the Office of Energy Efficiency and Renewable Energy's budget by 74 percent.

Energy Secretary Dan Brouillette says the proposed 2021 budget would fund vital priorities such as promoting America's continued rise as an energy-independent nation, enhancing national security through modernization of the nation's nuclear deterrent, and advancing transformative scientific innovation and environmental cleanup.

"President Trump's budget underscores the importance of nuclear security by increasing funding to modernize and maintain our nuclear stockpile," Brouillette said in a press release. "It focuses on intradepartmental collaboration to advance crosscutting priorities such as energy storage, security, reliability, and resilience."

"It also continues investment in early-stage research and development at our National Laboratories to guarantee that the United States is at the

forefront of innovative technology and innovation by investing \$1.5 billion in the administration's Industries of the Future initiative," Brouillette said.

Calls Reform Long Overdue

ARPA-E is unnecessary because the private sector already has the incentives and resources to undertake the agency's programs, and businesses and people don't need the government's guidance to make the energy choices that work best for them, says Marlo Lewis Jr., a senior fellow at the Competitive Enterprise Institute.

"ARPA-E's budget itself states 'the private sector has the primary role in taking risks to finance the deployment of commercially viable projects and government's best use of taxpayer funding is in earlier stage R&D,'" Lewis said. "Although ARPA-E's \$38.5 million program to 'develop technologies to rehabilitate natural gas distribution pipelines' is a worthwhile idea, natural gas distributors have the most to gain, and their sales vastly exceed \$38.5 million a day, so there is no reason taxpayers should be on the hook for pipeline rehab R&D."

"Competitive markets already drive businesses to cut costs, including energy expenditures, and consumers already have an incentive to purchase energy-efficient appliances provided those appliances do not cost too much and actually perform as advertised, so there is little need for additional government support for investment in energy efficiency," Lewis said.

The Trump administration should go even further and end federal ownership of electric power infrastructure, Lewis says.

"It is high time to begin reducing or even eliminating the federal government's role in electricity transmission infrastructure ownership," Lewis said. "Allowing private ownership of federal dams, for example, would introduce more market-based incentives, encouraging a more efficient allocation of economic resources, allowing rate competition, and mitigating risk to taxpayers."

Duggan Flanakin (dflanakin@gmail.com) writes from Austin, Texas.

Republicans Offer Bills to Fight Climate Change

Continued from page 1

ture their carbon dioxide emissions or remove carbon dioxide from the air and then convert it to liquid or solid form, or purify it in its gaseous state and ship it through pipeline, rail, or on trucks to be sequestered underground.

The New Energy Frontiers Through Carbon Innovation Act of 2020 would direct the U.S. Department of Energy (DOE) to establish a “a carbon utilization research hub and a program for the research, development, and demonstration of commercially viable technologies for the capture of carbon dioxide produced during the production of natural gas-generated power.”

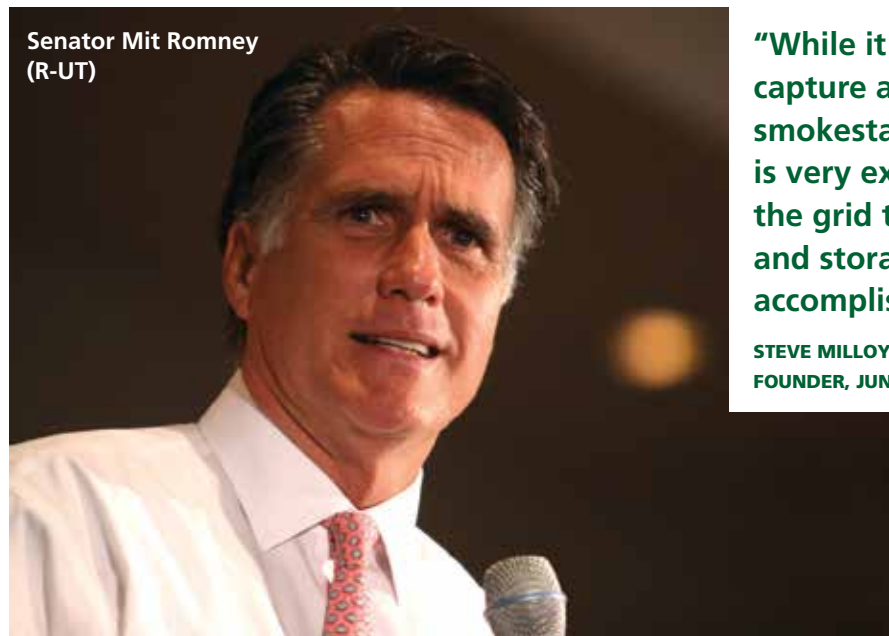
The Carbon Capture Usage and Storage Act proposes extending existing DOE grant, loan, and tax deferral programs to “carbon capture, utilization, or storage projects, such as pipelines and direct air capture,” and would streamline and expedite the permitting of carbon dioxide pipelines and associated infrastructure.

Economic, Practical Concerns

The federal government has subsidized the development and operation of carbon capture pilot projects already, and the technology has proven expensive, ineffective, unreliable, and economically unviable, says Steve Milloy, founder of JunkScience.com.

“While it is technologically possible to capture and inject carbon dioxide from smokestacks underground, the process is very expensive, diverts energy from the grid to operate the carbon capture and storage process, and can’t be accomplished on a large, utility scale,” Milloy said. “The federal government and private utilities have already wasted close to \$10 billion on failed carbon capture and storage projects, with little-to-no carbon dioxide having been stored for all the money spent.

“In addition, it’s unlikely there is enough space to store large amounts of carbon dioxide underground permanently,” Milloy said. “It has been estimated storing the carbon dioxide from just one large coal-fired power plant would require an underground area the size of the state of Maryland, and we had more than 350 coal-powered units across the United States in 2017, so where’s the carbon dioxide going to go?”



Senator Mit Romney
(R-UT)

“While it is technologically possible to capture and inject carbon dioxide from smokestacks underground, the process is very expensive, diverts energy from the grid to operate the carbon capture and storage process, and can’t be accomplished on a large, utility scale.”

STEVE MILLOY
FOUNDER, JUNKSCIENCE.COM

Expanding Oil Recovery Credit

A third Republican climate bill, the Enhanced Carbon [Di]-Oxide Sequestration Tax Credit Act of 2020, would increase and make permanent a tax credit already given to oil companies for pumping compressed carbon dioxide underground to enhance oil recovery (EOR).

Oil producers have used carbon dioxide for decades to increase production from and extend the life of marginal wells. It is unclear whether the carbon dioxide pumped underground through these operations is permanently sequestered.

The bill would increase the tax credit for carbon dioxide captured from the air by 25 percent, resulting in a credit of \$43.75 per ton when used for enhanced oil and gas recovery.

This is bill is an unnecessary gift to the oil industry, Milloy says.

“EOR often makes economic sense, with the oil produced covering the additional cost of using carbon dioxide to recover it,” Milloy said. “Operators already receive a federal tax credit of \$35 per ton when they use this recovery method, thus there is no need, and certainly no climate justification, for additional support.

“Indeed, increased use of EOR will, on balance, increase carbon dioxide levels, because the additional oil recovered, when it is burned, will produce more carbon dioxide than the amount pumped underground to enhance well production,” Milloy said.

No Electoral Gain

Past Republican efforts to push climate policies have not paid them dividends at the ballot box, says James Taylor, director of the Arthur B. Robinson Center for Climate and Environmental Policy at The Heartland Institute, which publishes *Environment & Climate News*.

“Before the 2018 midterm elections, 43 Republicans were part of the Congressional Climate Solutions Caucus (CSC), a bipartisan coalition of federal legislators that supported climate change reduction policies such as increased taxes on electricity, gas, and oil, and increased regulation of the coal, natural gas, and oil industries,” Taylor said. “After the votes had been counted, more than half of Republican members of the CSC had lost their seats.

“It is completely unsurprising less than half the Republican CSC members were returned to Congress in 2019,” Taylor said. “The lesson Republicans should have taken away from those results, but evidently haven’t, is that Republicans attempting to appease the Left will never gain enough support from the Left to offset the depressing impact their betrayal of conservative values has upon the Republican voter base.”

‘Will Not Endorse’

As if confirming Taylor’s argument, the political action committee Club for Growth announced in a press release it

would not support any candidate who proposes or endorses climate policies that grow government intervention in energy markets through regulations, subsidies, or taxes.

“Club for Growth PAC will not endorse any candidate that supports the liberal environmental policies being pushed by [House minority] leader [Rep.] McCarthy [R-CA] and Senator [Mitt] Romney [R-UT],” said David McIntosh, president of Club for Growth PAC. “Besides hurting our economy, these measures will not make a single environmentalist vote for a Republican and only alienate conservatives across the country.

“America’s economy is booming because of the tax cuts and deregulation under President Trump, and Republicans should consider free-market legislation to increase growth as opposed to trying to get the political support of green socialists,” McIntosh said.

H. Sterling Burnett, Ph.D. (hsburnett@heartland.org) is a research fellow at The Heartland Institute.

INTERNET INFO

James Taylor, *The Congressional Climate Solutions Caucus: A Leftist Betrayal of Republican Voters*, Policy Brief, The Heartland Institute, October 4, 2018: <https://www.heartland.org/publications-resources/publications/the-congressional-climate-solutions-caucus-a-leftist-betrayal-of-republican-voters>

New England Coal Plant Stays Online

Merrimack Station,
New England



By Duggan Flanakin

The largest remaining coal-fueled power plant in New England, New Hampshire's 482-megawatt (Mw) Merrimack Station, will remain in operation through at least May 2024, per an agreement with ISO New England, the company that operates the transmission system and purchases and sells power across Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

Granite Shore Power, Merrimack's owner, won ISO New England's auction to provide supplementary power during periods of peak demand. The company will receive \$676,000 per month from June 2023 through May 2024, a total of \$8.1 million, in return for being prepared to generate power at any time the need arises.

Granite Shore's 155 Mw Schiller Station power plant, with separate power generating units capable of burning biomass and coal or oil, failed to win a contract in ISO New England's most recent capacity auction.

Securing the Power Supply

ISO New England conducts an auction each year to ensure enough power plants will be operational three years hence to meet projected demand. Electric-power-generating plants within the ISO New England's service area compete to secure capacity payments at the auction.

Capacity payments are made regardless of whether emergency electricity is needed and are paid in addition to any per-kilowatt income a power plant receives for its normal generation of power.

The fact that the Merrimack Station won the most recent capacity auction is good news for the town of Bow, New Hampshire, which receives substantial property tax revenues from the power plant.

Circumstances Favored Coal

Merrimack's continued operations buck the trend of coal power plant closures in many areas of the country due to federal and state support for renewable power supplies and price competition from natural gas power plants.

New England faces potential power shortfalls that would have been worse without Merrimack's continued operation, because environmental groups have persuaded state governments and local federal legislators to prevent the expansion of natural gas pipelines and power plants in the region.

For instance, in 2016 Kinder Morgan, one of the largest energy infrastructure companies in North America, cancelled a proposed \$3.3 billion Northeast Energy Direct pipeline to provide natural gas to utilities and power generators in three New England states, in the face of strong opposition from environmental groups, including ongoing regulatory battles and legal challenges. With some cities in the region announcing they would no longer allow new natural gas hookups, and Sen. Edward Markey (D-MA) and presidential aspirant Sen. Bernie Sanders (I-VT) cosponsoring the Green New Deal, which would make it nearly impossible for natural gas power plants to operate, utility companies in the region were unwilling to commit to purchasing natural gas from the pipeline. Lacking committed customers for

its natural gas, Kinder Morgan jettisoned its pipeline plans.

With no new coal or natural gas capacity, and with ever-increasing renewable power mandates, New England today has the highest electricity prices of any region in the "Lower 48" states, averaging 20.8 cents per kilowatt-hour (kwh) in January 2020, compared with the national average of 13.4 cents per kwh.

Politics Undermining Supply

A January 2018 ISO New England report, "Operational Full-Security Analysis," found fuel security risk—the possibility that power plants won't have or be able to get the fuel they need to run, particularly in winter—is the foremost challenge to power grid reliability in New England. That report was issued in the middle of the harsh winter of 2017-18, when the operator warned of a serious risk of rolling blackouts.

During that "unexpected" cold snap, much of the natural gas that powers regional electric generating plants was diverted to heat homes. Electricity providers had to turn to older coal- and oil-fueled power plants, which were burning fuel at rates that led officials to fear their fuel tanks might run dry.

Absent new natural gas capacity, New England lacks sufficient capacity to provide reliable 24/7 energy during peak demand periods. The region must rely on coal and even expensive—and relatively dirty—oil power plants during peak load scenarios, says Andrew Kline, president of the Joshua Bartlett Center for Public Policy.

"Some of New England has switched

"Intermittent wind and dilute solar energy are not suitable power sources for modern society, which requires electricity to be always available."

**STEVE GOREMAN
EXECUTIVE DIRECTOR
CLIMATE SCIENCE COALITION OF
AMERICA**

from coal and oil to cleaner-burning natural gas, but a shortage of pipeline infrastructure puts the region at risk of blackouts during periods of peak demand, which is why the grid operator insists a few strategic plants be maintained as backup power sources," Kline said. "Coal is not necessarily the preferable fuel source for peaking power plants, but solar and wind can't be turned on by flipping a switch, whereas coal-fueled plants can.

"Nuclear is reliable, too, but it's not politically fashionable in New England, so coal is the default backup source," Kline said.

'Misguided Policy'

The New England states jointly share the blame for their energy supply and cost problems, says Steve Goreham, executive director of the Climate Science Coalition of America.

"The six New England states jointly adopted a policy of 'strategic electrification,' seeking to replace natural gas and propane appliances with electric appliances and heat pumps, all to be powered by electricity almost entirely from wind and solar systems, yet heat pumps perform poorly during New England winters, and the sun often doesn't shine," Goreham said. "This misguided policy has brought about a shortfall in gas pipeline capacity, ultimately leaving New England facing critical energy shortages.

"State government efforts to block gas pipelines have raised electricity costs for New England residents," Goreham said. "Intermittent wind and dilute solar energy are not suitable power sources for modern society, which requires electricity to be always available. Government officials should rethink unrealistic renewable energy mandates."

Duggan Flanakin (dflanakin@gmail.com) writes from Austin, Texas.

Oil Production on Federal Lands Reaches Record High

Continued from page 1

fracking revolution and the advances in horizontal drilling and seismic imaging that have enabled developers to extract oil and natural gas from shale formations cost-effectively, as well as the Trump administration's deregulatory policies.

The Trump administration has cut the time it takes the Bureau of Land Management (BLM) to approve drilling applications by more than half, from 257 days in 2016, the last year of the Obama administration, to 108 days in 2019. Combined, these factors have resulted in the United States becoming the world's largest producer of oil and natural gas.

The Trump administration's changes to oil and gas regulations have created an attractive environment for developers, Casey Hammond, acting Assistant Secretary of Interior, told the *Associated Press*.

"You have to create an environment where folks want to bid on leases and



then go develop them," Hammond said. "One thing we can do as regulators is give people some assurances we're going to work through the process in a fair and efficient way."

Touting the results of the administration's actions in a September 2019 speech, Trump said, "The United States is now the No. 1 energy producer anywhere in the world, by far. For the first time in more than 60 years, this just happened: We are now a net exporter of American natural gas. And we are ending decades of foreign energy reliance to unleash the blessings of American energy independence."

Transforming Energy Calculations

Royalties collected by the federal government from oil production on federal lands rose by 21 percent from 2018 to 2019, to \$7.5 billion. Approximately half that money goes back to the states in which the oil was produced.

The Trump administration's energy policies have helped the U.S. economy and increased federal revenues, says Dan Kish, a senior fellow at the Institute for Energy Research.

"President Trump's energy policies have made us richer, stronger, and much less dependent on others for affordable energy America has in

abundance," Kish said. "In addition to turning America into the top oil and gas producer in the world, it has added new wealth to our Treasury."

"Last year, revenues from federal lands were 98 percent higher than revenues in the last year of President Obama," Kish said.

The emergence of the United States as a global energy powerhouse has transformed the global political calculus regarding energy supplies, says Craig Rucker, president of the Committee for a Constructive Tomorrow (CFACT).

"OPEC is still very much with us, and it functions like the cartel it has always been, but thanks to the Trump administration's energy policies, it cannot call the shots on as it did in days of yore," Rucker said.

Bonner R. Cohen, Ph.D. (bcohen@nationalcenter.org) is a senior fellow at the National Center for Public Policy Research and a senior policy analyst with CFACT.

Socialism Is Evil

The Moral Case
Against Marx's
Radical Dream

"Immunize your
kids and grandkids
early and often
- send them to
StoppingSocialism.com"

- Michelle Malkin



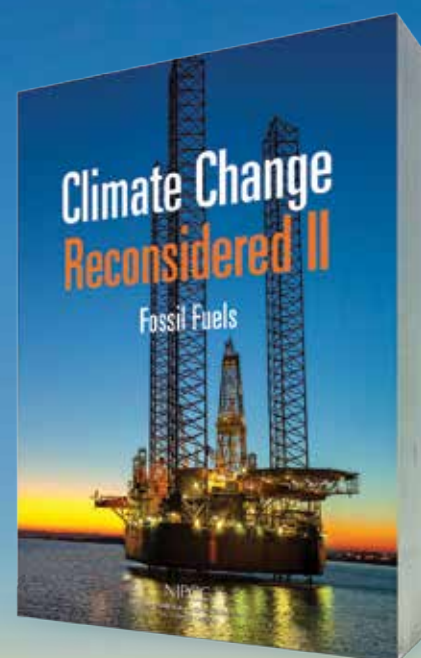
Go to StoppingSocialism.com

Get Your Copy Today! \$0.99 on Kindle \$5.99 on Amazon.com

Get your copy of Climate Change Reconsidered II: Fossil Fuels

Climate Change Reconsidered II: Fossil Fuels is the latest volume in the *Climate Change Reconsidered* series – now 5,000 pages of peer-reviewed science that shows humans are NOT causing a climate crisis.

Climate Change
Reconsidered II:
Fossil Fuels
ISBN-13: 978-1-934791-45-5
ISBN-10: 1-934791-45-81



THE HEARTLAND INSTITUTE
HEARTLAND.ORG

Tri-State Generation Announces Coal Closures, Renewable Construction in Colorado, New Mexico

By Kevin Stone

A co-op wholesale power supplier in Colorado and New Mexico announced a major shift from coal-fueled power plants to wind and solar industrial facilities in its electric power generation operations.

The power supplier, Tri-State Generation and Transmission Association, serves 43 rural electric cooperatives in Colorado, Nebraska, New Mexico, and Wyoming.

In a January 9 press release, Tri-State said it would close its only remaining New Mexico coal-fired power plant, the Escalante Station, by the end of 2020 and close its remaining Colorado coal plants and the Colowyo coal mine in northwest Colorado by 2030. Combined with Tri-State's closure of the Nucla coal power plant in 2019, those closures represent 1,001 megawatts (Mw) of coal-fueled electric power generation being taken offline, approximately 53 percent of the co-op's 1,884 Mw total coal power capacity.

Tri-State said the closures will cost approximately 600 power plant and mine employees their jobs.

Solar, Wind Replacement

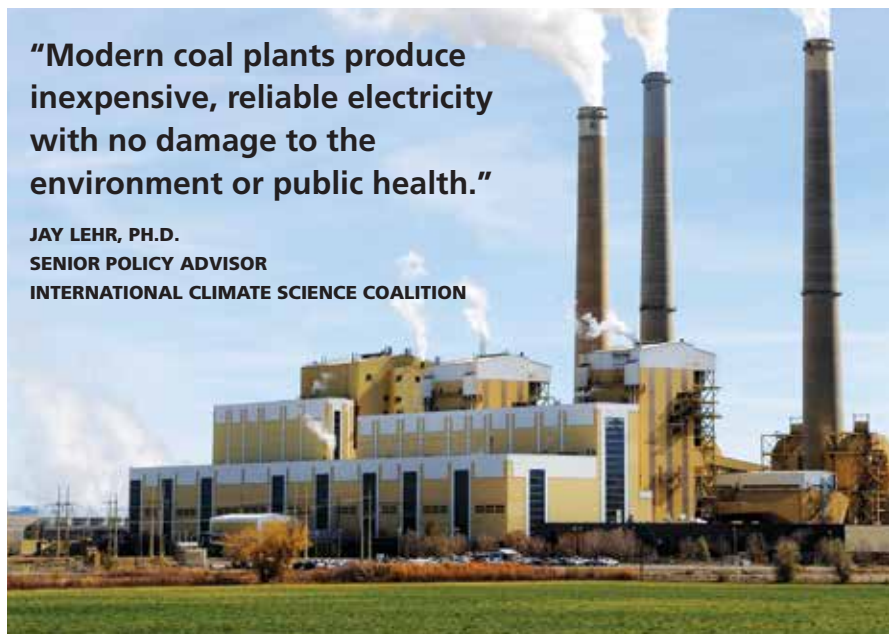
Tri-State announced the co-op would replace its coal-fueled electric power capacity with 304 Mw of new wind projects and 715 Mw of new solar projects built within the service territories of seven of its member organizations in Colorado and New Mexico. When the new solar and wind industrial facilities are combined with the co-op's existing hydroelectric, solar, and wind capacity, renewable power will account for approximately 50 percent of Tri-State's total electric power generating capacity by 2024.

At a press conference at the state capitol in Denver, with Colorado Gov. Jared Polis by his side, Tri-State's CEO Duane Highley said the steep decline in solar and wind power costs over the past decade means the transition away from coal will save its member electric power associations money.

Tri-State, however, provided no estimate of how much its members would save from the switch from coal to renewables, or how much the transition might cost its member associations before they start seeing savings.

"Modern coal plants produce inexpensive, reliable electricity with no damage to the environment or public health."

JAY LEHR, PH.D.
SENIOR POLICY ADVISOR
INTERNATIONAL CLIMATE SCIENCE COALITION



Pressure to Change

Tri-State's actions came in response to political pressure and demands from its member electric power associations to incorporate more renewable energy into its power-generating portfolio.

At a January 22 meeting of Colorado's Public Utilities Commission (PUC), the PUC said Tri-State must develop a plan to meet Colorado's 2019 law requiring carbon dioxide emissions be reduced 26 percent below 2005 levels by 2025, 50 percent by 2030, and 90 percent by 2050.

Tri-State's actions also represent a response to demands by some of its member electric power associations to cut emissions. In recent years, Colorado's Delta-Montrose Electric Association and New Mexico's Kit Carson Electric Cooperative cut ties with Tri-State, saying it was moving too slowly into renewable power generation. In 2019, Tri-State blocked efforts by two other member associations in Colorado—United and La Plata—to leave the co-op. Tri-State claims its plan will result in a 70 percent reduction of carbon dioxide emissions from its operations by 2030.

Misleading, Missing Information

Tri-State has not been forthcoming about the economic impact of its power plan, says Colorado state Sen. John Cooke (R-Greely).

"Shutting down a coal plant to go to

renewable energy will increase costs dramatically, and ratepayers will suffer," said Cooke. "We haven't been told the full cost of these impacts or whether the replacement jobs in renewable energy will have the same economic benefits for these towns."

'Vested Financial Interest'

Utilities benefit financially when they shut down existing power plants and replace them with newly constructed renewables, says James Taylor, director of the Arthur B. Robinson Center for Climate and Environmental Policy at The Heartland Institute, which publishes *Environment & Climate News*.

"Replacing existing electricity generation with new wind and solar power more than doubles electricity generation costs, which is the reason governments need to entice people to buy wind and solar with massive subsidies or coerce them into doing so with laws mandating wind and solar generation," Taylor said. "Despite the higher costs, utilities have a vested financial interest in shutting down existing power plants and replacing them with wind and solar power."

"They get to charge ratepayers for the cost of building and installing expensive wind and solar equipment, while building a nice profit for themselves into the equation," Taylor said. "The ultimate loser is the consumer, who gets stuck with higher electricity

bills."

Taylor says Colorado ratepayers are already experiencing higher prices due to the state's renewable power mandates.

"Since 2007, the last year before Colorado enacted a renewable power mandate, Colorado electricity prices have risen twice as fast as the national average," Taylor said. "Colorado electricity prices have risen 29 percent, versus only 15 percent for the nation as a whole."

"Colorado consumers will suffer even more as governments and utilities, at the behest of environmental radicals, force additional transitions to wind and solar power in the vain attempt to prevent climate change," Taylor said.

'No Problems with Coal'

The current generation of coal plants produces reliable, safe energy, says Jay Lehr, Ph.D., a senior policy advisor to the International Climate Science Coalition.

"There is no question that when you prematurely close perfectly good coal plants in order to promote green energy you have no choice but to raise the price of energy to your customers, whether the replacement source is natural gas, wind, or solar," Lehr said. "Companies appeal to their customers' desire to be green when in fact there are no problems with coal, and many issues with wind and solar."

"Modern coal plants produce inexpensive, reliable electricity with no damage to the environment or public health," Lehr said. "Customers are being misled about the costs and environmental necessity of transitioning to other power sources."

Kevin Stone (kevin.s.stone@gmail.com) writes from Dallas, Texas.

Official Connections:

Colorado state Sen. John Cooke (R-Greely): <https://leg.colorado.gov/legislators/john-cooke>; <https://cookeforcoloradosd13.com/about-john/contact-john/>

MN Regulators Approve Environmental Review for Oil Pipeline Replacement

By Bonner R. Cohen

The Minnesota Public Utility Commission (PUC) approved the environmental review of a proposed replacement for Enbridge Energy's aging, corroded, and cracking Line 3 crude oil pipeline.

The PUC's February 3 decisions brings the long-sought replacement line one step closer to reality by approving a court-ordered environmental review by Enbridge and reinstating two key regulatory approvals the company needs to proceed with the project.

Big Pipeline, Court Delay

Calgary, Canada-based Enbridge plans to spend \$2.6 billion on the new pipeline to run from Alberta's oil fields through northeastern North Dakota and across northern Minnesota to Enbridge's terminal in Superior, Wisconsin, across the St. Louis River from Duluth. It would replace the current pipeline, which was built in the 1960s and has deteriorated to the point where it operates at 51 percent of its capacity. The new pipeline would have the capacity

to transport twice as much oil as the current pipeline.

The PUC initially approved Enbridge's environmental review of the project in March 2018, but environmental groups filed a legal challenge to the review and the Minnesota Court of Appeals sent it back to the commission, saying the document inadequately addressed the potential risks of a spill in the Lake Superior watershed.

The Minnesota Department of Commerce subsequently conducted additional modeling and concluded there was little evidence any spill from Enbridge's proposed replacement pipeline could reach the lake. With this assurance in hand, PUC approved Enbridge's revised plan.

Additional Permits Needed

PUC's approval of Enbridge's environmental impact statement clears the way for the company to seek the remaining federal and state permits required before construction can proceed.

Those permits would come from the Minnesota Pollution Control Agency,

"Dismantling America's industrial base in the name of saving the planet is a fool's errand."

CRAIG RUCKER
PRESIDENT, COMMITTEE FOR A
CONSTRUCTIVE TOMORROW

cy, the state Department of Natural Resources, and the U.S. Army Corps of Engineers.

Enbridge hopes to begin work on the pipeline later this year. The pipeline would be one of the largest construction projects in recent Minnesota history. Enbridge says the pipeline will produce thousands of construction jobs and will be safer than the aging one currently in use.

"After nearly five years and thousands of hours of study, environmental review, and regulatory process, it's good to see Line 3 Replacement Project move forward," the company said in a statement. "It is a \$2.6 billion investment in the state's critical energy infrastructure,

structure that will better protect communities and the environment."

'Significant Environmental ... Benefits'

The replacement pipeline will reduce the risks inherent to the delivery of valuable oil supplies, says Craig Rucker, president of the Committee for a Constructive Tomorrow (CFACT).

"Pipelines have long been the target of environmental activists who object to any real improvements in U.S. energy infrastructure," Rucker said. "In this case, replacing an outdated pipeline with one that is state-of-the-art would have significant environmental and public safety benefits.

"The alternative is to shut down the current pipeline and replace it with nothing," Rucker said. "Dismantling America's industrial base in the name of saving the planet is a fool's errand."

Bonner R. Cohen, Ph.D. (bcohen@nationalcenter.org) is a senior fellow at the National Center for Public Policy Research and a senior policy analyst with CFACT.



NATIONAL
ASSOCIATION
of SCHOLARS

Climate Hysteria? We told you so.

Read more at nas.org/sustainability.



Virginia Passes Major Renewable Energy Legislation

By Bonner R. Cohen

The newly minted Democratic majority legislature in Virginia narrowly passed sweeping legislation designed to overhaul how the state's utilities generate electricity, sending the bill on to Gov. Ralph Northam for his expected signature.

Multiple Mandates

The Clean Economy Act (CEA), passed March 6, essentially codifies the 100 percent carbon-dioxide-free energy goals outlined in an executive order from Gov. Ralph Northam in September 2019. It also strips the state's utility regulators of much of their oversight authority over the regulation and approval of electric utilities and puts Virginia on the path to 100 percent renewable energy by 2050.

CEA "directs the [State Air Pollution Control Board] to adopt regulations establishing a carbon dioxide cap-and-trade program to limit and reduce the total carbon dioxide emissions released by electric generation facilities, which regulations shall comply with the Regional Greenhouse Gas Initiative [RGGI] model rule," the legislation states.

RGGI is a cooperative agreement between Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont to cap and reduce carbon dioxide emissions from the power sector through regulation.

Preapproval Requirements

Aside from taking Virginia into RGGI, CEA would restrict the Virginia State Corporation Commission's (SCC) traditional authority to approve new power generation facilities, barring it from approving "any investor-owned utility to own, operate, or construct any electric generating unit that emits carbon [dioxide] as a byproduct of combusting fuel to generate electricity" until the state legislature has had a chance to review a report concerning carbon dioxide emissions being undertaken by Virginia's Air Pollution Control Board.

The bill also requires utilities and the SCC to consider the social cost of carbon when reviewing the need for a new generation facility.

As part of the effort to meet the target of producing all the state's electricity from sources that emit no carbon

"Virginians will ultimately be saddled with the environmental and financial costs of the governor's poorly conceived 'clean power' act for years to come."

LYNN TAYLOR

PRESIDENT, VIRGINIA INSTITUTE FOR PUBLIC POLICY



dioxide during operation by 2050, the legislation sets targets for energy storage and offshore wind. The law requires the SCC to approve a minimum of 2.4 gigawatts (Gw) of new energy storage projects by 2035 and set interim targets for storage between now and then. In addition, CEA directs the SCC to expedite the approval of 5.2 Gw of offshore wind by the end of 2034.

The CEA also requires utilities to undertake programs, overseen by the SCC, to reduce the use of electricity by Virginians through conservation measures and programs. Under the bill, utilities should reduce their customers' electricity use 5 percent below current levels by 2025 and maintain programs to continue reducing use thereafter.

Concerns Energy Costs

Before CEA's final adoption, state officials warned about the cost of its renewable energy requirements to ratepayers, because offshore wind and battery storage are more expensive than traditional fossil fuel power plants or even other forms of renewable energy.

An analysis of a preliminary version of the bill conducted by the SCC concluded the typical residential household would likely see an increase of \$23.30 per month on its monthly electric power bills between 2027 and 2030, solely attributable to the bill's renewable energy requirements.

In testimony before a state Senate committee developing the bill, Attorney General Mark Herring's (D) office expressed reservations the bill

expressly calls for eliminating the SCC's role in determining whether the "enormous costs" of implementing the bill's provisions are reasonable and prudent and therefore can be passed on to ratepayers.

"In our view, the legislation will prevent the regulator from being able to work to accomplish the Commonwealth's clean-energy goals in a manner consistent with ratepayer protections," Meade Browder, a senior assistant attorney general, testified before the Senate.

Unnecessary, Premature Closures

CEA will shutter valuable power facilities with years of useful operating life remaining, all for no environmental gain, says Paul Driessen, a senior policy analyst with the Committee for a Constructive Tomorrow (CFACT).

"The Virginia bill would mean tearing down numerous generating stations that have many productive years remaining, and replacing them with hundreds of gargantuan offshore wind turbines, solar installations totaling several times the land area of Washington, D.C., and tens of thousands of Tesla-style backup batteries," Driessen said. "The price of electricity for air conditioning, computing, cooking, heating, lighting, recharging cell phones and other mobile devices, refrigeration, and other costs will skyrocket for businesses, charitable organizations, churches, families, factories, government agencies, hospitals, and schools.

"The renewable energy technologies would require millions of tons of anti-

mony, carbon fiberglass composites, concrete, copper, rare-earth elements, steel, and other raw materials mined on the cheap overseas with little attention to U.S. laws, regulations, or ethical standards for child labor, workplace safety, fair wages, air and water pollution, wildlife preservation, or mined land reclamation," Driessen said.

'Unregulated Corporate Protectionism'

Passage of the CEA reverses progress the legislature had been making to defend ratepayers from monopolistic practices, says Lynn Taylor, president of the Virginia Institute for Public Policy.

"This year there have been a number of promising bipartisan efforts within the General Assembly to regain control of the regional energy monopolies in Virginia," Taylor said. "In lieu of reasonable reform, the legislature chose to support unregulated corporate protectionism.

"Virginians will ultimately be saddled with the environmental and financial costs of the governor's poorly conceived 'clean power' act for years to come," Taylor said. "In the long run, a dramatic expansion of nuclear power in Virginia may be the only fragmented solution to serious problems exacerbated by this act."

Bonner R. Cohen, Ph.D. (bcohen@nationalcenter.org) is a senior fellow at the National Center for Public Policy Research and a senior policy analyst with CFACT.

Multiple Renewable Energy Initiatives Vie for Missouri Ballot

By Duggan Flanakin

Missouri voters may decide this November on whether to expand the state's commitment to renewable energy through votes on at least one of three separate initiatives.

The initiatives would build on a 2008 initiative, Proposition C, that created Missouri's existing renewable energy mandate requiring investor-owned utilities in the state to generate or purchase at least 15 percent of their electricity from renewable energy sources by 2021.

Under Proposition C, biomass, hydropower, solar, and wind counted as renewable sources. The initiative included a special carveout for solar power, requiring at least 2 percent of the total must come from solar installations. It also barred utilities from increasing their rates by more than 1 percent per year to pay for the renewables.

The initiative's backers, Renew Missouri, have to gather approximately 160,000 valid signatures, equaling at least 5 percent of the votes cast in the 2016 governor's race, by May 3 to qualify any of the initiatives for the November 2020 ballot.

Anti-Coal Goal

Even with the 2008 renewable energy mandate in place, the U.S. Energy Information Administration reports coal-fueled power plants provided 73 percent of Missouri's net electricity generation in 2018, second to only Texas in total coal used.

Missouri's lone nuclear power plant supplied 13 percent of the state's electricity in 2018, and 500 wind turbines generated just 1,000 megawatts (Mw) of electricity in 2018.

To reduce the use of coal to generate electricity, one initiative would increase Missouri's renewable energy mandate from 15 percent of retail sales in 2021 to 20 percent by 2025 and incrementally increase the required amount of renewable power to 40 percent by 2040. The second and third initiatives would each push the mandate to 20 percent by 2022, with incremental increases to 50 percent by 2040.

Each of the initiatives would eliminate the state's solar rebate program and only allow use of renewable energy credits associated with electricity a utility actually sells to Missouri customers. All three would also increase the solar



energy minimum from 2 percent to 5 percent by 2025. The latter two initiatives require utilities to purchase solar credits for 10 years from customers with solar panels.

Counting the Costs

Research consistently shows residents in states with renewable power mandates pay more on average for electric power than in states without such mandates.

When Missouri State Auditor Nicole Galloway conducted an analysis of the initiatives, her office concluded it could not calculate the effect of increasing the renewable mandate on energy prices, but experience in other states indicates it could increase them significantly.

'Dishonest Bait-and-Switch'

The supposed rate cap has not protected Missouri ratepayers from abnormally high increases in electricity prices, says James Taylor, director of the Arthur B. Robinson Center for Climate and Environmental Policy at The Heartland Institute, which publishes *Environment & Climate News*.

"Missouri electricity prices have risen 21 percent since 2010, the year before the current renewable mandate took effect, which is more than double the national average," Taylor said. "The asserted 'cap' in rate hikes is a dishonest bait-and-switch scheme allowing government bureaucrats to cook the

books and claim phantom 'other factors' are responsible for the rate hikes caused by renewable power mandates.

"The 'cap' merely gives utilities the option of ignoring the mandate during a given year if prices rise more than 1 percent, meaning the present initiatives fail to protect Missouri consumers from future rate hikes due to increased renewable power mandates, just as it failed Missourians in the past," Taylor said.

Taylor says utilities have figured out how to benefit, at the expense of ratepayers, from higher renewable power mandates.

"Utilities have a vested financial interest in building and operating expensive wind and solar power, since they get customers to pay the costs for building and installing expensive wind and solar equipment, while building their own profits into the equation," Taylor said. "The ultimate loser is the consumer, who gets stuck with higher electricity bills.

"If Missouri voters would like to double the price they pay for 40 percent of their electricity, they should vote for the proposed renewable power mandate," Taylor said.

'Energy Sprawl'

Expanding Missouri's renewable energy mandate would increase "energy sprawl" across Missouri's forests and fields, say Paul Driessen, a senior pol-

"Has anyone considered or calculated how many millions of tons of aluminum, carbon-fiberglass composites, cobalt, concrete, copper, lithium, rare-earth metals, steel, and other materials an expanded green mandate would require?"

PAUL DRIESSEN

SENIOR POLICY ADVISOR, COMMITTEE FOR A CONSTRUCTIVE TOMORROW

icy advisor for the Committee For A Constructive Tomorrow.

"Getting just 12,000 megawatts of unreliable, weather-dependent, rated capacity from wind energy would require 4,000 three-Mw turbines, if they worked 24/7/365," Driessen said. "In reality, Missouri would need 16,000 of these turbines, and 117,000 acres of land, to get to 12,000 Mw and charge the necessary battery backup—with still no guarantee they would generate any power on the year's hottest or coldest days."

Driessen says voters should consider exactly what they'll be getting and who will really pay the health and environmental price for increased wind and solar power.

"Has anyone considered or calculated how many millions of tons of aluminum, carbon-fiberglass composites, cobalt, concrete, copper, lithium, rare-earth metals, steel, and other materials an expanded green mandate would require?" Driessen said. "How many billions of tons of soil would be removed and ore would have to be mined, using how many African, Chinese, and South American parents and children working in those mines and processing plants, getting sick and dying from the toxic and radioactive air, water, dust, and mud?"

"Initiative promoters are silent concerning how they'll dispose of the gargantuan amount of trash, some of it potentially toxic, produced when backup batteries, solar panels, and wind turbines break or wear out," Driessen said. "What will they do with 200-foot-long turbine blades that can't be burned or recycled?"

Duggan Flanakin (dflanakin@gmail.com) writes from Austin, Texas.

California Considers Banning Gasoline-Powered Yard Equipment



By Kenneth Artz

California may soon ban gasoline-powered gardening tools such as lawnmowers and leaf blowers statewide, following the lead of approximately 60 California cities that have already banned the use of gas-powered yard equipment.

In an effort to reduce emissions of air pollutants and carbon dioxide, the California Air Resources Board (CARB) is now considering a statewide ban, which would force Californians to give up their gasoline-powered lawnmowers, leaf blowers, and trimmers.

CARB calculates operating a gas-powered lawnmower for an hour produces the same amount of air pollution as driving a Toyota Camry from Los Angeles to Las Vegas.

CARB's goal is to reduce the smog from these machines by 80 percent by 2031.

Ignoring the Downside?

In the rush to regulate, California has not fully considered the effects these regulations will have on consumers or small businesses such as repair shops, says Baruch Feigenbaum, the assistant director of transportation policy at Reason Foundation.

"I haven't seen any cost-benefit analysis or any type of realistic study quantifying what the effects of this regulation would be, and I don't think regulators should impose anything like a statewide ban without considering the negative impacts it will have on average people and the economy," Feigenbaum said.

Raising Consumers', Dealers' Costs

Battery-powered lawn tools are not suitable replacements for gasoline-powered equipment in many instances,

says Christian Reynolds, a sales representative at Buck's Saw Service in Novato, California.

"They're saying that within five years all gas-powered tools would be banned; logically it doesn't make sense," Reynolds said. "With the way batteries are now, maybe they'll be comparable in another five or 10 years, but until then it won't work, because they don't generate enough power.

"In addition, a quality cordless battery-powered leaf blower delivering a good hour-and-a-half of commercial use costs about \$1,400," Reynolds said. "A comparable gas-powered blower only costs about \$350."

For small businesses like the one where Reynolds works, there's also the question of what happens to all the old gas-powered equipment sitting on the showroom floor.

"We repair and sell gas equipment, so we would have to change over to all battery-powered equipment," Reynolds said. "The real question is what would happen to all the tools we have in the shop currently?"

"If this regulation becomes law, we wouldn't be able to do anything with that stuff," Reynolds said.

Sees No Environmental Benefit

California's politicians and bureaucrats seem determined to prove there is no action too petty, no aspect of peoples' lives too small, to dictate and micro-manage in the name of "saving the environment," says Adam Summers, a research fellow at The Independent Institute.

"In addition to violating basic personal freedoms, CARB's proposal, and similar measures adopted or under consideration by city governments, will harm consumers, small businesses, and

workers by forcing them to use more-expensive, less-efficient equipment and more labor-intensive practices, leading to higher prices and lost business," Summers said. "For wealthy residential users, this may be a relatively minor inconvenience, but for many small landscaping business owners and lower-income workers struggling to get by in California's already high-tax and stifling regulatory business climate, this could cost them their livelihoods, all in the pursuit of meeting an arbitrary goal set by bureaucrats that does nothing to substantially improve environmental quality.

"Moreover, forcing a switch from gas-powered to electric landscaping equipment will only place a greater strain on electrical resources, much of which do not come from 'green' sources anyway, thereby counteracting many of the supposed environmental benefits of the policy," Summers said.

Trouble for Lower Incomes

Climate change policies that force people to throw away perfectly good assets create large economic costs, says Wayne Winegarden, a senior fellow at The Pacific Research Institute.

"If this proposal is implemented, families will need to spend their hard-earned money to repurchase tools they already own," Winegarden said. "This imposes large opportunity costs, because instead of repurchasing gardening equipment, these families could have spent this money on entertainment, new clothes, or perhaps saved this money for the future—all possibilities foreclosed by the policy."

In addition, this policy is inherently regressive, hurting the poor the most, Winegarden says.

"An average electric lawn mower

could cost \$200 to \$300 or more," Winegarden said. "Since the batteries typically only last for an hour before recharging is necessary, the expenses could be even higher as families must buy multiple batteries and chargers in order to ensure there is a charged battery ready to run their equipment to finish a job they started.

"Most families do not have an extra \$300 lying around," Winegarden said. "Therefore, the policy will impose a significant financial hardship for many lower-income families,"

Undermining Fuel Savings

Any money saved by not having to buy gasoline to run equipment will be offset by higher electric bills, Winegarden says.

"Not only does California have some of the highest electric utility rates in the nation, many utilities in California, like the Sacramento Municipal Utility District, have introduced higher rates based on time of peak demand, meaning people pay a lot more when you actually want to use the power during daytime, which happens to be when most gardening and lawn care takes place," Winegarden said. "Ultimately, the higher electric bills will be substantial.

"Businesses will suffer too, as many retailers will have inventories of gas-powered equipment, which, if they can't be returned, means the retailer will suffer financial losses on unsaleable inventory," Winegarden said. "Further, businesses established to repair gas-powered gardening equipment will be forced out of business, resulting in job losses and transitional costs for workers."

Kenneth Artz (kennethcharlesartz@gmx.com) writes from Dallas, Texas.

New York State Offers Renewable Energy Developers New Financial Incentives, Security

By Bonner R. Cohen

In an ongoing effort to expand the use of solar and wind power in New York State, the N.Y. Public Service Commission (PSC) ordered the New York State Energy Research and Development Authority (NYSERDA) to offer new financial options beyond traditional fixed-price contracts when soliciting bids to build renewable energy projects.

Easing Funding Access

In addition to the revenue they receive from selling power and payments for guaranteeing a minimum amount of energy capacity through capacity market auctions, renewable energy developers in New York can also earn money from the Renewable Energy Credits (RECs) a project generates.

Unlike energy and capacity market prices, which can rise or fall, currently, REC prices are fixed when developers bid for projects through NYSERDA, the agency responsible for procuring RECs.

Under the PSC's new order, the REC price would be indexed to rise or fall depending on the direction of prices in the energy and capacity markets. Tying REC prices to price fluctuations in the energy market is intended to ensure a consistent minimum flow of revenue to prevent projects from running short of funds.

PSC says if renewable energy projects face reduced financial risks, they should also enjoy lower financing costs, thus reducing their ultimate price tag.

NYSERDA estimates the new REC program would save renewable power developers approximately \$233 million per year through 2030, or about \$4.6 billion over the life of the contracts.

"NYSERDA indicated that using an Index REC would likely expand the pool of bidders in future procurements, providing a boost to competition and likely additional downward pricing pressure on REC bids," PSC stated in a January 17 press release announcing the order.

"[The PSC's] decision today will benefit renewable energy developers by reducing their risks while also lowering customer costs," PSC Chairman John B. Rhodes stated in the commission's press release.



Ravenswood generating station seen past the Queensboro bridge

Piling on Renewable Support

PSC's action arrived on the heels of Democratic Gov. Andrew Cuomo's announcement in his January 8 State of the State Address that NYSERDA would award competitive contracts to 21 large-scale solar, power storage, and wind projects across upstate New York to provide more than 1,000 megawatts (Mw) of new electric power capacity.

This comes in addition to 2,700 Mw of battery storage, solar, and wind capacity brought online in the state since 2011, and another 7,000 Mw of renewable energy already being developed, in line with the state's 2019 Climate Leadership and Community Protection Act mandating all the electricity that utilities deliver in New York by 2040 come from sources that emit no carbon dioxide during power generation.

Cuomo has also been instrumental in blocking the construction of new natural-gas pipelines in New York and issued a ban in 2015 on fracking in the hydrocarbon-rich Marcellus shale underlying the state's economically depressed Southern Tier.

Jointly, these actions underscore the Democrat Party-controlled state government's desire to expand the use of renewable energy and end the use of fossil fuels.

Efficiency Targets

Also on January 17, PSC directed state utilities to spend nearly an additional \$2 billion to support energy efficiency initiatives through 2025, including \$893 million for electric energy efficiency programs and upgrades, \$553 million for natural gas efficiency improvements,

and \$454 million on heat pump installation.

"[PSC] has approved an ambitious set of energy efficiency and heat pump targets to dramatically reduce energy consumption in New York," the commission's press release said, adding it "reauthorized funding to support current levels of energy efficiency activities through 2025 totaling \$1.3 billion, meaning today's decision will result in over \$3 billion in investor-owned utility investments in energy-efficiency and building electrification through 2025."

Cuomo's 'Emergency Action'

The Cuomo administration does not plan on allowing objections from local communities to stand in the way of his vision for a New York covered in wind turbines and solar panels, says John Droz, founder of the Alliance for Wise Energy Decisions.

"New York is a Home Rule State where communities have the authority to establish their own regulations for siting green energy developments, and many have taken full advantage of that right," Droz said. "Local communities and municipalities haven't been keen on giant wind and solar megastuctures in their midst."

"To end local resistance, the Cuomo administration in February proposed an 'emergency action' using the state's Byzantine budget process to create an Office of Renewable Energy Siting, which would have the power to fast-track the approval of wind and solar projects through the acquisition of the land needed, build the necessary infrastructure, including transmission lines,

"New York leads the nation in making decisions that work against the best interest of the population, including outlawing hydraulic fracturing of the state's vast natural gas resources, even though fracking has delivered great economic benefits to the neighbor state of Pennsylvania, and closing their very successful nuclear power plant."

JAY LEHR
SENIOR POLICY ANALYST
INTERNATIONAL CLIMATE SCIENCE
COALITION

and give it to the developer," Droz said. "None of the governor's actions will have any impact on the climate, but they will raise energy costs for New Yorkers, stifle economic growth, and further burden communities in Upstate New York."

'Voting with Their Feet'

New York's anti-energy policies are encouraging an exodus out of the state, says Jay Lehr, a senior policy analyst for the International Climate Science Coalition.

"New York leads the nation in making decisions that work against the best interest of the population, including outlawing hydraulic fracturing of the state's vast natural gas resources, even though fracking has delivered great economic benefits to the neighbor state of Pennsylvania, and closing their very successful nuclear power plant," Lehr said. "New Yorkers should recognize wind and solar power would go away without taxpayer subsidies."

"New Yorkers are already voting with their feet and leaving the state for friendlier, less-expensive confines elsewhere," Lehr said.

Bonner R. Cohen, Ph.D. (bcohen@nationalcenter.org) is a senior fellow at the National Center for Public Policy Research and a senior policy analyst with the Committee for a Constructive Tomorrow (CFACT).

Are you tired of being
lectured, mocked and lied to by
the mainstream media?



Join the more than 7 million readers who turn to The Washington Times.

**Get 1 year of unlimited digital access to
The Washington Times for just \$69.95 and arm
yourself with the facts.**

Real. Trusted. News.

Your subscription will also include our digital version of the daily
paper delivered to your email, every weekday morning, with
breaking news on the issues that affect the future of our nation.

The Washington Times

Reliable Reporting. The Right Opinion.

washingtontimes.com/heartland

Partners in Freedom



Editor's note: Each month, Environment & Climate News will profile a national and a state-based public policy organization working to advance freedom in the arena of energy and environmental policy. *The Heartland Institute, which publishes Environment & Climate News, is a national research and educational policy organization focused on free-market solutions in all 50 states. Because worthy causes are never achieved single-handedly, we devote this space to share the good work of our allies in this effort.*

Pacific Research Institute

The Pacific Research Institute (PRI) is a nonprofit organization based in San Francisco, California with a mission of championing freedom, opportunity, and personal responsibility for all individuals by advancing free-market policy solutions that promote a free economy, limited government, and private initiative. PRI was founded in 1979 by Sir Antony Fisher and San Francisco businessman James North to promote the vision of a free and civil society where individuals can achieve their full potential.

PRI pursues this vision through community outreach, debates, events, independent research, invited legislative testimony, legal briefs, media commentaries, publications, speeches, and videos, and by working with recognized policy experts throughout its program areas, including its Center for the Environment.

Markets Promote the Environment

PRI's Center for the Environment researches the dramatic long-term trend toward a cleaner, healthier environment and promotes the catalysts for abundant resources and environmental quality: property rights, local action, markets, and private initiative.

The center highlights the true costs of anti-growth energy policies, especially on consumers. PRI has shown policies such as cap-and-trade regulations, efficiency standards, electric vehicle subsidies, motor vehicle and renewable fuel standards, renewable portfolio mandates, and restrictions on fossil fuel production impose large economic costs. Higher electricity and fuel costs increase the cost of living for families and households. Such costs are particularly burdensome on lower-income families, who can least afford these additional expenses.



Environment, Wealth, and Poverty

PRI's Center for the Environment published two major studies in 2018, each of which drew statewide and national media attention.

In *Costly Subsidies for the Rich*, PRI Senior Fellow Wayne Winegarden analyzed the impact of taxpayer-funded electric car subsidies. His research found 79 percent of the subsidies were claimed by those making more than \$100,000 per year. Citing Winegarden's research, there is a renewed effort in Congress to eliminate these giveaways to the wealthy.

In December 2018, PRI released *Legislating Energy Poverty*, a case study showing how the big-government approach to fighting climate change taken by California and New York hits working-class and minority communities the hardest.

According to a 2011 survey, 52 percent of respondents said their energy bills were harder to afford than in the previous year, and the number of households receiving energy assistance from the federal government remained 40 percent higher in 2014 than it was before the recession of 2007-2008.

The study made it clear middle-income and low-income households can ill afford the costs California-style energy policies inflict on the economy.

PRI is committed to educating the public and policymakers on the high economic costs Californians bear because of the state's misguided energy and environmental policies and demonstrating why other states should not follow California's lead by adopting similar policies.

Texas Public Policy Foundation

The Texas Public Policy Foundation (TPPF) was founded in 1989 to influence policymakers to support liberty, personal responsibility, and free enterprise. TPPF has been a leading voice on behalf of freedom in the Texas state capitol and, in recent years, nationwide.

TPPF is perhaps best known outside the Lone Star State for its criminal justice reform initiative, Right on Crime, which was a driving force behind the bipartisan First Step Act. TPPF saw that model could be replicated in other policy arenas, including one in particular: energy.

Life:Powered: Energy Is Vital

If any issue needs principled, policy-focused national leadership, it is energy.

TPPF has long noted the criticality of affordable, reliable energy to Texas' economic success and promoted market solutions to energy problems in the state.

With the fledgling Life:Powered initiative, TPPF, one of the country's largest think tanks, expands this message to the national stage, explaining and exploring how fossil fuels—coal, natural gas, and oil—are essential to modern life.

In the era of the Green New Deal, many Americans have forgotten just how critical affordable, reliable energy is to their daily lives, and how instrumental it could be in lifting billions around the world from poverty and oppression.

Our national conversation about energy and the environment is increasingly tense and unproductive, based tenuously on doomsday prognostications rather than sound science and economics. High school climate change protests get more news



coverage than issues truly deserving our attention, and the energy policy decisions being made today will have generations-long ramifications, for better or worse.

Thus, Life:Powered was born to "raise America's energy IQ": to inform policymakers and the public about our energy resources and policies that promote human flourishing. The project has quickly transformed from a scrappy startup into a national energy powerhouse, and it's still growing.

'Opportunities to Educate'

There's no shortage of opportunities to educate. Most people don't realize the vast majority of our energy comes from fossil fuels and has for decades, even as "renewable" has become a political buzzword. They're also shocked to learn the United States is leading the world in clean air.

Energy isn't a luxury, and it doesn't just power our cars, our lights, and our smartphones. Energy powers life.

Despite the doomsday narrative perpetuated in the media, our world is getting dramatically better, thanks to affordable, reliable energy and the ideals of liberty and prosperity born at our nation's founding.

Life:Powered capitalizes on opportunities to shift the conversation toward the human benefits of energy through an education initiative placing unbiased energy curriculum in public schools, building relationships with D.C. movers and shakers, exceptional research, professional-quality video production, and traditional and social media.

U.S. Dept. of Energy Approves Four New Liquefied Natural Gas Projects in TX

By Kenneth Artz

The U.S. Department of Energy (DOE) approved four liquefied natural gas (LNG) export projects for construction on the Texas Gulf Coast in February.

The DOE's permits will allow the four terminals combined to ship 47 million metric tons per year of LNG to countries currently without free-trade agreements with the United States, when the facilities become fully operational.

The DOE authorized Exelon's proposed Annova LNG export terminal and NextDecade's Rio Grande LNG and Texas LNG export terminals, all to be located at the Port of Brownsville, as well as an expansion of Cheniere Energy's existing Corpus Christi LNG export terminal.

Reducing Russian Influence

In addition to being a boon for consumers and producers and creating new jobs in the region, the four new Texas LNG projects will boost America's geopolitical influence overseas, says Merrill Matthews Jr., Ph.D., a resident scholar at the Institute for Policy Innovation.

"President Trump has criticized German Chancellor Angela Merkel for Germany's role in facilitating Russia's Nord Stream 2 gas pipeline project allowing Russia to increase exports of natural gas to Europe and thus exert greater influence on European public policies," Matthews said. "The problem is Europe needs a dependable source of natural gas and presently the United States does not have sufficient LNG terminals to export natural gas to Europe.

"With these new terminals coming on line, and with the United States awash in natural gas, we will soon have the ability to help meet other countries' natural gas needs, becoming a reliable supplier, undermining Russia's geopolitical meddling in the process," Matthews said.

Opening New Markets

The key point is that these LNG terminals are creating a global market for U.S. natural gas, Matthews says.

"Even if an economic recession reduces U.S. demand for natural gas, the ability to sell gas and ship it to other countries, including countries that have not been traditional trading partners for the United States, means pro-



"Even if an economic recession reduces U.S. demand for natural gas, the ability to sell gas and ship it to other countries, including countries that have not been traditional trading partners for the United States, means producers will have other markets to fall back on."

MERRILL MATTHEWS JR., PH.D.
RESIDENT SCHOLAR
INSTITUTE FOR POLICY INNOVATION

ducers will have other markets to fall back on," Matthews said. "This should encourage operators to keep production high, which also means low prices for U.S. consumers and an improved balance of trade."

Expects Big Benefits

It may take some time, but the four LNG projects will benefit Texas, other natural gas producing regions across the nation, and the United States as a whole, says Gary Stone, executive vice

president of engineering for Five States Energy.

"The current supply surplus of crude oil, natural gas, and natural gas liquids, coupled with the current worldwide demand dip due to the Covid-19 virus, will likely slow production and put other LNG projects on hold," Stone said. "Moreover, the domestic natural gas supply surplus is exacerbated by the record oil production, particularly in the Permian Basin, where oil production comes with associated gas and many wells have high gas-to-oil ratios.

"Prices have fallen and remain low, thus drilling is slowing, but as new pipelines carry gas from the Permian Basin for LNG to supply to these terminals, new markets will translate into higher prices, and higher commodity prices will translate into better LNG contracts and increased demand," Stone said.

Kenneth Artz (kennethcharlesartz@gmx.com) writes from Dallas, Texas.

Congress Considers Bill to Push Electric Car Purchases

By Kenneth Artz

Congress is considering a bill to continue and expand taxpayer support for electric vehicle (EV) manufacturers and purchasers by dedicating \$2 billion per year for development and adoption of plug-in cars.

The USA Electrify Forward Act, sponsored by U.S. Rep. Debbie Dingell (D-MI), would direct U.S. Department of Transportation Secretary Elaine Chao to "accelerate domestic manufacturing efforts directed toward the improvement of batteries, power electronics, and other technologies for use in plug-in electric vehicles."

The legislation also directs the transportation department to update residential and commercial building codes to encourage installation of electric-vehicle charging stations and directs states to consider measures to encourage station installation.

Dingell's bill would also appropriate \$2 billion per year for the U.S. Department of Energy's 2007 Advanced Technology Vehicles Manufacturing Incentive Program to provide direct loans to electric vehicle

component manufacturers for constructing new U.S. factories or retrofitting existing factories to make electric vehicle parts more affordable and functional, from 2021 through 2035.

Sees No Environmental Benefit

Dingell's bill is unlikely to improve the environment, says Baruch Feigenbaum, assistant director of transportation policy at the Reason Foundation.

"That's a very large amount of money, and it's not even clear to me that some of the things she is proposing would be good for reducing greenhouse gas emissions," Feigenbaum said. "Moreover, some of the batteries for the plug-in electric vehicles have major negative environmental impacts a lot of folks fail to consider.

"Even if this had positive overall environmental benefits, it's not clear to me why the federal government should do this," Feigenbaum said. "I don't know if Dingell's intending this as a [virtue]-signaling bill or maybe it's something to help the auto industry, since she's from Michigan, but I don't know why she's doing this."

Prefers Market Answers

Dingell does not understand what consumers want better than the market does, Feigenbaum says.

"The free market could put the money Dingell wants the government to direct to better use," Feigenbaum said. "If Dingell's bill becomes law, it will really distort the marketplace.

"The reason manufacturers are not selling as many of these vehicles as Dingell and others would like is because they don't work for most folks," Feigenbaum said. "Getting out of the way of the free market would achieve the sorts of things Dingell wants quicker than having Congress spend more money."

Kenneth Artz (kennethcharlesartz@gmx.com) writes from Dallas, Texas.

Official Connections:

U.S. Rep. Debbie Dingell (D-MI):
<https://debbiedingell.house.gov/>;
<https://debbiedingell.house.gov/contact/>

THE
EPOCH
TIMES

TRUTH *and* TRADITION

COVERING
IMPORTANT NEWS
OTHER MEDIA IGNORE

The very fabric of America is under attack— our freedoms, our republic, and our constitutional rights have become contested terrain. The Epoch Times, a media committed to truthful and responsible journalism, is a rare bastion of hope and stability in these testing times.

SUBSCRIBE TODAY
ReadEpoch.com

LEGISLATIVE PULSE

Fighting for Balanced Climate Education and Inexpensive, Reliable Electric Power in New Hampshire

Editor's Note: *New Hampshire state Rep. Glenn Cordelli (R-Carroll) is serving his fourth term in the state's House of Representatives. Cordelli's primary policy focus has been on education, and he serves on the Committee on Education.*

By H. Sterling Burnett

Burnett: New Hampshire is considering a bill to require a climate change curriculum be taught in the state's public schools. What are the details of the bill and your thoughts on it?

Cordelli: New Hampshire's climate education bill would have mandated a specific climate change curriculum in all New Hampshire public schools, starting in pre-K. It was clear both in the bill language and from the sponsor's testimony that it was geared more to promoting the agenda of the sponsor than real education. The instruction on causes of climate change to be taught were solely manmade causes, with no provision for acknowledging or discussing natural causes.

With the assistance of The Heartland Institute, I proposed an amendment that specified presenting a balanced look at climate change with an emphasis on critical thinking. Our Education Committee last week voted to undertake an "Interim Study" on the bill, but with interest expressed in my proposed amendment. As with all bills in New Hampshire, it will go to the full House for a vote, and I expect a vote support-

ing the committee recommendation. As this is the second year of our two-year term, it will effectively kill the bill.

Burnett: Numerous studies show ratepayers in states with renewable power mandates—often innocuously referred to as renewable portfolio standards—pay more on average for electricity than states without such demands. New Hampshire has a renewable power mandate. What are your thoughts on the wisdom of such a mandate?

Cordelli: As stated in your question, I agree studies do consistently show higher electric rates on average in states with renewable portfolio standards, such as New Hampshire. Our rates are some of the highest in the nation, and that impacts businesses as well as homeowners. Electric rates are one of the top concerns potential new businesses as well as current businesses always raise.

Biomass has been one of most discussed renewable classes in the past few years. Although it contributes to greenhouse gas emissions and the plants are not efficient, it has been promoted as a valuable source for our renewable standards. A recent attempt

to increase subsidies for this source was vetoed by our governor.

Burnett: New Hampshire is one of the states with membership in the Regional Greenhouse Gas Initiative (RGGI). States in RGGI pay more for electricity on average than states rejecting carbon dioxide emissions cap-and-trade programs such as RGGI. Additionally, the evidence shows RGGI has done almost nothing to reduce global carbon dioxide emissions. What are your thoughts on RGGI and whether New Hampshire should be a part of it?

Cordelli: We have had several bills offered during the past few years to repeal RGGI, but none have been successful. One other approach proposed in the legislature to reduce the impact

of RGGI on ratepayers, also unsuccessful, has been to increase New Hampshire's share of the funds generated by the sale of RGGI auction proceeds that are rebated to ratepayers from 80 percent to 100 percent. I believe this would help reduce electricity costs as well as return money to the ratepayers.

Although proponents of RGGI have touted it as a free market system due to the auctions, with its reserve prices and cost-containment mechanisms, I disagree. My primary concern is for the ratepayers—businesses and homeowners—who are harmed, not helped, by New Hampshire's participation in RGGI.

H. Sterling Burnett, Ph.D. (hsburnett@heartland.org) is a senior fellow at The Heartland Institute.



"With the assistance of The Heartland Institute, I proposed an amendment that specified presenting a balanced look at climate change with an emphasis on critical thinking. Our Education Committee last week voted to undertake an "Interim Study" on the bill, but with interest expressed in my proposed amendment."

GLENN CORDELLI, NEW HAMPSHIRE STATE REPRESENTATIVE

Liberty Baseball Cards

THE HEARTLAND INSTITUTE

HEROES OF LIBERTY

Liberty Baseball Cards feature some of history's greatest proponents of freedom and individual liberty.

COLLECT THEM ALL!

The first collection of Liberty Baseball Cards showcases 24 heroes of liberty. Trade with friends and family to collect them all.

ORDER TODAY! @
STORE.HEARTLAND.ORG

Visible card names include: Ronald Reagan, Martin Luther King Jr., Dr. May, and Betsy.

COMMENTARY

Let's Replace Climate Scares with Climate Sense

By Viv Forbes

Swante Arrhenius (1859-1927) was the Swedish scientist who first claimed that the burning of hydrocarbons like coal, gas, oil, peat, and wood might cause global warming. In 1895, he calculated—incorrectly, it turns out—that a doubling of the atmospheric carbon dioxide concentration would lead to a four- to five-degree Celsius rise in global temperature.

Arrhenius suggested this increase would be beneficial, making the various climates on Earth “more equable” and stimulating plant growth and food production.

About a century later, showman/politician Al Gore gave life to the theory that extra carbon dioxide caused by human activities will cause dangerous global warming.

Temperatures refused to obey the alarmist computer model forecasts, so they switched to a universal bogeyman,



Al Gore, Chairman
Generation
Investment
Management

“climate change,” and blamed every bit of bad weather on Western industry.

That did not scare enough people, so it morphed into a “climate emergency,” under which moniker coal, oil, gas, cars, and cattle were blamed for everything bad. Bushfires, coral bleaching, droughts and floods, heatwaves and snowstorms, pollution anywhere, and

species extinction are all supposed proof of the purported climate emergency.

Time for Carbon Sense

The carbon dioxide scare is proving to be just that: a scare. It's time for some climate sense.

Human activity cannot control atmospheric carbon dioxide or global temperature. Much bigger forces are at work, such as the absorption and expul-

sion of carbon dioxide by the oceans, cloud cover, declining magnetic field and magnetic pole reversals, El Niño and La Niña episodes, solar cycles, variable cosmic rays, and volcanic activity (especially on the sea floor).

Geological records show today's carbon dioxide levels are very low historically, from a geological perspective—so low, in fact, that plants grow more slowly and require more water.

In addition, ice core records from Antarctica and Greenland show the atmospheric temperature always rises before carbon dioxide levels rise. That means increased carbon dioxide levels are an *effect* of rising temperatures, not the cause. Warming oceans are like warming beer: they both expel bubbles of carbon dioxide into the atmosphere. When oceans cool, they take it back.

Fear Cold, Not Warmth

The dense plant and animal populations in equatorial regions demonstrates humans do not need to fear global warming. In fact, Russian President Vladimir Putin welcomed the possibility of warming for his cold land.

We have been living in a natural warm interlude, but we are past the warming peak. There will still be fluctuations and extreme weather events, but the next big climatic move will be global cooling, the 11th freeze-up in about a million years. All it needs are oceans heated by submarine volcanoes, and skies made cold by volcanic ash that blocks incoming solar energy. This will trigger evaporation of water from the oceans and heavy snowfalls on land. Once the summer sun fails to melt all the winter snow, glaciers

“The so-called climate emergency is an exercise in global politics, not science. The plan is to scare us into transferring money and power from Western nations to the United Nations—a fake answer to an invented problem.”

VIV FORBES
GEOLOGIST
CHAIRMAN, CARBON SENSE COALITION

and ice sheets will advance again. The increase in the amount of light reflected or diffused from the Earth's surface, its albedo, from the snow and ice will cause further cooling.

Ice ages have been a periodic threat to much of life on Earth. As ice sheets spread from the North Pole, there will be massive depopulation, and survivors will need to relearn hunter-gatherer skills if they do not have access to reliable energy. Wind turbines and solar panels will not work in snowy conditions, and many hydropower plants will freeze up. Even Niagara Falls froze in 1848, during the Little Ice Age.

Bureaucrats Will Survive

The United Nations' climate bureaucracy will probably still collect climate taxes and organize conferences in places with a warm climate and reliable power, where the elite attendees will be well-fed.

Climate alarmism is the great gravy train for academics, bureaucrats, globalists, politicians, and speculators seeking excuses for ever-more power and revenue.

The so-called climate emergency is an exercise in global politics, not science. The plan is to scare us into transferring money and power from Western nations to the United Nations—a fake answer to an invented problem.

Viv Forbes (forbes@carbon-sense.com) is a geologist and chairman of the Carbon Sense Coalition.

Exploring the Work of Think Tanks Across the Country

In this weekly podcast, hosts Donald Kendal and Justin Haskins provide commentary on the best studies, reports, and articles from think tanks across America.

Tune in every Friday to learn about the latest and greatest content from the best organizations promoting liberty and free-market solutions to public policy problems.

Subscribe on iTunes or listen from the audio page at Heartland.org



In The Tank Podcast

Part of the Heartland Daily Podcast

Harrisburg Nixes Water System Sale, Bucking Trend

By Vivian E. Jones

Several U.S. cities sold their water systems to the private sector in 2019, but Harrisburg, Pennsylvania decided after lengthy consideration it will not pursue privatization.

Capital Region Water (CRW), Harrisburg's water utility, announced plans to implement higher stormwater fees on January 1, 2020. In response, Harrisburg Mayor Eric Papenfuse put out a request to see if any local firms were interested in purchasing the utilities and could lower fees for residents. Four companies responded, and the city interviewed three.

The CRW Board voted to delay implementation of the new stormwater fees until July 1. The delay will allow CRW to seek approval from the U.S. Environmental Protection Agency for a 20-year, \$315 million plan to reduce wastewater and stormwater overflow draining into local waterways.

Based on CRW's decision to postpone the rate increases, the city will drop the idea of selling or leasing the water and sewer systems, *The Burg* reported on November 20.

"Ultimately, I'm hopeful that CRW can get the job done," Papenfuse said. "Privatization is off the table."

Growing Trend

Harrisburg is just one of several U.S. cities that considered water utility privatization in 2019, but other municipalities took the step. For example, Lake Station, Indiana sold its water system to Indiana American Water for more than \$20 million in October, joining more than a dozen other water and wastewater systems bought by IAW in recent years. Jerseyville, Illinois sold its water system to Illinois American Water for more than \$43 million in December.

Nationwide, about 12 percent of the population, or more than 36 million people, are served by private water utility systems, states the Environmental Finance Center at the University of North Carolina.

There are several benefits to a municipality when it sells or leases utility assets to a private provider, says Austill Stuart, director of privatization and government reform at the Reason Foundation and editor of its annual privatization report.

"The basis for entering into any such



agreement usually stems from wanting to transfer risks," Stuart said. "If major rebuilding or expansion is needed, transferring construction risks—and the costs associated with them—can save municipalities time and money, as most municipalities lack the labor resources on-demand to undertake such endeavors in a time-efficient or cost-efficient manner."

Private Sector Role

The private sector will probably have a role in infrastructure finance or management in cities like Harrisburg that don't sell their assets, Stuart says.

"Even if a city doesn't sell or lease its water system, new infrastructure most likely will be delivered by the private sector," Stuart said. "Private companies that manage multiple systems are usually better staffed to handle large projects that involve rebuilding and new construction and can more quickly complete them, especially when the municipalities enter 'performance-based' contracts that financially reward firms for good, timely work and punish them for delays and cost overruns."

The CRW plan for Harrisburg is projected to eliminate only about 60 percent of the raw sewage dumped into the Susquehanna River and other waterways that empty into the Chesapeake Bay, Stuart stated in a commentary on November 20 before the CRW vote.

"Over the long-term, CRW has shown that it does not possess the ability to fix the city's water issues alone, much less ensure Harrisburg won't be facing similar problems down the road," Stuart wrote.

Avoiding the 'Next Flint'

Cities can avoid or mitigate water quality problems, such as the public health crisis that occurred in Flint, Michigan due to deteriorating infrastructure and mismanagement, by utilizing the private sector, Stuart says.

"If a publicly run water system has the problems of Flint, it's the city's responsibility to fix them," Stuart said. "With privatization and outsourcing, the private partner would bear at least some responsibility."

"Those companies don't want to be responsible for the 'next Flint,' and will look to avoid water-quality issues before they make their way to faucets," Stuart said.

Managing 'Sludge'

Many cities want the benefits of outsourcing utility management without transferring ownership through privatization, Stuart says. These municipalities enter service contracts with private firms.

"New Orleans outsources its wastewater system's operations and management," Stuart said. "Atlanta, Baltimore—which has otherwise 'banned' water privatization—and Philadelphia are just a few cities that rely on private firms to handle services related to 'sludge' [a byproduct of wastewater treatment] management, though in those cases the private firm also built the infrastructure providing the service and usually owns it, too."

"By having a firm build sludge treatment infrastructure, as well as operate and maintain it, those cities transferred a large amount of risks that officials deemed would be better

"Private companies that manage multiple systems are usually better staffed to handle large projects that involve rebuilding and new construction and can more quickly complete them ..."

AUSTILL STUART
DIRECTOR OF PRIVATIZATION AND
GOVERNMENT REFORM
REASON FOUNDATION

handled by the private sector," Stuart said. "When speaking of larger water and wastewater systems, the story is similar: Since cities usually rely on private firms to build new infrastructure in 'design-build' contracts, it often can make a lot of sense for those same firms to operate and maintain the infrastructure, which typically leads to saving time and money."

Most municipalities that choose to privatize utilities seem satisfied with the arrangement. Data show 85 percent of private municipal water/wastewater contracts from 2007-2016 were renewed, Reason Foundation's *Annual Privatization Report 2017* states.

"It is important to note than when municipalities enter these arrangements, they tend to stick with them overwhelmingly—or move to a competitor—rather than take the service back 'in-house,'" Stuart said.

Vivian E. Jones (vivianejones@aol.com) writes from Nashville, Tennessee.

INTERNET INFO

Austill Stuart, ed., *Annual Privatization Report 2019*, Reason Foundation, updated October 31, 2019: <https://reason.org/privatization-report/annual-privatization-report-2019/>

COMMENTARY

Shale Revolution Helps Keep U.S. Economy Strong

By Steve Goreham

The U.S. economy is currently enjoying the longest period of expansion in history, despite a recent stock market setback due to concerns over coronavirus. The economy has been growing for more than ten and a half years, since the end of the Great Recession of 2007-2009. Driving the current expansion is the United States having become the world's leading energy producer.

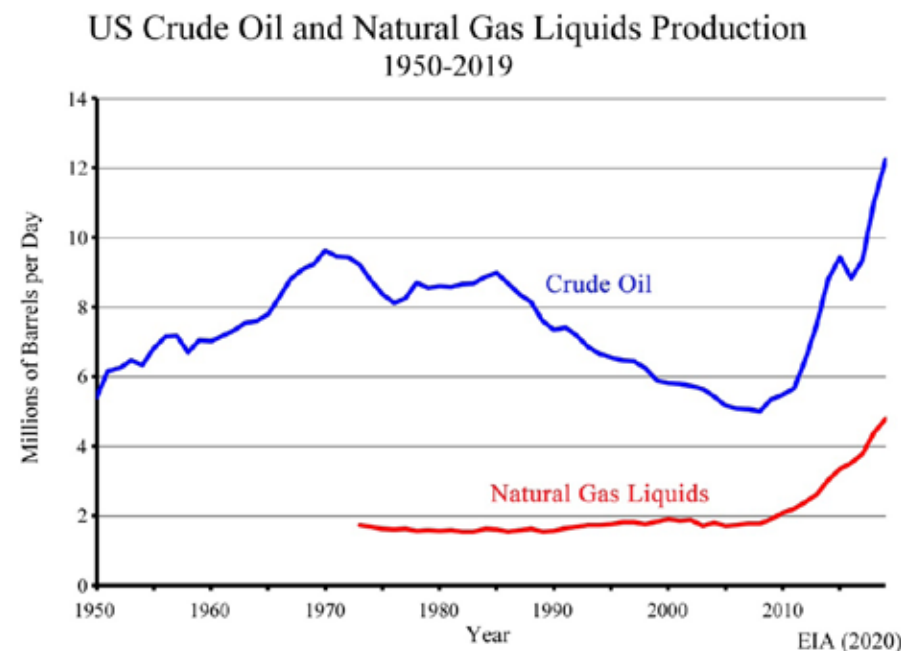
The National Bureau of Economic Research (NBER) defines a recession as “a significant decline in economic activity spread across the economy, lasting more than a few months, normally visible in real gross domestic product (GDP), real income, employment, industrial production, and wholesale-retail sales.” U.S. recessionary periods trigger business failures, changes in political leadership, and effects on U.S. citizens' daily lives.

According to NBER, there have been seven U.S. recessions during the last 50 years. The recession of 1969-1970 coincided with attempts to close budget deficits from the Vietnam war and the raising of interest rates by the Federal Reserve.

Energy in Past Recessions

In 1973, the Organization of Petroleum Exporting Countries (OPEC) quadrupled oil prices, triggering the 1973-1975 recession, which at the time was the most severe downturn since World War II. Rising gasoline prices hammered consumers, and unemployment reached 9 percent. The federal government mandated a 55 mph vehicle speed limit and established the Strategic Petroleum Reserve. This was the first of the recent recessions caused by high oil prices.

The next decade brought a short recession in 1980, followed by a deeper recession from 1981 through 1982. The Iranian Revolution of 1979 caused oil prices to rise to more than \$120 per barrel, causing a world energy crisis. To counter rising inflation from the 1970s, the Federal Reserve tightened monetary policy, boosting home mortgage rates to double-digit levels. Unemployment soared to 10.8 percent.



“The shale revolution and ramping up of American oil production have brought a new level of economic stability to the United States and the global economic system.”

STEVE GOREHAM

EXECUTIVE DIRECTOR, CLIMATE SCIENCE COALITION OF AMERICA

The recession of 1990-1991 was caused by a combination of the 1987 stock market crash and the collapse of the U.S. savings-and-loan industry. Soaring oil prices from Iraq's invasion of Kuwait in the summer of 1990 also contributed to the slowdown.

The economic slump of 2001 was one of the few recent recessions where oil prices were not involved. This recession was caused by a combination of the collapse of the speculative dot-com bubble, the stock market pull-back in 2001, and the September 11, 2001 attacks. This recession ended the decade-long period of growth in the 1990s.

Energy Extracts U.S. from Recession

The 18-month Great Recession of 2007-2009 was the longest since the Great Depression of 1929. The subprime mortgage crisis set off the recession, leading to the collapse of a housing bubble in the United States and the failure of several financial institutions. World crude oil prices spiked to \$164 per barrel in June of 2008, adding to the crisis.

Of the seven recessions the United States has experienced since 1969, high world oil prices were the primary cause of three of the slumps and a contributing factor in two others. Oil price shocks played a major role in both U.S. and global economic instability over the last 50 years.

During the last three decades, however, American geologists and petroleum engineers learned to extract oil and natural gas from shale rock formations by using hydraulic fracturing and horizontal drilling. This shale revolution now appears to have removed oil shock as a factor in economic instability.

Before the shale revolution, U.S. crude oil production had fallen from 9.6 million barrels per day in 1970 to five million barrels per day in 2008. Domestic oil production, an annual \$200 billion industry, was in long-term decline, with many industry experts proclaiming America had reached “peak oil” and world oil output would soon fall.

After the breakthroughs in shale

recovery technology, U.S. crude production soared beginning in 2008, reaching 12 million barrels per day in 2019, more than double the 2008 output. Production of natural gas also more than doubled from 2008 to 2019.

Energy Dominance, Net Exports

In 2011, the United States surpassed Russia as the world's largest producer of natural gas. In 2018, the United States became the world's largest producer of crude oil, passing Saudi Arabia. Oil prices are now largely determined by U.S. production instead of OPEC or Russian output.

In 2005, 60 percent of U.S. consumption of petroleum products was met by imports. The year 2020 will be the first in more than 70 years in which the United States is a net exporter of petroleum products, thanks to the shale revolution.

Shale Buffers Price Spikes

On September 14 of last year, 25 drones and missiles exploded at two oil processing facilities in Saudi Arabia. More than half of Saudi output, 5.7 million barrels of daily production capacity, was taken offline. Oil prices hardly budged.

On January 8 of this year, Iran fired more than a dozen missiles at two Iraq facilities housing U.S. military personnel. Yet, world oil prices remain low today, just above \$50 per barrel. In previous decades, the missile attacks on Saudi Arabia and Iraq would probably have triggered large oil price spikes.

The shale revolution and ramping up of American oil production have brought a new level of economic stability to the United States and the global economic system. There will still be recessions, but in the United States they will be less frequent and less severe with oil dependency and price shocks no longer being significant factors.

Steve Goreham (gorehamsa@comcast.net) is executive director of the Climate Science Coalition of America and the author of Outside the Green Box: Rethinking Sustainable Development. This article was originally published at WorldNetDaily and is republished with permission of the author.

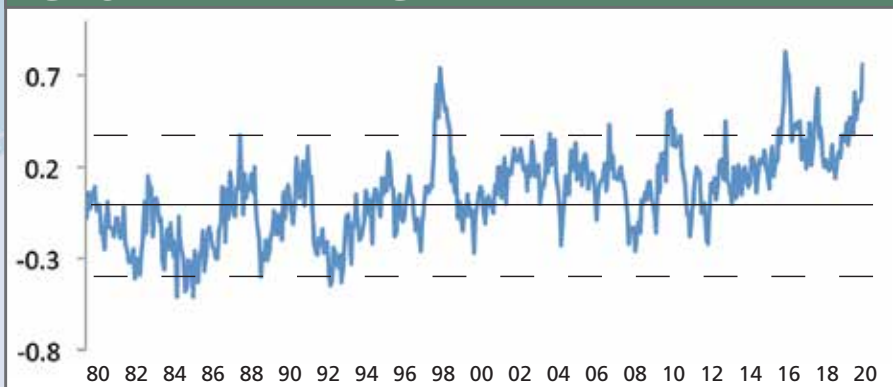
GLOBAL SATELLITE TEMPERATURES

HOW MUCH GLOBAL WARMING?

Each month, *Environment & Climate News* updates the global averaged satellite measurements of the Earth's temperature. These numbers are important because they are real—not projections, forecasts, or guesses. Global satellite measurements are made from a series of orbiting platforms that sense the average temperature in various atmospheric layers. Here, we present the lowest level, which climate models say should be warming. The satellite measurements are considered accurate to within 0.01°C. The data used to create these graphs can be found on the Internet at nsstc.uah.edu/climate. All past data were revised when the methodology was updated in April 2015.

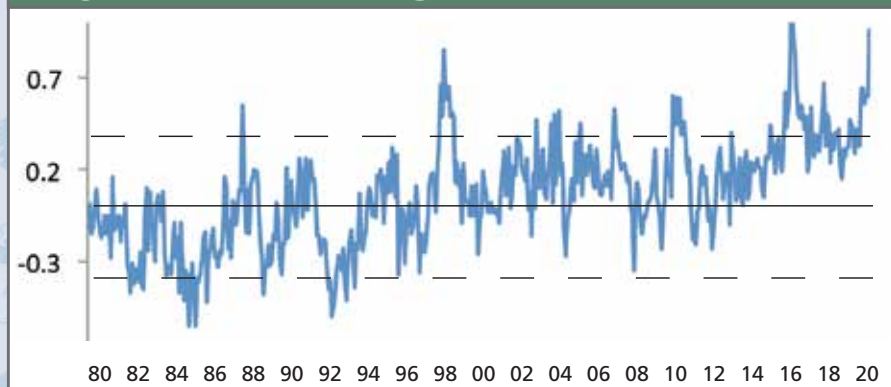
FEBRUARY 2020

GLOBAL AVERAGE



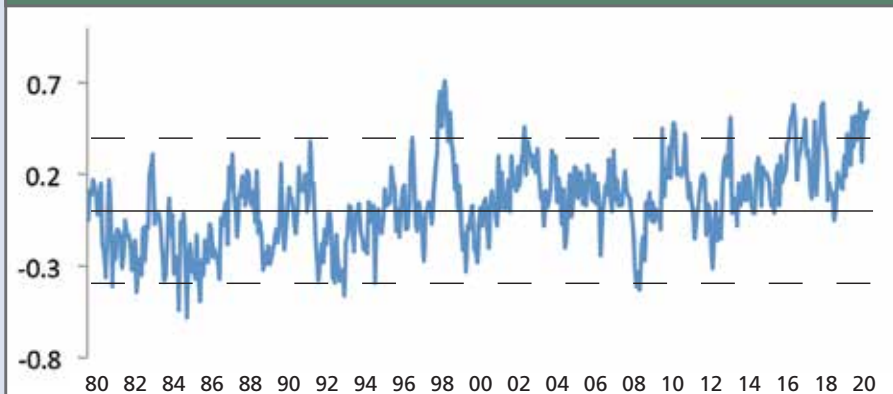
The global average temperature was 0.76°C above average.

NORTHERN HEMISPHERE



The Northern Hemisphere's temperature was 0.96°C above average.

SOUTHERN HEMISPHERE



The Southern Hemisphere's temperature was 0.55°C above average.

219,000 years of Temperature Variation

Source: Jouzel et al., 1996, www.ncdc.noaa.gov/paleo/image/vostok-t.gif.



YES! Please send me a one-year subscription to Environment&Climate News!

☐ My check in the amount of \$36 for each subscription is enclosed.

☐ Charge \$ _____ to my ☐ Visa ☐ MC ☐ Am Ex

ACCOUNT NUMBER EXPIRATION DATE

SIGNATURE

NAME HOME PHONE

TITLE•COMPANY WORK PHONE

ADDRESS

CITY•STATE•ZIP

☐ Yes! I want to receive ECN by email for free!

Please print your email address below:

EMAIL ADDRESS - PLEASE PRINT

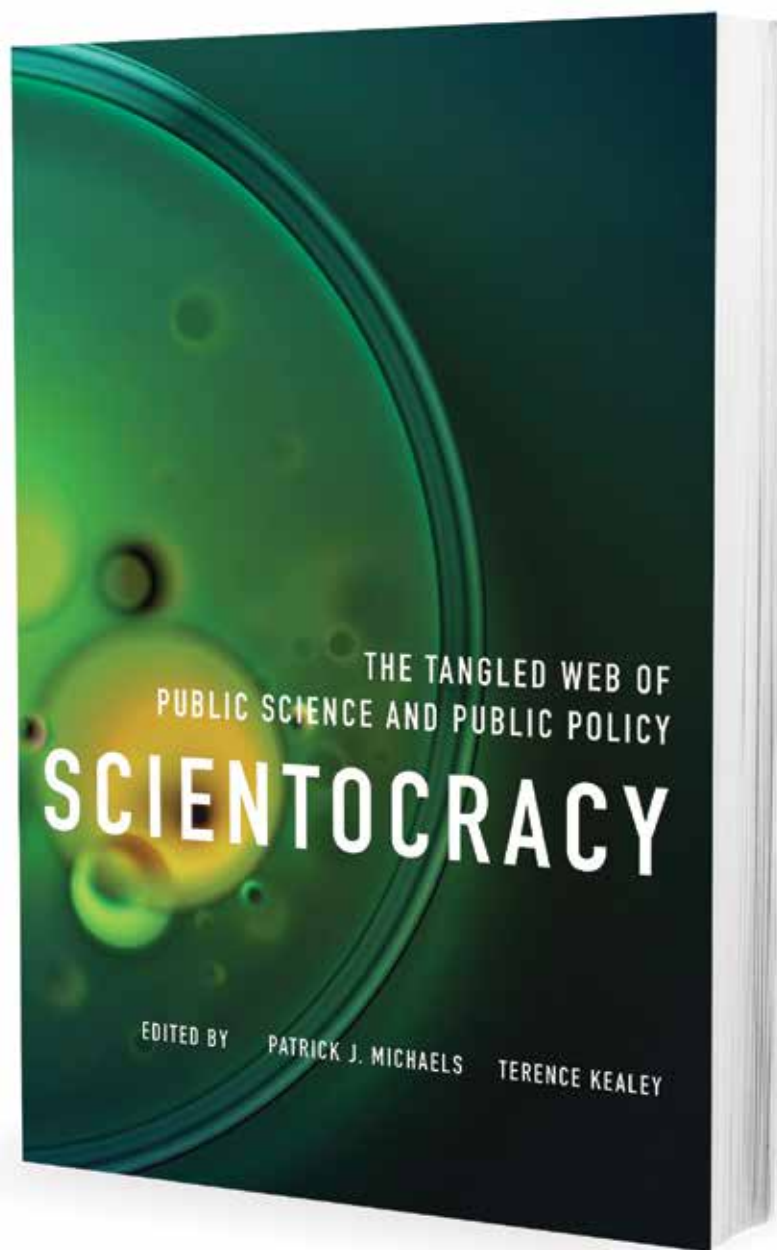
The information you have provided will be kept strictly confidential. The Heartland Institute from time to time offers its mailing list to organizations whose goals are similar to ours. If you prefer not to be contacted by such groups, please check the box. ☐

RETURN BY MAIL TO: The Heartland Institute, 3939 North Wilke Road, Arlington Heights, IL 60004 or fax this form to **312.277.4122**

ECN 04/20

NEW FROM THE CATO INSTITUTE

Science today is in systematic trouble.



Science can be a force for good, and it has enhanced our lives in countless ways. But even a cursory look at science in the 20th century shows that what passes for science can be detrimental. In the past, scientific research was funded pluralistically, but today certain portions of the market for knowledge are dominated by a single buyer—the government. This is especially true in the research fields that impinge on the regulatory sphere.

Scientocracy examines a number of recent abuses of science in research areas, including nutrition, pollution, drugs and the opioid crisis, and global warming.



AVAILABLE NOW AT ONLINE RETAILERS NATIONWIDE.