Colorado – 38 Articles

Document 1

**For coal miners and their families, transition to renewable energy has real consequences**

Environmental community needs to be on front lines protecting coal miners’ pensions and demanding a powerful safety net to support those whose jobs are vanishing

By [**JACOB SMITH**](https://www.denverpost.com/author/jacobsmith/) | Guest Commentary

June 16, 2017 at 12:00 pm

Earlier this month, the Tri-State electric utility announced the [closure of the New Horizon coal mine](http://www.denverpost.com/2017/06/08/tri-state-new-horizon-closes-colorado-coal-jobs-drop/) in western Colorado.

From a climate change and environmental perspective, this is good news. One less coal mine (and the eventual closure of the nearby Nucla coal-fired power plant) will mean reduced greenhouse gas emissions, improved air quality for Western Slope residents, and fewer people dying in mining accidents or suffering long-term health impacts from exposure to coal dust. And if we in Colorado hope to remain economically competitive in the 21st century, especially as the federal government cedes global renewable energy leadership to China and Europe, Colorado must transform its energy system as quickly as possible.

But the closure also means some hard-working Coloradans will lose their jobs. It’s easy for this to seem abstract, but these are real people, with families and communities and hopes of a comfortable retirement after years spent doing dangerous work. Some may not find work at all, or not for a long time. Even those who do may have to relocate or accept lower wages or a reduced quality of life. The loss of these jobs may have real consequences for Nucla and other nearby communities.

The growth in clean energy jobs can help offset the loss of coal mining jobs. Here in Colorado, more than 62,000 people work in the clean energy sector (compared to 1,000 in the coal industry) including solar panel installers, wind turbine operators, manufacturing lines, and energy efficiency services.

But it’s too easy to celebrate the march toward clean energy without recognizing, and taking seriously, the impacts this is having on people trying to earn a living and provide for their families.

In 1977, Barbara Kopple’s film “Harlan County, Kentucky” won the Oscar for best documentary. It depicts a bloody year-long battle between union coal miners and the Duke Power Company, which itself is a recapitulation of a nearly decade-long (and even bloodier) union-mining company war in Harlan County in the 1930s. Watching it, you can’t help but feel sympathy for the coal miners, who are struggling to ensure such basics as a wage they can live on, sick leave, and the opportunity to retire when they are too crippled by black lung disease to work anymore.

It’s time to recognize that the coal miners of the Harlan County wars and their families, like the coal miners of today, are and always have been American heroes. Many have worked decades, often underground under dangerous conditions, and suffer from debilitating diseases with a shortened lifespan. The coal they broke up and brought to the surface, and the cheap energy it enabled, has improved the quality of life for most Americans, enabled the evolution of a modern health care system, broadly expanded educational opportunities, helped free women from backbreaking domestic work, and facilitated the creation of a vibrant middle class.

The U.S. coal industry is dying, a victim of global economic forces and the desperate need to eliminate greenhouse gas emissions. Nothing will change that, not Donald Trump’s empty promises to West Virginians, not the fantasy of “clean coal,” not the millions spent by the Koch brothers to elect fossil fuel-friendly legislators. But that doesn’t mean that people and families and communities that have given their lives to this industry deserve to be discarded. It’s not enough to say, “Don’t worry, we’ll fund some worker training programs and you can become a solar panel installer.”

Even where there is disagreement on whether it’s time to phase out coal, or stop building new fossil fuel pipelines and export terminals, the environmental community needs to be on the front lines protecting miners’ pensions and demanding a powerful safety net to support those whose jobs are vanishing and whose communities are struggling.

*Jacob Smith is a former mayor of Golden and a former energy policy staffer for Sen. Bernie Sanders. Follow him on Twitter: at*[*@jacobzsmith*](http://twitter.com/jacobzsmith)

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Document 2

**America’s overlooked renewable energy source: Water has surprisingly bright future**

**By**[**THE WASHINGTON POST**](https://www.denverpost.com/author/the-washington-post/)

**PUBLISHED: July 28, 2016 at 12:59 am | UPDATED: July 28, 2016 at 12:59 am**

Long before wind and solar, water was the nation’s top renewable energy source. Going back some 100 years, the United States built enormous dams — like the Depression-era Hoover Dam in Nevada — to produce tremendous amounts of energy.

We have so many such dams that hydropower last year remained our fourth largest source of electricity overall and our single largest renewable source, providing 6 percent of Americans’ electricity. Yet it’s rarely talked about and lacks the excitement attached to other renewables. That’s in part because dams are controversial and can have major environmental consequences, affecting wildlife and altering local ecosystems. New ones also are expensive to build.

“A lot of people, when they think about hydro, they don’t think that there’s much growth opportunity,” said Jose Zayas, who directs the Wind and Water Power Technologies Office at the Department of Energy. “We wanted to really quantify the benefits of hydro.”

A new report from Zayas’s office takes a sweeping look at the state of U.S. hydropower and finds big potential. Based on the work of roughly 300 experts, the report published Tuesday concludes that substantial growth is possible in the sector, considerably upping the percentage of electricity that could come from non-carbon emitting sources.

According to the report, the nation’s current hydropower has an electricity-generating capacity of about 101 gigawatts (or billion watts of instantaneous power generation) that could grow by about 50 percent by 2050. That equates to nearly 50 more gigawatts, which would add a few percentage points to hydropower’s overall contribution to U.S. electricity.

One key reason is the number of existing dams that are not producing any electricity. “We have over 80,000 dams in our country, of which only 2,000 have power production,” Zayas said.

Some could be equipped for generation, even as older facilities could be made much more efficient, the report notes.

Bob Irvin, director of American Rivers, a group founded to protect the nation’s rivers, said he agrees that the country has the capacity to increase the amount of electricity generated by hydropower but that it must be done thoughtfully and cautiously.

“How can we go forward with hydropower, recognizing that it does have adverse impacts, in terms of blocking free-flowing rivers and harming wildlife? It’s certainly better than burning fossil fuels, but it’s not without its own issues as far as climate change,” Irvin said, noting that the reservoirs created by dams can emit methane and alter local plants and wildlife. “There are definitely adverse impacts that have to be considered. . . . Whenever we build a dam, we destroy a river in one form or another.”

Tara Moberg, a senior freshwater scientist at The Nature Conservancy, which provided input to the new report, said the group does see significant potential for more hydropower but only if it is done in a sustainable way.

“[Hydropower] infrastructure has powered our growth for the past century, but it has come at a cost,” she said, underscoring that dams have changed river flows, blocked migratory fish and affected water quality in surrounding areas. “Those impacts have had ripple effects on the communities that depend on river resources.”

Moberg said the hydropower of the future must look different than the hydropower of the past. For instance, there have been innovative agreements in some areas, such as on the Penobscot River in Maine, to couple the removal of older dams with enhancements to increase total electricity generation at other dams in the same area.

The Energy Department’s definition of hydropower includes not only dams, which generate electricity when the flow of water turns enormous turbines, but also so-called hydroelectric “pumped storage.” With the latter, large volumes of water are pumped to a higher location where they have the potential to later flow downhill again, generating hydroelectric energy. The storage facility essentially operates like a battery, ready to provide power when needed.

Current U.S. hydropower is mostly based on dams, which produce just under 80 gigawatts. Yet the new report concludes that the future could also see today’s 22 gigawatts of pumped storage increase considerably. In the Tesla era, when energy storage itself is having a major boom, it’s an attractive option.

Finally, the report projects the possible installation of new hydropower facilities in some environments. Environmental considerations would be paramount, of course.

Not addressed are other possible ways of one day getting energy from water, such as marine or riverine hydrokinetics — letting water flow turn turbines without the involvement of huge dams — or wave and tidal energy. These technologies are still a bit too far off, Zayas said.

The benefits of a hydropower expansion would be considerable, the government researchers found: fewer greenhouse-gas emissions, fewer health costs from air pollution and far less water consumed in the process of cooling down power plants.

The expansion of hydro would also further the expansion of its partners, wind and solar, the report contends.

“It’s a really flexible generation source, significantly more flexible than say fossil, coal, significantly more flexible than nuclear, and even possibly more flexible than natural gas,” Zayas said. Plus, the intermittency of wind and solar requires the availability of other electricity sources that can switch on fast to take up the slack when the wind fails or when it isn’t so sunny.

Despite the potential for gains highlighted in the report — which itself makes no specific policy recommendations — the hydropower industry’s growth isn’t guaranteed. Additional funding, research and technological improvements will be required. Not to mention a belief that increasing hydropower is a worthwhile endeavor, particularly given a changing climate.

“The future of hydropower is not in building new dams. It’s in re-powering existing dams, adding power generation to those dams that don’t have it and upgrading and improving the dams that have hydropower in them,” Irwin said. “That’s the kind of future we ought to be looking at, where we can invest in responsible hydropower, while making sure we don’t destroy any of the remaining rivers we have.”

Document 3

**Trump’s budget expected to massively slash research on renewable energy – and NREL’s budget**

Research for “clean coal” also in the sights

By [**CHRIS MOONEY**](https://www.denverpost.com/author/chris-mooney/) | The Washington Post

PUBLISHED: May 18, 2017 at 12:50 pm | UPDATED: May 18, 2017 at 1:00 pm

**By Chris Mooney,** *The Washington Post*

The Trump administration is expected to propose massive cuts to federal government research on wind and solar energy next week, according to current and former Energy Department officials familiar with budget discussions.

The department’s Office of Energy Efficiency and Renewable Energy (EERE), which funds research on advanced vehicles as well as other aspects of clean energy, would face a roughly 70 percent cut in 2018, carving about $ 1.45 billion from its $2.09 billion 2017 budget.

These planned deep cuts were first reported by Axios, which obtained an Energy Department budget document. Two officials reached by The Washington Post, one currently with the department and one a former employee knowledgeable about budget discussions, cited numbers very similar or, in some cases, identical to those in that report.

It was unclear whether these were the final budget figures, which are expected to be released next week.

Shaylyn Hynes, a spokeswoman for the Energy Department, declined to comment on the budget numbers, because they have not yet been made public.

But she said Energy Secretary Rick Perry “will lead the Department of Energy in the same way he led Texas, focusing on carrying out our core agency functions efficiently and effectively while also being fiscally responsible and respecting the American taxpayer. The Department looks forward to working with Congress as the budget process continues.”

The proposed cuts, if enacted, would reverberate dramatically at the National Renewable Energy Laboratory in Golden, which has a $292 million federal budget and 2,200 employees. This research center — the incubator for the solar cell technology used by the U.S. firm First Solar — is highly dependent on research funding from EERE.

The consequences of the proposed cuts could be wide ranging, potentially undermining the office’s SunShot Initiative, which has worked to drive down the costs of large-scale solar energy, which now runs about 7 cents per kilowatt hour. A goal of reaching 3 cents per kilowatt hour for large-scale solar electricity had been set for 2030.

The cuts are far from becoming a reality. In recent budget negotiations, Congress funded Energy Department programs roughly on par with 2016 levels, rather than follow a Trump administration proposal to slash them deeply in the current fiscal year.

Still, Josh Freed, vice president for the Clean Energy Program at Third Way, a public-policy think tank in Washington, said the proposals were “extremely troubling.”

“The proposal from the White House, particularly on the clean-energy innovation side, is waving a white flag,” he said. “And it sets a tone for negotiations with Congress of having to restore funds at the very time we need to be increasing the budgets for energy innovation to drive growth.”

The numbers are broadly consistent with those in the Trump administration’s “skinny budget,” released in March, which proposed a combined total of “approximately” $2 billion in cuts from EERE, the Fossil Energy Research and Development program, and two other offices. The total budget for the four programs was about $4 billion, so this would have meant cutting them collectively in half.

According to Axios, the Fossil Energy Research and Development program, which conducts research on carbon capture and storage, would face a 55 percent cut and be funded at $280 million in 2018, far lower than the 2017 funding level of $618 million. That’s even though carbon capture and storage, which often goes by the name “clean coal,” has been a major Trump administration priority.

One Energy Department official also confirmed this cut to The Post.

Cuts to research funding for “clean coal” would appear to undermine a key administration priority — and fly in the face of what the coal industry wants. Perry recently attended a ribbon-cutting for the U.S.’s first functioning clean-coal plant in Texas.

“The Obama administration made the biggest investment in clean-coal technology in history,” Ali Zaidi, a former Obama administration Office of Management and Budget official who is now at Stanford University, said in an email. “In contrast: This budget throws tacks in the road for coal; it’ll pump the brakes on much-needed carbon-capture technology research. Why?”

Document 4

**Can Denver cut its greenhouse-gas emissions by 80 percent? It will take 100 percent renewable energy**

Hitting the big target by 2050 also will require many households to heat with something other than natural gas

By [**BRUCE FINLEY**](https://www.denverpost.com/author/bruce-finley/) | [bfinley@denverpost.com](mailto:bfinley@denverpost.com) | The Denver Post

PUBLISHED: September 6, 2017 at 6:39 pm | UPDATED: September 6, 2017 at 7:35 pm

Denver floated strategies on Wednesday for meeting its big climate change goal, including pushing Xcel Energy to supply electricity only from renewable sources before 2030.

If these strategies are adopted, Denver would join [Aspen, Boulder, Nederland and Pueblo among](http://www.denverpost.com/2017/08/13/nederland-100-percent-renewable-energy-2030-or-sooner/) the more than 35 U.S. cities committed to using only renewable energy.

“We understand there are cities that want to do this, and we are going to do everything we can to help them achieve their goals,” Xcel spokesman Mark Stutz said. “We are trying to work with any city that wants to go 100 percent ‘renewable’ or 100 percent ‘carbon-free.’ We believe we can get electricity at equal or less cost with renewables.”

Xcel currently generates electricity from multiple sources — 46 percent from coal, 23 percent from wind, 25 percent from natural gas, and 6 percent from solar and hydropower. [Xcel last week asked Colorado’s Public Utilities Commission](http://www.denverpost.com/2017/08/29/xcel-energy-pueblo-coal-plants-retiring/) to let it generate 55 percent of its electricity from renewable sources by 2026 (23 percent coal, 22 percent natural gas, 40 percent wind, 14 percent solar and 1 percent hydro), Stutz said.

There has been no electricity generated inside Denver using coal since Aug. 13, when the conversion of Xcel’s Cherokee plant to natural gas was completed.

Denver Mayor Michael Hancock has committed to an 80 percent cut in emissions of heat-trapping greenhouse gases including carbon dioxide, measured against 2005 levels, before 2050. Denver leaders say this will fulfill their pledge to meet the targets that nations including the United States agreed to in the Paris climate agreement — defying efforts by President Donald Trump to get the nation out of that deal.

“We as a city, along with other leading cities, want to be part of the solution,” Denver climate and greenhouse gas program administrator Tom Herrod said. “We owe it to our community to take action and there is a clear global threat from climate change.”

A city task force on Wednesday recommended the following strategies for meeting the goal:

• Make sure the city receives electricity only from renewable sources by 2030.

• Continue to [shift to electric vehicles](http://www.denverpost.com/2017/08/16/electric-cars-new-charging-stations-denver-climate-change/) from those burning fossil fuels.

• Shift commercial buildings and 200,000 households off natural gas to heat sources that do not lead to carbon pollution.

City officials are seeking public comments on the strategies. They plan to fine-tune them before early next year.

Task force member Marc Alston, a former EPA employee, said residents must convert climate-change concerns to action.

“If you look at the projections for future temperatures in Denver and across the country, there are going to be areas that are very uncomfortable to live in and a lot of Denver residents are going to be very uncomfortable,” Alston said. “Scientists are correct in saying the time to act is now, not wait until it gets worse.”

But Denver’s population boom — state demographers project growth of 1 percent a year — complicates efforts to address climate change. More people would require more [electricity and travel](http://www.denverpost.com/2016/12/20/electric-vehicle-charging-network/) and produce more waste, all leading to increased emissions of heat-trapping gases. This pollution is degrading air quality, increasing an urban “heat-island” effect and contributing to extreme weather events and changes in mountain-snowpack melt.

At current worldwide rates of greenhouse gas pollution, Denver will face, in extreme years, 25 days where temperatures exceed 100 degrees, the city report warns.

Health officials anticipate continued rising temperatures could double heat-related deaths by 2050, with low-income, the elderly, children and infants most at risk. Denver now ranks third among U.S. cities for the worst heat-island effect with spikes of up to 23 degrees compared with nearby rural areas. Denver also ranks among the worst U.S. cities for asthma attacks and among the worst cities for ozone air pollution.

At the state level, [Gov. John Hickenlooper also is pushing to faster action to address climate change](http://www.denverpost.com/2017/07/11/colorado-signs-us-climate-alliance-joining-states-committed-paris-climate-agreement/). He issued an executive order in July compelling a greenhouse gas emissions cut before 2025 by at least 26 percent below 2005 levels and committing to the U.S. Climate Alliance of states and companies countering the Trump administration by shifting more quickly to wind and solar power.

Document 5

**Air pollution deaths point to a need for climate change legislation**

By [**THE DENVER POST**](https://www.denverpost.com/author/the-denver-post/) | [newsroom@denverpost.com](mailto:newsroom@denverpost.com)

PUBLISHED: September 17, 2015 at 11:04 am | UPDATED: June 7, 2016 at 3:39 pm

A man covers his nose during a hazy day in Singapore. Air pollution is killing 3.3 million people a year worldwide, according to a new study that includes this surprise: Farming plays a large role in smog and soot deaths in industrial nations. (Ng Han Guan, The Associated Press)

*Re: “Study: Air pollution kills 3.3 million worldwide, may double,” Sept. 17 news story*.

Air pollution kills more than 50,000 people in the United States each year (and 3.3 million people worldwide), mostly from premature strokes and heart attacks, according to the study reported in the Thursday Denver Post. The culprits? Power plants, automobile emissions, and — surprisingly — farming activities that combine with coal plant and auto emissions to produce deadly particulates. In Western states, vehicle emissions are the top killer. These results highlight another important reason to pass national climate change legislation — besides helping stabilize the climate, it would cut coal plant and vehicle emissions. It’s a win-win solution that should appeal to anyone who breathes.

**Jarett Zuboy**, *Golden*

Document 6

**Scientist at national renewable-energy lab pays $80,000 for double billing government**

By [**KIRK MITCHELL**](https://www.denverpost.com/author/kirk-mitchell/) | [kmitchell@denverpost.com](mailto:kmitchell@denverpost.com) | The Denver Post

January 26, 2017 at 12:09 pm

A senior scientist at the National Renewable Energy Lab in Golden paid $80,000 to the federal government to settle allegations that he double-billed the government and filed false travel reimbursement forms.

Dr. Miguel A. Contreras also used equipment owned by the U.S. Department of Energy facility while consulting for three private energy companies for his own personal gain, according to a Thursday news release by Jeffrey Dorschner, spokesman for Acting U.S. Attorney Bob Troyer.

Contreras agreed to pay the settlement as part of a civil case. No criminal charges were filed against him because of the higher level of proof required in criminal cases, Dorschner said.

The Golden facility is managed and operated by The Alliance for Sustainable Energy under contract to the Department of Energy.

Contreras acknowledged double billed the government on numerous occasions in 2008 and 2009.

The government further asserted that Contreras also misled his supervisors and investigators about the nature of his private consulting work. Investigators claimed Contreras committed up to 37 violations of the False Claims Act.

Contreras continues to work for the NREL, Dorschner said.

Document 7

**Group wants Longmont to commit to 100 percent renewable energy by 2030**

The organization will ask outgoing Mayor Dennis Coombs “to leave a lasting legacy”

By [**JOHN FRYAR**](https://www.denverpost.com/author/john-fryar/) | [fryarj@timescall.com](mailto:fryarj@timescall.com) | Longmont Times-Call

October 17, 2017 at 10:25 am

Sustainable Resilient Longmont wants Mayor Dennis Coombs to commit the city to providing all of its municipal electric energy from renewable power sources by 2030.

The organization will ask Coombs — the city’s outgoing mayor — “to leave a lasting legacy” by proclaiming the 100 percent renewable commitment, according to one of Sustainable Resilient Longmont’s Facebook postings.

Coombs said Monday that he will not sign such a commitment on the city’s behalf, in part because of the probable expense to customers to cover the costs of completing the final stages of transition away from power generated by coal and natural gas.

“We can do a lot better” in the percentages of power generated from renewable sources, Coombs said, adding that it may be possible by 2030 for Platte River Power Authority provide 70 or 80 percent of the city’s power from solar, wind and hydroelectric sources.

Document 8

**Colorado Energy Office, a lightning rod in the renewable energy debate, set to run out of funds despite last-ditch effort**

Without offering specifics, Gov. Hickenlooper suggested he would still try to salvage the office in some form.

By [**BRIAN EASON**](https://www.denverpost.com/author/brian-eason/) | [brianeason@denverpost.com](mailto:brianeason@denverpost.com) | The Denver Post

PUBLISHED: June 20, 2017 at 4:48 pm | UPDATED: June 21, 2017 at 10:02 am

A Colorado government agency that has become a lightning rod in the debate over renewable energy and fossil fuels is poised to see its state funding expire July 1 after a last-ditch attempt to save it Tuesday ended in a partisan impasse.

A six-lawmaker panel rejected an emergency funding request for the [Colorado Energy Office](http://www.denverpost.com/2017/05/11/hickenlooper-legislative-session/) from Democratic Gov. John Hickenlooper that sought to extend the office’s $3.1 million budget for another year. The move would have kept the agency intact while lawmakers continue their own negotiations on the future of an office that both sides agree is needed.

But the Joint Budget Committee vote deadlocked 3-3 along party lines, with Republicans saying they wanted to wait for more guidance from the full legislature, which last year failed to reach a compromise to avert the office’s looming funding deadline.

“I hope that there’s some way we can come to an agreement over the next few months over what the mission of the office would be and that we could get bipartisan acceptance of that,” said Rep. Bob Rankin, a Republican budget writer from Carbondale. “We’re not there.”

Tuesday’s vote wasn’t necessarily the final nail in the coffin for the office, which Hickenlooper has been trying for weeks to salvage. But it was a significant setback that makes its imminent demise all the more likely.

The Energy Office today is tasked with promoting a variety of energy sources, including renewables such as wind and solar, and fossil fuels such as coal and gas. It offers energy-efficiency grants to schools and farms, and manages a popular weatherization program for low-income homeowners. It also provides grants and tax credits to help finance a variety of energy-related projects, including community solar panels and natural gas stations for alternate-fuel vehicles.

If state funding sunsets as planned, the weatherization and natural gas fueling station programs will continue, because they’re funded entirely by federal grants. But the rest of the services the office provides would lapse and its staff would be cut — something that Hickenlooper and Democrats on the budget committee had sought to avoid with the one-year extension.

Typically the full legislature would approve or reject such a funding request, but state law gives the Joint Budget Committee the authority to act on emergency requests when the legislature isn’t in session. Republicans on Tuesday disputed whether the lack of funding for the Energy Office constitutes an emergency.

Senate Republicans this session sought to use the office’s statutory expiration date as leverage to reduce the agency’s focus on renewable energy, and [add things like nuclear power to its mission](http://www.denverpost.com/2017/05/08/colorado-energy-office/). But the gambit angered Democrats, and ultimately, the two sides couldn’t reach an agreement to continue the office before the legislative session’s end.

On Tuesday, lawmakers in both parties stressed that discussions on reauthorizing the office were ongoing. But pressure continues to build on the left for Hickenlooper to take unilateral measures to keep the office afloat.

“Gov. Hickenlooper should now use any means necessary to find funding for the Colorado Energy Office in order to keep its important work moving forward,” said Amelia Myers, an energy advocate at Conservation Colorado.

In a statement, Hickenlooper on Tuesday left the door open to salvaging the office in some form.

“We will continue to explore all options to fund this important work,” he said, without offering specifics.

But even if nothing’s done, don’t expect the office’s 24 employees to abruptly be fired on July 1.

The Joint Budget Committee staff on Tuesday suggested there could be some money leftover from the current year’s budget. And, if layoffs ultimately occur, the administration would need to return to the committee to request funding for close-out costs, such as unemployment benefits and vacation payouts.

Document 9

**Nederland in line to become 42nd town in the U.S. 100% powered by renewable energy**

Ned, Breckenridge likely next to join Aspen, Boulder and Pueblo on green-energy quest

By [**ALEX BURNESS**](https://www.denverpost.com/2017/08/13/nederland-100-percent-renewable-energy-2030-or-sooner/) | [burnessa@dailycamera.com](mailto:burnessa@dailycamera.com) | Boulder Daily Camera

PUBLISHED: August 13, 2017 at 11:50 am | UPDATED: August 14, 2017 at 1:01 pm

The town of Nederland is poised to become the 42nd community in the country to commit to achieving 100 percent renewable electricity by 2030.

But Mayor Kristopher Larsen says he thinks the town can reach the target much sooner than that.

“From what we can see with climate change and the accelerating rate of change, we don’t have 13 years to wait,” Larsen said. “I’m going to argue that we should set a goal more on the order of five years from now.”

Nederland’s Board of Trustees meets Tuesday to consider making the commitment, and Larsen expects a unanimous approval.

Should that happen, Nederland will become the fourth city in Colorado to commit to the 2030 target, joining Boulder, Aspen and Pueblo. Breckenridge will likely be added to that list, when its elected officials consider a resolution Aug. 22.

This is not the first time that Nederland has attempted these kinds of targets in the past — the town recently adopted a resolution supporting the Paris climate accord — but the timing hasn’t often been right, said Eryka Thorley, of the citizen group Climate Together Nederland.

“All of this started a long time ago, with many resolutions for renewable energy that have been proposed and approved by our Board of Trustees, but when it came down to actually implementing, there’s always been hurdles,” said Thorley, whose group pushed the current resolution.

Nederland, like Boulder, is a customer of Xcel Energy, which complicates the town’s plan to get to its soon-to-be-adopted goal.

Currently, renewables make up just less than a quarter of Xcel Colorado’s total energy portfolio. Even if Xcel achieves a 60 percent mark by 2030 — a best-case estimate far from a guarantee for a company committed to coal through 2070 — communities such as Nederland and Boulder will still have to bridge a large gap to reach the 2030 target.

Document 10

**House Democrats push forward goals for Colorado climate change plan**

By [**JOEY BUNCH**](https://www.denverpost.com/author/joey-bunch/) | [jbunch@denverpost.com](mailto:jbunch@denverpost.com) | The Denver Post

PUBLISHED: February 9, 2016 at 5:31 am | UPDATED: June 7, 2016 at 3:37 pm

State House Democrats passed a bill Tuesday to add measurable goals and deadlines to the state’s plan to fight climate change.

Without a single Republican vote in the House, however, the bill would appear to be doomed as it moves to the Republican-led Senate.

The legislation would keep the state on pace — “near-term, mid-term and long-term,” it states — to reduce greenhouse gas emissions that most experts say are heating up the planet.

When Gov. John Hickenlooper, a Democrat, released his update to the 2008 [Colorado Climate Action Plan](http://cwcbweblink.state.co.us/WebLink/ElectronicFile.aspx?docid=196541&searchid=243b8969-739b-448c-bd2d-699af9b7aea0&dbid=0" \t "_blank" \o "Colorado Climate Action Plan) in October, some environmentalists criticized it as [a hollow gesture](http://www.denverpost.com/news/ci_28937697/hickenloopers-climate-change-plan-draws-scorn-spotlights-his" \t "_blank" \o "Hickenlooper's climate change plan draws scorn, spotlights his record) that needed more urgency.

“What we’ve got here is a set of measurable goals,” said Rep. Diane Mitsch Bush, a Democrat from Steamboat Springs. “This is not a new policy to “do something.” It’s a policy to set goals to try to figure out where we are and how we are moving or not moving, as the case may be.”

Rep. Gordon Kling enschmitt, R-Colorado Springs, argued that the bill gave government too much power to create and enforce rules without input from those affected the most.

Other Republicans said it would be devastating to low-income Coloradans who could see their power bills increase as a result.

“Let’s step back and take a deep breath and think about what we’re doing,” said Rep. Don Coram, a Republican from Montrose. “This is going to affect the jobs and the economy of rural Colorado. Let’s not move the goalposts and create a bunch of losers.”

Republicans have said the legislation, if it passes, should continually measure economic impact of the proposals.

Rep. Faith Winter of Westminster, who sponsored the bill with fellow Democrat Rep. Jeni Arndt of Fort Collins, pointed to the supporters of he bill.

“A coalition of military, faith and business leaders came together to ask for a real climate plan,” Winter said. “It’s sad that every member of the Republican caucus voted no on this bill, but I’m glad to see it move forward.”

Document 11

**Polis targets 100 percent renewable energy in Colorado by 2040**

“That’s going to mean green jobs that can never be outsourced in all parts of the state”

By [**RYAN SUMMERLIN**](https://www.denverpost.com/author/ryan-summerlin/) | The Post Independent

PUBLISHED: August 3, 2017 at 9:45 am | UPDATED: August 3, 2017 at 9:55 am

U.S. Rep. [Jared Polis](http://www.denverpost.com/tag/jared-polis/) stopped into a Glenwood coffee shop Wednesday on his gubernatorial campaign tour of the Roaring Fork Valley.

The Boulder Democrat, who’s served in the U.S. House of Representatives for 10 years, [is part of a crowded race](http://www.denverpost.com/2017/08/03/aspen-governors-forum/) to succeed Gov. John Hickenlooper.

Polis wants to set Colorado on a path to 100 percent renewable energy by 2040. “That’s going to mean green jobs that can never be outsourced in all parts of the state,” especially outside of the metro area, he said. The congressman said this will mean more clean energy manufacturing jobs, as well as jobs in installation and maintenance.

**2018 CANDIDATES FOR COLORADO GOVERNOR**

[Who is running for governor of Colorado in 2018? (And who is on the fence?)](http://www.denverpost.com/2017/07/13/colorado-governor-race-candidates-2018/)

“Working to move our state to 100 percent renewable energy, that push isn’t going to come from Washington with President Trump pulling out of the Paris accords and with continual giveaways to the fossil fuel industry,” said Polis.

Document 12

**Experts discuss uncertain future of renewable energy at Colorado Capitol**

The future of renewable energy could rely on economics

By [**MAX SIEGELBAUM**](https://www.denverpost.com/author/max-siegelbaum/) | [msiegelbaum@denverpost.com](mailto:msiegelbaum@denverpost.com) |

PUBLISHED: November 16, 2016 at 6:00 pm | UPDATED: November 16, 2016 at 6:11 pm

**HIGHLIGHTS**

* Three environmental experts met at the capitol building to discuss the impact of politics and economics on renewable energy.

The future of renewable energy may depend on convincing Americans it’s good for their wallets, according to a panel of experts who met at the Colorado Capitol on Wednesday.

Environment Colorado, an environmental advocacy group, invited three experts working in various fields of renewable energy to discuss how political shifts could impact the industry and environmental protection policies. Emma Spett, campaign organizer for Environment Colorado, described how Donald Trump’s election and promise to repeal legislation targeting industrial emissions shook many in the climate action community.

“We weren’t concerned about the Clean Power Plan before,” Spett said. Now, they are trying to work to repair some of the fissures within the U.S., and “these shouldn’t be red and blue state principles.”

Trump spent much of his campaign promising to revive the coal industry, which has struggled due to a shifting energy market and environmental regulations. The climate movement must seek to connect with areas where the industry has died, said Mario Molina, international director of the non-profit Climate Reality Project.

“We failed to have a conversation about where people will fit in the new economy,” he said, calling it a single policy mindset. Molina talked about a previous campaign in Florida where conservative politicians helped reach out to communities on “values they hold,” like free market economy, as a potential model for future policy making and advocacy. Moving forward, they should “listen to people, not give these cookie-cutter answers.”

Chris Gorrie is the campus president of the Ecotech Institute, a school devoted to training students for careers in renewable energy. He explained how formerly expensive technologies have plummeted in price: a solar panel costs substantially less than it did 10 years ago and wind turbines can save Coloradans millions of dollars. But changing the energy economy will require educating the workforce, and not just the engineers and technicians.

“We must build a culture that values sustainability,” he said.

Dawn Mullally recalled a visit she took to UQM, a Longmont-based company that makes electric propulsion engines for cars, buses and trucks. A company representative told her that much of their business revolved around exporting to China and other East Asian countries, not because of regulations and stringent environmental law, but because “markets drive things, not just policy.”

Mullally, the director of air quality and transportation for the American Lung Association in Colorado, also recalled a conversation with a representative of Xcel Energy, which recently started buying and building wind [farms across Colorado](http://www.denverpost.com/2016/05/13/xcel-energy-files-for-1-billion-rush-creek-wind-project/). Xcel did this, “because it was economically sensible.”

Document 13

**Prince Charles’ secret letters concern badgers, fish, climate change**

By [THE ASSOCIATED PRESS](https://www.denverpost.com/author/the-associated-press/)

PUBLISHED: May 13, 2015 at 12:24 pm | UPDATED: June 7, 2016 at 3:42 pm

LONDON — The Patagonian Toothfish has a friend in the future king of England — that’s one lesson from the British government’s release Wednesday of previously secret letters written by Prince Charles to government officials.

The cache of 27 letters was the subject of a lengthy legal battle that pitted Charles’ right to privacy against the public’s right to know. The British press dubbed them the “black spider” memos, because of Charles’ cramped handwritten greetings and closings, and the British government spent years in court and hundreds of thousands of pounds trying to keep them secret.

The letters, written a decade ago, include 10 written to then-Prime Minister Tony Blair and other top Labour Party officials.

The sometimes quirky prince, known for his commitment to organic farming and traditional architecture, freely expresses himself on matters such as badger culling, fish protection, the readiness of the armed forces, standards for alternative medicines and the preservation of historic buildings.

The letter-writing is controversial because as Britain’s future king, Charles is expected to remain neutral on political matters. Some could see the letters as inappropriate lobbying of the government by the heir to the throne — especially because the prince does mention sensitive topics dealing with national security matters, including the war in Iraq.

The letters’ tone is polite and sometimes apologetic. He does not demand action.

A 2004 missive to the fisheries minister is typical: “I particularly hope that the illegal fishing of the Patagonian Toothfish will be high on your list of priorities because until that trade is stopped, there is little hope for the poor old albatross, for which I shall continue to campaign,” Charles writes.

*The writer is executive director of Eco-Justice Ministries*

*This letter was published in the Oct. 18 edition.*

Document 14

**Pope Francis seeking dialogue, not total agreement, on climate change**

By [**THE DENVER POST**](https://www.denverpost.com/author/the-denver-post/) | [newsroom@denverpost.com](mailto:newsroom@denverpost.com)

PUBLISHED: October 17, 2015 at 11:12 am | UPDATED: June 7, 2016 at 3:38 pm

*Re: “The limits of papal infallibility,” Oct. 11 Mike Rosen column.*

Mike Rosen is wrong in his attack on Pope Francis. “Infallible” statements from popes are extremely rare, and nothing from Pope Francis has claimed that authority.

The pope’s encyclical on “our common home” is a letter addressed “to every person living on the planet.” It is addressed so widely because Francis “would like to enter into dialogue with all people about our common home.”

Pope Francis does not seek “unquestioned agreement,” as Rosen fears. The encyclical, and the pope’s recent words in the U.S., put forth moral perspectives that are deeply rooted in Catholic teachings as the basis for conversation. As the leader of a global church, working with learned advisers, he is well-positioned to spark dialogue on important issues — including economics and ecology.

I find Pope Francis to be far more illuminating and authoritative on these complex topics than “freelance columnist” Rosen.

**Rev. Peter Sawtell**, *Denver*

*The writer is executive director of Eco-Justice Ministries*

*This letter was published in the Oct. 18 edition.*

Document 15

**Experts fear “quiet springs” as songbirds can’t keep up with climate change**

Certain migratory songbirds can’t keep pace with the shifting start of spring

By [BEN GUARINO](https://www.denverpost.com/author/ben-guarino/) | The Washington Post

PUBLISHED: May 16, 2017 at 7:07 am | UPDATED: May 16, 2017 at 11:25 am

In 1962, Rachel Carson warned that pesticides, particularly DDT, would lead to springs without birdsong, as she wrote in her book “Silent Spring.” Carson’s forecast kick-started an environmental movement and was instrumental in the Environmental Protection Agency’s decision to ban the pesticides 10 years later, so her descriptions of deathly quiet did not come to pass.

But the danger of a silent spring, according to ecologists who study birds, did not evaporate with DDT. The looming threat is not chemical but a changing climate, in which spring begins increasingly earlier – or in rare cases, later – each year.

“The rate at which birds are falling out of sync with their environment is almost certainly unsustainable,” ecologist Stephen J. Mayor told The Washington Post. Mayor, a postdoctoral researcher at University of Florida’s Florida Museum of Natural History, echoed Carson: “We can end up with these increasingly quiet springs.”

Certain migratory songbirds can’t keep pace with the shifting start of spring, Mayor and his colleagues wrote in a Scientific Reports study published Monday. Previous research noted that, in specific areas, some species can adjust to an earlier spring start, such as wood thrushes that breed sooner after arriving at Pennsylvania’s Laurel Highlands. But the new study was the first to survey songbirds across the entire North American continent. For 48 songbird species, the mismatch between arrival date and the onset of spring grew by an average of half a day per year between 2001 and 2012.

Of the species studied, nine fared the worst, with a yawning gap between their arrival date and the spring shift: blue-winged warblers, eastern wood-pewees, great crested flycatchers, indigo buntings, northern parulas, rose-breasted grosbeaks, scarlet tanagers, Townsend’s warblers and yellow-billed cuckoos. In the case of the cuckoos, for instance, spring greenery started growing 1.2 days earlier per year, although the birds arrived on average 0.2 days early. Put another way, the timing mismatch increased by an average of one day annually.

The report combined satellite data with bird sightings all over North America, splitting the continent into 120-by-120 mile sections. “The novel thing about this paper is the scale at which they are showing the effect,” said Wesley M. Hochachka, an ecologist at the Cornell Lab of Ornithology in New York who was not involved with this report.

Using satellite imagery, the study authors tracked the start of green-up, the sudden burst of photosynthetic activity that begins in early spring in North America. As seen from the sky, green-up is an explosion of leaves. This brings out droves of hungry caterpillars and other plant-eating insects. These bugs are a crucial food supply for songbirds, which travel northward to eat and breed after spending the winter in South or Central America.

This invertebrate buffet lasts for a limited time. In oak forests, for instance, insects find the young leaves quite tasty. But as the foliage ages, the oak trees deposit bitter tannin compounds in their leaves, making the plant matter difficult to digest or downright inedible. If birds’ timing is off, they may arrive to find their habitats impoverished of food.

Songbirds leave Central or South America timed according to changes in daylight. Departure dates vary yearly, but not wildly. Meanwhile in the north, Mayor said, “time for green-up is shifting with climate change and becoming more unpredictable.” In the eastern United States, spring green-up started earlier and earlier.

In Townsend’s warbler habitat and some other western regions, green-up was delayed later each year during the study period. The reasons for the lag are not yet fully understood, the scientists said, although Hochachka theorized that a lack of rainfall could play a role.

The study authors also tracked when birds arrived in the north using data from Cornell University’s eBird project, a compendium of 400 million sightings submitted by birdwatchers since the early 2000s. (The citizen-science eBird program fuels North American bird research, Hochachka said, in a way no other continent can match.)

There was some good news from these sightings, Mayor said. “At least 80 percent of the species don’t seem to be dramatically affected yet,” he said. Some songbird species may make up for lost springtime by flying north faster.

Mayor emphasized that the researchers selected the 48 songbird species to study because they were commonly spotted. It’s harder to get reliable data on rare species that are threatened with extinction.

The fact that scientists found nine pronounced mismatches in a relatively short timespan was notable, Hochachka said. Most studies of this type focus on smaller regions but use time scales longer than a single decade. “They have identified the really blatant cases where species’ arrivals are diverging,” he said.

It was too early for Mayor to speculate what characteristics separated the most-mismatched nine from the other 48 species, he said. But the ecologist said he expected these bird populations to decrease because of their poor timing. He was also worried that a lack of songbirds would go beyond silent habitats.

“If birds aren’t arriving when insects emerge in the spring, we could see things like insect outbreaks or defoliation,” he said. “There are many potential impacts that we don’t have a good handle on yet.”

And unlike the case of “Silent Spring,” any given EPA ban cannot curb this trend. Mayor recommended that bird fans continue to contribute data to eBird, given its scientific value. “Getting outside and observing these birds is important,” he said.

Likewise, Hochachka said, it would be difficult to directly ameliorate the impact of this mismatch. But it is still possible to make birds’ lives easier in other ways, he said, such as planting native or bird-friendly plants in our back yards.

“There are things I think we can do in the northeast states to compensate somewhere else in the life cycle,” Hochachka said. As birds return to South and Central America along the East Coast, for instance, city lights may cause them to lose their way. Or worse, crash into windows. Reducing light pollution or installing non-reflective glass could help make the long trip a little easier.

Document 16

**Monastery near Aspen does its part to fight climate change**

Father Josef Boyle said the monks felt morally responsible to heed the pope’s call

By [**SCOTT CONDON**](https://www.denverpost.com/2017/10/05/st-benedicts-monastery-climate-change-fight/) | The Aspen Times

October 5, 2017 at 9:00 am

When Pope Francis called for “swift and unified global action” on environmental issues in May 2015, the monks at St. Benedict’s Monastery in Capitol Creek Valley took it to heart.

The monks are installing a 202-kilowatt solar photovoltaic system at their picturesque ranch, and the system will offset 100 percent of electricity use at the chapel, retreat center and other buildings. The project is partially financed by a $75,000 grant from the Community Office for Energy Efficiency.

Father Josef Boyle, the abbot of the 3,000-plus-acre ranch where the monastery is located, said Wednesday the monks felt morally responsible to heed the pope’s call.

“The monastery has an interest in it partially to be environmentally safe and use the environment in the best way,” Father Josef said. “So that’s what got it going.”

It also makes financial sense. The monastery will invest its own funds in the projects, which will pay for itself in energy savings in about 10 years, he said.

Document 17

**Pope Francis’ quixotic quest on climate change**

Pope Francis speaks in St. Peter's Square at the Vatican last Sunday, several days before he issued his encyclical on climate change. (Gregorio Borgia, The Associated Press)

By [**THE DENVER POST**](https://www.denverpost.com/author/the-denver-post/) | [newsroom@denverpost.com](mailto:newsroom@denverpost.com)

PUBLISHED: June 19, 2015 at 3:32 am | UPDATED: June 7, 2016 at 3:41 pm

Pope Francis’ encyclical letter “On Care for Our Common Home” is, as advertised, an impassioned plea for the world’s leaders to take action to stave off warming of the planet. And that may be the least controversial part.

The encyclical is also a critique of modern culture, technology, consumerism, globalization, urbanization, markets, political corruption, individualism, and even the 24/7 news and entertainment cycle.

And this broader focus is where the pope wades into turbulent waters.

To counter our dependence on fossil fuels, Francis calls for a “bold cultural revolution” in which people turn away from consumerism and the uncritical embrace of technology and economic growth. And while this vision has a certain appeal, it also is deeply quixotic.

That’s not because “consumerism” is sacrosanct but because it is hard to define. At what point does the pursuit of material comfort become excessive and ethically problematic? Telling people to downsize their aspirations is not likely to be a winning strategy — or at least never has been in the past.

Moreover, the biggest growth in greenhouse gas emissions in the past 30 years has occurred in countries that are still trying to supply their citizens with basics such as electricity. The poor of the world will not be denied a slice of the good life. And Francis wouldn’t want them to be left out, either.

Francis criticizes those who tout economic growth and technological progress as keys to overcoming environmental problems. But technology in particular *is*key — and far more likely to be decisive than an elusive cultural revolution.

Only through technology — both improved and new — will we be able to fulfill the needs and desires of people across the globe while eventually moving beyond fossil fuels.

The pope seems to believe that a technological fix is illusory. But is it? Energy use per dollar of GDP in the U.S. and elsewhere has declined steadily for decades. And in 2014, the International Energy Agency reported a highly significant watershed: the “decoupling” of economic growth and carbon dioxide emissions.

For “the first time in 40 years,” the agency reported, “there was a halt or reduction in emissions of the greenhouse gas that was not tied to an economic downturn.”

The pope is on solid historical ground when he highlights the church’s longstanding commitment to stewardship of the natural world as opposed to exploitation. And he is right to point out the perils of both anthropocentrism and what he calls “biocentrism,” while decrying “the disappearance of thousands of plant and animal species which … our children will never see.”

His broad vision is challenging. No one is likely to agree with every assertion, and many will object strenuously to some claims. But perhaps that is precisely why Francis’ encyclical is a worthy contribution to a growing debate.

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Document 18

**Climate change hits Winter Olympic preparation**

Warming is forcing athletes to hunt farther from home for wintry conditions, particularly just months away from an Olympics

By [**EDDIE PELLS**](https://www.denverpost.com/author/eddie-pells/) and [**JOHN LEICESTER**](https://www.denverpost.com/author/john-leicester/) | The Associated Press

December 18, 2017 at 4:10 pm

SAAS-FEE, Switzerland — The athletes’ half-hour commute in the Swiss Alps — up two gondolas, then through a tunnel in the world’s highest underground train to a glacier at 11,000 feet — served up daily grim reminders that global warming is threatening their line of work.

After exiting the train, they squelched through a field of grayish mud to reach shrinking snowfields scarred by new crevasses. Occasionally, they heard the sharp roars of glacial ice breaking off in monster chunks, then echoing across the peaks where they trained jumps, tricks and turns for the Pyeongchang Olympics. Most days, they basked in brilliant, snow-melting sunshine that bathed the whole scene in deceptive beauty.

Another subtle but telltale indicator of climate change’s disruptive impact on winter sports: Many athletes — here 5,000 miles away from the Rockies and 3,500 miles from the Green Mountains of New England — had the letters “USA” emblazoned on their jackets. Americans once had little need to swap continents to guarantee offseason access to snow. But warming is forcing athletes to hunt farther from home for wintry conditions, particularly just months away from an Olympics.

“Without the snow and the cold in the places in the States where it’s normally cold, we have to travel over here and find a place on a glacier to get a couple of jumps off,” said Jon Lillis, world champion in aerials skiing. “Something that terrifies every winter athlete daily is the fact that the conditions are not as good as they used to be. You see videos of people skiing on glaciers back in the ’80s and ’70s, and half of that glacier doesn’t even exist anymore.”

Last year, the aerials team stopped water training at its headquarters in Park City, Utah, in mid-October, then sat and waited a month for snow that came late to the mountain that hosted the Winter Games 15 years ago. The World Cup season began in China, and the Americans were forced to travel there not having set foot on snow in months. The results, not surprisingly, were dismal: not a single podium and only one finish in the top 5.

Lesson learned: This season, they uprooted to glaciers at Saas-Fee, Switzerland, and Ruka, Finland, for autumn training needed to be competitive at February’s Winter Games in South Korea.

The hunt for offseason training spots like these is increasingly a scramble, and not just for the Americans. The hellishly named “Lucifer” heat wave that baked Europe in July and August wreaked havoc on teams’ schedules. Canadian skicross racers had to cancel plans to train on Italy’s Stelvio glacier that turned a sickly gray, rerouting to Mount Hood, Oregon, instead. Canadians endured issues elsewhere, scrubbing a planned summer training trip to Argentina because of hostile weather and extreme winds.

France’s moguls team cut short a July training camp on its home glacier in Tignes after a crevasse opened under the course, which this year had just one jump instead of the usual two because of a shortage of snow, said team member Ben Cavet.

He was shocked by the visible deterioration of his regular venue for summer training.

“It’s crazy, you know? I always thought global warming was like your granddad going, ‘Oh, I used to go and ski here 20 or 30 years ago and there was more snow,'” Cavet said in an interview. “But now we really are talking eight years. I can see a huge difference. Up on the glacier, now there’s this huge cliff, you know like a big rock, that you couldn’t even see before.”

“It is worrying, very worrying,” he added. “What scares me about global warming is that you can see that the world is suffering in some of the most beautiful places on Earth.”

Other glaciers suffered, too:

— Austria’s Moelltaler Glacier closed from Aug. 15-Sept. 7 because of what its operators said were “water gutters in the ice” and other safety concerns.

— The Stubai Glacier, also in Austria, is deteriorating. U.S. coach Mike Jankowski, who brought some of the snowboarders and freeskiers there after the Saas-Fee trip, said there are concerns that some of the big buildings, drilled into the permafrost on the glacier, might not be stable for much longer.

— Italy’s Stelvio, billed as the Alps’ largest summer skiing area, shut for 21 days in August, a sobering first since the opening of its lifts in the 1950s. Italian athletes who still came to train were hauled up on snow-cats.

“Partly it was because of the heat,” said Umberto Capitani, in charge of the ski area. “But it’s also been three years that we’ve had very little snowfall.”

— The Horstman Glacier in Whistler, Canada, near the 2010 Olympic Alpine venue, has deteriorated so badly that a renowned recreational snowboard camp was canceled, and other activities curtailed.

“There used to be like nine lanes for different camps there, and now it’s five or six,” said U.S. moguls skier Troy Murphy. “We still go there. It’s still pretty good. But the amount it’s shrunk, the snow is so much lower.”

— Glaciers of the French Alps lost an average of 25 percent of their surface area between 2003 and 2015, and the rate of shrinkage nearly tripled, according to a study being readied for publication early next year.

French researcher Antoine Rabatel said it is “highly probable” that the same trends will show up at glaciers elsewhere in Europe, as winters get shorter and summers hotter.

Winter sports training, he said, is “going to become harder and harder.”

The quest for reliable spots is becoming more competitive, and securing training locales is increasingly using up coaches’ time and budgets.

“I need to be progressive and search out new spots,” said Jankowski, who has had to add more reliable European venues to a global travel schedule that already includes trips to New Zealand and other locations in the Southern Hemisphere.

In October, skiing and snowboard athletes from the U.S. and dozens of other nations lined up before dawn, doing warmup exercises in the dark as they waited, to squeeze aboard the first gondola up to Saas-Fee’s glacier. It also is in retreat, no longer reaching down to above the no-cars-allowed resort town, as it did in the 1930s.

Environmentally minded athletes are wrestling with the moral dilemma of contributing to atmospheric pollution with their widening search for snow.

“We take planes to go overseas. We take cars every day to go training,” said French snowboard-cross racer Pierre Vaultier, gold medalist at the 2014 Sochi Games. “We are not examples about how to decrease global warming.”

U.S. gold-medal snowboarder Jamie Anderson said it’s easy to get “sucked into the system, whether you want to or not.”

“It’s hard to get out until you consciously make the decision,” Anderson said. “With how passionate I am about snowboarding, it’s hard to make that shift.”

Well aware of the impact snow sports are having on the environment, Burton Snowboards recently announced a series of changes aimed at diminishing its environmental footprint.

The growing frequency of warm winters has, indeed, hurt the financial health of the industry, including ski resorts that form the backbone of the recreational side of the sport. A study commissioned by the Natural Resources Defense Council and the athletes’ group Protect Our Winters found that skier visits in New Hampshire were 17 percent lower and ski resort revenue was $54 million less in the “low-snow” winters of 2001-02 and 2006-07, as compared with higher snowfall winters of 2007-08 and 2008-09. The differences between low- and high-snow seasons in Colorado were 8 percent in visits and $154 million in revenue.

The increased frequency of warm-weather race disruptions on the pro circuits also is causing alarm. Mild temperatures and lack of snow in Germany, Croatia and Michigan hit the 2015-16 season with multiple cancellations and venue changes. Last season began with events in Colorado and Alberta scrubbed because of lack of snow. This season’s early Alpine event in Beaver Creek, Colorado, was run on almost all man-made snow that turned glassy in the warming sunshine.

Biathlon venues such as Ruhpolding in Germany and Ostersund, Sweden, commonly now make thousands of cubic yards of snow at the end of winter and store it through summer beneath tarps and wood chips for early-season races the next winter.

“We used to have relatively reliable conditions at all biathlon venues around the world,” said Max Cobb, the president of U.S. Biathlon. “You can’t count on it anymore.”

Temperatures in the 40s and 50s greeted freestyle skiers and snowboarders at their world championships in Spain last March, creating mushy conditions like those that took some of the shine off the 2014 Sochi Games and the 2010 Olympics in Vancouver.

“It’s a scary thing right now for winter sports. There’s fewer and fewer places and all the glaciers are melting,” U.S. aerials coach Matt Saunders said in Saas-Fee. “It’s definitely getting harder and harder to get on snow early, for sure. We are having to travel further and further.”

Scientists warn that worse is to come for winter sports, and that more warming will render proven Olympic venues unsuitable, even with greater use of artificial snow-making. Much has been said about the scarcity of snow in Beijing and surrounding areas, which will host the 2022 Winter Games, though officials have frequently brushed off the problem and promised to make enough artificial snow.

Park City is in the mix for the 2026 and 2030 Olympics. The irony is not lost on Olympians who live there but had to travel the globe to train for Pyeongchang.

“In my career, a lot of times, it’s been really easy to chalk things up to it being a bad winter,” said U.S. aerialist Mac Bohonnon. “But (warming is) undeniable. And the more I’ve traveled, the more I’ve seen that it’s a pretty common theme wherever you go.”

*AP Sports Writers Andrew Dampf in Rome and Eric Willemsen in Vienna contributed.*

Document 19

**“Two Degrees” at the Jones Theatre parallels climate change, a life’s meltdown**

While it won’t change the course of your politics, the play harbors an undeniable emotional resonance

By [**Lisa Kennedy**](https://theknow.denverpost.com/author/lisa-kennedy/) Feb 23, 2017, 11:56 am

**3 out of 4 stars**

The day “Two Degrees” had its world premiere, Denver experienced a record-breaking temperature of 80 degrees. You might have thought that Mother Nature could not have offered a more apt lead-in for a review of a play about a climate scientist who’s been drafted by a college friend, now a high-ranking senator, to appear before a Senate committee. Yes, the balmy weather was a bit unnerving (if pleasing) but the Denver Center’s production of Tira Palmquist’s play proves to be far more than an issue outing.

The play opens onto a dimly lit set to the sounds of mutually gratifying sex. Emma (Kathleen McCall) and Clay (Jason Delane) met in a D.C. hotel bar and made their way to her room. Each knows next to nothing about the other. That’s Emma’s rule. We learn why soon enough when Clay goes to the bathroom to get dressed and another man, a memory, walks into the room. This is husband Jeffrey (Robert Montano). While Emma was taking ice core measurements in Greenland, an unfathomable personal disaster took place back home in Boulder.

The play gets its title from the notion that, according to some scientists, [2 degrees Celsius](http://www.pbs.org/newshour/bb/why-2-degrees-celsius-is-climate-changes-magic-number/is) is the threshold that, once exceeded, will lead to us to irreversible environmental upheaval. For Emma, the margin of disaster turned out to be more mundane: Someone had too many drinks and there was a crash on a Colorado road.

It is no easy task maneuvering the cataclysmic. The play’s twofold approach is impressively fluid as it moves between Emma’s past and her present, between her grief and the planet’s forewarned misery. The thaw that Emma researches threatens the way humankind lives. But the one she is experiencing epitomizes the benumbing and melting that humans go through after disastrous personal loss.

As the men in Emma’s life, Montano keeps gainfully busy portraying Jeffrey as well as Eric, Senator Allen’s exacting chief of staff, and Malik, an extreme weather carpenter at the Greenland station. His impressive triple duty is more than economical: it underscores Emma’s fragility. “Not now, Jeffrey,” she says sharply to his apparition more than once. “Not now!” But the other men, looking like variations of her husband, gnaw at her.

Emma is a tricky character to inhabit. As comfortable as she may be on the ice or in the home that she and Jeffrey share, she finds herself less sure-footed on D.C.’s slippery terrain. McCall is at her best capturing the character’s anxious energy, her defensive prickliness. It’s Emma’s frosted interior that occasionally begs for a more still approach.

Sen. Allen (Kim Staunton) and Eric represent the sausage-making aspects of governance: the horse-trading, the pragmatism. Staunton imbues Sen. Allen with a easy confidence. Of course, she can work a room. Still, a slip of the tongue during a wine-fueled visit with Emma could have forced the play into too much interpersonal drama. Instead, Staunton’s get-things-done portrayal underscores just how hard-nosed she’s become since their college days. Credit, too, director Christy Montour-Larson’s deft trust in the play’s ideas and emotions and the audience’s appreciation of the subtle movements between the expansive and the taut.

The sleek, evocative set (by Robert Mark Morgan) suggests the icy minimalism of Greenland as well as the very different chill of Washington, D.C. Charles MacLeod’s lighting — along with projections by Topher Blair — tease the set’s panes of glass and ice. You heard right, ice. The understated sound of dripping underscores the play’s global anxieties but also hints at the drip, drip, drip of emotional torment.

As good as “Two Degrees” is at depicting the slow melt of grief, it would be a disservice to Palmquist’s ambitions to ignore the scientific and political backdrop of the play. A particularly pointed exchange finds Clay and Emma arguing the dangers or the merits of mining and drilling. Turns out Clay, such an appealing if provisional paramour, has a day job. And a quip by Sen. Allen about her colleagues being “easily bored by facts” got a hearty laugh opening night.

The finely written swaths of dialogue about climate change aren’t likely to move opposing views dramatically nearer. But the play offers a humane argument that not only is the unmaking of life a matter of degrees, but so too, the making sense of it.

*“Two Degrees.” Written by Tira Palmquist. Directed by Christy Montour-Larson. Featuring Kathleen McCall, Jason Delane, Robert Montano and Kim Staunton. Through March 12 at the Jones Theatre Denver Performing Arts Complex, 14th and Curtis streets. Tickets at [dcpa.org](http://dcpa.org/" \t "_blank) or [303-893-4100](tel:(303)%20893-4100" \t "_blank)*

Document 20

**Purple State Memo: Darryl Glenn questions climate change, sticks to the right in final days**

**A weekly newsletter featuring Colorado political news and analysis**

By [JOHN FRANK](https://www.denverpost.com/author/john-frank/) | [jfrank@denverpost.com](mailto:jfrank@denverpost.com) | The Denver Post

PUBLISHED: October 19, 2016 at 12:59 pm | UPDATED: October 27, 2016 at 6:11 pm

Is Darryl Glenn just throwing in the towel?

The Republican nominee for U.S. Senate in Colorado is finishing his campaign where it started.

In an election forum earlier this week, Darryl Glenn questioned whether climate change is real — the kind of statement he espoused in the GOP primary but not one designed to appeal to the broad coalition he needs to defeat Democratic incumbent Michael Bennet in November.

Glenn’s remarks — on the day ballots hit the mail in Colorado — came in response to a question at the Denver Chamber of Commerce forum Monday about the Clean Power Plan.

“The climate is probably — could be changing,” he said, putting doubt into the [broad scientific consensus](http://climate.nasa.gov/scientific-consensus/) behind a warming planet. “But what we have to have is a debate over our involvement with that.”

It’s [not the first time](https://www.cpr.org/news/story/republican-senate-hopeful-glenn-talks-trump-guns-and-climate-change) Glenn questioned the role humans play in global warming, but his statement on the main issue is about as far as he’s gone to question whether climate change even exists.

His other prominent comment on the issue came more than six months ago amid a crowded GOP primary. In [a campaign forum in Fort Lupton](http://www.denverpost.com/2016/03/31/colorado-gop-senate-candidates-attack-epa-defend-fracking-at-forum/), Glenn questioned the scientific evidence behind climate change. ‘Show the data. Let’s have that discussion,” he told a small crowd at a restaurant in Fort Lupton.

*UPDATED 4 p.m.*: Glenn has no public campaign events [listed on his calendar](https://electdarrylglenn.com/events/) for the final three weeks. A campaign spokeswoman earlier confirmed there are no events to attend in coming days, but now says he is attending three events in three days.

It’s not clear why Glenn isn’t advertising his events or inviting the media to hear him speak — which raises questions about whether he’s even trying at this point given his huge deficit in the polls. Democratic rival Michael Bennet is launching a statewide bus tour Friday that he announced to the public.

Document 21

**Bill Gates Q&A on climate change: ‘We need a miracle’**

By [**THE DENVER POST**](https://www.denverpost.com/author/the-denver-post/) | [newsroom@denverpost.com](mailto:newsroom@denverpost.com)

PUBLISHED: February 23, 2016 at 3:21 am | UPDATED: June 7, 2016 at 3:37 pm

All we need is an energy miracle. No pressure, kids.

So came the call from [Bill Gates on Monday evening with the release of his annual letter](https://www.gatesnotes.com/2016-Annual-Letter). It tackles heady subjects with the billionaire’s usual optimistically sober tone. Unlike letters past, Gates aimed this year’s missive at teenagers instead of adults, arguing they’re our best shot at solving the world’s energy crisis.

The genesis of the note was a conversation the Microsoft co-founder and his wife Melinda had with a group of high school students in Kentucky. The students wanted to know what cereals the Gates family preferred and if Bill knows how to dance the Nae Nae. They also wanted to know which superpower Bill and Melinda would pick, and that question struck a particular chord.

The answers to the superpower question — Bill chose more energy, and Melinda chose more time — seem straightforward at first blush. They were the kinds of things that any adult desires.

In the letter, however, Gates focuses not on being peppy for a tennis match but instead on the world’s mounting energy crisis. Melinda likewise issues a global call for improvements in gender equality that would give women more time to pursue those things they care about most.

On the energy front, the most crucial part of the letter centers on an equation cooked up by Gates: P x S x E x C = carbon dioxide.

He shows that changes to P (the world’s population), S (services used by each person) and E (energy) will not be dramatic enough to get carbon dioxide production down to zero — something that has to happen, according to Gates, to avoid catastrophic consequences to global warming. The factor that matters most is C (carbon dioxide produced by energy).

Gates has talked quite a bit in the past about the need to come up with new energy technology beyond solar, wind, nuclear and all the rest. We’ll need a major development if the world is really going to change its energy equation. In the letter, though, he puts a very fine point on the idea.

“In short, we need a miracle,” Gates writes. “When I say ‘miracle,’ I don’t mean something that’s impossible. I’ve seen miracles happen before. The personal computer. The Internet. The polio vaccine. None of them happened by chance. They are the result of research and development and the human capacity to innovate.

“In this case, however, time is not on our side. Every day we are releasing more and more CO2 into our atmosphere and making our climate change problem even worse,” he writes. “We need a massive amount of research into thousands of new ideas—even ones that might sound a little crazy — if we want to get to zero emissions by the end of this century.”

Ever the optimist, Gates expects just such a miracle to arrive within the next 15 years, and he expects it just might come from one of today’s teenagers.

In the interview below, Gates expounds on his energy ideas and faith in the world’s youth. The letter goes into more detail on that subject as well as Melinda Gates’s thoughts on gender equality.

**Why did you aim the letter at the teenage audience?**

I think this younger group has a lot of advantages. They will tend to take a long-term view of things. They’re more scientific oriented and more interested in opportunities they can dream about where our generation hasn’t solved the problem, and, therefore, they can take up and surprise everybody by what they are able to do.

With scientific innovation, you see that people in their 20s get a depth of knowledge and a willingness to look at things in a different way. So, I would say it’s likely that if an energy miracle comes in the next 15 years, key participants will be the teenagers of today.

**Why are you confident that there will be a breakthrough?**

What we need to get that probability up to be very high is to take 12 or so paths to get there. Like carbon capture and sequestration is a path. Nuclear fission is a path. Nuclear fusion is a path. Solar fuels are a path. For every one of those paths, you need about five very diverse groups of scientists who think the other four groups are wrong and crazy.

**Throughout history, it seems like we’ve turned to war and competitions with massive prizes to bring about major advances in a field. Where is the motivation to come up with this energy miracle going to come from?**

Scientific problems don’t generally just yield at the time someone comes up with a prize or something equivalent. It is true in war that if one country funds research and gets ahead of the other on ballistic targeting or machine guns, they get an advantage. So you will take whatever is on the scientific frontier and try to get an edge by financing that.

In the energy space, there is no equivalent of when JFK said, “Let’s go to the Moon.” At that time, people understood they needed a certain kind of rocket, recovery system and landing system. There was a very straightforward path where the probability of success, given all the new technologies, was like 95 percent. They needed to integrate everything together in a super reliable way.

This is more like the invention of the automobile. You had risk takers working on steam-powered cars and electric cars. Then, there was this dark horse where they were exploding things in these metal boxes called internal combustion. They kept blowing things up, but because of the energy density of gasoline, the private market weighed the relative merits, and two out of three approaches are footnotes in history.

There is a $3 trillion market per year for buying energy that is bigger than any prize anyone can come up with. But the time it takes to develop this technology means you need slightly more patient capital. The normal venture capitalist model that has worked for biotech and worked for software is not quite right here.

I do think with some tuning, the [Breakthrough Energy Coalition group that we’re putting together](http://www.breakthroughenergycoalition.com/en/index.html) will have some characteristics of a venture fund to invest in these breakthrough ideas.

**Are there riskier things along the lines of geoengineering that we should be trying at this point?**

Geoengineering is, at best, a backup strategy to buy ourselves time, if we don’t move quickly enough and things like the ice melting and methane release are happening in a nonlinear way that we don’t expect. I support research on geoengineering and a dialogue on geoengineering. But it really is like a fire extinguisher that puts the flames out for decades as opposed to a real solution.

The word geoengineering also covers another class of things, like the free air capture of carbon. There is a Harvard professor named David Keith who has a startup company called Carbon Engineering that is working to build a prototype plant. The cost per ton you pull out of the air is still super high. And it is not clear that will ever become cheap.

(Gates is an investor in Carbon Engineering.)

That idea that energy companies tend to take a long time to develop and are not ultimately profitable seems like a hard sell for a youngster looking to make their way in the world.

Well, they have a long time frame. And the science is pretty cool and interesting. As a percentage of young people, we don’t need a huge, huge percentage. We need less than, say, the NFL needs.

Science in general has so many spin-off benefits in terms of what we are going to do in materials and basic understanding. We have environmental problems other than climate change, too—species extinction and lots of things going on in the ocean. There is plenty of room for science that is not quite as daunting as being the person that makes the energy breakthrough.

**Who would you hold up as a role model for teenagers these days?**

I think Steve Jobs, Mark Zuckerberg, Larry Page — some of the IT people that took a risk and did amazing work that has changed the world. A few dozen more people like Elon Musk would be great.

I don’t think that kids know enough about the people who are doing the medical breakthroughs. Hepatitis C went from being a terrible liver disease that is likely to kill you—now we have not one but multiple cures for that. The heroics and amazing work in the biology space, including medicines for poor countries and rich countries, I don’t think those get the visibility they should. But there are plenty of scientists and others that have taken on those causes.

For the young people right now, they probably know the historic figures better than they know the present-day innovators.

**In the letter, you mention that “The Martian” was your favorite movie last year. What in particular did you like about it?**

I thought it was pretty educational, and the science- related aspects were fun. Unlike a lot of science things, they struck me as actually realistic. Usually, movies dumb down the book so much that you are almost disappointed when you see the movie. It didn’t have the full content of the book, but I thought they did a good job.

**How do you stay optimistic?**

Our deep scientific understanding of how to design alloys, how to pick catalysts on a rational basis—our ability to do science is accelerating. Science has taken us from a situation where more than a third of all kids died to a situation where 5 percent of kids die. In the next 15 years, if we do our job right, we will get that down to 2.5 percent.

If you zoom out a little bit, and you look at the acceleration of science over the past 100 years, and the basic understanding we have gained and the tools we have, and the percentage of people in the world getting literate and getting engineering degrees, those numbers are on the constant rise.

I think it is irrational not to be optimistic, but I admit I am disposed to be optimistic. So maybe I would misconstrue the facts if they were against me. But I think, honestly, you have to be optimistic. Look at what we are doing with food production. Look at what we are doing with health. Would you rather have cancer 10 years ago or 10 years from now?

My favorite book is “The Better Angels of Our Nature” by Steven Pinker. As he says, there is only one thing that has gone down faster than violence, and that is our tolerance for violence. Ironically, at the period where violence is lower than ever, our disgust to how much violence there is at an all-time high.

When the U.S. was poor, we polluted our rivers so badly. We made such a mess of this country. And then we got rich and said, “Oh God, we have to clean up the Potomac. We even have to clean up the stupid Hudson.” I mean, my God, we’re getting so picky.

Being rich has allowed us to get disgusted at this mess that we made. We are more tasteful about things that bother us. That is the leading indicator of things that we will change. We will change our energy economy. We will change our gender imbalance because we are kind of unhappy about it.

Document 22

**JPMorgan won’t finance new coal mines that worsen climate change**

By [**BLOOMBERG NEWS**](https://www.denverpost.com/2016/03/07/jpmorgan-wont-finance-new-coal-mines-that-worsen-climate-change/)

PUBLISHED: March 7, 2016 at 9:26 am | UPDATED: June 7, 2016 at 3:37 pm

JPMorgan Chase is the latest big bank to pull back from coal.

The bank will no longer finance new coal mines around the world and will end support for new coal-fired power plants in “high income” countries of the [Organization of Economic Co-operation and Development](http://www.oecd.org/about/), JPMorgan said in a policy statement on its website.

The decision puts JPMorgan on a growing list of financial institutions, including Bank of America, Citigroup, Morgan Stanley and Wells Fargo & Co., that have pledged to stop or scale back support for coal projects. It’s part of a broader divestment campaign led by environmental groups looking to move the global economy beyond fossil fuels.

“We believe the financial services sector has an important role to play as governments implement policies to combat climate change,” JPMorgan said in the document.

Outside of rich countries, the New York-based bank will back only coal-fired plants that have “ultra-supercritical” technology that is more efficient than conventional systems. JPMorgan will consider on a “case-by-case basis” coal plants in rich or poor nations that use technology to capture carbon dioxide emissions and prevent their release into the atmosphere.

JPMorgan also plans to reduce its credit exposure in the “medium term” to companies that generate most of their revenue from coal mining and coal sales. The bank expects its business to reflect the “decline of coal as an energy source.”

The bank published its updated policy statement on Friday. In 2013, in an earlier version, JPMorgan said it would reduce its exposure to companies that engage in “mountaintop mining” in Appalachia.

Document 23

**Harrop: Fighting climate change fo real**

By [**SPECIAL TO THE DENVER POST**](https://www.denverpost.com/author/special-to-the-denver-post/)

PUBLISHED: August 11, 2015 at 9:19 am | UPDATED: June 7, 2016 at 3:40 pm

Time to drop this “war on coal” talk. Time to ignore the hollering by coal country politicians over President Obama’s beefed-up plan to combat global warming.

No, the Clean Power Plan will not ruin their local economies, because coal has already done that, certainly in Appalachia. Look at those barren flats where majestic mountains once stood. The coal industry lopped off the mountaintops and fouled the streams, depriving West Virginia and eastern Kentucky of a key recruiting tool for modern employers prizing a healthy environment.

But let’s not go overly negative here. Coal did its job. It powered 20th-century America. The Appalachian coal regions gave and gave. We honor their sacrifice.

So rather than call the new plan a war on coal, let us call it a retirement party for coal. Coal is the largest source of planet-warming gases. It must make room for 21st-century power.

Mother Nature has already offered us a foretaste of what she has in mind should global warming go unchecked. Higher temperatures have worsened drought in the West, igniting large swaths of California, Washington and Oregon.

Glacier National Park in northern Montana may sound like a cool, watery place. But tourists there have been abandoning their cars to flee wildfires. The glaciers themselves are melting and may be gone in 30 years.

Flooding in other parts of the country is part of the same climate phenomenon.

Natural gas emits about half as much carbon as does coal and can transition us to truly clean power. But the future is clearly renewable energy from such sources as the sun and wind.

The new rules push us in that direction. They will require utilities to generate at least 28 percent of their electric power from renewable sources by 2030. (Renewables accounted for only 13 percent last year.)

This is not mission impossible. In 2011, California mandated that 33 percent of its electricity come from renewable energy sources by 2020. California’s economy is booming — aided no doubt by all that clean-energy venture capital (almost 60 percent of America’s total) flowing into the state.

Obama’s plan promotes a cap-and-trade system. States place a limit on greenhouse gases and let businesses buy and sell permits to emit them. This market-based approach started off as a conservative idea. Do remember that when the opposition rails against the idea as “cap and tax.”

California already has a cap-and-trade system, and 10 other states have followed suit. At least 30 other states also have mandates for renewable energy.

Foes will no doubt bash the Clean Power Plan as radical, but the public should know that even these stricter regulations will not save us from global warming. They will only stop a free fall into planetary catastrophe.

What about other countries? A reasonable question. The plan will give Obama something serious to unfurl at the climate change summit this December in Paris. When the United States offers a plausible blueprint to meet the challenge, other countries, notably China, will be pressed to follow suit.

And what about the coal regions? Appalachia has considerable natural beauty left, a great location and plenty of water. Coal-producing Wyoming has its own attractions, some quite magnificent.

Coal is yesterday’s fuel. Give it a respectful goodbye and dry the tears.

Document 24

**Conservatives and climate change**

By [**THE DENVER POST**](https://www.denverpost.com/author/the-denver-post/) | [newsroom@denverpost.com](mailto:newsroom@denverpost.com)

PUBLISHED: October 3, 2015 at 11:10 am | UPDATED: June 7, 2016 at 3:39 pm

Pope Francis waves to the crowd during his arrival at John F. Kennedy International Airport on Sept. 24 in New York City. During his address to Congress last week, Pope Francis said we need to protect the environment. (Craig Ruttle, Pool/Getty Images)

*Re: “Pope Francis’ challenge to U.S. conservatives,” Sept. 27 Ramesh Ponnuru column.*

I chuckled at Ramesh Ponnuru’s statement that a conservative approach to global warming should take roughly the tack of “promoting research on how to mitigate its risks.” It reminded me of the famous phrase “Nero fiddled while Rome burned.”

**Doris E. Sanders**, *Denver*

Document 25

**Big oil companies pledge support for climate change deal**

By [**THE ASSOCIATED PRESS**](https://www.denverpost.com/author/the-associated-press/)

PUBLISHED: October 16, 2015 at 1:54 pm | UPDATED: June 7, 2016 at 3:38 pm

STOCKHOLM — The chief executives of 10 of the world’s biggest oil and gas companies have pledged support for an “effective” deal to fight global warming at a Paris conference next month.

In a statement Friday, the CEOs of BP, Shell, Saudi Aramco, Total, Repsol, Statoil, Eni, Petroelos Mexicanos, Reliance Industries and BG Group said they recognize greenhouse gas emissions trends are inconsistent with the ambition to keep warming below a level many consider dangerous.

Burning coal, oil and gas for energy is a key emissions source.

The companies offered to help by reducing flaring and methane emissions from oil and gas operations. They also called for replacing coal with cleaner-burning natural gas in power generation.

Greenpeace said the companies’ offer “contains nothing meaningful” and accused them of undermining effective climate action.

Document 26

**Trump to reverse Obama-era order aimed at planning for climate change**

The executive order would eliminate a planning step for infrastructure related to climate change and flood dangers

By [**DARRYL FEARS**](https://www.denverpost.com/author/darryl-fears/) and [**STEVEN MUFSON**](https://www.denverpost.com/author/steven-mufson/) | The Washington Post

August 15, 2017 at 5:01 pm

President Donald Trump signed an executive order Tuesday that he said would streamline the approval process for building infrastructure such as roads, bridges and offices by eliminating a planning step related to climate change and flood dangers.

Speaking in the lobby of Trump Tower in New York, Trump said that the approval process for projects was “badly broken” and that the nation’s infrastructure was a “massive self-inflicted wound on our country.” Trump said that “no longer” would there be “one job-killing delay after another” for new projects. But he did not provide any proposal on how his much-promised infrastructure program would be financed or what it would include.

The White House confirmed that the order issued Tuesday would revoke an earlier executive order by former President Barack Obama that required recipients of federal funds to strongly consider risk-management standards when building in flood zones, including measures such as elevating structures from the reach of rising water. Obama’s Federal Flood Risk Management Standard, established in 2015, sought to mitigate the risk of flood damage charged to taxpayers when property owners file costly claims.

Climate scientists warn that sea levels will rise substantially in the coming decades, and they say that long-term infrastructure projects will probably face more frequent and serious flood risks.

A White House official said the order will not stop “state and local agencies from using a more stringent standard if they choose.”

The fight over flood planning comes as Congress is set in September to reauthorize the National Flood Insurance Program that pays insurance claims. The beleaguered program is nearly $25 billion in debt, an obligation its administrator, Roy Wright, said he can’t repay.

Conservationists complained that the new order will weaken environmental standards that guard against flood risk. And they’ve found common cause with conservative think tanks worried about saddling the federal government with the burden of paying for flood damage in the future.

“Taxpayers have been made to shell out hundreds of billions of dollars in disaster-related spending over the past decade, including more than $136 billion for just the two years from 2011 to 2013,” R.J. Lehmann, a senior fellow at the conservative R Street Institute, said in a statement opposing Trump’s anticipated order. “By contrast, evidence shows that every $1 spent on disaster mitigation can save $4 in post-disaster recovery and rebuilding costs.”

“This is just another example of this administration trying to undo everything the Obama administration did, whether it makes any sense or not,” said William Robert Irvin, president of American Rivers, an advocacy and conservation group. “Directing federal agencies to ignore the impact of flooding in spending federal dollars is just a complete waste of taxpayer money and continues this administration’s head-in-the-sand approach to the perils of climate change, which is resulting in increased flooding.”

Trump’s executive order also promised “one Federal decision” for major infrastructure projects and setting a two-year goal for completion of permitting processes. He said every project would be assigned to a lead agency that would be held “accountable” for the project.

But many independent groups said they feared that Trump would try to limit possibilities for public comment.

“This order will put people throughout the country at risk by allowing developers to ignore potential hazards while muzzling the public’s ability to weigh in on potentially harmful projects near their homes,” Alex Taurel, deputy legislative director of the League of Conservation Voters, said in a statement.

The president’s action comes as no surprise. In January he signed an executive order to fulfill his goal of “expediting environmental reviews and approvals” to fast-track an effort to “fix our country, our roadways and bridges.” Too often, government and commercial projects are tangled in federal requirements, that order said. It commanded federal agencies to undertake environmental analyses with “maximum efficiency and effectiveness,” with an eye toward green-lighting projects.

A number of organizations, such as the National Association of Home Builders, opposed Obama’s order and applauded Trump’s. The NAHB argued that the order’s requirement to raise single-family homes by two feet within a 100-year flood when they are built or substantially improved “could make many projects infeasible, due to increased construction costs and the inability to offset these costs through higher rents.”

But the earlier order had significantly more supporters – engineers, planners and municipal managers, among others, said Laura Lightbody, flood preparedness project director for the Pew Charitable Trusts. Trump’s order “certainly from a national standpoint is a short-sighted step. This is a national policy that safeguards infrastructure . . . so why wouldn’t we make these investments with an eye toward the future?”

Lightbody said Nashville, Tennessee, New Orleans, Louisiana, and Charlotte, North Carolina, are just three examples of cities that are building infrastructure with plans to protect it. There was considerable misunderstanding by opponents of the existing rule about what it does, she said. “There was an understanding that it would prohibit building in a flood plain. Not true,” she said. “It does require that when you’re rebuilding after a disaster you consider future flood risk.”

Document 27

**Boulder filmmaker views climate change work as social responsibility**

“Chasing Coral” debuted at the Sundance Film Festival in January and received the festival’s Audience Award

PUBLISHED: September 5, 2017 at 7:32 am | UPDATED: September 5, 2017 at 7:37 am

An ex-advertising agent, a marine biologist and a mechanical engineer walk on screen. The mix might sound odd. But this combination of minds, plus the lens of an Emmy-winning documentarian, proves effective — it’s a connection of perspectives with the capacity to change the way climate change is presented to the public.

Jeff Orlowski, the Boulder-based director of “Chasing Coral,” is one of six people to be recognized on Sept. 9 at the Dairy Center Honors.

The three characters appear in “Chasing Coral,” a documentary that explores the mass death of coral reef systems across the globe, from Hawaii, to the Caribbean, to the Great Barrier Reef in Australia. Jeff Orlowski is the filmmaker behind the movie, and he is one of six people to be recognized on Sept. 9 at the Dairy Center Honors, a celebration of outstanding figures in Boulder-area arts.

“It is a rare privilege to be able to travel the world. And that privilege has translated to responsibility,” said Orlowski. “Not many people are seeing an entire ecosystem getting lost en masse like this, who bear witness to it. There is definitely a responsibility in trying to share.”

Hailing from Staten Island, New York, Orlowski was a small fish in a big pond until his premiere film, “Chasing Ice,” received an Emmy award in 2014 for outstanding nature programming. The film documented mass glacial melt across the arctic using time-lapse technologies. He was 30 years old.

“When I was a kid, my family would go camping in upstate New York all the time,” he said. “We spent a lot of time in nature, having access to nature and engaging in nature. It was a formative experience for me.”

Document 28

**Climate change on Mars? Oh no!**

By [**THE DENVER POST**](https://www.denverpost.com/author/the-denver-post/) | [newsroom@denverpost.com](mailto:newsroom@denverpost.com)

PUBLISHED: September 30, 2015 at 11:12 am | UPDATED: June 7, 2016 at 3:39 pm

(L to R) John Grunsfeld, associate administrator at NASA’s Science Mission Directorate, Jim Green, director of planetary science at NASA Headquarters and Michael Meyer, lead scientist for the Mars Exploration Program at NASA Headquarters, answer questions during a press conference where NASA announced new findings that provide the “strongest evidence yet” of salty liquid water currently existing on Mars on Sept. 28, in Washington, DC. (Win McNamee, Getty Images)

Jim Green, director of planetary science at NASA, said on Monday that eons ago, Mars had a massive ocean and extensive atmosphere. But climate change on Mars made it an arid, seemingly lifeless planet. Can this be Earth’s future?

Ancient Martians must have had coal-burning power plants, fossil-fuel-burning SUVs, and lots of CO2-generating activity that ultimately caused its demise. We need to take action now. The United Nations and Congress should outlaw all fossil-fuel-burning activity. All the horses being rounded up in western Colorado can be our new environmentally safe mode of transportation. Install sails on all ocean-going cargo ships to ensure trade keeps flowing between continents. Unfortunately, no more air travel, but then that’s only existed for a little over a hundred years anyway.

We need to go back to the simple life before fossil fuels to save our planet.

**Ron Hoefer**,*Lakewood*

Document 29

**Interior nominee Ryan Zinke disputes Donald Trump on climate change**

By [THE ASSOCIATED PRESS](https://www.denverpost.com/author/the-associated-press/)

PUBLISHED: January 18, 2017 at 6:21 am | UPDATED: January 23, 2017 at 3:31 pm

By Matthew Daly, *Associated Press*

WASHINGTON — Donald Trump’s choice to head the Interior Department on Tuesday rejected the president-elect’s claim that climate change is a hoax, saying it is indisputable that environmental changes are affecting the world’s temperature and human activity is a major reason.

“I don’t believe it’s a hoax,” Rep. Ryan Zinke told the Senate Energy and Natural Resources Committee at his confirmation hearing.

“The climate is changing; man is an influence,” the Montana Republican said. “I think where there’s debate is what that influence is and what can we do about it.”

Trump has suggested in recent weeks he’s keeping an open mind on the issue and may reconsider a campaign pledge to back away from a 2015 Paris agreement that calls for global reductions in greenhouse gas emissions.

In contradicting Trump, Zinke cited Glacier National Park in his home state as a prime example of the effects of climate change, noting that glaciers there have receded in his lifetime and even from one visit to the next.

Still, he told Sen. Bernie Sanders, I-Vt., that there is debate about how much humans have influenced the climate.

Likely to win Senate confirmation, Zinke, 55, sketched out a variety of purposes for the nation’s vast federal lands, from hiking, hunting, fishing and camping to harvesting timber and mining for coal and other energy sources.

The Interior Department and other U.S. agencies control almost a third of land in the West and even more of the underground “mineral estate” that holds vast amounts of coal, oil and natural gas.

An admirer of President Theodore Roosevelt, Zinke said management of federal lands should be done under a “multiple-use” model set forth by Gifford Pinchot, a longtime Roosevelt associate and the first chief of the U.S. Forest Service.

Zinke also pledged to tackle an estimated $12 billion backlog in maintenance and repair at national parks, saying parks and other public lands should be a key part of Trump’s infrastructure improvement plan.

But the former Navy SEAL said his most important task at Interior will be to “restore trust” between the agency and the states and Indian tribes it serves.

“One of the reasons why people want to sell or transfer public land is there’s no trust, because they feel like they don’t have a voice,” Zinke said, referring to elected officials and residents of many Western states. “They feel like they don’t matter. Well, they should matter.”

Zinke has said he would never sell, give away or transfer public lands — a crucial stance in his home state of Montana and the rest of the West where access to hunting and fishing is considered sacrosanct. Zinke feels so strongly that he resigned as a delegate to the Republican National Convention last summer because of the GOP’s position in favor of land transfers to state or private groups.

Even so, Zinke’s position on public lands came under fire this month after he voted in favor of a measure from House Republicans that would allow federal land transfers to be considered cost-free and budget-neutral, making it easier for drilling and development.

The Interior nominee “says he’s against transfer of federal lands, but there’s a big gap between what he says and what he does in that regard,” said Michael Brune, executive director of the Sierra Club, the nation’s oldest and largest environmental group.

Zinke told senators Tuesday that he flatly opposes all sales or transfer of federal lands.

Indeed, his support for public lands was a crucial reason why Zinke was chosen by Trump. The president-elect and son Donald Trump Jr. both oppose sale of federal lands. The younger Trump, an avid hunter, has taken a keen interest in Interior Department issues and played a key role in Zinke’s selection.

Zinke also reiterated his support for coal production on federal lands as part of an all-of-the above energy strategy

Sen. Maria Cantwell of Washington state, the top Democrat on the energy panel, asked Zinke about modernizing the federal coal program, saying it was important “to make sure American taxpayers aren’t short-changed for the benefit of corporate interests.”

Zinke promised to review the coal program and said he thinks taxpayers “should always get fair value,” whether it’s coal, wind power or other energy sources.

Zinke also pledged to work with members of Congress on proposed national monuments such as the Bears Ears monument recently designated in Utah. The state’s Republican delegation fiercely opposes the monument created by President Barack Obama.

“I think a monument, when it falls in a state, I think the state should have a say on it,” Zinke said.

**Popular In the Community**

Document 30

**Colorado GOP and climate change**

By [**THE DENVER POST**](https://www.denverpost.com/author/the-denver-post/) | [newsroom@denverpost.com](mailto:newsroom@denverpost.com)

PUBLISHED: April 12, 2016 at 11:11 am | UPDATED: June 7, 2016 at 3:36 pm

Gov. John Hickenlooper’s administration is making plans to implement the EPA s Clean Power Plan rules despite the U.S. Supreme Court issuing a stay against the plan. (Brennan Linsley, Associated Press file)

*Re: Wasting Colorado’s money on EPA’s Clean Power Plan, April 2 guest commentary.*

State Sen. Jerry Sonnenberg claims to want to prevent the Colorado Department of Public Health and Environment (CDPHE) from wasting taxpayer dollars on studying how to comply with the Environmental Protection Agency s Clean Power Plan. He acknowledges that the amount of money in question is less than 0.1 percent of the CDPHE s budget, or about 0.001 percent of the state s budget.

Sonnenberg doesn t really care about the dollars. Instead, he s doing his best to prevent the state from taking any steps whatsoever toward addressing climate change. We saw another example of this recently, when Sonnenberg and his fellow Republicans on the Senate Agriculture, Natural Resources, and Energy Committee killed House Bill 1004, which would have required the state to do what over 20 Colorado cities and counties have already done: adopt measurable goals for reducing greenhouse gas emissions.

How long can Coloradans afford to let Sonnenberg keep his head in the sand on this issue?

**J. Kevin Cross**, *Fort Collins*

*This letter was published in the April 13 edition.*

Document 31

**Trump EPA nominee Scott Pruitt says climate change is no hoax**

By [**THE ASSOCIATED PRESS**](https://www.denverpost.com/author/the-associated-press/)

PUBLISHED: January 18, 2017 at 9:07 pm | UPDATED: January 23, 2017 at 3:31 pm

**By Michael Biesecker and Matthew Daly,** *The Associated Press*

WASHINGTON — Donald Trump’s choice to head the Environmental Protection Agency said Wednesday that climate change is real, breaking with both the president-elect and his own past statements.

In response to questions from Democrats during his Senate confirmation hearing, Oklahoma Attorney General Scott Pruitt said he disagreed with Trump’s earlier claims that global warming is a hoax created by the Chinese to harm the economic competitiveness of the United States.

“I do not believe climate change is a hoax,” Pruitt said.

The 48-year-old Republican has previously cast doubt on the extensive body of scientific evidence showing that the planet is warming and man-made carbon emissions are to blame. In a 2016 opinion article, Pruitt suggested that the debate over global warming “is far from settled” and he claimed that “scientists continue to disagree about the degree and extent of global warming and its connection to the actions of mankind.”

At the hearing before the Senate Energy and Public Works Committee, Pruitt conceded that human activity contributes “in some manner” to climate change. He continued, however, to question whether the burning of fossil fuels is the primary reason, and refused to say whether sea levels are rising.

Pruitt’s testimony came shortly after NASA and the National Oceanic and Atmospheric Administration issued a joint statement affirming that 2016 was officially the hottest year in recorded history. Studies show the Greenland and Antarctic ice sheets have decreased in mass, while the world’s oceans have risen on average nearly 7 inches in the last century.

Pressed by Sen. Bernie Sanders, I-Vt., to answer in detail about his beliefs about climate change, Pruitt responded that his personal opinion was “immaterial” to how he would enforce environmental laws.

In his current post, Pruitt joined a multistate lawsuit opposing the Obama administration’s plan to limit planet-warming carbon emissions from coal-fired power plants. Pruitt also sued over the EPA’s recent expansion of water bodies regulated under the Clean Water Act. It has been opposed by industries that would be forced to clean up polluted wastewater.

The lawsuits are among at least eight pending cases Pruitt has joined against the agency he is in line to lead.

Under questioning from Sen. Edward Markey, D-Mass., Pruitt said he has “every willingness to recuse” himself on a case-by-case basis if directed to do so by the EPA’s ethics office. Markey said that was not enough to reassure Americans of his objectivity, adding that Pruitt should commit to a blanket recusal.

Pruitt said that if were confirmed by the GOP-run Senate, he would work with states and industry to return the federal watchdog to what he described as its proper role.

“Environmental regulations should not occur in an economic vacuum,” Pruitt said. “We can simultaneously pursue the mutual goals of environmental protection and economic growth.”

Environmentalists opposing Pruitt’s nomination cite his cozy relationships with oil and gas industry executives who have donated to his political campaigns.

As the hearing got underway, shouting could be heard from people who were not allowed in. The room accommodated fewer than 100 people; most seats were taken by congressional staff, reporters and others who were allowed in early. Only a few seats remained for the public.

One woman was quickly wrestled out of the room by three police officers as she pulled out a roll of yellow crime scene tape and shouted “We don’t want EPA gutted!”

Later, a group of coal miners wearing hard hats were allowed in to show support for Pruitt. Trump has pledged to bring back tens of thousands of lost coal mining jobs once inaugurated, though he has not yet detailed how. The president-elect has also said he will “renegotiate” the international accord to reduce carbon emissions signed in Paris at the end of 2015.

Senate Republicans uniformly praised Pruitt what they described as his robust record of enforcing environmental laws “when appropriate.” Court records show scant evidence of Pruitt acting to protect the environment in years as a state regulator.

Shortly after Pruitt took office in Oklahoma in 2011, he disbanded the unit responsible for protecting the state’s natural resources. He reassigned his staff to file more than a dozen lawsuits challenging EPA regulations.

Senate Democrats focused on Pruitt’s record of siding with polluters in court as he collected campaign contributions from them.

Sen. Sheldon Whitehouse, D-R.I., pressed Pruitt on money he raised from energy companies such as Exxon Mobil and Devon Energy, as well as the corporate “dark money” raised by groups with which he is involved that are not required to disclose their donors.

Earlier this month, Pruitt resigned from the board of the Rule of Law Defense Fund, a Washington-based group supporting the legal agendas of GOP attorney generals that Whitehouse described as “a complete black hole into which at least $1 million goes.” In his response, Pruitt declined to provide details about whether the group’s donors included fossil fuel companies or utilities with regulatory issues before EPA.

Though Pruitt ran unopposed for a second term in 2014, public campaign finance reports show he raised more than $700,000, much of it from people in the energy and utility industries.

Pruitt has also faced criticism from environmentalists for failing to take any action to help curb a dramatic spike in earthquake activity in Oklahoma that scientists have linked to the underground disposal of oil and gas wastewater.

Pruitt said his support for legal positions advocated by oil and gas companies was in the best interest of Oklahoma, which is economically dependent on the fossil fuel industry.

Document 32

**Coal mine expansion stalls in lawsuit citing climate change**

By [**THE ASSOCIATED PRESS**](https://www.denverpost.com/author/the-associated-press/)

PUBLISHED: October 26, 2015 at 9:00 am | UPDATED: June 7, 2016 at 3:38 pm

BILLINGS, Mont. (AP) — The U.S. Interior Department should not have approved the expansion of a southeastern Montana coal mine without taking a closer look at its effect on the environment, a federal judge said about a lawsuit arguing the government ignored coal’s contributions to climate change.

Environmental groups sued the Interior Department after it approved an expansion of the Spring Creek Coal mine in 2012. The case marks the second time conservationists have used worries over climate change to successfully challenge approval of a coal mine after it had been granted.

But unlike in the previous case involving Colorado mines, U.S. Magistrate Judge Carolyn Ostby did not explicitly name climate change as a factor in her decision issued Friday. She referred more broadly to air quality and environmental concerns, saying the government had failed to explain its thinking on the issue before granting approval and failed to seek public input.

Ostby said work at the mine near Decker will not be shut down immediately. Rather, the judge recommended that federal officials reconsider the environmental effects of the expansion by Wyoming-based Cloud Peak Energy. The mine, which employs about 260 people, is allowed to continue operating in the meantime.

The judge gave the government 180 days to complete its analysis and involve the public, before the mine’s approval would be vacated. U.S. District Judge Susan Watters will have the final decision.

The 2,042-acre expansion of the Spring Creek Coal mine added 117 million tons of coal that could be mined, which would allow it to operate through at least 2022, according to court documents. Mining on those parcels already has begun.

Spokesman Rick Curtsinger said the company was disappointed in the judge’s decision and planned to work with federal officials to defend the expansion.

“Spring Creek Mine is an important part of America’s energy supply and Montana’s economy,” Curtsinger said.

The Interior Department’s Office of Surface Mining and Reclamation is the lead defendant in the case. Agency Christopher Holmes did not have an immediate response to Ostby’s recommendations.

A similar case resulting in federal officials reconsidering mining plans after they already were approved involved the Colowyo and the Trapper mines, both in Colorado. After a subsequent re-examination of the Colowyo mine, Interior officials determined burning its coal to produce electricity had “insignificant impacts” on national greenhouse gas emissions and moderate impacts on emissions in Colorado.

A plaintiff in both cases, New Mexico-based WildEarth Guardians, mounted an aggressive legal campaign against the coal industry in recent years, challenging decisions affecting 11 mines in five states through a spate of lawsuits.

A decision is pending in a case involving the San Juan coal mine in New Mexico. In September, lawyers for the group contested federal approval of mine plans and coal leases in four states: the Antelope and Black Thunder mines in Wyoming’s Powder River Basin, the El Segundo Mine in New Mexico, the Bowie No. 2 Mine in Colorado and the Skyline Mine in Utah.

Black Thunder, owned by St. Louis-based Arch Coal, is one of the largest coal mines in the world.

WildEarth Guardians’ Jeremy Nichols said Ostby’s recommendation offers “another solid sign that Interior’s coal program is completely off the rails.”

“The greenhouse gas emissions do matter, and they need to come up with solutions to limit those emissions. In the long term, that’s going to mean keeping coal in the ground,” Nichols said.

The Northern Plains Resource Council and Western Organization of Resource Councils also were plaintiffs in the Montana lawsuit. The Billings-based groups argued that in addition to a lack of public notice and a shoddy analysis, the government had not shown that Spring Creek’s owner successfully restored previously mined lands.

Ostby did not directly address that claim.

Cloud Peak mined more than 17 million tons of coal from Spring Creek last year, including about 4 million tons exported to Asian markets though ports in British Columbia, according to the company’s regulatory filings.

Document 33

**Denver hopes 300 new charging stations will accelerate switch to electric cars**

Plug-in vehicles key to meeting Paris climate agreement goals to slash greenhouse gas emissions

By [**BRUCE FINLEY**](https://www.denverpost.com/author/bruce-finley/) | [bfinley@denverpost.com](mailto:bfinley@denverpost.com) | The Denver Post

PUBLISHED: August 16, 2017 at 7:26 pm | UPDATED: August 17, 2017 at 8:36 am

Denver is pressing ahead on its promise to help make [Paris climate agreement](http://www.denverpost.com/2017/07/11/colorado-signs-us-climate-alliance-joining-states-committed-paris-climate-agreement/)cuts in heat-trapping greenhouse gas pollution by accelerating a local takeoff of plug-in vehicles.

City officials on Wednesday said 300 charging stations for electric vehicles will be set up around metro Denver over the next two years. They’re also looking at changes in the city building code to encourage installation of more charging stations near proliferating apartments and condos.

Lawsuit settlement money paid by Volkswagen after the diesel emissions test scandal will help fund Denver’s effort.

Pollution from vehicles burning fossil fuels is the second largest source of Denver’s greenhouse gas emissions after emissions from heating and cooling commercial buildings, city officials said. A faster shift from vehicles running on fossil fuels to battery-powered transport also could help Denver begin to comply, after years of failure, with federal ozone air quality standards.

Colorado residents have registered more than 10,000 plug-in vehicles, up from 1,200 four years ago. Nearly 2 percent of new vehicles sold in the state are plug-ins, city officials said. In recent years, the number of plug-in vehicles has been increasing by more than 40 percent annually. And simultaneous efforts to move away from coal-fired power plants for [electricity](http://www.denverpost.com/2015/07/01/marijuana-growing-spikes-denver-electric-demand-challenges-clean-power-plan/), which release greenhouse gases, mean the environmental benefit of electric vehicles likely will increase.

“Without electrified transportation, we cannot meet those climate goals,” Denver Environmental Health electric vehicles project chief Tyler Svitak said. “And the market is pushing us this way. People are showing [demand](http://www.denverpost.com/2016/05/26/colorado-locals-form-bloc-to-prod-state-feds-to-slow-climate-change/). We are hoping to meet that demand.”

Mayor Michael Hancock has committed the city to help meet Paris climate targets even though President Donald Trump is trying to get the nation out of that deal. Hancock championed electric vehicles in his “state of the city” speech last month and on Wednesday issued a statement referring to a city greenhouse gas reduction target of 80 percent by 2050. He called electric vehicles a  “valuable investment in both air quality and as a tool for fighting climate change.”

“We’re hoping to move forward, with or without the support of the White House,” Svitak said. “Both collectively, and individually, cities can make a difference.”

Gov. John Hickenlooper for years has promoted electric vehicles as alternatives to those running on gasoline and is working with other Western governors to set up battery-charging stations from the Rocky Mountains to the Pacific Ocean.

Neither Hickenlooper nor Hancock ride in a plug-in vehicle.

But car dealers increasingly give options. There are at least 35 types of electric vehicles listed for purchase this summer, up from three in 2012. Tesla’s budget friendly Model 3 vehicles are being distributed with thousands bound for drivers in [Colorado who lined up more than a year ago committing to buy them](http://www.denverpost.com/2016/03/04/tesla-model-x-electrifies-denver-owners-who-plunked-down-5k-deposit/).

State lawmakers have dangled a $5,000 tax credit for buyers of electric vehicles, which took effect in January. That’s twice as high as tax credits offered in California and a few other states. Combining that state credit with federal tax benefits, a Colorado resident buying a new plug-in car could save up to $12,500.

The emergence of [electric plug-in vehicles](http://www.denverpost.com/2012/01/29/boulder-electric-vehicle-hoping-electric-vans-will-take-off-2/) already has spurred installation of 160 charging kiosks in Denver. Statewide, more than 500 plugs have been installed. The best rapid-charging stations, which can fully revive a dead battery in 30 minutes, cost around $100,000.

Most owners of plug-in vehicles charge them at home. But surveys show some fret about running out of power and that many more people would switch from from fossil fuel cars to electric plug-in cars if this [“range anxiety”](http://www.denverpost.com/2012/06/23/electric-vehicle-drivers-in-colorado-to-get-a-charge-out-of-new-law/) could be addressed.

While some existing charging stations are not heavily used, the idea is to encourage a shift to plug-in cars by making them widely available. Proponents envision charging stations along highways every 30 to 50 miles so that nobody is marooned without power.

Under the legal settlement following the VW scandal, VW created a subsidiary called Electrify America to install charging stations along highways and in 16 metro areas, including Denver.

Denver officials said they cannot control Electrify America, but said they are advocating for charging at apartment buildings, grocery stores, office towers, gas stations, parks, shops, parking meters and along major transit corridors, such as the 470 beltway.

Document 34

**Donald Trump names Scott Pruitt, Oklahoma attorney general suing EPA on climate change, to head the EPA**

By [**THE WASHINGTON POST**](https://www.denverpost.com/author/the-washington-post/)

PUBLISHED: December 7, 2016 at 2:36 pm | UPDATED: February 2, 2017 at 12:25 am

**By Chris Mooney, Brady Dennis and Steven Mufson,** *The Washington Post*

In a move signaling an intention to dismantle President Obama’s climate change and environmental legacy, President-elect Trump will nominate Scott Pruitt, the attorney general of the oil and gas intensive state of Oklahoma, to head the Environmental Protection Agency.

Pruitt has spent much of his energy as attorney general fighting against the agency he will now lead.

Pruitt, who has written that the debate on climate change is “far from settled,” joined a coalition of state attorneys general in suing the agency’s Clean Power Plan, the principal Obama-era policy aimed at reducing the U.S.’s greenhouse gas emissions from the electricity sector. He has also sued, with fellow state attorneys general, over the EPA’s recently announced regulations trying to curtail the emissions of methane, a powerful greenhouse gas, from the oil and gas sector.

He has also taken on the administration in other areas, joining other Republican attorneys general in a lawsuit over Obama’s immigration policies.

An ally of the energy industry, Pruitt also came to the defense, along with fellow Alabama attorney general Luther Strange, of oil company ExxonMobil when it fell under investigation by attorneys general from more liberal states seeking information about whether the oil giant failed to disclose material information about climate change.

“We do not doubt the sincerity of the beliefs of our fellow attorneys general about climate change and the role human activity plays in it,” they wrote at the conservative publication National Review. “But we call upon them to press those beliefs through debate, not through governmental intimidation of those who disagree with them.”

In an interview with the Washington Post in September, as a D.C. federal appeals court was preparing to hear arguments over the Clean Power Plan, Pruitt detailed why he had remained a leading opponent of the EPA’s efforts to curb carbon emissions by regulating power plants.

“What concerns the states is the process, the procedures, the authority that the EPA is exerting that we think is entirely inconsistent with its constitutional and statutory authority,” he said at the time.

Agencies such as the EPA, he said, should not be trying to “pinch hit” for Congress.

“This is a unique approach by EPA, whether they want to acknowledge it or not,” he said of the provisions of the Clean Air Act the agency had relied upon to write new regulations. “The overreach is the statutes do no permit [EPA officials] to act in the way they are. They tend to have this approach that the end justifies the means . . .They tend to justify it by saying this big issue, this is an important issue.”

But he added that’s where Congress should have authority, not EPA. “This is something from a constitutional and statutory perspective that causes great concern.”

Environmental groups reacted with alarm Wednesday at the nomination.

“Scott Pruitt has a record of attacking the environmental protections that EPA is charged with enforcing. He has built his political career by trying to undermine EPA’s mission of environmental protection,” said Fred Krupp, the president of the Environmental Defense Fund. “Our country needs – and deserves – an EPA Administrator who is guided by science, who respects America’s environmental laws, and who values protecting the health and safety of all Americans ahead of the lobbying agenda of special interests.”

Rhea Suh, president of the Natural Resources Defense Council, said that “over the past five years, Pruitt has used his position as Oklahoma’s top prosecutor to sue the EPA in a series of attempts to deny Americans the benefits of reducing mercury, arsenic, and other toxins from the air we breathe; cutting smog that can cause asthma attacks; and protecting our wetlands and streams.”

In 2014, the New York Times reported that Pruitt wrote a letter alleging that the agency overestimated air pollution from natural gas drilling, but that the letter was written by lawyers for Devon Energy, one of the state’s largest oil and gas companies.

But industry representatives expressed satisfaction on Wednesday. “The office he headed was present and accounted for in the battle to keep EPA faithful to its statutory authority and respectful of the role of the states in our system of cooperative federalism,” said Scott Segal, head of the policy group at the lobbying and legal firm Bracewell. “Given that we are almost two decades overdue for an overhaul of the Clean Air Act, there is interest on both sides of the aisle to look at that statute.”

Pruitt’s outlook reflects the state from which he comes: Oklahoma ranked fifth in the nation in onshore crude oil output in 2014, has five oil refineries, and is home to the giant Cushing oil storage and trading hub, where the price for the benchmark West Texas Intermediate grade is set every day. Although oil and natural gas production sagged in the 1990s and early 2000s, the surge in horizontal fracturing, or fracking, has boosted output.

The state’s natural gas output accounts for 10 percent of the nation’s overall. For the week ended Oct. 28, there were 73 drilling rigs in operation in the state.

The nomination suggests an extraordinarily tough road ahead for the Clean Power Plan, President Obama’s signature climate policy. However, the precise fate of the regulation most immediately turns on the U.S. Court of Appeals for the D.C. Circuit, which has not yet ruled in the lawsuit brought by Pruitt and his fellow attorneys general against the agency Pruitt is now named to lead.

Dismantling the regulation if it survives the courts would not be simple, because the agency has already finalized it — meaning that it would have to go through a public review and comment process.

However, interestingly, many of the Clean Power Plan’s signature objectives appear to have been already realized long before it came into effect. The U.S. is already burning less coal and more natural gas. In 2030, the EPA said in its final Clean Power Plan rule, coal would be reduced to providing 27 percent of the U.S.’s electricity, with natural gas at 33 percent. Yet this very year, according to the U.S. Energy Information Administration, natural gas will provide 34 percent of U.S. electricity, and coal 30 percent.

Document 35

**Study: Climate change to push 1 in 13 species to extinction**

By [**THE ASSOCIATED PRESS**](https://www.denverpost.com/author/the-associated-press/)

PUBLISHED: April 30, 2015 at 6:04 pm | UPDATED: June 7, 2016 at 3:42 pm

WASHINGTON — Global warming will eventually push 1 out of every 13 species on Earth into extinction, a new study projects.

It won’t quite be as bad in North America, where only 1 in 20 species will be killed off because of climate change or Europe where the extinction rate is nearly as small. But in South America, that forecasted heat-caused extinction rate soars to 23 percent, the worst for any continent, according to a new study published Thursday in the journal Science.

University of Connecticut ecologist Mark Urban compiled and analyzed 131 peer-reviewed studies on species and found a general average extinction rate for the globe: 7.9 percent. That’s an average for all species, all regions, taking into consideration various assumptions about future emission trends.

“It’s a sobering result,” Urban said.

Document 36

**Fact-checking President Trump’s claims on the Paris climate change deal**

By [**THE WASHINGTON POST**](https://www.denverpost.com/author/the-washington-post/)

**By Glenn Kessler and Michelle Ye Hee Lee**, *The Washington Post*

In his speech Thursday announcing his decision to withdraw the United States from the Paris climate agreement, President Donald Trump frequently relied on dubious facts and unbalanced claims to make his case that the accord would hurt the U.S. economy. Notably, he looked at only one side of the scale – claiming that the agreement left the United States at a competitive disadvantage, harming U.S. industries. But he often ignored the benefits that could come from tackling climate change, including potential green jobs.

Trump also suggested that the United States was treated unfairly under the agreement. But each of the nations that signed the pact agreed to help lower emissions, based on plans they submitted. So the U.S. target was set by the Obama administration.

The plans are not legally binding, but developing and developed countries are treated differently because developed countries, on a per capita basis, often produce more greenhouse gases than developing countries. For instance, on a per capita basis, the United States in 2015 produced more than double the carbon dioxide emissions of China – and eight times as much as India.

Here’s a roundup of statements made by the president during his Rose Garden address.

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“We’re getting out, but we will start to negotiate, and we will see if we can make a deal that’s fair.”

Each country set its own commitments under the Paris agreement, so Trump’s comment is puzzling. He could unilaterally change the commitments offered by President Barack Obama, which is technically allowed under the accord. But there is no appetite to renegotiate the entire agreement, as made clear by statements from world leaders after his announcement.

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“China will be allowed to build hundreds of additional coal plants. So, we can’t build the plants, but they can, according to this agreement. India will be allowed to double its coal production by 2020.”

This is false. The agreement is nonbinding, and each nation sets its own targets. There is nothing in the agreement that stops the United States from building coal plants or gives permission to China or India to build coal plants. In fact, market forces, primarily reduced costs for natural gas, have forced the closure of coal plants. China announced this year that it would cancel plans to build more than 100 coal-fired plants.

Gary Cohn, director of Trump’s National Economic Council, recently told reporters that “coal doesn’t even make that much sense anymore as a feedstock. “Natural gas, which we have become an abundant producer, which we’re going to become a major exporter is, is such a cleaner fuel.”

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“Compliance with the terms of the Paris accord and the onerous energy restrictions it has placed on the United States could cost America as much as 2.7 million lost jobs by 2025, according to the National Economic Research Associates. This includes 440,000 fewer manufacturing jobs – not what we need.”

Trump cited a slew of statistics from a study that was funded by the U.S. Chamber of Commerce and the American Council for Capital Formation, foes of the Paris accord. So the figures must be viewed with a jaundiced eye.

Moreover, the study assumed a scenario that no policy analyst expects – that the United States will take drastic steps to meet the Obama pledge of a 26 to 28 percent reduction in emissions by 2025.

Trump also cited the impact by 2040, including a “cost to the economy” of nearly $3 trillion in lost gross domestic product. But in addition to an unrealistic scenario, that number must be viewed in context over more than two decades, so “$3 trillion” amounts to a reduction of 6 percent. The study concludes that coal usage would almost disappear, but innovation in clean energy sources would slow considerably, which also raises the cost of complying with the commitments.

Environmentalists say greater investment in clean energy will lower costs and spur innovation. That may not be correct, either, but it demonstrates how the outcomes in models of economic activity decades from now depends on the assumptions.

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“Even if the Paris agreement were implemented in full, with total compliance from all nations, it is estimated it would only produce a two-tenths of one degree – think of that, this much – Celsius reduction in global temperature by the year 2100. Tiny, tiny amount.”

Trump is referring to research by the Massachusetts Institute of Technology, in a 2015 report. Researchers found that proposed emissions cuts in the Paris plan would result in about 0.2 degrees (Celsius) less warming by 2100, if the cuts were not extended further.

John Reilly, lead author of the report, said he “disagrees completely” with Trump’s characterization that the 0.2 degree cut is a “tiny, tiny” amount that is not worth pursuing. As a part of the deal, countries reexamine their commitments and can exceed or extend their pledges beyond 2030. The intent of the research was to say that the Paris deal was a small step and that more incremental steps need to be taken in the long run.

“The logic that ‘This isn’t making much progress on a serious problem, therefore we’re going to do nothing,’ just doesn’t make sense to me. The conclusion should be – and our intended implication for people was – not to overly celebrate Paris, because you still have a long journey in front of you. So carb up for the rest of the trip,” Reilly said.

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“The green fund would likely obligate the United States to commit potentially tens of billions of dollars of which the United States has already handed over $1 billion. Nobody else is even close. Most of them haven’t even paid anything – including funds raided out of America’s budget for the war against terrorism. That’s where they came [from].”

It is incorrect that other countries have not contributed to the United Nations’ Green Climate Fund. In fact, 43 governments have pledged money to the fund, including nine developing countries. The countries have pledged to pay $10.13 billion collectively, and the U.S. share is $3 billion. As of May, the United States contributed $1 billion of the $3 billion it pledged.

Trump implies that the money was taken out of the U.S. defense fund. But the U.S. contributions were paid out of the State Department’s Economic Support Fund, one of the foreign assistance programs to promote economic or political stability based on U.S. strategic interests. Republican lawmakers have criticized the use of this fund, saying Congress designated the money to prioritize security, human rights and other efforts unrelated to climate change.

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“Believe me, we have massive legal liability if we stay in. As president, I have one obligation, and that obligation is to the American people. The Paris accord would undermine our economy, hamstring our workers, weaken our sovereignty, impose unacceptable legal risk and put us at a permanent disadvantage to the other countries of the world.”

Trump is referring to concerns raised by White House Counsel Donald McGahn that staying in the Paris agreement would bolster legal arguments of climate advocates challenging Trump’s decision to roll back the Clean Power Plan.

The Clean Power Plan is a flagship environmental regulatory rule of the Obama administration and proposes to cut carbon emissions from existing power plants 30 percent below 2005 levels by 2030. It is crucial to the U.S. meeting its carbon emissions reductions pledge in the Paris agreement. But it has been placed on hold while under litigation.

According to Politico, McGahn raised concerns that the Paris agreement “could be cited in court challenges to Trump’s efforts to kill Obama’s climate rules. McGahn’s comments shocked State Department lawyers, who strongly reject both of those contentions, the sources said.”

Document 37

**Aspen Ideas Festival hot topics are campaign spending, climate change**

By [**RAY MARK RINALDI**](https://www.denverpost.com/author/ray-mark-rinaldi/) | [media@rayrinaldi.com](mailto:media@rayrinaldi.com) | The Denver Post

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ASPEN — It’s testimony to the ambition of the [Aspen Ideas Festival](http://www.denverpost.com/politics/ci_28411289/at-aspen-ideas-festival-focus-violence-america)that it would take on big topics like climate change, campaign financing and whether or not robots can take over our emotions all at once — and all before 10 a.m.

But Wednesday morning’s sessions give a good idea of the scope of this week-long event, which brings together big thinkers and a curious audience from across the country.

In one room, two of the country’s top legal minds, Theodore B. Olson and David Boies, sparred over the merits of the U.S. Supreme Court’s [“Citizens United”](http://www.denverpost.com/news/ci_26545467/ted-olson-argues-citizens-united-case-denver-court) decision removing the limits that corporations can contribute to political campaigns, and whether or not more regulations are in order.

Olson argued the case, and maintains his stance: “Speech about elections is at the very, very core of the First Amendment,” and government is wrong to curtail it.

Boies found the idea of applying constitutional rights to corporations absurd and called for further consideration of the question. “They don’t believe. They don’t eat. They don’t vote,” he said. “There’s a difference between corporations and people, and everybody knows that.”

But, like a lot of things in Aspen, the faceoff had an insider edge. The pair have a long history together. They were famous adversaries in the landmark “Bush vs. Gore” case and then, even more famously, joined forces for a successful 2014 lawsuit challenging California’s anti-gay Proposition 8.

Simultaneously, across the campus of the [Aspen Institute](http://www.aspeninstitute.org/), top players in the environmental movement were reporting positive results in the international fight against rising temperatures. They weren’t overly excited about the planet’s prospects, but they are optimistic that international agreements are taking place and that legislatures across the country are finally taking action.

One of the best things to happen: Pope Francis’ recent encyclical declaring humans have a moral responsibility to fight climate change.

“That’s going to resonate with people,” said Mark Tercek, president of the Nature Conservancy. “Even hard-core business people want to be inspired in a spiritual way.”

That swing between optimism and pessimism defines Aspen. Good ideas abound, but they’re checked by the reality that good people have to see them through.

That applies even to technology, and that was the set up for mathematician and physicist Edward Frankel, who gave a talk about maintaining our humanity even when machines can do a lot of our thinking for us. Will those advanced robots gain too much influence over our natural will?

Not if we remind them who’s boss, spiritually speaking. “The only thing that will safeguard us” is when humans put feelings first, when “algorithms are at the service of humanity and not the other way around,” said Frankel.

Document 38

**“We stood there crying”: Video of emaciated polar bear seen on Canadian island kicks off discussion about climate change**

By [**ELI ROSENBERG**](https://www.denverpost.com/2017/12/09/starving-polar-bear-baffin-island-canada-climate-change/) | The Washington Post

December 9, 2017 at 6:58 pm

The world’s tragedies often have images that end up defining them: A five-year old screaming in Iraq after her parents were killed by U.S. soldiers. A starving child being stalked by a vulture during a ruthless famine in Sudan.

A video released this week of an extremely emaciated polar bear has served as a similar purpose: as a rallying cry and stand-in for a largely unmitigated environmental disaster.

The video was shot by Paul Nicklen, a nature photographer and contributor to the National Geographic magazine for the last 17 years. He is also a biologist by training and the co-founder of Sea Legacy, a nonprofit that uses storytelling and images to advocate for the environment.

Nicklen’s video, which he shot on a trip for Sea Legacy, depicts an emaciated polar bear, its coat patchy, seemingly near death on an island in a Canadian territory inside the Arctic Circle. It searches for food in a rusted garbage can and chews what Nicklen said was an old snowmobile seat.

And it struck a nerve: it was viewed more than 3.5 million times in posts on Nicklen’s and National Geographic’s Instagram feeds, according to metrics on the photo sharing site, before picking up news coverage from around the world.

In his caption with the video, Nicklen wrote that his team was “pushing through their tears” while documenting the bear.

“It’s a soul-crushing scene that still haunts me, but I know we need to share both the beautiful and the heartbreaking if we are going to break down the walls of apathy,” he wrote. “This is what starvation looks like. The muscles atrophy. No energy. It’s a slow, painful death.”

The photo was shot on Somerset Island in the upper reaches of Canada. Nicklen and his team saw the bear and shot the video from about 400 feet away, he said. Nicklen, 49, who grew up in the region on nearby Baffin Island, said that he had never seen a bear in such poor condition before.

“We stood there crying – filming with tears rolling down our cheeks,” he told National Geographic.

He said that the intent behind the footage, which is set over a mournful soundtrack, was not purely journalistic. The trip he was on was part of a push to drive home the issue of climate change with Sea Legacy. Though he said that he had no definitive proof that the bear’s condition was connected to the global phenomenon, he said he wanted to show people what a starving bear looked like and let them draw their own conclusions.

“We are a visual species,” Nicklen said in a phone interview. “He should have been a dominant bear. Why he was dying, I don’t know.”

A shot of another emaciated polar bear taken by a photographer in 2015 raised similar questions.

Polar bears face an existential threat from climate change due to the loss of habitat from melting sea ice, scientists believe. The populations of some 25,000 polar bears in 19 locations worldwide are forecast to decline by as much as a third in the coming decades. As their hunting and breeding grounds shrink, polar bears face an increased threat of starvation.

More than any other animal, polar bears have become the poster animal for climate change, The Washington Post’s Cleve Wootson reported. Former Vice President Al Gore used a cartoon of an exhausted, endlessly swimming polar bear to illustrate the impact humans were having on the sea ice where the bears once hunted. And studies and government agencies continue to warn that climate change could make polar bears extinct by 2050.

A paper, published in July, said that the higher global temperatures go the more likely polar bears are to interact with humans – and possibly attack and eat them.

Some expressed skepticism that anything could be gleaned about the environment from one image. A commenter on the National Geographic’s Facebook page wondered about the bear’s age, when the footage was taken and what an autopsy would show.

Dr. Donald Moore, the director of Oregon Zoo, senior science adviser to Smithsonian National Zoo and expert on polar bears, said he couldn’t tell much more about the bear’s age or condition from the video except its extreme skinniness.

But he said that starvation was one of the results of the polar bear’s loss of icy habitats.

“These polar bears should be riding ice somewhere,” he said. “We have seen more and more very thin polar bears in the Arctic in recent years as climate change increases in intensity and opens up more water.”

He says that the population of about 25,000 polar bears in the wild has declined about 20 percent over the last decade or so. Bears need an immense amount of food, he said, about an average of a seal a week.

Nicklen said that while most people were supportive of the photo, a small percentage had been offended that he had not taken more action: fed the bear or tried to save it. Or taken it out of its apparent misery.

“It’s not like we travel around with 200-300 of pounds of seal meat when we’re walking around in the Arctic,” Nicklen said. “We knew it was going to be gut wrenching and intense and horrible.”

*Cleve R. Wootson Jr. contributed to this report.*