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Daily Environment Report

Afternoon Briefing - Your Preview of Today's News

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EPA Methane Regulations Officially on Hold

Posted May 31, 2017, 03:11 P.M. ET

By [David Schultz](#)

An Obama-era EPA rule designed to limit methane leaks from oil and gas wells is officially on hold, as the agency's new leadership begins the formal process of weighing whether to repeal it altogether.

The Environmental Protection Agency is reconsidering the methane rule because it says the final version of the rule, which came out last summer, diverged too far from a draft version, preventing the public from fully weighing in, according to a [notice](#) scheduled to be published in an issue of the Federal Register. The Obama administration had included this rule as a part of its Climate Action Plan because methane is a potent greenhouse gas.

In addition to beginning the reconsideration process, the EPA is pushing back some of the rule's upcoming compliance deadlines by 90 days. Had the agency not done this, oil and gas drillers would have had to start complying on June 3 with these parts of the rule, which deal with gas leak monitoring and pneumatic pump standards.

Within hours after the EPA announced its move, both the Natural Resources Defense Council and the Environmental Defense Fund said they would file lawsuits against the agency to try to stop it from rolling back the methane rule.

Exelon: Still Time for Pennsylvania to Help Three Mile Island

Posted May 31, 2017, 03:00 P.M. ET

By [Rebecca Kern](#)

Pennsylvania's Legislature still has time to help keep Exelon Corp.'s financially struggling Three Mile Island nuclear plant operating, Exelon's Joseph Dominguez told Bloomberg BNA.

“We’re continuing the discussion with policymakers that we really began six or seven months ago: Talking about the value proposition of nuclear, both from an environmental standpoint, as well as from fuel diversity and grid resilience standpoint,” Dominguez, Exelon’s vice president of governmental and regulatory affairs and public policy, told Bloomberg BNA May 31.

“We’ll see if there’s interest among policymakers to do the things that Illinois and New York were able to do,” he said. “We still have some time to have this discussion, but there is a sense of urgency in terms of starting to introduce policymakers to the subject.”

Exelon announced May 30 that it plans to prematurely close Three Mile Island, located about 90 miles west of Philadelphia, by Sept. 30, 2019, due to financial losses at the plant. It was the scene of the worst nuclear accident in U.S. history in 1979.

Last year, the Illinois Legislature approved a \$235 million-a-year lifeline for Exelon’s Quad Cities and Clinton reactors after the company announced they would close. Also, New York’s Public Service Commission’s Clean Energy Standard—passed last summer—will issue credits for zero-emitting resources, such as nuclear plants, starting this June.

‘Hundreds of Millions’ in Losses

Dominguez told Bloomberg BNA that the plant has lost “hundreds of millions of dollars” over the past six years.

Dominguez said even though the company has announced the closure of the plant, “it’s not too late” for the plant to be saved by legislation or action from the Pennsylvania Public Utility Commission. “Generally speaking, about a year before the shutdown date is a critical date,” he said.

The plant has not cleared the regional grid operator PJM Interconnection LLC’s annual capacity market for the past three years. PJM’s capacity auctions are held annually ensure enough power generation resources are available to meet demand in the region covering 13 states and the District of Columbia.

In New York and Illinois, both of the Exelon-related policies triggered lawsuits, as well as complaints to Federal Energy Regulatory Commission, but FERC has been hamstrung in addressing them because of its lack of a quorum since February.

“It’s a sad reality that policymakers really need to see the potential loss of these facilities, given their otherwise busy agenda, to really take note and start figuring out solutions,” he said.

Dominguez said that Exelon would like to see the Legislature introduce a bill to amend Pennsylvania’s Alternative Energy Portfolio Standard to include nuclear energy as a carbon-free energy resource. The standard was signed into law in 2004 and provides credits on tiered level for “alternative energy” sources, including solar, wind, hydropower, geothermal, biomass, biologically derived methane gas coal-mine methane and fuel cell resources.

Currently, there is no legislation introduced in the Pennsylvania Legislature. However, Dominguez said a bicameral Nuclear Energy Caucus, with nearly 80 members, was formed in May by state Sens. Ryan Aument (R) and John Yudichak (D) and Reps. Becky Corbin (R) and Rob Matzie (D).

Governor: Let’s Talk

Pennsylvania Gov. Tom Wolf (D) said through spokesman J.J. Abbott that he is willing to talk with lawmakers about the issue.

“Pennsylvania is a major supplier of energy and we need a diverse energy sector,” Abbott said, according to PennLive.com. “Governor Wolf is concerned about potential layoffs and empathizes with these employees.

“As we move forward, we expect a robust conversation about the state’s energy sector. Governor Wolf is open to these conversations and looks forward to engaging with the General Assembly about what direction Pennsylvania will go in regards to its energy sector, including the future of nuclear power.”

EPA Failed to Justify Nanosilver Pesticide Approval, Court Says

Posted May 31, 2017, 9:05 A.M. ET

By Pat Rizzuto

The EPA failed to prove its registration of a nanosilver antibacterial additive would be in the public interest, a federal appeals court ruled May 30. The court vacated the fast-tracked or “conditional,” registration, meaning the antibacterial product made by Nanosilva LLC may not be added to trash cans, mops, toilet seats and other products where it was intended to suppress the growth of bacteria, algae, fungus, mold and mildew.

The EPA could have, but failed, to prove the fast-tracked process it used to allow the pesticide’s use in 2015 was in the public’s interest as required by the Federal Insecticide, Fungicide, and Rodenticide Act, the U.S. Court of Appeals for the Ninth Circuit said in the case, Natural Res. Def. Council v. Env’tl. Prot. Ag., No. 15-72308.

The court said it was unaware of any previous court ruling based on the public-interest requirement FIFRA provides for fast tracked or “conditional” pesticide registrations.

Occidental Didn’t Report Asbestos Imports, Groups to Claim in Suit

Posted May 31, 2017, 8:02 A.M. ET

By Pat Rizzuto

Three public health organizations are threatening to sue the Occidental Chemical Corp. for allegedly failing to report to the Environmental Protection Agency its importation and use of nearly 900,000 pounds of asbestos.

The company, a subsidiary of Occidental Petroleum Corp., failed to report its importation and use of asbestos in 2013, 2014 and 2015 as required by the EPA’s Chemical Data Reporting rule, the coalition said in May 30 letters to the chemical corporation and to EPA. The letters were sent by the Asbestos Disease Awareness Organization; Safer Chemicals, Healthy Families; and the Environmental Health Strategy Center.

Occidental denied any wrongdoing.

“The claim has no merit. OxyChem complied with environmental regulations that allow reporting exemptions for some naturally occurring chemical substances (“NOCS”),” Occidental said in a statement emailed to Bloomberg BNA. The Chemical Data Reporting rule includes an exemption for naturally occurring chemical substances, it said.

The primary commercial chemicals law in the U.S., the Toxic Substances Control Act (TSCA), authorizes citizens to file civil actions aimed at compelling a company, organization or the EPA to comply with the statute. Section 20 of TSCA requires citizens to give the parties they intend to sue and the agency 60 days notice of their intent to litigate, Robert Sussman, an attorney working for the coalition, told Blomberg BNA. The coalition’s letters constitute that 60-day notice, he said.

An EPA spokesman declined to comment, citing the agency’s longstanding policy of not discussing ongoing or potential litigation with the media.

Making Chlorine, Other Chemicals

Occidental Chemical Corp., or OxyChem, manufactures chloralkali products such as chlorine and caustic soda, commodity chemicals used for water treatment, paper production, and other purposes. The chloralkali industry uses a wet process to transform the dry asbestos shipments it receives into a diaphragm. That diaphragm is designed to prevent dangerous chemical reactions during the chlorine and caustic soda manufacturing process.

The U.S. Geological Survey estimated U.S. usage of asbestos in 2016 to be about 340 tons. The chloralkali industry’s use “likely accounted” for 100 percent of that total asbestos imported, USGS said in its 2017 Mineral Commodity [Summaries](#).

Occidental’s alleged failure to report its asbestos use to the EPA deprived the agency of information it needs as it prepares to assess the risks of asbestos, the coalition wrote in a press release announcing its threatened lawsuits. Asbestos is among the first 10 chemicals the EPA is evaluating under the 2016 overhaul of TSCA.

Two other companies—Axiall Corp. and Olin Corp.—reported their imports of asbestos to the EPA during its 2016 Chemical Data Reporting submission period, the EPA said in a Preliminary Information on Manufacturing, Processing, Distribution, Use, and Disposal [report](#) issued in February.

“The imported amounts cannot be disclosed due to company claims of Confidential Business Information (CBI),” EPA said.

EPA will combine Chemical Data Reporting rule and data from many other sources in a risk assessment of asbestos it has undertaken. The 2016 TSCA amendments direct the agency to publish the scope of that risk assessment, and those for nine other chemicals it is assessing by June 19.

Trump Said to Still Be Mulling Whether to Leave Paris Accord

Posted May 31, 2017, 12:50 P.M. ET

By [Jennifer A. Dlouhy](#), [Jennifer Jacobs](#) and [Margaret Talev](#)

President Donald Trump hasn’t yet decided whether to keep the U.S. in the landmark Paris agreement on climate change but is leaning toward exiting the accord, according to two people

familiar with the matter.

The administration is preparing for several different outcomes and is lining up experts to speak to the media when an announcement is made, according to another person familiar with the discussions who, like the others, requested anonymity ahead of a decision.

Top administration officials are divided on what to do, with some, including Ivanka Trump and Secretary of State Rex Tillerson, urging Trump to stay in the deal. Others, including Environmental Protection Agency Administrator Scott Pruitt and White House Chief Strategist Steve Bannon, lead a faction that wants a U.S. exit.

There is consensus in the administration that the terms of the Paris deal must change, and it's exploring whether that requires a full exit or a scaled-back U.S. commitment to cut emissions, according to one of the people. Trump is scheduled to meet with Tillerson at the White House on May 31, and the president said he'd declare an outcome soon.

"I will be announcing my decision on the Paris Accord over the next few days," Trump tweeted on May 31.

Highly Anticipated Decision

Trump's decision is highly anticipated, and leaders of the six other nations in the Group of Seven heavily lobbied him at a summit in Sicily last week to keep the U.S. in the pact. But Trump has called climate change a "hoax" and criticized the deal as "one-sided" against the U.S. White House legal advisers have warned that staying in the accord could undercut Trump's efforts to rescind rules on power-plant emissions and methane leaks.

Axios reported earlier May 31 that the president would exit the Paris deal, and the New York Times followed with a report that he is likely to pull the U.S. out of the accord. Several administration officials contacted by Bloomberg said that a decision hadn't yet been made, and Trump has a record of shifting course on major decisions up until the last moment.

The move to leave would have significant environmental and diplomatic consequences. As the richest nation and the second-largest emitter of carbon dioxide, the U.S. is central to efforts to address global warming. The Vatican and companies as diverse as Exxon Mobil Corp. and Apple Inc. had urged the president to remain in the pact.

The Paris accord is broader than any previous climate agreement. It calls for reducing carbon dioxide emissions in hopes of limiting global warming to 2 degrees Celsius (3.6 degrees Fahrenheit) above temperatures at the outset of the Industrial Revolution. That's the upper limit scientists have set to keep climate change from hitting an irreversible tipping point, unleashing catastrophic floods, droughts and storms.

With an exit, Trump would make a clean break from his predecessor, Barack Obama, who made the Paris accord a top priority of his second term and pledged the U.S. would slash carbon dioxide emissions 26 percent by 2025. Withdrawal would put the U.S. in league with just two other nations -- Syria and Nicaragua -- that aren't participating in the agreement.

Trump has already moved to dismantle programs to fight global warming. He ordered a review of fuel-economy standards for cars and light trucks, which along with other vehicles are the U.S.'s largest source of greenhouse gases. And he set in motion a process to scrap the Clean Power Plan, which would have required utilities to slash their carbon dioxide emissions. EPA is also moving to rescind rules to prevent methane leaks.

Post-Leave Options

If he decides to leave, Trump has two options for jettisoning U.S. involvement.

The first—withdrawing from the Paris agreement—can't happen immediately. Under the deal's terms, he must wait until November 2019 to formally submit his bid to quit. It would take another year after that before the U.S. is actually out, under this process.

The other option—exiting the United Nations Framework Convention on Climate Change—goes beyond simply walking away from the Paris accord. The treaty, unanimously adopted by the U.S. Senate and signed by President George H.W. Bush, has been the foundation of 25 years of global climate talks. Scrapping the 1990s-era treaty would be a clear signal that this administration has no interest in cooperating with other nations on efforts to address global warming.

U.S. climate efforts won't completely cease if Trump walks away from Paris.

States including California, New York and Massachusetts continue to move forward with aggressive policies to cut carbon emissions. Anheuser-Busch InBev NV, Apple, Amazon.com Inc., Alphabet Inc.'s Google and other companies continue their push to power their facilities with wind and solar energy. Low-carbon wind, solar and natural gas are so cheap that the Department of Energy is studying what it can do to help ailing, older coal and nuclear plants.

—With assistance from Nick Wadhams.

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EU, China to Reaffirm Paris Agreement Commitment, as U.S. Wavers

Posted May 31, 2017, 01:14 P.M. ET

By Stephen Gardner

The European Union and China will reaffirm their commitment to the United Nations Paris Agreement on climate change during a June 1–2 summit in Brussels, despite uncertainty about continued U.S. participation in the deal.

An EU official who asked not to be named told Bloomberg BNA May 31 that one of the main conclusions of the summit will be a statement setting out the intention of the two major economic powers to implement their pledges under the Paris Agreement, which was agreed at the end of 2015 and is intended to keep global warming to no more than 2 degrees Celsius (3.6 degrees Fahrenheit) above pre-industrial levels.

“This agreement stands whether another major emitter pulls out or not,” the official said. The EU-China summit will emphasize the “global responsibility” of the two powers in the context of the lack of clarity about the US's intentions, the official added.

China and the EU both have ratified the Paris Agreement and pledged to tackle greenhouse gas emissions in line with nationally determined contributions, or promises submitted to the U.N. The EU said it will reduce emissions by 40 percent by 2030 compared to 1990, while China said its emissions will peak by 2030 at the latest, and has made pledges on renewable energy and afforestation.

There is “much stronger expectation” from countries around the world that “Europe should assume

leadership” in the effort to tackle global warming, and the EU was ready to lead, said Maros Sefcovic, European Commission vice president for Energy Union. The commission is the EU’s executive arm.

Detail on Cooperation

The EU official said the summit statement will give “considerable detail” on how the EU and China will work together to fulfill their Paris pledges, for example by cooperating on renewable energy. It also will emphasize implementing existing pledges, rather than offering new pledges to deepen emissions cuts, according to the official.

“One of the new qualities of our relationship is that we don’t just comment together, but we act together,” the official said, adding that clean energy for Chinese cities would be “a key area of cooperation between us.”

President Donald Trump has caused consternation in the EU about possible U.S. withdrawal from the Paris Agreement. EU leaders at a Group of Seven summit in Italy May 26–27 pushed Trump to respect the Paris deal on climate change, but concluded the U.S. was “not in a position to join in the consensus” on the implementation of the global deal.

During the June 1–2 summit, the EU will be represented by Donald Tusk, president of the European Council, and by Jean-Claude Juncker, president of European Commission. State Council Premier Li Keqiang will head the Chinese delegation.

Solar Stocks Fall on Reports That U.S. May Exit Paris Agreement

Posted May 31, 2017, 03:04 P.M. ET

By [Brian Eckhouse](#)

Solar manufacturers fell sharply on reports May 31 that President Donald Trump is leaning toward withdrawing the U.S. from the landmark 2015 Paris climate accord.

JinkoSolar Holding Co., the biggest solar manufacturer, dropped 3.2 percent to \$18.23 at 11:01 a.m. in New York, after sliding as much as 8 percent. Canadian Solar Inc., the largest North American panel producer, slid as much as 6.5 percent, while First Solar Inc., the top U.S. company, fell as much as 4.4 percent and rival SunPower Corp. was down as much as 4.2 percent.

Trump said in a [tweet](#) May 31 that he will announce “over the next few days” whether he will pull the U.S. out of the global climate pact, and according to reports from publications including Axios, he’s already decided to do so.

“The stocks are reacting to headlines, and the U.S. potentially pulling out of Paris is a big headline,” Gordon Johnson, a New York-based analyst at Axiom Capital Management, said in an interview May 31. “With Trump in office, the pressure for utilities and others to do solar is going to decline. That will negatively affect demand.”

It’s not just solar manufacturers that were affected. Sunrun Inc., the biggest independent U.S. rooftop solar company, was down as much as 3 percent. NRG Energy Inc., the largest U.S. independent power producer and the owner of almost 5 gigawatts of renewable energy, fell as much as 1.5 percent.

While solar isn’t driven primarily by a carbon price, “it does suggest that the U.S. may subsidize coal, which would be bad for U.S. manufacturers like First Solar and SunPower,” said Jenny Chase,

a Zurich-based solar analyst at Bloomberg New Energy Finance.

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Environmentalists Revive Lawsuit Against Federal Coal Leasing Program

Posted May 31, 2017, 03:55 P.M. ET

By [Tripp Baltz](#)

One of the litigants in an on-hold lawsuit over the Interior Department's coal leasing program said it's necessary to restart the case in light of the department's decision to begin processing coal lease applications again.

The focus of the unopposed motion is to challenge Interior Secretary Ryan Zinke's March 29 revocation of an order by his predecessor, Sally Jewell, to pause the issuance of new federal thermal coal leases until an environmental analysis could be done on the environmental impact—including the climate change effects—of coal mining, Bob LaResche, a rancher in Clearmont, Wyo., told Bloomberg BNA May 31 ([W. Org. of Res. Councils v. Zinke](#), D.C. Cir. App., No. 15-5294, motion filed 5/26/17).

Jewell in January 2016 said the halt in coal leases would continue at least until the Bureau of Land Management had prepared and issued a Programmatic Environmental Impact Statement analyzing the effects of coal mining on the climate.

"Now that Zinke has cancelled the PEIS, it's time to reactivate our litigation to force it to be done," said LaResche, chair of the Powder River Basin Resource Council, one of the eight organizations in the Western Organization of Resource Councils that sued the Interior Department in October 2015.

An Interior Department spokeswoman referred Bloomberg BNA's request for comment to the Justice Department, which declined to comment. Travis Deti, executive director of the Wyoming Mining Association, a defendant-intervenor in the case, did not immediately respond to Bloomberg BNA's request for comment.

NEPA Violation Alleged

The environmental groups alleged the department's failure to conduct an analysis of the environmental effects of coal mining violated the National Environmental Policy Act. When Jewell ordered the PEIS to be done, the groups said they had essentially received "all the relief" they were seeking. They joined with the defendants in seeking an abeyance in the case pending the completion of the analysis.

Zinke's issuing an immediate halt to the analysis "makes it necessary for us to restart the case again" to address "numerous and varied concerns," LaResche said.

"The coal leasing program has evolved from what it once was to being run by industry," he said. "Bids are generally non-competitive; most leases don't have more than one bidder. There's not enough transparency there."

LaResche said the groups are concerned that coal mining companies "continue to lease millions and billions of tons of coal when they shouldn't be leasing any." Companies have 20 years worth of projects already leased, he said.

In addition to the reality of climate change, LaResche said, the coal companies are facing shrinking

markets, and scientific evidence has emerged that coal threatens public health and safety. “For a federal agency to ignore the huge new body of knowledge acquired since 1979 is just whistling past the graveyard,” he said in a statement emailed to Bloomberg BNA. “This is not how a responsible nation operates.”

Friends of the Earth also is a plaintiff in the litigation.

EU Proposes Truck Monitoring as Preparation for Emissions Standard

Posted May 31, 2017, 02:38 P.M. ET

By Stephen Gardner

Manufacturers of trucks and other heavy-duty vehicles sold in the European Union would be required to monitor and report their vehicles’ carbon dioxide emissions and fuel economy performance, under a long-delayed proposal published by the European Commission May 31.

The commission, the EU’s executive arm, announced in May 2014 that it would propose the measure in 2015, but then said “further analysis” was needed. The lack of a harmonized measure for truck carbon dioxide emissions puts the EU at odds with the U.S., which has had an emissions standard for heavy-duty vehicles since 2011.

Commission vice president for Energy Union, Maros Sefcovic, conceded that the EU was “the last major economy” that does not “have this very important sector covered.”

Road freight was “developing in such a way that it is one of the main contributors of greenhouse gas emissions and air pollution in Europe,” and collecting data about truck emissions would give the commission the evidence it needed to propose the emissions standard, Sefcovic said.

The requirement for manufacturers to monitor and report their trucks’ emissions will be followed up in 2018 with a proposal for a carbon emissions standard for trucks, Sefcovic said.

The proposal on truck emissions was put forward as part of a package of transportation-related measures that the commission issued May 31.

Road-Use Charging Plan

According to the proposal, truck manufacturers would be required from Jan. 1, 2019, to use a common methodology to calculate the emissions of vehicles above 7.5 metric tons. The data would be made public from 2020.

The plan moved “in the right direction, but the real test of the EU’s intentions will be the ambition of the CO2 standards” when they are proposed in 2018, the nongovernmental organization Transport & Environment said.

The EU already has fuel economy and carbon standards for passenger cars and light vans. The commission said it would make proposals within 12 months to update these standards for the post-2020 period.

In a related move May 31, the commission proposed amending a 1999 directive to update rules EU countries must follow when levying road use charges on heavy vehicles. Currently, 24 of the EU’s 28 member nations impose charges on trucks crossing their territory.

It would require countries with road charges for trucks to introduce differentiated pricing based on

trucks' carbon emissions. This would "incentivize the use of the cleanest and most efficient" heavy vehicles, the commission said.

Both the proposed requirement on the monitoring of truck emissions and the road-charging directive require the approval of the European Parliament and the Council of the EU, which represents the governments of EU countries.

U.S. Colleges, With \$500 Billion to Invest, Seek Green Deals

Posted May 31, 2017, 8:52 A.M. ET

By [Janet Lorin](#)

If you guessed that the University of California system would champion "sustainable" investing, you'd be correct. The catch is, the shelves in the sustainable investing aisle aren't especially well-stocked with opportunities.

U.S. college endowments altogether hold more than \$500 -billion in assets, a growing part of which they've allocated to sustainable or "impact" investing. Yet they also face something of a paradox: Where, exactly, does one invest that money? The easy answer, and one popular among smaller endowments, is to buy funds of stocks deemed green.

Another option is real assets, says Jagdeep Bachher, who oversees the University of California's \$100 billion portfolio, which includes retirement funds for one of the country's largest public university systems in addition to the school's \$10 billion endowment, the 12th largest in the U.S.

"Institutions are lazy at some level," he says. "We wait for pitch books to show up." But that isn't satisfactory for the [Regents of the University of California](#). The reason: Staving off the worst effects of global warming will require much more investment than is being deployed—trillions of dollars more in coming years, according to [estimates](#) from the International Energy Agency. That's why the system has become prominent in a group of institutional investors deploying money to green projects.

The group has committed to putting more than \$1 billion into clean energy- and water-related projects that the Obama White House promoted two years ago. In addition, the investors helped create an advisory group called [Aligned Intermediary Inc.](#), which functions like a co-op for them, sourcing investments.

The deals Aligned Intermediary identifies are big: They range from \$50 million to \$500 million, according to co-founder and Chief Executive Officer Peter Davidson. Its members, which also include the Ontario Public Service Employees Union Trust and the New Zealand Superannuation Fund, seek real returns from direct investments in infrastructure—renewable energy, water, even garbage—as well as from loans to projects that help reduce greenhouse gas emissions. "The economic returns are there," Davidson says. "The responsible investing idea is there. It's a market imperfection that we need to solve."

The University of California has committed \$500 million to these types of projects. While the group's first transaction, an investment of about \$50 million involving water infrastructure in the Western U.S., is on the books, details haven't been disclosed.

For endowments, these types of direct investments have advantages. They skirt private equity and hedge funds' controversial 2-and-20 fees, and the projects' timetables run into the decades, substantially longer than a typical fund life of up to 10 years.

Endowments such as Yale's helped start the trend toward illiquid, alternative investments three decades ago, with a move into private equity and hedge funds. Yale and Harvard—the wealthiest college funds, with more than \$60 billion collectively—were also pioneers in buying real assets, particularly timberland. Yale has even invested directly in a 22-turbine wind farm in Maine. The school's endowment in a 2009 report extolled four green investments that have partly turned out to be duds. One solar company, for example, went bankrupt. Meanwhile, green funds that bet on clean energy and technology, launched in the past decade, have underperformed.

While there's demand for investments that help address global climate challenges, opportunities aren't especially easy to find—and most endowments, especially private schools, operate in opacity, so it's difficult to identify case studies. Williams—the richest U.S. liberal arts college, with a \$2.3 billion endowment—provides an interesting glimpse into the difficulties.

In September 2015, the Massachusetts school said it wouldn't divest from fossil fuel holdings, despite pressure from students. (Protests calling for endowments to divest from fossil fuels have been a campus constant in recent years.) Instead the college said it would seek investments with the condition that they can be measured to show an impact in reducing greenhouse gas emissions. A year later, Williams officials recommended an alternative energy fund to its investment committee, which approved the proposal, according to the alumni magazine.

"We are working hard to look for these types of investments, but they are not easy to find," says Collette Chilton, the chief investment officer. "We're not giving up, because this is important to the Williams community."

It's also been laborious for the University of California to find the right deal—even with the staff of Aligned Intermediary on the case. Aligned was structured as a benefit corporation, and its operational funding was provided by philanthropic groups, led by the Planet Heritage, William and Flora Hewlett, and John D. and Catherine T. MacArthur foundations. The organization provides expertise to find deals, perform due diligence, and, if necessary, help oversee the managers running projects. The University of California sifted through 90 proposals before finding the water deal that closed late last year. "You need flexibility and you need patience—and we have these things," Bachher says. The university will act only when it sees an opportunity that meets all of its requirements, he says.

In addition to the deal the University of California inked, others are in the pipeline, Davidson says. They include an investment in a solar power developer in North America, expected to close in June, and a mezzanine loan to a large-scale private wind, solar, and biomass company that operates globally.

The Ontario pension plan, a partner, has experience with these sorts of investments. It's put money in Ararat, a 75-turbine wind farm that opened earlier this year, becoming one of Australia's largest, and in Toronto-based Firelight Infrastructure Partners LP, which focuses on wind, hydroelectric, and solar projects. Both are expected to generate double-digit returns, says Hugh O'Reilly, president and CEO of the Ontario-based pension fund, which has C\$19 billion (\$14 billion) under management. "We do this to make money," he says. "We have an expertise in energy and renewable energy."

Caisse de Dépôt et Placement du Québec—which, with C\$271 billion under management, is Canada's second-largest public pension fund manager—found a triple whammy with its investment in an electric train project in Montreal: a real asset that's long term and will reduce emissions by taking cars off the road. "We're a long-term investor," Michael Sabia, president and CEO, said at a Bloomberg New Energy Finance conference in April. "It's not the next quarter, it's the next quarter

century.”

Laurence Siegel, director of research at the CFA Institute Research Foundation, is bullish on clean water and air and alternative energy. The horizon for the return on investment is unclear, though. “In the very long run we’re not going to use that much oil,” says Siegel, who worked for 15 years at the Ford Foundation in an investment capacity. “These other alternative sources of energy are going to have a larger and larger market share, so you want to be invested. Is it 20 years? Is it 100 years? If it’s 100 years, the rate of return isn’t competitive. If it’s 20 years, it’s probably fabulous.”

Endowments have historically invested in energy through their outside managers, who buy public and private oil and gas companies. “The endowments have done a remarkably good job in picking managers,” says Ashby Monk, executive director of Stanford’s Global Projects Center and chairman and co-founder of Aligned Intermediary. “That will inevitably shoehorn them into the types of strategies where that access point is the most efficient. To invest in these kinds of innovative assets, you have to be innovative in your investment organization.”

That appears to be the case for the University of California. In fact, Bachher says he feels like he’s in a “lonely spot” with his endowment colleagues. He’s optimistic, nonetheless. “With time, we will see more endowments involved,” he says. “It takes time for people to see the risk-adjusted returns.”

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Exxon Investors to Company: Make Climate Curb Fallout Public

Posted May 31, 2017, 03:31 P.M. ET

By [Joe Carroll](#)

Exxon Mobil Corp. investors, in a split with the company, urged the explorer to publish a detailed analysis next year on how carbon curbs could affect the value of its oil fields, refineries and pipelines.

The non-binding measure, backed by investors including the California Public Employees’ Retirement System and the Church of England investment fund, comes amid reports President Donald Trump may soon abandon the 2015 Paris Climate Accord. More than 60 percent of voters approved the resolution during Exxon’s annual general meeting in Dallas.

While Exxon’s management opposed the measure, Chief Executive Officer Darren Woods said he remains committed to the Paris pact’s goals and methods. Even with that agreement in place, he said, oil demand will grow in the coming decades, particularly in underdeveloped regions of the world.

“Energy needs are a function of population and living standards,” Woods said in his first annual meeting since becoming chief executive officer on Jan. 1. “When it comes to policy, the goal should be to reduce emissions at the lowest cost to society.”

Population growth and a desire for higher living standards will increase usage of petroleum-derived fuels, especially for transportation, because there are few widely-available alternatives, according to Woods. There’s a huge untapped energy market among the 1 billion people who currently have no access to electricity and the 3 billion who don’t use modern cooking fuels, he said.

Exxon shares fell 0.6 percent to \$80.61 at 2:15 p.m. in New York trading.

“It’s going to take a global solution” to limit greenhouse gas emissions that contribute to climate change, Woods said.

The remarks come amid news reports that Trump is on the verge of pulling the U.S. out of the Paris agreement. On May 31, Trump tweeted he would announce his decision within days.

Woods said his forecast assumes governments adhere to the strictures of the Paris pact, which calls for limiting emissions to prevent global temperatures from exceeding pre-industrial levels by 2 degrees Celsius.

Woods has been a staunch advocate for keeping the U.S. in the Paris group, as was his predecessor Rex Tillerson, who is now Trump’s secretary of state. In his first blog post after becoming CEO, Woods advocated low-emission fuels, carbon capture and biofuels as tools for meeting the goals of the Paris agreement.

In May 2016, the proposal received a 38 percent “yes” vote after the company said it already disclosed ample data about emissions and risk management. As a result of this year’s 62 percent “yes” vote, the board will reconsider its opposition.

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Firms Must Provide Financial Info for Utah Site Cleanup, EPA Says

Posted May 31, 2017, 03:24 P.M. ET

By [Lars-Eric Hedberg](#)

Mining and financial services companies failed to respond to the EPA’s request for information regarding their ability to pay for or perform a cleanup at a contaminated Utah site, the Justice Department alleged.

United Park City Mines and Talisker Finance LLC’s failure to respond violates Section 104(e) of the Comprehensive Environmental Response, Compensation and Liability Act, the U.S. wrote in its May 30 complaint filed in the U.S. District Court for the District of Utah ([United States v. United Park City Mines](#), D. Utah, No. 2:17-cv-00482, 5/30/17).

United and others conducted mining operations at the Richardson Flat Superfund Site near Park City until 1969, according to the Environmental Protection Agency. Talisker, a real estate and recreation business, now owns United.

Heavy metals such as arsenic, cadmium, copper, lead, mercury, silver, and zinc are among the hazardous substances found at the site, according to the EPA. Mine tailings containing these substances are sinking into Silver Creek and a nearby diversion.

United, the EPA, and other federal and state agencies have entered into administrative orders on consent for engineering, cost analysis, removal, and wetlands restoration, with the most recent agreement finalized in March 2014. This assessment work was meant to determine cleanup costs and requirements for the site, such as excavation of contaminated soil and tailings, as well as the removal of Silver Creek sediments, according to the agency.

The U.S. asked the court for an order directing the companies to respond to the Sep. 12, 2016, information request and enter civil penalties not to exceed \$54,789 per day of noncompliance with the request.

Firm Offering 'Peer-To-Peer' Power Network in New York Rollout

Posted May 31, 2017, 9:08 A.M. ET

By Mark Chediak

A Seattle-based energy startup is offering consumers and businesses a way to power their homes with energy from their neighbors' rooftop solar systems, nearby wind farms and other sources of clean electricity.

Drift Marketplace Inc. is rolling out the service now in New York and plans to expand to other markets this year, according to Chief Executive Officer Greg Robinson.

The company charges customers a flat fee, and then uses artificial intelligence and machine learning to predict how much energy customers will need. It gets the power a day ahead from nearby solar plants, wind farms and other resources, and if demand exceeds supply, will use a high-frequency wholesale power-trading system to cover any shortages. Robinson said customers will typically save money compared to their regular utility bills.

Robinson said he wanted to build a service that lets people gain control over their energy supply, in the same way that big corporations like Amazon.com Inc. and Microsoft Corp. are already doing.

"We thought if they can see the value, we can build a software platform that helps everyone have that same value," he said.

Drift calls itself a peer-to-peer energy company, and has raised \$2.1 million in funding from investors including First Round Capital, Lerer Hippeau Ventures, SV Angel, Liquid 2 Ventures, Third Kind Venture Capital and Acequia Capital.

The retail electricity market can be brutally competitive as companies work with thin margins and jostle to add customers. In the U.S., 17 states and the District of Columbia offer retail choice programs that let consumers buy power from competitive retail suppliers, according to the U.S. Department of Energy. Falling prices for solar and wind are making those offerings more attractive.

Drift said its software lets it reduce administrative and billing costs that typically flow through to utility customers. Customers pay weekly and have an option to get all of their power from emission-free sources.

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Is Three Mile Island the Canary in Nuclear's Coal Mine?

Posted May 31, 2017, 8:43 A.M. ET

By Peter Coy

In 1979, Three Mile Island managed to survive the worst nuclear accident in U.S. history. Almost four decades later, the Pennsylvania power plant can't seem to withstand cheap natural gas. And the Nuclear Energy Institute, which represents commercial nuclear operators in the U.S., is warning that lots of other U.S. reactors are equally imperiled.

"There are 10 to 15 plants still at risk of premature closure," in addition to Three Mile Island and several others whose owners have recently announced tentative closure plans, institute spokesman

John Keeley said in an interview on May 30.

Nuclear plants generate about two-thirds of America's carbon-free electricity, Bloomberg's Paul Barrett reported in December. The NEI argues that government should do more to help these plants because they produce electricity without byproducts such as greenhouse gases or other air pollutants. Keeley points to New York and Illinois as two states that have begun to help plant operators keep their heads above water by issuing them zero emission credits.

"Policymakers there do not want to lose them [the plants] because of their environmental and economic advantages," says Keeley. Lawmakers in Pennsylvania, Connecticut, Ohio, and New Jersey are "beginning to talk" about doing something similar, he says.

"When they surrender that license, it's final. The gate gets locked. You can't just turn a key and restart a nuclear reactor."

Opponents of nuclear power, meanwhile, say the zero emission credits amount to corporate welfare.

"Nuclear power has failed dismally in the marketplace, and that's what will doom Three Mile Island," Eric Epstein, chairman of Three Mile Island Alert, a Harrisburg, Pennsylvania, group, told Barrett.

As reported by Bloomberg, Exelon Corp., which owns Three Mile Island, submitted a filing on May 30 that it would shut the plant down in 2019 in the absence of state aid. Pennsylvania "has an opportunity to take a leadership role by implementing a policy solution to preserve its nuclear energy facilities," Exelon Chief Executive Christopher Crane said in a statement.

Shahriar Pourreza, a New York-based analyst for Guggenheim Securities, told Bloomberg that Exelon's announcement smacks of "posturing." But the NEI's Keeley says this was no trial balloon. "They have to give advance notice" because it takes grid operators time to plan for the withdrawal of generating capacity, he says.

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Sun-Blessed Chile May Target 100% Renewable as Prices Slump

Posted May 31, 2017, 9:22 A.M. ET

By [Brian Parkin](#), [Laura Millan Lombrana](#) and [Vanessa Dezem](#)

Chile may speed up its switch to clean power amid falling prices and expected improvements in storage, helping to squeeze out fossil-fuel generation more quickly than forecast, according to the country's National Energy Commission.

Discussion is likely over the next few years on whether Chile should bump up its mid-century target for renewables in the power mix to as much as 100 percent from 70 percent, said NEC Executive Secretary Andres Romero Celedon in Berlin. Chile's President Michelle Bachelet approved the current target in 2015, a year before an auction in which solar power undercut coal and gas-fired plants.

"Over the next four years we'll probably ask ourselves why 70 percent?" Celedon said in an interview

Chile has tremendous potential to develop clean power. Rainwater pours off the Andes mountains

for hydro-electric plants, the Atacama desert has some of the highest solar radiation rates in the world, and the 4,000 kilometers (2,486 miles) of coast has plentiful wind. As a result, Chile has an eye on reducing dependence on conventional fuel imports like coal and liquid natural gas faster as the price of clean technology undercuts conventional power.

The nation may reach its 2025 renewable power target of 20 percent, excluding hydro power, five years early, Celedon said.

Still, the government is cautious on predicting the trajectory of falling solar and wind prices, while becoming increasingly confident on the scope of storage technology to accommodate solar and wind power growth, said Celedon.

Falling Prices

Solarpack Corp. won the right to build 120 megawatts of solar capacity in last August's auction of 12.43 gigawatts of capacity after the Spanish developer bid \$29.1 a megawatt-hour, at the time the cheapest in the world. The average price at the tender was \$47.59 a megawatt-hour.

"Prices will drop steadily from auction averages, but it's not safe to wager beyond that," Celedon said.

"For us, it's very expensive to import fuel," said Rodrigo Castillo, Executive Director of Chile's Empresas Electricas AG power utilities federation, who was also in Berlin. "It makes sense to assess alternatives."

In 2016, renewables represented 12 percent of energy generated in Chile, according to Bloomberg New Energy Finance. Biomass led the way, representing 4 percent of the total generation. Solar and wind contributed 3 percent each, and small hydro supplied 2 percent. Coal represented 44 percent followed by large hydro at 24 percent, gas at 17 percent and oil at 3 percent. From the 22 gigawatts of the total capacity added by 2016, wind and solar plants combined to contribute 9 percent.

Chile received the most new clean energy investment in South America in 2016, according to BNEF. Of the \$1.8 billion, deployed in the region, 40 percent went to Chile. Estimates for 2017, however, show a drop in investment. Bottlenecks in Chile's transmission system continue to plague the country's power market and the situation is not expected to be resolved any sooner than a year from now.

"Chile will add less capacity of renewables from now to 2021," said Ana Verena Lima, a Bloomberg New Energy Finance analyst in Sao Paulo. "Chile still lacks infrastructure and the country's demand for electricity is slowing down in the next couple of years."

BNEF estimates that Chile's addition of capacity will resume growing by 2021, when more transmission lines will be added to the system and declining prices of clean power technology will improve the competitiveness of projects.

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Swiss Pickles Set to Benefit from First Carbon Capture Plant

Posted May 31, 2017, 8:51 A.M. ET

By Brian Parkin

Climeworks AG, the Swiss company that captures carbon from the air, opened its first commercial facility at a farm outside of Zurich.

Carbon dioxide extracted by Climeworks' [direct air capture plant](#) will be pumped into greenhouses owned by Gebrueder Meier Primanatura AG in Hinwil, according to a [statement](#) from the company. The greenhouse gas will be used as a fertilizer to boost the growth of tomatoes and cucumbers -- the fruits used to make pickles.

"It's our ambition to capture one percent of global CO2 emissions in 2025," Climeworks co-Chief Executive Officer and founder Jan Wurzbacher, said in a video. Climeworks, which employs about 45 workers, is counting on the "one-step" simplicity and scalability of its carbon capture technology to win customers, co-CEO Christoph Gebald said by phone.

Enhancing the growth of tomatoes and cucumbers is a first step to a far more formidable plan for Climeworks that will require the support of industries and governments to capture carbon dioxide as part of their commitments under the Paris climate accord. The Climeworks plant produces 900 tons of carbon dioxide a year -- equivalent to the annual volume of greenhouse gases emitted by [190 passenger vehicles](#).

Climeworks is targeting carbon capture and storage as its main business model, supplemented by carbon offset deals with companies and applications such as the greenhouse and clean fuel partnerships. It forged a partnership with German carmaker Audi AG in 2013 to use the Swiss company's technology to produce synthetic fuels, Gebald said.

The company has won financial support from the Swiss government, Zurich Cantonal Bank and European Union. Climeworks can currently make 150 air capture units a year.

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Vietnam Steps into the Sun With Policy Fixing Solar Power Price

Posted May 31, 2017, 7:01 A.M. ET

By [Lien Hoang](#)

People in Vietnam will soon have the power to convert sun rays into not just electricity—but also cash—with the arrival of solar policies that are being welcomed by big energy users such as Intel and Coca-Cola.

Starting June 1, producers will be able to sell solar energy for 9.35 U.S. cents per kWh to the state utility, which is sprinting to keep pace with the country's economic growth of 6 percent. Government Decision 11 also rewards household use of solar power and sets quality standards for panels, but will omit an item high on industry's wish list: the right to buy power from one another, rather than the state.

"Certainly, the price is the key," Do Duc Tuong, clean energy adviser at the U.S. Agency for International Development, told Bloomberg BNA by phone from Hanoi. "I think it's vital, not just for investors, but also others, banks, finance, even the developer itself."

World Solar Map

While the feed-in tariff of 9.35 cents could attract solar farms and other major generators, they also worry about the wide discretion left to Electricity Vietnam (EVN), the country's largest power company. The utility is not required to buy electricity when it's doing repairs, upgrades or

inspections, or when a problem occurs in the grid, according to Decision 11.

“They can say, ‘OK, we have to do maintenance,’ and shut down the power grid for hours, even days,” Andy Nguyen, founder of renewable energy firm Vietnam Eco-Solutions, told Bloomberg BNA. “Then that is money lost.”

Nguyen said regulations should limit how much time EVN can spend offline.

A [World Bank map](#) shows solar potential of more than 2,000 kWh per square meter annually along Vietnam’s south-central coast, near Cam Ranh Bay. That’s less solar power than what is usually seen in Africa or South America, but more than in Europe or Japan.

Coal, Nuclear, Hydropower

Vietnam’s issues with pricing and financing have kept renewables from getting off the ground. At the same time, the Southeast Asian nation of 92 million is seeking alternatives, as environmental complaints have slowed projects to secure power from more coal and nuclear sources. They have also tapped out most locations for its traditional energy source: hydropower dams.

Large manufacturers in Vietnam are gradually tacking solar panels onto their factory roofs, including Samsung, Intel, Coca-Cola, and Nike. Nike, for example, aims to source 100 percent of electricity at its own facilities from renewables, while Coke is working to bring Vietnam to the same level as neighboring Cambodia, where it has a factory powered entirely by solar.

Decision 11 allows for net-metering, so that when panel owners generate more electricity from sunlight than they consume, they’ll get a credit from EVN. The state-owned enterprise applies credits toward future billing, or adds them up by year-end for a lump-sum payout at the 9.35-cent rate.

But some of these private companies, especially in industrial parks, say they can’t hit their renewables targets without “direct power purchase agreements.” Under these contracts, they could buy energy straight from a solar farm, rather than through EVN—currently the single buyer recognized by the law.

Tuong does expect that to change, saying it’s a matter less of political will, and more of the legal legwork needed to dilute the EVN monopoly.

“I think it will be very challenging,” he said. “That’s why we have been working very closely and intensely with regulators.”

Two-Year Period

Hanoi will reassess the landscape for renewables by the time Decision 11’s two-year trial period expires June 30, 2019. By that time, investors hope the government will clear up some of the murky accounting they say plagues many state-owned firms and makes it risky to do business with EVN.

Vietnam does not give “any form of government guarantee, assurance or support to enhance the creditworthiness of EVN,” partners at Vietnam offices of Baker McKenzie, a multinational law firm, said in a client alert this month.

The law firm also noted Decision 11 does not tackle “how to balance cheaper land rental and use costs in relatively unpopulated areas, against the greater costs of running transmission lines over longer distances.”

'Obsolete Technology'

But the decision does specify that, to qualify for the feed-in tariff, solar cells must have an efficiency greater than 16 percent, and modules greater than 15 percent. This refers to the portion of energy the equipment can convert into useful electricity.

Nguyen disagreed with those who saw this as a move to avert the flood of cheap panels across the border with China.

"That is a technical requirement of the system to make sure people don't use obsolete technology," he said.

The ink is barely dry on Decision 11 but Vietnam already has supporting legislation in the pipeline. A draft circular out now shows companies what kind of power purchase agreement they need to sell solar energy to EVN, and describes how to resolve disputes.

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