

BRIEF ON CLIMATE & SUSTAINABILITY

November 20, 2020

DEVELOPMENTS IN CONGRESS

- *FERC Nominations on the Move, but Confirmation Unclear*. The Senate Energy and Natural Resources Committee met Wednesday morning to advance the nominations of Allison Clements and Mark Christie to become FERC commissioners. The pair has been waiting on the sidelines since appearing before the panel in September.
 - While they cleared the committee, it's yet to be seen if there is enough time on this year's Senate schedule to hold a floor vote to confirm the pair before the end of the session. If the Senate can squeeze in a confirmation vote before the end of the year, approval of the two commissioners would bring FERC back to full strength for the first time since 2018.
- Bill Presses EPA Verdicts on Advanced Feedstocks. House lawmakers applied fresh bipartisan
 pressure to EPA to approve certain advanced biofuels as part of the renewable fuel standard,
 introducing legislation to force the agency's hand.
 - Reps. Cheri Bustos (D-III.) and Jim Hagedorn (R-Minn.) introduced the "<u>Streamlining</u> <u>Advanced Biofuels Registration Act</u>," which would require EPA to approve or deny applications already received to use various cellulosic feedstocks to create renewable fuels. If a fuel in question would meet at least one state's clean transportation program, EPA would be compelled to accept the application, the lawmakers said.
 - The House bill mirrors legislation already introduced by Sens. John Thune (R-S.D.) and Jeanne Shaheen (D-N.H.), <u>S.3986</u>.
- Barrasso to Lead Senate Energy Panel. Senator Barrasso (R-WY) intends to become the top Republican on the Senate Energy and Natural Resources Committee in the next Congress, he said in a <u>statement</u> on Wednesday. The move will open the top spot on the Environment and Public Works Committee, where Barrasso currently holds the gavel.
 - Sen. Shelley Moore Capito (R-WV) is next in line. Sen. Lisa Murkowski (R-AK) is term-limited from staying atop the Energy and Natural Resources Committee.
- Groups Urge Congress to Pass Legislation Phasing Down HFCs. Enacting a bipartisan bill before the end of the year that would phase down hydrofluorocarbons would be a "win for everyone," a diverse coalition of organizations wrote in a <u>letter</u> this week to House and Senate leaders.
 - Transitioning away from HFCs—greenhouse gases found in refrigeration and air conditioning—protects the environment and creates jobs, said the groups, which included the Air-Conditioning, Heating, and Refrigeration Institute, the Alliance for Responsible Atmospheric Policy, the National Association of Manufacturers, the Natural Resources Defense Council, and the U.S. Chamber of Commerce.
 - "Many of the next-generation technologies poised to replace HFCs are made in the United States, reflecting billions of dollars invested by American companies in innovation and R&D," said the letter. There are currently various bills pending in each chamber that include language to phase down HFCs.

- Green Groups Urge Legislators on ESA Provision. More than 100 green groups signed onto a letter Wednesday urging top appropriators on the Hill to remove a provision in the Senate's latest Interior-Environment spending bill that would prohibit the U.S. Fish and Wildlife Service from considering listing the greater sage-grouse under the Endangered Species Act.
 - "It is long past time for Congress to allow the FWS to do its job and to finally stop denying protections to this iconic keystone species," the groups write.
- Marine Debris Bill Passes. The House passed bipartisan legislation, <u>H.R. 4636</u>, from Rep. Michael McCaul (R-TX) that would boost U.S. efforts to curb plastic waste and other marine debris in international waters. The bill, which passed by voice vote, would authorize the State Department and USAID to prioritize those efforts.
- Dems Press Trump on Climate Report. House Democrats, led by Select Committee on the Climate Crisis Chair Kathy Castor (Fla.), Natural Resources Chair Raúl Grijalva (Ariz.), and Reps. Don Beyer (Va.) and Suzanne Bonamici (Ore.), made clear their opposition to any attempts by the Trump administration to derail the fifth National Climate Assessment, amid several staffing moves in recent weeks atop the U.S. Global Change Research Program.
- Dem Appropriators Unhappy with Implementation of Conservation Law. The top House and Senate Democratic appropriators for Interior funding accused the department Friday of undermining the Great American Outdoors Act (Public Law 116-152) by allowing states to reject proposed federal land and water acquisition projects in their regions.
 - "This effort to make these unilateral changes to LWCF would reduce our ability to preserve special places during a time of climate change and a looming extinction crisis, not to mention undercut the growing outdoor economy and the millions of jobs that depend on it," said Sen. Tom Udall (D-N.M.), ranking member of the Senate Appropriations Interior-Environment Subcommittee.
- Senators Push Bipartisan Nuclear Infrastructure Bill. Senate Environment and Public Works Chairman John Barrasso (R-Wyo.) introduced legislation with Sens. Sheldon Whitehouse (D-R.I.), Mike Crapo (R-Idaho), and Cory Booker (D-N.J.) that would boost the country's nuclear infrastructure.
 - The American Nuclear Infrastructure Act of 2020 (S. 4897) would give the Nuclear Regulatory Commission authority to deny imports of Russian and Chinese nuclear fuel, streamline nuclear regulations and permitting, and authorize funds for environmental cleanup programs. Read a section-by-section summary <u>here</u> and the bill text <u>here</u>.
- Democratic Ocean Climate Bill Faces Long Odds. Democratic legislation to boost ocean conservation, coastal resiliency and "blue carbon" systems isn't going anywhere, Rep. Garret Graves (R-La.) said during a House Natural Resources Committee hearing this week.
 - The legislation (<u>H.R. 8632</u>), which would prohibit new oil and gas leasing and development in all of the outer continental shelf, has been referred to six different House panels and doesn't yet have any Republican co-sponsors.
 - "It's really embarrassing to continue to see legislation like this that is so offensive to the people that I represent, and simply doesn't represent the science and the on-the-ground conditions," said Graves, whose state delivers a large share of the annual offshore drilling revenues to the Treasury. Graves said he supports cleaner energy and reducing emissions, but the energy infrastructure isn't in place yet to supplant traditional sources of energy.
 - Supporters of the legislation, including chief sponsor Raul Grijalva (D-Ariz.), believe the bill's goal to improve the health of coastal ecosystems to better sequester and store carbon is a critical step toward tackling climate change.

- Dingell Calls 'Forever Chemicals' Top Priority. Legislation to require the EPA to regulate so-called 'forever chemicals' will be reintroduced in January, soon after the new Congress begins its first session, Rep. Debbie Dingell (D-Mich.) said Tuesday.
 - Dingell, who sponsored a bill (<u>H.R. 535</u>) that the House passed last January, said reintroducing the bill would send a signal to the Biden administration that controlling perand polyfluoroalkyl substances is "a top priority in the new Congress."
- Senate Climate Caucus Meets with EU. Senate Democrats and Republicans on a bipartisan climate caucus met yesterday with high-ranking European officials on ways to boost cooperation now that the U.S. is headed back onto the international climate stage, Dean Scott reports.
 - The U.S. "must join our European allies in leading by example on climate action by reducing our emissions, supporting clean energy innovation, and incentivizing global cooperation," Sen. Chris Coons (D-Del.), who co-chairs the Senate Climate Solutions Caucus, said in a statement.
- Wildlife Group Urges Lawmakers to Prevent Next Pandemic. Congress should move on legislation to combat wildlife diseases during the lame-duck session, the National Wildlife Federation told Capitol Hill this week. Among the recommendations: fully fund Fish and Wildlife Service law enforcement to prevent illegal wildlife trade within and to the U.S.; create a federal interagency Zoonotic Disease Task Force; establish a cohesive response to chronic wasting disease by passing three pending pieces of related legislation; pass a bipartisan, bicameral bill that would improve the country's response to human and animal health emergencies; and modernize the Lacey Act, which bans illegal wildlife trafficking.
- Senators Applaud House Passage of Bipartisan Legislation to Protect Rainforests, Coral Reefs. Senators Tom Udall (D-N.M.), Rob Portman (R-Ohio), Richard Burr (R-N.C.) and Sheldon Whitehouse (D-R.I.), applauded the House of Representatives for passing their bipartisan Tropical Forest and Coral Reef Conservation Reauthorization Act of 2020. U.S. Representatives Brad Sherman (D-Calif.) and Steve Chabot (R-Ohio) led the companion legislation in the House.
 - The bipartisan legislation reauthorizes the debt-for-nature-swap program that encourages developing countries to conserve critical ecosystems like tropical forests and coral reefs in exchange for relief on debt owed to the United States. This legislation reauthorizes the successful international conservation program first created in 1998, through FY 2025 at \$20 million per year.

TRUMP ADMINISTRATION ACTIONS

- Trump Wins Fight to Close Solar Tariff Loophole He Granted. The Trump administration scored a legal victory allowing it to lift an exemption for tariffs on certain imported solar-panels after being thwarted for months in court. A U.S. trade judge yesterday ruled that a proclamation the president issued in October to close the loophole for two-sided, or bifacial, panels doesn't violate an earlier court order.
 - The White House's victory may be fleeting. While the move paves the way for the tariff exemption to be lifted, Judge Gary Katzmann said solar compan ies that have fought to keep the exemption can file a new lawsuit to block Trump's proclamation.
- Trump Rushes Enviro Regulations That Could Cuff Biden. The Trump administration is rushing to issue permits, finalize major environmental regulations and even sell the rights to drill for oil in Alaskan wilderness before Inauguration Day in a push that could complicate Joe Biden's climate and conservation agenda.

- The 11th-hour regulatory race underscores the extent to which federal agencies are anticipating Biden's swearing-in as U.S. president on Jan. 20 even as President Donald Trump refuses to concede the election.
- It also reveals a widespread effort by Trump officials to leave their imprint on federal policy and -- at least temporarily -- tie the hands of their successors.
- Trump Proposes Easing Mandates on Drilling in Arctic Waters. The Trump administration is advancing a plan to ease a host of Obama-era standards governing oil drilling in Arctic waters, though the proposal is unlikely to be finalized before the inauguration of Biden and the U.S. government has no current plans to sell drilling rights in the region.
 - The proposed rule, which is not yet public, has been submitted to the Federal Register for possible publication as soon as Monday.
- Trump Names New Chairman at FERC. As the presidential race tightens, FERC announced last night that President Donald Trump replaced Neil Chatterjee as head of the regulatory agency — a surprise reshuffling in what could be the waning weeks of the Trump administration.
 - Chatterjee, who is a former staffer for Senate Majority Leader Mitch McConnell, <u>said he</u> will serve out the remainder of his term as a commissioner, and touted achievements during his tenure, including changes to the Public Utilities Regulatory Policy Act, approving LNG terminals and "unleashing the power of new technologies like storage and distributed energy resources."
 - Greens Ask Court to Block EPA Leak Rollback. Environmental groups on Friday asked a federal court to block key parts of EPA's recent rollback of leak detection and repair requirements for the oil and gas industry (Reg. 2060-AT54), complaining that it will lead to substantial amounts of pollution being emitted in the near future.
 - One of the two provisions targeted by the challengers will ease monitoring requirements for compression stations, which the suit calls "among the leakiest sources," from every three months to six months. The other provision exempts from leak detection requirements "low production" wells that yield 15 barrels of oil per day or less — wells the green groups say are "not low pollution.
 - Forest Service Issues Scaled-Back Rule for Environmental Reviews. The U.S. Forest Service is set to publish a scaled-back final rule for how it will comply with the National Environmental Policy Act, making it easier for the agency to approve some logging and wildfire mitigation projects within national forests.
 - The new rule has particular importance in the wake of this year's extreme wildfires in California, Oregon, and Colorado. The megafires burned largely on land managed by the Forest Service, which oversees about 193 million acres of public forests nationwide.

BIDEN TRANSITION AND 2021 OUTLOOK

- Gaming Out Biden's Appliance Options. A Biden administration could reduce cumulative CO2 emissions through 2050 by 1.5 billion to 2.9 billion metric tons through updates to national appliance standards done within the next few years, according to an American Council for an Energy-Efficient Economy report out Tuesday morning.
 - In its report, ACEEE estimated the potential savings from updated efficiency standards for 47 products over the next several years. Among the key findings, the report tabulated that by 2050 peak electricity demand could be reduced by almost 90 gigawatts, or about 13 percent of current total peak demand.
- House Dems All in on Haaland. More than 50 House Democratic lawmakers formally backed their colleague Rep. Deb Haaland (D-N.M.) for Interior secretary in a letter to President-elect Joe

Biden. Haaland, who is already being vetted for the position, would be the first Native American Cabinet secretary in the nation's history.

- Biden's Climate Agenda Hinges on Georgia Runoffs. If Democrats don't win both Senate seats currently up for grabs in the upcoming Georgia run-off, a Biden administration will have to choose which of its energy and climate goals it can pursue through legislation and which it will have to carry out via executive action.
 - Senate Republicans, for their part, may allow some leeway on certain policies of mutual interest, according to one GOP Senate aide.
 - Updates to mining laws and policies supporting production of the critical minerals needed for battery technology and electrification efforts would likely appeal to Republicans in mining states and China hawks in the caucus, the aide said. Also in the mix would be research and development money for carbon capture and storage.
- Biden Admin Asked to Put Carbon Removal First. Carbon 180, a climate-focused nongovernmental
 organization, wants the incoming Biden administration in its first 100 days to prioritize carbon
 removal efforts across several federal agencies.
 - That would include working with Congress to launch a "CarbonShot" innovation program to reduce the cost of "robustly verified carbon removal" to less than \$100 per ton CO2 by 2025 and creating a White House carbon removal interagency task force. Carbon removal involves strategies and technologies that can capture and remove carbon from the air.
 - Carbon180 Co-Founder and Executive Director Noah Deich has taken a leave of absence from the organization to serve as a volunteer on President-elect Joe Biden's Energy Department transition team.
- White House to Focus on Racial Injustice in Environment Policy. Biden has signaled he wants to power up a small White House office, transforming the Council on Environmental Quality into a muscular policy shop to help move his environmental justice agenda.
 - Under President Donald Trump, CEQ was focused largely on speeding up environmental permitting under the Nixon-era National Environmental Policy Act, revising the statute's decades-old rules in order to boost infrastructure and energy projects.
 - But Biden has <u>said</u> that, under his watch, the council—which sits within the Executive Office of the President—will become a kind of central clearinghouse for environmental justice policy, pulling together agencies across the federal government with a special focus on low-income communities of color.
- Biden Could Revive Enforcement Tool to Focus on Climate. The incoming Biden administration could not only resurrect a recently nixed environmental enforcement tool, but also wield it to fight climate change, former government officials say.
 - A memo from the Climate 21 Project—a initiative from more than 150 former officials identifying levers for climate action across the U.S. government—recommends the Justice Department reinstate supplemental environmental projects, or SEPs, a popular settlement option the Trump administration nixed in March.
 - The department could then "amplify the administration's climate agenda by prioritizing cases with a climate nexus and negotiating supplemental climate projects in settlements," the <u>report says</u>. Some outside lawyers have endorsed the recommendation.
- The Top Contenders to Become Biden's Top Environmental Officials. Unwinding President Trump's rollbacks of anti-pollution rules is going to take a lot of work. And much of it is going to fall on whomever Joe Biden chooses as his main deputies on environmental issues. On the list:
 - Environmental Protection Agency: <u>Mary Nichols</u>, <u>Collin O'Mara</u>, <u>Mustafa Santiago Ali</u>, <u>Heather McTeer Toney</u>, <u>Richard Revesz</u>, and <u>Daniel Esty</u>.

- o Interior Department: Sen. Tom Udall, Rep. Deb Haaland, and Sen. Martin Heinrich.
- Energy Department: <u>Arun Majumdar</u>, <u>Elizabeth Sherwood-Randall</u>, <u>Dan Reicher</u>, and <u>Ernest Moniz</u>.
- Moniz: Biden's Clean-Energy Plan Needs Reform. Former Energy Secretary Ernest Moniz, who is said to be up for the same job in the Biden administration, expects to see significant power-market reforms as more of the economy is electrified. President-elect Joe Biden's push for a net-zero economy would require enormous amounts of new electricity capacity, mostly coming from renewable sources, Moniz said yesterday during an online keynote address for the 2020 New England Energy Summit.
 - That means "the evolving generation mix will require a substantial electricity-market reform" including pricing mechanisms that properly value storage in power-market auctions, he said. Biden has called for a carbon-free electricity system by 2035, and for the entire U.S. economy to achieve net-zero emissions by 2050.
 - Carbon pricing remains a key tool in achieving that, but a Republican-controlled Senate "would eliminate the possibility" of such legislation, Moniz said.
- **Biden Meets with GM's Barra on Economy, Climate.** Biden met yesterday with the General Motors' Mary Barra along with other business and labor leaders before speaking in detail about the economy for the first time since winning the presidential election.
 - Barra noted that she looked forward to advancing "our vision of an all-electric, zeroemissions future" for cars, something Biden specifically mentioned.
 - "We talked about the need to own the electric vehicle market. We talked about climate a lot, building 550,000 charging stations, creating over 1 million good-paying, union jobs here at home," Biden said.
- Ag and Environment Groups Oppose Potential Heitkamp Pick for USDA. Former Sen. Heidi Heitkamp (D-N.D.), a possible pick to head the Agriculture Department under Biden, should be ruled out for her ties to agribusiness corporations and fossil fuel interests, more than 150 environmental, social justice, and labor groups said.
 - The Center for Food Safety, Farmworker Justice, the Humane League and other advocacy organizations called Heitkamp "the wrong choice" for the job in a <u>letter</u> to Biden and his transition team.
 - They point to past contributions to her congressional campaign from the fossil fuel industry and corporate giants, including Cargill, Bayer, and Monsanto, as problematic.
- Biden Faces Regulatory Challenges to Cut Power Plant Emissions. A Biden administration will face
 pressure to use existing regulatory authority to tackle power plant carbon pollution given a
 closely divided Congress, while navigating a U.S. Supreme Court that has only grown more
 conservative, attorneys and environmentalists say.
 - But President-elect Joe Biden still has the ability to direct federal agencies to take a host of climate actions, curbing planet-warming emissions from power plants as well as cars and trucks and phasing down the use of hydrofluorocarbons used in refrigeration and cooling.
 - Among the Biden administration's early challenges at the EPA: how to quickly halt the Trump administration's 2019 carbon pollution limits, which replaced Obama's ambitious Clean Power Plan with more modest requirements limited to plant sites. Biden has only hinted on his approach to EPA regulations, vowing to "move ambitiously to generate clean, American-made electricity to achieve a carbon pollution-free power sector by 2035" to meet "the threat of climate change," according to his <u>transition website</u>.
- Federal Water Rule Expected to Stay Murky Without Congress. A Biden administration won't be able to untangle the legal and regulatory "mess" under part of the Clean Water Act that

determines which streams, wetlands and other waters get federal protection, legal scholars and litigators say.

- A recent U.S. Supreme Court ruling failed to define WOTUS fully. And a bitterly divided Congress in 2021 is unlikely to make headway on the issue, particularly when congressional efforts to address Clean Water Act jurisdiction have failed in the past.
- In 2019, Republican Sens. Mike Braun (Ind.) and <u>Joni Ernst</u> (Iowa) introduced a "Define WOTUS Act" (<u>S. 2356</u>) that would codify the Trump administration's rule, but the legislation hasn't moved.

ENERGY ECONOMY NEWS

- U.S. Solar Industry Has a Six-Point Wish List for Joe Biden. A U.S. solar trade group is <u>calling</u> on President-elect Joe Biden to eliminate tariffs on imported equipment and propose legislation that would extend a key federal tax credit for the industry.
 - Solar Energy Industries Association CEO Abigail Ross Hopper said she'd also like Biden to establish a climate czar who will prioritize equity and justice, appoint commissioners to FERC who understand America's changing energy landscape, invest in domestic manufacturing, and ensure that the U.S. Interior Department is committed to responsible development of renewable energy on public lands.

CORPORATE SUSTAINABILITY UPDATES

- New Lobby Group Pushes for More Electric Vehicles. A coalition of utilities, electric vehicle makers and mineral producers have formed a new association to push for 100 percent electric vehicle sales by 2030. The group, dubbed the Zero Emission Transportation Association, will seek policies to help the growing sector, such as point-of-sale consumer incentives to buy electric vehicles, investments in federal infrastructure and strengthened emissions performance standards. The aim is for all light-, medium- and heavy-duty vehicle sales to be entirely electric by 2030.
- Bezos Donates Nearly \$800m to Climate Change Groups. Several outlets cover the news that Amazon founder Jeff Bezos – who is said to be worth more than \$200bn – has revealed the first recipients of his new \$10bn Bezos Earth Fund. Announcing the news via an Instagram post, Bezos named the US-based organizations set to receive nearly \$800m to tackle climate change, reports the Independent:
 - "The first beneficiaries are: The Climate and Clean Energy Equity Fund, ClimateWorks Foundation, Dream Corps Green For All, Eden Reforestation Projects, Energy Foundation, Environmental Defense Fund, The Hive Fund for Climate and Gender Justice, Natural Resources Defense Council, The Nature Conservancy, NDN Collective, Rocky Mountain Institute, Salk Institute for Biological Studies, The Solutions Project, Union of Concerned Scientists, World Resources Institute, and World Wildlife Fund.

NEW CLIMATE CHANGE STUDIES

- The Global Scale, Distribution, and Growth of Aviation: Implications for Climate Change. The most frequent fliers, which account for no more than 1% of the world's population, likely account for more than half of global emissions from passenger air travel, a new study says.
 - Using industry statistics, national surveys and data from international organizations, the researchers estimate that "the share of the world's population travelling by air in 2018 was 11%, with at most 4% taking international flights". The <u>study</u>, published in the journal

ScienceDirect, adds that individual users of private aircraft can contribute to emissions of up to 7,500 tones of CO2 per year.

- U.S. Greenhouse Gas Emissions Set to Drop to Lowest Level in Three Decades. Greenhouse gases generated by the U.S. economy will slide 9.2 percent this year, tumbling to the lowest level in at least three decades, a new <u>BloombergNEF study</u> says. Battered by the coronavirus pandemic, the stalled economy is projected to have generated 5.9 billion metric tons of emissions, about the same level as 1983, according to the private research organization.
 - As a result, the United States has been inadvertently pushed back on track to meet the commitments the Obama administration made at the Paris climate agreement in December 2015, despite the fact the Trump administration pulled the country out of the pact.
 - Before 2020, the United States had fallen badly behind its targets under the accord. An economic rebound in 2021 could further negate the drop in greenhouse gas emissions, the study says. Without the impact of the coronavirus, greenhouse gas emissions this year would have been only 1 percent lower than 2019, the organization says.

STATE & LOCAL GOVERNMENT NEWS

- Exxon Aims to Sink Connecticut's Climate Misinformation Lawsuit. Exxon Mobil Corp. is calling on a federal court to dismiss a lawsuit from Connecticut officials accusing the oil giant of misleading the public about the role of fossil fuels in driving climate change. Connecticut lacks personal jurisdiction over Exxon because the challenged actions—producing, promoting, and selling oil and gas—took place outside the state and were conducted by nonresidents, the oil giant told the U.S. District Court for the District of Connecticut on Nov. 13, asking the court to toss the case entirely.
 - Attorney General William Tong (D) announced the lawsuit in state court in September, accusing Exxon of violating the state's Unfair Trade Practices Act by allegedly burying climate research and promoting misinformation instead. Exxon quickly transferred the case to federal court, arguing last month that the suit "purposefully wades into complex federal statutory, regulatory, and constitutional issues."

INTERNATIONAL NEWS

- U.S. In International Climate Limbo. The U.S. government will be missing when national leaders gather online Dec. 12 for a global climate summit and the timing couldn't be more inconvenient. Leaders are eager to work with the incoming Biden administration, which is promising the most ambitious climate change policies of any incoming American administration.
 - The timing of the summit puts Biden in the position of having to gather global leaders again next year to show U.S. commitment after Trump obliterated trust in America by ditching the Paris accord, the four report.
 - That could come in the form of a global summit within Biden's first 100 days in office, or by placing climate change at the top of the agenda of G-7 and G-20 summits.
- EU Plans to Increase Offshore Windfarm Capacity by 250%. The Guardian reports that, under a draft plan drawn up by the European Commission, the capacity of the EU's offshore windfarms in the North Sea, the Baltic, the Atlantic, the Mediterranean and the Black Sea would be increased by 250%.
 - It adds: "The total energy generating capacity in Europe's seas stands at 23 gigawatts (GW)...from 5,047 grid-connected wind turbines across 12 countries, including the UK. Under a European Commission strategy, the 27 EU member states alone would achieve a

capacity of 60GW by 2030 and 300GW by 2050, with Germany set to hugely increase its investment in the sector.

- U.K. Power Grid Needs Investment to Deliver Johnson's Green Plan. Boris Johnson's green industrial revolution will strain the U.K.'s electricity network with a huge boost in consumption that will require billions of pounds of investment in new transmission lines and systems.
 - The program aimed at decarbonizing the economy by 2050 calls on more parts of the economy to use electricity. It brings forward by 10 years the target for phasing out cars that run on diesel and gasoline, favoring electric vehicles, a quicker shift than industry had been anticipating.
 - All told, power demand will jump by a third by 2050 in the U.K., according to BloombergNEF. That will require a transformation of the way power networks and utilities work, the power grid, forcing them to cope both with thousands of new wind and solar farms and millions of things that people need to plug in.
- Oil-Rich Saudis Aim Next to Be Largest Exporters of Hydrogen. The world's biggest oil exporter has set its sights on also becoming the largest supplier of hydrogen, a fuel seen as pivotal for curbing climate change.
 - The kingdom's large natural gas reserves enable it to produce blue hydrogen, he said, referring to a form of the fuel that's made when gas is re-formed and the carbon dioxide byproduct is captured. In September, the country shipped the world's first cargo of blue hydrogen, which was converted into ammonia, to Japan.
 - The kingdom also plans to generate hydrogen from solar power -- so-called green hydrogen -- at a \$5 billion facility in Neom, a futuristic city being built on the Red Sea, starting in 2025. By adding hydrogen to its mix, Saudi Arabia hopes to preserve its role as an important energy supplier as more countries shift away from pollution-emitting fossil fuels.

