

APRIL 13, 22

THE TRANSATLANTIC  
**SUN**  **WIND BELT**

# U.S. ENERGY TRANSITION REPORT

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CONTENTS:

<b>Maryland Sets Nation’s Most Ambitious Greenhouse Gas Targets</b>	<b>2</b>
<b>Time Is Running Out to Pass Federal Clean Energy Bills</b>	<b>4</b>
<b>Permit Issues Limit Domestic U.S. Battery Supply Chain Advances</b>	<b>5</b>
<b>Uyghur Forced Labor Prevention Act Gets a Hearing</b>	<b>6</b>
<b>News Roundup: LA, Boston, and Hertz Electrify Fleets, West Coast’s Largest Offshore Wind Farm Proposed, First Solar Secures Massive Contracts</b>	<b>7</b>



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## MARYLAND SETS NATION'S MOST AMBITIOUS GREENHOUSE GAS TARGETS

**M**aryland Governor Larry Hogan has declined to veto a bill that will set the nation's most ambitious economy-wide greenhouse gas reduction goals, which means that the bill will become law. The Climate Solutions Now Act of 2022 will require a 60% reduction in greenhouse gas emissions economy-wide in the state by 2031 and Maryland to reach net zero in 2045.

Only a few states have set economy-wide net-zero emissions targets into law. California has a target to reach net zero in 2045 and last year [Rhode Island](#) joined [Washington](#) in setting a target of net zero by 2050. In terms of the 2030 target, Maryland is much more aggressive, easily beating Washington's and Rhode Island's targets of 45% reductions by 2030 and California's target of 40% by 2030.

It is also more ambitious than the United States' Nationally Determined Contribution, which includes a pledge to reduce emissions 50 – 52% by 2030. As Congress has failed to approve key parts of Biden's plan to meet that target through decarbonizing the electric sector, the path to achieving those reductions remains elusive.

### DETAILS MISSING

However, it is one thing to set targets and another to have a plan to reach them. S&P Global notes that Maryland's bill is "thin on program and funding details."

Notably, Maryland legislators have held off on a bill that would require new buildings in the state to be all-electric. Under the Climate Solutions Now Act, new commercial or multifamily apartment buildings larger than 35,000 square feet will be required to develop energy performance standards. This is a less direct measure to reduce emissions.

The Climate Solutions law also requires the state's fleet of passenger cars to transition to electric by 2031, and for 50% of other light-duty vehicles purchased by the state to be electric in 2031 or 2032. However, it does not include a statewide phase-out of sales of new internal combustion engine (ICE) vehicles. So far, the only state to require such a phase-out by law is Washington, although California Governor Gavin Newsom issued an executive order in 2020 to end the sale of new ICE cars in 2035.

Transportation is the largest source of greenhouse gas emissions in the United States, and on-road transportation is the largest source in Maryland at 36% of in-state emissions. As such, transport will have to play a large role in any credible plan to meet the state's targets.

In terms of electricity, which is the second-largest sector in both Maryland and nationally (31% of Maryland emissions), last year the state set a 50% by 2030 greenhouse gas reduction target. However, [analysis by Rocky Mountain Institute](#) indicates that for the United States to reach the ambitious Paris Agreement targets electricity will need to decarbonize faster than other sectors, which the organization says will be more difficult and take longer.

## TARGETS FIRST, MEANS LATER

Adding up all of these sectors, it is difficult to see how existing commitments will be sufficient to meet the bill's ambitious targets. This appears to be acknowledged by the bill's supporters, with Chesapeake Climate Action Network telling [Canary Media](#) that the law instead will set up "important foundations" for actual policies to cut emissions.

This is the same route that Rhode Island is taking. In 2021 state legislators passed Act on Climate, which set strong greenhouse gas reduction targets and tasked all state agencies with meeting them. But it did not pass a 100% renewable electricity mandate, which has been reintroduced this year along with a building electrification mandate, 2030 ICE vehicle phase-out, and other measures that could enable the state to meet its ambitious targets.

In either state, if other measures don't pass it could set state governments up for failure. Regardless, laws such as Climate Solutions Now could increase the likelihood that other "blue" or Democrat-led states will implement similar policies, as was seen with the nationwide spread of 100% clean energy mandates.

### **Read more:**

News coverage: [New Md. climate law calls for 60% emissions cut by 2031, besting California](#) (S&P Global)

News coverage: [Maryland just passed one of the most aggressive climate laws in the US](#) (Canary Media)

Source: [Climate Solutions Now Act of 2022](#) (Maryland Legislature)

## TIME IS RUNNING OUT TO PASS FEDERAL CLEAN ENERGY BILLS

Clean energy advocates and their supporters in Congress are holding on to hope that some of the climate-related components of the stalled Build Back Better bill will be able to pass before the August recess. However, there have been no concrete developments on any legislation to extend and expand the Investment Tax Credit and Production Tax Credit, to create dedicated incentives for U.S. solar manufacturing, or in the other clean energy priorities in Build Back Better.

And with the U.S. Senate divided largely on partisan lines, one man continues to hold the keys to getting anything passed: U.S. Senator Joe Manchin. According to *Politico*, the Biden Administration is now deferring to Senator Manchin to design a post-Build Back Better energy bill, and the Administration is asking members of Congress to not talk about Manchin for fear of further alienating him.

According to *UtilityDive*, U.S. Senator Ron Wyden's staff has noted that the events in Ukraine are driving additional motivation for an energy package. Bobby Andres, senior policy advisor for Senator Wyden, told the publication that the opportune time to do so would be in the next month or two.

Senator Manchin has been clear that he wants to see support for fossil fuels accompanying clean energy policies. However, the argument that he is holding up action on clean energy and anti-poverty measures on behalf of his constituents in West Virginia is being publicly challenged. Last December, the United Mine Workers of America [issued a statement](#) asking for Manchin to “revisit” his opposition to Build Back Better.

And as the latest, on 9 April an estimated 100 activists organized by West Virginia anti-poverty and climate groups marched to blockade a coal-fired power plant that Manchin's family has financial ties to. 16 of the activists were arrested.

### **Read more:**

Analysis: [The new White House rule: Do not talk about Joe Manchin](#) (Politico)

Analysis: [Clean energy sector eyes window for passing federal tax breaks amid challenge of high energy prices](#) (UtilityDive)

News coverage of Grant Town Coal Plant protest: [Arrests made during protest at Grant Town Power Plant](#) (WBOY)

## PERMIT ISSUES LIMIT DOMESTIC U.S. BATTERY SUPPLY CHAIN ADVANCES

On 31 March, President Biden invoked the Defense Production Act (DPA), authorizing the production and processing of battery raw materials essential for national security and the clean energy transition. The country has set a target to become a net-zero emission economy by 2050, which would require the growth of both zero-emission vehicles and energy storage solutions. The DPA allows the government to offer funding to companies for conducting feasibility studies to develop new mineral source projects while upgrading or expanding existing facilities.

This step has been taken to shift the nation towards a stable and secure battery supply chain which starts with the supply of critical minerals – lithium, cobalt, nickel, graphite, and manganese. According to January 2022 U.S. Geological Survey report, the country relies heavily on foreign sources for many of these minerals. The report notes that the United States is over 50% reliant on China for 25 different minerals.

However, the DPA is not likely to be able to fully solve the domestic mining problem. The biggest impediment that the country needs to focus on is federal environmental permitting. The Act does not waive or supersede strict compliance with permitting requirements or environmental sustainability laws. As such, many industry players believe that the Act won't be able to aid development of local mining projects. The Biden administration has already announced that the Department of Defense will implement this authority while "using strong environmental, labor, community, and tribal consultation standards." This means that even though the Act will provide financial aid to mining companies, it does not include any changes in the mining permit process.

The United States does not lack mineral resources, but mining faces other challenges. Mines in the United States remain unexploited because of environmental and other regulations that hinder the domestic mining operations. Under the National Environment Policy Act (NEPA), it takes an average of 10 years to receive mine permits in the United States. Even if minerals are extracted, they need to be shipped abroad for processing due to the absence of mineral processing facilities in the country. New mines and processing facilities simply cannot come online fast enough to address the urgent need for minerals.

Furthermore, Biden administration is focusing on making more federal lands off-limits to mining. In the last two months, the federal government blocked a new mine in Minnesota and another in Nevada that would have produced lithium. These and other environmental obstructions are likely to limit the benefits of the DPA.

However, there are some industry experts and market players lauding the implementation of this Act as they believe it can inject enough capital and support the growth of smaller mining companies that otherwise would find difficult to get financial aid. Projects authorized under DPA Section 303 are eligible to receive funding from the Defense Production Act Fund, although the amount of funds to be used is not specified. Also, the U.S. mining companies are exempted from paying royalties to the federal government for the minerals they extract on public lands.



To achieve its stated goal of “on-shoring” battery supply chains, the Biden administration will need to take concrete steps towards strengthening the domestic production of battery minerals. This includes removal of the regulatory hurdles in the process of granting approval for new mines and processing facilities. But this could just be the opposite of what Biden promised during his first year in the office – no compromise with the environmental sustainability.

Source: CEA Research

## **UYGHUR FORCED LABOR PREVENTION ACT GETS A HEARING**

On 8 April the U.S. federal government held a hearing to inform creation of a plan to implement the Uyghur Forced Labor Prevention Act (UFLPA). This recently passed law creates a “rebuttable assumption” that goods produced in the Xinjiang Uyghur Autonomous Region utilize forced labor and must thus be excluded from the United States market under existing law.

One of three “priority” goods identified in the law is polysilicon. This new law follows on the U.S. government’s withhold release order (WRO) on materials containing or derived from silicon metal produced by Hoshine which has led to multi-month detentions of multiple gigawatts of solar PV modules intended for the U.S. market.

UFLPA will likely be implemented through additional WROs, which are instructions to border officials to not allow entry to goods from certain companies and/or goods with origins in specific regions. But while WROs are mentioned in the law and further WROs would follow the precedent for previous trade exclusions, there are many other aspects of implementation which have not yet been determined.

At the hearing the inter-agency Forced Labor Enforcement Task Force heard from 45 speakers from academia, industry, non-profit organizations, and some un-affiliated individuals to inform the strategy it must issue in June 2022. This included both Uyghur and Kazakh victims of forced labor, unjust imprisonment, and other human rights violations, as well as experts in these fields who spoke on their behalf.

Human rights experts universally called for more strict, expansive, and/or diligent enforcement of the Act. Many called for goods produced outside Xinjiang to also be subject to the rebuttable presumption around forced labor. One expert, James Cockayne from the University of Nottingham, called for all goods from any company that has any supply chains in Xinjiang to be banned, regardless of whether the components of the specific product being imported were made in Xinjiang. Given the prominence of Xinjiang in the silicon metal and global polysilicon industries, if this were adopted it could shut off much of the U.S. solar supply chain.

Many officials representing various industries also testified, including representatives of the Solar Energy Industries Association (SEIA) and the American Clean Power Association. These and other industry representatives stressed ongoing cooperation with industry and a need for transparency around the decisions that Customs and Border Protection (CBP) makes.

SEIA additionally called for the formal adoption of a supply chain traceability protocol jointly developed with Clean Energy Associates. In general, industry representatives stressed the theme of “informed compliance,” a concept wherein importers are better able to meet CBP requirements through the agency issuing detailed and early communication around said requirements.

Source: CEA Research

## **NEWS ROUNDUP: LA, BOSTON, AND HERTZ ELECTRIFY FLEETS, WEST COAST’S LARGEST OFFSHORE WIND FARM PROPOSED, FIRST SOLAR SECURES MASSIVE CONTRACTS**

The United States saw a number of major vehicle electrification announcements last week. On 6 April, the Los Angeles City Council approved a plan to electrify the city’s entire fleet of more than 10,000 vehicles, including automobiles, buses, and garbage trucks. Also on 6 April, Boston Mayor Michelle Wu announced that the city would purchase its first 20 electric school buses in 2022 – 2023 as the first step towards electrifying its entire fleet of 739 school buses.

But it was not only city governments; on 4 April rental car giant Hertz announced that it would purchase 65,000 EVs from Polestar, a subsidiary of Volvo and its Chinese parent company Geely. This follows on Hertz’s announcement in October that it would buy 100,000 Teslas for its rental fleet and make half of these available through Uber.

News source: [EV fleets coming to LA and Boston](#) (Grist)

News source: [Not just Tesla: Hertz expands EV plan](#) (E&E News)

A little-known developer has requested a federal lease for a 2-gigawatt floating offshore wind farm off the coast of Washington. This request by Trident Winds would represent the largest offshore wind farm proposed for the West Coast to date. As the Olympic Wind Farm proposal was not part of an active lease sale, the U.S. Department of the Interior is deciding whether to proceed with this request on its own or to put out a request for interest to other developers to see if they are interested in this region.

Turbines in the Olympic Wind Farm would be mounted on platforms that are moored via cables to the ocean floor. This design could allow development in the deeper waters of the Pacific Ocean, versus the fixed offshore wind designs that are being utilized in the Atlantic Ocean.

News source: [Company proposes largest offshore wind farm on West Coast](#) (E&E News)

As module supplies from Southeast Asia dry up in the wake of the Department of Commerce’s anti-circumvention investigation, exempt module maker First Solar is securing some of the largest supply contracts seen to date. This week First Solar announced two major supply deals; one to supply 4 gigawatts of PV modules to developer Silicon Ranch, and another 750 megawatts to Origis Energy.



Under the deals First Solar will supply modules to Silicon Ranch from 2023 through 2025, and Origis through 2024. First Solar's press release on the Silicon Ranch contract further spells out that it will recycle the modules it provides at the end of their useful lives. The manufacturer runs its own recycling operations, through which it can recover an estimated 90% of its cadmium telluride semiconductor material. Cadmium telluride is [potentially toxic](#) and tellurium is also relatively rare, both of which are potential drivers for recycling.

Source: [Silicon Ranch and First Solar expand partnership with 4 GW supply agreement](#) (First Solar)

Source: [Origis Energy Builds on Long-Term Alliance with Order for 750 MW of First Solar](#) Modules (First Solar)