

NEWSLETTER *Published September* 30, 2022 • 7 minute read

On the Grid: Storm Prevention 9/30/22



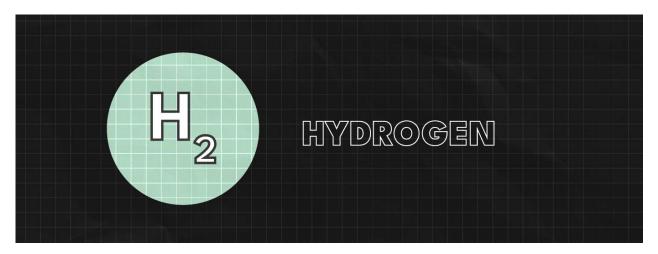




Climate change is fueling more intense and more destructive storms, and it is only going to get worse. Hurricane Ian battered the Gulf Coast of Florida this week with 150 mph winds, cutting power for 2.6 million Floridians and <u>irreparably damaging sections</u> of our already vulnerable grid. From power outages in <u>Texas</u> to <u>California</u> to <u>Ohio</u>, once-in-a-lifetime extreme weather events are becoming increasingly common, shining a light on how years of underinvestment and poor market incentives have left our electrical grid system weak. Even without considering <u>the growing power demands of our net-zero future</u>, the need to modernize our grid is apparent, but the siting and permitting required to build the transmission lines we need can currently take years.

Permitting is in desperate need of reform. Although there have been some attempts to streamline the process in the past by Presidents <u>Obama</u> and <u>Trump</u>, albeit in very different ways, there are still significant hurdles to overcome, which Senator Joe Manchin's recent bill tried to tackle. While an attempt to move Senator Manchin's permitting reform legislation with the government funding

bill this week was stymied, it certainly put this issue on the front burner and showed that policymakers across the ideological spectrum understand the current process for environmental review won't allow the US to deploy energy projects as quickly as it needs to. Members have pledged to keep working on solutions, but striking a balance that delivers the votes needed from both the left and the right will require some tough and honest negotiating.

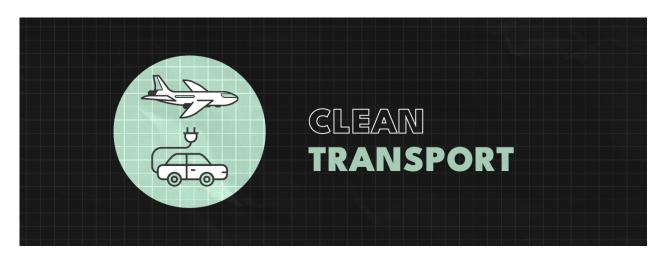


With hydrogen being lauded by many as the "fuel of the future", the Department of Energy recently announced \$7 billion in funding opportunities to build regional clean hydrogen hubs (H2Hubs) across the country, stemming directly from the Bipartisan Infrastructure Law. Feedstock, end-use, and geographic diversity requirements in the bill expand clean energy options, while the incorporation of community benefits plans will meaningfully address legacy environmental justice issues.

The clean energy transition requires an "all-hands-on-deck" approach and public-private partnerships are one of our most valuable tools. This week, Constellation Energy, the country's largest producer of clean, carbon-free energy, <u>announced</u> they are teaming up with Argonne National Laboratory to develop technologies for carbon-free energy generation and lay out a strategy for quick deployment. A big focus of the cooperative will be on the generation, storage, and transmission of hydrogen energy from nuclear power. As we <u>expand</u> cutting-edge advanced nuclear technology, there is ample opportunity to produce both carbon-free electricity and hydrogen.

This announcement comes on the heels of an international <u>agreement</u> among a coalition of nations, led by Japan, to boost the output of low-emission hydrogen-blue or green hydrogen-to at least 90 million tonnes a year by 2030.

As a reliable, next-generation fuel, hydrogen is an integral part of a national, and global, clean energy economy. Recent <u>analysis</u> from Boston Consulting Group, commissioned by Third Way and Breakthrough Energy, shows that global demand will create a market for low-carbon hydrogen worth \$3-4 trillion over the next few decades and that the US is well-positioned to compete for a big chunk of that business.



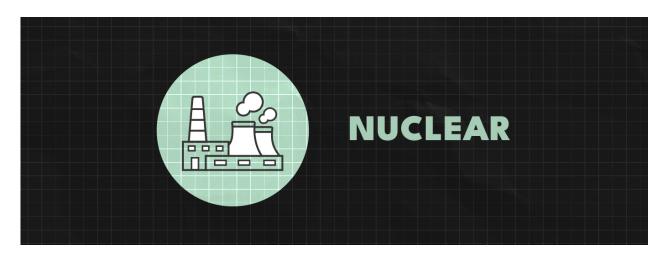
While electric vehicle (EV) chargers might be a familiar sight in parking garages or shopping centers, they're noticeably absent along many of our highways. But as more EVs hit the road, the Biden Administration is deploying a reliable and convenient charging network along highway corridors through a five-year, \$5 billion National Electric Vehicle Infrastructure (NEVI) Program. This week, the Biden-Harris Administration has unlocked \$1.5 billion of that funding and approved the charging infrastructure deployment plans for all 50 states, including the District of Columbia and Puerto Rico. With a goal of building a network of chargers every 50 miles, this initial funding will help deploy chargers across 75,000 miles of highway.

The Biden Administration is expanding access to charging infrastructure and setting a strong signal to the private sector that an EV future is worth investing in. Hertz Global's <u>partnership</u> <u>announcement</u> with BP Pulse, BP oil's EV-charging arm, to build more than 100,000 chargers by 2030 is just one recent example of how the private sector is stepping up.

Larger investments in robust charging infrastructure, not unlike Hertz and BP's joint efforts, will be required as we build our nationwide electric fleet. Barely a month since California announced it will phase out the sale of new gas-powered cars by 2035, New York is following a similar path, mandating that all new cars sold in the state must be zero-emissions by 2035. To achieve this, New York has laid out a roadmap: 35% of new cars must be zero-emissions by 2026, and then up to 68% by 2030. Along with the \$5 billion in NEVI funding, the incentives and tens of billions of dollars tucked into the Inflation Reduction Act will ensure the success of these state-level policies.

Transportation is our heaviest polluting sector, and curbing those emissions doesn't stop with ground vehicles. Aviation is responsible for 10% of transportation emissions, and that share is expected to grow; this mode will not be easy to electrify, which is why we need to scale up sustainable aviation fuel (SAF)--clean, liquid fuels that can be used in today's aircraft.

Join us for a virtual event on **Wednesday, October 12** at **2 PM ET**, with Assistant Secretary for Aviation and International Affairs Annie Petsonk and industry leaders to discuss how the public and private sectors are building out the SAF market to get cleaner fuels in our skies. Register for the event <u>here</u>.



This week, a Third Way expert joined an esteemed lineup of scientists, innovators, entrepreneurs, and changemakers in San Francisco for RE:WIRED Green, an event outlining different innovative pathways to tackle climate change. Senior Fellow for Nuclear, Alan Ahn, <u>spoke</u> on the immense potential of nuclear energy, debunking misconceptions and highlighting how cutting-edge nuclear innovation will produce reliable, safe carbon-free electricity.



Like Alan pointed out in California this week, advanced nuclear technology is a game-changer in the fight to cut carbon pollution. A new <u>report</u> from the Department of Energy found that replacing coal plants with nuclear reactors can cut up to 86% of a region's greenhouse gas emissions, cleaning up polluted air in surrounding communities. The study also identified 157 retired and 237

operating coal plant sites with the capacity to transition to nuclear, 80% of which would be good candidates for the next generation of nuclear technology.



Temperatures are beginning to drop, adding even more urgency to Europe's energy crisis. While Russia's invasion of Ukraine has certainly exacerbated the issue, Europe's failure to diversify its fuel sources over the years has created a perfect storm. This is not the first time Russia has used energy to apply political pressure, but news of <u>intentional sabotage</u> on the Nord Stream pipelines is pushing Europe's already fragile economy over the edge.

The European Commission is considering several <u>courses of action</u>, including mandatory demand reduction, price caps, and financial support for energy companies and consumers. These are short-term solutions that will alleviate some of the pressure this winter, but European nations need a long-term industrial strategy to guarantee affordable and reliable energy that can stand up to international price spikes and geopolitical maneuvering. With <u>European Sustainable Energy Week</u> in full swing, conversations around the REPowerEU plan, the EU Innovation Fund, energy efficiency, and opportunities to lead are blooming.

Third Way and Carbon Free Europe's new <u>memo</u> outlines the steps the UK can take to build a stable clean energy economy. By scaling up public and private investment across key technologies, the UK has the potential to reach net-zero emissions, meet growing energy demand, *and* become an international clean energy leader.



- <u>Alec Stapp</u>, co-founder of the Institute for Progress, in the *Atlantic*, spells out the importance of building out transmission lines in order to expand renewable energy usage and shifts that have happened, and need to happen, within environmental activist circles to accomplish this.
- <u>Matt Yglesias</u>, in *Slow Boring*, explains how innovation will make cutting-edge clean energy technologies cheaper and easier to deploy, and must be a central tenant of our technology-inclusive decarbonization strategy.
- <u>Julia Pyper</u>, host of the *Political Climate* podcast series, sat down with Josh Freed, Senior Vice President of the Climate and Energy program, to break down what a clean energy economy means for US competitiveness, security, economy, and climate change, featuring remarks from US Energy Secretary Jennifer Granholm on America's potential to lead.



John Hebert, Policy Advisor for Transportation, highlights takeaways from the new federal strategy to commercialize and deploy sustainable aviation fuel



Today, @Energy, @USDOT, & @USDA released a joint 128-page #SAFGrandChallenge Roadmap which lays out a strategy to expand sustainable aviation fuel to reach 3 billion gallons per year by 2030. There's a lot covered here, but a few key takeaways ...1/4



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Sustainable Aviation Fuel Grand Challenge Roadmap: Flight Plan for Sustainabl... To achieve SAF Grand Challenge goals, an interagency team worked with government agencies, and partners from national labs, universities, non-...