

NEWSLETTER Published June 3, 2022 · 8 minute read

On the Grid: Silver Linings 6/3/22







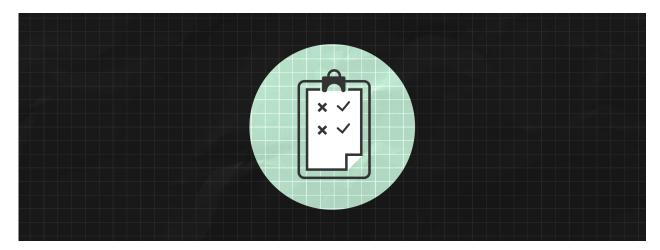
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This week, we got a reality check. The newly <u>released</u> Environmental Performance Index (EPI), a partnership between Yale and Columbia researchers, showed us what press statements and government policy skated around h-most nations, despite their net-zero pledges, are not on track to meet their goals by 2050, the United States included.

The EPI finds that only Denmark and the United Kingdom are on track to meet mid-century emissions goals, while the United States sits at 43rd on the list, dropping 19 spots from the 2020 report. This plunge is a *direct* result of Trump's climate—or lack thereof—policies, specifically from 2017 to 2019. While President Biden has been able to reverse many of the worst Trump—era actions and pass the Bipartisan Infrastructure Law with record clean energy innovation investments, the US and most other advanced economies need to do much more to get on track.

We need a long-term industrial strategy that will rapidly accelerate *all* of our clean energy resources to power economies and outlive ephemeral political cycles. This week, we're highlighting some successes that have started to lay the groundwork for this.

1. Decarbonizing Our National Laboratories



Last week, the Department of Energy <u>announced</u> the Net Zero Labs (NZL) initiative, a \$38 million pilot program to decarbonize four national laboratories. Our national labs are the jewels of the American scientific enterprise, conducting essential research and development that has powered scientific breakthroughs for decades. The laboratories and scientific processes themselves, however, remain difficult to decarbonize. This initiative lays the foundation for net-zero and energy efficiency solutions that can be replicated in our remaining 13 national laboratories and parallel industries.

We sat down with Dr. Nick Montoni, Third Way's Innovation Policy Advisor and National Lab science policy expert, who offered their perspective on why this is such a Big Deal!

On The Grid: These laboratories are testing key decarbonization solutions at scale. This begs the question, how does this investment help them apply their own solutions?

Dr. Nick Montoni: "A lot of our innovation efforts have focused on scaling up and exporting innovation, bringing innovation to market. The labs have certainly done their part to decarbonize their own operations. This \$38 million commitment is the funding that it takes to create and begin to implement these net-zero plans, which will catalyze their ongoing efforts to decarbonize and sets the stage for further investment. For instance, the Biden Administration has asked for \$60 million in FY23 to continue this work at more national labs!"

OTG: How easy is it to translate these solutions to other industries?

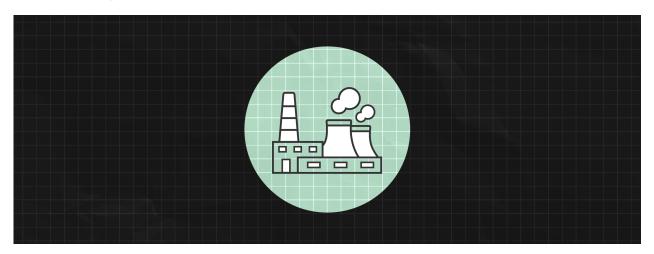
Montoni: "The whole point of these net–zero plans is to translate the emissions reductions to the rest of our economy. Take for instance, Oak Ridge National Lab, the high–performance computing center of the national lab universe, which is incredibly energy–intensive. The energy management strategies that PNNL

is working on and the energy generation capabilities that INL and NREL are working on will be incredibly useful at Oak Ridge to power and decarbonize their computing operations. This can then extend to data centers and other high-performance operations in the private sector!"

"In order to achieve net-zero emissions, NETL will be deploying CCUS and DAC technology, as well as expanding their use of geothermal energy. This will be useful for any industrial and energy generation operations that continue to rely on fossil fuels. What they learn can additionally help transition fossil energy communities to clean and renewable fields like geothermal."

For more information on the national labs mentioned and the impact of the NZL initiative, check out Dr. Montoni's tweet thread here!!

2. Going Nuclear over Nuclear Waste



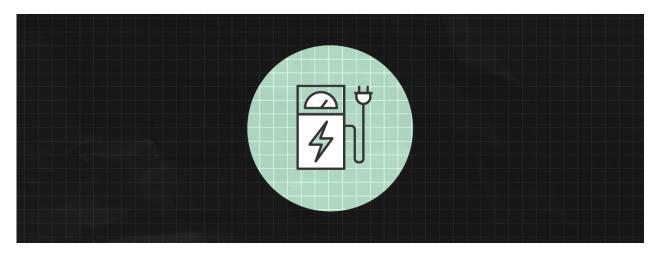
The Climate and Energy Program has long recognized the role of nuclear energy, particularly advanced nuclear, in working alongside a host of clean and renewable technologies to fast-track decarbonization. Nuclear energy is already our largest carbon-free energy source. Thanks to a growing number of American innovators, flexible, reliable, secure, and affordable clean energy is being deployed via advanced nuclear technology.

This week, the usually rigorous <u>PNAS</u> ran an article grounded in outdated information and fundamentally flawed assumptions on small modular reactors and nuclear waste.

To get the details, <u>read our Twitter thread</u>. The reality is that nuclear waste is fundamentally a political challenge that national governments continue to neglect and deprioritize. There are exceptions, like in <u>Finland</u>, where concerted government effort is making strides in developing practical solutions for nuclear waste.

Advanced nuclear energy is essential to our decarbonization goals, putting a significant dent in our carbon pollution to reach net-zero emissions in the fastest and fairest way possible.

3. Preserving EV Tax Credits

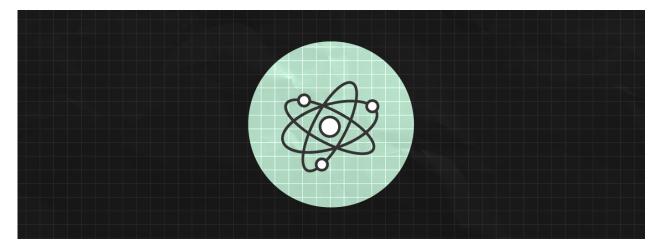


With more than <u>a million electric vehicles</u> (EVs) sold in the first few months of this year alone, it is increasingly obvious that the market is rapidly shifting towards electrification. This has left policymakers with a burning question, "Do we even need tax credits to incentivize EV purchases, especially as supply chain issues temporarily slow down vehicle production?"

Our answer is a resounding *yes*. While American markets are rapidly moving towards EVs, we're still lagging behind China and Europe, which have been investing in EVs at a significantly faster pace. As such, federal support is essential to strengthening American competitiveness.

In our new <u>memo</u>, Senior Policy Advisor for Transportation, Alex Laska unpacks how the EV tax credit is an essential policy tool that will make EVs more affordable for everyday Americans, ensure that US companies and workers are at the frontlines of electrification, and most importantly, help meet our climate goals. But to reach this potential, Congress must act fast to improve and expand our existing tax credit. This includes eliminating the cap on how many EVs per automaker are eligible for the tax credit, making the credit transferable, and establishing an all-together new credit for used EV sales.

4. An American Nuclear Supply Chain



While nuclear energy has been a cornerstone of the American energy sector for decades, our grip on leadership within the industry has been slipping as countries like Russia and China dominate

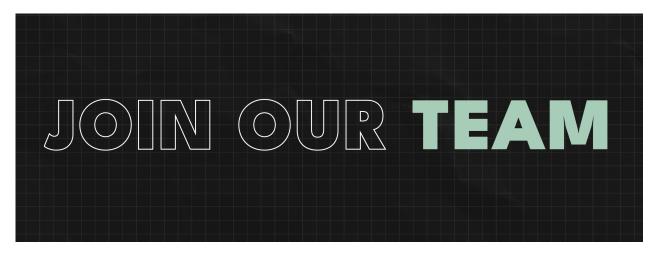
essential supply chains. However, with the rapid emergence of advanced nuclear technology, the US has the potential to seize global leadership by recapturing nuclear supply chains and becoming a major global supplier.

In our latest <u>blog post</u>, Senior Fellow for Nuclear Alan Ahn and Nuclear Policy Advisor Ryan Norman outline three concrete steps the US can take to revitalize domestic supply chains.

- Renew our commitment to advanced nuclear technology deployment, leveraging American ingenuity and the bipartisan supported resources to demonstrate the reliability and safety of US reactor designs.
- 2. Develop and train a modern nuclear workforce, taking advantage of resources embedded within labor unions.
- 3. Develop domestic infrastructure to create a high-assay low-enriched uranium (HALEU) supply chain that will circumvent Russia's current monopoly on nuclear fuel.

With decades of innovation under our belt, the United States is well poised to develop and lead the global nuclear markets.

5. We're Hiring



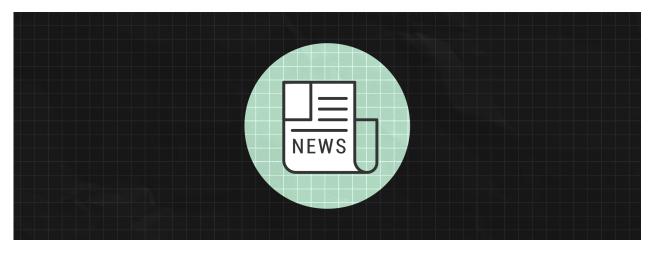
The clean energy policy conversation is expanding...and so are we! The Climate and Energy Program is looking for people with talent and a passion for climate solutions to fill two new roles on our team. If you've got anyone in your mental Rolodex who you think might be a fit, please send them our way. And if you wanted to circulate these job postings more broadly with your networks, we wouldn't mind that either!

<u>Policy Advisor for Transportation</u>: This person will focus predominantly on policies to decarbonize the aviation sector by conducting original-source research and analysis, and authoring high-impact written reports, memos, and op-eds to better understand and explain the importance of policies, federal funding changes, and technologies that are necessary to eliminate emissions from

aviation and provide associated benefits for the US economy, jobs, security, public health, and climate. (1 year of experience in transportation, clean fuels policy, or a relevant field)

<u>Deputy Director for Innovation and Clean Industry</u>: This person will help set policy, advocacy, and product strategy and supervise multiple team members working on issues surrounding energy innovation, carbon management, and industrial decarbonization while overseeing in-depth research and quantitative analysis to better understand and explain our policy goals in specific issue areas that relate to American clean energy innovation, deployment, and competitiveness. (5+ years of experience in clean energy policy)

6. What We're Reading and Listening To



- <u>Alejandra Borunda</u>, in *National Geographic*, touches on the impact of climate change, and alarmingly high temperatures, on sleep. Leveraging data from a recently released study, Borunda outlines the mental and physical health impacts on different demographics, pointing to increased air conditioning as a possible solution.
- <u>Shannon Osaka</u>, in *Grist*, sat down with the Climate and Energy Program's Senior Vice President, Josh Freed, to discuss the future of a reconciliation package and the embedded clean energy provisions, as well as the tight road ahead for Democrats.
- <u>Marcela Mulholland and McKenzie Wilson</u>, in Data for Progress's new podcast series On the
 Offense, unpack polling and message guidance around inflation. Discussing how soaring prices
 will likely impact Democrats at the polls this November, they outline effective strategies for
 discussing the contentious topic.