

Testimony of Abigail Ross Hopper
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US House of Representatives Committee on Natural Resources
Subcommittee on Energy and Minerals
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Chairman Lowenthal, Ranking Member Stauber and the members of the Subcommittee, thank you for inviting me here to discuss the important issues around renewable energy and public lands.

I am Abigail Ross Hopper, President and CEO of the Solar Energy Industries Association (SEIA). SEIA is the national trade association for solar energy and energy storage made up of 1,000 member companies across the country representing all parts of the solar and storage supply chain from manufacturers to installers. Today, 250,000 Americans work in our industry. Over the next decade, thanks to investments made by this Congress and companies across the country, that number will grow to over 538,000 Americans that reflect the diversity and talent of our country in high-quality clean energy jobs in every Congressional district.

With the recent passage of the Infrastructure Investments and Jobs Act (IIJA) and the Inflation Reduction Act (IRA), the solar industry will lead the way in combatting the climate crisis. Increasing solar deployment throughout the nation is vital and public lands offer important resources to reach the Administration's climate goal of a carbon pollution free power sector by 2035. For this reason, SEIA supports H.R. 8802, the Public Lands and Waters Climate Leadership Act, which would require the Secretary of the Interior and the Chief of the Forest Service to align management of public lands and waters with the President's greenhouse gas emission reduction goals.

SEIA has long advocated for improving federal land management policies to improve strategic siting and permitting for solar projects. With the right policies in place, public lands can be used to help create jobs, meet energy needs, and reduce carbon emissions.

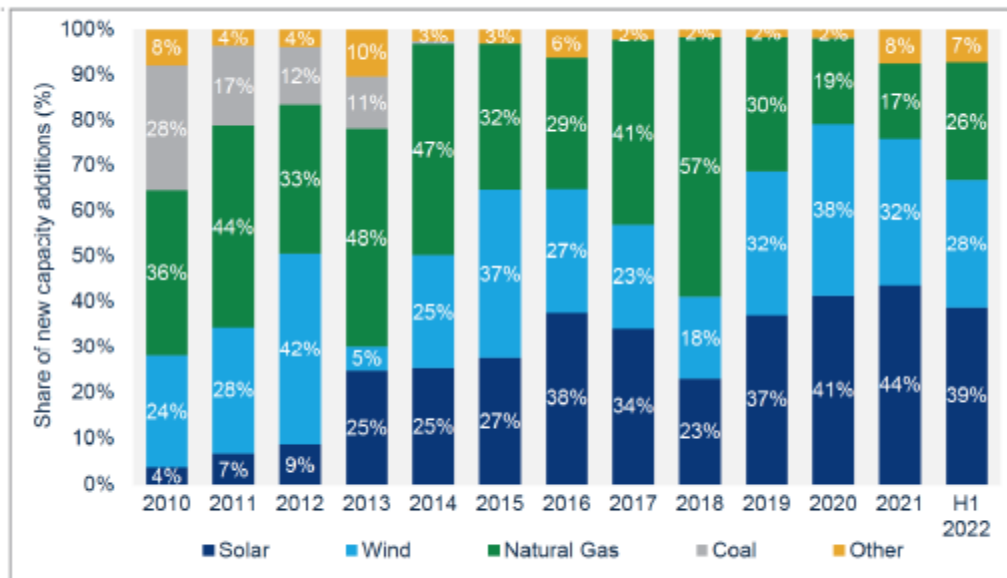
Provisions in H.R. 8802 may also incentivize dual use solar projects, such as those incorporating agrivoltaics and livestock grazing. We also strongly support provisions in H.R. 8802 that would expressly require input from environmental justice communities. Equity and environmental justice are core values of SEIA's mission. Our energy transition must be based on principles of justice and inclusion.

Today, I will share how important strong public land policies are to meeting this critical moment and how public lands can be used to help create jobs, meet energy needs, and reduce carbon emissions.

Solar is the Dominant Source of New Electricity Generation and Will Continue to Grow

Through the first half of 2022, despite challenges with supply chains and trade policies, the solar industry accounted for 39 percent of all new electricity-generating capacity. As the chart below outlines, since 2019 solar has been the leading technology for new electricity generation.¹

New U.S. electricity-generation capacity additions, 2010 – H1 2022



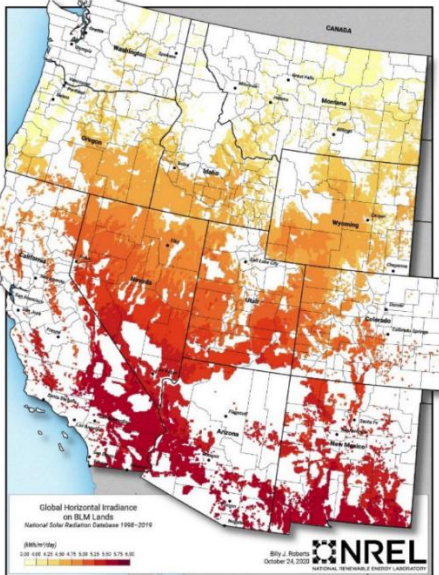
As I shared earlier, this growth in solar deployment has also consistently supported job growth. SEIA estimates that as IIJA and IRA are implemented, an additional 544 GW of solar will be deployed, more than four times the amount of solar installed over the last 10 years. It also means hundreds of billions of investments in the US economy over the next decade, which will turn the solar industry into an annual \$87 billion industry supporting hundreds of thousands of families across the country

To meet the Biden Administration's goal of 100% clean energy by 2035, we estimate that the solar industry will need to have installed roughly 1,495 GW of solar by 2035 (equivalent to 40% of electricity generation from solar). Policies in the IRA get us over 60% of the way to that goal. Deploying quickly is critical to avoiding the worst impacts of climate change.

¹ <https://www.seia.org/research-resources/solar-market-insight-report-2022-q3>

Public Lands Have a Major Role to Play in Deploying Solar and Storage

The Biden Administration has made a goal of siting 25 GW of solar on public lands by 2025. Meeting this goal is essential for achieving the deployment necessary to reduce carbon emissions and meet energy needs. According to the Bureau of Land Management, federal lands offer high-quality insolation – or sun quality – particularly in the American Southwest. ²



Supporting more solar and storage development on U.S. public lands will generate enormous economic, employment, and health benefits for local communities, states, and the entire nation.

Work is ongoing to reassess federal land that can be developed for solar energy and update staffing and policies around competitive bidding and rental rates that are necessary to provide developers the business certainty needed to invest in projects on federal land. However, this work is well worth it. Supporting more solar and storage development on U.S. public lands will generate enormous economic, employment, and health benefits for local communities, states, and the entire country.

In some cases, major projects are already coming online. For example, EDF Renewable Energy recently announced that the Palen Solar Energy Project built on BLM land in California was fully operating and 457 megawatts and 50 megawatts of battery storage are being generated. The size of this project produces enough electricity to power 116,000 homes.³

² [https://www.blm.gov/sites/default/files/docs/2022-](https://www.blm.gov/sites/default/files/docs/2022-04/BLM%20Public%20Land%20Renewable%20Energy%20FY21%20Report%20to%20Congress%20v4%20508_0.pdf)

[04/BLM%20Public%20Land%20Renewable%20Energy%20FY21%20Report%20to%20Congress%20v4%20508_0.pdf](https://www.blm.gov/sites/default/files/docs/2022-04/BLM%20Public%20Land%20Renewable%20Energy%20FY21%20Report%20to%20Congress%20v4%20508_0.pdf)

³ <https://www.blm.gov/press-release/interior-department-announces-full-operation-palen-solar-project-california>

Projects like this one are at the forefront of what is possible. Using federal resources – public land – to facilitate the development and deployment of solar and energy storage to the benefit of local communities and the climate. As a country, we will need many more permits approved on many more projects like this one to meet the Administration’s goals.

Coordination and Planning Around a Shared Goal

To combat the global climate crisis, we need an all-hands on-deck approach. Solar and storage deployment on public lands will play a key role in meeting carbon emission reduction targets.

The solar and storage industry continues its efforts to work alongside Congress and agencies to address issues around deployment, and over time, we have seen some improvements. The Energy Act of 2020 made key improvements in interagency cooperation and problem solving to address existing renewable projects and streamline the permitting process for renewable projects. According to the Bureau of Land Management’s 2021 Public Land Renewable Energy report, work is ongoing to reassess federal land that can be developed for solar energy and update staffing and policies around competitive bidding and rental rates. However, more resources are needed if we are going to meet the rapid deployment goals necessary.

Further refinements, such as aligning public lands and waters management with the Biden administration’s emission reduction goals through a regular planning process will help underscore the importance of a cross-governmental effort to site and permit solar energy more expeditiously to speed the U.S. transition to a clean-energy future.

Since 2010, BLM has fully permitted 18 solar PV facilities 100 MW or greater in capacity, including over 1,500 MW of capacity since January 2021 alone. There are 4.9 GW of projects under development on BLM lands, representing around 7% of the known utility-scale project pipeline, a substantial increase over recent years. Together, these figures tell an incredible story: solar development on BLM lands is increasing and permitting timelines are shrinking, likely leading to additional federal development planning. And it should be noted that these figures represent a snapshot in time prior to the passage of the IRA.

The biggest obstacle to building solar on public lands is lack of approved areas for leasing, not permitting timelines or environmental reviews. Of the over 1,500 MW permitted since January 2021, over half is located on lands outside of the Solar Energy Zones. There is a clear policy lesson to be drawn here: permitting agencies should continue to focus on opening up additional federal lands to solar development. We believe the Public Lands and Waters Climate Leadership Act will advance this priority, and we urge policymakers to immediately expand the universe of federal lands available for solar leasing in order to harness the full potential of the IRA.

Opportunities for Land Use

According to a soon-to-be released white paper by the Solar and Storage Industries Institute, “solar development can be compatible with conservation and preservation of community character” when implemented within a science-based siting framework. Further, the paper notes that “new research is beginning to show that more environmental benefits can flow from solar projects, beyond the injection of carbon free electricity into the grid, that should be accounted for during environmental impact review and factored in during permitting.”⁴

For example, large scale solar projects can be seen as tools for preserving land and increasing the value of that property over time. Land can in turn be uncultivated for years which will increase the productivity of soil, or it can host agrivoltaic operations to produce food and clean electricity simultaneously. Research also shows that solar facilities can enhance sheep grazing operations and habitat for pollinator species. We must continue to identify ways that such projects are beneficial to our ecosystem.

Jobs and Economic Development

Accessibility of solar to all Americans is of paramount importance to our industry. While SEIA continues to prioritize diversity, equity, inclusion, and justice, communities that have long faced disproportionate health disparities from industrial sites in minority and low-income communities is something that we must focus on as a nation. Investing in education and job opportunities for in growing industries like solar and storage can help spur economic growth in communities across the country, including those impacted by a federal presence.

SEIA actively works to promote diverse solar and storage supply chain and services suppliers through our Diverse Suppliers Database. In addition, we have developed curriculum for our industry to train in best practices for diversity and inclusion in hiring and retention in order to ensure our industry reflects the character of our communities.⁵

Conclusion

Thank you for your time and continued support of the solar and storage industry. After the passage of both the IRA and IIJA, the solar and storage energy is poised to grow exponentially over the next decade. To meet the climate goals, we must continue building more solar and storage projects on public lands. Many benefits are possible for economic and job growth across the country with increased deployment. However, achieving the steps necessary for

⁴ Large Scale Solar Siting: Encouraging Ecosystem Enhancement and Conservation While Producing Much Needed Zero Carbon Electricity. <https://www.ssii.org/home/>

⁵ <https://www.seia.org/initiatives/diversity-equity-inclusion-justice>

additional deployment will require cooperation and coordination across the federal government and consistent alignment with national goals to reduce carbon emissions.

I look forward to answering any questions you may have.