

## Targeting Clean Energy Investments to Regions with Highest Emissions: A Win for Climate, Communities, and Wildlife

We know that tax incentives for clean energy technologies, particularly for wind and solar power generation, have been essential to deploying these resources around the country, to the point where they are now cost-competitive with generation from coal or natural gas.

However, due to factors including local and state laws and policies, renewable resource availability, and general preferences, some states have made much more progress in decarbonizing their energy grids than others. The vast majority of federal tax credits have flown to just a handful of states, leaving the rest with fewer clean energy investments and the job creation opportunities they bring.



As the nation now races to eliminate carbon emissions in the power sector by 2035, we can no longer afford to let some states benefit from clean energy while others lag. Federal incentives are needed to deploy clean energy everywhere, but they are needed *even more* in those states that have more ground to overcome.

A new tax credit targeted to areas of the country that have the farthest to go in decarbonizing their grids would speed up clean energy deployment and help replace the lost jobs, investment, and local revenue in communities where fossil generation currently occurs but is rapidly declining. Here's what this new credit could look like.

- A new tax credit for clean energy generation (including energy storage), which could be taken as either a production tax credit (PTC) or an investment tax credit (ITC).
- Available to clean energy facilities in states with above average carbon-intensity in power generation.
- Technology-neutral to recognize that there are other current or emerging technologies in addition to wind and solar that can play an important role in decarbonization.
- Tied to fair wage and labor standards to ensure that federal incentives are good for workers as well as companies, and that clean energy investments realize their promise of bringing quality, high-paying jobs to communities in transition.

With precious little time left to deal with climate emissions and avoid the worst consequences, federal spending should target the areas that need the most investment. By taking this approach, each federal dollar would eliminate more carbon from the grid than under the current incentive structure.

Imagine a leader in renewables such as California. Due to aggressive state action, CA utilities have already eliminated nearly all coal generation, which has the highest emissions. New clean energy generation coming online there will replace any remaining natural gas plants. Now take a state like Ohio, which is still heavily reliant on coal. New clean generation there would replace the dirtiest kind of power, making that federal incentive go farther toward national decarbonization than doubling down in the most aggressive states.

## **Clean Energy Should Go Where the Carbon Is**

Carbon-Intensive States Need More Incentives to Switch to Clean Energy



Federal incentives are not flowing equally to the middle and southern parts of the country, where carbon intensity remains high. In these states, current power generation is more harmful to the climate and human health.

Emissions Intensity – kg CO/MW 484-658 658-780 Source: author's calculations and NREL (2020, 2021), Short-Run Marginal Emissions Rate – the emissions occurring due to a marginal increase in load over a short time.

2 of 4

A carbon-targeted approach to tax incentives offers the rare opportunity to do more for the climate while also driving investment into communities grappling with economic transition and improving local air quality and health outcomes. This will accelerate the benefits to the climate, communities, and wildlife alike.