



## ACCELERATING THE TRANSITION TO RENEWABLE ENERGY IN THE MIDWEST

### **Why This, Why Now?**

The race to build renewable energy is here. As recent studies have indicated, we can reach 90 percent zero-carbon electricity by 2035,<sup>1</sup> but not without conflicts on how we use our land. Developing smart siting solutions now is essential to accelerating the renewable energy buildout.

The Nature Conservancy has done more than any other organization to articulate the challenge and advance solutions that support both our climate and nature conservation goals. TNC's Midwest Division has an opportunity to build on TNC's successes from around the country, innovate in ways that make sense for our region, and advance our climate and nature conservation goals.

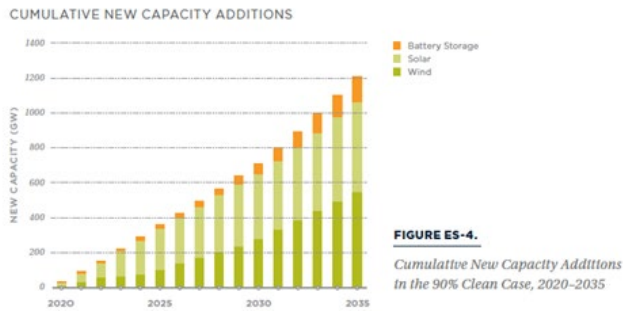
### **The Challenge**

Even without aggressive federal action, state policies and markets have aligned to significantly increase the demand for renewable energy while driving down costs.<sup>2</sup> In any scenario, wind and solar resources are an essential part of the solution.

The most optimistic scenarios conclude that we will need to build a total of 1,100 GW of new wind and solar generation by 2035. This equates to about 70 GW of new capacity a year (see Figure ES-4 from 2035: The Report). Thanks to great leaps in technology innovation, this buildout is feasible, and all regions of the country will be able to contribute. However, this also means that all regions of the country will be faced with the land-use implications that can potentially stall or halt renewable buildout.

<sup>1</sup> Goldman School of Public Policy, University of California Berkeley. June 2020. "2035: The Report."

<sup>2</sup> Aggarwal, Sonia and Mike O'Boyle. June 2020. "Rewiring the U.S. for Economic Recover." Energy Innovation Policy & Technology, LLC.



Scaling up solar and wind energy projects require a lot of land. Princeton University estimates a footprint the size of Colorado and Wyoming combined will be necessary to reach net-zero climate goals.<sup>3</sup> The pace of the buildout will depend greatly on avoiding the environmental and social conflicts that can come with siting projects in poor locations, such as important wildlife habitat areas.

As low impact sites become more scarce, the conflicts between clean energy development and environmental and

social values will continue to increase. Failure to address these conflicts will impede climate progress by slowing the transition to renewable energy which will have significant consequences for the protection of lands and waters.

Each year of delay in deploying zero-carbon electricity makes it more difficult and more expensive for us to achieve a sustainable climate future. By including nature in the energy planning, siting and buying process, we can advance a zero-carbon future as rapidly as possible while limiting impacts to natural and agricultural lands. Acting now to minimize those conflicts and accelerate the renewable energy buildout is essential to addressing climate change. To go fast, we need to go smart.

### Solutions for a Successful Clean Energy Transition

Achieving a successful clean energy transition requires a multi-pronged approach. Renewable development that comes to fruition will require siting solutions that accelerate buildout in places where projects avoid impacts to wildlife and habitat and have community support.

TNC is uniquely positioned to address this challenge. By bringing together our conservation science expertise, engagement in climate policy and partnerships with companies, government agencies and clean energy advocates, we have the potential to offer solutions that protect nature and mitigate the impacts of climate change.

We believe our best opportunities to advance a clean and green renewable energy buildout are through the following approaches:

- **Plan renewables right:** Governments and utilities make long-term plans to guide how they will meet energy demand and climate goals. The Midwest Division can build on our existing California [Power of Place](#) work and the forthcoming National Power of Place analysis while expanding the scenario analysis in ways that support collaboration with partners in agriculture and other sectors of importance to the states in the Midwest Division.
- **Site renewables right:** We can bring our science and policy expertise to the development of siting tools, guidelines and policies that incentivize renewable energy development in areas that are low-impact for nature. This approach can build on our existing [Site Wind Right](#) initiative and our ongoing collaboration with the Association of Fish and Wildlife Agencies and their regional and state counterparts to respond to the particular needs and opportunities of states in the Midwest.
- **Buy renewables right:** State policy largely dictates where energy is sited and can therefore be designed to incentivize and accelerate low-impact renewable energy generation and transmission. TNC can build on our existing procurement and energy zoning policy successes in states as varied as California, Maine and Massachusetts to advance policy solutions tailored to the needs of the Midwest.

By planning, siting, and buying renewables right, TNC can advance climate and nature goals.

<sup>3</sup> Princeton University. December 2020. "Net-Zero America: Potential Pathways, Infrastructure and Impacts."