



Power and Rail Networks Working Together: The Macro Grid Initiative and the Rail Electrification Council Join Forces

The U.S. electrified the contiguous states in the 20th Century, stringing lines across the country. Decades later, electrification means something different: powering sectors of the economy, including transportation, with electricity as part of a national project to reduce carbon emissions.

Electrifying the country's rail system represents one of the more revolutionary components of this wholesale transformation of the U.S. energy system.

But in addition to electrifying the trains themselves, the nation's rail system can play a significant role in enabling the transmission network that will be needed to meet increased demand. Forward-thinking transmission developers are thinking about how the existing rights-of-way along rail lines can be "repurposed" to expand high-voltage transmission.

The vast majority of the nation's rich wind and solar resources are located in fifteen states between the Rocky Mountains and the Mississippi River; the existing transmission network, however, was built to move power from large hydropower dams and power plants population

centers. To access wind and solar resources, we need new large-scale transmission to move that new power to where it's needed.



According to research issued in the last year by Princeton University, MIT, and the National Academies of Science, Engineering, and Medicine, to meet the clean energy goals at the heart of "decarbonizing" the grid, we will need to, at a minimum, *double our existing high-voltage transmission capacity.*

The scope of this challenge cannot be overstated. Access to existing rights-of-way will be key to overcoming the obstacles that make siting large-scale transmission difficult. The Biden Administration acknowledged this reality when a Factsheet on the American Jobs Plan highlighted the use of existing rail rights-of-way.

The [Macro Grid Initiative](#) is seeking to build support for expanding and upgrading transmission. NEMA and the Rail Electrification Council are extremely valuable partners in this effort. As the country moves forward to meet ambitious goals, we will be looking to our partners to help educate policymakers – and also to lay the foundation for turning the concept of electrification into a modern reality.

The Macro Grid Initiative is a partnership between American Council for Renewable Energy and Americans for a Clean Energy Grid.