

# Building a Green Power Superhighway

## What is a green power superhighway?

“Green power superhighway” is a term used to describe the power lines that would be carrying electricity from remote to populated areas. A national green power superhighway would allow plentiful domestic sources of renewable energy to be put to use powering homes and even vehicles, reducing carbon dioxide emissions as well as energy prices. It would cultivate economic development and create jobs in regions where they are most needed.



**FOR MORE INFORMATION, PLEASE CONTACT:**

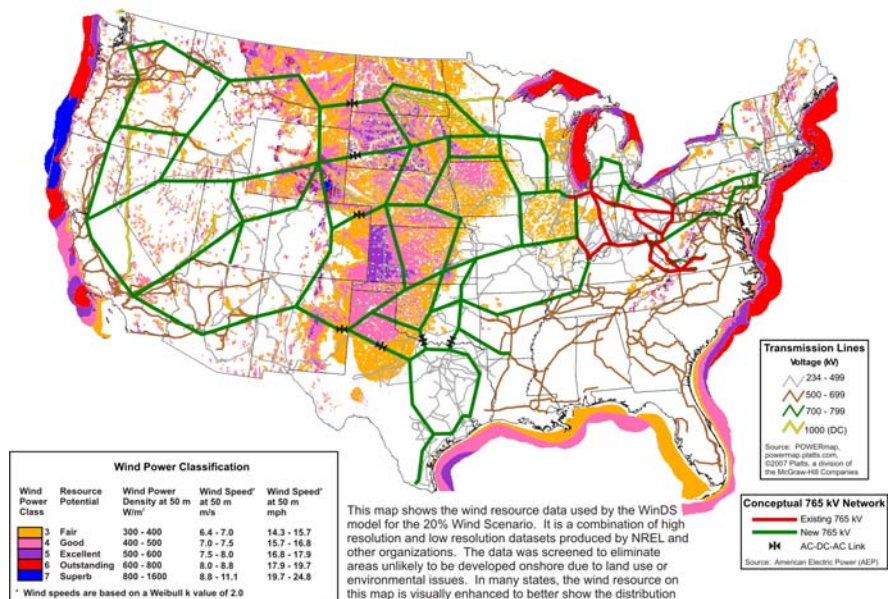
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## What could a green power superhighway look like?

### Conceptual Transmission Expansion Plan to Accommodate 400 Gigawatts (GW) of Wind Power



Source: American Electric Power

## Why do we need to build a new infrastructure?

The U.S. Department of Energy has identified transmission limitations as the largest obstacle to realizing the economic, environmental, and energy security benefits of obtaining 20% of the nation’s electricity from wind power.

Currently, almost 300,000 megawatts (MW) of proposed wind projects, more than enough to meet 20% of the country’s electricity needs, are waiting in line to connect to the grid because there is not enough transmission capacity to carry the electricity they would produce.

Outdated policies – not technical or economic barriers – are the chief factors holding up the construction of green power superhighways.

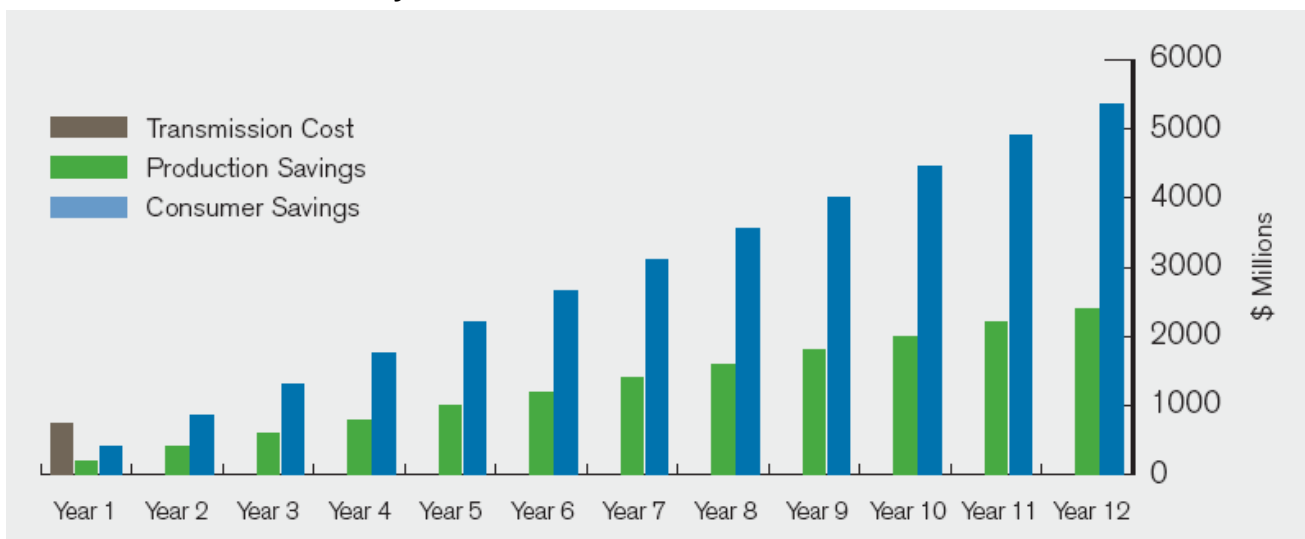


## What are the costs and benefits of building green power superhighways?

Studies have found that the costs of transmission investments needed to integrate wind power and other renewables are significantly outweighed by the consumer savings that those investments produce, and that the new power lines would pay for themselves within three to seven years.

Benefits to consumers include providing consumers with access to lower-cost electricity, protecting consumers against volatility in the price of fuels, increasing competition in wholesale power markets, and eliminating costly blackouts.

### Results of Texas Study Show That Benefits of Transmission Exceed Wind Costs



Source: Electric Reliability Council of Texas

## What action is needed?

**Planning:** Congress should give the Federal Energy Regulatory Commission (FERC) authority to oversee the creation of an interconnection-wide plan that includes both extra-high-voltage transmission lines and the lower-voltage feeder lines that are necessary to facilitate the development of green power superhighways.

**Paying:** Congress should direct FERC to allocate, on an interconnection-wide basis, the costs of these transmission lines across all entities that provide retail electricity. These costs should be allocated based on an entity's electricity usage.

**Permitting:** Substantial reform of the transmission siting process is required. The most effective model for siting is the full siting authority that is given to FERC over interstate natural gas pipelines. For green power superhighways, the extra-high-voltage facilities defined in the regional plans should be subject to FERC approval and permitting.