

100% Clean Electricity by 2035 Study

An NREL study shows there are *multiple pathways* to **100% clean electricity by 2035** that would produce significant benefits exceeding the additional power system costs.

Key Findings:

- **Technology deployment must rapidly scale up**
 - 4x the current annual deployment levels for wind and solar
 - Growth of emerging clean energy and storage technologies.
- **Total transmission capacity must grow significantly**
 - Up to 3x today's capacity, or between 1,400 and 10,100 miles of new high-capacity lines per year starting in 2026.
- **The climate and health benefits of decarbonization *offset the costs, saving:***
 - 130,000 lives and \$390–\$400 billion in avoided mortality costs
 - \$1.2 trillion in avoided damages from climate change
 - \$920 billion to \$1.2 trillion in overall net benefits to society.



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nrel.gov/analysis/100-percent-clean-electricity-by-2035-study.html