

Electric Companies Are Committed to a Clean Energy Future: 10 Things You Should Know (2020 Update)

In 10 years, the electricity generation mix has changed dramatically-nearly 40 percent of all electricity nationwide now comes from carbon-free sources like nuclear, hydropower, wind, and solar.

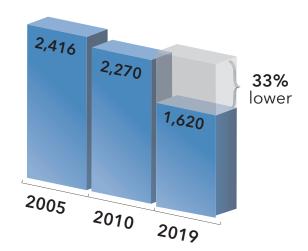
Solar Other Solar Wind Other <1% 3% 2% 3% 4% 7% 7% 210 Nind 7% Coal Hydro 23% Coal Nuclear 44% 20% Nuclear 20% Natural Gas Natural Gas 38% 23%

2009

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Carbon dioxide (CO₂) emissions from electricity generation have been declining for the last decade and were 33 percent below 2005 levels at the end of 2019.

2019



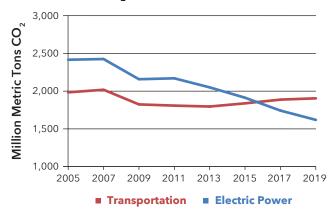
Electricity Delivered by Source

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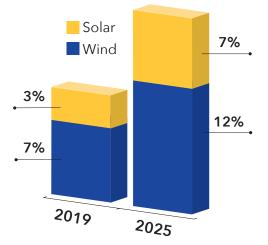
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CO₂ emissions for the electric power sector are now 15 percent below transportation sector emissions.

U.S. CO, Emissions by Sector



In 2019, wind and solar (all types) generated about 10 percent of all electricity used in the United States and are expected to account for about 19 percent of all electricity used in the United States in 2025.

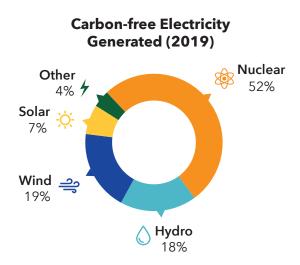


Solar energy is growing rapidly in the United States. Solar capacity was 66 gigawatts (GW) through the end of 2019 and is expected to more than double in 2025.

Electric Power CO, Emissions (MMT)

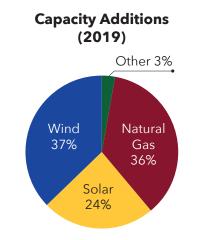
Today, nuclear accounts for 52 percent of the carbon-free electricity generated in the United States.

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- 7 Corporations increasingly want renewable energy to power their offices and operations. Between 2015 and 2019, corporate customers contracted for about 23 GW of renewable energy. This is expected to increase.
- 8 Electric companies provide virtually all of the wind and about 67 percent of the solar energy in the country.

Investments in wind and solar energy accounted for 61 percent of all electricity capacity additions in the United States in 2019.





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Clean energy integration requires smarter energy infrastructure. Electric companies invest more than \$100 billion annually to make the energy grid smarter, stronger, cleaner, more dynamic, and more secure.

Sources:

- U.S. Energy Information Administration: Electric Power Monthly (March 2020); Monthly Energy Review (March 2020); Annual Energy Outlook 2020
- Wood Mackenzie/SEIA: U.S. Solar Market Insight 2019 Year in Review (March 2020). Note: capacity values in this report have been converted to AC.
- ABB: Velocity Suite
- Renewable Energy Buyers Alliance
- Edison Electric Institute

About the Institute for Electric Innovation

The Edison Foundation Institute for Electric Innovation focuses on advancing the adoption and application of new technologies that will strengthen and transform the energy grid. IEI's members are the investor-owned electric companies that represent about 70 percent of the U.S. electric power industry. The membership is committed to an affordable, reliable, secure, and clean energy future.

IEI promotes the sharing of information, ideas, and experiences among regulators, policy makers, technology companies, thought leaders, and the electric power industry. IEI also identifies policies that support the business case for the adoption of cost-effective technologies.

IEI is governed by a Management Committee of electric industry Chief Executive Officers. In addition, IEI has a select group of technology companies on its Technology Partner Roundtable.



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