

A 100% Clean Electricity Future and its Impacts on Utilities

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Electricity Industry Moving Forward

- Across the country, the electric utility sector, including public power, continues to make great strides in reducing CO2 emissions
 - Trending toward more renewables and gas; likely no new coal and fewer large nukes
- EIA notes power sector CO2 emissions have declined 28% since 2005
- EIA has calculated that CO2 emissions from the sector totaled 1,744 million metric tons in 2017 – lowest level since 1987
- Public Power: 33% reduction in CO2 from 2005

Issues to Consider as We Move to a Cleaner Energy Future

- Balance between clean energy goals and rate impacts, especially in an era of low gas prices
- Clean energy goals must include nuclear and hydro – goals that exclude these technologies are not realistic
- Some areas of the country may need a longer glide path to a cleaner energy future

Reality Check

“The idea [that] we're going to have by 2050 ... a 100 percent renewable system is not realistic ... It doesn't violate the laws of physics to do it. But that doesn't mean it is politically or economically implementable, and I think that is the issue.”

--former Energy Secretary Ernie Moniz

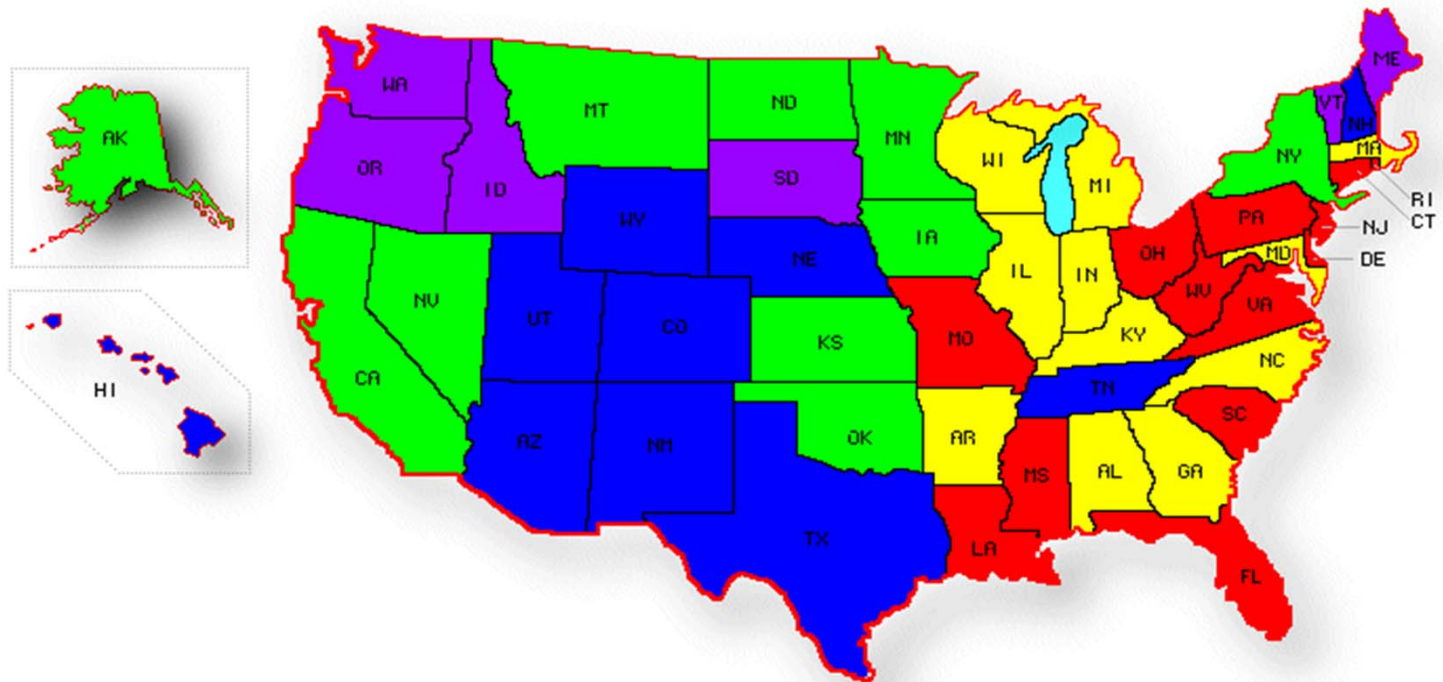
State Energy Standards

- Fundamental question: what does the standard allow?
- Non-Hydro renewables only?
- All renewables, including hydro?
- All non-emitting forms of generation?

Renewables Plus Hydro

Share of Renewable Generation by State - Includes Hydro

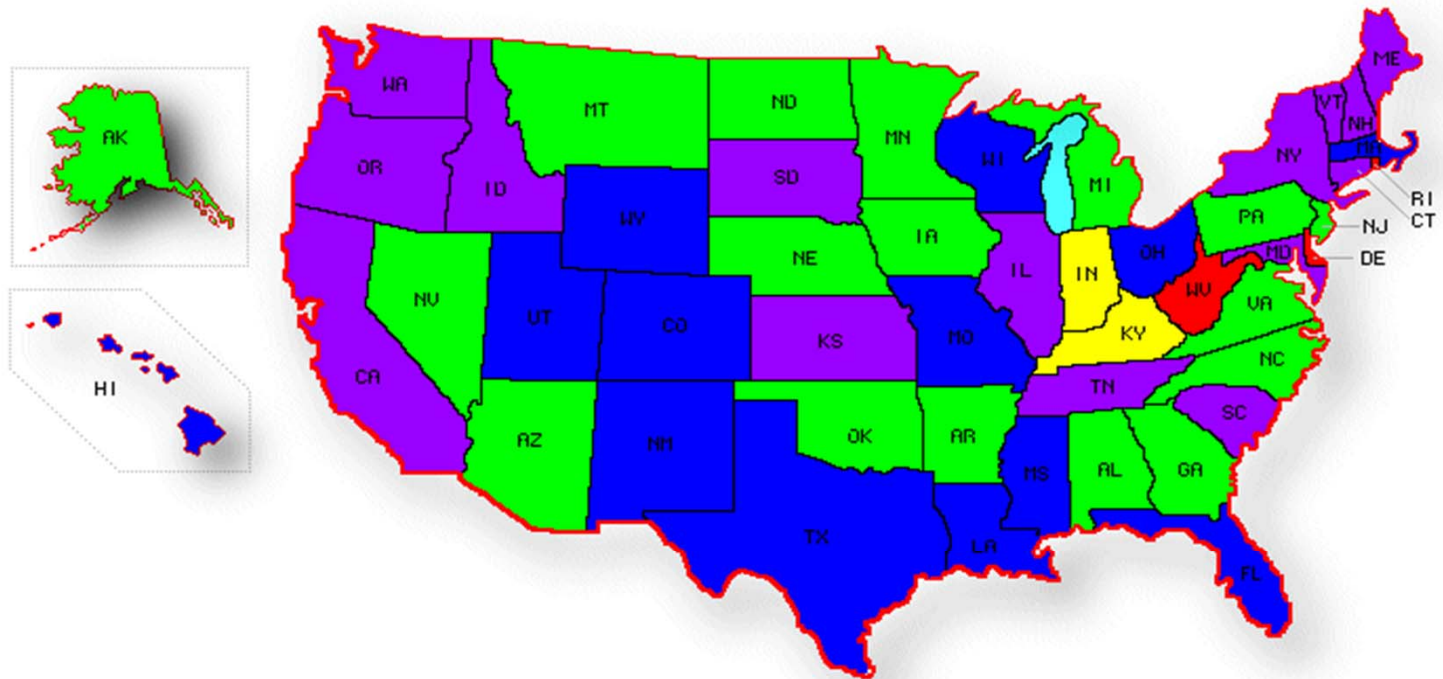
- - <5%
- - 5-10%
- - 10-25%
- - 25-50%
- - >50%



Renewables + Hydro + Nuclear

Share of No-Emitting Generation by State

- - <5%
- - 5-10%
- - 10-25%
- - 25-50%
- - >50%



Questions?

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