

An NEI survey of **19 utility members** showed significant demand for new nuclear reactors to reach decarbonization commitments in the next few decades.

The demonstrated demand translates to...

- More than **300 new SMRs** deployed in the U.S. over the next 25 years.
- More than **90 GW** of new nuclear generation by the **2050s**.
- **90%** of the current fleet expected to extend operating life to **80 years**.
- Many utilities evaluating sites that currently host operating or retired coal plants.

The electricity generated by these small modular reactors (SMRs), which would be around **731.3 TWh**, is more than the total 2020 generation in any one country except for China, U.S, India, Russia, and Japan. This is more power than Saudi Arabia and Mexico's electricity generation combined.

Nuclear generates **more electricity with less land** than other renewable energy sources.

To generate the same amount of carbon-free power as **300 SMRs**, wind would require over **13 million acres**, and solar would require over **2.3 million acres**.

Nationally **the demand is anticipated to be much greater**. The 19 NEI member utilities surveyed represent less than half of the total electricity generation in the U.S. Additionally, the survey only included utilities that already have nuclear energy in their portfolios, while there are utilities with only non-nuclear generation that have announced plans to build new nuclear.

Utilities are looking at their energy generation mix, trying to figure out what works to reach their decarbonization goals. This survey shows they are very clearly recognizing reliable, affordable, **24/7/365** nuclear as a critical part of the equation to creating a clean energy future alongside intermittent sources such as wind and solar.

The emissions avoided by the carbon-free power output of 300 SMRs is equivalent to:



Taking 100 million cars off the road, which is **97%** of all passenger vehicles on the road each year in the U.S.



Planting over **100 million trees** each year.

The **731.3 TWh** generated by 300 SMRs is equivalent to:



Powering **68 million homes**, or about half of the homes in the U.S.



Powering over **176 million electric vehicles** each year, with a total of over 2 trillion vehicle miles traveled (VMT).



Powering over **367 billion smartphones** for a year, which is 1,200 times the number of smartphones in the U.S. and the equivalent to **47 phones for every person in the world**.



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