

Noah and I affirm, Resolved: The United States should increase its use of nuclear energy for commercial energy production.

Our Sole Contention is Climate Change

[Zhang of The Pacific Standard in 2019](#) writes that 100 percent renewable energy is still a few decades away, and we have an increasingly limited timeline to radically change our energy supply to stop climate change.

Fortunately, increasing U.S. nuclear energy production prevents climate disaster in two ways.

First, halting domestic emissions

[Sen of Common Dreams in 2020](#) finds that 90% of the U.S. supports transitioning off fossil fuels.

[Piggot of The Stockholm Environment Institute in 2019](#) continues that while renewable energy use is growing, fossil fuels still make up around three-quarters of the total US energy mix. Transitioning away from these fuels will therefore entail a major shift in US energy investment.

The way to do so is through nuclear energy as [Calma of The Verge in 2020](#) writes that the U.S. government is looking to pour investment to revitalize nuclear energy.

There are two reasons why nuclear power is uniquely suited for decarbonization.

A) Reliability

[Poneman of Scientific American in 2019](#) explains that nuclear plants are the most reliable assets in our power generation mix, operating 93 percent of the time.

This is critical as [Shellenberger in 2018](#) continues that implementing solar and wind now would increase oil or gas-burning in order to maintain electric reliability when the sun stops shining and the wind stops blowing, potentially locking in fossil fuels for decades.

B) It's scalable

[Holthaus of Grist in 2018](#) reports that nuclear is the most rapidly scalable form of carbon-free power invented.

[Goldstein of The New York Times in 2019](#) furthers, because it is so concentrated, France was able to switch its grid from fossil fuels to nuclear power in just 15 years.

Thus [Budinger in 2019](#) concludes that nuclear power is the only technology that can provide all the new electric power as fast as we need it and thus nuclear power in combination with wind and solar must play a serious role in climate change.

Second, global leadership

[Ichor of The Atlantic Council in 2019](#) writes that the United States must mount a determined national mission to regain US leadership in the nuclear market by developing, demonstrating, and deploying a new generation of reactors.

Fortunately, [The Nuclear Energy Institute](#) reports that the U.S. is preparing to do just that as more than 45 companies have advanced nuclear technology projects underway, the most popular being small modular reactors, expected to deploy in the 2020s. Which are simple, scalable providers of safe, clean power that can be deployed in a variety of locations, including remote areas.

[Gordon of The Atlantic Council in 2020](#) continues that advanced nuclear technologies, like small modular reactors, are especially appealing in emerging markets where the need for reliable zero-carbon energy is pronounced, but current grid structures cannot support large light-water reactors. Growing demand in traditional and emerging markets for advanced reactors represents an opportunity for the United States to export new nuclear technologies.

We need to act now because [Varseev of The Bulletin in 2019](#) writes that since the economies of emerging countries are projected to increase the global energy demand by 80 percent, they plan to provide energy with 1600 new coal-burning power plants by 2040.

Fortunately, we are on the horizon as [Maitra of the Executive Intelligence Review in 2020](#) corroborates that in the United States, the leading SMR developer, NuScale, announced that it had signed a Memorandum of Understanding to explore applications for NuScale's SMR as a long-term energy solution in the Czech Republic.

[Hargraves of Business Insider in 2017](#) continues that with a vibrant domestic nuclear industry, the US can rise internationally and become a sought-after supplier, enabling the US to offer the environmental benefits of nuclear power.

The impact is stopping climate catastrophe

The [Nuclear Energy Institute](#) reports that every year, nuclear-generated electricity saves our atmosphere from more than 528 million metric tons of CO2 emissions that would otherwise come from fossil fuels.

And [Kim of The Korea Energy Economics Institute in 2017](#) corroborates that every 1% increase in nuclear power leads to a 0.32% decrease in emissions.

Preventing increased warming from emissions is crucial as [Aton of The Scientific American in 2017](#) quantifies that each degree Celsius of warming will decrease world food yields by 7.4 percent.

This is deadly as [Carrington of The Guardian](#) impacts that this decrease in food yields can kill more than 500,000 people a year globally.

Thus we affirm