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Climate scientists say it is time to go 'nuclear'; letter stirs debate in Utah

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A letter penned by four climate scientists urges the environmental community to embrace nuclear power as a way to reduce global warming and climate change. The missive stirs up debate in Utah, where a nuclear power plant is planned. (Shutterstock)

SALT LAKE CITY — Four world-renowned climate scientists have penned a letter to the environmental community, urging its support for developing a new generation of nuclear power as a way to address climate change.

"With the planet warming and carbon dioxide emissions rising faster than ever, we cannot afford to turn away from any technology that has the potential to displace a large fraction of our carbon emissions," they wrote. "Much has changed since the 1970s.

The time has come for a fresh approach to nuclear power in the 21st century."

The letter distributed over the weekend was signed by Ken Caldeira, senior scientist with the Department of Global Ecology at the Carnegie Institution; Kerry Emanuel, atmospheric scientist at Massachusetts Institute of Technology; Tom Wigley, climate scientist, University of Adelaide in Australia and the National Center for Atmospheric Research; and James Hansen, climate scientist at Columbia University Earth Institute.

Hansen is a controversial figure who left NASA to embrace a full-time climate activist role. In 1988, he testified before Congress on the effects of man-caused emissions and their role in a warming climate, raising the climate alarm that has since been echoed by a growing scientific community.

"Quantitative analyses show that the risks associated with the expanded use of nuclear energy are orders of magnitude smaller than the risks

associated with fossil fuels," the scientists wrote. "No energy system is without downsides. We only ask that energy system decisions be based on facts, and not on emotions and biases that do not apply to 21st century nuclear technology."



Dr. James Hansen Climate Scientist, Columbia University Earth Institute. (NASA)

In Utah, the letter brought a shrug from the anti-nuclear activist organization, HEAL Utah, which has been fighting to derail a proposed twin-reactor nuclear power plant outside of Emery County's Green River.



Professor Kerry Emanuel, MIT
(Donna Coveney, MIT)

"It is not an unfamiliar perspective," said Matt Panceza, the group's policy director. "This general notion has been kicking around for a bit."

Panceza mentioned the film, [Pandora's Promise](#), that debuted at the Sundance Film Festival and will air on CNN Thursday at 7 p.m. Directed by Robert Stone, the production showcases environmental activists once opposed to nuclear power who now favor it. The trailer challenges the audience with this question: "Can you be an environmentalist and be pro-nuclear? In light of climate change, can you be an environmentalist and *not* be pro-nuclear?"

Panceza said the scientists are giving too much credit to the environmental community.

"It strikes me as a little silly," he said. "We are not the audience. They should be writing letters to the utility executives and the president of the United States. I am surprised that we are supposed to be the magic bullet that keeps nuclear power from moving forward."

Panceza said the real issue boils down to money.

"It's not doing well because it costs too much."

The scientists' letter, however, said nuclear power needs to be encouraged based on its societal benefits, and renewables such as wind and solar cannot "scale up" fast enough to deliver the power a global economy requires.

"We appreciate your organization's concern about global warming and your advocacy of renewable energy," the letter said. "But continued opposition to nuclear power threatens humanity's ability to avoid dangerous climate change."

Aaron Tilton, president and chief executive officer of Blue Castle Holdings — the company behind the development of the Utah's nuclear power plant — said he agrees with the letter but for different reasons.



Dr. Ken Caldeira, senior scientist, department of Global Ecology, Carnegie Institution (Stanford University)

"We are concerned about the environment and as a developer and company that is trying to put together a resource for the state to use," he said.

Tilton pointed to the difficulties already confronting coal-fired power plants operating under an increasingly stringent regulatory framework that will only become more constrained in the future.



"It is virtually impossible at this point to get a permit for coal-fired emissions, so we don't see alternatives for a base load resource for power," he said. "They (the scientists) may have different reasons, but the goal is the same and the answer is the same: that nuclear power represents one scenario."

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