## San Jose Mercury News

## Top climate scientists call for fracking ban in letter to Gov. Jerry Brown

By Paul Rogers

January 01, 2014

Twenty of the nation's top climate scientists have sent a letter to Gov. Jerry Brown, telling him that his plans supporting increased use of the controversial practice of hydraulic fracturing, or "fracking," will increase pollution and run counter to his efforts to cut California's global warming emissions.

The letter is the latest example of the increased pressure that environmentalists and others concerned about climate change have been putting on Brown in recent months. Their argument: The governor can't say he wants to reduce global warming while expanding fossil fuel development in California.

Large hoses go from one hydraulic fracturing drill site to another as horses graze in the field Sept. 24, 2013, in Midland, Texas. (AP Photo/Pat Sullivan)



Large hoses go from one hydraulic fracturing drill site to another as horses graze in the field Sept. 24, 2013, in Midland, Texas. (AP Photo/Pat Sullivan) ( Pat Sullivan

"If what we're trying to do is stop using the sky as a waste dump for our carbon pollution, and if we're trying to transform our energy system, the way to do that is not by expanding our fossil fuel infrastructure," said Ken Caldeira, an atmospheric scientist at the Carnegie Institution for Science at Stanford University.

Caldeira signed the letter along with other prominent climate scientists, including James Hansen, the former head of NASA's Goddard Institute for Space Studies; Richard Houghton, acting president of Woods Hole Research Center in Massachusetts; and physicist Michael Mann, a professor of meteorology at Penn State University.

The letter called for Brown to place a moratorium on fracking, as New York Gov. Andrew Cuomo has done.

"Shale gas and tight oil development is likely to worsen climate disruption, which would harm California's efforts to be a leader in reducing greenhouse gas emissions," it notes.

Last month, in response to a question from this newspaper, Brown said: "As you know, I signed legislation that will create the most comprehensive environmental analysis of fracking to date. It will take a year, year and a half, maybe a little longer. And I hope that all the people, critics and supporters alike, will participate and offer their best thoughts."

On Tuesday, the Brown Administration responded to the scientists' letter in a statement:

"As the scientists note, California has among the strongest set of policies to combat climate change in the nation. These efforts are driven by sound science and so too will the new hydraulic fracturing regulations. ... We look forward to continuing to work with the scientific community."

The oil industry criticized the scientists' letter.

"The authors of this letter, while clearly very respected in their fields, do not present an accurate or realistic picture of our energy needs and our energy future," said Tupper Hull, a spokesman for the Western States Petroleum Association in Sacramento.

"California is going to need petroleumbased energy for a long time, even as it transitions to a lower carbon future."

Brown has generally won high marks from environmental groups over his 40-year political career. He signed legislation requiring California utilities to generate 33 percent of their electricity from solar, wind and other renewable resources by 2020, for example. Last month, he appeared at an event in San Francisco to announce a pact with the governors of Washington state, Oregon and the premier of British Columbia to reduce greenhouse gas emissions.

But he has come under increasing criticism -- and public protests -- this fall from opponents of fracking, the practice in which oil and gas companies inject water, sand and chemicals into the ground to fracture underground rock formations and release huge amounts of fossil fuels.

In September, Brown signed SB4, a bill by state Sen. Fran Pavley, D-Agoura Hills, that requires companies that conduct fracking operations in California to notify all nearby property owners, obtain a permit from the state, conduct groundwater testing and disclose the chemicals they are using. The law takes effect in 2015. Opponents say that water pollution and increased air and climate emissions from fracking require a moratorium, particularly in the Monterey Shale, an area that stretches from Bakersfield to Monterey and holds billions of dollars of shale oil that could be recovered from increased fracking.