

Scientist: Carbon fee will alter fossil fuel use

By Kathryn Reed

STATELINE – Government won't solve climate change. And people won't do anything to change the course of events without a monetary incentive. It is a global crisis. And the solution needs to be implemented worldwide.

Those are the thoughts and concerns of James Hansen, former director of the NASA Goddard Institute for Space Studies and adjunct professor at Columbia University's Earth Institute.

He gave the keynote address Jan. 8 during the 17th annual Operation Sierra Storm at Harveys. Once a year meteorologists from around the country gather at Lake Tahoe to talk science, trends and news.

"The bottom line is science tells us we have to phase out fossil fuel emissions and leave what's remaining in the ground," Hansen said. "There is a tremendous amount of fossil fuel in the ground. We can't afford to put it into the air without guaranteeing our children inherit a situation that is out of their control."

He is dead-set against fracking.

Hansen has been working to stem the effects of climate change since the 1980s. In 2006, *Time* magazine called him one of the 100 most influential people on Earth.



James Hansen talks about climate change Jan. 8 in Stateline. Photo/Denise Haerr

Not one to mince words, Hansen told Gov. Jerry Brown in person that California's cap and trade policy is nothing more than a tax that will do little to resolve the larger issue.

With word coming out this week that 2014 was the hottest year on record in the world, Hansen said 2015 is headed to be another record breaker. The U.S., by contrast, was one of the coolest places on Earth. But the United States only represents $1\frac{1}{2}$ percent of the planet's surface.

"If you add CO₂ to the atmosphere, it's like putting a blanket on the planet," Hansen explained.

Instead of the heat radiating to space, most of the energy goes into the ocean. This then creates an energy imbalance on Earth. The energy into the ocean each year is the equivalent of the energy from 400,000 Hiroshima bombs a day. That energy contributes to the warming ocean, the loss of Arctic ice and the rising seashore water that threatens cities.

Climate change is affecting plant and animal species – some of which are threatened with extinction – like the Eastern monarch butterfly. Some of the stressors on flora and fauna are also the result of herbicides. Agricultural practices – including how the soil is tilled – could be changed to help

reduce carbons released into the air.

Getting China onboard to get away from coal will help, Hansen said, as he talked about that major polluter building nuclear plants.

“The only way to solve the problem is to put an across the board fee on carbon. The only way it will work is if the money goes to the public. That would stimulate people to avoid carbon emissions,” Hansen said.

He predicts 70 percent of people would get a dividend back, while 30 percent would have more out of pocket costs with a carbon fee. Hansen said this is a “golden opportunity” with the oil prices so low to implement such a fee.

“If we start adding a carbon fee, it will depress the use of fossil fuels,” Hansen said. “It would rapidly decrease the addiction to fossil fuels.”