

Oil and gas industry surges past cows as top U.S. methane emitter -- EPA

Gayathri Vaidyanathan, Environment & Energy Publishing, 4-17-15

In 2012, cows overtook the oil and gas industry as the largest methane emitters. Now, bovine emissions have fallen back to second place.

In 2013, emissions of methane, a potent greenhouse gas and the primary component of natural gas, from the oil and gas sector rose to the top spot. That's despite fewer wells being drilled that year, according to U.S. EPA's greenhouse gas inventory released yesterday.

The inventory shows that natural gas systems (which include thousands of wells, processing facilities, and transmission and distribution lines) contributed 157.4 million metric tons of carbon dioxide equivalent (CO₂e) of methane in 2013. That is 2 percent higher than the previous year.

Petroleum systems (which include onshore and offshore crude oil production, transportation, and refining) contributed 25 million metric tons CO₂e of methane. That is 8 percent higher than the previous year.

Together, the gas and oil sector contributed 29 percent of the United States' overall methane emissions.

The cattle industry contributed 26 percent of the nation's methane.

The lost methane from the energy industry is "enough to meet the needs of 5 million households, and packs the same climate punch over the first 20 years as the CO₂ emissions from more than 160 coal-fired power plants," Mark Brownstein, associate vice president at the Environmental Defense Fund (EDF), wrote in a blog post.

Fracking emissions fall with regulation

Total greenhouse gas emissions in the United States increased by 2 percent as people used up more heating during an especially cold winter, according to the inventory. In addition, power plants burned more coal, which is more polluting than natural gas, in 2013. Industrial production increased, and Americans drove more than they did in 2012.

Overall, the nation emitted 6,673 million metric tons CO₂e of greenhouse gases, with CO₂ being the primary carbon pollutant (82 percent).

Fossil fuel combustion was responsible for 77 percent of the nation's CO₂ emissions. Burning of fossil fuels in power plants (2,040 million metric tons) and cars (1,718 million metric tons) released most of the CO₂.

Methane was the second most dominant carbon pollutant in the United States, and the oil and gas sector was a major contributor.

Regulations have helped reduce some leaks. In 2012, EPA required natural-gas-producing companies to control leaks from hydraulically fractured gas wells, which reduced emissions during fracking by 9.5 percent, according to the inventory.

Emissions from other processes, particularly from distribution and storage of natural gas, increased in 2013.

Industry downplays data

EPA regulations do not apply to oil production, and operators at times vent methane to the atmosphere from various devices. The venting accounted for 79 percent of emissions from the petroleum production sector. High bleed pneumatic controllers, gas engines, wellheads and other equipment were particularly leaky.

Brownstein of EDF wrote that industry lobbyists would spin the inventory's findings and assure Americans that emissions are under control and regulations are not needed.

As if on cue, the American Petroleum Institute, the major industry body, said that "U.S. producers continue to make dramatic improvements."

To show this, API compared 2013 emissions with a 2005 base line rather than 2012.

"These voluntary efforts will continue, as operators work to capture more gas and deliver it to consumers. Another layer of burdensome regulations will only interfere with that progress," Howard Feldman, API senior director of regulatory and scientific affairs, said in a statement.

The Obama administration will release draft regulations for the oil and gas industry's leakage problem this summer (*ClimateWire*, Jan. 14).