## EESI Policy Associate Laura Small provided testimony at a September 23, 2015, Environmental Protection Agency (EPA) hearing in Dallas, Texas, on the EPA's proposed air rules for new and modified sources of methane in oil and gas operations.

Good morning, and thank you for holding these public hearings to discuss the EPA's proposed air rules for new and modified sources in the oil and natural gas industry. My name is Laura Small; I'm a Policy Associate at the Environmental and Energy Study Institute, a nonprofit that works to promote sustainable solutions to climate change.

To begin, I would like to commend the EPA for their work to reduce methane and volatile organic compound, or VOC, emissions, which will protect human health and reduce harmful climate change. VOCs are a group of chemicals which individually can have adverse health effects, including liver and central nervous system damage, cancer, headaches, and nausea. When released broadly into the air, VOCs react to help form ground-level ozone, or smog, which is linked to asthma and premature death. EPA's action to limit VOC emissions from new and modified oil and gas industry sources will help limit these harmful health effects in the future.

Methane, which will be the focus of my comments today, has serious ramifications for the world's climate. Methane is a powerful climate warming pollutant – at least 84 times more powerful than carbon dioxide over the first 20 years of its presence in the atmosphere. Because of its potency, reducing methane emissions can reduce the rate of warming substantially in the near term. EPA estimates that methane comprises nearly 10 percent of U.S. greenhouse gas emissions. However, some studies have concluded that we are significantly underestimating the quantity of methane emissions. A study published last month found emissions from facilities that collect natural gas from well sites, called gathering facilities, emit eight times as much methane as EPA estimated in its greenhouse gas inventory. These kinds of findings indicate the problem could be far greater than currently understood.

There are many sources of methane (including agriculture, landfills, and industrial processes...), but the oil and gas sector is one of the larger ones, representing nearly 30 percent of all methane emissions. It is also one of the easier sources to address. Moreover, EPA has noted that methane emissions from the oil and gas sector are projected to rise 25 percent in the next ten years, if limits are not imposed.

There are serious leakages of methane throughout the entire oil and gas production and pipeline distribution infrastructure. In many cases, investing in the equipment and practices necessary to reduce leakage can actually lead to cost savings. The administration estimates that achieving its methane goals "would save up to 180 billion cubic feet of natural gas in 2025, enough to heat more than 2 million homes for a year." Reducing leakages would also lead to safer operations and better public safety, as methane is particularly flammable and can cause explosions.

Although the methods needed to reduce methane leakages are well known and cost effective (in fact, plugging leaks usually boosts profits), many in the oil and gas industry are privileging investments in capacity instead. That is why government action is needed.

In the EPA's proposed rule, released August 18, it sets draft standards for methane emissions from new and modified production, processing, and transmission facilities in the oil and gas sector. This proposal will be key in fulfilling the White House's pledge from earlier this year to cut methane emissions from the sector 40 to 45 percent below 2012 levels by 2025. Overall, EPA estimates this proposed regulation would avoid the emissions of 340,000 to 400,000 short tons of methane by 2025, offering a net climate benefit of \$120 to \$150 million.

We applaud the EPA's work in its proposed regulation to cover not only emissions from production and processing of oil and gas, but also downstream emissions from transmission and storage, and to require owners and operators to find and fix leaks. EESI is also pleased to see that EPA expanded its new source rules to cover sources previously unregulated in its 2012 VOC air rules, such as fugitive emissions from well sites, compressor stations, and pneumatic pumps.

However, we hope EPA will improve the final rule by requiring owners and operators to frequently inspect their facilities, either on a monthly or quarterly schedule, with no step up or down provisions based on the number of leaks they find. We also would like to see the final rule expand its coverage to include some additional important leakage areas, such as compressors at well sites and storage vessels. Finally, the final rule should encourage oil and gas companies to either use or sell the gas it captures by sealing up leaks, as opposed to burning it off through flaring or in an incinerator.

The draft standards for existing sources of methane emissions, however, are voluntary. In separate regulations, DOI is working to restrict emissions from existing sources on public lands. However, it is our hope that EPA will act soon to regulate methane emissions from existing sources, as the Clean Air Act requires them to do once they have regulated new and modified sources.

On July 1, 2015, EPA received a letter from a coalition of investors representing \$1.5 trillion in assets, in support of the President's plan to cut emissions 45 percent below 2012 levels by 2025. The letter states, "As widely diversified, long-term investors with holdings in the oil and gas industry ... we are concerned that methane emissions pose a serious threat to climate stability." The investors add that methane regulation "reduces reputational and legal risks, and in many cases generates positive economic returns."

In conclusion, reducing methane emissions is critical to reigning in global warming, and represents an economic opportunity and a public health benefit. We hope to work with EPA to make sure these regulations are strong and reasonable.