Methane is a climate super-pollutant that traps over 80 times more heat in our atmosphere than carbon dioxide and is responsible for roughly 30% of the global warming we are experiencing today. The International Energy Agency (IEA) estimated that the global oil and gas sector released over 82 million metric tons of methane in 2022. This pollution issue is incredibly extensive and widespread within the oil and gas industry, and it is exacerbating the climate crisis.

Only recently, oil and gas companies have transitioned from denying their methane pollution to trying to support those claims, producers are increasingly rebrand themselves as part of the “solution.” To do so, they are turning to third-party gas certifiers - companies hired to measure pollution and verify lower-methane emissions. There is currently no regulation of gas certification. In fact, each certification company uses different criteria, technology, and methodology to certify a client’s gas. Once emissions are measured and determined to be below a certain threshold, their gas is considered "certified."

The gas certification market is expanding quickly. However, it is essential to acknowledge the current technology’s limitations in measuring emissions accurately. There is also a potential conflict of interest between certification companies seeking to increase their client base and oil and gas companies looking to change public perceptions of their role in accelerating the climate crisis. Add to that a lack of federal oversight or any agreed-upon industry standards, and you create a scenario where the very companies causing the methane pollution use certification as a smokescreen to hide the extent of the methane pollution they are producing while continuing to invest in new gas extraction and infrastructure.
Project Canary is a Colorado-based Public Benefit Corporation that was initially incorporated in August 2018 and is a leader in the gas certification market. As of early 2023, Project Canary’s website disclosed it was undertaking over 760 million monthly measurements from over 1,700 methane monitors. Earthworks surveyors went to Colorado, where new well sites are mandated to install monitors and transmit the data back to the state regulator. They identified sites with Project Canary monitors and used thermographic cameras (OGI) to detect emissions invisible to the naked eye. Where they found emissions, they checked official records, which are mandated by Colorado regulations, to see if the monitors detected and reported them. What they found was alarming.

Over a period of seven months in 2022 (May-November), Earthworks’ certified thermographers conducted a total of 77 surveys of 30 different oil and gas production sites in the Front Range where Project Canary and similar monitors were deployed. Earthworks recorded 22 pollution events from a wide variety of well site activities spanning production phases and found that zero of the 22 OGI documented pollution events were detected by monitors at surveyed sites. Furthermore, a review of 115 monthly monitoring reports found only one instance where monitors documented pollution that triggered agency notification and required operator actions as defined in their monitoring plan.

Most notably, there is a stark contrast between the Colorado Department of Public Health & Environment (CDPHE) documents, which only report 11 confirmed emissions events over roughly 177,120 hourly readings across all facilities that the CDPHE received, versus Earthworks’ report of 22 emissions events from just 77 site visits over a period of 7 months, all of which should have triggered notifications.

As the EU considers new rules to reduce energy sector methane emissions, this report makes clear the critical need to strengthen the measures to regulate methane associated with fossil fuel imports. The EU is among the largest fossil fuel importers in the world, and the EU Methane Regulation Proposal considers requiring fossil fuel imports into the EU, such as U.S. LNG, to meet emissions criteria. Ahead of the adoption of the European Parliament’s position on the text, MEPs need to take note. The full recommendations of this report should be adopted for U.S. Certified Gas to meet methane emissions standards. This should include an independently accredited transition pathway away from gas to support a just energy transition. Transparency and public availability of monitoring data are also critical to addressing methane reduction. Monitors should also be subject to independent, peer-reviewed analysis to ensure they work effectively. Robust regulation and government oversight is key.