The Reality of US Methane Emissions

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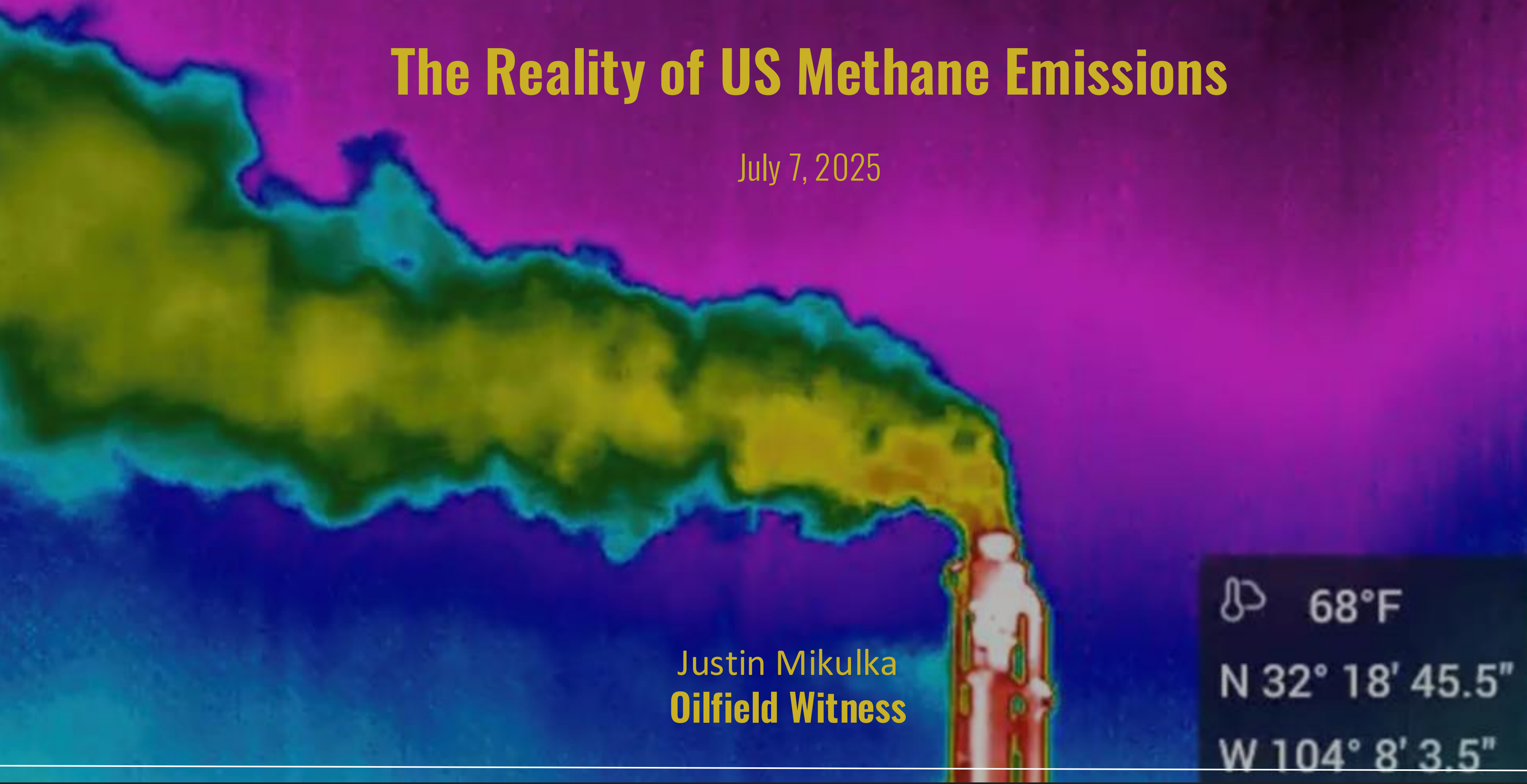
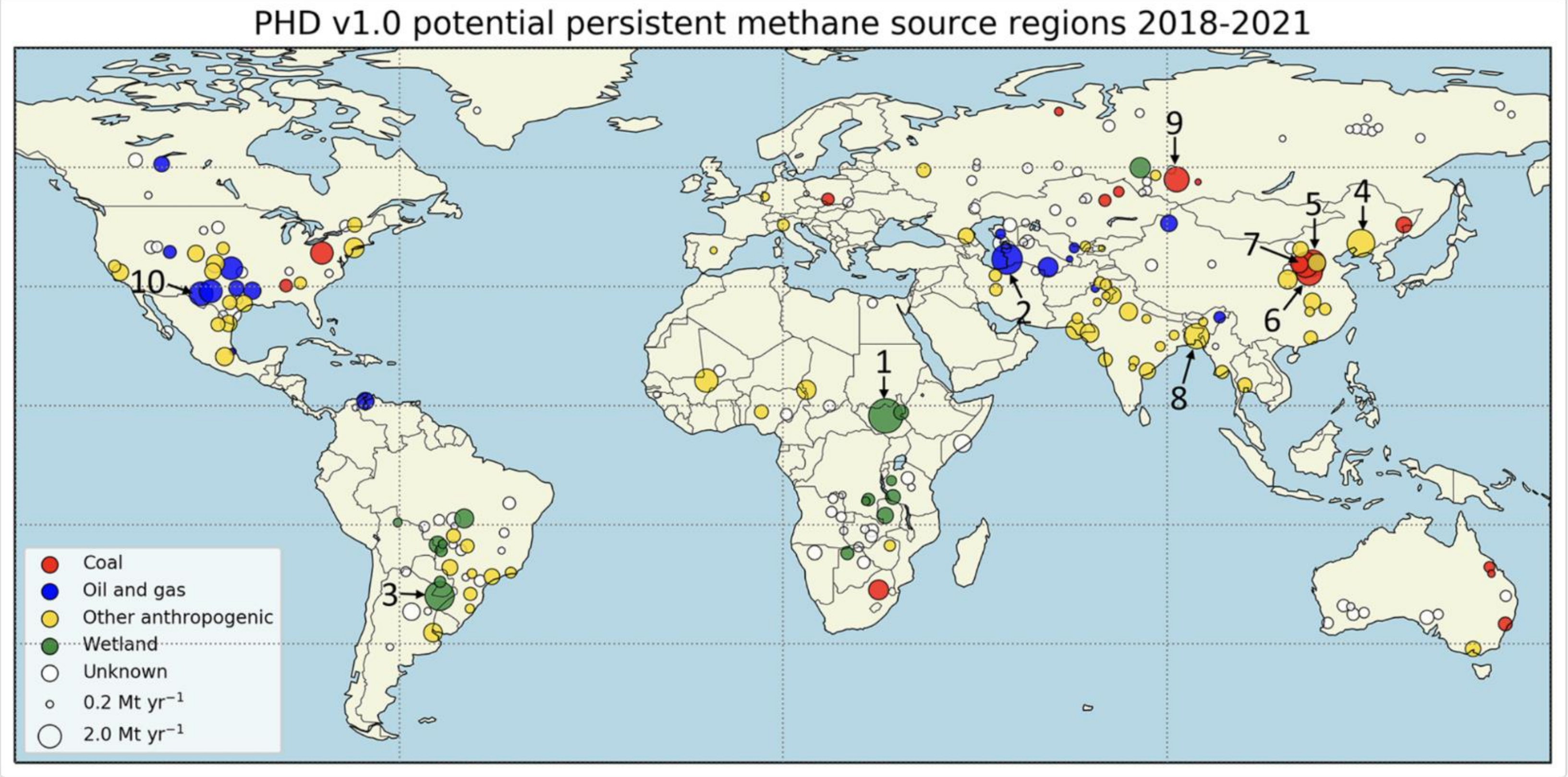


Industry has history of misleading the public

- New tools reveal that both oil and gas and coal industry estimates for methane emissions have been greatly underestimated.

- If the goal is to create real policies to limit methane emissions it is critical to not rely on industry promises.

Permian top methane-emitting O&G field in the world

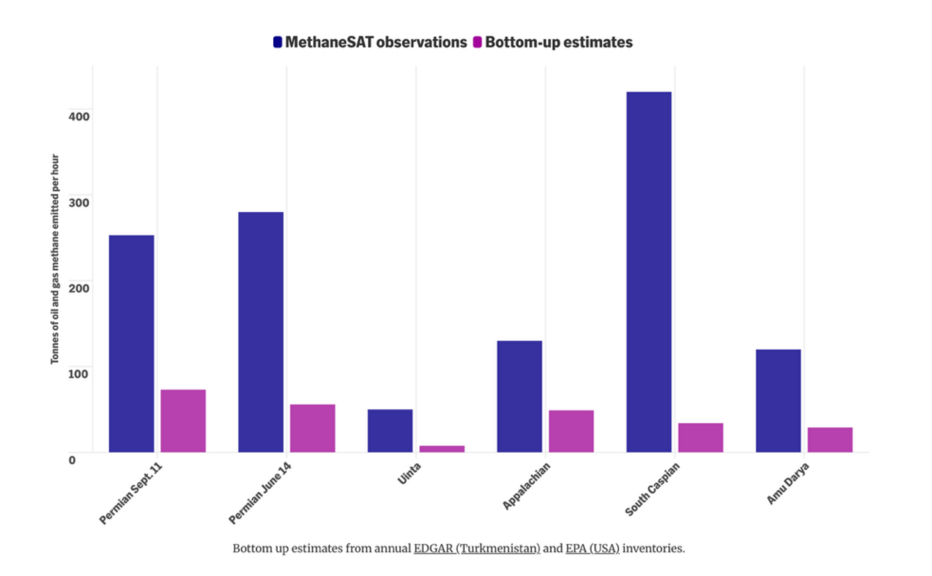


the Upper Silesia Coal Basin in Poland (Tu et al., 2022). Other PPSRs related to coal mining activities include the Kuznetsk Basin in

Figure 10 All PPSRs detected with the PHD algorithm grouped by the different dominant source types. The sizes of the circles scale with the emission estimates of the PPSRs for 2018–2021. The 10

Satellites show reality vs. U.S. industry estimates

- The oil and gas industry has greatly underreported methane emissions.
- Now satellites and aerial surveys reveal the truth.



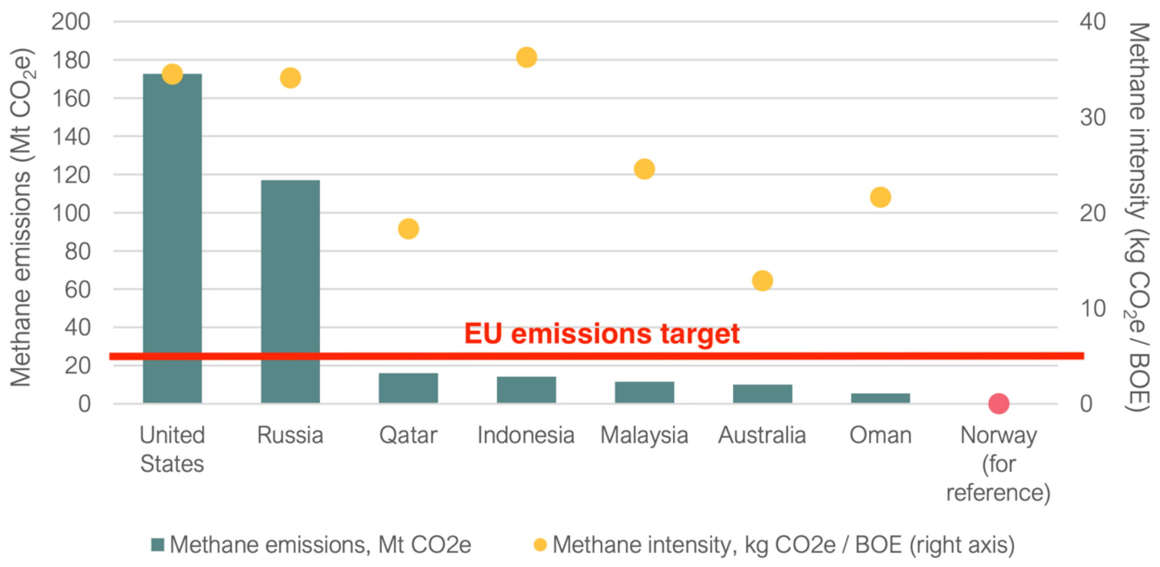
At least 9 times higher than EU target of 0.2%

“Based on gross gas production, the loss rate (or emissions intensity) of 1.8% to 2.9% observed in the Permian basin in these preliminary measurements is at least nine times higher than the 2030 target loss rate of 0.2% promised under the industry’s public commitments."

Novel observations reveal methane emissions from oil and gas operations that other satellites don’t seeMethaneSAT, Nov. 16, 2024

Assessment of Opportunities for Implementing a Methane Import Standard in South Korea (July 2025)

Figure 1-4 – Methane emissions and methane intensity associated with gas exported to South Korea in 2023



US deregulation and low oil prices won’t help

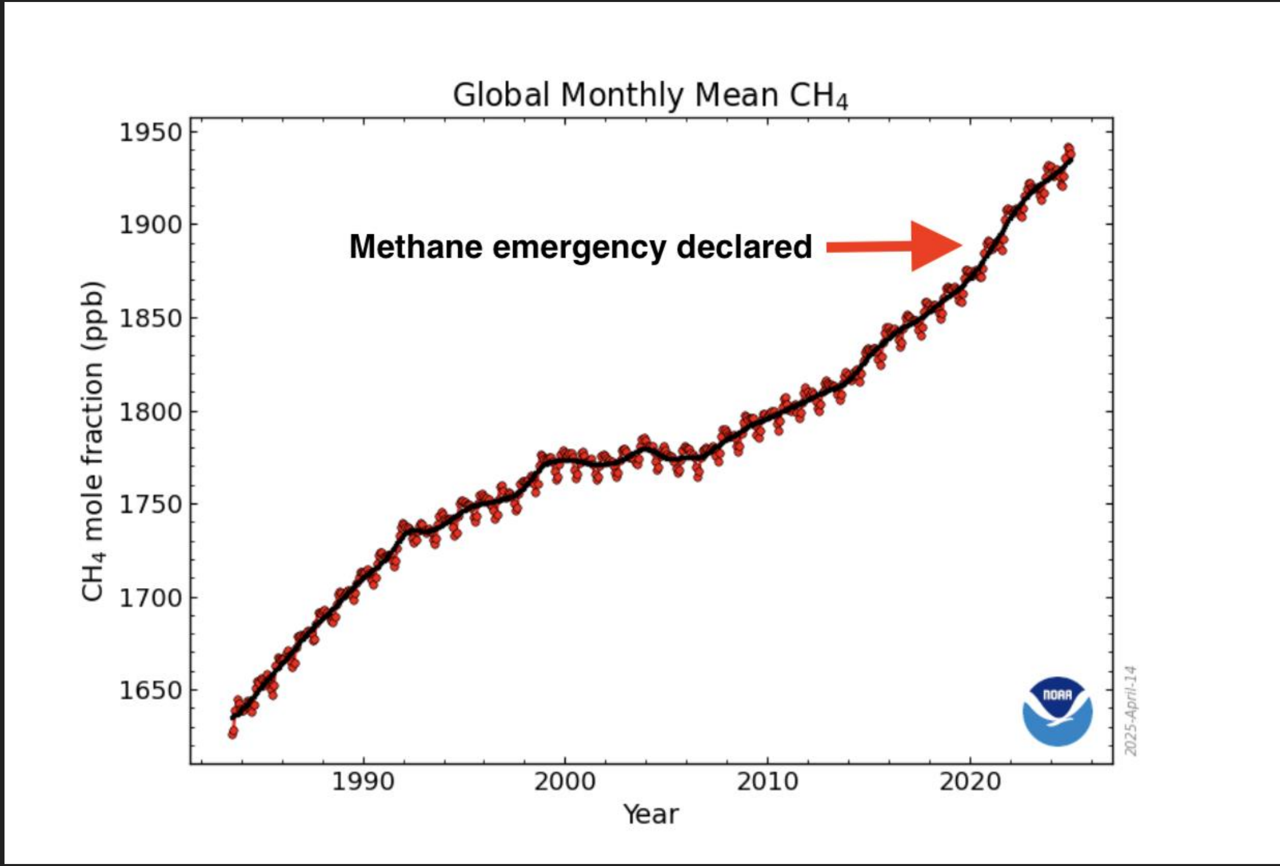
- Rolling back methane emissions regulations
- Rolling back power plant emissions regulations
- Rolling back waste water regulations
- Industry is unlikely to invest in methane reductions--even if those worked--in this environment.

Not Even Close

- The reality is that US oil and gas production consistently has methane emissions from 5-25X the current EU goal of 0.2%.

- The current combination of U.S. deregulation in the oil and gas industry and low oil prices is more likely to lead to increases in methane emissions than decreases.

Reality



Global Monthly Mean CH4
Methane emergency declared
CH4 mole fraction (ppb)
1950
1900
1850
1800
1750
1700
1650
1990
2000
2010
2020
Year
NOAA
2025-April-14

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Sources and Additional Information

Assessment of Opportunities for Implementing a Methane Import Standard in South Korea, June 2025, https://content.sfoc.tapahalab.com/files/research/Lml1jze.pdf

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