

# Satellites: A New Tool in Detecting Methane Emissions

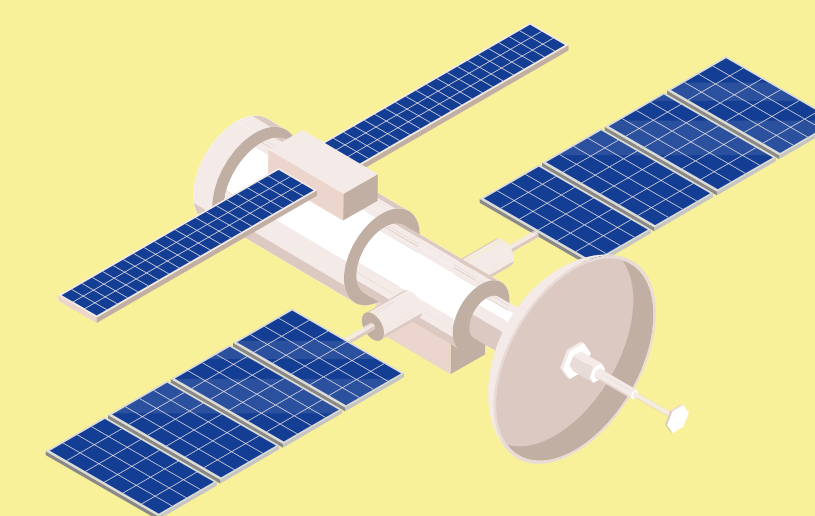
Environmental  
Science:  
Atmospheres



The oil and gas industries use a variety of technologies for detecting and quantifying the emission of methane, a potent greenhouse gas



The ability of satellites in detecting, reconciling, and reporting methane emissions has not previously been sufficiently investigated



## Use of satellites to detect methane emissions

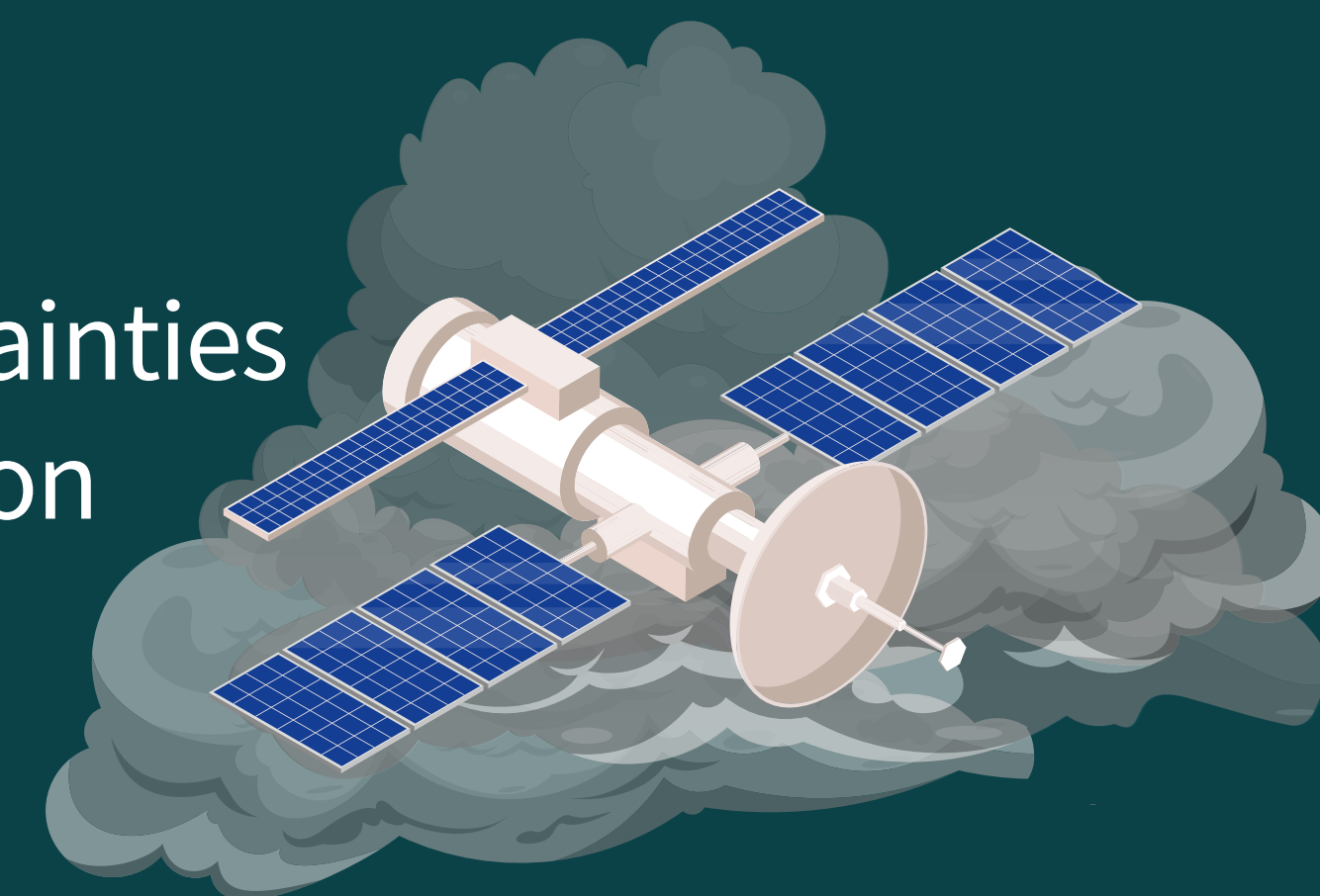
### Advantages

- ✓ Long-term emission monitoring
- ✓ Can scan large areas quickly
- ✓ Can detect presence of very large emissions
- ✓ Used for verifying emission estimates



### Limitations

- ✗ Increased uncertainties in derived emission estimates
- ✗ Not suitable for quantifying all oil and gas methane emissions
- ✗ Impacted by factors such as clouds, albedo, and quality of prior data



**Once their limitations are addressed, satellites will become even more effective tools to assess methane emissions, which is crucial for achieving the Paris Agreement ambitions**