

Ludovica Gazze, Warwick, Departmental Seminar on 03 February 2025

Host: Timo Goeschl

How large are methane emissions from the upstream oil and gas industry and why are they there? Evidence from Colorado *

Abstract:

Methane emissions contribute to climate change. Because methane is a valuable output of the oil and gas production industry, reducing fugitive emissions can deliver private and social benefits. Partnering with the Colorado air quality regulator, we measured methane emissions from 9% of oil and gas production facilities in the Denver-Julesburg basin over two years. These facilities' emissions comprise only 0.02% of their production. We experimentally varied facilities' abatement costs, by providing information about ex-ante leak risk, and regulatory scrutiny, by increasing the chance of inspections. Reducing the costs of finding emissions appears more effective than increasing regulatory scrutiny.

* joint work with Thomas Covert, Michael Greenstone, and Olga Rostapshova