

# **Investigation of Potential Emission Trade-offs among Flare Efficiency, NO<sub>x</sub>, and Particulate Matter Emissions**

Matthew Johnson, Carleton University

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The central goal of this collaborative project will be to quantify potential tradeoffs between flare efficiency and soot emissions for flares relevant to both upstream and downstream operations. Results will for the first time allow quantitative assessment of potential emission tradeoffs associated with different flare operating regimes, addressing a key knowledge gap in both Canada and the United States, and leading to opportunities for improved environmental performance.

## **Policy Issue**

Advance the Development of New or emerging air emission reduction technologies

## **Knowledge Gap**

Development and evaluation of the relationships between NO<sub>x</sub>, N<sub>2</sub>O, and CO emissions and engine process parameters, such as exhaust temperature, pressure and oxygen concentration, is requested.

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