

Backgrounder

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US States with Oil and Gas Emissions Rules Cover More Production than ECCC Rules

March 2017 backgrounder on methane regulation coverage prepared for Greenpeace Canada by experts at Environmental Defence Fund

1 March 2017 (TORONTO) – Environment and Climate Change Canada (ECCC) is in the process of developing its first-ever national rule to limit methane emissions from oil and gas facilities as part of Canada’s commitment to reduce methane emissions by 45%. The United States, both at the federal and state level, already has in place controls that limit methane, as well as other hydrocarbon emissions, from oil and gas facilities, and leading states are in the process of further expanding and strengthening requirements.

We undertook an analysis to compare the amount of onshore oil and gas production in U.S. states subject to current or proposed hydrocarbon (methane and volatile organic compound) emission control requirements to the amount of onshore and offshore oil and gas production in Canada. The states we looked at are described in more detail in the Annex but are California, Colorado, Ohio, Pennsylvania, Wyoming, and Utah. We also compared the amount of U.S. production subject to current or proposed hydrocarbon emission control requirements to the amount of production that will be covered by the ECCC rules. This analysis shows that in 2015 (the last year of available data):

- More oil and gas is produced in U.S. states that have implemented/are developing regulations than is produced in all of Alberta.
- 25% more oil and gas is produced in U.S. states that have implemented/are developing regulations than will be regulated by the ECCC.

State	Oil (MMBBL)	Gas (BCF)	Total production (MMBOE)
US States with emissions regs. total	353.44	8,070.00	1,785.02
Alberta only - includes bitumen/oil sands	699.19	4,468.79	1,485.77
Canada total production	1,331.31	5,464	2,287.25
Canada without oil sands	461.97	5,464	1,428.56

ANNEX: Overview of Methodology

We used the following methodology to identify U.S. final or proposed emission control requirements:

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(1) Identified all states with current or proposed emission control requirements for oil and gas production facilities: California, Colorado, Ohio, Pennsylvania, Utah and Wyoming's Upper Green River Basin ozone nonattainment area (UGRB NAA).

(2) Identified the scope of each state's rules as of 2/9/2017 as follows:

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| <p>a. California (proposed)</p> <ul style="list-style-type: none">• New and existing;• Conventional and unconventional;• Oil and gas. <p>b. Colorado (final)</p> <ul style="list-style-type: none">• New and existing;• Conventional and unconventional;• Oil and gas. <p>c. Ohio (final)</p> <ul style="list-style-type: none">• New• Unconventional Gas | <p>d. Pennsylvania (New (final) and existing (under development))</p> <ul style="list-style-type: none">• Unconventional;• Gas. <p>e. Utah (final)</p> <ul style="list-style-type: none">• Conventional and unconventional;• Oil and gas. <p>f. Wyoming UGRB NAA (final)</p> <ul style="list-style-type: none">• New and existing;• Conventional and unconventional. |
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(3) Identified the scope of the ECCC rule:

- a. Under development;
- b. New and existing;
- c. Conventional and unconventional;
- d. Oil and gas, excluding oil sands;
- e. Onshore and offshore.

We then pulled oil and gas production data from Drillinginfo for 2015 (the most recent year for which a complete year's worth of production data is available) to determine the amount of U.S. production subject to the six states' rules or proposed rules. We only pulled the type of production data that corresponds to the scope of the rules (e.g., only pulled new unconventional gas production for Ohio).

Lastly, we pulled data on Canadian production. Specifically, we pulled:

- 2015 oil and gas production from Drillinginfo for Alberta
- 2015 marketed oil and gas production, including offshore production using National Energy Board data.

For more information:

Keith Stewart, Senior Energy Strategist, Greenpeace Canada, 416-659-0294