Batumi Action for Cleaner Air (BACA) Actions by Canada: Update on Progress (May 2021)

Title: Reducing Methane Emissions in the Upstream Oil and Gas Sector (BACA Action 8)

Description: In April 2018, Canada published final methane regulations for the oil & gas sector. The regulations:

- Apply to facilities responsible for the extraction, production, primary processing, and transportation of crude oil and natural gas.
- Came into force in January 2020 and have phased requirements. Some of the provisions come into force in 2023.

Expected outcome: The regulations are expected to achieve:

- 20 Mt of CO2-equivalent emission reductions annually—fulfilling Canada's commitment to achieve a 40-45% reduction in methane reductions from the oil & gas sector by 2025 compared with 2012 levels.
- In addition, they will provide better air quality for Canadians living and working near certain oil and gas facilities.
- Also expected to achieve co-benefit reductions in emissions of (non-methane) volatile organic compounds from upstream oil & gas operations.

As part of Canada's strengthened climate plan, "A Healthy Environment and a Healthy Economy", published in December 2020, the Government of Canada committed to further strengthen Canada's approach to reducing methane emissions from the oil and gas sector, by establishing new targets and associated regulations for 2030. The design of the amended federal regulations to achieve additional reductions in 2030 will be determined through consultations with provinces, territories, the oil and gas industry and civil society.

Partners: Indigenous peoples; provincial, territorial and municipal governments; industry; non-governmental organizations.

Title: Reducing VOC Emissions in the Downstream Oil and Gas Sector (BACA Action 8)

Description: Canada's Reduction in the Release of Volatile Organic Compounds Regulations (Petroleum Sector) were proposed in May 2017 and finalized in November 2020.

The regulations require the implementation of:

- Comprehensive leak detection and repair programs at petroleum refineries, upgraders and certain petrochemical facilities;
- The operators of these facilities will also be required to ensure that certain equipment components are designed and operated in a manner that prevents leaks, and to monitor the level of certain VOCs at facility fencelines; and
- Record keeping, reporting and third-party auditing.

Expected outcome: Overall, the regulations will reduce fugitive VOC releases by approximately 90 kilotonnes and greenhouse gas emissions by 120 kilotonnes carbon dioxide equivalent (CO2e) for the years 2021 to 2037.

This will result in improvements in human health (fewer premature deaths, fewer days without asthma symptoms, fewer days of restricted activity) and environmental quality, as well as benefits to businesses from recovered products.

Canada is also developing regulations to limit releases of VOCs from petroleum storage tanks and loading operations. These regulations will include:

- Specific equipment performance and inspection procedures
- Planned for publication in 2022.

Partners: Indigenous peoples; provincial, territorial and municipal governments; petroleum and petrochemical industries; non-governmental organizations.

Title: Reduction of Carbon Dioxide Emissions from Coal-fired Generation of Electricity Regulations (BACA Action 8)

Description: Phasing-out the use of coal in electricity generation is one of the foundational aspects of Canada's efforts to address climate change.

On December 12, 2018, amendments to this regulation were published to accelerate the phase out of conventional coal-fired electricity generation by 2030. The amendments require existing units to meet a specific performance standard either at the end of their useful life or by December 31, 2029, whichever is sooner.

Accelerating the closure of conventional coal-fired generating units will:

- Reduce GHG and air pollutant emissions from the electricity sector resulting in avoided climate change damage in the future and improved air quality.
- Result in significant health improvements for Canadians sooner as air pollutants emitted by coal-fired generation adversely affect the health of Canadians, through direct exposure and through the creation of smog (including particulate matter and ground-level ozone).

Expected outcome: The amendments will result in 94 million tonnes (Mt) of cumulative GHG reductions over the 2019 to 2055 period, as well as reducing emissions of sulphur oxides (SOx) nitrous oxides (NOx), and mercury.

Partners: Provincial and territorial governments; utilities and power companies; and non-governmental organizations.

Title: Code of Practice to Reduce Emissions of Fine Particulate Matter (PM2.5) from the Aluminium Sector (BACA Actions 8, 9)

Description: Published in 2016, the code of practice recommends best practices to control and minimize the emissions of fine particulate matter (PM2.5) from facilities in the primary aluminium sector.

The code of practice was incorporated into an environmental performance agreement signed with the Canadian aluminium industry in 2017.

Expected outcome: As part of the performance agreement, facilities are required to implement recommendations from the code. This has been undertaken in the following manner:

- An initial analysis was conducted by each facility to identify which of the recommendations described in the code had already been implemented.
- Each facility prepared an action plan identifying additional recommendations from the code that are appropriate and practical based on circumstances specific to that facility. These plans were submitted to ECCC in 2019.
- The action plans are being implemented by the facilities, and follow-up is carried out and reported to ECCC annually.

Partners: Provincial and territorial environment departments of Canada