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Via email: ec.tarificationducarbonecarbonpricing.ec@canada.ca

Re: Review of the Federal Output-Based Pricing System Regulations

Fertilizer Canada appreciates the opportunity to comment on the proposed review of the federal Output-Based Pricing System (OBPS) Regulations. On behalf of our members, we would like to thank Environment and Climate Change Canada (ECCC) for its ongoing engagement in the review of the OBPS.

Fertilizer Canada represents manufacturers, wholesalers, and retail distributors of nitrogen, phosphate, potash, and sulphur fertilizers – the backbone of Canada's agrifood economy. Fertilizer is responsible for half of the world's current food production, and our industry is a major contributor to this global supply, supporting food security in Canada and around the world. We also contribute approximately \$24 billion annually to Canada's economic activity. Our industry has facilities across Canada supporting the employment of over 76,000 individuals throughout the supply chain.

Canadian fertilizer manufacturers produce about 12 million tonnes of nitrogen, phosphate, and sulphur fertilizers annually in some of the most technologically advanced, energy efficient, and safest facilities in the world. Our industry is one of the most energy-intensive, trade-exposed (EITE) industries in Canada with world-class, sustainable operations resulting from early action to reduce its environmental footprint. However, as an EITE industry, the Canadian fertilizer industry is vulnerable to competitiveness impacts, carbon leakage, and reduced investment.

Output-Based Standards

After review of the list of sectors and activities identified for new output-based standards (OBS), we would like to confirm that OBS for the fertilizer sector are not under review at this time. Fertilizer Canada and our members did note that the mining sector, specifically activities relating to salt mining, were listed as a new OBS.



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Given that some of our members produce salt products, we ask that Fertilizer Canada and specific member companies be included in any consultation to develop this OBS. In addition, as this was previously considered but not completed, we would like to take this opportunity to ask that the development of an OBS for granular urea be re-visited under this OBPS review.

Economic Concerns

Fertilizer Canada appreciates that this review will not reconsider OBS stringency levels for sectors that have previously been assessed. However, we believe it is important to highlight our ongoing concern with an unparalleled increase in the price of carbon relative to competing jurisdictions. Specifically, as an EITE industry, our members are concerned with the unprecedented carbon price increase of up to \$170/tonne of CO2e by 2030. Output-based standards were carefully designed to protect EITE industries and mitigate carbon leakage. However, without a comprehensive carbon leakage risk assessment, this escalating carbon price will jeopardize these protections and negate the original intent of the regulation. To this end, we are concerned that the OBPS review alters the wording of the original regulation away from "maintaining competitiveness and protecting against carbon leakage" to "minimizing competitiveness and carbon leakage risks". It is imperative that the Government of Canada prioritize EITE competitiveness during the review of the OBPS. Canadian fertilizer companies are already world leaders in environmental sustainability – for example, Canadian potash produces up to 50% fewer emissions in comparison to potash production from other global regions. As an EITE industry and as price-takers in a global market, the Canadian fertilizer industry is highly sensitive to decreased investments and carbon leakage.

Furthermore, the increase in the stringency of the OBPS needs to consider the extended timelines associated with adoption of decarbonizing technologies for our industry and should align with other government initiatives such as the Hydrogen Strategy for Canada and programs to support industrial decarbonization projects. We strongly recommend that the Government of Canada continue to recognize and protect EITE industries through regulatory frameworks that achieve our environmental goals without jeopardizing Canada's global competitiveness. Fertilizer Canada asks that ECCC review the proposed increase in carbon price with specific consideration of carbon prices in competing jurisdictions and commercialization timelines for new technologies to mitigate potential carbon leakage and secure Canadian investments.



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Additionally, we have concerns with the frequency of regulatory adjustments and its impact on long-term investments in Canada. Regulatory certainty is required to secure the large, long-term investments necessary for commercial implementation of new, innovative technologies. Fertilizer Canada asks that the Government of Canada work with provincial governments to implement longer-term carbon pricing equivalency agreements (i.e. 5 – 10 years) that would provide the required regulatory certainty for such investments in Canada.

Industrial Process (IP) Emissions

Fertilizer Canada and our member companies are concerned with an apparent discrepancy within the OBPS as it relates to industrial process (IP) emissions. IP emissions are fixed by chemistry, and scientifically unfeasible to reduce. The only way to reduce IP emissions is to decrease production, eliminating jobs and displacing production to other, potentially higher-emitting jurisdictions as global demand for our products is strong. For our sector, IP emissions can comprise a significant portion (more than half) of our overall emissions. While appreciative of the government's desire for broad emissions coverage under the OBPS, ascribing a reduction target to emissions which cannot be reduced does not set a price signal, as is the explicit intent of the policy – it is an uncompetitive tax. Furthermore, adding an annual tightening rate to those emissions would compound the negative impact.

No current provincial carbon pricing program includes a reduction target for IP emissions. For example, in Alberta and in Ontario through the former and incoming carbon pricing program, IP emissions are captured but given a 100% allocation and no increasing stringency (or declining cap) in recognition of the nature of these emissions. These provincial carbon systems, deemed equivalent within the OBPS, appropriately acknowledge chemically fixed limitations associated with process emission reductions. Specifically, the annual tightening rate within these provincial systems applies only to combustion emissions, not process emissions, to recognize this limitation. Fertilizer Canada asks that the OBPS continue to recognize these fixed limitations by providing 100% allocation for IP emissions. Specifically, in alignment with current provincial systems deemed equivalent with the federal OBPS, we ask that IP emissions not be subject to annual tightening rates and a 100% allocation be provided for process emissions.



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Additionally, we ask that the OBPS further protect EITE industries by acknowledging extenuating circumstances as it relates to ammonia facilities' start up IP emissions. For example, when ammonia facilities undergo initial and periodic mandatory start up processes due to maintenance/turnaround or adverse environmental/weather events, unavoidable IP emissions do not result in any ammonia production. Since emissions under the OBPS are relative to production, Fertilizer Canada ask that the OBPS acknowledge the unique nature of *start up* IP emissions by developing a specific exemption category within the regulation.

Electricity Generation

Fertilizer Canada has noted that the OBPS review intends to include electricity generation to meet Canada's goal of net-zero emissions by 2050. Some potash and nitrogen facilities have proactively installed cogeneration systems which allow heat to be recovered and converted into steam to produce on-site electricity and would therefore be captured as a non-utility generator. Cogeneration is an effective way for steam-dependent industries – like fertilizer manufacturing – to increase efficiency and reduce carbon emissions by utilizing a by-product of the steam generation process for product manufacturing. Cogeneration offers a cleaner alternative to the purchase of higher-emitting grid electricity.

The inclusion of electricity generation in this review presents an opportunity to improve the structure of the OBS for electricity with consideration of cogeneration. Increasing the stringency of the OBS for electricity generation severely limits the potential of cogeneration by discouraging investment in cogeneration systems that could have a significant impact on emission reductions. In many cases, cogeneration provides an avenue for steam-dependent industries to increase efficiency while manufacturing a product in the most cost-effective manner possible, in addition to reducing emissions. Policies and regulatory frameworks should acknowledge this opportunity through voluntary options for facilities to lower their emissions through cogeneration where it is deemed to be of technical merit and economic value for the business. Technology which offers a lower emission option while balancing the operational realities of an industry should not be penalized but should be encouraged through various policy frameworks.



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Within his mandate letter, Minister O'Regan states that new, zero-carbon clean electricity generation and transmission systems and grid modernization is a top priority for Canada. The Canadian fertilizer industry stands ready to be a part of the solution to achieve grid modernization and clean electricity generation, however, it is important that these actions remain voluntary and that regulations like the OBPS support the adoption of cogeneration technologies to reduce emissions. Further information is required to clarify how cogeneration from waste heat would be treated under the electricity OBS where the natural gas used was not originally combusted to produce electricity. Clarity is needed on the ability of electricity generated from non-emitting sources, which are not regulated under the OBPS, to generate credits in the federal carbon program or in Saskatchewan's *Management and Reduction of Greenhouse Gases (Electricity Standards and Compliance) Regulations*, which is also currently going through a consultation process.

Technology Roadmap

Nitrogen is an essential nutrient required for plant growth. However, until the discovery of the Haber-Bosch process in the early 1900s, nitrogen could not be chemically produced, jeopardizing global food security for a growing population. Large scale production of ammonia and ammonia-based products via the Haber-Bosch process continues to significantly contribute to crop production and is necessary to feed our population today. To date, there is no comparable process to produce nitrogen-based fertilizers at this scale.

Fertilizer Canada recognizes the importance of environmental sustainability for our industry, and to this end we have begun conducting a technology roadmap outlining technologies at various stages of development that could have an impact on our environmental performance. Our technology review assesses each emerging technology against current commercial saleability, construction and implementation timelines, economic viability and investment certainty, regional/jurisdictional specific considerations, etc.

We would welcome an opportunity to review and discuss this technology roadmap with the Government of Canada. The technologies available for our industry will involve significant upgrades to existing sites or building new sites altogether – both of these pathways present major challenges for our members in



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terms of time and financial investment which need to be adequately acknowledged in any technology review for our industry. Further, we want to take this opportunity to reiterate the importance of an updated carbon leakage assessment for the proposed increase in the price of carbon and note that although a technology review will be useful, it does not replace a specific risk assessment.

Concluding Remarks

Thank you for the opportunity to respond to the proposed review of the OBPS Regulations. Our industry stands ready to work with the Government of Canada to achieve our shared goals of environmental stewardship and economic growth and welcomes any questions as it relates to this consultation submission. Fertilizer Canada and our member companies would be pleased to schedule a virtual meeting to discuss these comments and our technology roadmap further.

Sincerely,

McKenzie Smith Director, Stewardship & Regulatory Affairs

CC: The Honourable Jason Nixon, Minister of Environment and Parks The Honourable Devin Dreeshen, Minister of Agriculture and Forestry The Honourable Dale Nally, Associate Minister of Natural Gas and Electricity The Honourable Jeff Yurek, Minister of Environment, Conservation and Parks The Honourable Warren Kaeding, Minister of Environment The Honourable Sarah Guillemard, Minister of Conservation and Climate



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The Honourable Bronwyn Eyre, Minister of Energy and Resources Jean-Francois Tremblay, Deputy Minister of Natural Resources Canada Christine Hogan, Deputy Minister of Environment and Climate Change Canada John Moffet, Assistant Deputy Minister of Environment and Climate Change Canada