RESOURCE



Fertilizer Emissions Reduction Target: Frequently Asked Questions

What is the goal of the fertilizer emission reduction target?

The fertilizer emission reduction target aims to reduce fertilizer nitrous oxide (N_20) emissions by 30% below 2020 levels by 2030.

Will the proposed strategy put a cap on fertilizer use?

The Canadian Government is not proposing a mandatory reduction in fertilizer use.

What specific emissions are targeted?

The Government is specifically targeting N_2O emissions arising from fertilizer use in Canadian agriculture, as it is a strong greenhouse gas with a global warming potential of 265 to 298 times that of carbon dioxide (CO_2) over a 100-year period, and is produced by the application of nitrogen (N) fertilizer in particular. The emissions reduction target includes direct (from fertilizer application) and indirect (from ammonia released into the atmosphere as a result of N leaching in fields) emissions from fertilizer application on-farm.

How does Government plan on reaching this 2030 target?

Government proposes to increase support for a number of existing approaches, which fall under 4R Nutrient Stewardship practices, including:

- Increased use of enhanced efficiency fertilizers and inhibitors
- Broader use of cover cropping and pulse crops, where applicable
- Transitioning from fall to spring applied fertilizer and increasing split application
- Greater adoption of precision agriculture techniques
- Nutrient management planning and funding for precision nutrient application technologies

What is the Ontario Federation of Agriculture's position on the target?

- The approach to emissions reduction <u>must not</u> lead to regulations or policies that result in a mandatory reduction in fertilizer use. A mandatory cap would pose extreme risk to food security at a time when Canadian agricultural products are needed more than ever to feed the world.
- Measurement of emissions to achieve the target reduction must be intensity-based, relating to crop production, rather than based on fertilizer use. An emissions-intensity approach balances environmental performance with continued economic growth. An emissions-intensity approach may also provide better estimations of non-applicationbased emissions reductions, providing a more accurate accounting of the agriculture sectors' attempts to reduce greenhouse gas emissions associated with agricultural production.
- The role of soil health in reducing emissions cannot be undervalued, and the approach to
 emissions reduction must recognize the work already completed and currently underway
 in Ontario to improve soil health, as well as existing initiatives that help reduce fertilizer



emissions. This includes overarching work like the Ontario Soil Health Strategy and the National Soil Study proposed by Senator Rob Black, as well as more specific initiatives like 4R Nutrient Stewardship and OMAFRA's AgriSuite tools.

- OFA believes Government should form regional Working Groups across Canada between AAFC, Environment and Climate Change Canada (ECCC), farmers and agricultural organizations, and relevant stakeholders. The Working Groups would collaborate to examine the scalability and regional applicability of proposed emission reduction approaches, improve communications between all active partners, define measures of success applicable to the variety of commodities and regional production systems in Canada's agriculture sector, and provide early engagement with producers on any further targets that impact agriculture. OFA envisions playing a key role in these Working Groups.
- OFA recommends Government significantly invest in knowledge transfer support to farmers across Ontario through established communication channels, trusted advisors, and those who can tailor advice to the variety of farming operations in Ontario, and to establish those channels in areas where they do not currently exist. Additional support to scale up 4R adoption more widely will greatly enhance nutrient use efficiency and lower fertilizer emissions.
- Levels of financial support to farmers must be significantly enhanced, eligibility requirements and funding options must be broadened to allow the greatest number of farms to apply. It is key that the funding be easy to access and apply for, offered at a time that aligns with agricultural production schedules and includes opportunities for those producers who have already adopted efficiencies and best management practices that help reduce fertilizer emissions.
- Research into new and emerging technologies that have the potential to reduce emissions, like biologicals, enhanced efficiency fertilizers and N inhibitors, needs to be funded. Incorporating results of this research into farm management decisions requires additional knowledge and expertise, and OFA recommends that Government invest significantly in knowledge translation and transfer to farmers through multiple communication channels regarding the benefits, use, and applicability of new and emerging technologies to their farm operations. Often incorporating new approaches involve production costs that may not be recovered. OFA further recommends that Government consider options for direct financial support for uptake of new and emerging technologies through existing and new programming, and that funding support approaches be adjusted to encourage producers with smaller margins to adopt new technologies.
- OFA believes that farmers should be recognized for their efforts to manage and enhance these co-benefits for the public benefit. We have seen from other jurisdictions that carbon offset credit systems can provide an effective mechanism to recognize and incentivize an enhanced level of environmental and ecological co-benefits from agricultural lands. We encourage carbon offset credit system that is flexible and practical to facilitate farm-based credits, eligible to satisfy the compliance needs of large industrial emitters.

What can OFA members do?

- Read <u>OFA's full submission</u> to the Government consultation for more detailed information.
- Check out <u>CFA</u> and <u>Fertilizer Canada</u> information on the fertilizer emission reduction target.
- Investigate <u>4R Nutrient Stewardship in Ontario</u>, and talk with your input supplier, agronomist or a 4R NMS-certified Certified Crop Advisor about implementing nutrient use efficiency practices on your farm.