Annual Report **2015**

GROWING STRONGER



FERTILIZER CANADA

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Fertilizer Canada

Fertilizer Canada represents manufacturers, wholesale, and retail distributors of **nitrogen**, **phosphate**, **potash**, and **sulphur** fertilizers. The fertilizer industry plays an essential role in Canada's economy, contributing over **\$12 billion** annually and **12,000 jobs**. The association is committed to supporting the fertilizer industry with innovative research and programming, while advocating **sustainability**, **stewardship**, **safety**, and **security** through standards and Codes of Practice. As the foundation of Canada's agri-food sector, Fertilizer Canada continues to make changes that positively impact the **environment**, the **economy**, and the **social** fabrics of Canadian life.





DID YOU KNOW?

The Canadian fertilizer industry employs more than 12,000 Canadians in high skilled, high paying jobs.

Our vision is to play a leadership role in the global fertilizer industry in meeting the challenge of feeding the world with safe and nutritious food.

As the unified voice of the Canadian fertilizer industry, **our mission** is to promote safe, responsible, and sustainable, globally competitive fertilizer production, distribution, and use. We strive to fulfill this mission by developing and implementing four key strategic initiatives: issues and policy development, knowledge development and education, product stewardship, and industry services.

We're Growing Sustainability®

The fertilizer industry is a leader in sustainability, recognized as an essential to a profitable, environmentally and socially responsible, abundant and healthy food production.

Fertilizer Canada's Sustainability Principles:

- Base our decisions and actions on sound science.
- Promote best practice on—farm nutrient 4R Nutrient Stewardship (Right Source @ Right Rate, Right Time, Right Place®).
- Ensure products are safe, environmentally responsible, and effective.
- Set standards for the safe, secure, and environmentally responsive and responsible production, distribution, handling, and transportation of fertilizer.
- Communicate openly and work in partnership with our stakeholders.
- Encourage transparency and performance reporting.
- Act with integrity.



Fertilizer Canada: Growing Stronger

Canada's fertilizer industry does not shy away from a challenge. We are well positioned to face one of the biggest challenges yet. By 2050, food production must increase by 70 percent to feed the world's growing population. Efficient fertilizer use is the solution, and can already be attributed to 50 percent of the world's crop production — put another way, without fertilizer current food production would be half of current levels, unable to sustain the world's current population. The Canadian fertilizer industry stands ready to address this challenge, while supporting the environment, the economy, and the social fabrics of Canadian life.

Our manufacturing, wholesale, and retail members require access to a network advocating sustainable, efficient, and safe operations to maintain a positive industry reputation. As the association representing the interests of this \$12 billion industry, Fertilizer Canada adds value to the work our members are doing at their retail site or manufacturing facility through our advocacy, nutrient stewardship, and safety and security efforts.

With safety at the core of the fertilizer industry's operations, Fertilizer Canada has applied an effective combination of world-leading industry Codes of Practice and government regulation. Our association will continue to promote the safety and security of fertilizer products across their life cycle, allowing our industry to remain among the most safe and efficient in the world.

Concerning the environmental stewardship, Fertilizer Canada also promotes the voluntary adoption of 4R Nutrient Stewardship (Right Source @ Right Rate, Right Time, Right Place®). Governments, retailers, and farmers across Canada have adopted this framework to achieve cropping system goals and demonstrate enhanced environmental protection and improved sustainability, helping to maintain our soil, air, and water quality. Helping sustainable agriculture, the 4R Nutrient Stewardship framework will remain a priority, allowing us to demonstrate further action through nutrient application, efficiency, and production.

An industry that supports innovation, stewardship, safety and security, human development, and growth requires a voice strong enough to be heard. Fertilizer Canada stands proud, providing a unified voice for the future of the fertilizer industry. Through strategic collaboration, Fertilizer Canada forms partnerships that prove critical to the varying initiatives which the association has come to succeed.

I look forward to working with the members, staff, partners, and governments to address the challenges of the sector and to build a stronger unified voice for Canada's fertilizer industry.

Garth WhytePresident and CEO

Fertilizer Canada: A Unified Voice



Fertilizer is the backbone of Canada's agriculture economy. Over the past year, the industry has been faced with critical challenges and remarkable opportunities. We have worked hard to position the association for standout performance, to ensure the fertilizer industry is a leader in sustainable food production.

In my two years as Chair of Fertilizer Canada's Board of Directors, the association has worked with members, staff, partners, and government to ensure the industry can address these challenges and opportunities, all while making certain we can meet the challenge of feeding the world with safe and nutritious food.

The industry's recent transition allows us to reflect on how far we have come: We are delivering significantly improved programs and services for the industry, members, stakeholders and government. We are excited to launch the association under a new name: Fertilizer Canada. Fertilizer Canada provides a singular, unified voice to the fertilizer industry to support its interests under one seamless identity.



This new identity enables Fertilizer Canada to elevate and more clearly promote our successes:

- For more than a decade, Fertilizer Canada has proactively worked with the federal
 government to recognize early reductions while setting achievable targets to further
 reduce greenhouse gas emissions from production and application. Fertilizer Canada
 continues to work with the Government of Canada to reduce emissions stemming from
 ammonia and nitric acid production while protecting the environment and ensuring
 Canada's fertilizer can continue its critical role in feeding the world.
- Fertilizer Canada is participating in the Government of Canada's review of the Canada
 Transportation Act to ensure they serve Canada's current and future needs. The review
 provides a unique opportunity to consider how the national transportation system can
 best be leveraged to support Canada's continuing economic growth.
- Fertilizer Canada has also worked with the Government of Canada to ensure recognition
 of the industry's efforts to operate in an exceptionally safe manner. Bill C-52, Safe and
 Accountable Rail Act, upholds the railways' obligation to safety by prohibiting them from
 shifting liability to shippers.
- In 2015, Fertilizer Canada advanced 4R Nutrient Stewardship (Right Source @ Right Rate, Right Time, Right Place ®) in Manitoba, Ontario, New Brunswick and Prince Edward Island through a number of provincial and regional agreements with government and stakeholders. Additionally, the fertilizer industry celebrated \$1.1-million in federal funding matched by the industry to advance the science behind 4R Nutrient Stewardship. As a result of this project, science-based data will allow our industry to further demonstrate the benefits of 4R Nutrient Stewardship for improved farmer economics, feeding the world, and protecting the environment.
- Fertilizer Canada has taken a diligent approach to ensure safe and secure manufacturing, handling, storage, transportation, and application of commercial fertilizer across their life-cycle. Fertilizer Canada has taken significant steps to manage the risks of fertilizer products. Canada's fertilizer industry established clear requirements that every member must abide by as a condition of Fertilizer Canada membership. The Ammonia Code of Practice and the Agricultural Ammonium Nitrate Code of Practice set Canada's fertilizer industry apart, as a world leader in fertilizer safety.

The industry has also taken on new leadership. In June 2015, Garth Whyte joined as President and CEO. His leadership skills, relationship-building focus and knowledge of government will support the accomplished team we already have and help us elevate future performance. During this transition, Fertilizer Canada continued to build and evolve, and achieved many successes. On behalf of the Board of Directors and membership, I want to thank Clyde Graham, who served as Acting President throughout the leadership transition, and continues to be a key leader in his position as Senior Vice President.

Fertilizer Canada continues to make changes that positively impact the environment, the economy, and the social fabrics of Canadian life. It has been an honor to serve as Chair with such committed membership and talented staff as we grow the positive contributions of our industry. I have had the pleasure of being involved with many developments, and I have no doubt that the years to come will bring as much prosperity for the association, and the industry, as I have seen over my two years as Chair.

Grea Yont

Agrium Inc.

Chair of the Board of Directors

Advocacy

Fertilizer Canada and its members have been working diligently with Environment Canada and provincial governments to develop a regulatory framework to achieve high environmental standards while maintaining economic integrity. The Government of Canada understands the need to protect the environment while ensuring the fertilizer industry can continue its critical role in feeding the world.

Canada's fertilizer industry is among the most efficient in the world. For more than a decade, Fertilizer Canada has proactively worked with the federal government to further reduce greenhouse gas emissions from production and application. Technological investments and process improvements in nitrogen fertilizer production have resulted in a significant reduction in emissions levels since the early 1990s. Further reductions are possible on the farm where fertilizer products are applied. Fertilizer Canada has developed the 4R Nutrient Stewardship system (Right Source @ Right Rate, Right Time, Right Place®) and subsequent Nitrous Oxide Emissions Reduction Protocol to reduce greenhouse gas emissions on farms while utilizing our vast retail networks.

As several provinces move forward with greenhouse gas regulatory regimes, Fertilizer Canada continues to advocate a proactive approach to emission reductions, from production to the end use of fertilizer products.

Meanwhile, the federal government has initiated a federal, provincial, and territorial Air Quality Management system initiative with stakeholder involvement. Fertilizer Canada continues to align with industry stakeholders to complete the development of base-level industrial emissions requirements and propose a framework which meets government targets.

An efficient transportation system is key to continuing the competitiveness of Canada's fertilizer industry. Canada's fertilizer industry is dependent on rail and truck to move fertilizer products to domestic, United States, and offshore markets. Fertilizer Canada is participating in the Government of Canada's Review of the Canada Transportation Act to ensure they serve Canada's current and future needs. The Review provides a unique opportunity to consider how the national transportation system can best be leveraged to support Canada's continuing economic growth. It reaffirms the Government of Canada's commitment to meeting the transportation challenges and opportunities of the next decade in a sustainable manner.

"I know first-hand the economic impact of the fertilizer industry in Saskatchewan and across Canada. Canada's potash sector accounts for 40 percent of the world's potash trade and contributes more than \$6 billion annually to our economy. This sector delivers more than 25 million metric tons annually to feed our country and the world in addition to employing 12,000 Canadians in highskilled, high-wage jobs. Our government is proud to support the fertilizer industry, and will continue to promote this vital sector of our economy."

Ray Boughen, M.P.

Palliser, Saskatchewan

Milestones

- In May 2015, the Government of Canada announced its intention to regulate emissions stemming from ammonia and nitric acid production. This announcement follows more than a decade of discussion with Environment Canada, and achieving an outcome Fertilizer Canada believes will balance the need to protect the environment while ensuring Canada's fertilizer industry can continue its critical role in feeding the world.
- After a significant appeal, the government intervened in the transfer of liability from railways to shippers for the transportation of hazardous commodities. Bill C-52, Safe and Accountable Rail Act, only allows for such transfers unless agreed to by contract. Fertilizer Canada supports the government's desire to ensure that goods are moved throughout Canada in a responsible way. The government's actions recognize that Canada's fertilizer industry has already taken significant measures to ensure operations are carried out in an exceptionally safe manner.
- Continuing outreach with municipal leaders through the Federation of Canadian Municipalities.
- Developing stronger relationships with provincial decision-makers, including:
 - » A photo opportunity with Ontario Premier Kathleen Wynne, and meetings with government and opposition Members of Provincial Parliament.
 - » Introductory meetings with Alberta's new NDP Government.
- 69 reportable meetings with federal decision-makers, including:
 - » A meeting with the Honourable Leona Aglukkaq, Minister of the Environment prior to the announcement of the intent to set a performance standard for ammonia and nitric acid.
 - » A meeting with the Honourable Gerry Ritz, Minister of Agriculture and Agri-Food regarding rail transportation.
 - » A dinner for senior officials at Transport Canada, Foreign Affairs, Trade and Development Canada and Industry Canada.
 - » A briefing to the Conservative Party of Canada's Saskatchewan Caucus.
 - » An industry-branded reception for Parliamentarians, staff, and stakeholders.

Fertilizer Canada advocates programs and initiatives through online and social media channels:

30,500+

450,00+ online impressions

SO, OOO +



95% of Canada's potash production is exported.

Safety and Security

Safety is at the core of the fertilizer industry's operations, promoting safe and secure manufacturing, handling, storage, transportation, and application of commercial fertilizer across their life-cycle.

Fertilizer Canada has taken significant steps to manage the risks of fertilizer products. Canada's fertilizer industry established clear requirements that every member must abide by as a condition of Fertilizer Canada membership. The *Ammonia Code of Practice* and the *Agricultural Ammonium Nitrate Code of Practice* set Canada's fertilizer industry apart as a world leader in fertilizer safety.

Fertilizer Canada understands the shared responsibility to manage the risks of fertilizer products from the facility to farm-gate in order to protect our communities. Canada's First Responders understand this more than anyone. The *Anhydrous Ammonia First Responder Information and Training* eLearning course was created in partnership with First Responders to help handle an incident safely and protect front-line workers. In 2015, Fertilizer Canada prioritized interactions with this audience to manage the risk due to an incident involving fertilizer products. Continued effort and partnership lead to fewer accidents.

Fertilizer Canada works with other organizations to support safe agriculture practices and fertilizer safety year-round. International stakeholders marked April 28, 2015, the first-ever World Fertilizer Safety Day, reminding us that zero accidents relies on continued effort and partnership.

Milestones

- The success of safety and security efforts of Fertilizer Canada is a result of cooperation
 and agreement across the membership. Fertilizer Canada continues to establish
 requirements that every member must abide by as a condition of their membership. These
 guidelines set Canada's fertilizer industry apart as a world leader in fertilizer safety.
- The International Fertilizer Industry Association held the Safety Summit, of which Fertilizer Canada was an organizing partner, to align the industry on safety and security initiatives.
- Fertilizer Canada actively coordinates with the Canadian Agricultural Safety Association, hosts of Canadian Ag Safety Week, to emphasize the importance of safety in agriculture and fertilizer safety programming among stakeholders.

S, O O +

3,300+
trained online in fertilizer safety and security

800+

First Responders trained on how to respond to an Anhydrous Ammonia incident

200+

First Responders connected with in 2015

11

Years of partnership with Canadian First Responders



DID YOU KNOW?

Fertilizer is the 3rd highest volume commodity shipped by Canadian railways.



Nutrient Stewardship

Fertilizer Canada leads the way in providing innovative thinking for the fertilizer industry while making changes that positively impact the environment, the economy, and the social fabrics of Canadian life. Fertilizer Canada promotes the voluntary adoption of 4R Nutrient Stewardship (Right Source @ Right Rate, Right Time, Right Place®).

Fertilizer retailers and farmers across Canada have adopted this framework to achieve cropping system goals and demonstrate enhanced environmental protection and improved sustainability, helping to maintain our soil, air, and water.

In 2015, Agriculture and Agri-Food Canada announced \$1.1 million in funding to develop a 4R Nutrient Stewardship Research Network. Canada's fertilizer industry is matching this funding, giving the project \$2.2 million for research over three years. Research using the 4R Nutrient Stewardship framework focuses on reducing greenhouse gas and ammonia emissions, losses of phosphorus to surface waters, and nitrate leaching into groundwater.

Fertilizer Canada is promoting 4R Nutrient Stewardship across Canada through provincial and regional programs and initiatives. 4R Nutrient Stewardship is currently being practiced in Alberta, Manitoba, Ontario, New Brunswick, and Prince Edward Island.

- Manitoba: Farmers in Manitoba are utilizing 4R Nutrient Stewardship to improve
 agricultural productivity and minimize the impact on the environment. Fertilizer Canada
 is working with the Government of Manitoba and Keystone Agricultural Producers
 to implement extension and data-collection projects across the province focused on
 sustainable fertilizer use in the agricultural sector.
- Ontario: The Government of Ontario, the Ontario Agri-Business Association, the Grain
 Farmers of Ontario, and Fertilizer Canada are working together to protect water quality in
 Ontario and support the sustainable intensification of agriculture in the region.
- New Brunswick: The Government of New Brunswick formally endorsed a provincial
 agreement between Fertilizer Canada and the New Brunswick Soil and Crop Improvement
 Association to help farmers implement 4R Demonstration Farms across the province to
 showcase how to improve sustainable food production.
- Prince Edward Island: A regional commitment to reduce nutrient losses into the environment was formalized through an extension of a 4R Nutrient Stewardship Memorandum of Understanding with the Government of Prince Edward Island (PEI), the Kensington North Watersheds Association, the PEI Federation of Agriculture and the PEI Potato Board. Industry-led 4R Demonstration Farms have shown significant economic and environmental benefits for Island farmers. Eight out of ten farms indicated lower soil nitrate levels, providing environmental protection for the province's groundwater.

"Our government recognizes that this research will provide valuable knowledge to help reduce greenhouse gas emissions and air pollutants such as ammonia, as well as lower losses of nutrients to the aquatic environment."

The Honourable Leona Aglukkaq, P.C., M.P. Minister of the Environment



Fertilizer Canada is improving the Canadian agriculture industry's ability to report on sustainable nutrient management practices. By linking commercial interests in the food sector, 4R Nutrient Stewardship can capture market opportunities arising from the food industry's demand for information on how their food is grown. A project led by Pulse Canada is utilizing 4R Nutrient Stewardship as a tool that will enable the Canadian grain, oilseed and pulse industries to use 4R Nutrient Stewardship to measure sustainability performance. This new information will demonstrate compliance with food industry assurance systems.

To further support crop production, the Canadian Roundtable for Sustainable Crops is working with Fertilizer Canada to build a reporting and communication framework to advance Canadian grain production metrics. Canadian and global experts recognize 4R Nutrient Stewardship as a driver to advance sustainability measurement solutions.

In addition to growers and suppliers, many regions across Canada have recognized 4R Nutrient Stewardship as a way to demonstrate and document sustainable fertilizer practices for growing crops and maintaining soil health. A report published by the International Joint Commission, *A Balanced Diet for Lake Erie* acknowledges 4R Nutrient Stewardship as a recognized method for managing nutrients responsibly, helping to reduce nutrient loading and harmful algal blooms.

Milestones

- \$2.2 Million in funding awarded for Canadian 4R Research Network.
- \$100,000 project extension awarded for Agricultural Greenhouse Gas Program work on national adoption of 4R to reduce greenhouse gas emissions.
- Fertilizer Canada's participation on the Fertilizer and Soil Conditioners technical
 committee, under the International Organization for Standardization or "ISO", is ensuring
 science-based standards for product efficacy are maintained and the fertilizer industry
 remains a competitive leader in the global market.



- When it comes to decision tools for determining rates, soil test and nutrient balancing were the most favourable. [Right Source, Right Rate]
- Most farmers wait until spring to apply their fertilizer [Right Time]
- Most farmers band their fertilizer
 (N, P, K, and S) at planting [Right Place]

1,000,000

estimated acres using 4R Nutrient Stewardship across Canada

38

farms participating in 4R Nutrient Stewardship

13

4R researchers in Canada

3 of 4

producers are familiar with 4R Nutrient Stewardship

3 of 5

3 out of 5 producers look to their agri-retailer for information about 4R Nutrient Stewardship

470+

trained online in 4R Nutrient Stewardship

100+

trained on greenhouse gas reduction (NERP)

492

Continuing Education Credits obtained

Leadership and Staff

Board of Directors

Executives

Greg Yont

Chairman

Agrium Inc.

Steve Biggar

Vice-Chair

Richardson International Limited

Garth Whyte

President and CEO

Fertilizer Canada

Directors

Mark Auchampach, J.R. Simplot Company

Noel Hsu, Orica Mining Services

Kathy Jordison, Yara Canada Inc.

Lindsay Kaspick, Koch Fertilizer Canada, UCL

Don Kitson, International Raw Materials Ltd.

Hugh Loomans, Sylvite Group of Companies

Jim MacEwen, MacEwen Agricentre Inc.

Brian Mark, PotashCorp

André Mercure, La Coop fédérée

Dale Moverley, CF Industries Holdings, Inc.



Fertilizer Canada Staff

Garth Whyte

President and CEO

Clyde Graham

Senior Vice President

Dan Doyle

Managing Director, Corporate Services

Giulia Brutesco

Senior Director, Industry Standards

Cassandra Cotton

Director, Sustainability

Catherine King

Director, Public Outreach

Emily Pearce Rayner

Director, Government Relations

Monique MacDonald

Senior Manager, Administration

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