

FEEDING THE FUTURE PLAN

Transforming Agriculture: Our 2030 Commitments



10 BILLION REASONS WHY

Our purpose starts with the soil beneath our feet and the global challenge of feeding nearly 10 billion people by the year 2050. We cultivate solutions for growers so they can increase food production sustainably for generations to come.



The United Nations' Sustainable Development Goals (SDGs) bring the world together to address global challenges and are intended to be achieved by the year 2030.

Our efforts ripple through many of the goals but our primary focus is SDG 2: Zero Hunger through 2.4.1 sustainable and productive agriculture. Learn more about our contributions in our SDG Impact Assessment.

A MESSAGE FROM
THE PRESIDENT & CEO

FEEDING OUR WORLD



Nutrien's Feeding the Future Plan strives for innovation through collaboration to create lasting change and sustainably feed a growing population.

Our team recognizes there is no one-size-fits-all approach – our solutions must be as unique as every grower, in every field we support.

Leveraging our global presence, strong network, and broad base of value chain partners, Nutrien will drive a set of ambitious commitments, each with clear action pathways.

We cannot do it alone – the key to unlocking this transformation will come from partnerships with other industry leaders, sharing information, and pooling resources.

Together, we can evoke transformational change in the spirit of SDG 17: Partnerships for the Goals. It is our responsibility as an industry to scale and evolve the systems and policies needed to find new sustainable solutions that protect our planet.

I'm proud to work alongside the team at Nutrien on this important journey, please join us.

Mayo Schmidt
President & Chief Executive Officer



Our purpose is to grow our world from the ground up with a vision to be the leading global integrated agriculture solutions provider.

We have developed strategic sustainability priorities that support key transformations and address our most material environmental, social and governance (ESG) risks and opportunities.

This means innovating and improving to further create long-term value with measurable impacts and outcomes that drive three key areas: **feeding the planet sustainably, environment and climate action, and inclusive agriculture.**

Our 2030 commitments will be challenging to achieve, but necessary, which is why we are committed to work with stakeholders across our value chain to build a sustainable path forward.

These commitments are just the beginning. Our commitments are being integrated and embedded into our operations. We have established targets and goals to support our sustainability strategy, and to drive continuous improvement for our most material issues. We provide annual disclosures on our performance. [Click here to learn more.](#)

At Nutrien, our Feeding the Future Plan helps move our industry and world forward, intending to drive systemic change and lead the next wave of agricultural evolution.

OUR GLOBAL IMPACT



Feeding the Planet Sustainably

Strengthen food security by scaling sustainable and productive agriculture



Environment and Climate Action

Provide solutions and platforms to achieve emissions reductions in alignment with climate science



Inclusive Agriculture

Support rural livelihoods and increase participation of underrepresented stakeholders in agriculture

OUR COMMITMENTS

We will work towards achieving by the year 2030

We are committed to transforming agriculture and doing what is right for our stakeholders and our planet. We believe Nutrien is uniquely positioned to drive sustainability across the agricultural value chain for economic, social and environmental outcomes. We are grateful for the diverse set of external stakeholders whose insights and feedback helped shape our path forward.



Feeding the Planet Sustainably

ENABLE

Enable growers to adopt sustainable and productive agricultural products and practices on 75 million acres globally.



Environment and Climate Action

ACHIEVE

Achieve at least a 30 percent reduction in greenhouse gas (GHG) emissions (Scope 1 + 2) per tonne of our products produced.*



Inclusive Agriculture

LEVERAGE

Leverage our farm-focused technology partnerships and investments to drive positive impact in industry and grower innovation and inclusion.

LAUNCH AND SCALE

Launch and scale a comprehensive Carbon Program, empowering growers and our industry to accelerate climate-smart agriculture and soil carbon sequestration while rewarding growers for their efforts.

INVEST

Invest in new technologies and pursue the transition to low-carbon fertilizers, including blue and green ammonia.

CREATE

Create new grower financial solutions to strengthen social, economic and environmental outcomes in agriculture.

* from a baseline year of 2018.

ENABLE



Adopting nature-positive solutions is critical to ensuring growers are resilient to climate change and can sustainably grow more per acre while protecting the environment and natural resources.

Our 2030 commitment: Enable growers to adopt sustainable and productive agricultural products and practices on 75 million acres globally.

IMPACT:

Sustainable agricultural production supports the global food system and enhances grower resilience and prosperity. Crop input management and regenerative practices can improve soil health, carbon sequestration, nutrient-use efficiency and water retention while conserving and restoring nature. As a result, crop yields increase, which further builds soil organic matter and reduces the pressure to convert additional land to food production.

HOW WE'RE DOING IT:

Nutrien is uniquely positioned with our direct relationships with over 500,000 growers globally to provide year-round agronomic solutions. We enable growers to deliver higher crop yields while providing benefits from the adoption of sustainable products, services and practices.

Our network of over 3,600 agronomists and crop consultants provides advice on best management practices such as environmental farm plans, leveraging [4R Nutrient Stewardship](#), integrated pest management plans, conservation tillage or no-till, cover crops, and crop rotation.

We provide over 2,000 proprietary products including those that enhance sustainability practices and value-added services including custom application and soil and tissue sampling.

In addition, our digital hub provides historical and real-time information, grower-specific analytics, and performance measurements to help growers make informed decisions.

Nutrien's sustainable agriculture approach aligns with the [United Nations Food and Agriculture Organization \(FAO\)](#) principles to increase productivity while protecting natural resources and enhancing grower resilience. Productive and sustainable agriculture is enabled by regenerative practices and precision agriculture and has the following dimensions:

1
Increased crop input efficiency and increased output per acre

2
Increased farm income

3
Improved soil and water outcomes

4
Bio-diversity supportive practices

5
Increased resilience to extreme weather

LAUNCH & SCALE



Agriculture is a climate leader. We have a significant role to play in helping farmers deliver natural climate solutions and verified carbon credits.

Our 2030 commitment: Launch and scale a comprehensive Carbon Program, empowering growers and our industry to accelerate climate-smart agriculture and soil carbon sequestration while rewarding growers for their efforts.

IMPACT:

Nutrien's comprehensive Carbon Program is intended to benefit growers and a broad base of value chain partners and stakeholders. It will enable the adoption of climate-smart agricultural practices that drive positive environmental outcomes while preserving the security of global food production. Growers who practice climate-smart agriculture improve soil carbon sequestration and reduce GHG emissions.

Soils are the largest terrestrial pool of carbon and could store up to 1.85 gigatonnes of carbon each year, equivalent to the amount produced by all of global transport.¹

HOW WE'RE DOING IT:

Nutrien's leading breadth of assets, capabilities, industry partnerships and our relationships with growers are expected to support all aspects of carbon credit generation and monetization.

Nutrien's Carbon Program is designed to verify growers' carbon performance at the farm level and facilitate the sale of their carbon credits.

Working with select growers in our pilots, Nutrien is designing scalable programs that facilitate the use of climate-smart inputs and practices to reduce GHG emissions, improve soil carbon sequestration, and measure the financial, productivity and environmental impacts that result. These pilots will help us uncover ways to scale protocol implementation and improve the verification process.

Nutrien's global reach supports a partnership network to develop the at-scale generation and monetization of high-quality, natural climate solution carbon credits. At the same time, we intend to partner with governments and non-government organizations (NGOs) to help inform policy and help meet public environmental goals.

NUTRIEN'S CARBON PROGRAM



¹ Cho, Renee. (2018). Can soil help combat climate change? <https://blogs.ei.columbia.edu/2018/02/21/can-soil-help-combat-climate-change/>

ACHIEVE



Climate change is the top ESG risk identified by Nutrien's stakeholders. We are reducing GHG emissions across our operations and are committed to setting science-based targets.

Our 2030 commitment: Achieve at least a 30 percent reduction in GHG emissions (Scope 1 + 2) per tonne of our products produced.*

IMPACT:

Our commitment to climate action means we are reducing our direct and indirect emissions.

We have committed to setting science-based climate targets. We have engaged with partners and peers in addressing sectoral challenges in emissions reductions and a net zero pathway. This includes working to develop a sectoral decarbonization approach (SDA) which is a method for setting targets in alignment with the Paris Agreement.

We have obtained external limited assurance on our 2018 baseline Scope 1 and 2 GHG emissions. A multi-stakeholder approach is being taken to understand our impact on downstream emissions through our Carbon Program.

HOW WE'RE DOING IT:

The manufacturing of fertilizer accounts for approximately 95 percent of our total Scope 1 and Scope 2 emissions.

While conventional fertilizer manufacturing is one of the most important innovations for food and agriculture, it presents unique challenges to reducing emissions. The industry is actively working towards innovative, more sustainable methods of production, including low-emission processes powered by renewable energy. Though it will take time for these technologies to scale and be cost-competitive, there are still ways we can improve the emissions intensity of conventional fertilizer production in the short term.

For Nutrien, we believe a 30 percent reduction in our emissions intensity is achievable by implementing nitrous oxide (N₂O) abatement at our nitric acid production facilities, energy efficiency improvements, carbon capture, utilization and storage (CCUS) at strategically located assets, and cogeneration projects that use natural gas for lower GHG electricity generation and waste heat recovery. Additionally, we will continue to look to our energy partners for options to procure low-carbon power, including from renewable sources.

SCOPE 1 emissions occur during nitrogen fertilizer production, primarily from natural gas feedstock.

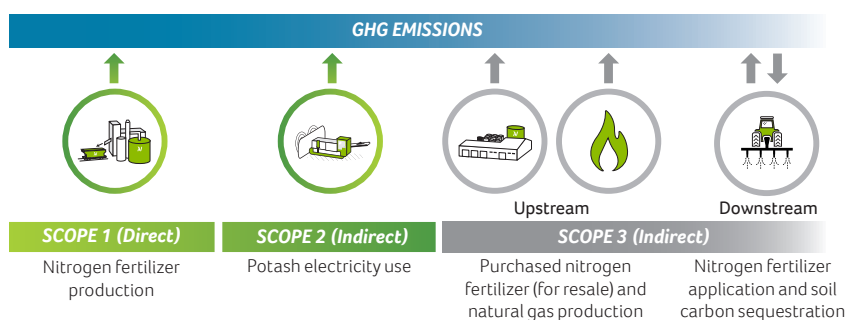
SCOPE 2 emissions are from off-site generation of purchased electricity, steam and heat.

SCOPE 3 emissions are released when nitrogen is applied to crops but emissions are sequestered into soils as crops grow. Nutrien's emissions inventory is in development.

● Nutrien activities ● Not in Nutrien's control.

* from a baseline year of 2018.

PRIMARY EMISSIONS SOURCES ALONG NUTRIEN'S VALUE CHAIN



INVEST



The roadmap for reducing the carbon intensity of ammonia exists; however, at-scale economics require the emergence of low-carbon end markets for ammonia or hydrogen use as a fuel.

Our 2030 commitment: Invest in new technologies and pursue the transition to low-carbon fertilizers, including blue and green ammonia.

IMPACT:

Access to early-stage technology ecosystems will help identify low-carbon ammonia innovations, which is anticipated to provide long-term reductions in emissions when deployed at scale. Future commercial scale-up is expected to drive absolute emissions reductions post-2030.

HOW WE'RE DOING IT:

Our near-term focus is on economically maximizing CCUS using existing infrastructure, and supporting the growth of Nutrien's leading blue/low-carbon ammonia production. We will focus on market development for industrial applications and will continue to actively pursue opportunities to position Nutrien's blue/low-carbon ammonia for use in proof-of-concept trials. We are also advancing a certification effort to create a universally recognized standard for low-carbon ammonia products to support pricing, market transparency and confidence around emissions claims.

Concurrently, Nutrien will assess the scope and investments required for transformational low-carbon ammonia production pathways, including exploring technology partnerships, investing in internal research and pursuing scalable pilot projects to enable commercial-scale production in the future.

DEFINING BLUE AND GREEN AMMONIA

Process and Technology

Blue Ammonia			Green Ammonia
Steam Methane Reforming (SMR) with Carbon Capture, Utilization and Storage (CCUS) Conventional ammonia production with capture and sequestration of process CO ₂	Autothermal Reforming (ATR) with CCUS All chemical reactions occur in the pipe, therefore no possible combustion CO ₂ emissions	Methane Pyrolysis "Turquoise Ammonia" Methane is decomposed into solid carbon and hydrogen	Electrolysis with Renewable Power Use of renewable electricity to convert water into oxygen and hydrogen

LEVERAGE



Bold leadership and new opportunities are required to help stakeholders impacted by historical inequities and disparities in agriculture.

Our 2030 commitment: Leverage our farm-focused technology partnerships and investments to drive positive impact in industry and grower innovation and inclusion.

IMPACT:

Nutrien's investments in cutting-edge agriculture technology bring new solutions to improve practices, products and services. In Nutrien's assessment of new opportunities, we will seek to partner with businesses and start-ups that not only deliver exceptional value, but bring a commitment to meaningful contributions to equity, diversity and inclusion (EDI) efforts. Leveraging innovation for inclusion is a new initiative and Nutrien is currently exploring how to effectively measure and assess impact.

HOW WE'RE DOING IT:

Nutrien invests in research and development to advance the agriculture industry. Our relationship with growers allows us to pilot new solutions in real-life conditions and provide an accelerated path to market.

Nutrien will increase its focus on opportunities to partner with diverse businesses and start-ups and will promote diversity across all partnerships and investments. In addition to our ongoing efforts to diversify our workforce and supply chains, Nutrien will seek to increase diversity in partnership opportunities along with a strategy for all partners to have commitments to EDI.

Our efforts will extend beyond ensuring fair consideration is offered for all opportunities and also include mentorship and capacity building for diverse partners, as well as support for partners that need help shaping their EDI commitments.

Nutrien also has extensive research farms that can offer unique opportunities for diverse partners and grower groups. These opportunities will help strengthen relationships, increase understanding of challenges, and identify how Nutrien can best provide services and solutions.

Similar to supply chain diversity, investments in innovation provide an opportunity for accelerating inclusion.

IDEAS

We assess up to 100 new opportunities annually that support sustainable agriculture.

TRIAL

Our relationship with growers allows us to pilot new solutions in real-life conditions.

EVALUATE

Based on the results of our pilots, we evaluate the impact and adjust as needed for continuous improvement.

SCALE

Our extensive reach ensures that our customers have access to the best available solutions.

CREATE



Inclusive agriculture means we can deliver a future where every grower has the capital needed to grow. It is important that grower financing encompasses a more holistic view of balancing social, economic and environmental outcomes.

Our 2030 commitment: Create new grower financial solutions to strengthen social, economic and environmental outcomes in agriculture.

IMPACT:

Transformative and inclusive financing can help growers overcome barriers. Potential barriers include access to capital, technology and services, among others. Challenges can be multi-faceted and complex and new levers and opportunities are required to accelerate change. Initial steps towards measuring and assessing impact include implementing ways to track and measure diversity data for our grower customers.

HOW WE'RE DOING IT:

Nutrien Financial provides financing for our grower customers. From seed to fertilizer to crop protection, we can help finance a grower's seasonal investment in their operations.

Nutrien intends to develop and offer new programs and services to help growers who may have been impacted by historical inequities and disparities in agriculture. Nutrien is committed to inclusive financing and helping diverse growers access working capital needed to purchase our goods and services. In addition to lending, growers are supported with other services from our trusted advisors and field agronomists who help with planning and decision making for each critical growing season.

Financing is also often a key enabler to broad adoption of sustainable agricultural practices including climate-smart agricultural practices. While many growers are adopting sustainable agricultural systems and practices, there is an opportunity for us to help support even more sustainable acres to increase soil carbon sequestration, productivity, profitability and resiliency through inclusive financing.



FORWARD-LOOKING STATEMENTS

Certain statements and other information included in this document constitute "forward-looking information" or "forward-looking statements" (collectively, "forward-looking statements") under applicable securities laws. Such statements include, but are not limited to: Nutrien's business strategies, plans, prospects, opportunities and its sustainability, climate change and ESG initiatives; expectations regarding Nutrien's Feeding the Future Plan and its 2030 commitments and ESG performance targets; Nutrien's 2030 GHG emissions reduction commitment, including its plans with respect thereto and capital expenditures required to achieve such commitment; our initiatives to promote sustainable and productive agriculture, our commitment to invest in new technologies to support a transition to low and zero-carbon fertilizers, including blue and green ammonia; Nutrien's pursuit of opportunities relating to its blue ammonia; the implementation of our carbon program and the benefits to Nutrien and growers; Nutrien's near-term focus on economically maximizing CO₂ capture and sequestration utilizing existing infrastructure; our commitment to leverage partnerships and investments to drive innovation and inclusion; and our commitment to create new financial solutions to strengthen social, economic and environmental outcomes in agriculture. These forward-looking statements are subject to a number of assumptions, risks and uncertainties, many of which are beyond our control, which could cause actual results to differ materially from such forward-looking statements. As such, undue reliance should not be placed on these forward-looking statements.

All of the forward-looking statements are qualified by the assumptions that are stated or inherent in such forward-looking statements, including the assumptions referred to below and elsewhere in this document. Although we believe that these assumptions are reasonable, having regard to its experience and its perception of historical trends, this list is not exhaustive of the factors that may affect any of the forward-looking statements and the reader should not place an undue reliance on these assumptions and such forward-looking statements. In respect of Nutrien's 2030 GHG emissions reduction commitment, we have made assumptions with respect to, among other things: that such target is achievable by deploying capital into N₂O abatement at our nitric acid production facilities, energy efficiency improvements, carbon capture, utilization and storage, use of natural gas to generate electricity and waste heat recovery; our ability to successfully deploy capital and pursue other operational measures, including the successful application to its current and future operations of existing and new technologies; the successful implementation by Nutrien of proposed or potential plans to reduce GHG emissions; projected capital investment levels, the flexibility of Nutrien's capital spending plans and the associated source of funding; and our ability to otherwise implement all technology necessary to achieve its 2030 GHG emissions reduction commitment, the development and performance of technology and technological innovations and associated expected future results. In respect of Nutrien's other 2030 commitments, we have made assumptions with respect to, among other things: our ability to successfully deploy capital and pursue

other operational measures, the successful implementation of our proposed or potential plans in respect thereof; projected capital investment levels, the flexibility of Nutrien's capital spending plans and the associated source of funding; the development and performance of technology and technological innovations and associated expected future results. Additional key assumptions relating to the operation of Nutrien's business as currently planned and the ability to achieve its business objectives are detailed from time to time in Nutrien reports, including its 2020 annual report dated February 18, 2021 and its annual information form dated February 18, 2021 for the year ended December 31, 2020, filed with the Canadian securities regulators and the Securities and Exchange Commission in the United States.

Events or circumstances that could cause actual results to differ materially from those in the forward-looking statements include, but are not limited to: (i) with respect to Nutrien meeting its 2030 climate and GHG emissions reduction commitment, including: our ability to deploy sufficient capital to fund the necessary expenditures to implement the necessary operational changes to achieve this commitment; our ability to implement requisite operational changes; our ability to implement some or all of the technology necessary to efficiently and effectively achieve expected future results, including in respect of such GHG emissions reduction commitment; the commercial viability and scalability of emission reduction strategies and related technology and products; the development and execution of implementing strategies to meet such GHG emissions reduction commitment; (ii) in respect of Nutrien's other 2030 commitments, including: our ability to deploy sufficient capital to fund the necessary expenditures to implement the necessary operational changes to achieve these commitments; our ability to implement requisite operational changes; our ability to implement some or all of the technology necessary to efficiently and effectively achieve expected future results; the commercial viability and scalability of required technology and products; development and growth of end market demand for sustainable products and solutions; the performance of third parties; the development and execution of implementing strategies to meet such commitments; and (iii) with respect to Nutrien's business generally and meeting its other targets, commitments, goals, strategy and related milestones and schedules in this document, including the risk factors detailed from time to time in Nutrien reports, including its 2020 annual report dated February 18, 2021 and its annual information form dated February 18, 2021 for the year ended December 31, 2020, filed with the Canadian securities regulators and the Securities and Exchange Commission in the United States.

The forward-looking statements in this document are made as of the date hereof and Nutrien disclaims any intention or obligation to update or revise any forward-looking statements in this document as a result of new information or future events, except as may be required under applicable Canadian securities legislation or applicable US federal securities laws.

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