



CF Industries®

2016 CORPORATE SUSTAINABILITY REPORT

CEO Tony Will on Helping
Farmers Feed the World

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Conservancy
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**SUPPORTING
SOLUTIONS
FOR A HUNGRY
WORLD**



How CF is Helping to Support the UN Sustainable Development Goals

Since 2015, countries around the world have been working toward a series of ambitious goals for securing a sustainable planet by 2030. Achieving these goals will require the contributions of governments, the private sector and citizens everywhere. CF is committed to helping support the following goals, which align most closely with our business:



1 NO POVERTY
Our business supports thousands of direct and indirect American jobs, contributing to the local economies and financial well-being of communities.



2 ZERO HUNGER
By feeding the crops that feed the world, we're helping ensure food security for people worldwide.



6 CLEAN WATER AND SANITATION
We're educating farmers on responsible agricultural techniques that allow them to grow more crops while protecting our air and water.



7 AFFORDABLE AND CLEAN ENERGY
Clean, abundant natural gas powers our operations, while recaptured waste heat technologies make our plants more efficient.



8 DECENT WORK AND ECONOMIC GROWTH
We bring much-needed jobs to rural communities where our presence is a key driver of local economic development.



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
We invest in energy-saving technologies – and track our energy, water and greenhouse gas emissions impacts with an eye toward continuous improvement.



12 RESPONSIBLE CONSUMPTION AND PRODUCTION
We manufacture and distribute our nitrogen-based fertilizers using state-of-the-art technologies that emphasize safety and energy-efficient production.



13 CLIMATE ACTION
Helping farmers maximize soil health and yield per acre protects forests and supports critical carbon sequestration.



14 LIFE BELOW WATER
We help teach farmers the optimal amount of nitrogen to apply to their crops, minimizing runoff and keeping water sources clean.

Global Reporting Initiative

We have prepared our 2016 Corporate Sustainability Report in accordance with the Core guidelines of the Global Reporting Initiative (GRI) G4 framework.

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OUR WORLD IS ADDING 83 MILLION PEOPLE A YEAR.

Finding sustainable ways to feed this growing population is a challenge – one that we're ready to help solve as a leading provider of crop nutrients to farmers around the world.

How CF is PART OF THE SOLUTION



A CONVERSATION WITH TONY WILL, PRESIDENT & CEO

CF Industries has an important role to play in addressing some of the most critical challenges of our time. Our products help crops grow, putting food on the world's table. As a company, we're also confronting issues such as energy efficiency, resource use and economic growth. CF President and CEO Tony Will explains how we're working to remain part of the solution.

QUESTION: Ensuring food security for a growing global population is one of society's greatest challenges. How is CF helping?

WILL: We're well aware of the sobering statistics on food demand around the world today and in the future. Of the 7 billion people in the world, about 805 million go to bed hungry each night. That's one in nine people. It's no surprise that ending hunger is one of the UN's foremost Sustainable Development Goals, but it's a vision that is only going to become more difficult going forward.

As the world's population adds 83 million people per year, food production must increase to meet climbing demand. That level of growth is impossible without fertilizer. More than one-half of the world's food supply is attributable to the use of commercial fertilizer. We've risen to the challenge by increasing our own production capacity in recent years and working every day to make sure that farmers receive their product in a timely fashion to maximize their yields.

QUESTION: Beyond helping meet global nutrition needs, applying nitrogen leads to increased sequestration of carbon. Why is that?

WILL: Nitrogen fertilizer helps farmers increase their yield, which allows them to grow more food on smaller plots of land. If nitrogen fertilizer weren't available to play this vital role, more land would have to be put into production. And to do that, carbon-consuming forests would have to be cleared. This, in turn, would lead to a higher concentration of atmospheric greenhouse gases than is present today.

What's more, recent studies show that applying nitrogen to corn, the most widely grown crop in the U.S., increases soil's

ability to store carbon over time. When you consider the net impact of nitrogen application to produce crops, the advantages become very clear.

QUESTION: Don't organic fertilizers serve the same purpose?

WILL: Whether farmers use a synthetic fertilizer product or an organic fertilizer like manure or compost, their crops crave the same thing: nitrogen. Synthetic fertilizers deliver nitrogen in far higher concentrations than organics. This means, for example, that you'd need to apply about six times as much manure as urea to feed the same plot of land. And there's simply not enough organic matter to go around. Generally, farms that don't use synthetic fertilizer produce approximately one-third less crops per acre. While organic methods serve a purpose, feeding the entire world isn't possible without the help of synthetic fertilizer.

QUESTION: Does the environmental impact of producing nitrogen fertilizer differ around the world?

WILL: Absolutely. There are important distinctions between the raw materials used to make nitrogen in different parts of the world, and they have significant implications for fertilizer's environmental impacts. While producers in China and other parts of the world use coal as their primary feedstock, CF is fortunate to rely on North America's abundant, reliable and affordable supply of natural gas. The CO₂ emissions of a coal-based plant are more than twice those of an average natural gas-based plant. At the same time, scale and process improvements also have enabled us to further reduce emissions at our natural gas-based plants.

QUESTION: Another environmental concern is the risk of nitrogen runoff

from farms contaminating water supplies. What is CF doing to address this?

WILL: This is a valid concern, and one we're actively working on. One instance in which runoff occurs is when more nutrients are applied to fields than needed. By applying the correct fertilizers in the proper amount at the right time and in the right place, farmers can maximize the amount of nitrogen that is absorbed by plants and minimize runoff into bodies of water. Through a partnership and grant to The Nature Conservancy and our support of 4R Nutrient Stewardship, we're better educating U.S. farmers on how to do exactly that.

QUESTION: How do you ensure that safety remains paramount throughout your operations?

WILL: We value safety above everything. Our "Do It Right" culture encourages employees to take safety into account in all that they do. And we're always looking for ways to improve. The Stephen R. Wilson Excellence in Safety Program, now in its third year, is a great way for us to capture potentially life-saving, innovative safety ideas from the people who know our plants and facilities best: our employees. (Read more about this year's Wilson Award winner on page 19). We share these safety innovations openly with others in the industry.

It's also important to us to promote safety in the communities where we operate. That's why we provide services like training and equipment for local fire departments and first responders.

QUESTION: Why are nearly all of your facilities located in smaller, often rural, areas?

WILL: The locations of our production and distribution facilities are no



coincidence. With strategic proximity or access to all of North America's major crop-growing regions, we're well positioned to deliver the right products to farmers when they need them.

Plus, our relationship with these communities is truly symbiotic. They provide us with a great pool of skilled talent, who, as employees, often spend their entire career with CF. Our presence provides a stable economic force within the community. It's a great example of American manufacturing done right.

QUESTION: CF strives to help "feed the crops that feed the world." How will this commitment evolve in the face of new global sustainability challenges?

WILL: Our mission is unchanged. We've long understood the need to increase food production to feed a growing global population. Farmers must maximize the amount of food they can produce from every available acre. That's where CF comes in. Whatever the future brings, we're committed to ensuring that farmers have the nutrients they need to meet demand. In this respect, CF is very much part of the solution to feed a hungry and growing world.



EMERGENCY
& EYE WASH

1 NO POVERTY



8 DECENT WORK AND ECONOMIC GROWTH



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE





LOCAL SOLUTIONS

Feeding the world involves all of us at CF

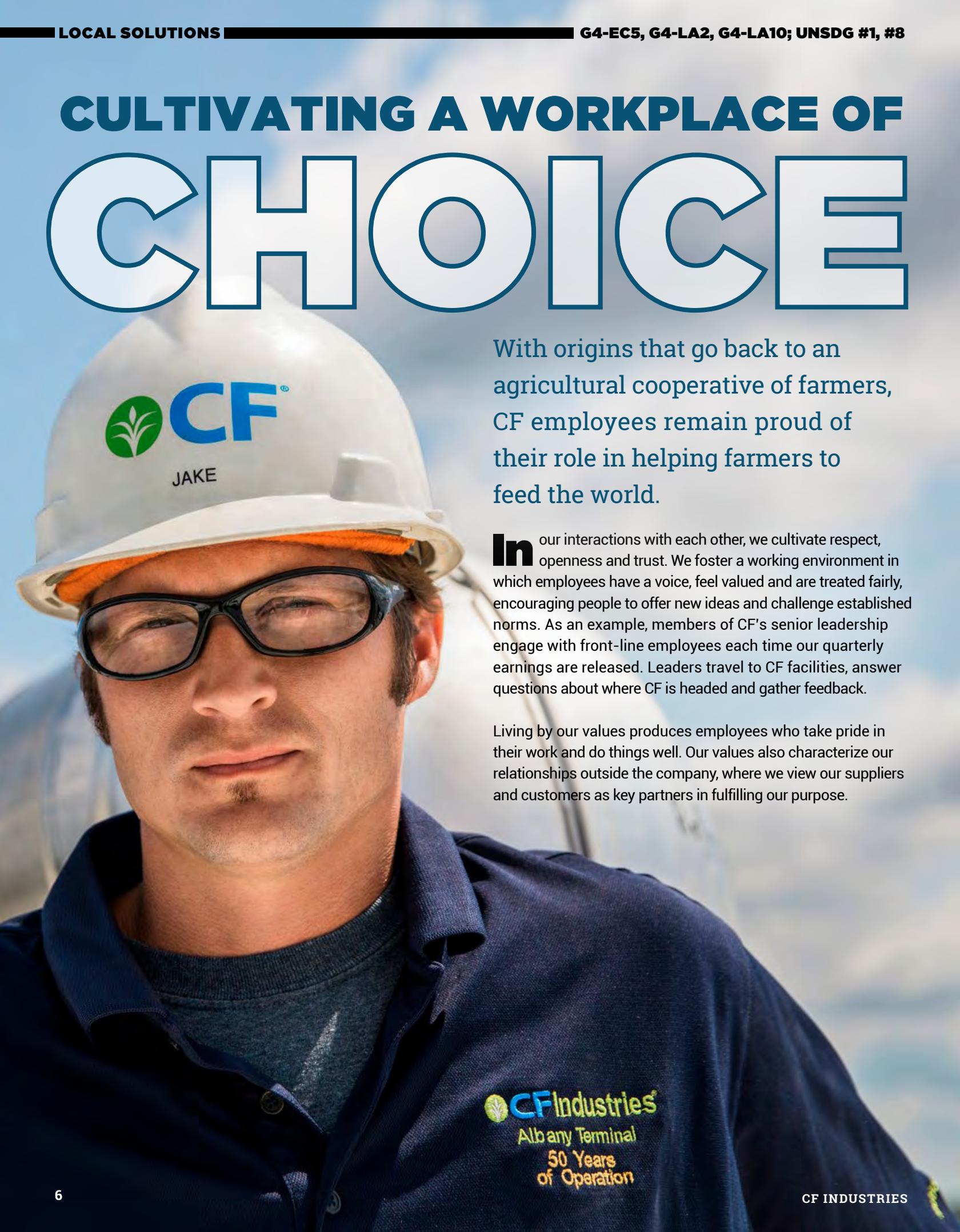
Our commitment to help farmers feed the world starts within our own operations and the communities where we are located. We invest in our employees so they have the skills and experience necessary to produce and distribute nutrients that farmers need. We also value and support the communities in which our employees live and work by being an active and participatory corporate citizen.

CULTIVATING A WORKPLACE OF CHOICE

With origins that go back to an agricultural cooperative of farmers, CF employees remain proud of their role in helping farmers to feed the world.

In our interactions with each other, we cultivate respect, openness and trust. We foster a working environment in which employees have a voice, feel valued and are treated fairly, encouraging people to offer new ideas and challenge established norms. As an example, members of CF's senior leadership engage with front-line employees each time our quarterly earnings are released. Leaders travel to CF facilities, answer questions about where CF is headed and gather feedback.

Living by our values produces employees who take pride in their work and do things well. Our values also characterize our relationships outside the company, where we view our suppliers and customers as key partners in fulfilling our purpose.



CF Industries
Albany Terminal
50 Years
of Operation



Offering Competitive Benefits

Beyond a supportive culture, CF offers employees a safe, challenging and rewarding workplace environment, attractive salaries, competitive health, retirement and lifestyle benefits. Part-time employees are eligible for these benefits based on the number of hours they are scheduled to work. Starting salaries for operators average \$47,000 per year, and with full certification, increase to \$75,000 per year.

All employees work under an incentive bonus plan that rewards them for doing things right. Employees are also eligible to participate in a pension plan as well as a 401(k) or equivalent plan.

CF's benefits approach includes an emphasis on wellness. We offer an employee assistance program; a wellness stipend, which employees can use to purchase health club memberships, fitness gear and more; annual biometric screenings and flu shots; and *Do-It-Well*, a quarterly wellness newsletter.

Growing a Long-Term Workforce

Building the skill and experience of our workforce is as important as making capital improvements to our plants. That's why we invest in extensive recruitment, training and

professional development opportunities for our employees.

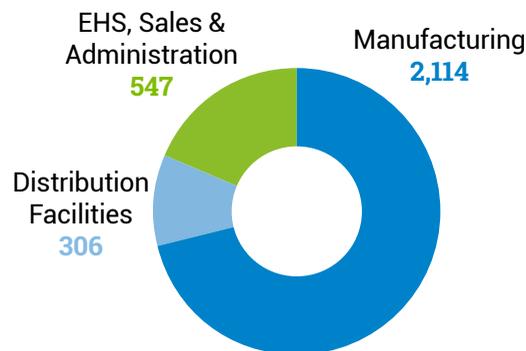
For example, in the U.K., we offer apprenticeship programs through which students can access training, local college instruction and on-site learning with CF. At the end of the three-year program, graduates may fill roles as chemical, mechanical and electrical engineers, mechanical technicians and process operators.

In the U.S., talented young finance and accounting professionals take part in a three-year leadership development program that gives them experience in financial planning and analysis, general accounting, cost accounting, and plant manufacturing accounting and analysis. We view these types of development opportunities as being a key part of succession planning, allowing us to grow a stronger company, today and for the future.

ACTIVE EMPLOYEES

as of July 1, 2017

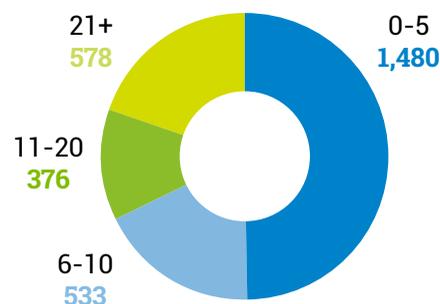
Total of 2,967 in North America and the U.K.



Source: Internal CF Data

YEARS OF SERVICE

as of July 1, 2017



Source: Internal CF Data

A Growth Engine for Local Communities



Just as our nutrients can serve as a catalyst for the growth of healthy crops, our presence in over 30 North American and U.K. communities can spur growth for local economies. Often we are the largest employer and contributor to the local tax base in towns that are relatively small and in rural locations. Our recent expansions in Donaldsonville, Louisiana, and Port Neal, Iowa, created new jobs at those facilities. For every new direct position created, we estimate seven indirect jobs are created in the local community, ranging from schools and health facilities to grocery stores and other small businesses.

We are also committed to contributing to the vitality of local communities through the volunteer efforts of our employees and through contributions of in-kind and cash donations. In 2016, our community donations totaled \$1.02 million and education donations totaled \$372,000. All CF plants support community programs on an ongoing basis, and our distribution facilities provide mini-grants to fund educational and environmental projects at local schools.

3 WAYS WE GIVE BACK



Community Education

- Raising awareness about STEM degrees and careers
- Educating community members about wastewater treatment and sustainability
- Donating carbon reduction credits for agriculture education
- Providing mini-grants to schools to fund environmental and agricultural projects, with special consideration for water quality projects



Community Safety

- Sponsoring HAZMAT safety training
- Donating equipment for local emergency responders
- Hosting regular community open houses with facility tours and safety presentations



Community Development

- Sponsoring charity events, such as races, for local civic organizations
- Leading environmental restoration projects for wetlands and community parks
- Supporting kids through United Way and the Boys & Girls Clubs of America
- Funding portable classrooms and supplies for community gardens in the U.K.

MUTUAL BENEFIT

CF and Port Neal

CF brings an array of benefits to the communities where it operates. For proof, look no further than Iowa's Port Neal Nitrogen Complex. We offer an assured supply of nitrogen fertilizer in a strategic location for farmers in America's heartland. And through well-paying jobs and support of the Port Neal community, we'll help support prosperity for the people of the greater Sioux City area for years to come.

COMMUNITY

CF supports cultural organizations such as the local symphony, community health care-related organizations and 4H, and the National Future Farmers of America (FFA) Organization.

JOBS

New CF jobs in engineering, operations and maintenance have more than doubled the size of our Port Neal workforce, and added nearly 700 jobs in related industries.

INVESTMENT

CF's Port Neal investment was one of the largest in Iowa's history. The new ammonia plant is among the most energy efficient in the world.

FOOD FOR CROPS

The entire facility's production of ammonia, granular urea, UAN and urea liquor provides approximately 2.3 million tons of nitrogen for agricultural and industrial use.

2 ZERO HUNGER



6 CLEAN WATER AND SANITATION



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



13 CLIMATE ACTION



14 LIFE BELOW WATER





SOIL SOLUTIONS

Making smart use of one of the building blocks of life

Crops need nitrogen-rich soils to grow. And people and livestock around the world depend on crops for food. Simply put, feeding the world is impossible without nitrogen. CF helps farmers harness the power of this essential nutrient and understand how to use it to maximize plant growth through responsible agricultural practices.

MORE FOOD *for* MORE PEOPLE

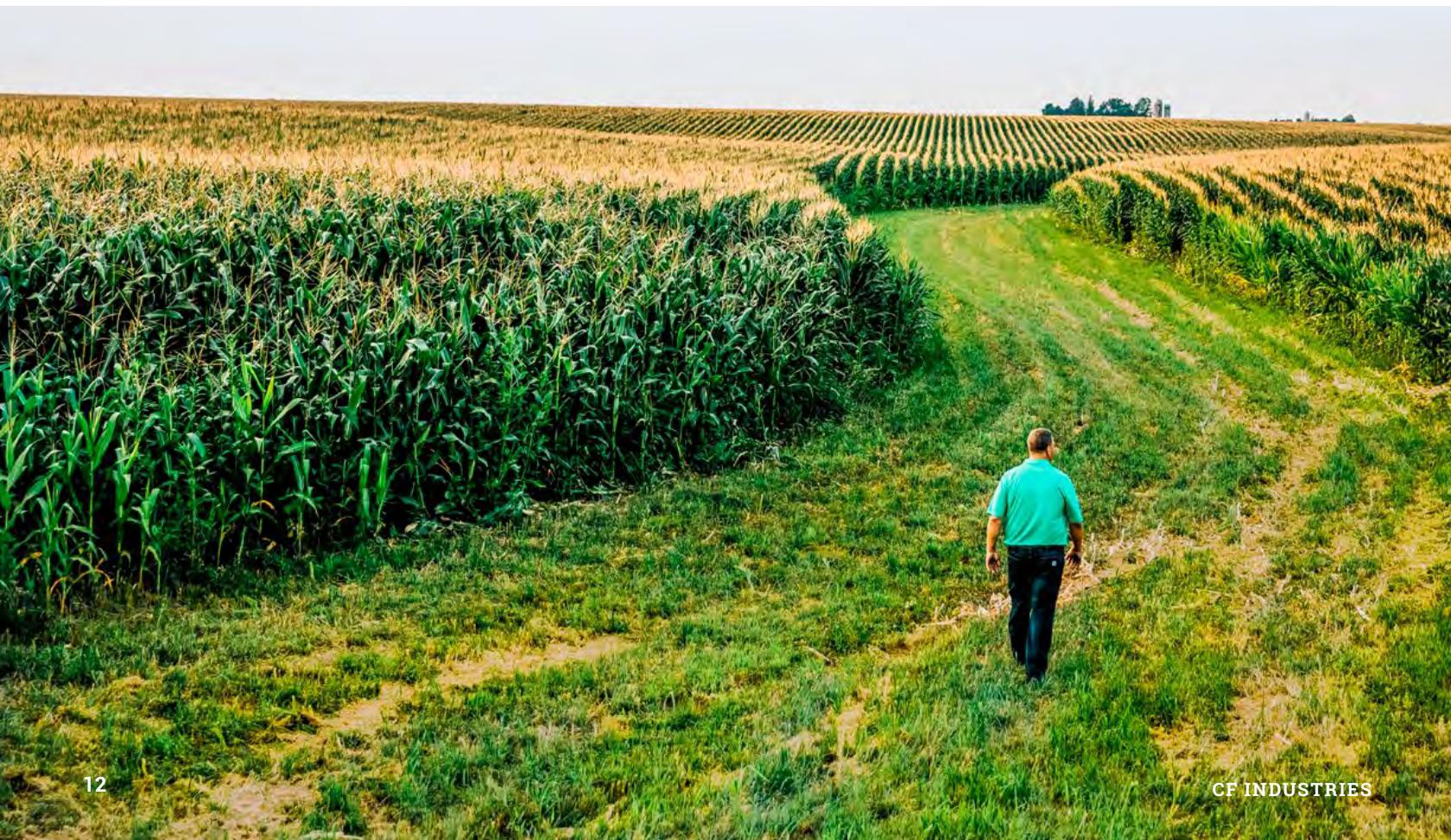
Today on Earth, the population increases by nearly 150 people every minute. That's 83 million people per year. Our population is larger than at any time in human history, and by 2050 it's expected to increase another 30 percent, to more than 9 billion people.

As the population — and, therefore, demand for food — grows, our planet's supply of land that is usable for farming remains finite. This presents farmers and growers with an unprecedented challenge: How will we feed an increasingly hungry world? Nitrogen is an important part of the answer.

The Food Plants Need

Of all the nutrients plants need, nitrogen is the most vital for growth. But most plants can absorb nitrogen only through soil. By applying nitrogen fertilizer every year, farmers can maintain soil health, promote healthy plant growth and increase yields.

Today, commercial fertilizer makes possible over one-half of the world's food supply, and nitrogen fertilizer has allowed farmers to grow more food on the same amount of land. Consider this: today, less than 15 percent of the world's total land area is used for farming. If we had to provide for today's





population using pre-industrial farming practices, we'd need four times as much land, or almost half of all the ice-free land on Earth. Instead, we've been able to preserve vast amounts of land for other purposes, including one of its most important roles – sequestering carbon. Through this process, carbon is stored in the leaves, stems and roots of trees, instead of in the air as a greenhouse gas. Forests are the United States' most important source of carbon sequestration, making up 90 percent of the country's carbon sink and storing 10 percent of CO₂ emissions.



Meeting Tomorrow's Challenges

Nitrogen has enabled population growth and global progress over the past century and is critical to a sustainable future. As one of the world's largest producers of nitrogen fertilizer, CF Industries has taken on a daunting but rewarding role of helping ensure food security for people around the world.



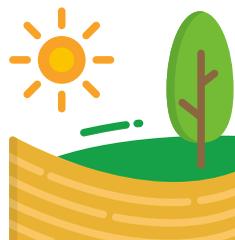
FERTILIZER'S ROLE IN PREVENTING DEFORESTATION

Clearing forests to make way for farmland eliminates trees that remove carbon dioxide from the air. This practice contributes to the global rise in greenhouse gas emissions. Fertilizer helps address this problem by allowing for more crops to be grown on less land, which reduces greenhouse gas emissions by limiting deforestation.



140% INCREASE
in World Grain Harvest

Source: FAOSTAT



7% INCREASE
in Agricultural Land



~30% INCREASE
in Crop Yield Through Synthetic Fertilizer

HELPING FARMLAND FLOURISH

Applying nutrients correctly has a variety of benefits. Most importantly, it creates the best possible conditions for plants to grow.

This increases yields and maximizes growers' productivity. It also minimizes the chances of runoff into water supplies.

That's why CF is committed to helping share knowledge on how to properly manage plant nutrients. In the U.S., we support Field to Market®, which offers a Fieldprint® calculator that estimates field-level performance of sustainability indicators such as land

use, water quality and greenhouse gas emissions. We're also partnering with The Nature Conservancy (TNC) in Iowa to enhance farmers' knowledge of sustainable agricultural practices. TNC has long provided on-the-ground technical assistance to Iowa farmers and partners to implement in-field, edge-of-field and in-stream conservation practices. A substantial grant to TNC from CF is funding a campaign, known as "4R Plus," based on the 4Rs of nutrient

management. The campaign aims to educate 90,000 farmers responsible for 23 million acres of crops, while creating a sustainable agriculture blueprint that can be applied to other states. Throughout the campaign, we're working closely with stakeholders including fertilizer manufacturers and retailers, government, academics, agriculture groups and farmers to advance the overall goal of the Iowa Nutrient Reduction Strategy (INRS):

WHAT IOWA FARMERS TOLD US

30%

Considering new conservation practices in the next three years

37%

Consider cost a barrier to conservation practices

15%

Have heard the term "4R"

1.5%

Could accurately name the 4R components

4R Plus

Applying fertilizers in the most efficient way can help all farmers manage their environmental impact. It also helps them get the best possible return on their investments. Farmers should focus on four things:

RIGHT SOURCE

Matching fertilizer type to what crops need, whether root development, water balance or protein

RIGHT TIME

Applying nutrients at the optimal time, considering soil temperature and weather conditions

RIGHT RATE

Delivering the right amount of fertilizer based on existing levels of other plant nutrients in soil

RIGHT PLACE

Placing fertilizer for maximum uptake by plants to optimize yields

Our campaign with The Nature Conservancy, known as “4R Plus,” is focused on the 4Rs and empowering farmers with tools to implement various conservation practices. For example, planting cover crops in between growing season helps restore lost nutrients to soil. Restoration of oxbow wetlands – streams that become cut off from their channels – reduces nitrates in water and decreases flood risk.

a 45 percent reduction of nitrogen and phosphorus runoff into the state's waters.

During 2016, TNC and CF worked to obtain a baseline of farmer knowledge and attitudes toward nutrient management, the 4Rs and soil health. The results revealed ample opportunities for our campaign to make a difference by enhancing farmers' knowledge.

For example, farmers cited cost as a major barrier to implementing new agronomic and conservation practices, even though applying the 4Rs can help them control costs by purchasing no more fertilizer than necessary and by maximizing yields. Many respondents also were unaware of ways to improve their practices, but described a desire to cultivate healthy soils and leave land in the best possible shape for future generations.

These findings underscore the importance of our work in Iowa and beyond. We look forward to our continued work with TNC to empower farmers – and to improve soil health and minimize environmental impacts in Iowa and beyond.

BEYOND FOOD

Beneficial industrial applications of nitrogen

Our products are the result of chemical reactions, which yield a variety of byproducts. We share these byproducts with manufacturers in other industries – leading to an array of eco-friendly benefits beyond the farm.



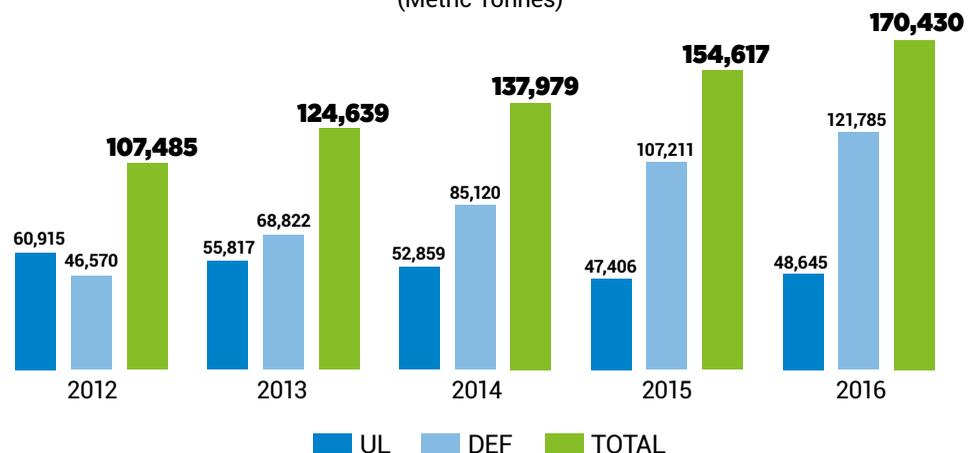
The conversion of urea into diesel exhaust fluid helps reduce NOx emissions of heavy-duty trucks by up to 90 percent and improves fuel efficiency by up to five percent.



NOx abatement solutions for power plants reduce emissions and improve air quality.

ESTIMATED NOx REMOVED BY USING CF UREA PRODUCTS

(Metric Tonnes)



Source: ClimeCo; Internal CF Data



TILX 500822

CAPY 34190 US GAL

CAPY 129 423 L

M901E DFT GR
36" 1W CLASS C W LLS
SPRG D-5
BR BM AAR 24

1005

INNOVATIVE SOLUTIONS

How we're delivering an essential nutrient while minimizing our footprint

Producing nitrogen fertilizer is an energy-intensive process, but one that's indispensable to feeding a growing world. Rather than shying away from progress, we're finding ways to build the safest, cleanest and most technologically advanced nitrogen manufacturing environments in the world.



A SAFER CF

Manufacturing nitrogen fertilizer involves complex chemical processes that demand the highest levels of operational excellence in order to be performed in a safe manner. That’s why we consider safety our highest priority and a foundational strength.

CF’s approach to safety is grounded in our “Do It Right” culture – a motto that means we put safety first, operate our facilities to the highest standards, share knowledge and best practices among teams, and do the right things for the right reasons.

In 2016, we implemented a new comprehensive environmental health and safety (EHS) strategy. The new policy shifts our focus away from avoiding failure and toward achieving safety excellence. It recognizes the three ingredients needed to “Do It Right”: training and systems that teach people the meaning of “Do It Right”; tools and procedures that make “Do It Right” easy; and a safety culture and set of habits that encourage people to “Do It Right” every time they come to work.

A strong safety culture also requires an awareness and understanding of best practices. In 2016, we saw marked improvement in process safety awareness thanks to a revitalized and strengthened Process Safety Council, which is comprised of members from each operating location who discuss emerging topics in process safety. The council’s work has helped spread lessons learned throughout our international network, enhancing process safety across CF.

The Right People

Employees are our most important safety resource, and everyone who works in

our production and distribution facilities receives regular safety, health and process operation training. This includes annual EHS training and testing that focuses on daily operations, as well as hazardous waste operations and emergency response (HAZWOPER) and hazardous materials (HAZMAT). We also work closely with emergency responders and other local officials to develop detailed emergency response plans that extend beyond our physical plants. These measures have paid off. CF scored in the 92nd percentile in a National Safety Council survey, which elicits employee opinions about a broad spectrum of components or elements that contribute to successful safety management.

The Right Network

Another element of safety involves delivering products to our customers efficiently and without incident. This

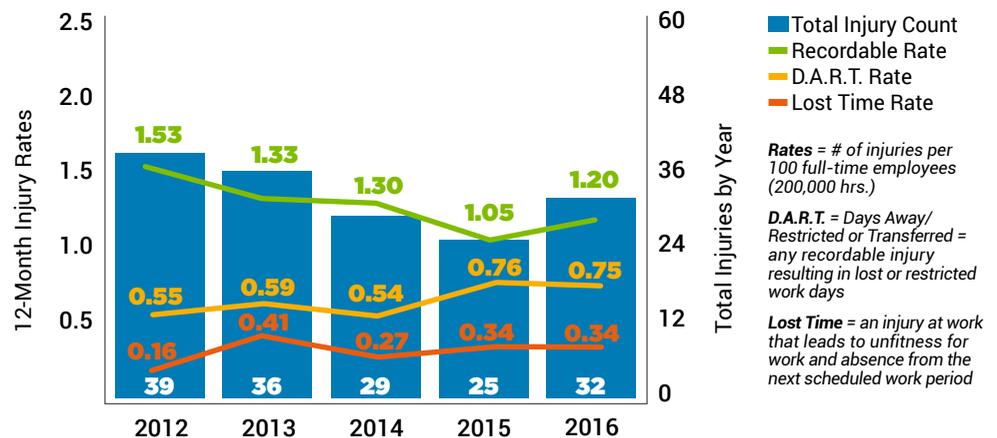
requires attention to the distribution, storage and handling of our products.

Each year, CF ships more than one million tons of anhydrous ammonia, a hazardous material, to customers and distribution facilities by rail. CF received the 2016 Association of American Railroads – Bureau of Explosives Grand Slam Award. This award is given to shippers that have been recognized by at least four Class I North American railroads for zero non-accident releases (NARs) over the calendar year.



To ensure safety of products once at retailers, we have taken a leadership role in ResponsibleAg, an independent nonprofit organization that supports fertilizer retailers’ compliance with federal safety and security storage and handling regulations.

SAFETY PERFORMANCE



Source: Internal CF Data



Recognizing Innovative Ideas

The Stephen R. Wilson Excellence in Safety Program recognizes innovative ideas that enhance safety practices and strengthen our safety culture. A committee of CF employees judges nominated projects on their safety impact, transferability to other sites and potential for long-term implementation and expansion.

The winner of the 2017 Wilson Award is the Courtright Nitrogen Complex in Courtright, Ontario, where employees identified a safer way to find potential faults in electrical equipment that can cause power failures or electrical fires. Previously, personnel conducted scans by opening equipment while wearing protective suits that shielded them from heat — but not from the 35,000 volts running through live cables. Our employees identified a new solution: infrared windows that allow technicians to “see” inside a machine without opening it up. Two hundred windows later, we’ve engineered a serious safety risk out of our operations.

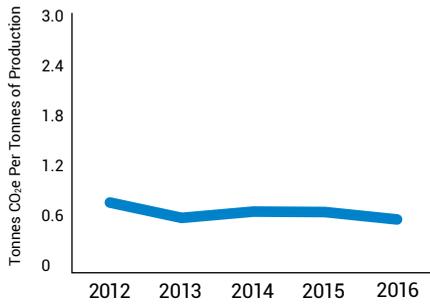


DOING
 MANUFACTURING
 ACTUALLY
 GETTING IT
 RIGHT

CF’s “Do It Right” culture means making the right choices for our employees, contractors, community and the environment. We are proud to operate some of the cleanest and most energy-efficient nitrogen complexes in the world.

This is due in part to our use of natural gas as feedstock, or the raw material used to fuel the chemical reactions, that make our products possible. Manufacturers in China and elsewhere still rely on coal for fuel, which pollutes the air and emits more than twice as much carbon dioxide as natural gas during combustion.

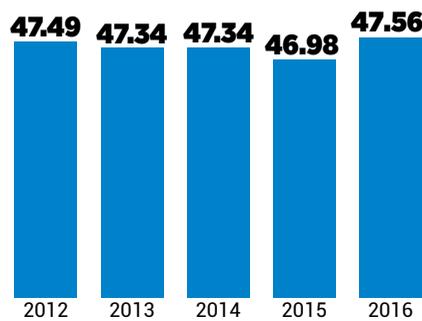
CO₂e EMISSIONS PER PRODUCT TONNE



Source: Internal CF Data; Corporate Greenhouse Gas Inventory Report for CF Industries 2016; Ruby Canyon

NATURAL GAS INTENSITY IN PRODUCTION

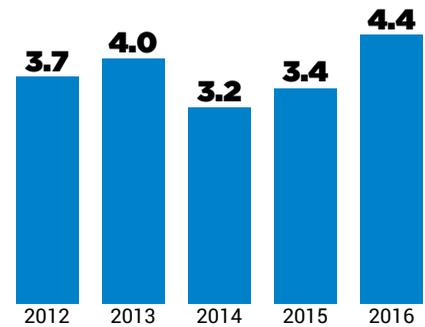
(Million MMBtus/Nutrient Tonne)



Source: Internal CF Data

CO₂ CAPTURE IN UREA PRODUCTION

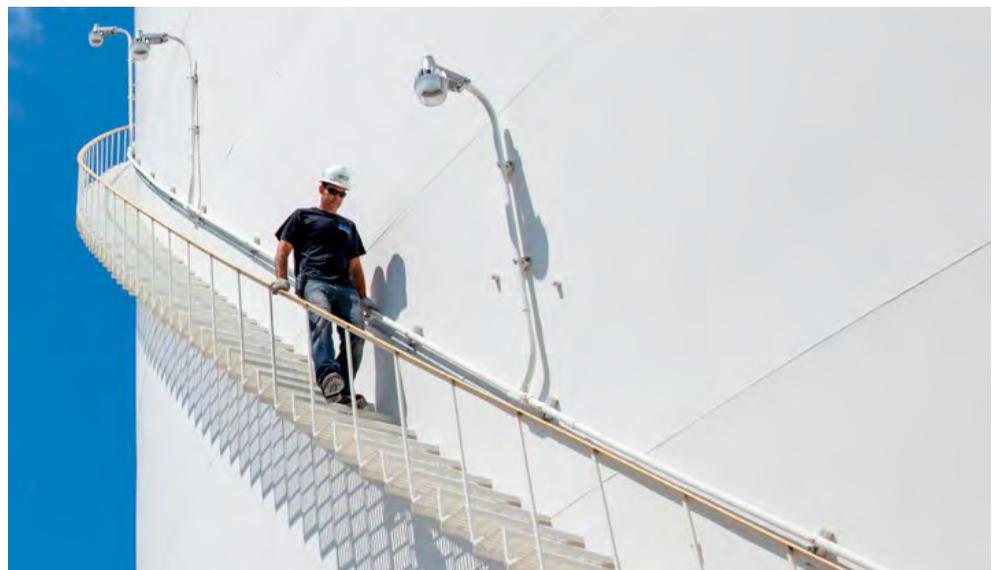
(Million Metric Tonnes)



Source: Internal CF Data

STAYING ACCOUNTABLE FOR OUR COMMITMENTS

Since 2012, our U.K. operations have disclosed the carbon footprints of all of our fertilizers. In 2016, we worked with the U.K. government and the Carbon Trust to recertify all products to the rigorous Publicly Available Standard 2050 (PAS 2050). Certification ensures maximum credibility of our carbon footprints – and increases transparency as we continually seek to lessen our impact.



Natural gas, in contrast, is the cleanest feedstock available for producing nitrogen fertilizer. North America is home to one of the largest and most secure reserves of natural gas in the world. With this resource close at hand, we can provide an efficient supply that North American farmers can count on.

CF also stands out for our smart investments in state-of-the-art technologies, including both additions to new plants and upgrades to our established plants and distribution facilities. For example, our newly built ammonia plant in Donaldsonville, Louisiana, is 10 percent more efficient than the industry benchmark. At our distribution center in the Port Neal

Nitrogen Complex, a new self-service application developed by CF's own software engineers allows drivers to load products into trucks more safely and within weight requirements. This innovation has cut load times in half and reduced engine idling time.

CF has also been an early adopter of safe, energy-efficient and cost-effective manufacturing processes, which strengthen our competitiveness within an energy-intensive, trade-exposed sector, while demonstrating our commitment to environmental stewardship. We've made voluntary investments, for example, in carbon capture and nitrous oxide abatement technologies to reduce greenhouse gas emissions.

A MODEL FOR PLANT EFFICIENCY

Our Courtright Nitrogen Complex in Ontario is a perfect example of how we've combined new technologies, improved practices and environmental stewardship to make a difference. Ontario's only fertilizer manufacturing operation, Courtright is a global leader in nitrogen plant efficiency, performing over 10 percent better than the Canadian average. The plant captures CO₂ both for reintegration into its urea manufacturing process and for sale to other entities, and recycles methane that would otherwise be flared for fuel. In addition, CF has redeveloped over 60 acres of nearby land to serve as a carbon sink. Together, these activities help reduce the amount of CO₂ vented to the atmosphere by more than 200,000 metric tonnes every year.

DO IT RIGHT AT EVERY STEP



1

FEEDSTOCK

Affordable and abundant natural gas is the cleanest raw material and energy source available to produce nitrogen fertilizer.



5

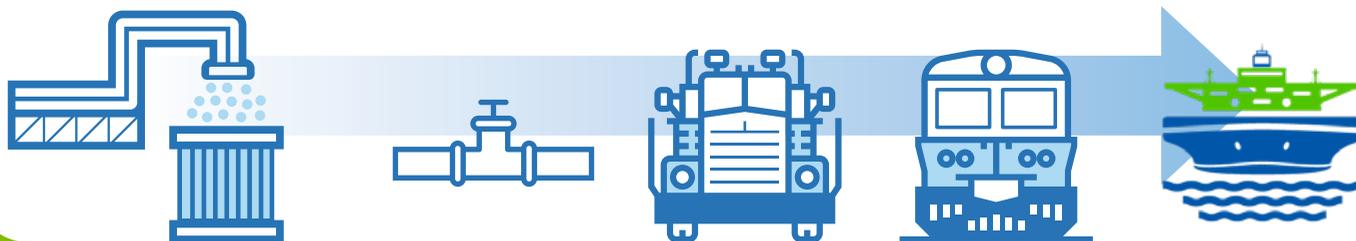
GRANULATION AND PRILLING

Granular urea and other solid fertilizers, such as ammonium nitrate, are produced by milling raw materials mixed with liquid ammonium nitrate.

6

DISTRIBUTION

Finished products are transported to retail distributors using the most efficient form of transportation based on product type, destination location and timing.



From production at large industrial complexes to the application of our product across acres of farmland, we are committed to supplying nitrogen-based fertilizers in a safe and environmentally responsible manner – all to ensure food security for a growing world.

2

AMMONIA PRODUCTION

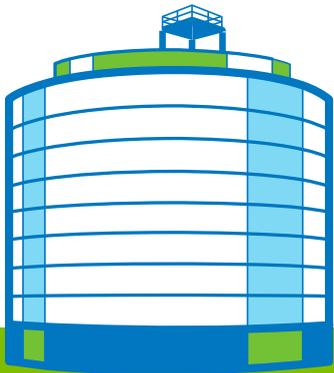
Utilizing the Haber-Bosch process, hydrogen from natural gas and nitrogen from air are reacted under pressure to produce anhydrous ammonia, which is upgraded into a variety of nitrogen fertilizers.



4

AMMONIA STORAGE

Liquid ammonia is stored at -33°C in large insulated tanks, which we inspect regularly through one of the most comprehensive programs in the industry.



3

CARBON CAPTURE

Carbon dioxide, a byproduct of the ammonia manufacturing process, is captured to make urea.

7

RETAIL DISTRIBUTION

Agricultural distributors receive CF fertilizer products and remarket them to their farmer customers. CF promotes responsible handling of products by agribusinesses through its support of the ResponsibleAg program.



8

FARM APPLICATION

Farmers apply nitrogen-based fertilizers to maintain soil health and increase crop yield. CF is committed to environmentally responsible agricultural practices through its partnership with The Nature Conservancy and the 4R Plus program.



CORPORATE SOCIAL RESPONSIBILITY AT CF

ABOUT CF INDUSTRIES

CF Industries is a global leader in the manufacturing and distribution of nitrogen products, serving both agricultural and industrial customers. We operate world-class nitrogen manufacturing complexes in the central United States, Canada and the United Kingdom, and distribute plant nutrients through a system of terminals, warehouses and associated transportation equipment located primarily in the Midwestern United States. CF also owns a 50 percent interest in an ammonia facility in the Republic of Trinidad and Tobago. We are headquartered in Deerfield, Illinois. Public since 2005, we trade on the New York Stock Exchange under the ticker symbol "CF."

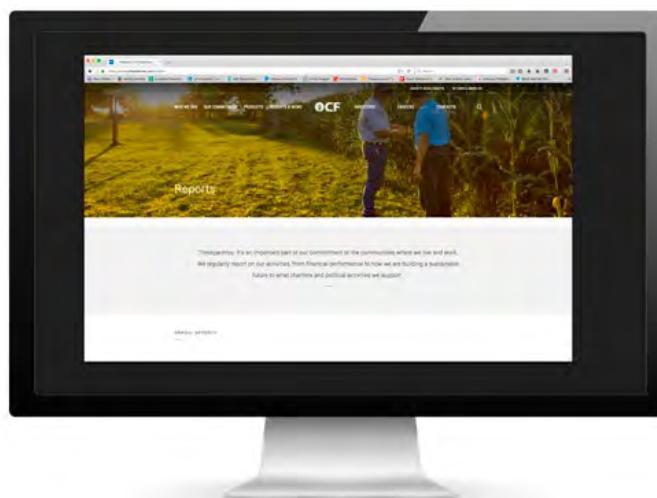
CORPORATE GOVERNANCE

CF Industries is committed to implementing sound corporate governance practices that enhance the effectiveness of our Board and management, and engaging with our shareholders on matters of corporate governance.

- 9 of 10 Directors are Independent
- Independent Chairman of the Board and Separate Chief Executive Officer
- Declassified Board, Members Elected Annually for One-Year Term
- Consider Diversity in Identifying Nominees for Director; Women Comprise 20% of the Board
- Majority Voting for Directors in Uncontested Elections
- Proxy Access
- Policy on Adoption of a Stockholder Rights Plan
- Independent Directors Meet Regularly in Executive Session
- Stock Ownership Requirements for Directors and Executive Officers
- Annual Board and Committee Self-Evaluations
- Stockholder Ability to Call Special Meeting
- No Supermajority Voting Provisions in Charter or Bylaws
- Publish an Annual Sustainability Report and Report Twice Per Year on the Company's Political Contributions

POLITICAL AND TRADE ASSOCIATION PARTICIPATION

CF is involved in lobbying and advocacy both on our own and through trade associations. You can learn more at www.cfindustries.com/reports.



Stakeholder Engagement

We believe in fostering open communication with all key stakeholders in our business. We do so by understanding the issues and topics that are most important to each group of stakeholders and ensuring that the appropriate channels are in place to facilitate ongoing communication.

INVESTORS

Key Interests

- Business Performance
- Commodity Market Trends
- Regulatory Risks
- Corporate Governance

Engagement

- Quarterly Conference Calls
- Analyst & Investor Conferences
- SEC Reporting
- Senior Management Meetings

COMMUNITY MEMBERS

Key Interests

- Business Stability
- Job Creation
- Community Safety
- Local Economic Development
- Environmental

Engagement

- Community Advisory Panels
- Safety Training for First Responders
- Employee Volunteerism
- Civic Associations



FARMERS

Key Interests

- Farm Profitability
- Crop Yield
- Soil Quality
- Conservation

Engagement

- 4R Plus Campaign
- Agronomic Testing Services
- Field to Market®
- ResponsibleAg

CUSTOMERS

Key Interests

- Quality & Reliability
- Industry-Leading Distribution
- Logistics Capabilities

Engagement

- Plants to Farm Process
- Advice & Planning Services
- World-Class Sales & Marketing



EMPLOYEES

Key Interests

- Operational Safety
- Business Stability
- Compensation & Benefits
- Professional Training

Engagement

- Employee Surveys
- Employee Newsletter
- Performance Reviews
- Facility Meetings

GRI INDEX

We issue our Corporate Sustainability Report on an annual basis. This report presents data for the year ended December 31, 2016, and covers environmental, social and governance issues most material to our key stakeholders and to the long-term success of our business.

Our key material issues are:

- Energy, Emissions & Climate Change
- Food Security
- Environmental Impacts of our Products
- Environmental Compliance
- Employee Health & Safety
- Training & Development
- Local Economic Impact
- Community Performance
- Public Policy
- Ethics

General Standard Disclosures

STANDARD DISCLOSURE	STANDARD DISCLOSURE TITLE	RESPONSE
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STRATEGY AND ANALYSIS

G4-1	Provide a statement from the most senior decision-maker of the organization.	CEO Q&A
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ORGANIZATIONAL PROFILE

G4-3	Report the name of the organization.	Corporate Social Responsibility at CF – About CF Industries
G4-4	Report the primary brands, products, and services.	Corporate Social Responsibility at CF – About CF Industries 10-K, page 1
G4-5	Report the location of the organization's headquarters.	Corporate Social Responsibility at CF – About CF Industries
G4-6	Report the number of countries where the organization operates.	Corporate Social Responsibility at CF – About CF Industries 10-K, page 1
G4-7	Report the nature of ownership and legal form.	Corporate Social Responsibility at CF – About CF Industries
G4-8	Report the markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries).	Corporate Social Responsibility at CF – About CF Industries 10-K, pages 1, 2, 7, 134

STANDARD DISCLOSURE	STANDARD DISCLOSURE TITLE	RESPONSE
G4-9	Report the scale of the organization.	Annual Report, page 22
G4-10	Breakdown of Employee Type.	Active Employees as of July 1, 2017 Manufacturing: 2,114 Distribution Facilities: 306 EHS, Sales & Administration: 547 North America and U.K. Total: 2,967
G4-11	Report the percentage of total employees covered by collective bargaining agreements.	Approximately 18 percent of our total employees are covered by collective bargaining agreements.
G4-12	Describe the organization's supply chain.	10-K, page 6
G4-13	Report any significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain.	10-K, pages 1-2
G4-14	Report whether and how the precautionary approach or principle is addressed by the organization.	CF does not follow the precautionary approach, but has a comprehensive internal risk management program in place.
G4-15	List externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses.	ResponsibleAg, Protect and Sustain, 4R Nutrient Stewardship, Carbon Trust, OSHA VPP, Field to Market®.
G4-16	List memberships of associations (such as industry associations) and national or international advocacy organizations in which the organization: <ul style="list-style-type: none"> – Holds a position on the governance body – Participates in projects or committees – Provides substantive funding beyond routine membership dues – Views membership as strategic 	Corporate Social Responsibility at CF – Political and Trade Association Participation.
IDENTIFIED MATERIAL ASPECTS AND BOUNDARIES		
G4-17	List all entities included in the organization's consolidated financial statements or equivalent documents.	10-K, page 1; 10-K, Exhibit 21
G4-18	Explain the process for defining the report content and the Aspect Boundaries.	The content of this report has been compiled based upon a review and analysis of industry material issues; benchmarking against industry peers; engaging regularly with our stakeholders; and surveying GRI reporting recommendations.

STANDARD DISCLOSURE	STANDARD DISCLOSURE TITLE	RESPONSE																																																							
G4-19	List all the material Aspects identified in the process for defining report content.	<table border="1"> <thead> <tr> <th>ISSUE</th> <th>GRI ASPECT(S)</th> <th>INTERNAL</th> <th>EXTERNAL</th> <th>BOUNDARY</th> </tr> </thead> <tbody> <tr> <td>Energy, Emissions & Climate Change</td> <td>- Energy - Emissions</td> <td>X</td> <td>X</td> <td>Global</td> </tr> <tr> <td>Food Security</td> <td>N/A</td> <td></td> <td>X</td> <td>Global</td> </tr> <tr> <td>Environmental Impacts of Products</td> <td>- Products and Services</td> <td></td> <td>X</td> <td>Global</td> </tr> <tr> <td>Environmental Compliance</td> <td>- Environmental Grievance Mechanisms</td> <td>X</td> <td>X</td> <td>Global</td> </tr> <tr> <td>Employee Health & Safety</td> <td>- Occupational Health & Safety</td> <td>X</td> <td></td> <td>Global</td> </tr> <tr> <td>Training & Development</td> <td>- Training and Education</td> <td>X</td> <td></td> <td>Global</td> </tr> <tr> <td>Local Economic Impact</td> <td>- Local Communities</td> <td></td> <td>X</td> <td>Global</td> </tr> <tr> <td>Community Performance</td> <td>- Economic Performance - Market Presence - Indirect Economic Impacts</td> <td></td> <td>X</td> <td>Global</td> </tr> <tr> <td>Public Policy</td> <td>- Public Policy</td> <td></td> <td>X</td> <td>Global</td> </tr> <tr> <td>Ethics</td> <td>- Compliance</td> <td>X</td> <td></td> <td>Global</td> </tr> </tbody> </table>	ISSUE	GRI ASPECT(S)	INTERNAL	EXTERNAL	BOUNDARY	Energy, Emissions & Climate Change	- Energy - Emissions	X	X	Global	Food Security	N/A		X	Global	Environmental Impacts of Products	- Products and Services		X	Global	Environmental Compliance	- Environmental Grievance Mechanisms	X	X	Global	Employee Health & Safety	- Occupational Health & Safety	X		Global	Training & Development	- Training and Education	X		Global	Local Economic Impact	- Local Communities		X	Global	Community Performance	- Economic Performance - Market Presence - Indirect Economic Impacts		X	Global	Public Policy	- Public Policy		X	Global	Ethics	- Compliance	X		Global
		ISSUE	GRI ASPECT(S)	INTERNAL	EXTERNAL	BOUNDARY																																																			
		Energy, Emissions & Climate Change	- Energy - Emissions	X	X	Global																																																			
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		Environmental Compliance	- Environmental Grievance Mechanisms	X	X	Global																																																			
		Employee Health & Safety	- Occupational Health & Safety	X		Global																																																			
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Public Policy	- Public Policy		X	Global																																																					
Ethics	- Compliance	X		Global																																																					
G4-20	For each material Aspect, report the Aspect Boundary within the organization.																																																								
G4-21	For each material Aspect, report the Aspect Boundary outside the organization.																																																								
G4-22	Report the effect of any restatements of information provided in previous reports, and the reasons for such restatements.	No restatements.																																																							
G4-23	Report significant changes from previous reporting periods in the Scope and Aspect Boundaries.	There have been no significant changes from previous reporting periods.																																																							

STAKEHOLDER ENGAGEMENT

G4-24	Provide a list of stakeholder groups engaged by the organization.	Corporate Social Responsibility at CF – Stakeholder Engagement
G4-25	Report the basis for identification and selection of stakeholders with whom to engage.	We identify relevant stakeholders as those individuals and/or groups that our people, plants, and products impact directly. We also take into consideration the entire life cycle of our products even though we may not be directly responsible for impacts in the downstream value chain.
G4-26	Report the organization's approach to stakeholder engagement.	Corporate Social Responsibility at CF – Stakeholder Engagement
G4-27	Report key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns.	Corporate Social Responsibility at CF – Stakeholder Engagement

REPORT PROFILE

G4-28	Reporting period for information provided.	January 1, 2016 – December 31, 2016
G4-29	Date of most recent previous report.	2015
G4-30	Reporting cycle.	Annual

STANDARD DISCLOSURE	STANDARD DISCLOSURE TITLE	RESPONSE
G4-31	Provide the contact point for questions regarding the report or its contents.	corp_communications@cfindustries.com
G4-32	Report the 'in accordance' option the organization has chosen.	Core
G4-33	Report the organization's policy and current practice with regard to seeking external assurance for the report.	We do not seek external assurance for this report currently.

GOVERNANCE

G4-34	Report the governance structure of the organization, including committees of the highest governance body. Identify any committees responsible for decision-making on economic, environmental and social impacts.	Corporate Social Responsibility at CF – Corporate Governance Proxy Statement, pages 11-17
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ETHICS AND INTEGRITY

G4-56	Describe the organization's values, principles, standards, and norms of behavior such as codes of conduct and codes of ethics.	Our Values (https://www.cfindustries.com/who-we-are/our-values); Code of Corporate Conduct (https://www.cfindustries.com/who-we-are)
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Specific Standard Disclosures

STANDARD DISCLOSURE

CATEGORY: ECONOMIC

ASPECT: ECONOMIC PERFORMANCE

G4-DMA	Generic Disclosures on Management Approach	Annual Report, pages 9-11
G4-EC1	Direct economic value generated and distributed	Annual Report, pages 23-24
G4-EC3	Coverage of the organization's defined benefit plan obligations	10-K, pages 67, 102-109

ASPECT: MARKET PRESENCE

G4-DMA	Generic Disclosures on Management Approach	Local Solutions
G4-EC5	Ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation	The majority of our operations are located within the United States, where the federal minimum wage is \$7.25. Starting salaries for operators at our plants average \$47,000 per year, and with full certification, increase to \$75,000 per year.

ASPECT: INDIRECT ECONOMIC IMPACTS

G4-DMA	Generic Disclosures on Management Approach	Local Solutions
G4-EC7	Development and impact of infrastructure investments and services supported	Local Solutions
G4-EC8	Significant indirect economic impacts, including the extent of impacts	Local Solutions

CATEGORY: ENVIRONMENTAL

ASPECT: ENERGY

G4-DMA	Generic Disclosures on Management Approach	Innovative Solutions
G4-EN3	Energy consumption within the organization	293,905,671 Net MMBtus

STANDARD DISCLOSURE	STANDARD DISCLOSURE TITLE	RESPONSE
ASPECT: EMISSIONS		
G4-DMA	Generic Disclosures on Management Approach	Innovative Solutions
G4-EN15	Direct greenhouse gas (GHG) emissions (Scope 1)	Scope 1 emissions were 15,406,217 tonnes CO2e
G4-EN16	Energy indirect greenhouse gas (GHG) emissions (Scope 2)	Scope 2 emissions were 983,139 tonnes CO2e
G4-EN18	Greenhouse gas (GHG) emissions intensity	Innovative Solutions
ASPECT: PRODUCTS AND SERVICES		
G4-DMA	Generic Disclosures on Management Approach	Soil Solutions
G4-EN27	Extent of impact mitigation of environmental impacts of products and services	CEO Q&A Soil Solutions
ASPECT: COMPLIANCE		
G4-DMA	Generic Disclosures on Management Approach	Soil Solutions
G4-EN29	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	10-K, pages 26-27, 129-131
ASPECT: ENVIRONMENTAL GRIEVANCE MECHANISMS		
G4-DMA	Generic Disclosures on Management Approach	Soil Solutions
G4-EN34	Number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms	10-K, pages 8-10, 26-27, 129-131
CATEGORY: SOCIAL		
SUB-CATEGORY: LABOR PRACTICES AND DECENT WORK		
ASPECT: EMPLOYMENT		
G4-DMA	Generic Disclosures on Management Approach	Local Solutions
G4-LA1	Total number and rates of new employee hires and employee turnover by age group, gender and region	In 2016, we hired 182 new employees. Total turnover was 207, of which 158 were voluntary from reasons such as retirements.
G4-LA2	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation	Local Solutions
ASPECT: OCCUPATIONAL HEALTH AND SAFETY		
G4-DMA	Generic Disclosures on Management Approach	Innovative Solutions
G4-LA6	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	Innovative Solutions
ASPECT: TRAINING AND EDUCATION		
G4-DMA	Generic Disclosures on Management Approach	Local Solutions

STANDARD DISCLOSURE	STANDARD DISCLOSURE TITLE	RESPONSE
G4-LA9	Average hours of training per year per employee by gender, and by employee category	Local Solutions
G4-LA10	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	Local Solutions
G4-LA11	Percentage of employees receiving regular performance and career development reviews, by gender and by employee category	All employees receive regular performance and career development reviews.

SUB-CATEGORY: SOCIETY

ASPECT: LOCAL COMMUNITIES

G4-DMA	Generic Disclosures on Management Approach	Local Solutions
G4-S01	Percentage of operations with implemented local community engagement, impact assessments, and development programs	All of our facilities have ongoing local community engagement programs in place.

ASPECT: ANTI-CORRUPTION

G4-DMA	Generic Disclosures on Management Approach	Our Values (https://www.cfindustries.com/who-we-are/our-values) Code of Corporate Conduct (https://www.cfindustries.com/who-we-are)
G4-S04	Communication and training on anti-corruption policies and procedures	Provide annual training on anti-corruption and corporate code of conduct.

ASPECT: PUBLIC POLICY

G4-DMA	Generic Disclosures on Management Approach	Corporate Social Responsibility at CF
G4-S06	Total value of political contributions by country and recipient/beneficiary	Political Contributions Report

PRODUCTION LOCATIONS

BILLINGHAM MANUFACTURING FACILITY

Billingham, UK

COURTRIGHT NITROGEN FACILITY

Courtright, Ontario, Canada

DONALDSONVILLE NITROGEN FACILITY

Donaldsonville, LA

INCE MANUFACTURING FACILITY

Ince, UK

MEDICINE HAT NITROGEN FACILITY

Medicine Hat, Alberta, Canada

PORT NEAL NITROGEN FACILITY

Sergeant Bluff, IA

VERDIGRIS NITROGEN FACILITY

Claremore, OK

WOODWARD NITROGEN FACILITY

Woodward, OK

YAZOO CITY NITROGEN FACILITY

Yazoo City, MS



We welcome comments and questions about this report and sustainability at CF Industries. Please send inquiries to corp_communications@cfindustries.com.

OUR MISSION

CF Industries is a leader in an industry whose mission is fundamental to human survival: putting food on the world's table. By providing plant nutrients to farmers, we feed the crops that feed the world. We are proud of the role our company plays in fulfilling this increasingly challenging mission.

FORWARD-LOOKING STATEMENTS

Certain statements and other information contained in this report constitute "forward-looking statements." These statements are typically identified by the words "anticipate," "believe," "could," "estimate," "expect," "intend," "may," "plan," "predict," "project," and similar terms and phrases, including references to assumptions. These forward-looking statements are not guarantees of future performance and 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 statements. We want to caution you not to place undue reliance on any forward-looking statements. More detailed information about factors that may affect our performance may be found in our filings with the Securities and Exchange Commission, including our most recent periodic reports filed on Form 10-K and Form 10-Q, which are available in the Investor Relations section of the CF Industries website. Forward-looking statements are given only as of the date of this report, and we disclaim any obligation to update or revise the forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.



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