

# CULTIVATING

2018 Sustainability Report



### **MESSAGE**

from our Chief Executive Officer

# Our Journey to An Agricultural Sciences Company

During the last 10 years, we took several important actions to transform FMC from a highly diversified chemical company into an enterprise focused on crop protection. We launched a Plant Health platform that extended our portfolio into crop nutrition, seed treatment and biologicals; we increased investments in technology and R&D to strengthen and expand our product pipeline; we opened new innovation centers around the world; and we made several strategic acquisitions to broaden our agricultural sciences business.

Acquiring DuPont's crop protection assets in late 2017 was a final, critical step in our journey. Following the transaction, we moved quickly to integrate the regional commercial teams, R&D, regulatory and other functions. We have been very pleased with the pace and results of our integration efforts.

#### **FMC Values**

In a year marked with integration-related changes, our employees remained true to what makes FMC a special company. Our six Core Values define who we are and how we do business: Integrity, Safety,

> Rapeseed (Canola), Brassica napus

Sustainability, Respect for People, Agility and Customer Centricity. Collectively, these values guide us as individuals and as a team of 6,500 people around the world. You can learn more about our Core Values in this report and at **FMC.com**. I will comment briefly on three of them.

**Safety** remains paramount at FMC, and employees continue to demonstrate their commitment to a safe and secure workplace. We ended 2018 with an injury rate of 0.11, the lowest rate ever for FMC. Our employees believe that a zero-injury workplace is highly achievable, and they are committed to proving it every day.

**Sustainability**, a core value at both FMC and at the acquired DuPont crop protection business, continues to inform and guide our company. As you will read in this report, we focus primarily on three areas:

- Creating innovative solutions while preserving the environment for tomorrow.
- Making a positive impact on the communities where we live and work.
- Stewarding the responsible use of our products.

Respect for People is a business imperative at FMC. We embrace, leverage and respect the diversity of our workforce, our customers and our communities. In 2018, we created a new senior leadership role to oversee Diversity and Inclusion to ensure we have strategic focus on driving actions that foster an inclusive culture.

#### **Separating the Lithium Business**

Our Lithium business began trading as Livent Corporation on the New York Stock Exchange on October 11, 2018. Full separation of Livent was completed in March 2019. We wish our Livent colleagues continued success as an independent company.

#### **Growing Our Future**

Today's FMC has the right technologies, products, market focus and global infrastructure to grow to a \$6 billion crop protection leader by 2023, focused on advanced synthetic chemistries and biologicals. We will



invest nearly \$2 billion in R&D over the next five years and expect to grow our company more than twice the anticipated growth rate of the crop protection market during the same period.

We have made great progress to transform FMC into an agricultural sciences company. All of us are proud to be a part of this next exciting chapter.



Pierre R. Brondeau
Chief Executive Officer and Chairman of the Board
FMC CORPORATION

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#### GLOBAL REPORTING INITIATIVE

This report and our web-based content at **www.FMCsustainability.com** has been prepared in accordance with the GRI Standards: Core option. Please find the detailed GRI Content Index on the website.

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#### **EXPLORE FMCSUSTAINABILITY.COM**

We invite you to explore our website for more information and data that highlight how we are Cultivating Tomorrow through our commitment to sustainability. The online data center lets you visualize and interact with our data to understand FMC's impacts. You can explore our resources to access FMC reports and videos related to our sustainability programs as well as FMC policies and statements on several important topics including climate change, Sustainable Development Goals (SDGs), human rights, supplier code of conduct and animal welfare.

# ORGANIZATIONAL PROFILE

# FMC CORPORATION: AN AGRICULTURAL SCIENCES COMPANY

FMC has transformed from a highly diversified chemical company into an enterprise focused on crop protection.

Acquiring DuPont's Crop Protection assets was the largest transaction in FMC's history, transforming our product portfolio. The acquisition returned our company to discovery research, expanded our innovation infrastructure, strengthened our R&D pipeline and significantly enhanced our capabilities to develop proprietary active ingredients.

#### **FMC LITHIUM**

The Lithium business began trading as Livent
Corporation on the New York Stock Exchange on
October 11, 2018. The successful Initial Public Offering of
approximately 16 percent of Livent was the culmination
of intensive year-long preparations. Full separation of

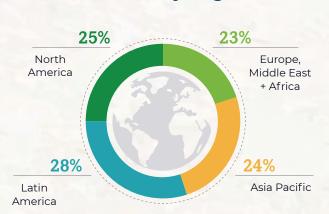


Livent through a spinoff of the remaining approximately 84 percent to FMC shareholders in the form of a dividend of Livent shares was completed in March 2019.

# FMC REPORTING AND CONSOLIDATION PRINCIPLES

The environmental and safety data in this report include all sites under FMC's operational control in the 2018 calendar year, including Lithium sites and sites acquired from DuPont in 2017 as well as environmental data supplied by active ingredient contract manufacturers (except where noted).

#### Revenue by Region



# 2018 Financial Performance Summary

For the year ending December 31, 2018, FMC Corporation recorded the following results:



#### **FMC AGRICULTURAL SOLUTIONS**

- · Full-year segment revenue: \$4.3 billion
- Full-year segment EBITDA: \$1.2 billion



#### **FMC LITHIUM**

- Full-year segment revenue: \$443 million
- Full-year segment EBITDA: \$196 million

\$4.7

ANNUAL
SALES
(billions)

\$**1.3** 

ADJUSTED EBITDA (billions) \$6.29

EARNINGS

Per Share

**16.6**\*%

RETURN ON INVESTED CAPITAL

\$3.69

GAAP EARNINGS Per Share **\$512** 

GAAP NET INCOME (millions)

\*Represents a Non-GAAP financial term. For definitions and other information, please refer to our website.

# **UPDATE ON OUR GOALS**

Progress on our goals reported below reflects only legacy FMC Agricultural Solutions entities (except where noted). New sustainability goals will be announced in 2019 and will be inclusive of both legacy FMC and DuPont.



#### INNOVATION:

80% R&D spend on developing sustainable products

87% 2018 PROGRESS

#### SAFETY:

TRIR\* of 0.3

**0.11** 2018 PROGRESS

#### **COMMUNITY ENGAGEMENT:**

Achieve 100 on the CE Index

90 2018 PROGRESS



METRIC	2025 GOAL (vs. 2013 Baseline)	2018 RESULTS
Energy Intensity	<b>↓ 15</b> %	<b>↓ 18</b> %
Greenhouse Gas (GHG) Emissions Intensity	<b>↓</b> 15%	<b>↓ 12%</b>
Waste Disposed Intensity	<b>↓</b> 15%	<b>↓ 29</b> %
Water Intensity in High Risk Locations	<b>↓ 20%</b>	<b>↓ 25</b> %

2018 Progress toward
the United Nations
Sustainable Development
Goals (SDGs) ▶

UN	ITED NATIONS SDG	FMC INITIATIVES
2 ZERO HUNGER	SDG 2 – Zero Hunger	<ul> <li>Products that increase crop yields</li> <li>Products that ensure a quality food supply</li> <li>Technologies that contribute to resilient agricultural practices</li> </ul>
15 UFF ON LAND	SDG 15 – Life on Land	<ul> <li>Technologies that save water and fuel and reduce GHG emissions and soil compaction</li> <li>Products that increase crop yields thus preserving land from being converted to farmland</li> <li>Targeted and low application products</li> <li>Biological products</li> <li>Continued commitment to R&amp;D spending on developing sustainable products</li> </ul>

<sup>\*</sup>Includes safety data from newly acquired sites

# Progress Report on our 2018 Commitments

completed in progress not started yet postponed

- Align FMC's approach to the Major Global Challenges with the UN SDGs and prioritize two of the goals to ensure we make positive impact.
- Merge product stewardship and sustainability assessment tools from FMC and DuPont's Crop Protection businesses to ensure sustainable innovation of new products.
- Conduct pre-assurance of key environmental and safety data from newly acquired DuPont sites as part of integration.
- Implement pilot employee engagement programs in Asia to help embed sustainability in everyday activities across our global offices.

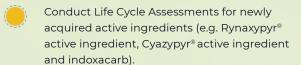
- Reset innovation, business practice and operations goals and targets as FMC Agricultural Solutions and Lithium become two separate businesses as we continue our sustainability journey.
- Continue to measure our global logistics footprint to better understand and reduce our impacts and risks.
- Complete sustainability training for Lithium and North America Agricultural Solutions commercial teams, providing sustainability tools and resources they can use with our customers.
- Continue utilizing the External Sustainability
  Advisory Council to help shape FMC's global
  sustainability strategy.

- Expand the Diversity and Inclusion plan to promote talent development and increased employee engagement.
- Reduce FMC's non-renewable energy dependency by exploring options for renewable energy sourcing.
- Implement a sustainability program for the Lithium business as it continues its progress as a standalone company.
- Conduct Life Cycle Assessments of lithium hydroxide to better inform our customers of the advantages of FMC supply.

#### 2019 Commitments

- Update innovation, business practice and operations goals and targets for FMC.
- Continue utilizing the External Sustainability Advisory Council to help shape FMC's global sustainability strategy.
- Continue to measure our global logistics footprint to better understand and reduce our impacts and risks.
- Support Diversity and Inclusion efforts both internally (through Employee Resource Groups) and externally (through corporate affiliate groups and academia).

- Reduce FMC's non-renewable energy dependency by exploring options for renewable energy sourcing.
- Identify opportunities to improve our sustainability reporting in line with CDP (formerly Carbon Disclosure Project) and other reporting frameworks.
- Incorporate sustainability matrices in the Capital Deployment Plan.
- ( ) Conduct initial Scope 3 GHG emissions assessment.





# Q+A

with Mark Douglas, our President and Chief Operating Officer

# How are you integrating sustainability into FMC's strategic growth plan?

Sustainability is a core value for FMC. We are growing the company at a strong rate, and we're doing it with sustainable development at the forefront. Our singular focus on agricultural sciences means that FMC can further impact the United Nations Sustainable Development Goal of "zero hunger." Every day, our teams work to deliver solutions to farmers that help them protect and increase their crop yields.

# Are you resetting your sustainability goals now that you're a focused Agricultural Sciences company?

I am very proud of the progress we've made on our innovation, safety, community engagement and environmental goals over the past four years. For example, we've significantly reduced our environmental footprint from our manufacturing sites and we're committed to continuing to drive improvement.

Over the past several months we have been working to update our sustainability targets to reflect the long-term goals of our new business and product portfolio. We will be announcing our new 2025 and 2030 targets later in 2019.

# How is climate change affecting your business and how are you addressing it?

We see that global weather patterns are different and more extreme than what growers have experienced over past generations. The extremes of flooding and drought are impacting our growers more frequently, and pest pressures are also shifting as a result.

To support growers' changing needs, we carefully track pest pressures to facilitate products that can help with emerging diseases and pests. For example, we have years of historical data about how soybean rust is evolving in Brazil, which is immensely valuable in our efforts to combat that damaging disease in all parts of the world.

# How does FMC help smallholder farmers be successful?

Farmers all over the world use our portfolio of products containing Rynaxypyr® active ingredient. These products are highly effective at controlling some of the most damaging pests, like stem borers and leaf miners that can devastate crops on a small farm in a very short

Mark Douglas
President and Chief Operating Officer
FMC CORPORATION

amount of time. Through Rynaxypyr® active ingredient use, smallholder farmers have had life-changing crop yield increases, in some cases allowing them to build new homes for their families and invest in the future of their farms.

I look forward to partnering with smallholder farmers as we introduce new precision agriculture crop protection solutions. Many of the emerging technologies will enable growers to be much more efficient with their time and resources, which can make a major difference in a family's farm income and quality of life.

# What do you see in the future of agriculture?

Emerging technologies in precision agriculture offer growers highly detailed data about their fields, allowing them to make better informed and more customized decisions than ever before. I'm excited about the future of biological crop protection and plant health. Farmers are increasingly able to augment their synthetic crop protection programs with biological options that are highly selective, and support resistance management and sustainable agriculture.



FMC is a company driven by innovation and committed to discovering new active ingredients, product formulations and application technologies. We are guided by core business principles:

- Discover and develop sustainable technology to solve evolving crop protection needs.
- 2 Commit to exceed customer expectations through collaboration, speed and agility.
- 3 Doing business with us should be simple and easy.
- 4 Operate with strict financial rigor for the benefit of our customers, employees and investors.

#### INTEGRATION OF FMC & DUPONT

Throughout 2018 we continued to integrate business processes, commercial teams and various functions from both legacy FMC and DuPont. Integration efforts focused on pace of work, breadth and depth of roles and combining our complementary strengths around marketing and customer intimacy.

A working team of senior leaders across the company developed our core values and behaviors based on the input gathered through a cultural assessment survey from employees of both legacy FMC and DuPont. Senior leaders gathered small groups of employees, including change champions across the world, to get feedback on how the values and behaviors would resonate with our workforce. We have developed a 2019 plan to communicate with and engage employees on our core values as part of the new FMC narrative.

#### **Our Core Values and Behaviors**

FMC's core values and behaviors are the foundation of our organization.



#### **INTEGRITY**

- We do things the right way ethically and in compliance with laws – regardless of circumstances
- We keep our commitments, building trust with customers, shareholders, the community and each other
- We take responsibility for our actions, regardless of the outcome

PEOPLE

We empower informed risk-taking,

We develop the knowledge and

their careers and our customers

from mistakes

celebrating successes and learning

abilities of our people to best serve

We create an inclusive environment

experiences are key to our success

where diverse views, backgrounds and

RESPECT FOR



#### SAFETY

- Every action we take is guided by our TH!NK. SAFE. Manifesto
- We empower employees to always put safety first
- We help others to be safe

   at work, at home and on the road



#### SUSTAINABILITY

- We create innovative solutions while preserving the environment for tomorrow
- We make a positive impact on the communities where we live and work
- We steward the responsible use of our products



#### **AGILITY**

- We are action-oriented, delivering results without sacrificing safety or quality
- We pursue continuous innovation not only in our products and processes, but in the experiences we deliver
- · We are collaborative, fast and nimble



# **CUSTOMER CENTRICITY**

- We cultivate long-term customer relationships and put their needs at the center of everything we do
- We understand our customers' business, and provide solutions to their most pressing challenges
- We measure our success in terms of our customers' success

Over the next five years, we will succeed by focusing on five priorities:



#### **TECHNOLOGY**

Aggressively promote our current portfolio and accelerate new active ingredients and formulations to meet growers' evolving needs



# FOCUS ON CHEMISTRY

Invest significantly in R&D to discover and develop new technologies in chemical and biological crop protection



# MARKET-DRIVEN INNOVATION

Engage customers and partners to identify, develop and deliver solutions that meet the unique needs of a specific region or country



# EMPOWERED COUNTRIES

Operate a globally aligned, regionally focused business model where local commercial strategy and execution is directed at the region- and country-level



#### **SIMPLICITY**

Ensure our tools, processes and organizational structure allow us to be agile, efficient and easy to do business with

# RESULTS OF OUR 2018 MATERIALITY ASSESSMENT

The results of our materiality assessment which define topics that are most important for our agricultural business are indicated in the matrix to the right. This assessment was accomplished through a series of interviews, meetings and surveys with internal and external stakeholders. Internal stakeholders included people from the following groups: executives, legal counsel, environment, health and safety, commercial, human resources, enterprise risk, finance, sustainability, procurement, facilities and communications. External stakeholders included representatives from customers, academia, investors, consultants, government, trade associations and non-government organizations. We analyzed 32 potential material topics grouped into the five categories (marketplace, operations, workplace, environment and community).

#### **FMC Materiality Assessment**





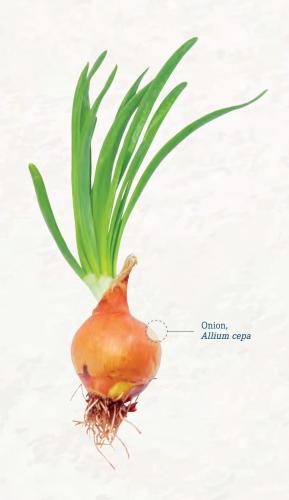
# The key topics indicated in the top right section of the matrix were identified as the most important for FMC with both strong internal and external stakeholder alignment. Throughout this report, details are provided on actions we are taking to positively impact these topics.

#### TOPIC CATEGORIES

- Marketplace
- Operations
- Workplace
- Environment
- Community

#### STAKEHOLDER ENGAGEMENT

Stakeholder engagement is essential to identify important initiatives, issues and trends for FMC. We regularly meet with several stakeholder groups. Taking their feedback into account is vital as FMC continues to evolve and grow. The table to the right indicates our main stakeholder groups, how we engage them and examples of key topics.



STAKEHOLDER GROUP	CHANNELS OF ENGAGEMENT	FREQUENCY	KEY TOPICS COVERED
Employees	Town Hall meetings Reports, email blasts, videos Surveys Training Social media	Quarterly Monthly Annually Annually Weekly	Integration of legacy FMC and DuPont employees and processes     Safety
Prospective employees	Sustainability Report Annual Report Social media	Annually Annually Weekly	Sustainability is highly regarded when considering employment at FMC
Customers	Meetings Innovation collaboration Industry partnerships	Quarterly Quarterly Quarterly	Innovation     Pollinator safety     Product stewardship
Suppliers	Supplier audits Supplier surveys Code of Conduct	Biannually Quarterly Monthly	Fair wages and labor     Sustainability goals     Responsible care
Investors	Ratings/rankings and indices Conference calls Surveys Investor Day	Annually Quarterly Annually Biannually	The new FMC and our strategic growth plan The benefits of pesticides The sustainability of new products
Local communities	Donations to local organizations Employee volunteers Community Advisory Panels	Quarterly Monthly Quarterly	Hunger     Motorcycle safety in Asia     Clean drinking water systems
Regulators and public policy makers	Meetings Risk assessments and studies	Monthly Regularly	<ul> <li>Endangered species</li> <li>Product stewardship</li> <li>Science-based evaluations</li> <li>Safety and environmental standards</li> </ul>
Non-government organizations (NGOs)	In-person meetings/conference calls Survey responses Policies and best practices	As needed Bi-annually As needed	Biodiversity decline     Secondary standards     UN Sustainable Development Goals
Industry associations	Leading/participating on committees and working groups Advocacy	Bi-monthly As needed	Responsible care     Product stewardship     Sustainability
Academia	Wharton Initiative for Global Environmental Leadership Studies	As needed As needed	Climate change Innovation Efficacy Biodiversity

# **PROCESSES**

Corporate governance and processes form the foundation of our work at FMC. As a global company, we believe these elements are essential in guiding organizational and employee behavior across the world to achieve our goals.



FMC has strong sustainability governance and robust processes that drive our success and the sustainability of our product portfolio. We continue to integrate processes from legacy DuPont and FMC and to develop new standards to support our businesses and functions. This section describes our governance and some of our key processes.

#### SUSTAINABILITY GOVERNANCE AT FMC

Our sustainability governance structure consists of two main bodies — the Board of Directors Sustainability Committee and the Executive Sustainability Steering Team. They meet three to four times per year to review progress on goals, new initiatives, commitments and challenges. They recommend actions, as necessary, to ensure continuous performance improvement and alignment with constituent expectations (both internal and external). In addition to these formal committees, communication is encouraged throughout the organization to help drive progress.

# TESTING AND REGISTRATION PROCESS FOR CROP PROTECTION PRODUCTS

Today's pesticides are the results of many years of scientific research and testing. To bring a new pesticide to market, it takes roughly \$286 million USD and 11 years of research and development. Manufacturers must follow stringent product development criteria, whereby an average of 160,000 chemical molecules are analyzed to find the best product that is safe for use.

Pesticides are among the most tested and regulated products in the world. In fact, more tests are required for pesticides than for pharmaceuticals. They are tested extensively to ensure their safety for people, wildlife and the environment. The tests take into account the potential for sensitive windows of exposure (e.g., pregnancy and puberty) and vulnerable populations

#### **Testing & Regulation of Pesticides**



SCIENTISTS SCREEN AN AVERAGE OF

160,000 MOLECULES

JUST TO FIND ONE with the RIGHT PROPERTIES to address a pest problem and meet international requirements. THEN THEY CONDUCT MORE THAN

#### 150 STUDIES

designed and validated by regulatory authorities TO ENSURE THE MOLECULE IS DEVELOPED INTO A PRODUCT THAT IS

SAFE+EFFECTIVE.





Pesticides are among the most tested and regulated products in the world."

**OVERALL, IT TAKES ROUGHLY** 

11 YEARS +

\$286 MILLION USD

of RESEARCH & DEVELOPMENT to bring a pesticide to market.

Then products must be RE-REGISTERED REGULARLY to stay in line with regulations.

Learn more at www.PesticideFacts.org

PESTICIDE · FACTS ·

(e.g., pregnant or nursing women, the very young or very old), ensuring high margins of safety.

These tests, based on internationally accepted regulatory guidelines, are sufficiently robust to support regulatory risk assessments. Products are only approved by authorities and placed on the market if thorough testing and evaluation show they do not pose unacceptable risks. Once approved, these products often require re-registration about every 10 years or when new scientific information becomes available.

Scientists are constantly developing new products and reevaluating existing products based on safety and efficacy. Older products that had high risk with normal use, which could not be mitigated, have been voluntarily restricted or withdrawn from the marketplace.

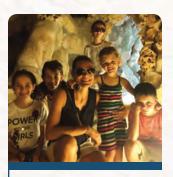


New pesticides are selected from discovery to be more environmentally friendly than their decades-old predecessors. Newer molecules do not persist in the environment or bioaccumulate in the human body or wildlife.

#### **BUSINESS PROCESS MODERNIZATION**

The Business Process Modernization (BPM) program is transforming FMC's business processes and systems to follow best-in-class industry standards. The BPM team is implementing an intelligent enterprise resource planning (ERP) solution that will enable FMC to capture greater opportunity in today's digital world. Below are the main

objectives of BPM:



#### THAISA HUGENNEYER, DIRECTOR, BPM

"The BPM program is a journey toward building a truly modern company. It will ensure that our employees have the right tools and processes to enable success and growth. It's a very exciting time for FMG."

- ► Scalability and flexibility | Creating a landscape that works efficiently today while having the flexibility for growth for tomorrow.
- ► Simplicity | Using the industry-standard processes that are proven to streamline the way FMC works.
- ► Reliable, real-time data | Driving data excellence through safeguards and master data governance.
- ► Faster, better decision-making | Delivering reporting and analytics that will better inform leadership on key decisions and supporting an agile business.

#### **Critical Areas of Protection**

that we investigate when developing a new product:



#### TOXICOLOGY

Studies the adverse effects of the substance in mammals to assess

potential effects in humans. While animal testing is required under many global regulations to ensure sound knowledge of the substance and its safety to humans, we follow a strict Animal Welfare Policy to minimize animal testing whenever possible and ensure the welfare of the animals according to strict global guidelines.



#### **DIETARY SAFETY**

Evaluate the exposure to the human population, including sensitive

populations (e.g., infants, children) from potential residues of substances (including metabolites and impurities) in food and drinking water to ensure the levels, if any, are safe to consumers. Residue data can include food crops, processed commodities, rotational crops, animal feed, pollen, nectar and honey.



#### **ENVIRONMENTAL FATE**

Studies the fate and behavior, metabolism and distribution of substances in the environment and looks at its effect on soil/sediment, water, groundwater and air. We also evaluate the substance's movement in the environment such as runoff, leaching and drift.



#### **ECOTOXICOLOGY**

Looks at the effects the substance may have (either directly or indirectly) on organisms in the environment. Organisms include: birds, fish, mammals, non-target plants, pollinators, non-target arthropods, earthworms, Collembola, soil microbes, Daphnia, shrimp, oysters, etc.



Evaluates the potential to workers and bystanders resulting from the manufacture and use of substances and determines the necessary protective equipment needed to ensure safety.



#### PRODUCT CHEMISTRY

Determines the physical chemical properties of the substance (e.g., solubility, partitioning, volatility, etc.) that aid in understanding the nature of the substance as well as ensuring safe storage, transport, use and disposal of the substance.



# BIOLOGY AND USE DIRECTIONS

Determines how a product should be used in the field to ensure efficacy and crop safety. Includes assessment of potential for resistance and proposed mitigations to reduce the potential.

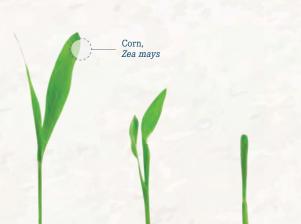
#### ETHICS AND COMPLIANCE

FMC has a longstanding commitment to ethics and compliance. During 2018, FMC's Ethics and Compliance team focused on increased and deeper communications supporting that commitment, as well as strengthening our compliance processes. Awareness campaigns were conducted that emphasized Data Privacy, Conflicts of Interest and Anti-Corruption. To broaden engagement and communications, we formed a global team of Ethics and Compliance ambassadors who are leaders from all regions of the world. The ambassadors support FMC's Law Department to drive messaging deeper into local organizations, provide feedback to the Ethics Office on local concerns, and advocate for ethics and compliance locally.

In late 2018, we launched the inaugural FMC Ethics and Compliance Achievement Awards. The FMC Ethics Office received almost 80 nominations from all around the world. The nominations demonstrated very encouraging and enthusiastic support for ethics and compliance across FMC and identified true champions of good behavior throughout the company.

In 2019, FMC's Ethics and Compliance Team is leading several initiatives including:

- ► A new and improved Global Ethics and Compliance Learning Management System.
- Awareness and training campaigns focusing on Anti-Trust Compliance, Sexual Harassment, Careful Communications, and Intellectual Property Protection.
- Updating key FMC policies.
- Enhancement of the FMC Policies and Standards platform.
- Providing internal FMC Ethics and Compliance news.



#### FMC Ethics and Compliance Achievement Award Winners



**IRENE DIP** (North America)

For establishing new processes for the Registration, Evaluation, Authorization and Restrictions of Chemicals (REACH) and Toxic Substances Control Act (TSCA) compliance.



ANALBERY CORREA

(Latin America)

For revising agreements not in accordance with FMC policies and for speaking up in support of FMC internal policies and when she saw disrespect in the workplace.



**ERIN LIU** (Co-Winner Asia-Pacific)

For helping to keep financial compliance top-of-mind and increasing employees' awareness of policies and procedures.



**VISKANTO ADI PRABOWO** 

(Co-Winner Asia-Pacific)

For setting a strong tone at-the-top as the leader of the Surabaya, Indonesia plant site and demonstrating a commitment to the highest standards of ethical behavior.



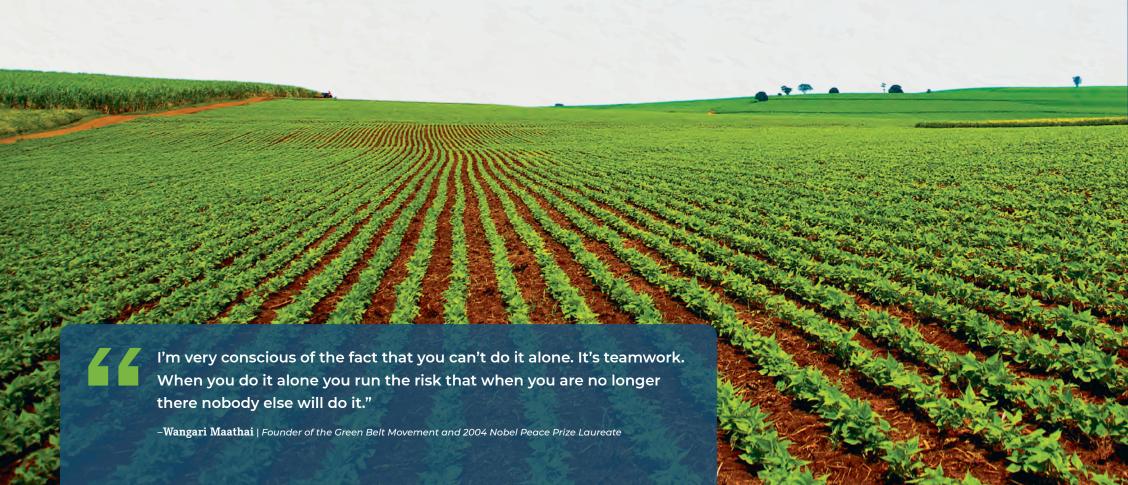
KATHRYN PEOVER

(EMEA)

For taking several actions in support of ethics and compliance, including raffling small gifts received from vendors to employees.

# our PEOPLE

FMC's success comes from our most important resource - our people. We create an environment where employees flourish and can achieve their highest potential. The backbone of this responsibility is our commitment to safety. At FMC, we foster a culture that provides a safe and secure workplace.



#### **SAFETY**

Safety is a core value for FMC. Throughout 2018, our employees continued to demonstrate their commitment to a safe and secure workplace. Our Total Recordable Incident Rate (TRIR) in 2018 was 0.11, the lowest rate ever for FMC and well below our 2020 goal. We are proud to be one of the safest companies among our industry peers.

regional office won site excellence awards



# Vitis vinifera 15

#### **FMC Safety Awards and Accomplishments**

The FMC Site Excellence Award recognizes sites that have achieved zero recordable injuries, zero critical process safety incidences, zero environmental notices of violation and positive EHS compliance audit results in the calendar year. In 2018, 39 sites were award recipients. In addition, eight sites have achieved 10 or more years without a recordable safety incident.



# 10+ YEARS WITHOUT A RECORDABLE SAFETY INCIDENT AS OF 2018

- Bangpoo, Thailand
- ► Barra Mansa, Brazil
- ► Calgary, Canada
- ► Lahore, Pakistan
- Pudong, China
- Song Than, Vietnam
- Surabaya, Indonesia
- Ungaran, Indonesia

WYONG

#### Environmental Stewardship Award for Mobile

Our Mobile, Alabama, manufacturing plant was recognized by the Partners for Environmental Progress and awarded the Environmental Stewardship Award for having a significant positive contribution to environmental health in the Gulf Coast region. The team achieved this through safe and successful process recycle optimization projects, which delivered a significant reduction in hazardous waste generation and raw material consumption and decreased GHG emissions from reduced transportation of waste and raw materials.



PICTURED ABOVE FROM LEFT TO RIGHT: Jordan Edwards, FMC Unit Technology Leader; Perkins Fendley, President, PEP Board of Directors; and Chris McFarland, FMC Unit Technology Leader.

#### **FMC SAFETY PROGRAMS IN 2018**

FMC's TH!NK. SAFE. manifesto is the heart of our Environment, Health and Safety (EHS) programs. TH!NK. SAFE. aims to change employee thinking and actions through interactive EHS programs which build a strong

culture of safety. Under the umbrella of TH!NK. SAFE., FMC organized activities and programs throughout 2018 to increase awareness and improve performance.



#### **Spreading FMC's Safety Culture**

Integrating a strong safety culture into FMC's newly acquired sites was a key focus in 2018. Across each of the newly acquired sites, we organized activities and events which showcased our commitment to a safe and secure work environment and encouraged our new colleagues to live these values.

The "TH!NK. SAFE. Tuesday" campaign was launched company-wide with videos each Tuesday to familiarize our newly acquired sites with FMC's commitment to safety. Prior to the video series, we distributed a digital library of downloadable TH!NK. SAFE. materials to introduce new employees to TH!NK. SAFE.

#### Spotlight on Savli, India:

Our Savli site conducted a series of activities in January 2018 to kick off TH!NK. SAFE. for their site. Activities included learning and onboarding sessions, a public TH!NK. SAFE. manifesto pledge for employees to sign and distribution of TH!NK. SAFE. welcome packs including a pocket-sized manifesto.



#### **Contractor Safety**

Our commitment to safety extends beyond our employees to the wider FMC family including contractors. Third-party contractors form a significant part of our workforce – approximately 2,000 contractors work at FMC in any given month.

In 2018, FMC updated requirements for selection and management of contract companies and their employees working at FMC sites. The purpose is to protect FMC and contract employees from injuries and prevent process safety incidents.

#### **Emergency Response Team at FMC Tower**

FMC is committed to the safety and well-being of all employees and visitors at our headquarters in Philadelphia. The Emergency Response Team (ERT) is a group of 23 individuals trained in first aid, cardiopulmonary resuscitation and automated external defibrillator usage who serve as the bridge to first responders. In the event of a medical emergency, ERT members are dispatched via text message to the location with the reported emergency. They evaluate the situation and render care until professional help arrives. In addition, they serve as emergency directors, ensuring people respond properly to fire alarms and shelter-in-place instructions.

#### **Global Regulatory Affairs Safety Program**

FMC's Global Regulatory Affairs team based in Philadelphia initiated a safety program that includes monthly safety meetings with presentations on safety topics as well as "walkabouts" to identify and address unsafe conditions and behaviors. Since this initiative began, employees from other teams have joined the meetings and have spread the word about the program.

#### Focus 60 Days

Many injuries occur from the use of inadequate tools and equipment. To combat this FMC launched a "Focus 60 Days" campaign to share best safety practices. As part of this campaign, leaders and employees participated in weekly dialogs and identified opportunities for improvement. This reduced the number of misused tools as well as improved employees' hazard recognition skills and prompted action to reduce future incidents.





#### Spotlight on Wyong, Australia:

Through the "Focus 60 Days" campaign, our Wyong site made over 100 observations, of which 55 were reported into the Safety Initiative Management System with appropriate actions and follow-up. Observations ranged from inappropriate storage of kitchen knives to inadequate safety signage. Employees at Wyong found the program to be a novel approach to safety and felt it had a positive impact on their site's safety culture.

#### **PROCESS SAFETY**

Process Safety Management (PSM) is critically important to FMC. We are dedicated to developing and enforcing robust systems and procedures for our employees across all global sites. Below are four initiatives FMC addressed in 2018 across the organization.

**Process Safety Information (PSI)** – PSI contains details about materials, equipment and process technology. This information is used to support all other elements of PSM.

Process Hazard Analysis (PHA) – PHA is the systemic review of a process to identify and evaluate process hazards. We conducted PHAs for many legacy FMC processes including several at our largest manufacturing facility in Denmark. In addition, we revalidated several PHAs at our newly acquired sites.

#### **Reporting Standard**

FMC's EHS Incident Reporting Standard was revised in 2018 to align with the American Chemistry Council's use of the American Petroleum Institute's "Process Safety Performance Indicators for the Refining and Petrochemical Industries" standard. New definitions and thresholds were incorporated for each of the FMC Process Safety Incident categories. This change allows FMC to compare process safety performance with other industry members both domestically and globally. All FMC sites will report process safety incidents using the revised standard starting in 2019.

Process Hazard Level (PHL)
Screening – PHL screening
uses an internally developed
methodology to identify the
hazards of a process and
then "right-size" the PSM
systems to ensure
both effective and
efficient control of
process hazards.
During 2018, we

applied this tool to the legacy Cheminova sites and added this data to that generated for legacy FMC sites. This helps us prioritize our process safety work.

**External PSM Assessment** – In 2018 we conducted an external PSM assessment for four newly acquired active ingredient sites from DuPont to ensure PSM management systems were in place and fully functional. We reviewed the quality of execution of several key process safety elements, including Management of Change, Process Safety Information, Process Hazard Analysis, Asset Integrity and Safe Work Practices.

#### **RESPONSIBLE CARE**

As a member of the American Chemistry Council (ACC), FMC has been an active participant in the Responsible Care® program since its inception. Responsible Care is the chemical industry's world-



Tomatoes.

Solanum lycopersicum

class Environmental, Health, Safety, and Security (EHS&S) performance initiative. It helps member companies enhance their EHS&S performance, discover new business opportunities, and build a strong foundation for the ACC's advocacy on behalf of the industry.

Participation in Responsible Care is a commitment to:

- ► Improve Environmental, Health and Safety performance.
- Use resources efficiently.
- ► Engage with stakeholders.
- Report on progress, openly and transparently.
- ► Effectively manage chemical products.

As part of FMC's commitment to the program, we conduct annual internal Responsible Care Management System (RCMS) audits at each of our U.S. locations, which includes our Philadelphia headquarters at FMC Tower, Stine Research Center, and the Middleport, Wyoming, Mobile and Manati manufacturing locations. External certification of our RCMS program is conducted every three years at selected locations.

# Sugar beets, Beta vulgaris

#### TALENT MANAGEMENT

**Our People:** Employees are FMC's most valuable asset. Ensuring a safe and inclusive work environment where they can bring their whole selves to work is one of the company's most important priorities. We help and empower our employees to develop their skills in alignment with their career aspirations.

#### LEADERSHIP DEVELOPMENT PROGRAMS

FMC is committed to attracting, developing and retaining a diverse and talented workforce. In 2018, we designed and developed a three-tier leadership development program which is being rolled out globally.

- ► The Science of Leadership | Designed for individual contributors or future/new people managers.
- ► The Art of Leadership | Designed for experienced people managers seeking to enhance their leadership acumen.
- ► The Keys to Leadership | Designed to develop highly effective leaders in the organization.

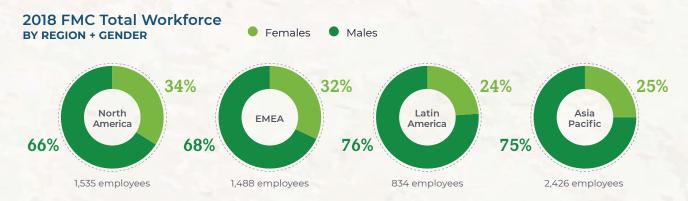


PICTURED ABOVE (FROM LEFT TO RIGHT): Kate McIntyre, Gregory VanOmmeren, Marianna Tymocz and Roisin Breen

#### ENGINEERING DEVELOPMENT PROGRAM

FMC's Technical
Engineering
Development
Program (EDP) is
designed to develop
the next generation
of engineering
and operations
professionals in our
organization. In 2018,
we expanded the
focus of the program
by leveraging EDP
support across

multiple areas within operations including active ingredients, formulations and packaging, and process safety management.



FMC supports a global and diverse workforce. Our total workforce includes 6,283 full-time regular employees globally as of December 31, 2018.

#### DIVERSITY AND INCLUSION

#### **Ambition Statement:**

See yourself in FMC, Be yourself in FMC

At FMC, we strive to be an inclusive workplace where our employees reflect the community, are valued, find purpose in their work, and grow and contribute to their fullest potential.

#### **OUR STRATEGY**

Before 2014, FMC's Diversity and Inclusion (D&I) efforts were primarily focused on compliance within the U.S. In 2014, employee affinity groups began to evolve with the launch of the Women's Initiative Network. Since then, affinity groups have been rebranded as Employee Resource Groups (ERGs) and have continued to grow and thrive within the organization globally. Benefits continue to broaden and in 2016 we introduced D&I

New Global Director of

**Diversity and Inclusion** 

awards. In support of our Ambition Statement, we have developed a comprehensive D&I strategy. Our strategy has four key focus areas:

- ► Inclusive Workplace | Create a workplace where everyone is valued and has an opportunity to reach their full potential.
- Workforce Diversity | Establish programs and processes that systematically attract, develop and retain diverse talent
- Inclusive Leadership | Build the competency of our leaders, managers and employees to advocate inclusive behaviors.
- Business Impact | Position FMC as a great company for diverse, top talent and share best practices internally and externally.

#### Incorporating D&I elements in learning programs and talent acquisition strategies

 Defining metrics to measure the impact of our D&I strategy

# In September 2018, Subarna Malakar joined FMC as the Director of Diversity & Inclusion. Subarna is responsible for developing the D&I roadmap. As part of his role, Subarna will be:

- · Aligning D&I priorities with executive leaders
- Implementing new practices and programs that accelerate inclusiveness
- Engaging global stakeholders and driving accountability across the organization



Subarna Malakar, Director, Diversity & Inclusion

#### Our 2019 D&I Action Plan:



#### **EVOLUTION OF OUR EMPLOYEE RESOURCE GROUPS**

In 2018, we evolved our affinity groups to Employee Resource Groups (ERGs) to better align the ERG business plans and initiatives to our global D&I strategy. We also created a comprehensive ERG guideline with clear budgets, communications and activities. Additionally, we included the roles and responsibilities of the Executive Sponsors, Chairs and Workstream Leaders to support the missions of the ERGs. Below is information about our ERGs.

#### **WOMEN'S INITIATIVE NETWORK**

Mission: To raise the profile of women at FMC encouraging wellbeing, education, development and networking in the workplace.



WOMEN'S Employee Resource Group

#### 2018 Highlights:



- Hosted a half-day Clifton Strengths Workshop for women in Philadelphia, Stine and Ewing sites to learn about developing their own unique strengths.
- ▶ Hosted a Women In Leadership Panel
  Discussion: The event featured a keynote
  address from Bethwyn Todd, Vice President
  and FMC Asia President, and a panel
  discussion moderated by Amy O'Shea, Vice
  President and Business Director, North
  America. Panelists were Kathy Shelton, Vice
  President and Chief Technology Officer; Diane
  Allemang, Vice President and Chief Marketing
  Officer; and Susanne Lingard, Vice President
  Regulatory Affairs.

#### **WOMEN IN ENGINEERING**

Mission: To engage and enable women to reach their fullest potential as engineers and leaders. To expand the image of the engineering profession and demonstrate the value of diversity.



#### 2018 Highlights:

- Participated in Affinity Day Celebrations.
- ► Hosted "Chalk it up to Science" session for Take Your Kids to Work Day.
- ► Hosted a Women in Engineering Panel.
- Joined the Society of Women Engineers.
- Attended the joint Association of Latino
   Professionals for America and National Association
   of Asian American Professionals 2018 FRG Summit



WOMEN IN ENGINEERING EVENT IN LATIN AMERICA

#### **NEW GENERATION**

**Mission:** To create a D&I culture within Cork Shared Services. Centered on core values and committed to inclusion and excellence.



#### 2018 Highlights:

- Celebrated International Women's Day.
- Organized Women's Day Event at offsite location with guest speakers and a video produced by FMC Cork, Ireland site highlighting the inspirational women in the lives of FMC employees.
- Held annual charity event co-organized with Cope Foundation (an organization that enhances and supports the lives of people with an intellectual disability and/or autism). Employees spent time painting, cleaning and gardening with Cope members.

#### THE BRIDGE

**Mission:** To showcase and provide a community for the various ethnic cultures across FMC, which in turn helps recruit and retain



talent. To bring awareness to the FMC workforce on the business cultures in regions where we operate and provide insight into best practices when working with various cultures.

#### 2018 Highlights:

- Hosted quarterly "Taste of FMC" culinary events to celebrate and acknowledge diverse food culture.
- Organized a Fireside Chat during Black History Month to discuss topics on the background, work behavior dynamics, challenges and solutions to overcome stereotypes and biases often faced by people of color.
- Hosted a presentation about Dr. Erin Myers' book, "The Culture Map: Navigating Cultural Differences in Business", that helped FMC employees learn ways to navigate through the different cultural realities of how people think and get things done in global business.
- Established partnerships with the Association of Latin Professionals For America (Philadelphia Chapter) and National Association of Asian American Professionals (Philadelphia Chapter).

#### **SPECTRUM**

**Mission:** To increase the visibility of LGBTQ+ issues within FMC through education and awareness initiatives. Encourage



LGBTQ Employee Resource Group



fellowship through dialogue and an inclusive understanding of LGBTQ+ identity by formal and informal interactions and engagement with the FMC community at large.

#### 2018 Highlights:

- Organized movie screenings for employees of Kinky Boots and Love, Simon in Philadelphia.
- Celebrated Pride Month in Philadelphia and the Stine and Ewing Research Centers.
- Hosted Parents and Friends of LGBTQ+ and Spectrum Core Team meet and greet sessions in Philadelphia and Stine Research Center.

#### **Pride Month Celebration**

To raise awareness and celebrate PRIDE month, Spectrum hosted keynote speaker Kenji Yoshino who spoke about the issue of "Covering in the Workplace". Kenji is the Chief Justice Earl Warren Professor of Constitutional Law at NYU School of Law. In his remarks, Kenji shared that "To cover is to downplay a disfavored trait to blend into the mainstream. Because all of us possess stigmatized attributes, we all encounter pressure to cover in our daily lives". He provided employees with valuable insights and tools to recognize and overcome covering.

#### I-GEN

**Mission:** To leverage multigenerational differences and commonalities for personal and professional growth to attract and retain talent that enhances FMC's strength in diversity and inclusion in the marketplace.



Thereby, the i-Gen Network will serve to develop, connect and empower employees from all generations to have a voice and cultivate leadership within FMC.

#### Highlights:

(Launched in early 2019)

Organized i-Gen launch party that included a talk about different generations in the workplace from Subarna Malakar (Director, Diversity and Inclusion), and activities/skits that celebrated cross generational collaboration and differences.



#### PICTURED FROM LEFT TO RIGHT AT THE I-GEN LAUNCH:

Linda Froelich, Global Sustainability Director; Karen Totland, i-Gen Executive Sponsor and VP of Global Procurement, Global Facilities and Sustainability; Julie Boss, i-GEN Co-Chair; Gabriel Olchin, i-GEN Co-Chair; Pierre Brondeau, Chief Executive Officer; Margarita Giavis, i-GEN Treasurer; Ragine Williams, D&I Intern; and Mark Douglas, Chief Operating Officer.

#### WOMEN LEADING THE WAY



CropLife Asia, the regional voice of the plant science industry, elected **Bethwyn Todd**, Vice President and FMC Asia President, as CropLife Asia President. In addition, The Australia China Alumni Association recognized Bethwyn with the Australian Ambassador's Award for Women in Leadership which celebrates achievements of leading female graduates of Australian universities who inspire other women through their dedication, accomplishments and commitment to the Australia-China relationship.



Lisa Hoffman, Technical Manager, Discovery Biology at FMC Stine Research Center, has been nominated to the 2019 STEP Ahead Awards by the National Association of Manufacturers in Washington, DC. The STEP Ahead Awards celebrate women in Science, Technology, Engineering and Production careers who have made outstanding achievements in their companies and communities. The STEP Ahead Awards recognizes women at all levels of a manufacturing organization, from the factory floor to the C-suite. Lisa is one of 130 nominees from 101 companies.

#### **2018 DIVERSITY AND INCLUSION HIGHLIGHTS:**

#### **Domestic Partner Benefits**

Effective January 2019, FMC offers domestic partner healthcare coverage to U.S. same-sex and opposite-sex partners and their dependents. While FMC has offered domestic partner healthcare coverage in the past, this coverage was thought to be unnecessary when the U.S. Supreme Court legalized same-sex marriage in 2015. However, many state jurisdictions continue to lack clear, fully-inclusive protections for domestic partners, and we have since determined that there are some states today where it can be difficult or burdensome for same-sex partners to marry.

#### **Transgender Inclusion Benefits**

Effective January 2019, FMC offers transgender-inclusive healthcare coverage as part of our U.S. benefit plan. These benefits include support for mental health and hormonal therapies, as well as surgical procedures.

#### Disabilities Awareness Month

As part of our Disability Awareness month activities in October 2018, we hosted a luncheon with keynote speaker David Harrell. David is an international award-winning actor, speaker and disability advocate.

He talked to employees about how to understand the challenges someone with a disability may face and ideas to promote a disabled-friendly workplace.

Soybeans, Glycine max

#### FMC Denmark Wins Engagement with People with Disabilities Award

FMC's manufacturing site in Rønland,
Denmark, received the Disability Award of the
Year from the local municipality. This award
recognizes an association, private person or
company that has made a special effort to
enable citizens with disabilities to participate
in community life on equal terms. FMC
received the award for its training of local
residents with disabilities who are struggling
to gain a foothold in the labor market and
may not be prepared for higher education.
Since its launch in 2014, 118 local residents
have participated in the program. Many of
them are currently employed while others are
pursuing further education.

#### **Women in Senior Management**

**2018 Results:** While we have increased the percentage of women in senior management year-over-year since 2016, we have more work to do. With our D&I strategy, commitment from our leaders, and critical actions plans, we will be able to increase the number of women in management at FMC.



# FMC China Certified Top Employer 2019

FMC was certified in 2019 as a Top Employer in China by the Top Employers Institute, a certification program that recognizes leading employers in more than 115 countries around the world that provide exceptional working environments.



# DIVERSITY AND INCLUSION LEADERSHIP AWARDS

In 2018, we continued our D&I Leadership Award Program to recognize employees who are champions of D&I. This year, we had a total of nine award winners, spread across three different categories: Emerging Leaders in STEM, Women in STEM and Change Leader.

#### **Emerging Leaders in STEM Award**

Recognizes employees who have made significant contributions in STEM and excelled early in their career. Award winners were:

Lauren Markell - North America

Maureen Anyanwu - North America

Yang Yuan - North America

#### Women in STEM Award

Recognizes talent at any level, from manufacturing to executives, who have made contributions in STEM.

Award winners were:

Lisa Hoffman - North America

Poonam Nangalia - North America

#### **Change Leader Award**

Recognizes employees, who through their actions, perseverance and engagement, made the workplace more welcoming and inclusive. Award winners were:

Joshua Hoff - North America

Karina Daugaard - EMEA

Naresh Bolla - Asia Pacific

Roxanne Gutschenritter - North America



AWARD WINNERS PICTURED ABOVE FROM LEFT TO RIGHT:
Naresh Bolla, Karina Daugaard, Yang Yuan, Roxanne Gutschenritter,
Lauren Markell, Lisa Hoffman and Poonam Nangalia.

# our PRODUCTS

Farmers around the world face major productivity challenges. Demand for food is sharply increasing due to a rising population and growing middle class. This, along with climate pressures, results in fewer acres of arable land per capita. To meet the nutritional needs of our growing global population, it is essential that we continually improve crop yields on a relatively stable environmental footprint. FMC is committed to addressing these challenges within our current portfolio and in our R&D pipeline.



The need for the introduction, adaptation and implementation of good farming practices has never been more urgent to maintain local and international food security and livelihoods in sustainable ways.

According to the UN Food and Agriculture Organization, there has been a rise in hunger for the third year in a row. The population of undernourished people increased to nearly 821 million in 2017 from 784 million in 2014.

Without crop protection products there would be epidemics of destructive insects, weeds and diseases that could cause major crop failures. Farmers have been able to sustainably grow more crops on less land using crop protection products, thus significantly increasing crop yields. Additional benefits of using crop protection products include:

- Lower cost of food.
- Quality food supply.
- Consistent food supply.
- Land conservation.
- More widely available grains, milk and proteins necessary for childhood development.
- More abundant fruits and vegetables which provide essential nutrients for human health.
- Increased profits for farmers by maximizing valuable agricultural inputs such as fertilizers, water resources and high-quality seeds.

Pesticides also help protect consumers and their property from a wide variety of problems. They help keep homes free of termites, disease-carrying insects and other unsanitary pests such as bed bugs and cockroaches. Insecticides help keep people safe from insect bites that may carry diseases like the West Nile virus, Lyme disease, Zika virus and malaria, which are significant public health concerns.

#### **Hunger Statistics:**

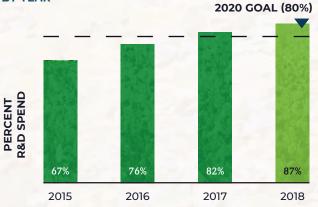
- Approximately 1 billion people worldwide go to bed hungry each night.
- Small farmers, herders, and fishermen produce about 70 percent of the global food supply, yet they are especially vulnerable to food insecurity – poverty and hunger are most acute among rural populations.
- Approximately 9 million people die of hunger each year according to world hunger statistics; more than the death toll for malaria, AIDS and tuberculosis combined.
- Over 60 percent of the world's hungry are women, who have limited access to resources because of the patriarchal societies in which they live.
- Because of the prevalence of hunger in women in developing countries, malnutrition is a leading cause of death for children. Over 3 million children die of hunger each year.





#### INNOVATION GOALS

#### FMC R&D Spend on Sustainably Advantaged Products BY YEAR





In 2018, we dedicated 87 percent of our R&D budget to develop sustainably advantaged products, surpassing our 2020 goal of 80 percent. A sustainably advantaged product is one that positively impacts at least one of the six major Global Challenges: Food Expectations, Health and Safety Expectations, Environmental Consciousness, Climate Change, Scarce Resources and Land Competition, but does not retreat in any of the five other areas.

#### FROM R&D TO THE GROWER

FMC R&D is fully integrated today with complementary organizations combining the legacy DuPont Discovery organization and the FMC Development organization. Together, we are stronger.

FMC has 22 field stations, allowing us to test new products and formulations around the world. Through this expanded presence, our regional R&D teams transmit what is going on in local markets back to our global Discovery and Development teams. This broadens our reach, helping us to better understand unique local needs and opportunities. It is this kind of deep knowledge that leads to the solutions that make a difference for growers.

#### STAGE GATE PROCESS

The process of creating new crop protection products is divided into two activities: Discovery and Development. Work in Discovery and Development is very different, but they both follow a rigorous stage gate process to ensure we advance the best and most sustainable molecules to commercialization.

The work of Discovery is to imagine and create brand new molecules that the world has never seen. This stage typically lasts two to three years. We screen more than 60,000 compounds annually, and we make and test thousands of molecules in Discovery each year. Our goal is to move one compound from the Discovery Pipeline to the Development Pipeline each year.

When a molecule is in the Development Pipeline, we test and develop all the components needed for a commercial molecule. This includes:

- ► Testing for requirements to support registrations to sell the molecule
- ► Testing the molecule in the field to develop a label for the use of the product
- Developing formulations for specific crops and regions
- Developing a manufacturing process

The Development stage can take seven to 10 years to progress through definition, validation, development, and finally the launch of the new product.







#### **DISCOVERY PIPELINE**

We currently have 15 innovative chemistry areas in our Discovery Pipeline which we will continue to test. Due to stringent testing requirements, only a few molecules will advance to the next stage. Some of these feature new modes of action, which are very important for successful molecules.

# Why Are New Modes of Action Important?

New mode of action pesticides control pests that are resistant to products on the market today. They also maintain product efficacy longer because growers have a new tool that allows them to rotate different modes of action during a season. This rotation, part of Integrated Pest Management, limits resistance from occurring for as long as possible and is integral to sustainable agricultural practices.



# YEARS 6 - 8 Additional Field Trials & Product Definition Stage



#### **New Discoveries**

Our late-stage Discovery Pipeline includes a broadspectrum herbicide molecule that can control glyphosate-resistant weeds, a growing challenge for farmers. It controls both grass and broadleaf weeds, and is safe to use on corn, soybean and cereals, as well as other key crops. It is effective either as a pre-emergent or post-emergent application, giving the grower flexibility in both timing as well as mixture partners.

A novel insecticide that has demonstrated outstanding control of key aphids has recently moved from late stage discovery into our development pipleline. This insecticide is systemic so when it is applied either through sprays on the leaves or with irrigation, it is taken up in the plant, providing protection to the entire plant. This insecticide

will have the potential to meet the market need in vegetables as well as corn, cotton and potato crops worldwide.

Solanum tuberosum

#### DEVELOPMENT PIPELINE

We have several active ingredients in our development pipleline. Some examples of them are outlined below.

#### Fluindapyr Fungicide

Fluindapyr controls a variety of key diseases in row and specialty crops around the world including rusts, leaf spots, powdery mildews, scab and anthracnose. We anticipate launch in the U.S. in 2021, China in 2022, the EU and Argentina in 2023, and Brazil in 2024. Key crops include soybeans, corn, cotton, cereals, oilseed rape, fruits and vegetables, tree nuts and peanuts, as well as turf and ornamentals.

#### **Bixlozone Herbicide**

Bixlozone is an herbicide with a new mode of action against grass weeds in cereals. It will also be used in oilseed rape, sugarcane, rice and corn. Bixlozone provides growers a new rotational product for resistance management across a wide range of agronomic practices. In addition to controlling resistant weeds, bixlozone demonstrates long duration control of key grass weeds, including crabgrass, goose grass, and ryegrass.

#### **Bixafen Fungicide**

Bixafen has completed the stage gate process in the U.S. and has recently launched. The lead product is Lucento™ fungicide which contains a mixture of bixafen plus FMC's proprietary fungicide flutriafol. Lucento™ fungicide is an important part of FMC's U.S. fungicide portfolio and provides a differentiated solution to a wide range of diseases on corn, soybeans and peanuts. Like flutriafol, it is absorbed into leaf and stem tissues, and has both translaminar and systemic activity. Since both fungicides in this product are taken up in the plant, and do not just coat the leaf surface, the whole plant is protected from diseases.

#### **Rotational Products**

Rotational products are beneficial to both farmers and the environment. If one product is used season after season, there is an increased likelihood that the product is no longer effective against the pest. Integrating a smart rotational cycle with a variety of products decreases the likelihood of resistance.



# EXAMPLES OF TECHNOLOGIES IN OUR SUSTAINABLE PORTFOLIO

#### **PLANT HEALTH**

Biological offerings in our Plant Health platform complement synthetic molecules. We continue to invest in the discovery and development of bio-stimulants, bio-fungicides, bio-insecticides, and bio-nematicides, which are unique technologies that protect plants and their root systems against pests and disease, leading to improved crop yields.

One biological product in our Plant Health development pipeline can be applied as a seed treatment for soil diseases, as well as protection against nematodes. Both soil fungi and nematodes attack the roots of plants, leading to poor growth and yield. Nematodes are parasitic microscopic creatures that damage roots of many types of vegetable and legume plants, grains and grasses and the stems and leaves of some flowering plants. In the U.S. alone, crop losses due to nematodes are in the billions (US\$). Our product has demonstrated nematode protection in Brazil, North America and Europe. In addition, it controls diseases such as Rhizoctonia sp. and Fusarium sp. and has indications that it outperforms current bio-fungicide seed treatment standards when added to a chemical-based seed treatment.

In June 2018, we extended our collaboration with Chr. Hansen for an additional five years to develop and commercialize natural solutions for the agricultural industry.

The collaboration, which has resulted in the launch of several natural products over the last five years such as Quartzo® nematicide and Presence® nematicide in Brazil, has enabled both Chr. Hansen and FMC to join resources and expertise to accelerate entry into the rapidly growing biological crop protection market. The newly extended agreement continues to leverage the resources and expertise of both companies.

## RYNAXYPYR® AND CYAZYPYR® ACTIVE INGREDIENTS

These sustainable active ingredients belong to the diamide class of insect control products, and are highly selective chemistries that only target certain classes of pests. This was a new mode of action for insect control when the Rynaxypyr® active ingredient brand was first introduced in 2008. Rynaxypyr® and Cyazypyr® active ingredients are not the only diamides on the market, but they have proven to be superior to the others and to all other competing classes of chemistry. There are many features about their performance and characteristics that led to their rapid adoption by farmers around the world.

- Both active ingredients are unique in their combination of fast action, low dose rate and residual control. This combination results in almost immediate and continued prevention of direct and indirect pest damage. There are extensive data showing that this superior and prolonged insect control directly leads to vigorous growth, improved yield and higher quality crops.
- ▶ In China, growers can see a yield increase of 10 to 15 percent for rice versus competitive products. For a rice farmer, this translates to an increase of \$1,500 to \$4,000 per acre, which is a life-changing increase for many Asian farmers.



CORAGEN® INSECTICIDE IN RICE (CHINA)



ALTACOR® INSECTICIDE IN SUGARCANE (BRAZIL)

- ► Growers in Brazil can see a 15 to 25 percent yield improvement for sugarcane versus current products on the market. The positive impact from this improvement can be an increase of \$3,500 to \$8,000 of revenue per acre.
- ► In India, these products have had a significant impact on the lives of small-scale farmers in protecting their crops and thus, their livelihoods.



PICTURED ABOVE: A letter received from a farmer describing how our Rynaxypyr® active ingredient product (Coragen® insecticide) significantly increased his sugarcane crop yield and improved his family's quality of life.

#### **PRECISION AGRICULTURE**

Agriculture is transforming at a rapid pace through new technologies that allow growers to make site-specific decisions based on highly detailed data. FMC cares about the downstream environmental impact of our products and strives to create innovative solutions that use fewer resources and are safer for growers and applicators. 3RIVE 3D® and PrecisionPac® application technologies are two examples within FMC's portfolio that advance precision agriculture. In the future, we anticipate integrating data streams to add greater precision to the capabilities of these technologies.



#### PrecisionPac® Technology

FMC's PrecisionPac® application technology is a revolutionary herbicide dispensing system that matches the right amount and blend of products (from 12 different herbicide blends) to agronomic needs. This technology allows farmers in North America the flexibility of purchasing the exact amount they need.

#### The benefits of this technology include:

- ➤ **Saved costs** from being able to purchase the exact amount needed for their acreage.
- ► Reduced waste the product is delivered into custom pouches, reducing packaging materials.
- Reduced applicator exposure eliminates growers having to measure herbicides in the field. The product is in a sealed pouch that can be directly added to sprayers.
- Reduced environmental impact purchasing the right amount prevents the over application of products.

#### 3RIVE 3D® Technology

3RIVE 3D® application technology is a revolutionary at-plant crop protection delivery platform. This technology ensures the product is evenly distributed throughout the entire solution with the introduction of air in the application system. Therefore, when the product is applied to the soil furrow, seeds are protected from pests regardless of seed placement. While this technology was originally designed with efficiency in mind, the positive environmental impacts of 3RIVE 3D® application technology has made it a mainstay in our portfolio and continues to inspire us to further push the boundaries of its use.

#### The benefits of this technology include:

- Uses 90 to 95 percent less water than traditional liquid systems, which means fewer refills and a reduced risk of runoff; beneficial for areas facing water challenges.
- ► Carries 50 percent less weight than granular systems, which reduces soil compaction.
- Reduces potential pollinator impact due to dustfree formulations and immediate soil row cover upon application.

- ► Minimizes worker exposure.
- Increases application efficiency by delivering product directly in-furrow.



Harvesting cotton



#### PRODUCT STEWARDSHIP



MARCELLO GIANNUZZI
Product Stewardship Director

At FMC we promote stewardship at each stage of the product life cycle, and stewardship priorities are built into the core of R&D, portfolio and marketing strategies for a truly proactive approach. The company is a member of CropLife International's Product Stewardship Committee to help drive positive progress in agriculture, especially in terms of safe and responsible use of crop protection products. This includes labeling schemes in support of resistance management, guidelines for the adoption of new technologies such as drones, best practices for handling empty containers and availability of personal

Sorghum seeds, Sorghum bicolor

protective equipment in rural areas. FMC strives for an open and transparent communication about the successes and challenges facing product stewardship, as this is a fundamental component in identifying successful solutions. An example of the leadership commitment to stewardship at FMC is the Stewardship Advisory Council, an internal forum composed of key leaders who provide guidance for the development of long-term strategies.

#### SUSTAINABILITY ASSESSMENT TOOL

FMC developed and utilizes the Sustainability Assessment Tool to determine the sustainability of new active ingredients and formulated products being developed in R&D and to evaluate products currently on the market. This assessment, along with other stewardship processes and tools, ensures the introduction and continued use of environmentally sustainable agricultural solutions.

Assessment questions are answered in comparison to a benchmark product and the results are indicated in a Sustainability Matrix diagram (see facing page for example). A product is considered sustainable if it is better than the benchmark in at least one area, but it cannot retreat in any of the five other areas. If a product is not considered sustainable because its attributes are not as good as the benchmark, then FMC works to mitigate the area of concern.

# WHAT IS PRODUCT STEWARDSHIP?

Stewardship is about the safe and responsible use of our products along the product life cycle.

# PRODUCT STEWARDSHIP AT FMC

Stewardship priorities are built into the heart of R&D, portfolio and marketing strategies.

#### **STRATEGY**

We enhance the sustainability of our business by taking proactive stewardship actions at each stage of the product life cycle.

#### STRATEGIC PILLARS



#### **Processes**

Define processes, priorities and opportunities for value creation to ensure proper governance of our new and existing products through proactive stewardship.



#### **Engagement**

Raise the profile of stewardship within the organization.

Define priorities and needs for stewardship training within the organization.

Develop engagement strategies with key external stakeholders.

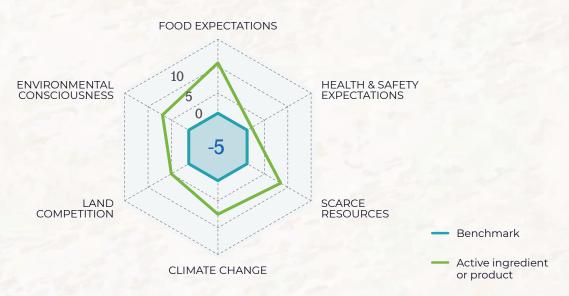
Enhance leadership within CropLife International to influence priorities and outcomes.



#### **Measure and Monitor**

Develop metrics to monitor implementation and impact of stewardship initiatives on the responsible use of our products and commercial strategies.

#### **FMC Sustainability Matrix Example**



#### **HIGHLY HAZARDOUS PESTICIDES**

FMC is committed to introducing products that control only target pests and promote human and ecosystem health. We continue to phase out Highly Hazardous Pesticides (HHPs) as classified by the United Nations Food and Agriculture Organization from our product portfolio.

To ensure that no inert ingredients classified as HHPS are used in new product development, our Formulations team consults a toolbox of recommended additives. In addition, our Regulatory teams double-check the inert ingredients in each new product prior to submitting it for registration.



#### **Conservation at Stine Research Center**

In 1995, Stine Research Center in Delaware received its first recognition as a certified Wildlife Habitat Site. The site consists of approximately 500 acres of woodland, farmland and grassland habitats.

The Wildlife Improvement of Stine Habitat (WISH) team currently manages many habitat enhancement programs. These include the monitoring of 45 nest boxes for bluebirds, wood ducks and a variety of other native birds, maintaining butterfly and hummingbird gardens, supporting a program for Eastern Painted Turtles and a reforestation project. In 2017, Stine Research Center achieved Gold Conservation Certification status from the Wildlife Habitat Council.









PICTURED ABOVE: Wildlife sightings at Stine Research Center and the WISH team's on-site reforestation efforts

# OUR PROGRESS

At FMC, we understand the impact our manufacturing processes have on the environment and the communities that surround them. We are committed to increasing the transparency of our progress towards strengthening relationships with our communities and reducing our environmental impact.



#### **Community Engagement**

Each of our manufacturing sites across the world is committed to enriching the communities in which we work and live. If our surrounding communities thrive, so do we. To monitor this, each FMC-owned manufacturing site reports on its community activities on a quarterly basis. The metric is organized into four categories:



#### **SAFETY**

Sharing FMC's commitment to safety with our families and neighbors.



#### **OPERATIONAL** TRANSPARENCY

Opening up about how we operate so we are understood and trusted by the community.



#### **COMMUNITY PARTNERSHIP**

Sharing our skillsets and talents to better the lives of those around us.

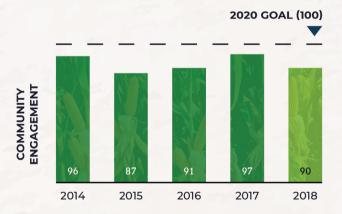


#### COMMUNITY **LEADERSHIP**

Leading the way in forming a better tomorrow for our communities.

#### **Community Engagement Index Results BY YEAR**

2018 Results on Community Engagement Index and progress toward goal of 100 by 2020.



Community Engagement scores only include FMC

the four Community Engagement categories each

legacy sites. If a site completes an activity in each of

year, thus providing diverse and valuable interactions with the community, it earns a score of 100 on the

Community Engagement Index. The final reported score

is the average of all of our manufacturing sites' scores.



2020 Goal: Achieve 100 on the Community Engagement Index, which measures interactions with the communities where we work and live.





# A Snapshot of FMC's Community Activities

#### **ASIA**



### TRESNA WERDHA NURSING HOME - PASURUAN, INDONESIA



FMC employees at our Pasuruan Plant donated food, clothes, diapers and cleaning materials to the Tresna Werdha Nursing Home, located approximately 20 km from the plant. The facility is home

to over 100 elderly residents who do not have a family support system to take care of their personal and medical needs. During FMC's visit to the nursing home in May 2018, employees were also able to spend time connecting with the residents.



#### DONATION OF WATER COOLERS - SAVLI, INDIA

Employees at our Savli Plant donated water coolers to four schools in their community. Water coolers are essential to give children access to clean, cold water to cool off on a hot day. The program benefited over 870 students.



#### **EUROPE**



#### STORIE DI ALTERNANZA - SAN COLOMBANO, ITALY



The "Storie di Alternanza" Award is an initiative promoted by the Italian Chambers of Commerce to increase collaboration between schools and corporations.

Students who participated in internships with businesses were encouraged to share learnings with the wider community through video essays. FMC collaborated with students from the A. Cesaris School, who won the first prize for their winning video about how FMC's strong safety culture helped change people's behavior.

#### **NORTH AMERICA**



#### FEED THE GULF COAST - MOBILE, ALABAMA

Our Mobile site's Feed the Gulf Coast backpack program helped meet the needs of chronically hungry children by providing them with nutritious and easy-to prepare food to take home on weekends and during school vacations when other resources were not available.



# "ADOPT A FAMILY" PROGRAM – STINE RESEARCH CENTER, NEWARK, DELAWARE

FMC Stine employees have participated in an annual Adopt A Family Program sponsored by Children & Families First in Wilmington, Delaware, for over 15 years. This program ensures that each "adopted" child receives a winter coat, hat and gloves along with other requested clothing and toys. Other essential items are given to the children's mother to help support the family.

#### Q

# THE GIVING SPIRIT THRIVES - MIDDLEPORT, NEW YORK

FMC Middleport employees donated more than 600 pounds of food to the Middleport Area Community Food Pantry. "Throughout the year and especially during the holiday season, it is important to help those in our community who are in need," said Roberta Kloda, plant manager.



# THE LEUKEMIA & LYMPHOMA SOCIETY – PHILADELPHIA, PENNSYLVANIA

As part of our longstanding partnership with the Eastern Pennsylvania Chapter of The Leukemia & Lymphoma Society®, FMC became the Safety Spotlight Sponsor for Light the Night fundraising walk. We were also a premier sponsor for "Big Climb", a stair climb fitness event that was held at FMC Tower.

#### LATIN AMERICA



#### HOSPITAL VOLUNTEERING - UBERABA, BRAZIL



In April, our Uberaba site employees visited the Hospital de Clínicas da Universidade Federal do Triângulo Mineiro and organized fun interactive activities such dancing, balloon sculpturing and magic shows to lift the spirits of patients of all ages and their families.

# REDEVELOPMENT OF ONE OF OUR REMEDIATION SITES



The conceptual design (above) represents the planned residential redevelopment on a portion of a former FMC property in Alameda County, California. Redevelopment of the entire FMC property into a mixeduse area, including residential buildings, retail space, a neighborhood park and a transportation hub is part of a broader development plan established by the city. FMC is performing the remediation of the property in phases to expedite redevelopment and support the city's plan. We completed soil remediation to meet residential use standards in late 2017 on a portion of the property and received approval of the remediation from the local environmental regulatory agency in 2018, thus paving the way for the first phase of future redevelopment. Investing in remediation to residential use standards, which are typically more stringent than those for industrial or commercial use, will allow for beneficial reuse of this brownfield site to help meet the growing demand for housing in the San Francisco Bay Area.

#### REDUCING TRANSPORTATION EMISSIONS

FMC is committed to increasing transparency of our global logistics impact. In 2018, we established a partnership with BDP international, Inc. and the Smart Freight Centre to pilot a Logistics Emissions Accounting and Reduction Network (LEARN) project. The pilot calculated carbon dioxide equivalent (CO2e) emissions for select routes within our supply chain. From there, alternative routes were identified, CO2e emissions measured and compared to existing routes to assess the potential for reduced transportation emissions. We determined that if the alternative routes with the lowest CO2e emissions were chosen, we could realize emission reduction by up to 38 percent. Moving forward we plan to expand this pilot study to additional routes within our supply chain and apply these findings to our broader GHG emissions reduction strategy.

#### A SUSTAINABLE SUPPLY CHAIN

Suppliers are vital to ensuring a responsible supply chain. Several years ago, we launched a formal Supplier Selection and Approval Process that screens all new significant contractors and raw material suppliers for their adherence to quality, safety, human rights standards and sustainability. In 2018, we expanded our process to support the additional screening of new vendors for sanctions and Foreign Corrupt Practices Act compliance. This program is vital to managing and mitigating supplier risk. The Supplier Selection and Approval process training is incorporated into our new employee onboarding program in Procurement.

Given our large number of suppliers, we have partnered with Sedex, a not-for-profit risk management membership organization, to assist in assessing and auditing our current raw material suppliers. We have a similar partnership program with Avetta for significant contractors in North America. This program was expanded in 2018 to include the newly acquired sites from DuPont.

# EXTERNAL SUSTAINABILITY ADVISORY COUNCIL

industry and investors.

FMC's External Sustainability Advisory Council, established in late 2017, is continuing to help us drive progress on our sustainability journey. In-person meetings are held twice a year and have focused on key areas such as innovation, sustainable agriculture, stakeholder engagement, materiality, diversity and inclusion, issues management strategy, ethics/compliance, safety and product stewardship. Members of the council represent academia, think tanks,

Rice, Oryza sativa

#### 2018 | Environmental Results

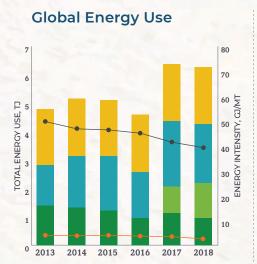
FMC Corporation Metric	2025 Goal (vs. 2013 Baseline)	Legacy FMC	Lithium
Energy intensity	-15%	-18%	-21%
GHG emissions intensity	-15%	-12%	-27%
Waste disposed intensity	-15%	-29%	-20%
Water use intensity at high risk locations	-20%	-25%	-21%

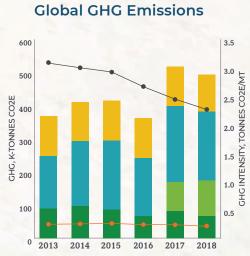
FMC measures and reports our environmental footprint on an intensity basis – i.e., energy (gigajoule), GHG emissions (tonne CO2 equivalent), waste disposed (tonne), and water use at high risk locations (cubic meter) per tonne of product. The table to the left shows progress towards our environmental reduction targets for both legacy FMC and for Livent at the end of 2018. Significant reductions were achieved for both companies versus the 2013 baseline year, already exceeding the 2025 targets in most areas. This was primarily due to efficiency improvements in our processes and changes to cleaner burning fuels.

Note: The data in this table does not include the newly acquired assets from DuPont from November 2017. Livent expects to separately report on its goals and targets starting in 2019.

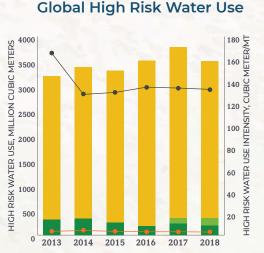
The charts below include environmental metrics for legacy FMC owned sites, active ingredient contract manufacturing sites, all newly acquired sites from DuPont as well as Livent.

For further details on our environmental progress, please visit **ww.FMCsustainability.com** 









#### Notes about Environmental Data:

- 1. In 2018, energy, GHG emissions and water data for legacy FMC and legacy DuPont were externally assured.
- 2. Throughout 2018, Livent Corporation reported its data along with FMC's Agricultural business. Livent's energy, GHG emissions and water data was externally assured along with that of FMC's Agricultural Solutions business.
- 3. In 2018, the external assurance did not include the active ingredient contract manufacturing sites.
- 4. In 2018, we revised our accounting practice for reporting Lithium production that resulted in changes to Lithium intensities ranging from 1-6 percent.



#### **FMC**

FMC's manufacturing sites synthesize active ingredients (Als) and perform the final steps of product formulation, mixing and packaging. Additionally, we obtain Als through contract manufacturers. The synthesis of these complex chemicals has a material environmental footprint; therefore, we work with both FMC-owned sites and contract manufacturers to monitor and reduce these impacts. As growers' needs change and pest pressures increase, we adjust our Al product mix to address these challenges. In some cases, these adjustments result in producing Als that are more resource intensive. We are committed to minimizing our impacts and collaborating with our contract manufacturers to measure and reduce their impacts.

#### **FMC-OWNED MANUFACTURING SITES**

- 1 Energy We are continuously investing in energy efficient equipment and replacing our boilers for efficient use of our energy. We have also undertaken energy audits at select plants that resulted in energy savings. The efforts have resulted in reduced absolute energy use by 31 percent and energy intensity by 18 percent compared to the 2013 baseline.
- 2 GHG The energy efficiency projects at our plants have also helped reduce our absolute GHG emissions by 26 percent and GHG intensity by 12 percent versus our 2013 baseline. It is important to note that the continued use of briquettes as an energy source at our Panoli, India, site is a large source of GHG emissions. However, the use of briquettes is tied to the local economy and positively contributes to the socio-economic sustainability of the community. Briquettes are made from an agricultural byproduct (groundnut shells) that would otherwise be combusted by

local farmers without heat recovery. If FMC were to replace the briquette use with natural gas, we could reduce our GHG emissions at Panoli by about 34 percent. But on a life cycle basis, total GHG emissions to the environment would not be reduced due to the extra natural gas combustion needed to meet the energy demand of the site.

- Waste In 2018, FMC reduced absolute waste disposed by 39 percent and waste disposed intensity by 29 percent versus the 2013 baseline. This was accomplished through process efficiencies and phasing out highly waste intensive products.
- 4 Water In 2018 we reassessed our sites that fall in the medium- to high-risk locations as defined by the World Resources Institute (WRI) Aqueduct Tool. WRI uses 12 key water indicators to assess the risk level of a site. Twelve of our manufacturing sites (including newly acquired sites from DuPont) fall within the medium- to high-risk zones based on the key water indicators. Through better process control, and treatment for water reuse we have achieved 40 percent reduction in absolute water use and 25 percent reduction in water intensity at these high-risk sites.

### FMC ACTIVE INGREDIENT CONTRACT MANUFACTURING SITES

- 1 Energy Since 2013, the energy intensity at our contract manufacturing partners increased by 6 percent due to change in product mix.
- 2 GHG Due to the change in fuel mix, the GHG intensity decreased 3 percent compared to the 2013 baseline.
- Waste Waste disposed intensity at our contract manufacturing sites was reduced by 24 percent compared to the 2013 baseline.

#### LITHIUM (NOW KNOWN AS LIVENT)

The FMC Lithium business, which is now Livent Corporation, also achieved significant reductions in intensities compared to the baseline. Since 2013, the business has seen considerable growth in production volume, yet due to increased operational efficiencies, it has reduced the intensities across all its environmental metrics.

- 1 Energy Even though production increased by 23 percent in 2018, energy use remained flat due to implementation of energy improvement projects. This resulted in a decrease in energy intensity of 21 percent compared to 2013 baseline.
- 2 GHG Since 2013, due to energy efficiency projects and conversion to natural gas fired boilers, GHG intensity was reduced by 27 percent.
- Waste By repurposing several waste streams to valuable by-products, Lithium reduced the waste disposal intensity by 20 percent since 2013.
- 4 Water Lithium utilizes water as a portion of its extraction process. Through responsible use and recycling of this valuable resource, Lithium reduced water intensity at high risk sites by 21 percent since 2013.

#### **CONTINUED PROGRESS**

Making progress on our goals requires identification and implementation of projects to reduce our environmental footprint. In 2019 FMC will reset its environmental goals to reflect our current business, including the legacy DuPont manufacturing sites, using a 2018 baseline.

# **ASSURANCE STATEMENT**

#### INDEPENDENT ASSURANCE STATEMENT TO FMC CORPORATION

ERM Certification and Verification Services (ERM CVS) was engaged by FMC Corporation (FMC) to provide limited assurance in relation to specified 2018 environmental and safety data in the FMC Sustainability Report 2018 ('the Report') as set out below.

	ENGAGEMENT SUMMARY
Scope of our assurance engagement	Whether the FMC total and BU level 2018 data for the following environmental (absolute and intensity) and safety indicators presented on pages 15 and 36, and on FMC's sustainability website (fmcsustainability.com/data-gri/) are fairly presented in all material respects, with the reporting criteria:  Scope 1 GHG Emissions (from direct energy use) [Kilotonnes CO2e] Scope 2 GHG Emissions (location-based method) [Kilotonnes CO2e] Total GHG Emissions [Kilotonnes CO2e] GHG Intensity [Tonnes CO2e/Tonne of Production] Total Energy Use [Terajoules] Energy Intensity [GJ/Tonne of Production] Total Water Use [Million Cubic Meters] High Risk Water Intensity [Cubic Meters/Tonne of Production]
Reporting criteria	The WBCSD/WRI GHG Protocol (2004) for the Scope 1 and 2 GHG emissions (excluding refrigerants) and FMC's internal reporting criteria and definitions for the other indicators.
Assurance standard	ERM CVS' assurance methodology, based on the International Standard on Assurance Engagements ISAE 3000 (Revised).
Assurance level	Limited assurance.
Respective responsibilities	FMC is responsible for preparing the data and for its correct presentation in reporting to third parties, including disclosure of the reporting criteria and boundary. ERM CVS's responsibility is to provide conclusions on the agreed scope based on the assurance activities performed and exercising our professional judgement.

#### **OUR CONCLUSIONS**

Based on our activities, nothing has come to our attention to indicate that the 2018 data for the specified indicators, as listed above, are not fairly presented, in all material respects, with the reporting criteria.

#### **OUR ASSURANCE ACTIVITIES**

Our objective was to assess whether the 2018 data for the specified indicators are reported in accordance with the principles of completeness, comparability (across the organisation) and accuracy (including calculations, use of appropriate conversion factors and consolidation).

We planned and performed our work to obtain all the information and explanations that we believe were necessary to provide a basis for our assurance conclusions.

A multi-disciplinary team of EHS and assurance specialists performed the following activities:

- Interviews with relevant staff to understand and evaluate the data management systems and processes (including systems and internal review processes) used for collecting and reporting the data for the specified indicators;
- A review of the internal indicator definitions and conversion factors;
- Visits to three sites (Flintshire, UK; Newark-Stine, DE, USA; Middleport, NY, USA) and two
  virtual site visits (Tuas South, Singapore; Mobile, AL, USA) to review local reporting processes
  and consistency of reported annual data with selected underlying source data for each
  indicator. We interviewed relevant staff, reviewed site data capture and reporting methods,
  checked calculations and assessed the local internal quality and assurance processes;
- A desk-based review of source data for four sites (Manati, Puerto Rico; Ronland, Denmark; Panoli, India; and Salvi, India);
- An analytical review of the data from all sites and a check on the completeness and accuracy
  of the corporate data consolidation;
- Year-end assurance activities at corporate level including the results of internal review procedures and the completeness and accuracy of the consolidation of the data for the specified indicators from the site data; and
- A review of the presentation of information relevant to the scope of our work in the Report to ensure consistency with our findings.

#### THE LIMITATIONS OF OUR ENGAGEMENT

The reliability of the assured data is subject to inherent uncertainties, given the available methods for determining, calculating or estimating the underlying information. It is important to understand our assurance conclusions in this context.



Jennifer lansen-Rogers Head of Corporate Assurance Services 21 May 2019



ERM Certification and Verification Services, London | www.ermcvs.com; email: post@ermcvs.com

ERM CVS IS A MEMBER OF THE ERM GROUP. THE WORK THAT ERM CVS CONDUCTS FOR CLIENTS IS SOLELY RELATED TO INDEPENDENT ASSURANCE ACTIVITIES AND AUDITOR TRAINING. OUR PROCESSES ARE DESIGNED AND IMPLEMENTED TO ENSURE THAT THE WORK WE UNDERTAKE WITH CLIENTS IS FREE FROM BIAS AND CONFLICT OF INTEREST. ERM CVS AND THE ERM STAFF THAT HAVE UNDERTAKEN THIS ENGAGEMENT WORK HAVE PROVIDED NO CONSULTANCY RELATED SERVICES TO FMC IN ANY RESPECT.

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#### Kathleen A. Shelton, Ph.D.

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#### **Bethwyn Todd**

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Vice President, Global Procurement, Global Facilities and Corporate Sustainability

#### Shawn R. Whitman

Vice President, Government Affairs

# UNITED NATIONS GLOBAL COMPACT

Communication on Progress

FMC became a signatory of the UN Global Compact (UNGC) in 2015. This is our fourth Communication on Progress indicating our activities and management systems in support of the UNGC principles.



More information on our initiatives to support the UNGC principles can be found on www.FMCsustainability.com

TOPIC UNGC PRINCIPLE		FMC'S INITIATIVES TO SUPPORT UNGC P	MC'S INITIATIVES TO SUPPORT UNGC PRINCIPLES			
Human Rights	<b>Principle 1:</b> Businesses should support and respect the protection of internationally proclaimed human rights.	Human rights policy     Code of Ethics and Business Conduct	Human Rights in the Supply Chain training	Supplier code of conduct     Supplier screening process		
numan Rights	<b>Principle 2:</b> Make sure that businesses are not complicit in human rights abuses.	· Human rights policy	Code of Ethics and Business Conduct			
	<b>Principle 3:</b> Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.	· Human rights policy	Code of Ethics and Business Conduct			
	Principle 4: The elimination of all forms of forced and compulsory labor.	Human rights policy     Code of Ethics and Business Conduct	Supplier code of conduct	· Supplier screenings		
Labor	Principle 5: The effective abolition of child labor.	Human rights policy     Code of Ethics and Business Conduct	Supplier Code of Conduct	· Supplier screenings		
	<b>Principle 6:</b> The elimination of discrimination in respect of employment and occupation.	Human rights policy     Code of Ethics and Business Conduct     FMC Employee Resource Groups	<ul> <li>Revision of FMC policies to be more inclusive</li> <li>Hired new Director of Diversity and Inclusion (D&amp;I)</li> </ul>	<ul> <li>New D&amp;I strategy</li> <li>Domestic partner and transgender benefits (U.S.)</li> </ul>		
	<b>Principle 7:</b> Businesses should support a precautionary approach to environmental challenges.	CDP climate change module submission     Climate change statement	Risk assessments for agricultural products	Adherence to stringent regulatory frameworks		
Environment	Principle 8: Undertake initiatives to promote greater environmental responsibility.	CDP climate change module submission     Responsible Care	2025 environmental goals and progress	Product Stewardship programs		
	<b>Principle 9:</b> Encourage the development and diffusion of environmentally friendly technologies.	<ul> <li>Precision agriculture (3RIVE 3D® and PrecisionPAC® application technologies)</li> </ul>	Evalio® AgroSystems     Plant health products	<ul><li>Seed treatment products</li><li>Product Stewardship and Sustainability Assessment tool</li></ul>		
Anti Corruption	<b>Principle 10:</b> Businesses should work against corruption in all its forms, including extortion and bribery.	Ethics on-line training course     The Foreign Corrupt Practices Act (FCPA)     compliance standard process	Training of FMC organization and FMC's key third parties	FCPA audits     Code of Ethics and Business Conduct		

Safe Harbor Statement under the Private Securities Litigation Reform Act of 1995: Statements made in this report that are forward-looking statements are subject to various risks and uncertainties concerning specific factors described in FMC Corporation's 2018 Form 10-K and other SEC fillings. Such information contained herein represents management's best judgment as of the date hereof based on information currently available. FMC Corporation does not intend to update this information and disclaims any legal obligation to the contrary. Historical information is not necessarily indicative of future performance.





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FMC.com















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