

C0. Introduction

C0.1

**(C0.1) Give a general description and introduction to your organization.**

FMC Corporation is an agricultural science company serving global agricultural markets by providing innovative solutions, applications and quality products for more than a century. On November 1, 2017 FMC acquired a significant portion of DuPont's Crop Protection business. In March 2019, FMC completely divested its Lithium business to become a pure play Agricultural Sciences Company. FMC employs approximately 6,400 people throughout the world. FMC's 2020 revenue totalled approximately USD\$ 4.6 billion. FMC's product line helps meet the food and nutrient needs of a growing population as it provides innovative and cost-effective solutions to enhance crop yields and quality by controlling a broad spectrum of insects, weeds and diseases, and non-agricultural solutions for pest control. Sustainability is an enduring, fundamental part of FMC's structure, built into who we are as a company. We continue to integrate sustainability into our innovation, operations, and business practices, which strengthens our business performance and aligns with our corporate strategy. With our customers' use of our products and changes to our business operations, we are addressing six of the world's "major global challenges" that are among society's most profound concerns and have significant implications. They are 1) Food Expectations: Food and crop production must meet the basic needs of a rapidly-growing population and socio-economically diverse population that seek a wider array of nutritional options. 2) Health and Safety Expectations: The need for reduced worker exposure, control of pests known to negatively impact human health. 3) Environmental Consciousness: Growing interest in natural and benign materials is driving the need for new, improved, bio-based products that reduce environmental impacts. 4) Climate Change: Reduction in greenhouse gas emissions is a necessary step in mitigating climate-warming trends. 5) Scarce Resources: To cope with limited availability of fresh water, energy and other essential resources, we must carefully manage them and use more renewable alternatives. 6) Land Competition: Urbanization to accommodate a growing population and poor land management techniques limit the amount of arable land available for agriculture, which intensifies the need to increase farmland productivity and crop yields. Each of these challenges shapes the way FMC does business. In 2019, FMC took a focused approach to link the "major global challenges" with the United Nations Sustainable Development Goals (SDGs). This includes a detailed review of SDG #2 and #15, and their associated targets on which FMC can make a positive impact.

FMC is committed to continuing to do its part to address climate change and its impacts. In 2019 we set new environmental goals to reflect the changes to our business with the acquisition of the DuPont Crop Protection Business and the divestiture of the FMC Lithium business. Our new 2030 reduction targets for energy and greenhouse gas emissions are both 25 percent from our 2018 baseline year. In 2020, FMC has reduced both energy intensity and GHG intensity by 12.8 and 15.3 percent respectively. FMC has been reporting its GHG emissions and mitigation strategy to CDP since 2016. FMC has detailed the business risks and opportunities we have due to climate change and its impacts in our CDP climate change reports.

FMC representatives may from time to time make written or oral statements that are "forward-looking" and provide other historical information. Such statements are based on our current views and assumptions regarding future events, future business conditions and the outlook for FMC based on currently available information. These statements involve known and unknown risks, uncertainties and factors that may cause actual results to be materially different from any results, levels of activity, performance or achievements expressed or implied by any forward-looking statement. We wish to caution readers not to place undue reliance on any such forward-looking statements, which speak only as of the date made.

C0.2

**(C0.2) State the start and end date of the year for which you are reporting data.**

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Reporting year	January 1 2020	December 31 2020	No	<Not Applicable>

C0.3

**(C0.3) Select the countries/areas for which you will be supplying data.**

- Australia
- Brazil
- Canada
- China
- Denmark
- France
- Germany
- India
- Indonesia
- Italy
- Pakistan
- Russian Federation
- Singapore
- Thailand
- United Kingdom of Great Britain and Northern Ireland
- United States of America

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

USD

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Operational control

C-CH0.7

(C-CH0.7) Which part of the chemicals value chain does your organization operate in?

Row 1

Bulk organic chemicals

Bulk inorganic chemicals

Other chemicals

Specialty chemicals

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	Please explain
Director on board	The highest responsibility for climate-related initiatives is the Chairman of the Board of Director's Sustainability Committee. The Board of Directors has adopted a written charter to address climate change by outlining the Sustainability Committee's duties. The Chairman of the Sustainability Committee ensures that the charter is addressed in periodic board meetings and operationalized by the corporation. The written charter includes: <ul style="list-style-type: none"> <li>•Conducting an annual self-assessment of risks and opportunities related to climate change</li> <li>•Monitoring FMC's Sustainability Program that also includes environmental sustainability, program development and advancement, goals and objectives, and progress toward achieving those objectives</li> <li>•Monitoring FMC's environmental responsibility</li> <li>•Monitoring FMC's programs against American Chemistry Council's Responsible Care initiative related to climate change. As an example, the Chairman, with the consent of the Committee, has approved the adoption of a science-based emissions reduction target. FMC will be submitting this target for approval to The Science Based Target initiative (SBTI) in 2021. The Sustainability Committee is assisted by FMC's internal Sustainability Steering Team, that meets quarterly, to decide on sustainability and climate related goals, risks and opportunities, various reporting responsibilities and discusses sustainability scorecards.</li> </ul>

C1.1b

**(C1.1b) Provide further details on the board’s oversight of climate-related issues.**

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Scope of board-level oversight	Please explain
Scheduled – all meetings	<p>Reviewing and guiding strategy</p> <p>Reviewing and guiding major plans of action</p> <p>Reviewing and guiding annual budgets</p> <p>Setting performance objectives</p> <p>Monitoring implementation and performance of objectives</p> <p>Monitoring and overseeing progress against goals and targets for addressing climate-related issues</p> <p>Other, please specify (Reviewing and approving annual Sustainability Commitments)</p>	<Not Applicable>	<p>The highest governance body responsible for climate-related initiatives at FMC is the Board of Directors' Sustainability Committee. This committee was established when sustainability was formalized at FMC in 2011. The committee meets four times per year to review and direct climate change related sustainability programs and submit summary reports to the full Board of Directors. The Sustainability Committee of the Board of Directors (the "Committee") is composed of six outside members of the Board, one of whom is the Chairman. The Committee and its Chairman are nominated by the Nominating and Corporate Governance Committee, and elected annually at the organizational meeting of the Board. The Committee's scope encompasses FMC's safety, environmental and sustainability programs as these were found to be important in the Materiality Assessment of the company. It reviews these programs (objectives, plans, and performance) and recommends actions, as necessary, to ensure continuous performance improvement and alignment with constituent expectations (both internal and external). The Committee also monitors program goals in light of market, environmental and social trends and expectations. The Committee meets as scheduled by its Chairman, at a minimum, four times per year. Assisting the Committee is the Vice President, Global Procurement, Global Facilities and Corporate Sustainability, who serves as the Committee's executive secretary. The executive secretary prepares the agenda and the minutes of the meetings. The Chief Sustainability Officer reports to the Committee the changes in sustainability metrics related to climate change resulting from the Committee's inquiries and recommendations. She also assists the Chairman in preparing reports to be submitted to the Board. The Committee conducts a self-assessment of its performance annually. The Committee meets as scheduled by its Chairman, nominally three times per year in conjunction with the April, July and October meetings of the Board of Directors. Assisting the Committee is the Vice President, Global Procurement, Global Facilities and Corporate Sustainability, who serves as the Committee's executive secretary. The executive secretary prepares the agenda and the minutes of the meetings. The Global Sustainability Director reports to the Committee the changes in sustainability metrics related to climate change resulting from the Committee's inquiries and recommendations. She also assists the Chairman in preparing reports to be submitted to the Board. The Committee conducts a self-assessment of its performance annually.</p>

**C1.2**

**(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.**

Name of the position(s) and/or committee(s)	Reporting line	Responsibility	Coverage of responsibility	Frequency of reporting to the board on climate-related issues
Chief Sustainability Officer (CSO)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Quarterly
Environment/ Sustainability manager <i>The Environment/Sustainability Manager, internally known as Director of Corporate Sustainability.</i>	<Not Applicable>	Both assessing and managing climate-related risks and opportunities <i>Director of Corporate Sustainability heads the Corporate Sustainability Org. that includes Sustainability Engineer and Analyst, as well as numerous cross functional teams, to manage day to day activities related to sustainability. The Director also heads the External Sustainability Advisory Council.</i>	<Not Applicable>	Quarterly
Sustainability committee <i>Internally known as Executive Sustainability Steering Team and comprises of Executives of the company</i>	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Quarterly

**C1.2a**

**(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).**

The Chief Executive Officer is responsible for smooth functioning of the corporation, including the Sustainability program at FMC. The CEO is also a passionate spokesperson for the Sustainability initiatives internal and external to FMC.

The Chief Sustainability Officer (CSO) is a member of FMC's executive leadership, has the overall responsibility of leading and managing Sustainability related programs throughout the Corporation.

The Director of Global Sustainability oversees the implementation and integration of sustainability at FMC. The Director reports to the CSO. The Executive Sustainability Council includes Vice Presidents and executives from Manufacturing, EHS, R&D, Regulatory, Marketing and Sales, Communications, Procurement, Human Resources, Legal and Government Affairs. The Council meets on a quarterly basis and dives deeply in to climate-related issues such as corporate environmental goals, stakeholder feedback and sustainability initiatives. The CSO communicates directly with the Board of Directors' Sustainability Committee on sustainability and climate change four times a year. The Global Sustainability Director collaborates with the Vice President of Operations and FMC's Operations, Human Resource and R&D directors to develop and ensure the achievement of FMC's 2025 and 2030 safety, environmental, innovation and social metrics and targets. In 2019, the Board of Director's Sustainability Committee approved the new corporate sustainability goals upon becoming a pure agricultural sciences company. The CSO also apprised the Board the feedback from FMC's external sustainability advisory council, diversity and inclusion initiatives and the development of FMC's Product Stewardship and Sustainability Assessment tool for R&D projects. Additionally, this individual manages the Corporate Sustainability Group, who collects, verifies and audits FMC's metrics for innovation, business practices, and environment (energy, water, greenhouse gas emissions and waste). The Global Sustainability Group works cross-functionally to monitor the implementation of FMC's sustainability programs globally.

**C1.3**

**(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?**

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	Climate -related issues and management decisions are tied to incentives

**C1.3a**

**(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).**

Entitled to incentive	Type of incentive	Activity incentivized	Comment
Corporate executive team	Monetary reward	Behavior change related indicator Company performance against a climate-related sustainability index	FMC's executive officers and vice presidents, including those who are members of FMC's executive team are encouraged to include sustainability-related targets, like greenhouse gas emissions and energy reductions, in their annual performance indicators. FMC has committed to developing targets that will contribute to FMC's corporate 2030 sustainability targets to reduce energy, greenhouse gas emissions, waste disposed and water use in high-risk areas. Due to recent changes in FMC's portfolios through Acquisition and Divestiture, FMC has set new targets for 2030 using 2018 as the baseline year.
Procurement manager	Monetary reward	Energy reduction project Supply chain engagement	FMC Procurement tracks projects that may have a "Potential Sustainability Advantage", The categories are Energy Usage, Packaging Reduction, Emissions Reductions, Reuse/Recycle Substitutions, Waste Reduction and Water Usage. The results are reviewed and recognized by Management for making a contribution to support our Sustainability goals.
Buyers/purchasers	Monetary reward	Environmental criteria included in purchases Supply chain engagement	FMC Procurement tracks projects that may have a "Potential Sustainability Advantage", The categories are Energy Usage, Packaging Reduction, Emissions Reductions, Reuse/Recycle Substitutions, Waste Reduction and Water Usage. The results are reviewed and recognized by Management for making a contribution to support our Sustainability goals.
All employees	Non-monetary reward	Other (please specify) (General Sustainability Engagement)	FMC's Global Sustainability Group has produced a sustainability blog, which is featured on FMC's sustainability website. The goal of the blog is to inform and engage FMC's international workforce on programs and initiatives related to sustainability at FMC. Employees and stakeholders can submit information to the Global Sustainability Group on how they are creating a more sustainable future within and outside of FMC.

**C2. Risks and opportunities**

**C2.1**

**(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?**

Yes

**C2.1a**

**(C2.1a) How does your organization define short-, medium- and long-term time horizons?**

	From (years)	To (years)	Comment
Short-term	0	3	No Comment
Medium-term	3	10	No Comment
Long-term	10	20	No Comment

**C2.1b**

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**(C2.1b) How does your organization define substantive financial or strategic impact on your business?**

FMC assesses risks using impact and likelihood definitions defined by the Risk Council (composed of the Chairman of the Board of Directors, CEO, CFO, General Counsel and Chief Compliance Officer, President/Chief Operating Officer, and Head of Risk, Control and Audit) to arrive at "enterprise" level risks, those risks are considered substantive and are estimated to have a financial impact of \$50 million or more of EBIT.

Impact: Considers the *consequences of an event*, separate from the likelihood that the event will actually occur. Impact ratings *consider risk and control activities in place* and whether they operate effectively. FMC rates impact on a five point scale with level of 1 (Minor) to 5 (Critical). The level of impact is determined by the effect on net income, working capital as well as non-financial indicators such as business disruption, legal regulatory compliance and reputational impact.

Likelihood: Considers the probability of an event occurring over the next five years, given both the inherent probability and the preventive measures in place. FMC rates likelihood on a five point scale with level of 1 (Remote) to 5 (Likely).

**C2.2**

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**(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.**

**Value chain stage(s) covered**

Direct operations  
Upstream  
Downstream

**Risk management process**

Integrated into multi-disciplinary company-wide risk management process

**Frequency of assessment**

More than once a year

**Time horizon(s) covered**

Short-term  
Medium-term  
Long-term

**Description of process**

Description of the process used to determine which risks and opportunities could have a substantive financial or strategic impact: FMC's Risk, Control and Audit Group (RC&A), who leads the company's Enterprise Risk Management (ERM) process, conducts a company-wide enterprise risk assessment to report on FMC's exposure to risk factors (generally disclosed in our 10-K). The assessment process includes engaging with business functions globally on issues including risks/opportunities associated with climate change. Assessment findings are reported to the Risk Council and FMC's executive leadership four times a year, and Board of Directors annually. Quarterly-RC&A group reviews key risks with the Risk Council, which is composed of the Chairman of the Board of Directors, CEO, CFO, General Counsel and Chief Compliance Officer, President/Chief Operating Officer, and Head of Risk, Control and Audit. FMC's Risk Council is responsible for ensuring good risk governance, defining strategic risks through impact and likelihood assessments, and monitoring risk assessment processes in strategic planning, business/capital planning and M&A. In addition, the Corporate Sustainability Group conducts a materiality assessment every two years that quantitatively and qualitatively analyses material issues. They conduct interviews with employees with a deep understanding of our business for climate change and other material issues to FMC. They also conduct a survey asking internal and external stakeholders to rank environmental sustainability issues based on each issue's perceived impact on and importance to FMC. The 2020 survey had over 100 respondents, representing non-government organizations, customers, suppliers, foundations, trade associations and employees. The outcome of the survey were reported to FMC's executive leadership team, Sustainability Steering Committee, Board Sustainability Team and on our sustainability website (<https://www.fmc.com/en/sustainability/sustainability-data-and-reporting>). The next materiality assessment is scheduled for 2022. Separately, on an asset level, RC&A conducts an annual risk assessment for our manufacturing sites and physical assets for impact of climate change, among other topics, on our operations. It has a review process for potential natural catastrophes and possible sources of risks, which are generally disclosed in our 10-K. The Sustainability Group manages the company's energy consumption, GHG emissions, water use and waste generation data. FMC obtained third-party assurance on its 2020 data on energy, GHG emissions, waste disposed and water use at high risk areas. FMC's sites collect and report this data to the Sustainability Group, ensuring FMC is able to measure its environmental impact. The Sustainability Group conducts water risk assessments and energy audits at FMC facilities and results are applied at other sites as needed. Finally, FMC recently conducted both a TCFD aligned transition scenario (considering FMC's direct operations and entire value chain) and physical scenario (considering FMC's direct operations) analysis considering to identify climate-related risks and opportunities under the IEA SDS, IEA Net Zero roadmap, and RCP 8.5 scenario. These risks are summarized in 2.3a and 2.4a, and the process is described in 3.2a. The results from this scenario analysis will be incorporated into our overall risk management process. Example of how the described process is applied to Physical risks and/or opportunities: (Situation) FMC recognizes that the long-term physical impacts of climate change will continue to manifest themselves going forward, including sea level rise, which may put some of our facilities at risk. Therefore, these risks are considered in our ERM process as well as during our recent climate-related scenario analysis. Under RCP8.5, sea level rise was identified as a potential substantive climate-related risk to some of our coastal assets. (Task) FMC is examining options to protect our resources close to sea level against sea level changes and stronger storm surges. (Action) For example, plans are in place at our Ronland, Denmark site to strengthen its dike system to improve the resilience of this site to the impacts of sea level rise or stronger storm surges. (Result) FMC has already repaired the dike to ensure a minimum height of 1.9m above normal sea level around the Ronland peninsular. Work will begin in fall 2021 to increase dike height to 2.3 meters (Postponed from 2020). The project will be carried out in collaboration with the Danish Coastal Authority. Example of how the described process is applied to Transitional risks and/or opportunities: (Situation) As more regions and countries chart pathways to limit the impacts of climate change, climate-related regulation is emerging globally, including in areas where both FMC as well as customers have direct operations. Therefore, as part of FMC's ERM processes and transition scenario analysis, we evaluate emerging regulatory systems to understand potential associated risks or business opportunities that may emerge from their implementation. As a result of the transition scenario analysis carbon pricing mechanisms was identified as a potential substantive risk. FMC's Ronland, Denmark plant is subject to the EU ETS and is below Phase III's emissions cap. In 2021, Phase IV of the EU ETS will come into effect and allowances will decrease by 2.2 percent annually from 2021 to 2030. (Task) Our Ronland, Denmark plant will continue to be subject to the EU ETS and the new emissions limits in Phase IV may increase costs at this plant, depending on the new EU-wide emissions cap and the cost of procuring allowances. Additionally, China is in the process of expanding the implementation of the country's cap and trade program across the country in order to limit emissions. General environmental regulations in China and the country's cap-and-trade program are designed to improve air quality and the environment and they are quickly becoming more prevalent throughout the country. (Action) FMC realizes the potential impacts on the company's operations due to government's recent increased focus on improving the country's environmental conditions. Environmental regulations have the potential to increase the costs of active ingredient contract manufacturing companies that produce our active ingredients. (Result) Based on FMC's new Science Based Targets, FMC identified a need to increase its capital investment in emission reduction technology to reduce its GHG emissions to help meet its goal which is more stringent than the EU/ETS.

**C2.2a**

**(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?**

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	The agriculture industry is subject to climate-related regulation that directly influences our operations and customers. Therefore, as part of FMC's Enterprise Risk Management (ERM) processes, we evaluate current regulatory systems to ensure that we implement appropriate actions to mitigate associated risks or take advantage of potential business opportunities. We have also undergone scenario analysis to better understand the impact of regulatory climate risks on our business. Example: FMC is currently subject to the European Union (EU) Emission Trading Scheme (ETS), which has a goal to reduce greenhouse gas emissions by 43 percent by 2030 from 2005 emission levels. Specifically, FMC's Ronland, Denmark plant is subject to the EU ETS and is below Phase III's emissions cap. In 2021, Phase IV of the EU ETS will come into effect and allowances will decrease by 2.2 percent annually from 2021 to 2030. Our Ronland, Denmark plant will continue to be subject to the EU ETS and the new emissions limits in Phase IV may increase costs at this plant, depending on the new EU-wide emissions cap and the cost of procuring allowances. Environmental regulations have the potential to increase the costs of active ingredient contract manufacturing companies that produce our active ingredients. FMC could potentially need to increase capital investment in emission reduction technology to reduce its GHG emissions. FMC has also set overall 25 percent energy intensity and GHG reduction goals. By reducing our emissions of greenhouse gases and investing in energy and process efficient equipment, we lessen the likelihood of a material risk from greenhouse gas legislation. FMC has and will continue to implement energy and process efficiency projects to reduce our energy consumption and GHG emissions. FMC has a dedicated budget for process improvements at its established Tech Center, which conduct research in energy efficiency and emissions reductions activities. The Tech Center performs energy audits and process improvement at FMC facilities and findings are implemented at other FMC locations as needed.

	Relevance & inclusion	Please explain
Emerging regulation	Relevant, always included	As more regions and countries chart pathways to limit the impacts of climate change, climate-related regulation is emerging globally, including in areas where both FMC as well as customers have direct operations. Therefore, as part of FMC's ERM processes, we evaluate emerging regulatory systems to understand potential associated risks or business opportunities that may emerge from there implementation. We have also undergone scenario analysis to better understand the impact of regulatory climate risks on our business. Example: There are numerous emerging and proposed climate-related regulation that could impact our business. For example, in December 2019, the European Commission approved the European Green Deal and Farm to Fork Strategy, with the goal of making the EU carbon neutral by 2050. The Deal includes investment plans and a roadmap to fight against climate change and includes goals and strategies related to GHG and pesticide use reductions. 23% of our 2020 revenue is derived from Europe, the Middle East and Africa. FMC is closely following updates and the discussion surrounding the Green Deal and the Farm to Fork Strategy. Additionally, China is in the process of expanding the implementation of the country's cap and trade program across the country in order to limit emissions. General environmental regulations in China and the country's cap-and-trade program are designed to improve air quality and the environment and they are quickly becoming more prevalent throughout the country. FMC realizes the potential impacts on the company's operations due to the Chinese government's recent increased focus on improving the country's environmental conditions. These are emerging regulatory schemes and hence, costs of complying with possible future requirements are difficult to estimate at this time. These risks are monitored carefully by the organization. As part of our scenario analysis process, FMC assessed the increase in annual costs to the business due to climate regulation under the Sustainable Development Scenario. We found that such a situation could incur additional annual costs of up to \$20M by 2040. This represents a conservative estimate, and we are taking steps to lower our energy and emissions impact through energy intensity and GHG reduction goals, which will limit our exposure to carbon pricing schemes.
Technology	Relevant, always included	Our ability to compete successfully depends in part upon our ability to maintain a superior technological capability and to continue to identify, develop and commercialize new and innovative, high value-added products for existing and future customers. Climate change may impact markets in which we sell our products. For example, our markets are affected by climatic conditions, which could adversely impact crop pricing and pest infestations. Drought may reduce the need for fungicides, which could result in fewer sales and greater unsold inventories in the market, whereas excessive rain could lead to increased plant disease or weed growth with growers requiring different pest management needs. A lack of investment in technological solutions that meet customer demands due to changing market conditions represents a risk to FMC. Therefore, as part of our climate-risk and scenario analysis process, we assessed technology risks, as well as corresponding opportunities. Our investment in the R&D of new pesticidal active ingredients relies on discovery of new chemical molecules. It is important for FMC to place a high priority on developing sustainably-advantaged products to ensure that products coming out of our pipeline are addressing climate related risks and are efficacious against target pests without creating any undue risks to human health and the environment while meeting applicable regulatory criteria. If FMC's technology or product reformulations fall short or do not deliver on customer expectations around carbon intensity, circularity, and other sustainability considerations, we could experience reduced demand for products. Example: FMC is working to turn this risk into an opportunity, as we are committed to helping solve issues of food security related to climate change through increased R&D investment. We have set an innovation goal to dedicate 100% of our R&D expenses on sustainably advantaged products by 2025. FMC utilizes the award-winning Sustainability Assessment Tool that compares our R&D projects to a benchmark product currently in the market through a series of 38 questions. In 2020, we dedicated 97 percent of our R&D spend to developing sustainably advantaged products. In addition, FMC recognizes that risk profiles may change as well as evaluation criteria and as such, the Sustainability Assessment tool is evergreen.
Legal	Relevant, always included	We are subject to extensive federal, state, local and foreign environmental and safety laws, regulations, directives, rules and ordinances concerning, among other things, emissions in the air, discharges to land and water, and the generation, handling, treatment, disposal and remediation of hazardous waste and other materials. We take our environmental responsibilities very seriously, but there is a risk of environmental impact inherent in our manufacturing operations and transportation of chemicals. Any substantial liability for environmental damage could have a material adverse effect on our financial condition, results of operations and cash flow. The evaluation of this risk is included in the ERM annual risk assessment process. Example: Specifically, FMC is currently regulated under the EU ETS and as climate-related legislation is increasingly enacted in regions and countries where we operate, we will be required to meet these regulatory requirements. Not only is this a regulatory risk, but failure to comply with such systems could pose a legal risk to FMC. In order to limit exposure to subsequent legal risks that could arise from climate-related regulation, FMC is taking steps to limit the emissions impact of our operations. Specifically, we set an overall 25 percent energy intensity and GHG reduction goals. By reducing our emissions of greenhouse gases and investing in energy and process efficient equipment, we lessen the likelihood of a material risk from greenhouse gas legislation, and any potential litigation that could result from a lack of compliance.
Market	Relevant, always included	Changing market conditions due to climate change is and will continue to impact the agriculture industry. Since close to 100% of our business is in agriculture, these market risks represent a material issue for us. The evaluation of this risk is included in the ERM annual risk assessment process. We have also undergone climate-related scenario analysis to better understand the impact of market climate risks on our business. Example: Specifically, our markets are affected by climatic conditions, which could adversely impact crop pricing and pest infestations. For example, drought may reduce the need for fungicides, which could result in fewer sales and greater unsold inventories in the market, whereas excessive rain could lead to increased plant disease or weed growth requiring growers to purchase and use more pesticides. Drought and/or increased temperatures may change insect pest pressures, requiring growers to use more, less, or different insecticides. Climate change may also impact markets in which we sell our products, where, for example, a prolonged drought may result in decreased demand for our products. The more gradual effects of persistent temperature change in geographies with significant agricultural lands may result in changes in lands suitable for agriculture or changes in the mix of crops suitable for cultivation and the pests that may be present in such geographies. Another example of how climate risks will impact market demand is that a prolonged increase in average temperature may make northern lands suitable for growing crops not grown historically in such climates, leading farmers to shift from crops such as wheat to soybean and may result in new or different weed, plant disease or insect pressures on such crops – such changes would impact the mix of pesticide products farmers would purchase, which may be adverse for us, depending on the local market and our product mix. As part of our scenario analysis process, we looked at the suitable land area shift between the 2020s and 2050s for three of our largest market shares by sales revenue, including Brazil Cotton, Brazil Sugarcane and USA Soybean, noting a reduction of 1%, 26% and 6% in suitable land for each market, respectively. Such market shifts, which could be impacted by physical climate risks, pose a potential risk to FMC through reduced demand for our products, which under a RCP8.5 scenario, could result in \$11-290M of lost revenue in Brazil alone.
Reputation	Relevant, always included	Climate change and its impacts have the potential to induce changes in customer preferences for products and/or services. People are increasingly concerned about the environment and the impact that companies' products and operations have on the environment. In the future, some consumers' preferences could change, and they could prefer to support products, technologies and companies that they perceive as "friendlier" and/or less impactful on the environment. Not meeting these customer and consumer expectations could pose a reputational risk to FMC that has the potential to impact our business. Therefore, these risks are considered in our ERM process as well as during our climate-related scenario analysis process. Example: The potential risks associated with changing consumer behavior depend on the time frame and extent to which consumers decide to switch to products they perceive as "greener" or more "climate-friendly" because of increased concern for society's negative impacts on the environment. Negative shareholder perceptions could lead to a reduction in capital availability, especially as new methods of measuring climate action emerge. The financial impacts on FMC will also depend on our product portfolio and our ability to adapt our products with changing consumer behavior. To mitigate our potential exposure to reputational risks related to the "greenness" of our products, FMC is committed to developing sustainable solutions in our portfolio. For example, Arc™ farm intelligence solution enable growers and their advisors to operate more effectively and sustainably through the power of data and machine learning. One of the key pests targeted by Arc™ farm intelligence is the highly invasive fall armyworm (FAW). This pest is endemic to the Americas but has rapidly spread to Africa and parts of Asia. This spread has been due to a variety of factors, including the pest's ability to fly long distances and the expansion of FAW habitats due to climate change. Uncontrolled infestations of FAW have the ability to severely affect food systems, particularly in developing regions. In 2020, we also announced a partnership with Nutrien (customer and value chain partner) to use the platform for the prediction of diamondback moths in California. The diamondback moth is one of the most prolific pests on brassicas. U.S. Brassica crops are some of the most nutrient dense vegetables and play a key role in promoting human health.
Acute physical	Relevant, sometimes included	FMC is committed to evaluating the risk of each of our production facilities from acute physical risks. The evaluation of this risk is included in the ERM annual risk assessment process. Physical risks, including acute risks, are also considered in our climate-related scenario analysis. We manufacture products through a combination of FMC owned facilities and contract manufacturers. We own and operate large-scale active ingredient manufacturing facilities with a wide geographic spread. Interruptions at these facilities may materially reduce their productivity, or the profitability of our business as a whole. FMC has also set environmental intensity goals for all of our manufacturing sites and monitor their footprint on a monthly basis. Although we take precautions to enhance the safety of our operations and minimize the risk of disruptions, our operations and those of our contract manufacturers are subject to hazards inherent in chemical manufacturing and the related storage and transportation of raw materials, products and wastes. Example: Potential hazards to our facilities include (among many others) explosions, fires, severe weather and natural disasters (due to climate change), other environmental risks and public health epidemics/pandemics. Some of these hazards may cause severe damage to or destruction of property and equipment or personal injury and loss of life and may result in suspension of operations or the shutdown of affected facilities. Specifically, FMC's physical risk assessment determined that FMC's sites in Mobile, Alabama and Manati, Puerto Rico have historically faced a high exposure and vulnerability to hurricanes, which are increasing in severity and frequency due to the impacts of climate change. Furthermore, FMC has a number of chemical manufacturing sites in India that are exposed to increasing wildfire risk. A deep dive analysis of the financial risk presented by wildfires is planned in the coming weeks for the most critical FMC sites in India. FMC has emergency response and business continuity plans in place in order to mitigate the impact from such physical risks.
Chronic physical	Relevant, sometimes included	Climate-related chronic physical risks have the potential to impact both our direct operations as well as the customers and markets we serve. Given the susceptibility of the agriculture industry to physical risks, and because close to 100% of our business is in agriculture, these physical risks represent a material issue for us and therefore, the evaluation of this risk is included in the ERM annual risk assessment process. Example: Specifically, our markets are affected by climatic conditions, which could adversely impact crop pricing and pest infestations; for example, drought may reduce the need for fungicides, which could result in fewer sales and greater unsold inventories in the market, whereas excessive rain could lead to increased plant disease or weed growth requiring growers to purchase and use more pesticides. Drought and/or increased temperatures may change insect pest pressures, requiring growers to use more, less, or different insecticides, which may result in a decreased demand for our products. Chronic physical risks could also adversely impact suitable land area in some of our major markets. An example of chronic risks determined as part of FMC's physical risk assessment is potential impact from coastal inundation (rising sea level, storm surge and high tide) at FMC's site in Rønland, Denmark. This site also has a historical vulnerability to dropping water levels in the nearby fjord, which are irrelevant to the facility's ability to cool its equipment. Water dynamics at Rønland will be further studied in the coming weeks as part of a deep dive financial analysis. The effects of climate change such as rising sea levels, drought, flooding and general volatility in seasonal temperatures could also adversely affect our operations globally. Extreme weather events attributable to climate change may result in, among other things, physical damage to our property and equipment, and interruptions to our supply chain. FMC has emergency response and business continuity plans in place in order to mitigate the impact from such physical risks.

C2.3

**(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?**

Yes

C2.3a

**(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.**

**Identifier**

Risk 1

**Where in the value chain does the risk driver occur?**

Direct operations

**Risk type & Primary climate-related risk driver**

Emerging regulation	Carbon pricing mechanisms
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**Primary potential financial impact**

Increased indirect (operating) costs

**Climate risk type mapped to traditional financial services industry risk classification**

<Not Applicable>

**Company-specific description**

As part of FMC's ERM processes, we evaluate emerging regulatory systems to understand potential associated risks or business opportunities that may emerge from their implementation. We have also undergone scenario analysis to better understand the impact of regulatory climate risks on our business. FMC is currently subject to the European Union (EU) Emission Trading Scheme (ETS), which has a goal to reduce greenhouse gas emissions by 43 percent by 2030 from 2005 emission levels. Started in 2005, the EU ETS was designed to be implemented in a series of four phases. The third phase (2013-2020) of the EU ETS is currently in effect and the emissions allowances decline by 1.74 percent annually. As of now, each member nation participating in the EU ETS sets the cap and distributes free emissions allowances. FMC's Ronland, Denmark plant is subject to the EU ETS and is below Phase III's emissions cap. In 2021, Phase IV of the EU ETS will come into effect and allowances will decrease by 2.2 percent annually from 2021 to 2030. Our Ronland, Denmark plant will continue to be subject to the EU ETS and the new emissions limits in Phase IV may increase costs at this plant, depending on the new EU-wide emissions cap and the cost of procuring allowances. Additionally, China is in the process of expanding the implementation of the country's cap and trade program across the country in order to limit emissions. General environmental regulations in China and the country's cap-and-trade program are designed to improve air quality and the environment and they are quickly becoming more prevalent throughout the country. FMC has 3 sites in China (, Jinshan, , Suzhou, and Pudong; with 11 tolling partners in 4 provinces) ) FMC realizes the potential impacts on the company's operations due to government's recent increased focus on improving the country's environmental conditions. Environmental regulations have the potential to increase the costs of active ingredient contract manufacturing companies that produce our active ingredients. Depending on how additional countries implement cap and trade in the long-term, FMC could potentially need to increase capital investment in emission reduction technology to reduce its GHG emissions.

**Time horizon**

Medium-term

**Likelihood**

Virtually certain

**Magnitude of impact**

Low

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

8077660

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

The potential financial impact figure was calculated by applying the Sustainable Development Scenario (SDS) carbon pricing for 2025 (\$63/metric tonne CO2e for sites in countries with advanced economies and \$43/metric tonne CO2e for sites in selected developing economies) to FMC's total 2020 Scope 1 and 2 emissions (151,520 metric tonnes CO2e) to determine the impact of potential carbon pricing regulations. The formula is as follows: \$8,077,660 = 78,115 metric tonnes CO2e (Scope 1 and 2 for advanced economies) \* \$63/metric tonne CO2e + 73,405 metric tonnes CO2e (Scope 1 and 2 for developing economies) \* \$43/metric tonne CO2e. This estimation makes several high-level assumptions and is not meant to indicate a forecast of true costs to FMC but rather presents a possibility of potential financial impacts to the company.

**Cost of response to risk**

15000000

**Description of response and explanation of cost calculation**

FMC's total annual investment in our sites and tolling partners to address energy efficiency can range from approximately \$8 to 15 million. Direct cost of management of this is unknown. (Situation) FMC continues to follow legislative and regulatory developments regarding climate change because the regulation of greenhouse gases, depending on their nature and scope, could subject FMC manufacturing operations to additional costs or limits on operations. (Task) To proactively help mitigate the risk, FMC has set emissions reduction targets to lessen the potential cost of future regulations. (Action) FMC has set overall 25 percent energy and GHG intensity reduction goals by 2030. By reducing our emissions of greenhouse gases and investing in energy and process efficient equipment for our manufacturing facilities by 2030, we lessen the likelihood of a material risk from greenhouse gas legislation. (Result) FMC has and will continue to implement energy and process efficiency projects to reduce our energy consumption and GHG emission generation. FMC has a dedicated budget for process improvements at its established Technical Center, which conduct research in energy efficiency and emissions reductions activities. The Technical Center perform energy audits and process improvement at FMC facilities and findings from these audits are



implemented at other FMC locations as needed. FMC's total annual investment in the Technical Center can range, from approximately \$8 to \$15 million. The direct cost of management is not known as this time.

**Comment**

**Identifier**

Risk 2

**Where in the value chain does the risk driver occur?**

Direct operations

**Risk type & Primary climate-related risk driver**

Chronic physical	Rising mean temperatures
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**Primary potential financial impact**

Decreased revenues due to reduced production capacity

**Climate risk type mapped to traditional financial services industry risk classification**

<Not Applicable>

**Company-specific description**

According to the U.S. Global Change Research Program's National Climate Assessment, climate change is projected to cause many changes in physical climate parameters. These include increases in extreme weather events as well as changes in sea levels, mean temperatures, precipitation levels and precipitation patterns. The interaction of these physical parameters could have significant impacts on natural resources in the locations in which FMC operates. We own and operate large-scale active ingredient manufacturing facilities with a wide geographic spread such as in the U.S. (Mobile, AL), Puerto Rico (Manati), China (Pudong and Jinshan), Denmark (Ronland), and India (Panoli). Our operating results are dependent in part on the continued operation of these production facilities. Interruptions at these facilities may materially reduce the productivity of a particular manufacturing facility, or the profitability of our business as a whole. Although we take precautions to enhance the safety of our operations and minimize the risk of disruptions, our operations and those of our contract manufacturers are subject to hazards inherent in chemical manufacturing and the related storage and transportation of raw materials, products and wastes. These potential hazards include (among many others) explosions, fires, severe weather and natural disasters (due to climate change), other environmental risks and public health epidemics/pandemics. Some of these hazards may cause severe damage to or destruction of property and equipment or personal injury and loss of life and may result in suspension of operations or the shutdown of affected facilities. For example, our Ronland, Denmark site is especially susceptible to the impacts of sea level rise and our Mobile, Alabama site is susceptible to hurricanes.

**Time horizon**

Long-term

**Likelihood**

Very likely

**Magnitude of impact**

Medium

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

As noted in the International Panel on Climate Change Fifth Assessment Report, quantitative estimates to measure the private costs of climate change may be incomplete due to difficulty in measuring all relevant effects over time. FMC could experience higher costs with adapting to sea level rise, storm surges, rise in mean temperatures and changes in natural resources as we will need to fortify our sites near sea level. The percentage of FMC's revenue that would be impacted would depend on the severity of changes in natural resources. (FMC's 2020 full year segment revenue was USD\$4.6 billion)

**Cost of response to risk**

**Description of response and explanation of cost calculation**

(Situation) FMC recognizes that the long-term physical impacts of climate change will continue to manifest themselves going forward, including sea level rise, which may put some of our facilities at risk. (Task) FMC is examining options to protect our resources close to sea level against sea level changes and stronger storm surges. (Action) For example, plans are in place at our Ronland, Denmark site to strengthen its dike system to improve the resilience of this site to the impacts of sea level rise or stronger storm surges. (Result) FMC has already repaired the dike to ensure a minimum height of 1.9m above normal sea level around the Ronland peninsula. Work will begin in 2021 to increase dike height to 2.3 meters (Postponed from 2020). The project will be carried out in collaboration with the Danish Coastal Authority.

**Comment**

Direct cost of management of this this in unknown.

**Identifier**

Risk 3

**Where in the value chain does the risk driver occur?**

Downstream

**Risk type & Primary climate-related risk driver**

Chronic physical	Changes in precipitation patterns and extreme variability in weather patterns
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**Primary potential financial impact**

Decreased revenues due to reduced demand for products and services

**Climate risk type mapped to traditional financial services industry risk classification**

<Not Applicable>

**Company-specific description**

Induced changes in natural resources could be both a risk and an opportunity for FMC’s Agricultural Sciences business depending on the geographic location and the severity of climate change impacts on our customers. With a worldwide manufacturing and distribution infrastructure, we are better able to respond rapidly to global customer needs, offset downward economic trends in one region with positive trends in another and match local revenues to local costs to reduce the impact of currency volatility. FMC’s revenue by region for 2020 is as follows: Asia (24%), North America (22%), Latin America (31%) and Europe, Middle East and Africa (23%). The National Climate Assessment projects that growers in many regions will face impacts on crop yields and livestock development because of changes in growing seasons, insect vectors and species distributions due to increasing extreme weather, changing mean temperatures, precipitation patterns and mean precipitation levels. FMC Agricultural Sciences develops agricultural products and technologies to help growers combat the effects of these changes on their crops and we could experience greater market uncertainty because an increase in unpredictable growing conditions would negatively affect our customers. The severity and extent of induced changes in natural resources would affect our customers and in turn, it could affect their need for our products and technologies. Agricultural Sciences could experience a decrease in demand if our products and technologies do not align with the solutions that growers need.

**Time horizon**

Long-term

**Likelihood**

Virtually certain

**Magnitude of impact**

High

**Are you able to provide a potential financial impact figure?**

Yes, an estimated range

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

3000000

**Potential financial impact figure – maximum (currency)**

29000000

**Explanation of financial impact figure**

As noted in the International Panel on Climate Change Fifth Assessment Report, quantitative estimates measuring private costs of climate change may be incomplete due to the difficulty in measuring all relevant effects over time. FMC could be impacted by changes in natural resources. If impacts on growers are significant and FMC did not have products in the market to address these impacts, then it could be a material risk to our business. The financial impact on our customers is difficult to project at this point in time because of the difficulty in estimating the potential costs to our growers in different geographic locations, in what time frame and the severity of impacts. However, with a worldwide manufacturing and distribution infrastructure, we are better able to respond rapidly to global customer needs, offset downward economic trends in one region with positive trends in another and match local revenues to local costs to reduce the impact of currency volatility. The potential financial impact range provided is an example output of our scenario analysis results for potential revenue impacts for sugarcane in Brazil. FMC made \$1,116 M in sales in Brazil in 2020. Under the RCP 8.5 scenario, Brazil sugarcane could see a 26% reduction in arable land by 2050. By making an assumption on the percentage of total Brazil sales that are sugarcane sales FMC could see anywhere from \$3-290 M (1%-100% of Brazil sales) of lost revenue in Brazil by the 2050s.

**Cost of response to risk**

279000000

**Description of response and explanation of cost calculation**

(Situation) Induced changes in natural resources could be both a risk and an opportunity for FMC’s Agricultural Sciences business depending on the geographic location and the severity of climate change impacts on our customers. (Task) FMC is committed to finding and developing sustainable solutions in our portfolio that among other benefits, mitigate the effects of climate change for farmers. (Action) FMC utilizes the award-winning Sustainability Assessment Tool. This tool compares our R&D projects to a benchmark product currently in the market through a series of 38 questions in the following categories: Food Expectations, Health and Safety Expectations, Scarce Resources, Climate Change, Land Competition and Environmental Consciousness. A product is considered sustainably-advantaged if it is better than the benchmark in at least one area, but it cannot retreat in any of the 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. (Result) In 2020 FMC spent US\$287.9 million on total Research and Development Expenses. In addition, FMC utilized 97 percent of its 2020 R&D spend on developing sustainably advantaged products, which address global challenges like climate change, scarce resources, land competition, environmental consciousness and food & health expectations. Examples of FMC’s sustainably-advantaged product portfolio: FMC’s biological products feature new modes of action and excellent sustainability profiles. Several FMC biological products on the market are performing extremely well. Biologicals offer benefits beyond their environmental profile. They can help plants overcome difficult growing conditions, fight disease and even assist in regulating the plant’s uptake of nutrients and use of limited water. Several FMC biological products on the market are performing extremely well. We recently launched Accudo® biostimulant in the South Korea market, and have submitted a series of new bacterial strains to European Union regulatory authorities for evaluation and approval as bionematicides and biofungicides, a major step prior to commercial launch. The direct cost of management for this risk is not known as this time. Instead, a proxy figure of the estimated amount of R&D spend on sustainably-advantaged (97% of total R&D spend: US \$287.9 million x 0.97 = ~\$279 million) products has been used.

**Comment**

Direct cost of management of this this is unknown.

**C2.4**

**(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?**

Yes

**C2.4a**

**(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.**

**Identifier**

Opp1

**Where in the value chain does the opportunity occur?**

Downstream

**Opportunity type**

Markets

**Primary climate-related opportunity driver**

Access to new markets

**Primary potential financial impact**

Increased revenues through access to new and emerging markets

**Company-specific description**

Climate change is predicted to cause more extreme weather conditions as well as changing temperatures, precipitation patterns and mean precipitation levels. This is expected to result in changes in the pest spectrum for crops. With increasing food production pressures to feed a rising population, farmers will also have to sustainably grow more crops on less land using crop protection products, thus significantly increasing crop yields. It is likely that FMC and its customers will be impacted by resource and pest pressures from climate change. FMC has a well-diversified portfolio (both evenly spread across regions and product type) that can help growers adapt to more unpredictable growing conditions. For example, as temperatures increase in the Northern Hemisphere, crops like soybeans/corn could be grown in more northern latitudes, creating an opportunity for FMC to sell its agricultural products to promote plant health and development in new growing regions. Currently, FMC generates approximately 25% of its revenue from North America. Overall, the geographic range, time frame and significance of climate impacts on regions where our customers are located remain to be determined.

**Time horizon**

Medium-term

**Likelihood**

Very likely

**Magnitude of impact**

Medium

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

Our growth efforts focus on developing environmentally compatible and sustainable solutions that can effectively increase farmers' yields and provide cost-effective alternatives to chemistries which may be prone to resistance. We are committed to providing unique, differentiated products to our customers by acquiring and further developing technologies as well as investing in innovation to extend product life cycles. Our long range growth strategy expects a Revenue CAGR of 5-7%. We have not yet quantified the direct financial growth attributed specifically to climate related opportunities .

**Cost to realize opportunity**

**Strategy to realize opportunity and explanation of cost calculation**

(Situation) We expect climate-related impacts to alter the pest spectrum across our customer base and have different effects in different regions. Pest problems that Brazilian growers must address are very different from those faced by growers in the U.S. They have their own weed species, insect pressures, and disease strains to control, as well as unique soil conditions, weather patterns, and farming practices. (Task) Internally, Global and Regional Portfolio/Product managers work to have current knowledge about emerging grower needs and include climate related risks in their analysis. (Action) They work very closely with FMC's R&D personnel to share information about emerging agronomic trends and determine how FMC's portfolio of existing and upcoming products can best address the needs of our customers in light of climate change and related pest pressures. For example - FMC Pakistan introduced a mobile lab unit called "Dr. Soil," which travels and offers soil fertility analysis and counsel to growers. (Result) This initiative enables farmers to have a deeper understanding of soil science and shift many out of unsustainable farming practices. It also provides our commercial team with a deeper understanding of grower needs. We reach over 155,000 farmers annually. However, in a country with 14 million smallholder farmers, there are significant opportunities to grow in Pakistan and beyond.

**Comment**

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**Identifier**

Opp2

**Where in the value chain does the opportunity occur?**

Direct operations

**Opportunity type**

Products and services

**Primary climate-related opportunity driver**

Development of new products or services through R&D and innovation

**Primary potential financial impact**

Increased revenues resulting from increased demand for products and services

**Company-specific description**

As people become more aware of product impacts on the environment, they are demanding more natural and benign materials to reduce individuals' impacts on the environment. Products that provide enhanced land productivity with less resources will be increasingly important as arable land decreases due to climate impacts while the global population grows. As the spotlight on the agriculture industry grows, farmers are increasingly looking for solutions that improve environmental and economic performance. Changing consumer behavior presents an opportunity for FMC to develop products that are less impactful on the environment and/or limit the contribution to climate change through products with a low-carbon life cycle. Potential product opportunities include reducing water and fertilizer use, increasing soil health and carbon sequestration, and preserving biodiversity. The increasing growth in organic foods and regenerative agriculture are driving the need for products that can reduce resource

inputs and increase yields. New innovations, such as digital solutions, precision agriculture, and biologicals, are supporting emissions reductions and growth. Developing new products and services, or expanding existing products and services that meet this criteria, through R&D that provide natural solutions to increase resource efficiency, reduce emissions, and promote soil resilience will help FMC maintain competitiveness in a low carbon economic transition. Growers prefer agricultural products with a lighter environmental footprint and ones that reduce labor, time, water, fuel use and GHG emissions. FMC's business almost fully operates within the agricultural sciences/crop protection industry and thus will be able to realize the benefit from the new demand for environmentally lighter, more benign products. Furthermore, FMC has a significant presence in Europe (Approximately 23% of revenue), where the EU Green Deal and the Farm to Fork Program has legislated a move towards lower carbon intensive products and alternative chemistries.

**Time horizon**

Medium-term

**Likelihood**

Likely

**Magnitude of impact**

Medium

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

How FMC will benefit from these opportunities financially will depend on our ability to adapt our products with consumers' changing behavior. More dramatic climate-change effects in the short-term could accelerate consumers' preference for FMC's sustainably advantaged products and technologies. We have not yet quantified the direct financial growth attributed specifically to changes in demand. As noted in the IPCC's Fifth Assessment Report, quantitative estimates measuring the financial impact of climate change on companies may be incomplete because of difficulties in measuring all relevant climate-change effects over time.

**Cost to realize opportunity**

**Strategy to realize opportunity and explanation of cost calculation**

(Situation) As people become more aware of product impacts on the environment, they are demanding more natural and benign materials to reduce individuals' impacts on the environment. (Task) FMC is committed to develop products that are less impactful on the environment and/or products with a low-carbon life cycle. (Action) Biologicals represent a diverse group of plant protection products derived from microorganisms and other naturally occurring materials. FMC discovers and develops biologicals in its Plant Health business, which has grown significantly in the last several years. Today, we are working on new bioinsecticides, bionematicides, biofungicides and biostimulants at our European Innovation Center in Hørsholm, Denmark. (Result) These biological products feature new modes of action and excellent sustainability profiles. Several FMC biological products on the market are performing extremely well. An example is the recently launched Legend™ organic fertilizer that helps growers improve crops' response to stresses caused by drought. The product works at a very low dose rate and is powered by SURGE Technology (Selective Upregulation of Gene Expression) that improves a plant's gene activation responsible for various plant functions. The product is partially made from a renewable source by cultivating Rhodophytes (Red Seaweed) and extracting Sulphated Oligosaccharides as an active ingredient. It also provides bioavailable potash and contains sulphur to enhance a plant's hormonal activity and improve the shape, size, shine and color of fruits.

**Comment**

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**Identifier**

Opp3

**Where in the value chain does the opportunity occur?**

Direct operations

**Opportunity type**

Products and services

**Primary climate-related opportunity driver**

Development of new products or services through R&D and innovation

**Primary potential financial impact**

Increased revenues resulting from increased demand for products and services

**Company-specific description**

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. Helping farmers produce more food, feed and fuel for a growing world population is a tall order. Growers rely on many tools to help meet this challenge, but nothing is more important than having the right technologies to combat threats of disease, insects and weeds. Any one of these invasive threats can impact yields and potentially destroy a farmer's crops in a matter of days. FMC has the opportunity to develop these technologies, expand further into precision agriculture, and provide growers with climate resilient products and services through R&D as grower needs arise. Agriculture research in the context of climate change is lacking, and is limiting the development of new business models. Additionally, technology or product reformulations may fall short or not deliver on customers' expectations around circularity and carbon intensity (e.g. microplastics, packaging, etc.) due to short comings in existing technologies. FMC is committed to addressing these challenges within our current portfolio and in our R&D pipeline. FMC provides products and technologies that increase crop yields and/or water efficiency, which will help to reduce the effects of climate change on growers and support them in meeting increasing food demand. FMC will continue to develop agricultural products and technologies designed to help growers combat the effects of climate-related changes on their crops. As climate impacts increasingly harm farmer productivity, delivering integrated digital solutions that optimize planting, weather forecasts, nutrient delivery, watering, and year to year analytics will become more important to business success and provide a great opportunity for FMC. FMC utilizes the award-winning Product Stewardship and Sustainability Assessment Tool (PSSA) that compares our R&D projects to a benchmark product currently in the market through a series of 38 questions. A product is considered sustainably-advantaged if it is better than the benchmark in at least one area, but it cannot retreat in any of the 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

**Time horizon**

Medium-term

**Likelihood**

Virtually certain

**Magnitude of impact**  
Medium-high

**Are you able to provide a potential financial impact figure?**  
No, we do not have this figure

**Potential financial impact figure (currency)**  
<Not Applicable>

**Potential financial impact figure – minimum (currency)**  
<Not Applicable>

**Potential financial impact figure – maximum (currency)**  
<Not Applicable>

**Explanation of financial impact figure**

We have not yet quantified the direct financial growth attributed specifically to changes in demand due to climate change. However, as part of our long range growth strategy we aim to spend \$1.8 billion in Research and Development from 2019 – 2023.

**Cost to realize opportunity**  
279000000

**Strategy to realize opportunity and explanation of cost calculation**

(Situation) 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. (Task) FMC is committed to helping solve issues of food security related to climate change through increased R&D investment. (Action) FMC utilizes the award-winning Product Stewardship and Sustainability Assessment Tool (PSSA). This tool compares our R&D projects to a benchmark product currently in the market through a series of 38 questions in the following categories: Food Expectations, Health and Safety Expectations, Scarce Resources, Climate Change, Land Competition and Environmental Consciousness. A product is considered sustainably-advantaged if it is better than the benchmark in at least one area, but it cannot retreat in any of the 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. (Result) In 2020, we dedicated 97 percent of our R&D spend to developing sustainably advantaged products and technologies. A sustainably advantaged product addresses the previously mentioned six major global challenges. By addressing these challenges in our R&D spend for developing sustainably advantaged products and technologies, we are better able to address potential market and other-climate related developments, including changing consumer behavior. The cost of these R&D programs has already been incorporated into our business strategy. The direct cost of management of this risk is not known as this time. Instead, a proxy figure of the estimated amount of R&D spend on sustainably-advantaged (97% of total R&D spend - US\$287.9 million x 0.97 = ~\$Approximately \$279 million) products has been used.

**Comment**

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**C3. Business Strategy**

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**C3.1**

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**(C3.1) Have climate-related risks and opportunities influenced your organization’s strategy and/or financial planning?**  
Yes

**C3.1b**

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**(C3.1b) Does your organization intend to publish a low-carbon transition plan in the next two years?**

	Intention to publish a low-carbon transition plan	Intention to include the transition plan as a scheduled resolution item at Annual General Meetings (AGMs)	Comment
Row 1	Yes, in the next two years	No, we do not intend to include it as a scheduled AGM resolution item	In 2021, FMC has set a new science based target climate change goal to be Net-Zero Emissions by 2035.

**C3.2**

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**(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?**  
Yes, qualitative and quantitative

**C3.2a**

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**(C3.2a) Provide details of your organization’s use of climate-related scenario analysis.**

Climate-related scenarios and models applied	Details
2DS IEA Sustainable development scenario Other, please specify	<p>FMC recently completed a qualitative transition scenario analysis. FMC used the IEA’s Sustainable Development Scenario and Net Zero by 2050 roadmap to help evaluate potential business impacts, which assumes global warming is limited to 2 degrees and 1.5 degrees Celsius, respectively, due to several regulatory, technological and societal lifestyle changes. FMC’s 2020 market share and emissions were used as the baseline from which to model the financial impacts of the scenarios. Time horizons: Where possible, data addressed trends for 2030 and 2050 and was compared to the current/short-term baseline to identify potential medium and long-term impacts and illustrate how risks and opportunities might evolve over time. This approach provides FMC with insight into various pathways economies could follow in the future, providing helpful information for strategic planning processes. Area of organization: The scenario analysis covered all parts of FMC’s business including products and services, operations, and value chain. Results: Scenario analysis results show how FMC’s business might be impacted by the climate-related, transition risks and opportunities. The process highlights key financial climate-related issues while identifying potential, strategic solutions to reduce impacts of these risks and help FMC realize the opportunities. FMC’s business is exposed to several transition risks, including 1) regulatory such as carbon pricing mechanisms (i.e. China’s expansion of their cap and trade system that would affect 13 of FMC’s sites), 2) market risks such as declining revenue from certain product lines due to shifting demand (i.e. a potential 26% reduction in Brazil sugarcane under RCP 8.5) and increased expenditures due to raw material price increases, 3) technological risks related to current products and services being replaced by lower-emission solutions and 4) reputational risks from investors’ potential dissatisfaction with future climate strategies. FMC’s most substantive climate-related opportunities include investing in products that provide enhanced land productivity with less resources as this becomes increasingly important as arable land decreases due to climate impacts while the global population grows (i.e. expanding FMC’s biologicals and precision agriculture offerings which currently make up less than 7% of FMC’s total sales in 2020) and supporting farmers with the development of new business models through decarbonization and soil sequestration. Based on these results, FMC management has chosen to revise its R&amp;D Sustainability Screening Tool to incorporate newly identified climate change impacts towards the identification and development of new products to launch to market. Case study: (Situation) The results of the risk analysis provided findings of potential impacts to FMC’s product line as it relates to the crop markets, specifically location and crop type which may be a result of climate change, as well as technology risks associated with lower emissions solutions. Task: FMC uses a Sustainability Assessment Tool, which has been published publicly, to ensure that all new products introduced are sustainable. This is used in the development process and is required as molecules progress through the various stage gates; however, due to the findings in the risk analysis, the tool needed to be reviewed to not only ensure FMC is evaluating products sustainability, but also to evaluate climate related impacts as it pertains to the market. (Action) FMC developed a cross functional team to review the Sustainability Assessment Tool, and develop recommendations for revision, as necessary to address both the sustainability profile of the products as well the potential market shifts as a result of climate change. (Result) This tool will be used during the entire R&amp;D processes to ensure FMC is developing sustainable products as well as evaluating how potential climate change impacts may affect the markets.</p>
RCP 8.5	<p>How the scenarios were identified with reference to inputs, assumptions, and analytical methods used: FMC is in the process of completing a qualitative and quantitative physical scenario analysis. FMC drew upon publicly available scenarios from the Intergovernmental Panel on Climate Change (IPCC) to model physical risks. The IPCC scenario RCP 8.5 assumes a global temperature increase of 4 degrees Celsius, representing significant physical climate risks, including extreme temperatures, weather events, flooding, and sea-level rise. FMC conducted a portfolio-wide hotspot screening using downscaled models accounting for past and projected physical risk across several hazard categories. Data from this portfolio-level screening was matched with financial and historical information about each site to determine criticality and vulnerability. The next step is to conduct a detailed analysis for the top 4 most critical/vulnerable sites and provide ranges for estimates of potential damages, losses and business interruption from climate hazards. Time horizon: This financial analysis includes a characterization of uncertainty as well as the movement of the risk level relative to baseline and between 2030 and 2050 to understand the potential medium and long-term impacts of climate change. Results: Scenario analysis results provide insight into how FMC’s business might be impacted by climate change across a number of hazards including cyclones, extreme temperatures, flooding, landslides, water stress and drought and wildfires. A screening process was conducted to generate potential future climate hazard exposure indicators for 44 FMC sites. As a result of the screening process on all of FMC’s relevant sites, four sites were selected for a deep dive financial analysis: Rønland, Denmark; Manati, Puerto Rico; Savi, India; and Panoli, India. These sites were identified as maximizing the cross-section of: exposure to climate hazards, the added vulnerability of chemical manufacturing sites to particular hazards such as flooding and wildfire, and financial criticality to FMC’s business enterprise. In the coming weeks, data will be collected from each of these sites detailing historical damages, losses and business interruptions due to climate-related events. Detailed information on site engineering and analysis of mitigation efforts already in place will also be conducted. This data will be run through the financial models to determine range estimates of potential financial losses at these facilities due to climate-related hazards.</p>

**C3.3**

**(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.**

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Evaluation in progress	(Situation) Our markets are affected by climatic conditions, which could adversely impact crop pricing and pest infestations. Example, a prolonged drought may result in decreased demand for our products. The more gradual effects of persistent temperature change in geographies with significant agricultural lands may result in changes in lands suitable for agriculture or changes in the mix of crops suitable for cultivation and the pests that may be present in such geographies. (Task) we are committed to developing environmentally compatible and sustainable solutions that can effectively increase farmers' yields and provide cost-effective alternatives to chemistries which may be prone to resistance. We utilize a R&D sustainability screening tool to ensure the prospective product aligns with the company's sustainability objectives. Crop protection product development affect our product strategy affects medium- and long-term time horizons. (Action) One of the most substantive decisions FMC has made to align with management criteria is to ensure FMC's plant health business is developing new bioinsecticides, bionematicides, biofungicides and biostimulants at our European Innovation Center in Hørsholm, Denmark. These biological products feature new modes of action and excellent sustainability profiles. Biologicals offer benefits beyond their environmental profile. They can help plants overcome difficult growing conditions, fight disease and even assist in regulating the plant's uptake of nutrients and use of limited water. This decision represents a case study of the most substantial strategic decision(s) made in this area to date that have been influenced by the climate-related risks and opportunities" (Result) An example is the recently launched Legend™ organic fertilizer that helps growers improve crops' response to stresses caused by drought. The product works at a very low dose rate and is powered by SURGE Technology (Selective Upregulation of Gene Expression) that improves a plant's gene activation responsible for various plant functions. The product is partially made from a renewable source by cultivating Rhodophytes (Red Seaweed) and extracting Sulphated Oligosaccharides as an active ingredient. It also provides bioavailable potash and contains sulphur to enhance a plant's hormonal activity and improve the shape, size, shine and color of fruits.
Supply chain and/or value chain	Evaluation in progress	We have made supply arrangements to meet planned operating requirements, an inability to obtain the critical raw materials or operate under contract manufacturing arrangements could adversely impact our ability to produce certain products. We are increasingly sourcing critical intermediates and finished products from a number of suppliers, largely outside the United States and principally in China. Our value chain was considered in our recent climate, transition scenario analysis including risks to our raw materials, customers and Scope 3 emissions (about 1.89 million metric tons of CO2e in 2020). We are working towards analysing the results and developing a more comprehensive strategy for responding to climate risk across our entire value chain. We anticipate completing this over the next year or so.
Investment in R&D	Yes	FMC considers impact of climate change in our long- and medium- R&D strategy. (Situation) 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. Increased innovation is required to protect growers from associated climate risks and tap into climate opportunities. (Task) FMC is committed to addressing climate related risk and opportunities in our R&D pipeline. FMC provides products and technologies that increase crop yields and/or water efficiency, which will help to reduce the effects of climate change on growers and support them in meeting increasing food demand. FMC will continue to develop agricultural products and technologies designed to help growers combat the effects of climate-related changes on their crops. In our product portfolio, we also see market opportunities for our products to address climate change and its impacts. For example, FMC's agricultural products can help customers increase yield, energy and water efficiency, and decrease greenhouse gas emissions. Our products can also help growers adapt to more unpredictable growing conditions and the effects these types of threats have on crops. (Action) To determine if a project is sustainably-advantaged, FMC utilizes the award-winning Sustainability Assessment Tool. T. This tool compares our R&D projects to a benchmark product currently in the market through a series of 38 questions in 6 categories with Climate change being a key category. (Result) FMC has dedicated over 97% of its 2020 R&D spend on developing sustainably advantaged products, which are products that address global challenges like climate concerns, scarce resources, food and health expectations, land competition or environmental consciousness. This decision is a case study of the most substantial strategic decision(s) made in this area to date that have been influenced by the climate-related risks and opportunities"
Operations	Yes	FMC considers impact of climate change in our medium and long-term operational strategy. We produce products through a combination of owned facilities and contract manufacturers. We own and operate large-scale active ingredient manufacturing facilities with a wide geographic spread. FMC recently conducted a climate-related, physical risk scenario analysis for our operations where we considered the impacts of a number of physical climate-related risks to each of our assets under RCP 8.5 for 2030 and 2050. FMC recognizes that the medium and long-term physical impacts of climate change will continue to manifest themselves going forward, including sea level rise, which may put some of our facilities at risk. (Situation) FMC recognizes that the medium and long-term physical impacts of climate change will continue to manifest themselves going forward, including sea level rise, which may put some of our facilities at risk. (Task) FMC is examining options to protect our resources close to sea level against sea level changes and stronger storm surges. (Action) For example, plans are in place at our Ronland, Denmark site to strengthen its dike system to improve the resilience of this site to the impacts of sea level rise or stronger storm surges. (Result) FMC has already repaired the dike to ensure a minimum height of 1.9m above normal sea level around the Ronland peninsula. Work will begin in fall 2021 to increase dike height to 2.3 meters (Postponed from 2020). The project will be carried out in collaboration with the Danish Coastal Authority.

**C3.4**

**(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.**

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs Indirect costs Capital expenditures Capital allocation Acquisitions and divestments Access to capital Assets Liabilities	Every 3-5 years, FMC develops a long range (5-year) growth plan that incorporates a multi-disciplinary company-wide risk assessment process. The assessment takes into account many factors, including the diversity of our supply network and trends in customer demand. Many of these risks incorporate the effects of climate change. For example, the effects of climate change such as rising sea levels, drought, flooding and general volatility in seasonal temperatures could adversely affect our operations globally. Extreme weather events attributable to climate change may result in, among other things, physical damage to our property and equipment, and interruptions to our supply chain. Climate change may also impact markets in which we sell our products where, for example, a prolonged drought may result in decreased demand for our products. The more gradual effects of persistent temperature change in geographies with significant agricultural lands may result in changes in lands suitable for agriculture or changes in the mix of crops suitable for cultivation and the pests that may be present in such geographies. For example, prolonged increase in average temperature may make northern lands suitable for growing crops not grown historically in such climates, leading farmers to shift from crops such as wheat to soybean and may result in new or different weed, plant disease or insect pressures on such crops – such changes would impact the mix of pesticide products farmers would purchase, which may be adverse for us, depending on the local market and our product mix. Additionally, changes in the governmental regulation of greenhouse gases, depending on their nature and scope, could subject our manufacturing operations to significant additional costs or limits on operations. FMC considers impact of climate change in our long- and medium- financial strategy. (Situation) 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. Increased innovation is required to protect growers from associated climate risks and tap into climate opportunities. (Task) FMC is committed to addressing climate related risk and opportunities in our R&D pipeline. FMC provides products and technologies that increase crop yields and/or water efficiency, which will help to reduce the effects of climate change on growers and support them in meeting increasing food demand. FMC will continue to develop agricultural products and technologies designed to help growers combat the effects of climate-related changes on their crops. In our product portfolio, we also see market opportunities for our products to address climate change and its impacts. For example, FMC's agricultural products can help customers increase yield, energy and water efficiency, and decrease greenhouse gas emissions. Our products can also help growers adapt to more unpredictable growing conditions and the effects these types of threats have on crops. (Action) To determine if a project is sustainably-advantaged, FMC utilizes the award-winning Sustainability Assessment Tool. T. This tool compares our R&D projects to a benchmark product currently in the market through a series of 38 questions in 6 categories with Climate change being a key category. (Result) FMC has dedicated over 97% of its 2020 R&D spend on developing sustainably advantaged products, which are products that address global challenges like climate concerns, scarce resources, food and health expectations, land competition or environmental consciousness. This decision is a case study of the most substantial strategic decision(s) made in this area to date that have been influenced by the climate-related risks and opportunities"

**C3.4a**

**(C3.4a) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).**

Research and Development

Climate Change impacts the short-term execution of field research with trials being rendered useless due to adverse weather conditions which results in extra costs and delays. For example, in North America, we have embedded adverse weather risk into our strategy and conduct extra field trials each year so that we have backup locations in case a research plot is lost due to unforeseen environmental conditions. We also distribute these trials across as broad an area as possible to minimize the risk of losing multiple trials to the same weather event.

In the long-term, our Agricultural Sciences products will be needed by growers in locations that are experiencing changes in existing physical environments. FMC is developing products that improve agricultural productivity by helping growers increase crop yields to feed a growing global population. Growers must adapt to less available arable land because of climate change impacts, like temperature and rainfall shifts as well as impacts like increased urbanization. FMC researchers also developed the award-winning Sustainability Assessment tool to ensure each new product introduction is more sustainable than the current benchmark. The tool includes questions that address FMC's identified six major global challenges. A product must show progress in at least one of the areas without regressing in another before it continues in the development process. R&D scientists and development managers must complete the tool at each development stage. More complete answers to the questions are developed as the product moves forward and more insights are gained into the product's attributes.

FMC's Environmental Footprint and Goals

FMC collects site wise information on our environmental impacts, such as energy usage, GHG emissions, water usage and waste generation, which are our key sustainability performance indicators. We used this data to develop our sustainability goals for 2030 to reduce our environmental impacts. Our 2030 environmental sustainability goals and strategies were developed using a quantitative model that sets our 2018 environmental footprint as the baseline. Subsequently we have identified sustainability projects at our high footprint sites that will positively impact our sustainability metrics. We are in the process of incorporating the identified initiatives in our capital planning that will ensure their implementation during the target period. As an example in 2020, we upgraded the HVAC controls in a Discovery laboratory at Stine Research Center in Delaware, U.S. The old system often caused compressed air leaks, excess airflow in the laboratories and inefficiencies in temperature management. The new system allows air to circulate more efficiently and generates significant energy savings (approximately 3,000 MWh per annum). This project is currently being replicated at several other FMC locations.

We are also in the process of evaluating science base targets and are developing a comprehensive renewable energy strategy.

Business Operations

Climate change has influenced FMC's short-term strategy in that we are making changes in our business operations to reduce our energy and GHG emissions intensities, third-party assurance assessments of our environmental data, conducting energy assessments to reduce energy intensity at our high energy use manufacturing sites and updating our Water Risk Assessment for our manufacturing sites.

## C4. Targets and performance

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### C4.1

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**(C4.1) Did you have an emissions target that was active in the reporting year?**

Intensity target

### C4.1b

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**(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).**

**Target reference number**

Int 1

**Year target was set**

2019

**Target coverage**

Company-wide

**Scope(s) (or Scope 3 category)**

Scope 1+2 (location-based)

**Intensity metric**

Metric tons CO2e per metric ton of product

**Base year**

2018

**Intensity figure in base year (metric tons CO2e per unit of activity)**

0.52

**% of total base year emissions in selected Scope(s) (or Scope 3 category) covered by this intensity figure**

100

**Target year**

2030

**Targeted reduction from base year (%)**

25

**Intensity figure in target year (metric tons CO2e per unit of activity) [auto-calculated]**

0.39

**% change anticipated in absolute Scope 1+2 emissions**

-6

**% change anticipated in absolute Scope 3 emissions**

0

**Intensity figure in reporting year (metric tons CO2e per unit of activity)**

0.44

**% of target achieved [auto-calculated]**

61.5384615384616

**Target status in reporting year**

Underway

**Is this a science-based target?**

No, but we anticipate setting one in the next 2 years

**Target ambition**

<Not Applicable>

**Please explain (including target coverage)**

We set our 2030 target to reduce our greenhouse gas intensity by 25 percent based on our 2018 emissions baseline year. The amount of absolute emissions is highly dependent upon several factors such as: Product mix: FMC's goal is to modify product mix that will be more sustainable not only during the use phase, but also during product design and manufacturing phase. This will significantly affect how much absolute reduction in GHG emission we can achieve. Energy Mix: FMC uses a variety of energy sources with a wide range of emission factors (CO2e/unit of energy). We are currently evaluating sustainability projects that will help us change our energy mix (in addition to reduction in energy through enhanced efficiency) and achieve maximum reduction in GHG emission. Location: FMC has a global manufacturing footprint. Where we choose to execute our sustainability projects will have impact on the absolute GHG emission. In addition, in 2021, FMC has committed to a science based target of becoming net-zero emissions across the value chain by 2035.

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**C4.2**

**(C4.2) Did you have any other climate-related targets that were active in the reporting year?**

Net-zero target(s)

Other climate-related target(s)

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**C4.2b**

**(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.**

**Target reference number**

Oth 1

**Year target was set**

2019

**Target coverage**

Company-wide

**Target type: absolute or intensity**

Intensity

**Target type: category & Metric (target numerator if reporting an intensity target)**

Waste management	Other, please specify (Kilogram of waste disposed )
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**Target denominator (intensity targets only)**

metric ton of product

**Base year**

2018

**Figure or percentage in base year**

154.59

**Target year**

2030

**Figure or percentage in target year**

152

**Figure or percentage in reporting year**

146.4

**% of target achieved [auto-calculated]**

316.216216216216

**Target status in reporting year**

Achieved

**Is this target part of an emissions target?**

The waste included solid and liquid waste that has no beneficial end use and was not part of the emission target. FMC had a separate GHG emission target.

**Is this target part of an overarching initiative?**

No, it's not part of an overarching initiative

**Please explain (including target coverage)**

In 2019, FMC set a waste disposed goal to not exceed the waste disposed intensity by 2030 compared to our base year 2018 waste disposed intensity. This is despite the fact that, due to market demand, FMC will increase production of certain products that are very waste intensive during manufacturing. In effect, FMC's waste reduction goal is equivalent to reducing our absolute waste disposed by 55%.

**Target reference number**

Oth 2

**Year target was set**

2019

**Target coverage**

Company-wide

**Target type: absolute or intensity**

Intensity

**Target type: category & Metric (target numerator if reporting an intensity target)**

Energy consumption or efficiency	GJ
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**Target denominator (intensity targets only)**

metric ton of product

**Base year**

2018

**Figure or percentage in base year**

7.13

**Target year**

2030

**Figure or percentage in target year**

5.35

**Figure or percentage in reporting year**

6.14

**% of target achieved [auto-calculated]**

55.6179775280899

**Target status in reporting year**

Underway

**Is this target part of an emissions target?**

All energy usage in FMC is either Scope 1 or 2 emissions.

**Is this target part of an overarching initiative?**

No, it's not part of an overarching initiative

**Please explain (including target coverage)**

In 2019, FMC set a goal to reduce our energy intensity by 25% by 2030 compared to base year 2018. We intend to achieve this through energy efficiency improvement project, changes in our product portfolio and the use of low carbon or renewable energy.

**Target reference number**

Oth 3

**Year target was set**

2019

**Target coverage**

Company-wide

**Target type: absolute or intensity**

Intensity

**Target type: category & Metric (target numerator if reporting an intensity target)**

R&D investments	Other, please specify (Percentage of R&D spend to develop sustainable products)
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**Target denominator (intensity targets only)**

USD(\$) value-added

**Base year**

2018

**Figure or percentage in base year**

93

**Target year**

2025

**Figure or percentage in target year**

100

**Figure or percentage in reporting year**

97

**% of target achieved [auto-calculated]**

57.1428571428571

**Target status in reporting year**

Underway

**Is this target part of an emissions target?**

No. However, the R&D activities to develop sustainable product will positively affect our energy, GHG emission, waste and water targets.

**Is this target part of an overarching initiative?**

No, it's not part of an overarching initiative

**Please explain (including target coverage)**

FMC commits to creating products that are sustainably advantaged compared to existing products currently in the market place. FMC utilizes the Sustainability Assessment Tool to determine if new active ingredients and formulated products in our R&D pipeline are sustainably-advantaged. This assessment, along with other stewardship processes and tools, ensures the introduction and continued use of environmentally sustainable agricultural solutions. The R&D spend used in the metric is inclusive of all variable and fixed costs related to the discovery and development process across all regions.

**Target reference number**

Oth 4

**Year target was set**

2019

**Target coverage**

Company-wide

**Target type: absolute or intensity**

Intensity

**Target type: category & Metric (target numerator if reporting an intensity target)**

Other, please specify	Other, please specify (Cubic Meter of Water Used at High-Risk Locations)
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**Target denominator (intensity targets only)**

metric ton of product

**Base year**

2018

**Figure or percentage in base year**

3.67

**Target year**

2030

**Figure or percentage in target year**

2.75

**Figure or percentage in reporting year**

2.95

**% of target achieved [auto-calculated]**

78.2608695652174

**Target status in reporting year**

Underway

**Is this target part of an emissions target?**

No

**Is this target part of an overarching initiative?**

No, it's not part of an overarching initiative

**Please explain (including target coverage)**

FMC uses WRI's aqueduct tool to determine our high risk locations for water use. More information can be found in our CDP water report

**C4.2c**

**(C4.2c) Provide details of your net-zero target(s).**

**Target reference number**

NZ1

**Target coverage**

Company-wide

**Absolute/intensity emission target(s) linked to this net-zero target**

Abs1

**Target year for achieving net zero**

2035

**Is this a science-based target?**

Yes, and we have committed to seek validation of this target by the Science Based Targets initiative in the next 2 years

**Please explain (including target coverage)**

In 2021 FMC has committed to becoming net-zero across the value chain (scope 1, 2, and 3) by 2035. This goal is a science based target and will be submitted to the science based targets initiative for validation.

**C4.3**

**(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.**

Yes

**C4.3a**

**(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.**

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	56	
To be implemented*	17	962.8
Implementation commenced*	15	2372.9
Implemented*	40	2984.2
Not to be implemented	1	

**C4.3b**

**(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.**

**Initiative category & Initiative type**

Energy efficiency in production processes	Process optimization
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**Estimated annual CO2e savings (metric tonnes CO2e)**

2984.2

**Scope(s)**

- Scope 1
- Scope 2 (location-based)
- Scope 3

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

139887

**Investment required (unit currency – as specified in C0.4)**

1550612

**Payback period**

1-3 years

**Estimated lifetime of the initiative**

6-10 years

**Comment**

The list of projects include: Water consumption reduction, MPB Idle, Lock-out sheds and other minor buildings A/Cs turned off, ADMIN partial idle and Energy Savings settings, EHS/ChangeHouse partial idle and Energy Savings settings, Main Lab Energy Savings, MCCs set at Energy Savings conditions, Warehouses Energy Savings, ERT Buildings/areas Energy Savings settings, HAZMAT Team area Energy Savings settings, Maintenance building Energy Savings settings, B&R Lunchrooms Energy Savings settings, Guard House areas - Main Gate Energy Savings settings, Guard House areas - Contractor Gate Energy Savings settings, Control Rooms HVACs Energy Savings settings, Water Heater Energy Savings settings, New ABU Chiller installation (0 degree glycol system), Upgrade pumps at Central Cooling plant, Install new compressors at the GCH plant, Change of cafeteria’s natural gas supply by Liquefied gas in bottles, Recycled Bottles (35% of Packaging Volume), Recycled Caps (100% of Packaging Volume), Increase productivity and reduce production shift., Cafeteria residue transformed in fertilizer, Cyaypyr capacity increase - reduction in raw material usage , Rynaxypyr capacity increase - reduction in water wash, JB Oil-water separation project, JB Dry vacuum pump, JL SLZ L1/L2 SiC heat exchanger application, JL SLZ L1 TBA Reduction, ABA DBC80 Wastewater reduction, DQ L8E22 Mother liquid recovery, ABA DBC80 reduce ACN usage , LSS DBC80 KPS2 process, 200 GC6/7/8 Replacement.

**C4.3c**

**(C4.3c) What methods do you use to drive investment in emissions reduction activities?**

Method	Comment
Compliance with regulatory requirements/standards	We are in compliance with regulatory requirements and standards. The global regulatory environment is becoming increasingly complex and requires more resources to effectively manage. FMC recently expanded our government affairs team in our Asia Pacific, EMEA and Latin America regions to better engage and advise on changing regulatory requirements.
Internal incentives/recognition programs	FMC recognizes its employees' contributions to EHS and sustainability throughout the year. Sites and individual employees are eligible to be nominated for awards for their achievements in these areas. The awards recognizes the exceptional performance and/or improvement of a plant location, laboratory, and business unit or staff functional department within a Group/Business in the areas of EHS and sustainability. In Research and Development, an Above and Beyond award program has been established and is very vibrant. Awards are both recognition as well as monetary. A committee reviews submissions, and categorizes (including EHS category) and proposes awards. R&D leadership reviews all awards. Awards and handed out monthly.
Other (Process Improvement)	FMC has a dedicated budget for process improvements at its established Technical Centers, which conduct research in energy efficiency and emissions reductions activities. The Technical Centers perform energy audits and process improvement at FMC facilities and findings from these audits are implemented at other FMC locations as needed. In 2020, FMC launched several Manufacturing Excellence projects at our manufacturing sites to reduce our environmental footprint. Example includes improvement of HVAC systems, recovery of solvent from waste, condensate recovery and use.
Dedicated budget for low-carbon product R&D	In 2015, FMC established its first set of long-term sustainability targets in safety, R&D, and community engagement. We have achieved significant progress while planning how FMC can contribute to a more sustainable future. One of these goals was to increase the percentage of our R&D spend on new solutions that positively impact FMC's six identified major global challenges climate change, scarce resources, land competition, environmental consciousness, food expectations and health expectations that we can address with our products and technologies. Success in this area indicates that FMC is developing products that ensure more sustainable options for our customers. In 2020, 97 percent of FMC's R&D spend was on developing sustainably advantaged products, as defined by our sustainability assessment tool.

**C4.5**

**(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?**

Yes

**C4.5a**

**(C4.5a) Provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions.**

**Level of aggregation**

Group of products

**Description of product/Group of products**

FMC has started to build a strong biological product and technology portfolio through BioSolutions. Biologicals currently makes up less than 7% of FMC's total sales in 2020. This biologicals portfolio is one component of FMC's comprehensive Plant Health (PH) platform. PH is dedicated to advancing plant yields using biological products and microbes, which protect and stimulate crops using products derived from natural bacteria found in plants and soil. The seed treatment portfolio in PH uses bacteria to protect the seed and nurture an emerging plant once in the ground. In addition, plant nutrition products add basic nutrients to the soil to ensure optimal conditions for healthy crop growth. FMC's biologicals include Fracture (a fungicide derived from sweet lupine plants), VGR Soil Amendment (a strain of the beneficial bacterium *Bacillus licheniformis* that creates an improved living seedbed to help increase root system size), and Ethos XB (an insecticide/fungicide that protects corn from a broad spectrum of seedling diseases). We are following the Climate Bonds Initiative and the development of the Initiative's sector-specific taxonomy for Agriculture, Forestry & Other Land Use (AFOLU). As the parameters of what constitutes a low carbon product are further refined, we will work to further differentiate our sustainably-advantaged products that address climate change, scarce resources, land competition, environmental consciousness and food and health expectations from each other.

**Are these low-carbon product(s) or do they enable avoided emissions?**

Avoided emissions

**Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions**

Addressing the Avoided Emissions Challenge- Chemicals sector

**% revenue from low carbon product(s) in the reporting year**

**% of total portfolio value**

<Not Applicable>

**Asset classes/ product types**

<Not Applicable>

**Comment**

We are currently assessing our portfolio to estimate percentage of our product that is sustainability advantaged and contribute directly or indirectly in reducing our customer's GHG emissions.

---

**Level of aggregation**

Group of products

**Description of product/Group of products**

FMC's Precision Agriculture solutions are designed to ensure the right crop protection products are applied precisely where and when they are needed to increase sustainability, optimize yield quality and quantity, and improve ROI. FMC currently has three major precision agriculture applications in its portfolio that are driving the future of crop care: 3RIVE 3D™ Application System – A revolutionary crop protection delivery system that helps growers efficiently cover more ground in less time with fewer refills – saving water, fuel, labor and time. PrecisionPac® Solutions – A distribution system that allows retail agronomists to create custom herbicide combinations specific to each grower, their crop and field. The PrecisionPac® machine pre-measures and mixes custom combinations for growers that fit the desired field or sprayer tank. Arc™ farm intelligence – FMC's newest precision agriculture platform. In 2020, we launched Arc™ farm intelligence, an exclusive precision agriculture platform with unique technology that provides growers real-time data and predictive modeling of future pest pressure. Predicting pest pressure with high accuracy before it impacts a grower's crops delivers many benefits, including the ability to treat infestations before they escalate and manage insect resistance through more effective application schedules.

**Are these low-carbon product(s) or do they enable avoided emissions?**

Avoided emissions

**Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions**

Other, please specify (Not applicable)

**% revenue from low carbon product(s) in the reporting year**

**% of total portfolio value**

<Not Applicable>

**Asset classes/ product types**

<Not Applicable>

**Comment**

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**C5. Emissions methodology**

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**C5.1**

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**(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).**

**Scope 1**

**Base year start**

January 1 2018

**Base year end**

December 31 2018

**Base year emissions (metric tons CO2e)**

87000

**Comment**

The above emission includes FMC's operational footprint associated with manufacturing and R&D activities.

**Scope 2 (location-based)**

**Base year start**

January 1 2018

**Base year end**

December 31 2018

**Base year emissions (metric tons CO2e)**

73000

**Comment**

The above emission includes FMC's operational footprint associated with manufacturing and R&D activities.

**Scope 2 (market-based)**

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

**C5.2**

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**(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.**

IEA CO2 Emissions from Fuel Combustion

IPCC Guidelines for National Greenhouse Gas Inventories, 2006

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

US EPA Mandatory Greenhouse Gas Reporting Rule

**C6. Emissions data**

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**C6.1**

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**(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?**

**Reporting year**

**Gross global Scope 1 emissions (metric tons CO2e)**

83584.41

**Start date**

<Not Applicable>

**End date**

<Not Applicable>

**Comment**

**C6.2**

---

**(C6.2) Describe your organization's approach to reporting Scope 2 emissions.**

**Row 1**

**Scope 2, location-based**

We are reporting a Scope 2, location-based figure

**Scope 2, market-based**

We are reporting a Scope 2, market-based figure

**Comment**

### C6.3

---

**(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?**

**Reporting year**

**Scope 2, location-based**

68360

**Scope 2, market-based (if applicable)**

67031

**Start date**

<Not Applicable>

**End date**

<Not Applicable>

**Comment**

### C6.4

---

**(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?**

No

### C6.5

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**(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.**

**Purchased goods and services**

**Evaluation status**

Relevant, calculated

**Metric tonnes CO2e**

1759483.1

**Emissions calculation methodology**

a) Production related products (Includes the purchase of chemicals, packaging and related products that are directly related to FMC's end products) FMC used the Average-Data Method to estimate emissions. The amounts (weight, dollar) of individual purchased goods were multiplied by their respective emission factors and the total summed to obtain corporation wide purchased good emission. Source data consisted of purchasing data and volumes obtained from procurement. Emissions factors were obtained from supplier specific LCA data and external databases such as Ecolnvent or US EEIO emission factors. b) Non-production related products (All other spend related to the running of FMC's business e.g. Consulting spend, office supplies, financial services, etc). FMC uses the Spend-based method for calculating emissions from capital goods. Dollar spend from each capital goods expenditure category was matched to emissions factor provided by the U.S EEIO emissions factor database. Supply chain emissions factors without margins (cradle to gate) were utilized in line with the boundary of this category. Emissions include carbon dioxide, methane and nitrous oxides and other GHGs. While a portion of our capital good expenditure originates from regions outside the U.S, USEEIO factors were utilized due to lack of region-specific spend data

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

0

**Please explain**

**Capital goods**

**Evaluation status**

Relevant, calculated

**Metric tonnes CO2e**

7271.72

**Emissions calculation methodology**

FMC used the Spend-based method for calculating emissions from capital goods. Dollar spend from each capital goods expenditure category was matched to emissions factor provided by the U.S EEIO emissions factor database. Supply chain emissions factors without margins (cradle to gate) were utilized in line with the boundary of this category. Emissions include carbon dioxide, methane and nitrous oxides and other GHGs. While a portion of our capital good expenditure originates from regions outside the U.S, USEEIO factors were utilized due to lack of region-specific spend data

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

0

**Please explain**



## Fuel-and-energy-related activities (not included in Scope 1 or 2)

### Evaluation status

Relevant, calculated

### Metric tonnes CO2e

22996.59

### Emissions calculation methodology

Average-data method is used for this calculation. FMC utilized DEFRA (2020, 1.01 Version) GHG Conversion Factors for the calculation. Where a direct emissions factor was not available, factors were chosen based on the closest equivalent. Categories included in this calculation: 1. Well to Tank (WTT) emissions and T&D losses for all fuel types consumed 2. T&D losses associated with purchased electricity and steam

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### Please explain

Emissions Factor Reference: DEFRA (2020, 1.01 Version) GHG Conversion Factors

## Upstream transportation and distribution

### Evaluation status

Relevant, calculated

### Metric tonnes CO2e

56020.3

### Emissions calculation methodology

Calculation only included transportation paid for by FMC. Emissions calculations were either provided directly from 3rd party logistics partners or calculated internally (Tonne-KM for each trip multiplied by appropriate emissions factor). Emission Factor Source: Global Logistics Emissions Council Framework (GLEC) Version 2.0, by Smart Freight Center. Boundary includes the following: 1. Global Airfreight 2. North America ocean freight 3. Europe, the Middle East and Africa (EMEA) trucking and ocean freight Exclusions: North America Trucking, Latin America trucking/ocean and Asia Pacific trucking/ocean are not included at this time due to insufficient data.

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

3

### Please explain

North America and EMEA Ocean Freight were obtained directly from 3rd party logistics partners.

## Waste generated in operations

### Evaluation status

Relevant, calculated

### Metric tonnes CO2e

11253.77

### Emissions calculation methodology

Utilized average data method. \* Emissions associated with each waste disposal method were calculated using corresponding DEFRA emissions factor. \* For landfill, the factors include collection, transportation and landfill emissions ('gate to grave') – As per DEFRA's methodology. \* For combustion and recycling, the factors consider transport to an energy recovery or materials reclamation facility only. This is in line with GHG Protocol Guidelines, with subsequent emissions attributed to electricity generation or recycled material production respectively. \* For all other waste types, a default factors for Combustion of municipal waste was used Emissions associated with onsite waste treatment (e.g. wastewater treatment) are accounted for in Scope 1 & 2.

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### Please explain

Emission Factor Reference: DEFRA (2020, 1.01 Version)

## Business travel

### Evaluation status

Relevant, calculated

### Metric tonnes CO2e

944.354

### Emissions calculation methodology

FMC utilizes the distance-based method of calculating emissions from business travel. Boundary included scope 1 and scope 2 emissions of transportation carriers that occur during use of vehicles. Travel data and emissions factors were provided by the travel agency. Emission factors were sourced from DEFRA (2018, 1.01 Version) GHG Conversion factors. \* Travel distances for each route were multiplied with relevant emissions factors provided by the travel vendor. \* Air: Miles were converted to CO2e emissions using separate conversion factors for short-haul, medium-haul and long-haul flights. \* Train: Rail miles were converted into CO2e emissions and only include rail travel in the U.S and Europe.

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

95

### Please explain

The calculated emissions only include travel booked through FMC's external travel agency and does not include booking made outside the agency. The calculated emissions do not include buses, rental cars and other miscellaneous methods of travel.

## Employee commuting

### Evaluation status

Relevant, calculated

### Metric tonnes CO<sub>2</sub>e

4487.56

### Emissions calculation methodology

FMC utilized the distance-based method of calculating emissions from employee commuting. A survey was sent out to all full-time FMC employees that asked for employee location, distance traveled, and mode of transportation used (e.g. car, train, bus, bicycle, walking, etc). Approximately 20% of FMC employees were surveyed. The average individual carbon footprint was rolled up to a regional level (North America, Latin America, EMEA and Asia Pacific). This figure was used to extrapolate emissions from the entire organization based on employee count by region as at 31 December 2020. For North American employees, EPA (March 2018 Version) emission factors were used. For all other regions, DEFRA (2018, 1.01 Version) factors were used.

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### Please explain

## Upstream leased assets

### Evaluation status

Relevant, calculated

### Metric tonnes CO<sub>2</sub>e

4319

### Emissions calculation methodology

This category represents emissions for offices leased by FMC not included in Scope 1 & 2. Shared office spaces were not material to the overall category emissions and this were excluded from the calculation. Floor space for each office was multiplied by appropriate emissions factor to calculate estimated carbon emissions for that building. Emissions factor was derived from Hong, S., 2018. Analysing Trends of Energy Use of Offices and Schools Using Display Energy Certificates, In: CIBSE Technical Symposium, 12-13 April 2018, London, UK. 2020 Reporting note: Based on employee tracking from FMC's Central Incident Management Team (CIMT), it is estimated that 33% of our global workforce worked from home from March 2020 - December 2020. As such, emissions were reduced proportionately.

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### Please explain

## Downstream transportation and distribution

### Evaluation status

Relevant, not yet calculated

### Metric tonnes CO<sub>2</sub>e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

### Please explain

Not assessed at this time due to complexity and uncertainty of data

## Processing of sold products

### Evaluation status

Not evaluated

### Metric tonnes CO<sub>2</sub>e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

### Please explain

Not calculated as the WBCSD Chemical Sector Standard "Guidance for Accounting and Reporting Corporate GHG Emissions in the Chemical Sector Value Chain" emphasizes that "chemical companies are not required to report Scope 3, category 10 emissions, since reliable figures are difficult to obtain, due to the diverse application and customer structure

## Use of sold products

### Evaluation status

Relevant, calculated

### Metric tonnes CO2e

24763

### Emissions calculation methodology

The active ingredients (AI) contained in FMC's products typically have very low vapor pressure, and therefore not likely to evaporate and produce greenhouse gas. A well-defined emission factor for such AIs could not be found in open literature. A team of internal specialists have developed a conservative method to account for maximum possible contribution of sold products to Scope 3 emission during use phase. It was assumed that a fraction of the applied product remains as residue in the soil, the remaining product either is absorbed by the plants, or goes with the water. The fraction remaining with the soil, known as Non-Extractable Residue (NRE) ultimately degrades to CO2 over its lifetime, contributing to the Scope 3 direct emissions. These internally developed emissions factors were applied to volume of product sold (by AI) in the reporting year

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### Please explain

## End of life treatment of sold products

### Evaluation status

Not evaluated

### Metric tonnes CO2e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

### Please explain

FMC Agricultural Sciences products are used directly in the field, requiring no end-of-life treatment. Packaging materials and waste are recycled when possible. At this time, FMC is investigating methods to measure the emissions associated with these activities

## Downstream leased assets

### Evaluation status

Not relevant, explanation provided

### Metric tonnes CO2e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

### Please explain

FMC has downstream leased assets that have a small footprint compared to our overall footprint.

## Franchises

### Evaluation status

Not relevant, explanation provided

### Metric tonnes CO2e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

### Please explain

FMC does not have franchises.

## Investments

### Evaluation status

Not evaluated

### Metric tonnes CO2e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

### Please explain

This category has not yet been evaluated by FMC corporation.

**Other (upstream)**

**Evaluation status**

Not evaluated

**Metric tonnes CO2e**

<Not Applicable>

**Emissions calculation methodology**

<Not Applicable>

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

<Not Applicable>

**Please explain**

No other upstream impacts have been evaluated at this time.

**Other (downstream)**

**Evaluation status**

Not evaluated

**Metric tonnes CO2e**

<Not Applicable>

**Emissions calculation methodology**

<Not Applicable>

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

<Not Applicable>

**Please explain**

No other downstream impacts have been evaluated at this time.

C6.7

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**(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?**

Yes

C6.7a

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**(C6.7a) Provide the emissions from biogenic carbon relevant to your organization in metric tons CO2.**

	CO2 emissions from biogenic carbon (metric tons CO2)	Comment
Row 1	13695.134	FMC uses briquette as a significant source of energy at one of its manufacturing plants in India. Briquettes are made from an agricultural by product (groundnut shells) that would otherwise be combusted by local farmers without heat recovery. Briquette represents captured CO2 and constitutes a significant portion of site GHG emissions.

C6.10

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(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

**Intensity figure**

0.0000327325

**Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)**

151944.41

**Metric denominator**

unit total revenue

**Metric denominator: Unit total**

464200000

**Scope 2 figure used**

Location-based

**% change from previous year**

0.8

**Direction of change**

Decreased

**Reason for change**

The decrease in the combined global emission in metric ton CO2e per unit currency total revenue is heavily due to COVID-related Equipment Shutdowns in April/May 2020.

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**Intensity figure**

0.44

**Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)**

151944.41

**Metric denominator**

metric ton of product

**Metric denominator: Unit total**

342922.53

**Scope 2 figure used**

Location-based

**% change from previous year**

<Not Applicable>

**Direction of change**

<Not Applicable>

**Reason for change**

Intensity figure has stayed largely flat due to similar production quantity from previous year

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## C7. Emissions breakdowns

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### C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Yes

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### C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	83584.41	IPCC Fifth Assessment Report (AR5 – 100 year)

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### C7.2

**(C7.2) Break down your total gross global Scope 1 emissions by country/region.**

Country/Region	Scope 1 emissions (metric tons CO2e)
North America	41467.307
Europe, Middle East and Africa (EMEA)	26073.43
Asia Pacific (or JAPA)	15990.529
Latin or South America (LSA)	53.137

**C7.3**

**(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.**

By business division

**C7.3a**

**(C7.3a) Break down your total gross global Scope 1 emissions by business division.**

Business division	Scope 1 emissions (metric ton CO2e)
Agricultural Sciences	83584.41

**C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4**

**(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e.**

	Gross Scope 1 emissions, metric tons CO2e	Net Scope 1 emissions , metric tons CO2e	Comment
Cement production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Chemicals production activities	83584.41	<Not Applicable>	All FMC operations are related to chemical production activities
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Electric utility activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Metals and mining production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (upstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (midstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (downstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport services activities	<Not Applicable>	<Not Applicable>	<Not Applicable>

**C7.5**

**(C7.5) Break down your total gross global Scope 2 emissions by country/region.**

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted for in Scope 2 market-based approach (MWh)
North America	41031.269	40233.573	41031.26	0
Latin America (LATAM)	494.027	484.423	494.02	0
Europe, Middle East and Africa (EMEA)	4390.112	4304.763	4390.11	0
Asia Pacific (or JAPA)	22444.589	22008.24	21436.58	1008

**C7.6**

**(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.**

By business division

**C7.6a**

**(C7.6a) Break down your total gross global Scope 2 emissions by business division.**

Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Agricultural Sciences	68360	67031

**C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7**

**(C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7) Break down your organization's total gross global Scope 2 emissions by sector production activity in metric tons CO2e.**

	Scope 2, location-based, metric tons CO2e	Scope 2, market-based (if applicable), metric tons CO2e	Comment
Cement production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Chemicals production activities	68360	67031	All FMC operations are related to chemical production activities
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Metals and mining production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (upstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (midstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (downstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport services activities	<Not Applicable>	<Not Applicable>	<Not Applicable>

**C-CH7.8**

**(C-CH7.8) Disclose the percentage of your organization's Scope 3, Category 1 emissions by purchased chemical feedstock.**

Purchased feedstock	Percentage of Scope 3, Category 1 tCO2e from purchased feedstock	Explain calculation methodology
Specialty chemicals	100	We do not have category level data for individual chemical

**C-CH7.8a**

**(C-CH7.8a) Disclose sales of products that are greenhouse gases.**

	Sales, metric tons	Comment
Carbon dioxide (CO2)	0	There has been no sale of Greenhouse Gasses
Methane (CH4)	0	There has been no sale of Greenhouse Gasses
Nitrous oxide (N2O)	0	There has been no sale of Greenhouse Gasses
Hydrofluorocarbons (HFC)	0	There has been no sale of Greenhouse Gasses
Perfluorocarbons (PFC)	0	There has been no sale of Greenhouse Gasses
Sulphur hexafluoride (SF6)	0	There has been no sale of Greenhouse Gasses
Nitrogen trifluoride (NF3)	0	There has been no sale of Greenhouse Gasses

**C7.9**

**(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?**

Decreased

**C7.9a**

**(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.**

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	0	No change	0	FMC had no changes in emissions due to changes in renewable energy consumption in 2020.
Other emissions reduction activities	2984.2	Decreased	1.96	The changes in our global emission is mainly due to our emission reduction initiatives. The figure in "Emissions value (percentage)" was calculated accordingly: $1.96\% = 2984.2 / 152135 * 100\%$ (2019 Scope 1 and 2 emissions).
Divestment	0	No change	0	There were no divestments that contributed to a change in Scope 1 and 2 emissions in 2020.
Acquisitions	0	No change	0	There were no acquisitions that contributed to a change in Scope 1 and 2 emissions in 2020.
Mergers	0	No change	0	There were no mergers that contributed to a change in Scope 1 and 2 emissions in 2020.
Change in output	2793.07	Increased	1.83	There is an increase in production output from 2019 to 2020 that results in an increase in emission. The figure in "Emissions value (percentage)" was calculated accordingly: $1.83\% = 2793.07 / 152135 * 100\%$ (2020 Scope 1 and 2 emissions).
Change in methodology	0	No change	0	There were no changes in methodology that contributed to a change in Scope 1 and 2 emissions in 2020.
Change in boundary	0	No change	0	There were no changes in boundary that contributed to a change in Scope 1 and 2 emissions in 2020.
Change in physical operating conditions	0	No change	0	There were no changes in physical operating conditions that contributed to a change in Scope 1 and 2 emissions in 2020.
Unidentified	0	No change	0	There were no unidentified changes that contributed to a change in Scope 1 and 2 emissions in 2020.
Other	0	No change	0	There were no other changes in 2020

### C7.9b

**(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?**

Location-based

### C8. Energy

#### C8.1

**(C8.1) What percentage of your total operational spend in the reporting year was on energy?**

More than 0% but less than or equal to 5%

#### C8.2

**(C8.2) Select which energy-related activities your organization has undertaken.**

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	Yes
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	No

#### C8.2a

**(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.**

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	0	408991.76	408991.76
Consumption of purchased or acquired electricity	<Not Applicable>	0	158592.46	158592.46
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	0	17476.87	17476.87
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Total energy consumption	<Not Applicable>	0	585005	585005

#### C-CH8.2a



**(C-CH8.2a) Report your organization's energy consumption totals (excluding feedstocks) for chemical production activities in MWh.**

	Heating value	Total MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	264904
Consumption of purchased or acquired electricity	<Not Applicable>	101858
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	8964.76
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	<Not Applicable>
Total energy consumption	<Not Applicable>	375726.76

**C8.2b**

**(C8.2b) Select the applications of your organization's consumption of fuel.**

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	Yes
Consumption of fuel for the generation of cooling	Yes
Consumption of fuel for co-generation or tri-generation	Yes

**C8.2c**

**(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.**

**Fuels (excluding feedstocks)**

Natural Gas

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

346140.73

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

0

**MWh fuel consumed for self-generation of steam**

0

**MWh fuel consumed for self-generation of cooling**

0

**MWh fuel consumed for self-cogeneration or self-trigeneration**

0

**Emission factor**

0.00185

**Unit**

metric tons CO2e per m3

**Emissions factor source**

IPCC fifth amendment. Used in steam boilers and to run CHP units. Used for internal accounting. FMC uses some quantity of natural gas to produce electricity, but we do not track the amount separately that is used to produce electricity.

**Comment**

IPCC. Used in steam boilers and to run CHP units. Used for internal accounting. FMC uses some quantity of natural gas to produce electricity, but we do not track the amount separately that is used to produce electricity.

**Fuels (excluding feedstocks)**

Other, please specify (Briquette)

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

38348.56

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

0

**MWh fuel consumed for self-generation of steam**

0

**MWh fuel consumed for self-generation of cooling**

0

**MWh fuel consumed for self-cogeneration or self-trigeneration**

0

**Emission factor**

1.61183

**Unit**

kg CO2e per GJ

**Emissions factor source**

IPCC 2006

**Comment**

Used to produce steam at the Panoli, India site.

---

**Fuels (excluding feedstocks)**

Liquefied Petroleum Gas (LPG)

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

9212.29

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

0

**MWh fuel consumed for self-generation of steam**

0

**MWh fuel consumed for self-generation of cooling**

0

**MWh fuel consumed for self-cogeneration or self-trigeneration**

0

**Emission factor**

1.61183

**Unit**

metric tons CO2e per m3

**Emissions factor source**

IPCC 2006

**Comment**

---

**Fuels (excluding feedstocks)**

Kerosene

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

7973.97

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

0

**MWh fuel consumed for self-generation of steam**

0

**MWh fuel consumed for self-generation of cooling**

0

**MWh fuel consumed for self-cogeneration or self-trigeneration**

0

**Emission factor**

2.51975

**Unit**

metric tons CO2e per m3

**Emissions factor source**

IPCC 2006

**Comment**

Mainly used in boiler to produce steam, but we do not track exact distribution for various purposes. Used for internal accounting.

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**Fuels (excluding feedstocks)**

Diesel

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

6034.79

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

0

**MWh fuel consumed for self-generation of steam**

0

**MWh fuel consumed for self-generation of cooling**

0

**MWh fuel consumed for self-cogeneration or self-trigeneration**

0

**Emission factor**

2.67687

**Unit**

metric tons CO2e per m3

**Emissions factor source**

IPCC 2006

**Comment**Diesel / Gas oil is primarily used for transportation Used for internal accounting

---

**Fuels (excluding feedstocks)**

Petrol

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

906.09

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

0

**MWh fuel consumed for self-generation of steam**

0

**MWh fuel consumed for self-generation of cooling**

0

**MWh fuel consumed for self-cogeneration or self-trigeneration**

0

**Emission factor**

2.27214

**Unit**

metric tons CO2e per m3

**Emissions factor source**

IPCC 2006

**Comment**For transportation Used for internal accounting

---

**Fuels (excluding feedstocks)**

Propane Gas

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

286.12

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

0

**MWh fuel consumed for self-generation of steam**0

---

**MWh fuel consumed for self-generation of cooling**

0

**MWh fuel consumed for self-cogeneration or self-trigeneration**

0

**Emission factor**

1.61183

**Unit**

metric tons CO2e per m3

**Emissions factor source**

IPCC 2006

**Comment**

For heating and use in flares.

---

**Fuels (excluding feedstocks)**

Distillate Oil

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

89.21

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

0

**MWh fuel consumed for self-generation of steam**

0

**MWh fuel consumed for self-generation of cooling**

0

**MWh fuel consumed for self-cogeneration or self-trigeneration**

0

**Emission factor**

0.01013

**Unit**

metric tons CO2e per m3

**Emissions factor source**

IPCC 2006

**Comment**

Used to produce steam at the Stine R&D location. Only used in emergency situation when natural gas is unavailable.

---

**C8.2e**

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**(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero emission factor in the market-based Scope 2 figure reported in C6.3.**

**Sourcing method**

Power purchase agreement (PPA) with on-site/off-site generator owned by a third party with no grid transfers (direct line)

**Low-carbon technology type**

Solar

**Country/area of consumption of low-carbon electricity, heat, steam or cooling**

India

**MWh consumed accounted for at a zero emission factor**

1008

**Comment**

Solar power PPA for panoli site

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**C-CH8.3**

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**(C-CH8.3) Does your organization consume fuels as feedstocks for chemical production activities?**

No

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

C-CH9.3a

(C-CH9.3a) Provide details on your organization's chemical products.

**Output product**

Specialty chemicals

**Production (metric tons)**

342922.53

**Capacity (metric tons)**

400000

**Direct emissions intensity (metric tons CO2e per metric ton of product)**

0.44

**Electricity intensity (MWh per metric ton of product)**

1.665

**Steam intensity (MWh per metric ton of product)**

0.1465

**Steam/ heat recovered (MWh per metric ton of product)**

0

**Comment**

These values are averaged for all FMC's products

C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

	Investment in low-carbon R&D	Comment
Row 1	Yes	97% of all of FMC's R&D investment was associated with sustainable products for 2020

C-CH9.6a

(C-CH9.6a) Provide details of your organization's investments in low-carbon R&D for chemical production activities over the last three years.

Technology area	Stage of development in the reporting year	Average % of total R&D investment over the last 3 years	R&D investment figure in the reporting year (optional)	Comment
Unable to disaggregate by technology area	<Not Applicable>	81 - 100%		97% of FMC's R&D investments in 2020 were towards sustainable solutions.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

## C10.1a

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(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

ERM CVS 2020 Assurance Statement FMC\_FINAL.pdf

**Page/ section reference**

Pg 2, Section Conclusions

**Relevant standard**

ISAE3000

**Proportion of reported emissions verified (%)**

100

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## C10.1b

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(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

**Scope 2 approach**

Scope 2 location-based

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

ERM CVS 2020 Assurance Statement FMC\_FINAL.pdf

**Page/ section reference**

Pg 2, section conclusions

**Relevant standard**

ISAE3000

**Proportion of reported emissions verified (%)**

10

---

**Scope 2 approach**

Scope 2 market-based

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

ERM CVS 2020 Assurance Statement FMC\_FINAL.pdf

**Page/ section reference**

pg 2, section conclusions

**Relevant standard**

ISAE3000

**Proportion of reported emissions verified (%)**

10

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## C10.1c

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**(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.**

**Scope 3 category**

Scope 3 (upstream & downstream)

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Limited assurance

**Attach the statement**

**Page/section reference**

**Relevant standard**

ISAE3000

**Proportion of reported emissions verified (%)**

**C10.2**

**(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?**

Yes

**C10.2a**

**(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?**

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C5. Emissions performance	Year on year change in emissions (Scope 1)	ERM CVS verified - WBCSD/WRI GHG Protocol (2004, updated 2015) for the Scope 1 and 2 GHG emissions (excluding refrigerants and process emissions); FMC's internal reporting criteria and definitions	We assure our Scope 1 and 2 emissions every year. Please find attached the verification letter. ERM CVS 2020 Assurance Statement FMC_FINAL.pdf
C6. Emissions data	Year on year change in emissions (Scope 2)	ERM CVS' assurance methodology, based on the International Standard on Assurance Engagements ISAE 3000 (Revised).	We assure our Scope 1 and 2 emissions every year. Please find attached the verification letter.
C8. Energy	Energy consumption	ERM CVS' assurance methodology, based on the International Standard on Assurance Engagements ISAE 3000 (Revised).	ERM-CVS verification engagement summary, that includes verification of Total Energy and Energy Intensity, is attached (previous link)
C5. Emissions performance	Year on year emissions intensity figure	ERM CVS' assurance methodology, based on the International Standard on Assurance Engagements ISAE 3000 (Revised).	We assure our Scope 1 and 2 emissions every year. Please find attached the verification letter. (previous link)

**C11. Carbon pricing**

**C11.1**

**(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?**

Yes

**C11.1a**

**(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.**

EU ETS

**C11.1b**

**(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.**

**EU ETS**

**% of Scope 1 emissions covered by the ETS**

30.27

**% of Scope 2 emissions covered by the ETS**

3.99

**Period start date**

January 1 2020

**Period end date**

December 31 2020

**Allowances allocated**

76311

**Allowances purchased**

0

**Verified Scope 1 emissions in metric tons CO<sub>2</sub>e**

25303

**Verified Scope 2 emissions in metric tons CO<sub>2</sub>e**

2700

**Details of ownership**

Facilities we own and operate

**Comment**

FMC's manufacturing facility based in Ronland, Denmark, participates in the European Union (EU) Emissions Trading Scheme (ETS)

**C11.1d**

---

**(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?**

FMC's strategy for complying with the systems we are regulated by or anticipate being regulated by involves having regional Sustainability teams to study local regulations affecting FMC operations. Where applicable, FMC participates in local carbon price related regulations as well as voluntary adoption. (Situation) For example, in 2015, FMC acquired Cheminova, a chemical company based in Denmark. One of Cheminova's facilities in Ronland, Denmark, participates in the European Union (EU) Emissions Trading Scheme (ETS) and falls below the current emissions cap. In 2021, the next phase of the EU ETS will come into effect. (Task) FMC will continue to invest and make improvements in its energy use and greenhouse gas emission levels prior to 2021 to prepare for the lower emissions cap. (Action) FMC has already undertaken energy audits at Ronland. (Result) As a result of the energy audits undertaken at the Ronland facility, the company was able to identify the risk of upcoming EU regulations and lead to energy efficiency improvement projects for the site.

**C11.2**

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**(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?**

No

**C11.3**

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**(C11.3) Does your organization use an internal price on carbon?**

No, and we do not currently anticipate doing so in the next two years

**C12. Engagement**

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**C12.1**

---

**(C12.1) Do you engage with your value chain on climate-related issues?**

Yes, our suppliers

Yes, our customers

Yes, other partners in the value chain

**C12.1a**

---



**(C12.1a) Provide details of your climate-related supplier engagement strategy.**

**Type of engagement**

Compliance & onboarding

**Details of engagement**

Climate change is integrated into supplier evaluation processes

**% of suppliers by number**

60

**% total procurement spend (direct and indirect)**

58

**% of supplier-related Scope 3 emissions as reported in C6.5**

**Rationale for the coverage of your engagement**

Collaboration and strong partnerships with suppliers are very important to FMC to ensure we meet our sustainability commitments, from sourcing, to manufacturing, to transportation and product stewardship. FMC chooses to work only with suppliers who share our commitment to ethical and sustainable business practices. FMC is committed to continuous improvement of its health, safety and environmental performance, listening and responding to public concerns, and reporting on our specific goals and progress toward meeting those goals. Accordingly, the Global Procurement Group has set high standards for the way we conduct business in the areas of social and environmental responsibility. As a member of the United Nations Global Compact, FMC expects our suppliers to conduct their business with similar standards of integrity and ethical behavior. Our FMC Supplier Code of Conduct provides clarity on FMC's expectations from its suppliers. FMC encourages our suppliers to collaborate with us to eliminate waste and cost from our supply chain. We expect our suppliers to work to reduce emissions and waste and use energy and natural resources efficiently and to work with their employees, customers, contractors and commercial partners to promote responsible management of their products and processes through their entire life cycle, and for their intended end use. In addition to the prequalification screening, FMC partners with Sedex, an external screening and risk management provider to continuously qualify key raw material suppliers including assessment of emissions, including GHG, targets to reduce energy usage, and if they have a biodiversity action plan among other business practices (labor standards, health and safety, human rights, and business ethics). We are continuing to grow this program. FMC has initiated relationships with suppliers that are current members of Sedex and has successfully engaged with 67% of those current members, 40 suppliers. Sedex regularly updates FMC on changes to supplier profiles. In phase two of this partnership, we identify Sedex members and ask them to initiate a partnership with FMC during the supplier evaluation process.

**Impact of engagement, including measures of success**

We measure our success by tracking the percentage of our suppliers covered by our Supplier evaluation process and percent of suppliers who are compliant with our standards. Since 2012, 450 of our direct material suppliers (~ 60%) and approximately 58% of the total spend were evaluated for their environmental sustainability commitment using our Supplier evaluation process. We also have Key Performance Metrics on the % of new suppliers who have a formal sustainability program. Since we began tracking, 68% of our direct material suppliers have a sustainability program. During the Supplier Evaluation process, FMC encourages our new suppliers to visit FMC's Sustainability Report to learn more about our commitment to producing food, feed, fiber and fuel for an expanding world population through any challenge that comes our way including those that are climate-related. In addition, FMC sources active ingredients (AIs) for FMC-owned formulation sites globally through contract manufacturers. The synthesis of these complex chemicals has a material environmental footprint compared to FMC-owned formulation and packaging operations, so we work with our contract manufacturers to monitor and reduce these impacts. We also disclose their energy, GHG and waste footprints in our annual report as a means to encourage reductions in these metrics. In 2020, FMC partnered with one of our active ingredient contract manufacturers based in Jianshu province, China, to significantly reduce their waste output. The project, which was funded by FMC and based on similar efforts conducted by the contract manufacturer, improved yield and resulted in the reduction of solvent use by about 450 metric tonnes per year and waste by 550 metric tonnes per year .

**Comment**

We are continuing to engage all our suppliers to respond to our sustainability questionnaire.

---

**C12.1b**

**(C12.1b) Give details of your climate-related engagement strategy with your customers.**

**Type of engagement**

Collaboration & innovation

**Details of engagement**

Run a campaign to encourage innovation to reduce climate change impacts

**% of customers by number**

25

**% of customer - related Scope 3 emissions as reported in C6.5**

0

**Portfolio coverage (total or outstanding)**

<Not Applicable>

**Please explain the rationale for selecting this group of customers and scope of engagement**

FMC partnered with one of our key customers, Nutrien Ag Solutions (Nutrien), on a pilot program for FMC's Arc™ farm intelligence platform. The program was designed to deliver real-time pest mapping and predictive forecasts of diamondback moth populations in brassica crops to Nutrien Pest Control Advisors (PCAs) in the Salinas Valley of California, U.S. Brassica crops, such as broccoli, brussels sprouts and cabbage, are some of the most nutrient dense vegetables and play a key role in promoting human health. The diamondback moth is one of the most prolific pests on brassicas, with an estimated annual economic impact exceeding \$4 billion. These insects feed on the crops, causing physical damage and creating a vector for disease, rendering them commercially unviable. As such, early detection and treatment are essential in making sure these vegetables reach our plates. Using FMC's Arc™ farm intelligence platform, Nutrien PCAs and growers were able to easily track, and ultimately predict, the progression of pest pressure from May to September 2020, the peak season for diamondback moths. For Nutrien's PCAs, the highly visual and accessible pest information helps them be more efficient and effective in scouting and delivering pest management recommendations to growers. FMC plans to refine and validate an advanced pest prediction model for diamondback moths based on current and historical data.

**Impact of engagement, including measures of success**

More efficient use rate of product, better resistance management and reduced environmental footprint.

### C12.1d

---

**(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.**

FMC sources active ingredients (AIs) for FMC-owned formulation sites globally through contract manufacturers. The synthesis of these complex chemicals has a material environmental footprint compared to FMC-owned formulation and packaging operations, so we work with our contract manufacturers to monitor and reduce these impacts. We also disclose their energy, GHG and waste footprints in our annual report as a means to encourage reductions in these metrics. In 2020, FMC partnered with one of our active ingredient contract manufacturers based in Jiangsu province, China, to significantly reduce their waste output. The project, which was funded by FMC and based on similar efforts conducted by the contract manufacturer, improved yield and resulted in the reduction of solvent use by about 550 metric tonnes per year and waste by 550 metric tonnes per year.

### C12.3

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**(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?**

- Direct engagement with policy makers
- Trade associations
- Funding research organizations
- Other

### C12.3a

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**(C12.3a) On what issues have you been engaging directly with policy makers?**

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Adaptation or resilience	Support	Broad advocacy and education	Engaging and including farmers towards bio-conservation and carbon sequestration through pending legislative solutions.

### C12.3b

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**(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?**

Yes

### C12.3c

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**(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.**

**Trade association**

American Chemistry Council (ACC)

**Is your position on climate change consistent with theirs?**

Consistent

**Please explain the trade association's position**

The American Chemistry Council (ACC) and its members believe that chemistry plays an integral role in solving our world's sustainability challenges. The ACC is committed to advancing safe, innovative, effective, and economically viable chemical products and technologies that are key to unlocking sustainability solutions. The ACC's sustainability principles call on its members to address the environmental impacts from operations by achieving measurable reductions in greenhouse gas emissions and distribution of products, conserving materials and resources, reducing waste through re-use and recycling, and collaborating to reduce marine debris and its impacts. The ACC has supported a number of proposals designed to reduce greenhouse gases, and improve energy generation and efficiency. The ACC has not endorsed a specific climate change policy proposal.

**How have you influenced, or are you attempting to influence their position?**

FMC is a member of numerous trade and business associations that relate to the chemical, manufacturing, agricultural and consumer industries and their associated priority issues. FMC supports the ACC in its mission to deliver business value through advocacy, political engagement, communications and scientific research. The members of ACC are a diverse group of companies with differing positions on issues that impact the chemical industry. Overall, FMC supports the ACC's sustainability principles that call on ACC members to address their environmental impacts including those related to climate change.

---

**Trade association**

CropLife America (CLA)

**Is your position on climate change consistent with theirs?**

Consistent

**Please explain the trade association's position**

CropLife America (CLA) supports a number of proposals designed to impact greenhouse gas generation, energy generation and energy efficiency.

**How have you influenced, or are you attempting to influence their position?**

FMC is a member of numerous trade and business associations that relate to the chemical, manufacturing, agricultural and consumer industries and their associated priority issues. FMC supports CLA in its efforts to engage with policy makers at the federal, state and local levels to develop policies and regulations. CLA is comprised of a diverse group of members that could potentially differ on certain issues that impact its members. In situations of conflict, all members have the right to advocate for an alternative position. Currently, FMC President, Americas Region is the Vice Chair of the CLA Board.

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**Trade association**

CropLife International (CLI)

**Is your position on climate change consistent with theirs?**

Consistent

**Please explain the trade association's position**

CropLife International (CLI) supports and is a member of Farming First, a coalition of multi-stakeholder organizations that articulates, endorses and promotes practical, actionable programs and activities to further sustainable agricultural development worldwide. Farming First has a set of recommendations on climate change to all governments: 1) Support the unique role of agriculture in the global climate change response, 2) Encourage the use of all available and applicable climate change solutions, 3) Promote funding mechanisms which support the needs of all levels and forms of farming, 4) Reward resource-based productivity improvements as the direct contributor to climate-change effectiveness, and 5) Invest in capability sharing to encourage all farmers to play a role in climate change while safeguarding local and global security.

**How have you influenced, or are you attempting to influence their position?**

FMC is a member of numerous trade and business associations that relate to the chemical, manufacturing, agricultural and consumer industries and their associated priority issues. FMC's President and Chief Executive Officer, is a member of CLI's Board of Directors. FMC supports CLI in its efforts to engage with policy makers to develop policies and regulations. CLI is comprised of a diverse group of members that could potentially differ on certain issues that impact its members. In situations of conflict, all members have the right to advocate for an alternative position. FMC uses this position to drive its peer groups to make sustainable decisions.

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**C12.3d**

**(C12.3d) Do you publicly disclose a list of all research organizations that you fund?**

No

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**C12.3e**

**(C12.3e) Provide details of the other engagement activities that you undertake.**

The communities in which FMC operates are vital to the company's success. To understand how FMC can positively influence those communities, each FMC-owned manufacturing site reports quarterly on community activities, which are organized into four categories: safety, operational transparency, community partnership and community leadership. If a site completes an activity in each of the four categories, thus providing diverse and valuable interactions with the community they earn a 100 on the Community Engagement Index. The 2020 FMC achieved a score of 82 on the Index against a stated goal of 100 by the year 2025. In addition to the four categories in a calendar year, promoting food security and improved nutrition across our locations is an important part of FMC's community engagement strategy. One of our long-term partnerships is Philabundance – an impactful and collaborative organization distributing more than 24 million pounds of food each year to those in need – in Philadelphia, Pennsylvania, United States.

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**C12.3f**

**(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?**

In October 2020, FMC created the role of Vice President and Chief Sustainability Officer (CSO). The new Office of the CSO will bring greater focus and direction to our sustainability efforts around the world, driving meaningful change across the company and supporting global initiatives to address some of the world's most urgent challenges. There are five key functions that report to the Chief Sustainability Officer: Corporate Sustainability, Diversity & Inclusion, Product Stewardship, Government and Industry Affairs and Sustainability Communications, Engagement & Philanthropy.

FMC also has an established set of strategic and governance processes that ensure the collaboration of FMC's Governmental Affairs team with FMC's executive leadership team, business leaders, and sustainability group on many issues, including sustainability and climate change-related issues. For example, members of FMC's Governmental Affairs Group participate on FMC's Executive Sustainability Council alongside leaders of FMC's executive leadership, as well as group leaders from Manufacturing, EHS, R&D, Finance, Communications, Procurement, Human Resources, and Legal. In addition, members of FMC's Corporate Government Affairs have regular interactions with FMC's leaders from each function and geography in which FMC operates to define and ensure the priorities of the company are advocated for in our interactions with policy makers, trade associations, and research organizations. Through these interactions and meetings, FMC is able to discuss and ensure the company's common approach to climate change is consistent.

In addition, FMC's External Sustainability Advisory Council, initiated in November 2017, provides perspectives and objectivity to our sustainability strategy. Members of the Council are leaders in agriculture, energy, water, academia and environmental issues. Council meetings are held twice a year.

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## C12.4

**(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).**

**Publication**

In voluntary sustainability report

**Status**

Complete

**Attach the document**

FMC 2020 Sustainability Report - Resilient.Ready.pdf

**Page/Section reference**

2-7, 34-36

**Content elements**

Governance  
Strategy  
Emissions figures  
Emission targets  
Other metrics

**Comment**

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**Publication**

In mainstream reports

**Status**

Underway – previous year attached

**Attach the document**

FMC 2020 Annual Report\_Form 10-K\_0.pdf

**Page/Section reference**

Part 1A, Pg 9

**Content elements**

Risks & opportunities  
Other metrics

**Comment**

Annual Report

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## C15. Signoff

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### C-FI

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**(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.**

### C15.1

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**(C15.1) Provide details for the person that has signed off (approved) your CDP climate change response.**

	Job title	Corresponding job category
Row 1	Chief Executive Officer	Chief Executive Officer (CEO)

**SC. Supply chain module**

**SC0.0**

**(SC0.0) If you would like to do so, please provide a separate introduction to this module.**

Please refer to the introduction in C 0.2 for company introduction.

**SC0.1**

**(SC0.1) What is your company’s annual revenue for the stated reporting period?**

	Annual Revenue
Row 1	4600000000

**SC0.2**

**(SC0.2) Do you have an ISIN for your company that you would be willing to share with CDP?**

No

**SC1.1**

**(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.**

**SC1.2**

**(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).**

**SC1.3**

**(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?**

Allocation challenges	Please explain what would help you overcome these challenges
Diversity of product lines makes accurately accounting for each product/product line cost ineffective	An accurate product trail that will help us understand where our products are going and the corresponding quantities. Currently, majority of our products are sold through intermediate distributors.
Customer base is too large and diverse to accurately track emissions to the customer level	An accurate product trail that will help us understand where our products are going and the corresponding quantities. Currently, majority of our products are sold through intermediate distributors.
Managing the different emission factors of diverse and numerous geographies makes calculating total footprint difficult	We have manufacturing and R&D operations in more than 25 sites throughout the world.

**SC1.4**

**(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?**

Yes

**SC1.4a**

**(SC1.4a) Describe how you plan to develop your capabilities.**

Corporate Sustainability group within FMC has undertaken a project to quantify FMC’s Scope 3 emissions. Among the 15 categories that makes up Scope 3, Use of sold goods quantifies the emissions associated with our product when used by our customers. FMC has partnered with external consultancy service provider to assure our Scope 3 emissions that would include the emissions to our customers.

SC2.1

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(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

SC2.2

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(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?  
No

SC4.1

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(SC4.1) Are you providing product level data for your organization's goods or services?  
No, I am not providing data

Submit your response

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In which language are you submitting your response?  
English

Please confirm how your response should be handled by CDP

	I am submitting to	Public or Non-Public Submission	Are you ready to submit the additional Supply Chain questions?
I am submitting my response	Investors Customers	Public	Yes, I will submit the Supply Chain questions now

Please confirm below

I have read and accept the applicable Terms