



The Mosaic Company (MOS)

Vote Yes: Item #7 – Stockholder Proposal to Report on the Company’s Plans to Reduce Greenhouse Gas Emissions

Annual Meeting: May 25, 2023

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THE RESOLUTION

BE IT RESOLVED: Shareholders request the Board issue a report, at reasonable expense and excluding confidential information, disclosing how the Company intends to reduce its full value chain greenhouse gas emissions in alignment with the Paris Agreement's 1.5°C goal requiring Net Zero emissions by 2050.

SUPPORTING STATEMENT: Proponents suggest, at Board and Company discretion, that the report include:

- A timeline for setting 1.5 degree-aligned Scope 3 reduction goals;
- A climate transition plan to achieve emissions reductions goals across all relevant emissions scopes;
- Annual reports demonstrating progress towards meeting emissions reduction goals;
- Other information the Board deems appropriate.

SUMMARY

The window for limiting global warming to 1.5 degrees Celsius (“1.5°C”) is quickly narrowing,¹ requiring immediate, sharp emissions reduction from all market sectors.² Failure to reach Net Zero emissions by 2050 is projected to have disastrous economic consequences, impacting companies and investor portfolios.³

Shareholders are increasingly concerned about this material climate risk to their companies and portfolios. They seek clear, consistent disclosures and 1.5°C-aligned climate transition plans from the companies in which they invest. While The Mosaic Co. does have emissions targets for its direct operations, it has not disclosed a plan to reduce emissions from its value chain—which contributes 69% of Mosaic’s total emissions.⁴

¹ <https://www.ipcc.ch/2021/08/09/ar6-wg1-20210809-pr/>

² <https://www.ipcc.ch/assessment-report/ar6/>

³ <https://www.nytimes.com/2021/04/22/climate/climate-change-economy.html>

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https://www.cdp.net/en/formatted_responses/responses?campaign_id=79520704&discloser_id=985380&locale=en&organization_name=The+Mosaic+Company&organization_number=12382&program=Investor&project_year=2022&redirect=https%3A%2F%2Fcdp.credit360.com%2Fsurveys%2F2022%2F6wz4wms4%2F194704&survey_id=78646008, C6



Mosaic is a global leader in producing and marketing crop nutrients. It engages in every phase of crop nutrition development, from mining resources to fertilizer production and distribution.⁵ As a leading integrated producer of concentrated phosphate and potash, Mosaic creates significant carbon emissions from its value chain. Mosaic's use of ammonia, a key ingredient in most fertilizers, drives significant upstream emissions because ammonia is processed with natural gas, the production and burning of which creates large amounts of carbon dioxide (CO₂) and methane emissions.⁶ Methane has 80 times the global warming potential of CO₂.⁷ While Mosaic has set emission reduction targets for its Scope 1 and 2 emissions, representing approximately 30% of its total emissions, Mosaic has not yet disclosed a plan to reduce its Scope 3 value chain emissions.

Mosaic's operations and value chain are exposed to numerous climate-related risks, including regulatory, competitive, and physical risks. Climate-related regulations, such as carbon taxes, are impacting Mosaic's operations in Canada, and similar regulations may be adopted in the U.S. and Brazil, key regions for Mosaic's customers and operations. Low-emission products and supply chains also serve as a competitive advantage in reducing costs, addressing shifting demand for more sustainable agricultural products while ensuring that climate-related risks are reduced. Furthermore, increasing extreme weather events pose physical risk to Mosaic's facilities and ability to produce and distribute its products.⁸

Mosaic has a responsibility to provide investors with a credible transition plan that covers its full range of material emissions and meaningfully addresses climate risk. The Company's failure to address material value chain emissions may leave it vulnerable to regulatory risk and put it at a competitive disadvantage. The Proponent urges a "Yes" vote on this proposal.

RATIONALE FOR A YES VOTE

1. **Mosaic faces climate-related regulatory and physical risks that will drastically impact its business.**
2. **Mosaic is falling behind peers in addressing the impact of its emissions, which may result in competitive risks.**
3. **Mosaic does not disclose a plan or goal to reduce its material value chain emissions in alignment with the Paris Agreement's 1.5°C degree goal requiring Net Zero emissions by 2050.**

DISCUSSION

1. **Mosaic faces climate-related regulatory and physical risks that will drastically impact its business.**

⁵ https://www.sec.gov/ix?doc=/Archives/edgar/data/1285785/000161803423000003/mos-20221231.htm#i666d5b1bcefe4159bb4ef878a11bd2e3_13, p.1

⁶ https://www.ceres.org/sites/default/files/reports/2022-05/FF_TransitionPlaninFoodSector_FINAL_LR_May22.pdf

⁷ <https://earth.stanford.edu/news/methane-and-climate-change>

⁸

https://www.cdp.net/en/formatted_responses/responses?campaign_id=79520704&discloser_id=985380&locale=en&organization_name=The+Mosaic+Company&organization_number=12382&program=Investor&project_year=2022&redirect=https%3A%2F%2Fcdp.credit360.com%2Fsurveys%2F2022%2F6wz4wms4%2F194704&survey_id=78646008



Regulatory Risks

Fertilizer-related emissions from the agriculture sector are significant and increasing, representing 70% of global nitrous oxide emissions.^{9,10} Nitrous oxide is a greenhouse gas that has 265 times the impact of carbon dioxide and causes damage to the ozone layer.¹¹ Reducing agriculture-related emissions is a key step in limiting the effects of climate change, and efforts to reduce agriculture emissions are likely to play a large role in countries’ emission reduction strategies.¹²

Mosaic’s production and operations are located primarily in the U.S., Canada, and Brazil, each a member of the Paris Agreement.¹³ Mosaic’s facilities in Canada, representing approximately 30% of its total emissions in 2021, are already subject to a combination of federal and provincial regulations that tax carbon emissions.¹⁴ Mosaic anticipates the implementation of a price on carbon in the U.S. and Brazil; its operations in those countries currently account for approximately 65% of Mosaic’s total emissions.¹⁵

Physical Risk

Mosaic faces severe physical risk from climate change to its business.¹⁶ In 2020 and 2021, extreme cold in areas of the U.S. resulted in refinery closures, affecting the supply of an essential raw input to Mosaic’s products, constraining the Company’s production and profit.¹⁷ In 2021, major hurricanes in Florida and Louisiana damaged facilities, disrupted production and distribution, and cost Mosaic millions of dollars in lost profits and insurance costs.¹⁸ Property damage at Louisiana sites exceeded Mosaic’s insurance deductible, costing the Company approximately \$125 million.¹⁹ Extreme weather and related

⁹ <https://www.nature.com/articles/s41586-020-2780-0>

¹⁰ <https://www.nature.com/articles/s41586-020-2780-0>

¹¹ <https://www.epa.gov/ghgemissions/overview-greenhouse-gases#:~:text=Nitrous%20oxide%20molecules%20stay%20in,1%20pound%20of%20carbon%20dioxide.&text=Globally%2C%2040%25%20of%20total%20N,emissions%20come%20from%20human%20activities>

¹² <https://www.wri.org/insights/2023-ipcc-ar6-synthesis-report-climate-change-findings>

¹³ https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVII-7-d&chapter=27&clang=en

¹⁴

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¹⁵

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¹⁶

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¹⁷

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¹⁸ <https://www.bloomberg.com/news/articles/2022-10-01/ian-latest-weaker-storm-brings-rain-flash-floods-to-carolinas?sref=TtrRgti9>

¹⁹

https://www.cdp.net/en/formatted_responses/responses?campaign_id=79520704&discloser_id=985380&locale=en&organization_name=The+Mosaic+Company&organization_number=12382&program=Investor&project_year=2022&redirect=https%3A%2F%2Fcdp.credit360.com%2Fsurveys%2F2022%2F6wz4wms4%2F194704&survey_id=78646008, C2.3a



damages are expected to increase in the coming years,²⁰ and global property insurance coverage to protect against property loss is also costing more. Mosaic reports insurance costs of around \$28 million per year, and growing physical risk from climate could increase its annual insurance costs.²¹

Mosaic states in its 10-K that climate change could also impact the location of and demands on global grain production, which will impact demand for Mosaic's core crop performance products.^{22,23} Indeed, crop yield in affected growing regions, such as the U.S. and Brazil, is expected to decline 10-25%, making some regions permanently less productive.²⁴ While this presents an opportunity for Mosaic to possibly develop new products and expand its customer base into new growing regions, it is unclear if Mosaic can effectively act on those opportunities or whether such opportunities outweigh or compensate for the risks of crop yield decline in key growing regions. For example, approximately 30% of Mosaic's net sales in 2021 originated in the U.S., yet this is one of the key growing regions expected to have crop yield declines.²⁵

2. Mosaic is falling behind peers in addressing the impact of its value chain emissions, which may result in competitive risks.

Setting emission reduction targets across its full value chain and creating a plan for meeting those targets can enhance Mosaic's competitive advantage in producing sustainable products, anticipating impacts to business lines, and outperforming peers. Proactively addressing climate risk can be a key factor in company performance. In the mining industry, early movers in addressing climate change have valuations that are around 20% greater than peers.²⁶

Currently, many of Mosaic's peers are setting greenhouse gas reduction targets. Yara International S.A. states its ambition to become climate neutral by 2050 and has signed a commitment letter with SBTi to set science-based targets for its Scope 1, 2, and 3 emissions.²⁷ The Chemours Company committed to establishing science-based targets for its Scope 1, 2, and 3 emissions, in addition to a goal to achieve a 60% absolute reduction of operations-related emissions by 2030.²⁸ FMC Corporation aims to achieve net

²⁰ <https://unfccc.int/news/climate-change-leads-to-more-extreme-weather-but-early-warnings-save-lives>

²¹

https://www.cdp.net/en/formatted_responses/responses?campaign_id=79520704&discloser_id=985380&locale=en&organization_name=The+Mosaic+Company&organization_number=12382&program=Investor&project_year=2022&redirect=https%3A%2F%2Fcdp.credit360.com%2Fsurveys%2F2022%2F6wz4wms4%2F194704&survey_id=78646008, C2.2a, C2.3a

²² <https://www.sec.gov/ix?doc=/Archives/edgar/data/1285785/000161803423000003/mos-20221231.htm>, p.26

²³

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²⁵

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²⁶ <https://www.bcg.com/publications/2020/mining-needs-to-go-faster-on-climate>

²⁷ <https://www.yara.com/sustainability/sustainability-performance/latest-sustainability-report/>

²⁸ <https://www.chemours.com/en/corporate-responsibility/2030-goals>



zero emissions by 2035 with a specific goal of reducing Scope 3 emissions by 25% by 2030.²⁹ Newmont Corporation has also set a Scope 3 reduction goal to reduce its absolute Scope 3 emissions 30% by 2030.³⁰ Developing a comprehensive plan for limiting its material emissions to 1.5°C will help Mosaic reduce the cost of compliance with emerging regulations, identify and respond to areas of climate risk, contribute to the resiliency of its global customers, and improve Mosaic’s ability to succeed over competitors.

3. Mosaic does not disclose a plan or goal to reduce its material value chain emissions in alignment with the Paris Agreement’s 1.5°C degree goal requiring Net Zero emissions by 2050.

Mosaic does report a plan to reduce its Scope 1 and Scope 2 emissions with a goal to reduce the emissions intensity of its operations by 20% per tonne of product and achieve net zero across Scope 1 and 2 by 2040.³¹ However, these targets fail to cover Scope 3 emissions from Mosaic’s value chain, which account for 69% of Mosaic’s total emissions.³² The Science Based Targets initiative (“SBTi”) is widely considered the global standard of science-aligned target setting, with over 2,600 businesses and financial institutions currently committed to, or working to, becoming validated through the organization. SBTi’s standard requires that Scope 3 emissions must be incorporated into company reduction targets when they make up 40% or more of a company’s total emissions.³³ Similarly, the CA100+ Benchmark requires Scope 3 emissions be incorporated into companies’ net zero targets.³⁴

While Mosaic outlines some action steps to address its Scope 3 emissions, the Company has failed to disclose a plan to reduce value chain emissions or to do so at a rate aligned with the global 1.5°C goal. Mosaic discusses some emissions reduction actions in its value chain, such as its low-nitrous product development, but these initiatives do not constitute an emissions reduction target or a comprehensive transition plan. According to its CDP submissions, Mosaic’s Scope 3 emissions increased 13% from 2020 to 2021.³⁵ While revised accounting methodologies may account for some discrepancy, it is still unclear if Mosaic’s current efforts are having the desired impact on reducing emissions levels. It is imperative that Mosaic incorporate its full value-chain emissions into its emission reduction strategies to ensure that large material sources of emissions are adequately managed now and into the future. By not including the full range of material emissions in its interim and long-term emission reduction goals, it is

²⁹ <https://investors.fmc.com/news/news-details/2023/FMC-Corporation-among-just-six-companies-in-the-world-to-have-its-net-zero-target-by-2035-verified-by-the-Science-Based-Targets-initiative/default.aspx>

³⁰ <https://www.newmont.com/sustainability/sustainability-reporting/default.aspx>

³¹ <https://mosaicco.com/fileLibrary/publicFiles/0-Mosaic-2025-ESG-Performance-Targets-Progress.pdf>

³²

https://www.cdp.net/en/formatted_responses/responses?campaign_id=79520704&discloser_id=985380&locale=en&organization_name=The+Mosaic+Company&organization_number=12382&program=Investor&project_year=2022&redirect=https%3A%2F%2Fcdp.credit360.com%2Fsurveys%2F2022%2F6wz4wms4%2F194704&survey_id=78646008 C6

³³ <https://sciencebasedtargets.org/resources/files/SBTi-criteria.pdf>, I.III C4

³⁴ <https://www.climateaction100.org/wp-content/uploads/2023/03/Climate-Action-100-Net-Zero-Company-Benchmark-Framework-2.0..pdf>

³⁵

https://www.cdp.net/en/formatted_responses/responses?campaign_id=79520704&discloser_id=985380&locale=en&organization_name=The+Mosaic+Company&organization_number=12382&program=Investor&project_year=2022&redirect=https%3A%2F%2Fcdp.credit360.com%2Fsurveys%2F2022%2F6wz4wms4%2F194704&survey_id=78646008 C6



unclear to investors if Mosaic plans to align its value chain emissions with the goals of the Paris Agreement, meet customer expectations, or remain competitive with peers.

RESPONSE TO MOSAIC BOARD OF DIRECTORS' STATEMENT IN OPPOSITION

This proposal is not duplicative of current efforts. As discussed above, the Company's current actions are inadequate to address the proposal which requests information to fill in major gaps in the Company's climate-related plans. The Company lacks transparency around anticipated emission reductions for all segments of its business. The Company's value chain emissions represent 69% of its total emissions, yet Mosaic does not have a reduction goal to address those emissions. While it has announced that it is working to reduce emissions associated with some products, it does not estimate the extent of potential reductions or when they are anticipated to be achieved. Mosaic also fails to communicate a plan to comprehensively reduce value chain emissions and avoid associated regulatory, physical, and competitive risks.

The fertilizer and mining industries are not exempt from expectations for value-chain wide emission reductions. Investor groups and experts, including the CA100+ and SBTi, are clear that credible climate goals must take material value chain emissions into account, especially when those emissions make up a majority of a company's total emissions footprint. Core customer regions, such as the U.S. and Canada, are adopting net zero commitments and carbon tax legislation, sending strong signals that Mosaic's customers value low-carbon innovation and emission reduction commitments. Early movers that act on this desire and invest in comprehensive decarbonization will gain significant opportunities and competitive advantage.

Mosaic states it cannot commit to such targets due to the absence of a sectoral decarbonization approach. In Mosaic's opposition statement, it states that it is not prepared to establish Paris-aligned Scope 3 reduction targets until sector-based guidance is available. However, Mosaic's peers are already establishing Scope 3 reduction targets. Delaying action may result in Mosaic falling behind peers. Like its peers, Mosaic can identify a range of levers to address its value chain emissions to remain competitive. Mosaic has control over its own procurement policies. It can engage with suppliers of its raw materials to move its value chain toward carbon efficiency. Establishing a Scope 3 reduction target will signal demand for sustainability from its suppliers, while driving operational and product innovation to maintain long-term competitiveness and value.

CONCLUSION

Mosaic's failure to set emission reduction targets that cover its value chain emissions demonstrates a lack of adherence to its stakeholder's expectations and exposes Mosaic to physical, regulatory, and competitive material risk. We urge a "Yes" vote on this proposal.

Vote "Yes" on this Shareholder Proposal 7.

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For questions, please contact David Shugar, As You Sow, david@asyousow.org



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