Trucost was engaged by **The Mosaic Company** to provide assurance of its 2018 CDP submission and Global Reporting Initiative (GRI) based sustainability disclosure

Intended Users

The intended users of this assurance statement are the management and stakeholders of Mosaic.

Responsibilities of Mosaic and Assurance Provider

The management of Mosaic has sole responsibility for the preparation and content of its CDP submission and GRI report. Trucost's statement represents its independent and balanced opinion on the content and accuracy of the information and environmental data held within.

Assurance Standard

Trucost undertook the review in accordance with AA1000AS (2008) Type 2 moderate-level assurance, covering:

- ✓ Evaluation of adherence to the AA1000AS (2008) principles of inclusivity, materiality and responsiveness (the Principles).
- ✓ The reliability of environmental performance data.
- Trucost used the GRI principles and the Greenhouse Gas Protocol to evaluate Mosaic's performance information and adherence to the Principles.

Scope

Trucost was engaged to assure the data and claims relating to Mosaic's 2018 CDP submission and GRI report, covering the period January 1, 2017 – December 31, 2017. Mosaic took an operational control approach. Trucost verified the following environmental impacts and resource use (as calculated by Mosaic).

Table 1: EN15 (Scope 1), EN16 (Scope 2) and EN17 (Scope 3)

Scope	Greenhouse Gas Emission Source	Emissions (metric tons CO ₂ e)
Scope 1	Natural gas, diesel, gasoline, propane, fuel oil, NH ₃ , limestone, phosphate rock and process-related emissions	
Scope 2	Electricity	1,741,674
Scope 3	Ammonia purchases	2,144,496
	Road transport of phosphate rock (Florida)	21,079
	Road transport of finished products & process chemicals (Florida)	20,230
	Marine transport	482,076

Rail transport	43,718
Business travel-air & rail	2,873

Table 2: EN 3 and EN4 – Energy consumption within and outside the organization

Energy Source	Consumption (GJ)
Steam from captured heat	62,104,475
Cogenerated electricity	6,672,262
Natural gas	25,089,756
Petroleum products	1,576,952
Electricity purchased from utilities	10,036,944
Total	105,480,389

Table 3: EN8 - Total water withdrawn by source

Water Source	Consumption (m³)
Groundwater	77,981,383
Municipal water	1,064,648
Surface water	232,393,833
Reclaimed wastewater	9,429,497
Total	320,869,361

Table 4: EN 23 - Waste generated by disposal method

Waste Disposal	Hazardous (metric tons)	Non-hazardous (metric tons)
Incineration	56	1,354
Landfill	868	14,931
Other ¹	18	16
Recycle	269	46,740
Treatment	1,339	937
Total	2549	63,978

Table 5: CDP CC 8.8 - Additional verification

Greenhouse Gas Emission Source	Year on year change in emissions	
Scope 1	-21% (reduction)	
Scope 2	8% (increase)	
Scope 1 + Scope 2	-9% (reduction)	

Description of Methodology

Trucost's methodology included the following activities:

- Review of the processes by which Mosaic defines the sustainability issues that are relevant and material to its operations and its stakeholders
- Interviews with employees responsible for data collection and drafting CDP response and GRI report
- Review of processes and systems used to gather and consolidate environmental data
- Verfication of data accuracy for a selection of sites, including an audit of emissions factors and calculations

¹ "Other" disposal method includes combinations of co-processing, retort, treatment, incineration and/or deep well injection.

Findings, Conclusions and Recommendations

<u>The Principles</u>: Nothing came to Trucost's attention to suggest that Mosaic's CDP response and GRI report do not adhere to the AA1000AS Principles.

<u>Data reliability</u>: Trucost did not find evidence to insinuate that the processes and systems to collect and collate data are such that the company's environmental performance would be erroneously described. All minor corrections were made as necessary.

Mosaic uses a third party software system to collect data and make calculations at an environmental impact level. Trucost would recommend Mosaic to collect and calculate its Scope 3 footprint using the platform. Mosaic applied the most up-to-date conversion factors where possible. Trucost assured the raw data based on the invoices that Mosaic provided.

Trucost recommends that Mosaic continue to review and update emission factors annually or as available. Trucost also recommends that Mosaic compile an Inventory Management Plan to record the methodologies and assumptions that it applies in its calculations.

Finally, Trucost recommends that Mosaic include calculation formulas in its spreadsheets, rather than only the final values, to minimize conversion errors. Integrating the formulas would clarify how data are used, how emission factors are applied and how unit conversions are made.

Assurance Provider

Trucost has been researching, standardizing and validating corporate environmental performance data since 2000. Trucost's research team has the relevant professional and technical competencies and experience to conduct an assurance to the AA1000 standard. Trucost did not provide any services to Mosaic during FY2018 that could conflict with the independence of this work.

Trucost plc London, March 2018



Libby Bernick
Global Head of Corporate Business





Independent Third Party Assurance Statement

To the Board and stakeholders of The Mosaic Company:

ICompli Sustainability, a division of BPA Worldwide, was commissioned by The Mosaic Company ('Mosaic') to provide independent third party assurance over the sustainability content within the 2017 Sustainability Disclosure & GRI index (the 'Report') covering activities occurring primarily in the period of January 1, 2017, to December 31, 2017.

AccountAbility AA1000AS (revised, 2008)

This engagement has been managed in accordance with AccountAbility's AA1000AS (2008) assurance standard, where the format of the engagement was structured to meet the AA1000AS Type I (Moderate) requirements.

Independence

iCompli Sustainability has not been responsible for the preparation of any part of the Report, nor have we undertaken any commissions that would conflict with our independence. Responsibility for producing the Report belonged to Mosaic and its sustainability reporting advisors. Thus iCompli Sustainability is, and remains, an independent assurer over the content and processes pertaining to the Report.

Assurance Objectives

The objective of the assurance process was to provide Mosaic's stakeholders an independent 'moderate' level assurance opinion on whether:

- The sustainability content within Mosaic's Report adheres to the AA1000AS (2008) principles of *Inclusivity*, *Materiality* and *Responsiveness*; and,
- > The sustainability content within the Report meets reasonable expectations for report content, including whether or not the Report meets the Global Reporting Initiative (GRI) Standards and Mining & Metals Sector Disclosures 'In accordance Core' reporting requirements.

Assurance Approach and Limitations

The process used in arriving at this assurance statement is based on AccountAbility's AA1000AS (2008) guidance, the GRI Standards and Mining & Metals Sector Disclosures requirements, as well as other best practices in sustainability reporting assurance. Our approach to assurance included:

- A review of the information collation and reporting procedures undertaken by Mosaic, to define the content of the Report by looking at materiality of issues included in the Report.
- Interviews with staff responsible for the determination of sustainability context and coverage of material issues.
- A review of drafts of the Report for any significant errors and/or anomalies within stated assertions, and to confirm whether or not it contains the requisite number of GRI Standards and Mining & Metals Sector Disclosures indicators to meet the GRI 'In accordance Core' reporting requirements.

The assurance process was limited to the content and assertions made within Mosaic's Report for the period under review, and did not extend to a comprehensive analysis of the accuracy, reliability, completeness and/or consistency of the data presented by Mosaic. Rather, data presented within the Report was subjected only to a series of reasonability tests during proof editing. The process was further limited to reviewing policies and procedures for ethics, governance and stakeholder engagements, and did not extend to the physical engagement of any external stakeholders to arrive at our assurance opinion.



Independent Third Party Assurance Statement

Findings

Based on our review of the Report, as well as the processes employed to collect and collate information reported herein, it is our assertion that:

- Mosaic reasonably adheres to the AccountAbility AA1000AP principles of *Inclusivity, Materiality, Responsiveness*, and *Impact*; and,
- ➤ The Report adequately meets the GRI Standards and Mining & Metals Sector Disclosures 'In accordance Core' reporting requirements.

Based on the information reviewed and interviews conducted, iCompli Sustainability is confident that the Report provides a reasonable account of Mosaic's sustainability performance for the period under review.

Recommendations

The following recommendations have been identified to improve the Report:

- With respect to the principle of Inclusivity, Mosaic should continue to expand engagement with entities and suppliers that it impacts but does not have operational control.
- With respect to the principle of Materiality, Mosaic should continue to integrate the processes for identifying material topics between operational, financial and sustainability perspectives.
- With respect to the principle of Responsiveness, Mosaic should continue to evaluate emerging sustainability frameworks and stakeholder information needs.
- With respect to the principle of Impact, Mosaic should continue to acknowledge and manage actual and potential impacts, both positive and negative.

For more information about the assurance process employed to assess the sustainability information contained within Mosaic's Report, contact <u>icomplisustainability.com</u>.

June 13, 2018 iCompli Sustainability, a division of BPA Worldwide 100 Beard Sawmill Road, 6th Floor Shelton, CT 06484