



Verification Statement

Chesapeake Energy 2021 GHG Emissions and Select ESG Metrics

Spirit Environmental, LLC (“Spirit”) was engaged by Chesapeake Energy (“CHK”) to carefully review and provide limited assurance on their Scope 1 and 2 greenhouse gas (“GHG”) emissions calculations and reported values along with selected Environmental, Social, and Governance (“ESG”) metrics for calendar year 2021. The GHG findings and assurance provided relate to the direct GHG emissions and production values from Chesapeake Energy’s oil and natural gas operations as reported to the United States Environmental Protection Agency (“US EPA”) and the indirect purchased electricity emissions for all operations. ESG metrics assured are identified in the tables below. GHG and ESG metrics are disclosed at a minimum in the relevant sections of CHK’s ESG Report and on the external sustainability microsite located at <https://sustainability.chk.com/>. CHK’s organizational boundary was defined using the operational control model and consisted entirely of domestic United States operations.

GHG Reporting Protocols and ESG Standards Reviewed

- EPA’s Mandatory Reporting Rule (Title 40 Code of Federal Regulations [“40 CFR”] 98 Subpart W & C)
- The GHG Protocol Scope 2 Guidance
- SASB Oil & Gas – Exploration & Production Sustainability Accounting Standard, version 2018-10
- IPIECA Sustainability Reporting Guidance for the Oil and Gas Industry, 4th edition

Reported GHG Emissions and Select ESG Metrics for 2021

Chesapeake Energy		
Parameter	Value	Units
Scope 1 GHG Emissions	1.83	Million Metric tons CO ₂ e
Scope 1 GHG Intensity (GHG emissions/gross annual production)	4.5	Metric tons CO ₂ e / thousand barrels of oil equivalent
Scope 2 GHG Emissions	.057	Million Metric tons CO ₂ e
Methane Intensity (volume of methane emissions/volume of gross natural gas production)	0.07	%



Chesapeake Energy		
Parameter	Value	Units
Total Recordable Incident Rate (“TRIR”): Employee, Contractor, Combined	0.17, 0.64, 0.51	Rate (Incidents * 200,000 hrs / hrs)
Net Spill Intensity (Volume of Produced Liquid Spills >1barrel [“bbl”] outside of secondary containment minus Recovered Volume per total Volume of Produced Liquids/1000)	0.009	Rate (Barrels / thousand barrels)

Verification Approach and Methodology

2021 Scope 1 GHG data was reviewed for compliance with the above standards both in terms of meeting globally accepted GHG reporting principles (Relevance, Completeness, Consistency, Transparency, and Accuracy) and being technically correct for reporting to the relevant agencies, namely the US EPA under Subparts W and C. The materiality threshold for GHG findings was established at a 1% deviance from the reported total value, and individual sources were furthermore compared against the emissions source totals. Scope 2 GHG and Voluntary ESG metrics were reviewed for technical accuracy and process integrity in accordance with those processes defined by CHK; individual components were compared against the requirements of the identified standards. The verification was conducted by Spirit’s staff according to their technical expertise and familiarity with the referenced standards rather than a strict adherence to a formal auditing protocol. The review followed best practices for auditing and assurance, borrowing elements from various applicable International Standards Organization (“ISO”) standards including ISO 14064 specific to GHG reporting and ISO 14065 for verifying environmental information, and consisted of the following process:

- Review of applicable data provided by CHK staff including GHG monitoring plans, Assets and Compliance Tracking System (“ACTS”) database queries, emission summary spreadsheets, Subpart W reporting workbooks, emission source specific workbooks, process summary documents, and other supplemental supporting data (incident data, employee manhours, spill logs, etc.);
- Interviews with key personnel to verify outstanding questions and data collection methodologies;
- Draft findings table development, classification of findings as Potential Non-Compliant Gaps or Administrative/Process Improvements, and assignment of potential corrective actions;



- To the best of our knowledge, CHK carefully reviewed these findings to determine whether any were material in nature and if any had already been addressed. After those determinations were provided, Spirit reviewed the responses, identified any outstanding issues, and worked with CHK to sufficiently validate and accept each value.
- On 5/26/2022, Spirit reviewed the sustainability microsite and validated the assured values provided in the above table and prepared this limited assurance letter confirming Chesapeake Energy's 2021 reporting data against the standards listed above.

Assurance Opinion

Based on Spirit's professional opinion, and after careful review, nothing has come to our attention that would cause us to believe that the total Scope 1 GHG Emissions, Scope 1 GHG Intensity, Scope 2 GHG Emissions, Methane Intensity, TRIR, or Net Spill Intensity Rate as reported are not materially correct or have not been prepared in conformance with the reporting criteria. Spirit provided potential corrective actions to CHK to enhance the process in future years and explore greater alignment with the relevant standards for ESG metrics but found no reason to believe that reported values would not be acceptable for reporting as defined.

A handwritten signature in black ink, appearing to read 'Conor Merrigan'.

Conor Merrigan
Program Manager, Sustainability

SPIRIT ENVIRONMENTAL

Issued May 26, 2022