

LANDFILL GAS PROJECT VERIFICATION REPORT

Verification under the Climate Action Reserve (CAR)

*South Kent Landfill Gas to Energy Project
CAR#443*

Reporting Period:

01 March 2022 to 28 February 2023

Prepared for:

3Degrees Group, Inc.

30 August 2023



CLIMATE ACTION RESERVE



Prepared By:

Tina Sentner | Lead Verifier

Greenhouse Gas Verification Program

+1.510.452.8000

tsentner@scsglobal.com

SCSglobal
SERVICES

Setting the standard for sustainability™

2000 Powell Street, Ste. 600, Emeryville, CA 94608 USA

+1.510.452.8000 main | +1.510.452.8001 fax

www.SCSglobalServices.com

Table of Contents

Summary.....	1
Introduction	2
Verification Details.....	2
Verification Objectives.....	2
Verification Scope and Criteria	2
Level of Assurance	3
Treatment of Materiality	3
Verification Process.....	3
Verification Summary	3
Verification Team.....	4
CAR Landfill Project Requirements	5
Project Description	5
Project Eligibility	5
Location	5
The GHG Assessment Boundary	8
Review of Project GHG Management Systems.....	8
Quantitative Review of Carbon Reductions	11
Verification Results	14
Appendix A: SCS Certification Mark	16

Summary

This report presents the findings of the verification assessment of the South Kent Landfill Gas to Energy Project (“the Project”) developed by 3Degrees Group, Inc. (3Degrees). This assessment covers the South Kent Landfill Gas to Energy Project’s greenhouse gas emission reductions reported to the Climate Action Reserve (the Reserve or CAR) for the verification period 01 March 2022 to 28 February 2023. The verification was undertaken to evaluate the Project Monitoring Plan and assess whether the compiled data conforms to the verification criteria.

The evaluation was undertaken using the CAR U.S. Landfill Project Protocol, Version 5.0 (April 2019) and the verification methodology developed by SCS for carbon offset projects submitted to the Reserve.

During the verification assessment, the SCS verifiers developed findings which included New Information Requests (NIRs), Non-Conformity Reports (NCRs), and Observations (OBSs). All New Information Requests and Non-Conformity Reports have been adequately responded to, resulting in their closure.

Based on the information provided and the analyses completed, SCS was able to reach a decision on the emissions reduction reported by 3Degrees Group, Inc. to the Climate Action Reserve. SCS verified the adequacy of the information provided in the Project Monitoring Plan, confirming that this document meets the requirements of the Climate Action Reserve standards. Further, SCS was able to reach a positive opinion on the claimed emission reductions presented in the Project Monitoring Plan and on the Reserve website by 3Degrees group, Inc. Thus, SCS has verified 138,389 metric tonnes of CO₂e reductions from the South Kent Landfill Gas to Energy Project for the reporting period of 1 March 2022 to 28 February 2023.

Introduction

SCS Global Services (SCS) is a global leader in third-party certification, auditing, testing services, and standards. Established as an independent third-party certification firm in 1984, our goal is to recognize the highest levels of performance in environmental protection and social responsibility in the private and public sectors, and to stimulate continuous improvement in sustainable development. In 2012, Scientific Certification Systems, Inc. began doing business as SCS Global Services, communicating its global position with offices and representatives in over 20 countries. SCS is currently accredited to ISO 14065 for GHG Validation and Verification by the ANSI National Accreditation Board (ANAB) and through this accreditation offers carbon offset validation and verification under the Verified Carbon Standard (VCS) and the American Carbon Registry (ACR). SCS also offers carbon offset verification under the Climate Action Reserve (CAR) and the Climate, Community and Biodiversity (CCB) standards.

SCS was commissioned by 3Degrees South Kent Landfill Gas to Energy Project. The project consists of the collection of landfill gas (LFG) from the So. Kent County Landfill at Byron Center, Michigan, and subsequent destruction through combustion in two caterpillar engines and an open flare. This report covers the verification period of 1 March 2022 to 28 February 2023 as a project deliverable into the Climate Action Reserve.

Verification Details

Verification Objectives

- The objective of the verification was to:
- Evaluate conformance with the Landfill Project Protocol as defined in the criteria stated below.
- Determine with a reasonable level of assurance whether the project has resulted in the GHG emissions reductions as stated in the project documents.
- Evaluate the project planning information and documentation including the determination of project eligibility, project design, baseline and project emissions determination, management systems supporting the project, and methodologies employed for the calculation of GHG emission reductions.

Verification Scope and Criteria

The scope of the verification is defined as an independent and objective review of the project description document, the project's baseline study, monitoring plan and emissions reductions calculations. The information in these documents was reviewed against the following criteria:

- CAR U.S. Landfill Project Protocol, Version 5.0 (April 2019)
- Reserve Offset Program Manual (March 2021)
- Reserve Verification Program Manual (February 2021)

- Principals of ISO 14064-3:2019 Greenhouse Gas – Part 3: Specification with guidance for the verification and validation of greenhouse gas statements

Level of Assurance

The level of assurance applied to this verification assessment is Reasonable Assurance as required by the Climate Action Reserve.

Treatment of Materiality

In consideration of the required level of assurance, the needs of the intended user and the requirements of the Climate Action Reserve Program, SCS applied a materiality threshold of 1% because the emission reductions for the 12-month period are greater than 100,000 tCO₂e. The data reviewed was considered to meet the principles of accuracy, completeness, transparency and is free of material error or omission.

Verification Process

Verification Summary

The verification process consisted of the following:

1. **Project listed with the Climate Action Reserve**

The South Kent Landfill Gas to Energy Project is listed on the Climate Action Reserve (CAR) website and 3Degrees selected SCS as their verification body.

2. **Conflict of Interest Review**

A Notification of Verification Activities/Conflict of Interest (NOVA/COI) form was submitted to CAR. The COI assessment was conducted to identify any potential conflicts interests with the verification/project. No conflicts were identified and a determination of low potential for conflict of interest was received from the Climate Action Reserve on 17 March 2023 prior to the commencement of verification activities.

3. **Introductory Meeting**

A kick-off meeting was conducted between the verification team and 3Degrees on 03 April 2023. The purpose of the kick-off meeting was to review the timeline of audit; confirm verification criteria; determine any changes in the site, sources, GHG management systems or personnel, and to begin gathering information.

4. **Desk Review**

SCS received and reviewed the Project Monitoring Plan, CAR submittals, and supporting documentation to assess initial conformance with the data requirements of the CAR Landfill Project Protocol. A risk assessment was conducted to identify key factors that impact the reported emission reductions. A verification plan was created to focus on the critical elements presenting potential risk for errors with the project.

5. Site Visit

An on-site audit of the project area was conducted by the audit team conducted on 23 May 2023. The purpose of the site visit is to verify the project equipment, location and eligibility; to review and evaluate the project GHG management systems, data collection and handling, and emission reduction calculations and procedures in place; and to finalize the risk assessment and sampling plan.

6. Quantitative Review

An assessment of the emission reduction calculation inputs and procedures was performed to review the quantitative analyses undertaken by the Project to convert the raw inventory data into emission reduction estimates.

7. Findings

Throughout the verification process, there is an iterative exchange between SCS and the Project Proponent to gather additional information for review and examination. This exchange includes Findings—New Information Requests (NIR), Non-Conformity Reports (NCR) and Observations (OBS)—that are issued by SCS to the Project Proponent. The Project must respond to NIRs and NCRs in order for SCS to render a verification opinion. At this time, all findings were appropriately addressed by 3Degrees and subsequently closed by SCS.

8. Draft Report and Statement

This step in the verification process includes a final review of the submitted data and drafting of the verification report and accompanying verification statement based on the results of the verification assessment.

9. Technical Review

The draft verification report was presented to an SCS lead verifier who is independent of the verification and determined the verification statement to be justified given the evidence provided. The verification report and verification statement were finalized and presented to 3Degrees for review and comment.

10. Final Report and Statement

Once 3Degrees approved these documents, SCS uploaded them to the Reserve website for administrative review by CAR. Given a positive review, CAR will register the emissions reductions for the landfill gas project and issue carbon tonnes for the reporting period of 1 March 2022 to 28 February 2023.

11. Exit Meeting with Client

The exit meeting entails a review of the verification process, summary of the verification findings and the scheduling for the next verification period.

Verification Team

The verification was undertaken by Tina Sentner, Lead Verifier. The Technical Review was performed by Carolin Judd of SCS.

CAR Landfill Project Requirements

SCS verified the South Kent Landfill Gas to Energy Project against the requirements of the Climate Action Reserve Landfill Project Protocol. The following sections detail the most essential aspects of the verification of the project.

Project Description

The South Kent Landfill Gas to Energy Project is located at the So. Kent County Landfill in Byron Center, Michigan. The Project consists of a landfill gas collection and conveyance system which routed landfill gas to either an electrical generation facility operated by Energy Developments Ltd or via a single open flare.

The collected landfill gas is destroyed in two Caterpillar model G3520C internal combustion engines to generate electricity and a single open flare that is used as a back-up destruction device. The Project Activity was initiated in July 2008 through the voluntary installation of a gas collection system followed by the installation of the electricity generation engines in April 2009. At the flare/blower compound, the landfill gas is measured for temperature, pressure, and methane content prior to destruction. The landfill does not re-circulate leachate back into the landfill and is not considered a Bioreactor as defined by U.S. EPA.

Project Eligibility

The LPP specifies eligibility rules that the project must meet to register reductions with the Reserve. Below is a summary of the eligibility requirements and the project's compliance to each requirement.

Location

The project is a U.S. based landfill located in the Byron Center, Michigan, USA and therefore meets this eligibility requirement.

Project Start Date

The project start date is defined as the date on which methane gas was first continuously destroyed in a qualifying destruction device, regardless of whether sufficient monitoring data is available to report reductions.

SCS verified the validity of the project start date of 10 July 2008. The project was listed with the Climate Action Reserve on 1 May 2009. SCS reviewed various documents to support the evidence of construction of the landfill gas project such as the Title V permit, the engine installation permit, previous verification reports, and initial data logger reports. SCS concluded that these documents were sufficient to verify the Project has been registered with the Reserve from the initial reporting period to the current reporting period.

Crediting Period

The crediting period for landfill projects is 10 years from the project start date. The initial crediting period for the South Kent Landfill Gas to Energy Project began 10 July 2008 to 9 July 2018. The current (second) crediting period began on 10 July 2018 and extends to 9 July 2028. SCS has concluded that the reporting period verified in this report is within the second crediting period of the Project.

Additionality

Project proponents must indicate that reductions are above and beyond business as usual. In order to do so, the project must pass a Performance Standard Test and the Legal Requirement Test.

Performance Standard Test

For the Performance Standard Test, a project developer may meet eligibility under four possible performance threshold scenarios. The following scenario applies to the South Kent Landfill Gas to Energy Project:

Scenario 1: The landfill was not previously collecting and destroying any landfill gas in a qualifying destruction device prior to the project start date.

SCS confirmed there was no evidence of a pre-existing destruction devices, nor were pre-existing destruction devices on historical project drawings identified. In addition, SCS reviewed the project startup documentation and Title V permit which confirmed that no other destruction devices were permanently located at the Landfill until the candlestick flare was originally installed.

Legal Requirements Test

For the Legal Requirements Test, project proponents must ensure that emission reductions achieved by the project would not have occurred in the baseline scenario due to local, state, or federal regulations.

SCS confirmed and reviewed the legal review of the South Kent Landfill Gas to Energy Project conducted by 3Degrees. SCS reviewed the Solid Waste Permit and the Title V permit from the Michigan Department of Natural Resources and Environmental (MDNRE) and found no evidence of legal requirements to collect and destroy methane at the project landfills. The results of the legal review indicated the landfills were in compliance with federal, state and local regulations and that there are no new laws, statutes, regulations, court orders, environmental mitigation agreements, permitting conditions, or other legally binding mandates requiring the destruction of landfill gas.

In addition, as the landfill has a design capacity greater than 2.5 million metric tonnes, it is subject to NSPS regulation requiring the facility to conduct Non-Methane Organic Compound (NMOC) emission rate testing. The landfill has been modified since 17 July 2014 and is therefore subject to the 34 Mg/yr threshold. The latest NMOC test was conducted on 24 December 2019 and resulted in an estimated

maximum NMOC emissions of 29.1Mg/yr through year 2024. This is below the 34 Mg/yr threshold and therefore the landfill is not required to install a gas collection and conveyance system during the reporting period. The Tier 2 NMOC Emission Rate Report indicates that the results of the Tier 2 landfill gas test may be considered valid for a total of five years before additional sampling is required.

Lastly, SCS reviewed the Attestation of Voluntary Implementation, signed on 28 August 2023 by an eligible signatory to attest for the Project. Kent County Department of Public Works has affirmed that the Project was established and implemented voluntarily and continues to operate as such. Based on this evidence, SCS concludes the Project passes the legal requirements test.

Limits on Credit Stacking

Credit stacking is defined as receiving both offset credits and other types of mitigation credits for the same activity on spatially overlapping areas (i.e., in the same landfill). Per interviews with the landfill regulatory compliance personnel and 3Degrees, the Project has not received offset credits and other types of mitigation credits for the same activity.

Regulatory Compliance

SCS reviewed the Attestation of Regulatory Compliance submitted by 3Degrees, dated 28 August 2023, affirming the project's compliance status throughout the project reporting period. SCS reviewed the EPA Enforcement & Compliance History Online database (ECHO), the solid waste inspection reports from the MDNRE, and the semi-annual Title V Compliance Certification Forms along with stack testing reports for the engines. There was evidence of two instances of non-compliance and a historical enforcement action noted in the ECHO report. The first issue was due to the incorrect emission factor used in reporting annual emissions, and the other for a late submittal of the semi-annual Title V certification. SCS observed both issues were administrative in nature and the facility did not appear to be in material non-compliance. The historical enforcement action issue has been reviewed previously and is not applicable to the reporting period. All issues are further detailed in the list of findings. Lastly, the solid waste inspections and stack testing of the engines noted compliance.

SCS also confirmed the Project's monitoring plan contained procedures for maintaining and monitoring regulatory compliance and that the procedures were being properly followed. The results of the regulatory review indicated that the Project followed federal, state and local regulations. Based on this review, SCS has concluded that the Project met the Regulatory Compliance requirements of the LPP.

Ownership

Kent County Department of Public Works is the owner of the landfill. Ownership was confirmed through review of various regulatory permits issued from MDNRE as well as review of the legal property descriptions. Though the landfill and gas collection wells are owned and operated by Kent County Department of Public Works, the gas collection plant and associated destruction devices are owned and operated by Energy Development, Inc. (previously Granger Electric).

3Degrees owns full title to any Climate Reserve Tonnes (CRTs) issued at the South Kent Landfill for this reporting period. 3Degrees contracts with the Kent County Department of Public Works. SCS reviewed contractual documentation between the Kent County Department of Public Works and 3Degrees to support title of the emission reduction credits. Lastly, SCS reviewed the Attestation of Title signed by 3Degrees dated 28 August 2023 concerning ownership of landfill gas emission reduction credits for the reporting period. Based on this review, SCS has concluded that 3Degrees Group, Inc. holds the legal title and exclusive ownership rights of the emission reductions associated with the Project.

Non-Climate Action Reserve Reporting

CAR requires that project developers register specific emission reductions with one registry only. SCS performed an internet search of the American Carbon Registry (ACR) and the Verified Carbon Standard/Verra (VCS) and confirmed that the Project is not currently registered in any other offset registry program. Based on this review, SCS determined that GHG reductions have not been registered with more than one crediting agency for the current verification period.

The GHG Assessment Boundary

The project assessment boundary includes all emission sources from the operation of the landfill gas collection system to the ultimate destruction of the landfill gas.

The GHG sources, sinks, and reservoirs associated with the baseline scenario are:

- CH₄ vented to the atmosphere
- CO₂ from the oxidation of CH₄ by soil bacteria. As the landfills are not covered with a synthetic liner, the LPP assumption is that 10 percent of the methane produced would be naturally oxidized by soil bacteria

The GHG sources, sinks, and reservoirs associated with the project are:

- Un-combusted CH₄ from landfill gas in the internal combustion engines and flare
- CO₂ from the combustion of fossil fuels used during operation and maintenance activities for the project activity
- CO₂ resulting from the consumption of imported electricity

The gases reviewed include CO₂ and CH₄. All gases are converted to CO₂ equivalents.

Review of Project GHG Management Systems

During the desk review and site visit, SCS assessed the project's greenhouse gas management systems. This review included a detailed look at the project's data handling and processing procedures, recordkeeping and data storage, and the quality control and assurance procedures.

Monitoring and Operations Plan

In accordance with the LPP requirements, a monitoring and operations plan was provided for the project. This document addressed frequency of data acquisition, flow and methane concentration monitoring, facility and data management systems, QA/QC provisions of monitoring instrumentation, roles of individuals responsible for monitoring activities, a project diagram, a record keeping plan and describes how relevant parameters required by table 6.1 of the LPP are to be collected and reported.

Project Monitoring

The primary data gathered for the project is landfill gas flow, pressure, temperature, and methane content of the landfill gas. Landfill gas flow to the flare skid is measured by a Fluid Components Intl (FCI) Flow Meter ST-98 at the flare inlet which monitors flow prior to the flare and the engines. The manufacturer suggests calibration of the instrument every eighteen months and provides no recommendation for cleaning and inspections. The instrument was calibrated annually with cleaning and inspections conducted on a monthly basis.

Landfill gas flow to the engines is monitored continuously by a Veris Verabar differential pressure meter, static meter, and a Yokogawa YEWFO mass flow meter transmitter. There is no factory calibration or cleaning and inspection schedule suggestion by the manufacturer and thus the Project Developer set a calibration schedule of at least once every 5 years. The instrument was field checked or calibrated by a third party annually following manufacturer's requirements and cleaned and inspected on a periodic basis.

Both flow meters compensate for temperature and pressure by normalizing the flow to 70 degrees Fahrenheit and 14.7 psia. The standard temperature and pressure required by the Protocol is 60 degrees Fahrenheit and 1 atm, therefore the data is corrected by the Project Developer via Equation 5.2 in the emission reduction calculations to meet the Protocol requirements.

The methane concentration to the engine was measured continuously by a Siemens Ultramat 23 infrared gas analyzer. The manufacturer suggests calibration internally every six to twelve months, depending on ambient conditions but provides no suggest schedule for cleaning and inspection. The project monitoring plan states a calibration with a known calibration gas should be performed at least annually with factory calibration occurring every five (5) years. The instruments were auto-calibrated by a third party within two months of the end of the reporting period and noted to be within $\pm 5\%$ tolerance prescribed by the Landfill Project Reporting Protocol.

Methane concentration to the flare was measured on a weekly basis using a handheld portable methane analyzer. The Envision Operator's Manual states the gas analyzer should be returned to the factory at a minimum once per year for inspection and factory calibration. The analyzer was calibrated annually as required by the Protocol by the manufacturer. There is no requirement for cleaning and

inspection however, the instrument was observed to be regularly cleaned and inspected by project staff.

SCS reviewed the periodic inspection and cleaning records along with calibration results for the flow meters and methane analyzers used at the generator sets and flare. SCS observed “as found/as left” conditions of the instruments recorded with the “as found” readings confirmed within the required $\pm 5\%$ tolerance prescribed by the Landfill Project Reporting Protocol. The last calibrations or field checks were noted conducted within two months prior to or after the end of the reporting period.

The QA/QC results for the flow meter were as follows.

Table 1. Flow Meter QA/QC Check Results

Instrument	Calibration	Cleaning and Inspections	Status
Flow Meter- Flare (FCI-ST98)	Calibration Conducted on April 14, 2022 and April 11, 2023 by a third 3 rd party.	No frequency requirement noted by manufacturer. Conducted monthly by project staff.	Calibrations noted within protocol tolerance and the last calibration conducted within two months prior to or after the end of the reporting period.
Flow Meter- Engine Yokogawa Digital YEWFLOW meter DY150 and Differential Pressure Static Pressure and Temperature	Calibrations conducted by a 3 rd party on January 7, 2022 and February 8, 2023	No frequency requirement noted by manufacturer. Conducted periodically by project staff.	Calibrations noted within protocol tolerance and the last calibration conducted within two months prior to or after the end of the reporting period.
Methane Analyzer- Engines Siemens Ultramat 23 (Continuous Dry basis)	Factory Calibration conducted on April 7, 2022 by certified 3 rd party, Auto-calibrated weekly by EDL personnel with the last calibration check on 03/03/2023.	Conducted weekly by EDL personnel.	Calibrations noted within protocol tolerance and the last calibration conducted within two months prior to or after the end of the reporting period.
Methane Analyzer - Flare Elkins ENV 100 Portable gas analyzer (Weekly- wet basis)	Factory calibration Conducted on February 9, 2022 and February 13, 2023 by Mfg.	Cleaning and Calibration logs noted to known gases on regular schedule.	Calibration according to MFG and Protocol schedule requirements.

Operational activity to ensure landfill gas destruction was confirmed by review of the kilowatt-hour output of the engine generator units recorded on a 10-minute interval. For the flare, SCS confirmed temperature readings exceeded the minimum requirement of 500 degrees f as recorded for the same interval. SCS reviewed the flow meter data to ensure that no credits were being accumulated for periods in which the destruction devices were not operational.

Electronic records of continuous methane fraction, flow data and flare temperature (as a proxy for flare operating hours) were recorded by a Yokogawa data recorded on a 10-minute basis and was downloaded monthly and stored for the long-term on the local office servers of the Project Developer and Owner. All records related to flow data, factory calibrations, field checks, and general maintenance, service, and repair are maintained on site The Project Developer has confirmed all information required by the Protocol will be retained for a period of 10 years after the information is generated or 7 years after the last verification in accordance with the Protocol.

Lastly SCS confirmed a project monitoring plan have been created for the project. The contents of the monitoring plan were reviewed to meet the requirements of the Landfill Project Protocol.

Quantitative Review of Carbon Reductions

SCS devoted a portion of the verification assessment to the review of the manner and propriety by which the Project quantified the net GHG reductions. This assessment included a review of the baseline determination, project assumptions, raw data inputs, and accuracy of calculations. In addition, SCS reviewed the formulas and raw data inputs used to determine emission reduction calculations as described in the monitoring plan and the calculation spreadsheets. The main parameters of Equation 5.1 were verified as follows:

Total Annual Methane Emissions Destroyed by The Project Landfill Gas Collection And Destruction System ($CH_4 Dest_{PR}$)

The amount of methane destroyed is calculated from the continuously metered landfill gas data. For the verification period from 01 March 2022 to 28 February 2023, data was electronically aggregated on intervals of 10 mins for the various devices. The main monitored parameters needed to calculate the amount of methane destroyed are:

$LFG_{i,t}$	= total quantity of landfill gas fed to the destruction device and
$PR_{CH_4 i,t}$	= the average methane fraction of the landfill gas in time interval t as measured

Flow is first adjusted for by voiding the flow for any period when no kWhs were recorded for the engine or when temperature in the flare was under 500 degrees Fahrenheit. Daily flow was then calculated by summing the flow for each interval period to produce a daily total. The incremental methane destroyed flow was calculated based on an average daily methane concentration by the daily total flow of landfill

gas with temperature and pressure taken into consideration (for each destruction device). Total daily destroyed methane was carried forward into further calculations to determine emission reductions for the project.

Adjustment For Landfill Gas Flow Metering Equipment For Temperature And Pressure

SCS confirmed gas flow was adjusted to 70 degrees Fahrenheit and 1 atm as required by the LPP. SCS confirmed the flow data was adjusted back to 60 degrees Fahrenheit and 1 atm in the emission reduction calculations.

Adjustment for As-Found condition (percent drift) of Metering Equipment

SCS noted above that the flow meter “as found” calibration record to be within protocol tolerance for the whole reporting period.

Default Methane Destruction Efficiency For Device (Dei)

SCS confirmed the project applied a 0.951 destruction efficiency for the engines and a 0.96 destruction efficiency for the open flare.

Factor for The Oxidation Of Methane By Soil Bacteria (OX)

The project does not incorporate a synthetic liner in its cover system; therefore a 10% methane soil oxidation factor was applied to the baseline scenario.

Discount Factor To Account For Uncertainties Associated With The Project Monitoring Equipment (DF)

As per the methodology, DF equals to 10 % if not using a continuous methane monitor. It was verified that measurement readings were taken by a continuous gas analyzer for the engines, but a weekly reading was taken for the flare and therefore a discount factor was applied to the reporting period.

Adjustment To Account For Pre-Project LFG Destruction Device ($PRE_{discount}$)

An adjustment to the project baseline was not necessary there were no pre-project destruction devices associated with the project.

Total Annual Indirect Carbon Dioxide Emissions From The Consumption Of Electricity From The Grid (EL_{CO_2}) and Total Annual Carbon Dioxide Emissions From The Destruction Of Fossil Fuel (FF_{CO_2})

CO₂ emissions result from consumption of electricity to power project equipment and activity data for this source was tracked by reviewing utility invoices from the power supplier. Project emissions were also noted from propane consumption for use in the flare taken from purchase invoices. The emission factors for electricity, natural gas, and propane were verified and no material errors were found. Project emissions were subtracted from the total amount of methane destroyed. The values are presented in the final calculation spreadsheets for the verification period.

Global Warming Potentials

Under the Climate Action Reserve's offset protocols, projects convert quantities of non-CO₂ greenhouse gases (GHGs) into a quantity of CO₂-equivalent (CO₂e) using the 100-year global warming potential (GWP) values from the Intergovernmental Panel on Climate Change (IPCC) using the Fourth Assessment Report. On 13 July 2020, the Reserve issued a Use of Global Warming Potential Values for all Offset Protocols. This policy is effective immediately (as of 13 July 2022) for projects using Reserve protocols – regardless of version – for emission reductions and removals for vintage year 2021 and later. As such, the project has applied the methane GWP of 28.

Data Substitution Procedures

Data substitution procedures were applied to some instances of the data in this verification period for methane fraction only. SCS reviewed the missing data to ensure compliance with the protocol data substitution procedures in Appendix D of the Protocol. SCS found that all instances were discreet, the instrument evidenced to be functioning properly and within normal ranges, and the methodology in accordance with Appendix D of the Protocol.

Zero Credit Reporting Periods

There were no zero credit reporting periods reviewed for this verification engagement.

Variances

There were no variances in this reporting period.

Verification Results

The verification of the South Kent Landfill Gas to Energy Project focused on the accurate data collection and quantification of emission reductions as implemented by 3Degrees Group, Inc. in accordance with the verification criteria. A sample set of raw flow data (consisting of landfill gas flows and temperatures) and methane concentrations was selected and reviewed to identify material misstatements due to transcription mistakes, mathematical errors or malfunction of instruments. The emission reduction calculations were then recalculated by the verification team and found to be in conformance with the LPP.

Based upon the verification process and the evidence collected, SCS concluded that the GHG assertion is a fair representation of the project emission reductions resulting from the capture and destruction of landfill gas during the reporting 01 March 2022 to 28 February 2023 and can be considered:

- In conformance with the U.S. Landfill Project Protocol, Version 5.0 (April 2019)
- Without material discrepancy, and
- Verified to a reasonable level of assurance.

The following provides a summary of the verification results:

Vintage Emissions Verified	Vintage Period	Baseline Emissions CO ₂ e (metric tons)	Project Emissions CO ₂ e (metric tons)	Emission Reductions CO ₂ e (metric tons)
2022	1 March 2022 to 31 December 2022	111,005	4	111,001
2023	1 January 2023 to 28 February 2023	27,389	1	27,388

Note: final numbers are rounded for simplicity.

Throughout the verification process, SCS made several supplemental documentation requests in the form of New Information requests, Non-Conformances and Opportunities for Improvements. These requests provided clarification regarding the project. All findings from the verification of the South Kent Landfill Gas to Energy Project have been compiled in a separate “List of Findings” that is available under a separate cover. This document is only shared between the Project Proponent and the verifier and is not publicly available.

Recommendation

The Lead Verifier recommends that SCS Global Services issue a positive verification opinion for the following:

Project Developer Name & Address	3Degrees Group, Inc. 235 Montgomery St Suite 320, San Francisco, CA 94104
Scope of Verification	Emission reductions arising from the capture and destruction of landfill gas methane from: South Kent Landfill Gas to Energy Project
Reporting Period	01 March 2022 to 28 February 2023
Total GHG Emission Reductions Verified	138,389 metric tonnes CO ₂ e
GHG Protocol(s) Used for Verification	■ CAR U.S. Landfill Project Protocol, Version 5.0 (April 2019) ■ Reserve Offset Program Manual (March 2021) ■ CAR Verification Program Manual (February 2021) ■ ISO 14064-3:2019 Greenhouse Gas – Part 3: Specification with guidance for the verification and validation of greenhouse gas statements
Lead Verifier's Approval	 Tina Sentner, 08 September 2023
Technical Reviewer's Approval	 Carolyn Judd, 08 September 2023
Date of Verification	The Verification Statement is to be dated when the technical reviewer accepts the recommendation to issue the statement.

Appendix A: SCS Certification Mark

Congratulations on receiving a positive verification for the South Kent Landfill Gas to Energy Project. Your project is now eligible to use the SCS Kingfisher Certification Mark B for Carbon Offset Project Verification, as represented on the cover page of this verification report. The SCS Kingfisher Certification Mark increases the recognition of your achievements with your verification carbon offset project.

Please refer to the *SCS Kingfisher Certification Mark Labeling and Language Guide: Mark B* provided to you by the GHG Verification Program staff for more information about your Mark and usage. Should you have any additional questions regarding your Mark, use, messaging, or other marketing opportunities, please contact the GHG Verification Team or SCS Marketing Staff at NRmarcom@scsglobalservices.com.