Greenhouse Gas Emissions Inventory Report

Concurrent Technologies Corporation and
Enterprise Ventures Corporation

2022

About this Report

Concurrent Technologies Corporation (CTC) and Enterprise Ventures Corporation (EVC) are pleased to provide this Greenhouse Gas (GHG) Emissions Inventory Report. The Management of CTC and EVC are responsible for the completeness and accuracy of the data contained herein and assert that the report was developed in accordance with *The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)*, published by World Business Council for Sustainable Development and World Resources Institute.

The GHG Protocol establishes consistent standards and guidance for the measurement and reporting of GHG emissions. This GHG Emissions Inventory Report includes information on CTC-EVC's Scope 1 and Scope 2 emissions from operations that were under their Operational Control for Calendar Year 2022. It also provides a comparison to our baseline year of 2019.

GHG Emissions Measurements

Scope 1

Scope 1 emissions include direct emissions from the combustion of fuels by stationary units and mobile equipment, as well as emissions from refrigeration, HVAC equipment, fire suppression discharges, and losses from purchased industrial gases usage.

Scope 2

Scope 2 emissions include indirect emissions arising from purchased electricity and heat. The CTC-EVC Scope 2 emissions from purchased electricity using the GHG Protocol followed the reporting methodology for the location-based method, which reflects the average emissions intensity of the national electricity grids from which consumption occurs. There were no market-based contracts.

Data and metrics were collected from a variety of sources including facility metering, utility invoicing, purchasing records, published emission factors, and mass balance calculations. The EPA Simplified GHG Emissions Calculator ("the Calculator") was utilized to quantify Scope 1 and Scope 2 emissions of CTC-EVC's operations. The Calculator is a simplified tool to help organizations estimate and inventory their annual GHG emissions for U.S.-based operations.

All methodologies and default values provided are based on the most current EPA Center for Corporate Climate Leadership Greenhouse Gas Inventory Guidance documents and the Emission Factors Hub.

Per the tool's notes, "*Emissions sources of all seven major GHGs are accounted for in the inventory and in this Calculator: carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF6), and nitrogen trifluoride (NF3). The Calculator allows the user to estimate GHG emissions from scope 1 (direct), scope 2 (indirect), and some scope 3 (other indirect) sources. The Calculator uses U.S.-specific cross-sector emission factors from the Emission Factors Hub. Many industrial sectors also have process-related emissions sources that are specific to their sector. EPA's Greenhouse Gas Reporting Program provides guidance and tools that can aid in the calculation and reporting of these emissions*."

Concurrent Technologies Corporation (CTC) is an independent, nonprofit, applied scientific research and development professional services organization. CTC collaborates with its technology transition affiliate, Enterprise Ventures Corporation, to provide transformative, full lifecycle solutions through research, development, test, and evaluation work. To best serve our clients' needs, we offer the complete ability to fully design, develop, test, prototype, and build. We deliver robust, technical, and innovative solutions that safeguard our national security, retain U.S. technological advantage, and ensure the primacy of American manufacturing.

To learn more about CTC-EVC's overall efforts and successes regarding environmental, social, and governance initiatives, please review our ESG report.

Has this inventory been verified by an accredited third party?
☒ No ☐ Yes (if yes, fill in verifier contact information below and attach verification statement)
Date of verification: MM/DD/YYYY
Verifier:
Email:
Phone:
Address:
Have any facilities, operations and/or emissions sources been excluded from this inventory? If yes, please specify.
NO
Reporting period covered by this inventory
From 01/01/2022 to 12/31/2022

ORGANIZATIONAL BOUNDARIES

Which consolidation approach was chosen (check each consolidation approach for which your company is reporting emissions.) *If your company is reporting according to more than one consolidation approach, please complete and attach an additional completed reporting template that provides your company's emissions data following the other consolidation approach(es).*		
Equity Share	Financial Control	Operational Control
☐	☐	☒

OPERATIONAL BOUNDARIES

Are Scope 3 emissions included in this inventory?
yes ☐ no ☒
If yes, which types of activities are included in Scope 3 emissions?

INFORMATION ON EMISSIONS

The table below refers to emissions independent of any GHG trades such as sales, purchases, transfers, or banking of allowances

EMISSIONS	**TOTAL ($mtCO_2e$)**	CO_2 (mt)	CH_4 (mt)	N_2O (mt)	HFCs (mt)	PFCs (mt)	SF_6 (mt)
Scope 1	960	557.34	0.01	0.00	0.44	0.00	0.00
Scope 2	1678	1670.64	0.12	0.02	0.00	0.00	0.00
Scope 3 (OPTIONAL)							

Direct CO2 emissions from Biogenic combustion ($mtCO_2$)
0.00

BASE YEAR

Year chosen as base year
2019
Clarification of company-determined policy for making base year emissions recalculations
Base Year recalculations were not conducted in 2022

Context for any significant emissions changes that trigger base year emissions recalculations
N/A

Base year emissions							
EMISSIONS	**TOTAL ($mtCO_2e$)**	CO_2 (mt)	CH_4 (mt)	N_2O (mt)	HFCs (mt)	PFCs (mt)	SF_6 (mt)
Scope 1	629	612.08	0.01	0.00	0.01	0.00	0.00
Scope 2	1913	1904.38	0.13	0.02	0.00	0.00	0.00
Scope 3 (OPTIONAL)							

METHODOLOGIES AND EMISSION FACTORS

Methodologies used to calculate or measure emissions other than those provided by the GHG Protocol. (Provide a reference or link to any non-GHG Protocol calculation tools used)
GHG Protocol and the EPA GHG Calculator tool were used for all emission calculations

ORGANIZATIONAL BOUNDARIES

List of all legal entities or facilities over which reporting company has equity share, financial control or operational control	% equity share in legal entity	Does reporting company have financial control? (yes/no)	Does reporting company have operational control? (yes/no)
STFJST	100	YES	YES
ETFJST	100	YES	YES
Enterprise Ventures Corporation	100	YES	YES

If the reporting company's parent company does not report emissions, include an organizational diagram that clearly defines relationship of the reporting subsidiary as well as other subsidiaries
CTC IS THE PARENT COMPANY

INFORMATION ON EMISSIONS

Emissions disaggregated by source types	
Scope 1: Direct Emissions from Owned/Controlled Operations	
a. Direct Emissions from Stationary Combustion	552.6 mt
b. Direct Emissions from Mobile Combustion	5.1 mt
c. Direct Emissions from Process Sources	0.5 mt
d. Direct Emissions from Fugitive Sources	401.5 mt
e. Direct Emissions from Agricultural Sources	0.0
Scope 2: Indirect Emissions from the Use of Purchased Electricity, Steam, Heating and Cooling	
a. Indirect Emissions from Purchased/Acquired Electricity	1678 mt
b. Indirect Emissions from Purchased/Acquired Steam	0.0
c. Indirect Emissions from Purchased/Acquired Heating	0.0
d. Indirect Emissions from Purchased/Acquired Cooling	0.0

Emissions disaggregated by facility (recommended for individual facilities with stationary combustion emissions over 10,000 mtCO2e)	
Facility	Scope 1 emissions
N/A	

Emissions disaggregated by country	
Country	Emissions (specify Scopes included)
USA	2638 mt CO2e (Scope 1 & Scope 2)

Emissions attributable to own generation of electricity, heat, or steam that is sold or transferred to another organization
0.0

Emissions attributable to the generation of electricity, heat or steam that is purchased for re-sale to non-end users
0.0
Emissions from GHGs not covered by the Kyoto Protocol (e.g., CFCs, NOx,)
NOx = 0.49 mt; VOC's = 0.006 mt

Information on the causes of emissions changes that did not trigger a base year emissions recalculation (e.g., process changes, efficiency improvements, plant closures)
Weather Degree Days; Identification and Repair of Refrigeration leaks; Reduction of company owned vehicles and miles driven by each vehicle.

GHG emissions data for all years between the base year and the reporting year (including details of and reasons for recalculations, if appropriate)
Total CO_2-e = 4,889 mt; Scope 1 Emissions = 1,204 mt; Scope 2 Emissions = 3,685 mt

Relevant ratio performance indicators (e.g. emissions per kilowatt-hour generated, sales, etc.)
2019 = 0.3414 mt/$1K Revenue 2022 = 0.0303 mt/$1K Revenue 11.21% Reduction in emissions/$1K in Revenue

An outline of any GHG management/reduction programs or strategies
CURRENT INITIATIVES: 1. Replacement of all lighting fixtures with LED technology 2. Improved management of refrigeration systems. 3. Previously implemented strategies below continue to be utilized. PREVIOUSLY IMPLEMENTED: 1. Automation of energy conservation modes for computers, printers, and copiers 2. Run-time optimization for process equipment 3. Off-hour, weekend, and holiday HVAC temperature setbacks 4. Lights Out Program 5. Seasonal temperature adjustments 6. Business trip management - carpooling, trip combination, video conferencing, mass transit

ADDITIONAL INFORMATION

Information on any contractual provisions addressing GHG-related risks and obligations
None at the present time.

An outline of any external assurance provided and a copy of any verification statement, if applicable, of the reported emissions data.
N/A

Information on the quality of the inventory (e.g., information on the causes and magnitude of uncertainties in emission estimates) and an outline of policies in place to improve inventory quality
The majority of the raw data was obtained directly from utility meters, vehicle odometers, gauges and vendor invoices. Some degree of uncertainty existed with the calculation of Refrigerant losses but the deviation is expecting to be minimal.

Information on any GHG sequestration
N/A

INFORMATION ON OFFSETS

Information on offsets that have been purchased or developed *outside* the inventory boundary		
N/A		
Quantity of GHGs (mtCO2e)	Type of offset project	Were the offsets verified/certified and/or approved by an external GHG program (e.g., CDM)
N/A		

Information on reductions *inside* the inventory boundary that have been sold/transferred as offsets to a third party.		
Quantity of GHGs (mtCO2e)	Type of offset project	Were the offsets verified/certified and/or approved by an external GHG program (e.g., CDM)
N/A		