

# 2019 GHG REPORTING

Cal-eGGR Summary Report

**Facility Name:**

**California State University, Fullerton**

Facility ARB ID: 104350

Facility Reporting Year: 2019

Confidential Data Indication Set to "No" by Reporter

**Certification Statement:**

The designated representative or alternate designated representative must sign (i.e., agree to) this certification statement. If you are an agent and you click on "SUBMIT", you are not agreeing to the certification statement, but are submitting the certification statement on behalf of the designated representative or alternate designated representative who is agreeing to the certification statement. An agent is only authorized to make the electronic submission on behalf of the designated representative, not to sign (i.e., agree to) the certification statement.

**Facility Representatives**

Agent:	Paul Liao
Agent:	Joseph Steirer
Designated Representative:	Robert Denman
Alternate Designated Representative:	LEONARDO LOPEZ

**Facility Location**

Physical Address:	800 N State College Blvd
City:	Fullerton
State / Province:	CA
ZIP / Postal Code:	92831
Country:	USA
Latitude:	33.87786
Longitude:	-117.88991
County:	ORANGE
Air Basin:	SOUTH COAST
District:	SOUTH COAST AQMD
Mailing Address:	800 N State College Blvd, T-1475
City:	Fullerton
State / Province:	CA
ZIP / Postal Code:	92831
Country:	USA

**Payment Information** (required if subject to AB 32 Cost of Implementation Fee Regulation)

Responsible Party for Payment:  
 Responsible Party Email:  
 Responsible Party Phone:  
 Billing Address:  
 City:  
 State / Province:  
 ZIP / Postal Code:  
 Country:

**Owners / Operators**

REPORTING  
11/2020  
Name:

SOLID  
Cal e-GGRT Summary Report  
California State University

**Facility or Entity Total GHG Emissions Summary**

CO2 equivalent emissions, excluding biogenic (subparts C – AA):	19,881.24301 Metric Tons
Exempt biogenic CO2 emissions (subparts C – AA):	0 Metric Tons
CO2 equivalent emissions from fuel supplier categories, excluding biogenic (subparts MM – NN):	0 Metric Tons
Exempt biogenic CO2 emissions from fuel supplier categories (subparts MM – NN):	0 Metric Tons
CO2 emissions from CO2 Suppliers (excluding biogenic) (subpart PP):	0 Metric Tons
Exempt biogenic CO2 emissions from CO2 Suppliers (subpart PP):	0 Metric Tons
CO2 equivalent emissions from electric power entities:	0 Metric Tons
<b>Covered CO2 equivalent emissions:</b>	<b>19,881.24301 Metric Tons</b>
De Minimis CO2 equivalent emissions:	0 Metric Tons
Maximum allowable De Minimis emissions:	596.43729 Metric Tons

**General Facility Reporting Information**

**NAICS Codes**

Primary:  
611310 (Colleges, Universities, and Professional Schools)  
Second Primary:  
Additional:

**U.S. Parent Companies**

Parent Company Name: California State University  
Address: 401 golden shore, Long Beach , CA 90802  
Percentage of Ownership Interest: 100%

GHG Report Start Date: 2019-01-01  
GHG Report End Date: 2019-12-31

Explanation of any calculation methodology changes during the reporting year:

**EPA e-GGRT Facility IDs**

Full or Abbreviated GHG Report: Abbreviated  
Company or Entity qualifies for Small Business Status: No

**Electricity Purchases/Acquisitions for Reporting Facilities (95104(d))**

Electricity Provider's Name: Southern California Edison (SCE)  
Provider's ARB ID: 3005  
Purchases/Acquisitions: 6,139 MWh

**Natural Gas Purchases/Acquisitions for Reporting Facilities [95115(k), 95103(a)(1)]**

Natural Gas Supplier Name:	Southern California Gas Company (SCG)
Supplier's ARB ID:	5002
Customer Number:	5002
Purchases/Acquisitions:	397,543.7 MMBtu
Was this natural gas received directly from an interstate pipeline?	No
Do you grant CARB staff permission to share confidential annual natural gas fuel purchase data with your identified natural gas fuel supplier?	No

**Cap-and-Trade Facilities: Increases and Decreases in Facility Emissions [95104(f)]:**

For facilities subject to Cap-and-Trade requirements: Have total facility emissions increased or decreased more than 5% in relation to the previous data year? [Not applicable for fuel suppliers, CO2 suppliers, electric power entities, and abbreviated reporters.]

NA (Not applicable: Reporting as an abbreviated reporter, fuel supplier, CO2 supplier, or electric power entity.)

**Note: This section is not subject to the third-party verification requirements**

**Electricity Generation**

Facility has the capacity to generate electricity:	Yes
CEC ID (if applicable):	N/A
EIA ID (if applicable):	58169
FERC QFID (if applicable):	N/A
CAISO ID (if applicable):	N/A
Total Facility Nameplate Generating Capacity:	8.6 MW

Facility Type:

Industrial/institutional/commercial facility with electricity generation capacity

Facility's Energy Disposition:

Does not provide any generated energy outside of the facility boundary

Generated electricity used for other on-site industrial processes that are not in support of or a part of the power generation system:	33,936 MWh
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Reported emissions include emissions from a cogeneration/bigeneration unit:	Yes
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Parasitic Steam Use: Generated thermal energy used for supporting power production (excluding steam used directly for generating electricity) [95112(a)(5)(B)]:

Generated thermal energy for on-site industrial applications not

related to electricity generation  
[95112(a)(5)(C)]:

**Portion of Generated Thermal Energy Used to Produce Cooling Energy or Distilled Water for Other End-Users or For On-Site Industrial Process not in support of the Power Generation System [95112(a)(5)(C)1-2]:**

Product Produced: Cooling Energy  
 Other Product:  
 User Of Product: Other End-User  
 Description Of Use: chiller  
 Amount Of Thermal Energy: 268,403 MMBtu

**Subpart C: General Stationary Fuel Combustion**

**Gas Information Details**

Gas Name	Gas Quantity (Metric Tons)
Methane	0.374609
Exempt Biogenic Carbon dioxide	0
Nitrous Oxide	0.037461
Carbon Dioxide	19,861.763348
Total CO2e	19,881.24301

**Total Covered CO2e Emissions:** 19,881.24301 (Metric Tons)

Emissions shown above that are claimed as De Minimis (CO2e): 0 Metric Tons

**Unit Details**

**Unit Name:** GP-Campus Combustion Sources  
**Configuration Type:** Aggregation of Units  
**Unit Type:** OCS (Other combustion source)  
**Unit Description:** Misc. Water Heaters from Campus Buildings

**Small Unit Aggregation Details**

Highest Maximum Rated Heat Input Capacity: 0.5 mmBtu/hr  
 Type of Emission Unit for this Group [Note: EGU/EGS must always be separated from other unit types]: Other (none of the above)

**Electricity Generation Unit Information**

Does this configuration have the capacity to generate electricity? No

**Emission Details: Configuration-Level Summary (User entered values)**

Total exempt annual biogenic CO2 mass emissions (must equal the sum of calculated annual exempt biogenic CO2) (metric tons): 0  
 Annual CO2 emissions from sorbent (metric tons): 0

**Fuel-Specific Emissions Information**

**Fuel: Natural Gas - Natural Gas**

Calculation Methodology:  
Tier 1 (Equation C-1a, natural gas billing in therms)

Methodology Start Date: 2013-01-01

Methodology End Date: 2019-12-31

Percentage of Fuel that is Biogenic: 0%

**Fuel Emission Details**

Total CO2 emissions: 1,405.093094 Metric Tons

Total CH4 emissions: 0.026501 Metric Tons

Total N2O emissions: 0.00265 Metric Tons

Total CH4 emissions CO2e: 0.556525 Metric Tons

Total N2O emissions CO2e: 0.821537 Metric Tons

**Equation Inputs**

Annual Natural Gas Usage: 265,011.9 therms

Fuel Specific CO2 Emissions Factor: 53.02 kg CO2/MMBtu

Fuel Specific CH4 Emissions Factor: 0.001 kg CH4/MMBtu

Fuel Specific N2O Emissions Factor: 0.0001 kg N2O/MMBtu

**Unit Name:**

Solar Panels

Configuration Type:

Single Unit Using Tiers 1, 2, or 3

Unit Type:

ONC (Other, non-combustion)

Unit Description:

Solar Panels

**Individual Unit Details**

Maximum Rated Heat Input Capacity: 0 mmBtu/hr

**Electricity Generation Unit Information**

Does this configuration have the capacity to generate electricity? Yes

Is this configuration a Part 75 unit? No

Nameplate Generating Capacity: 4 MW

Prime Mover Technology: Photovoltaic

Type of Thermal Energy Generation: Electricity only EGU

95112(b)(2): Gross Generation: 5,706.1 MWh

95112(b)(2): Net Generation: 5,706.1 MWh

95112(b)(3): Total Thermal Output (for Cogeneration or Bigeneration): 0 MMBtu

95112(b)(8): Other Steam Used for Electricity Generation:

95112(b)(8): Input Steam to the Steam Turbine (for bottoming cycle cogeneration units only)

95112(b)(8): Output of the Heat Recovery Steam Generator (for bottoming cycle cogeneration units only)

95112(e): Geothermal Steam Utilized:

The source of geothermal generation:

95112(f): Stationary Hydrogen Fuel Cell: Fuel Type and Provider (if not reported elsewhere)

Additional Comments and Information

**Emission Details: Configuration-Level Summary (User entered values)**

Total exempt annual biogenic CO<sub>2</sub> mass emissions (must equal the sum of calculated annual exempt biogenic CO<sub>2</sub>) (metric tons): 0

Annual CO<sub>2</sub> emissions from sorbent (metric tons): 0

**Fuel-Specific Emissions Information****Fuel:**

Calculation Methodology:  
Methodology Start Date:  
Methodology End Date:  
Percentage of Fuel that is Biogenic:

**Natural Gas - Natural Gas**

Tier 1 (Equation C-1)  
2018-01-01  
2019-12-31  
0%

**Fuel Emission Details**

Total CO<sub>2</sub> emissions: 0 Metric Tons  
Total CH<sub>4</sub> emissions: 0 Metric Tons  
Total N<sub>2</sub>O emissions: 0 Metric Tons  
Total CH<sub>4</sub> emissions CO<sub>2</sub>e: 0 Metric Tons  
Total N<sub>2</sub>O emissions CO<sub>2</sub>e: 0 Metric Tons

**Equation Inputs**

Mass or Volume of Fuel Combusted per Year: 0 scf  
High Heat Value: 0.001028 mmBtu/scf  
Fuel Specific CO<sub>2</sub> Emissions Factor: 53.02 kg CO<sub>2</sub>/MMBtu  
Fuel Specific CH<sub>4</sub> Emissions Factor: 0.001 kg CH<sub>4</sub>/MMBtu  
Fuel Specific N<sub>2</sub>O Emissions Factor: 0.0001 kg N<sub>2</sub>O/MMBtu

**Unit Name:**

Trigen Cogen

Configuration Type:

Single Unit Using Tiers 1, 2, or 3

Unit Type:

CCCT (CC (Turbine, combined cycle))

Unit Description:

Gas powered turbine generator supplying waste heat to absorber machines

**Individual Unit Details**

Maximum Rated Heat Input Capacity: 38.99 mmBtu/hr

**Electricity Generation Unit Information**

Does this configuration have the capacity to generate electricity? Yes

Is this configuration a Part 75 unit? No

Nameplate Generating Capacity: 4.6 MW

Prime Mover Technology: Combined Cycle

Type of Thermal Energy Generation: Cogeneration Topping Cycle

95112(b)(2): Gross Generation: 28,523 MWh

95112(b)(2): Net Generation: 28,230 MWh

95112(b)(3): Total Thermal Output (for Cogeneration or Bigeneration): 263,840 MMBtu

95112(b)(8): Other Steam Used for Electricity Generation:

95112(b)(8): Input Steam to the Steam Turbine (for bottoming cycle cogeneration units only)

95112(b)(8): Output of the Heat Recovery Steam Generator (for

bottoming cycle cogeneration units only)  
95112(b)(7): Supplemental Firing Information

**Fuel Type**  
**Percent of the Total Fuel Combusted at This Configuration That Was Used for Supplemental Firing**  
**Purpose of the Supplemental Firing**  
Natural Gas - Natural Gas 13.3 % Thermal energy generation

95112(e): Geothermal Steam Utilized:

The source of geothermal generation:

95112(f): Stationary Hydrogen Fuel Cell: Fuel Type and Provider (if not reported elsewhere)  
Additional Comments and Information

**Emission Details: Configuration-Level Summary (User entered values)**

Total exempt annual biogenic CO2 mass emissions (must equal the sum of calculated annual exempt biogenic CO2) (metric tons): 0  
Annual CO2 emissions from sorbent (metric tons): 0

**Fuel-Specific Emissions Information**

**Fuel:** Natural Gas - Natural Gas

Calculation Methodology:  
Tier 1 (Equation C-1a, natural gas billing in therms)

Methodology Start Date: 2013-01-01

Methodology End Date: 2019-12-31

Percentage of Fuel that is Biogenic: 0%

**Fuel Emission Details**

Total CO2 emissions: 18,456.670254 Metric Tons  
Total CH4 emissions: 0.348108 Metric Tons  
Total N2O emissions: 0.034811 Metric Tons  
Total CH4 emissions CO2e: 7.310262 Metric Tons  
Total N2O emissions CO2e: 10.791339 Metric Tons

**Equation Inputs**

Annual Natural Gas Usage: 3,481,077 therms  
Fuel Specific CO2 Emissions Factor: 53.02 kg CO2/MMBtu  
Fuel Specific CH4 Emissions Factor: 0.001 kg CH4/MMBtu  
Fuel Specific N2O Emissions Factor: 0.0001 kg N2O/MMBtu

**Time And Date Report Generated: 05/11/2020 13:28**





## **SUCCESS!**

Your facility's annual GHG report has been successfully submitted to CARB and certified. The facility's representatives and agents will receive an email confirmation.

### **Annual Report Submission**

**Facility Name:** California State University, Fullerton  
**Address:** 800 N State College Blvd, T-1475, Fullerton CA 92831  
**Reporting Year:** 2019  
**Submitted Date:** Mon May 18 09:17:14 PDT 2020  
**Certification Date:** Mon May 18 09:17:14 PDT 2020  
**Submitted By:** Denman, Robert  
**Confirmation Number:** 21220-28324

