

MSA-Wide ClearPath Data Entry

ClearPath GHG Calculation Tool Used: <https://clearpath.icleiusa.org/>

Calculation Methodology Used in ClearPath: <https://icleiusa.org/us-community-protocol/>

CELL COLOR KEY

	Enter Additional Data Needed
	Enter notes here
	Enter corresponding input into ClearPath
	Enter ClearPath emissions here
	Enter ClearPath Biogenic emissions here
	Redacted due to data confidentiality

GWP

Description	IPCC 5th Assessment 100 Year Values		Input	2022
When developing a new GHG inventory in ClearPath, select the Global Warming Potential reference under "Edit Parameters". The IPCC AR 5th Assessment values used in the 2022 inventory are noted to the right for reference.	GHG	GWP	GWP Selection	IPCC 5th Assessment Report 100-Year Values
	CO ₂	1		
	CH ₄	28		
	N ₂ O	265		

FACTOR SETS

ClearPath Factor Set	Factor Set Type	Notes	Input	2022
Grid Electricity	PGE Base Plan Electricity Factor Set 2022	PGE PCL CO2e emission factor for the Base Plan offering 2022	Name	PGE Base Plan Electricity Factor Set 2022
			Year	2022
			CO ₂ lbs/MWh	56
			CH ₄ lbs/GWh	0
			N ₂ O lbs/GWh	0
	PGE 100% Solar Choice Electricity Factor Set 2022	PGE PCL CO2e emission factor for the 100% Solar Choice offering 2022	Name	PGE 100% Solar Choice Electricity Factor Set 2022
			Year	2022
			CO ₂ lbs/MWh	36
			CH ₄ lbs/GWh	0
			N ₂ O lbs/GWh	0
	PGE GreenSaver Electricity Factor Set 2022	PGE PCL CO2e emission factor for the GreenSaver offering 2022	Name	PGE GreenSaver Electricity Factor Set 2022
			Year	2022
			CO ₂ lbs/MWh	-
			CH ₄ lbs/GWh	0
			N ₂ O lbs/GWh	0
	Lodi Electric Market-based Electricity Factor Set 2022	Lodi Electric PCL CO2e emission factor 2022	Name	Lodi Electric 2022 Market-based Electricity Factor Set
			Year	2022
			CO ₂ lbs/MWh	533
			CH ₄ lbs/GWh	0
			N ₂ O lbs/GWh	0
	East Bay Community Energy/Ava Community Energy Market-based Electricity Factor Set 2022 - Bright Choice	East Bay Community Energy/Ava Community Energy - Bright Choice offering - PCL CO2e emission factor 2022	Name	East Bay Community Energy/Ava Community Energy -Bright Choice 2022 Market-based Electricity Factor Set
			Year	2022
			CO ₂ lbs/MWh	496
			CH ₄ lbs/GWh	0
			N ₂ O lbs/GWh	0
	East Bay Community Energy/Ava Community Energy Market-based Electricity Factor Set 2022 - Renewable 100	East Bay Community Energy/Ava Community Energy - Renewable 100 offering - PCL CO2e emission factor 2022	Name	East Bay Community Energy/Ava Community Energy - Renewable 100 2022 Market-based Electricity Factor Set
			Year	2022
			CO ₂ lbs/MWh	-
			CH ₄ lbs/GWh	0
			N ₂ O lbs/GWh	0
	Lathrop Irrigation District Market-based Electricity Factor Set 2022	Lathrop Irrigation District PCL CO2e emission factor 2022	Name	Lathrop Irrigation District 2022 Market-based Electricity Factor Set
			Year	2022
			CO ₂ lbs/MWh	663
			CH ₄ lbs/GWh	0
			N ₂ O lbs/GWh	0
	Location-based Electricity Factor Set 2022	EPA eGRID 2022 data - CAMX Subregion	Name	2022 Location-based Electricity Factor Set
			Year	2022
			CO ₂ lbs/MWh	497.4
			CH ₄ lbs/GWh	30.000
			N ₂ O lbs/GWh	4
Waste Characterization	2022 Waste Characterization Factor Set	From the Cal Recycle 2021 Disposal Facility-based Characterization of Solid Waste in California	Name	Default Community Waste Characterization
			Year	2022
			Percentage Mixed MSW	0
			Percentage Newspaper	0.3
			Percentage Office Paper	0.6
			Percentage Corrugated Cardboard	4.1
			Percentage Magazines / Third Clas	0.4
			Percentage Food Scraps	11.00
			Percentage Grass	2.2
			Percentage Leaves	0
			Percentage Branches	1.00
			Percentage Dimensional Lumber	2.8

INVENTORY

RESIDENTIAL ENERGY

ClearPath Calculator Name	Assigned Name	Notes	GPC Ref. #	Input	Unit	2022
Emissions from Grid Electricity (USCP Required)	Residential Electricity - PGE Base Plan (Market-based)		I.1.2	Electricity Used	kWh	Confidential utility data
				Factor Set- Grid Electricity	NA	PGE Base Plan Electricity Factor Set 2022
				Electricity Used	kWh	Confidential utility data
				CO ₂ e (MT)	CO ₂ e (MT)	Confidential utility data - Total emissions are summed in the Results tab
Emissions from Grid Electricity (USCP Required)	Residential Electricity - PGE 100% Solar Choice (Market-based)		I.1.2	Electricity Used	kWh	Confidential utility data
				Factor Set- Grid Electricity	NA	PGE 100% Solar Choice Electricity Factor Set 2022
				Electricity Used	kWh	Confidential utility data
				CO ₂ e (MT)	CO ₂ e (MT)	Confidential utility data - Total emissions are summed in the Results tab
Emissions from Grid Electricity (USCP Required)	Residential Electricity - PGE GreenSaver (Market-based)		I.1.2	Electricity Used	kWh	Confidential utility data
				Factor Set- Grid Electricity	NA	PGE GreenSaver Electricity Factor Set 2022
				Electricity Used	kWh	Confidential utility data
				CO ₂ e (MT)	CO ₂ e (MT)	Confidential utility data - Total emissions are summed in the Results tab
Emissions from Grid Electricity (USCP Required)	Residential Electricity - Lodi Electric (Market-based)	NOTE: using total electricity use here as RECs are reflected in the PCL emissions factor, so need to use total kWh, not kWh without RECs	I.1.2	Electricity Used	kWh	Confidential utility data
				Factor Set- Grid Electricity	NA	Lodi Electric 2022 Market-based Electricity Factor Set
				Total Electricity Used	kWh	Confidential utility data
				CO ₂ e (MT)	CO ₂ e (MT)	Confidential utility data - Total emissions are summed in the Results tab
Emissions from Grid Electricity (USCP Required)	Residential Electricity - East Bay Community Energy/Ava Community Energy - BRIGHT CHOICE (Market-based)	Assuming Ava is 50% Res and 50% Commercial	I.1.2	Electricity Used	kWh	Confidential utility data
				Factor Set- Grid Electricity	NA	East Bay Community Energy/Ava Community Energy -Bright Choice 2022 Market-based Electricity Factor Set
				Total Electricity Used	kWh	Confidential utility data

	Source (Market-based)			CO ₂ e (MT)	CO ₂ e (MT)	Confidential utility data - Total emissions are summed in the Results tab
Emissions from Grid Electricity (USCP Required)	Residential Electricity - East Bay Community Energy/Ava Community Energy - RENEWABLE 100 (Market-based)	Assuming Ava is 50% Res and 50% Commercial	I.1.2	Electricity Used	kWh	Confidential utility data
				Factor Set- Grid Electricity	NA	East Bay Community Energy/Ava Community Energy - Renewable 100 2022 Market-based Electricity Factor Set
				Total Electricity Used	kWh	Confidential utility data
				CO ₂ e (MT)	CO ₂ e (MT)	Confidential utility data - Total emissions are summed in the Results tab
Emissions from Grid Electricity (USCP Required)	Residential Electricity - Lathrop Irrigation District (Market-based)		I.1.2	Electricity Used	kWh	Confidential utility data
				Factor Set- Grid Electricity	NA	Lathrop Irrigation District 2022 Market-based Electricity Factor Set
				Total Electricity Used	kWh	Confidential utility data
				CO ₂ e (MT)	CO ₂ e (MT)	Confidential utility data - Total emissions are summed in the Results tab
Emissions from Stationary Fuel Combustion (USCP Required)	Residential Natural Gas		I.1.1	Fuel Type	NA	Natural Gas
				Fuel Use	Therms	Confidential utility data
				CO ₂ e (MT)	CO ₂ e (MT)	Confidential utility data - Total emissions are summed in the Results tab

COMMERCIAL ENERGY

ClearPath Calculator Name	Assigned Name	Notes	GPC Ref. #	Input	Unit	2022
Emissions from Grid Electricity (USCP Required)	Commercial Electricity - PGE Base Plan (Market-based)	Subtracted EV and potable water electricity use from total electricity use in Commercial sector.	I.2.2	Electricity Used	kWh	Confidential utility data
				Factor Set-Grid Electricity	NA	PGE Base Plan Electricity Factor Set 2022
				Total Electricity Used	kWh	Confidential utility data
				CO ₂ e (MT)	CO ₂ e (MT)	Confidential utility data - Total emissions are summed in the Results tab

Emissions from Grid Electricity (USCP Required)	Commercial Electricity - PGE 100% Solar Choice (Market-based)		I.2.2	Electricity Used	kWh	Confidential utility data
				Factor Set-Grid Electricity	NA	PGE 100% Solar Choice Electricity Factor Set 2022
				Total Electricity Used	kWh	Confidential utility data
				CO ₂ e (MT)	CO ₂ e (MT)	Confidential utility data - Total emissions are summed in the Results tab

Emissions from Grid Electricity (USCP Required)	Commercial Electricity - Lodi Electric (Market-based)	NOTE: using total electricity use here as RECs are reflected in the PCL emissions factor, so need to use total kWh, not kWh without RECs	I.2.2	Electricity Used	kWh	Confidential utility data
				Factor Set-Grid Electricity	NA	Lodi Electric 2022 Market-based Electricity Factor Set
				Total Electricity Used	kWh	Confidential utility data
				CO ₂ e (MT)	CO ₂ e (MT)	Confidential utility data - Total emissions are summed in the Results tab
Emissions from Grid Electricity (USCP Required)	Commercial Electricity - East Bay Community Energy/Ava Community Energy - BRIGHT CHOICE (Market-based)	Assuming Ava is 50% Res and 50% Commercial	I.1.2	Electricity Used	kWh	Confidential utility data
				Factor Set- Grid Electricity	NA	East Bay Community Energy/Ava Community Energy -Bright Choice 2022 Market-based Electricity Factor Set
				Total Electricity Used	kWh	Confidential utility data
				CO ₂ e (MT)	CO ₂ e (MT)	Confidential utility data - Total emissions are summed in the Results tab
Emissions from Grid Electricity (USCP Required)	Commercial Electricity - East Bay Community Energy/Ava Community Energy - RENEWABLE 100 (Market-based)	Assuming Ava is 50% Res and 50% Commercial	I.1.2	Electricity Used	kWh	Confidential utility data
				Factor Set- Grid Electricity	NA	East Bay Community Energy/Ava Community Energy - Renewable 100 2022 Market-based Electricity Factor Set
				Total Electricity Used	kWh	Confidential utility data
				CO ₂ e (MT)	CO ₂ e (MT)	Confidential utility data - Total emissions are summed in the Results tab
Emissions from Grid Electricity (USCP Required)	Commercial Electricity - Lathrop Irrigation District (Market-based)		I.2.2	Electricity Used	kWh	Confidential utility data
				Factor Set-Grid Electricity	NA	Lathrop Irrigation District 2022 Market-based Electricity Factor Set
				Total Electricity Used	kWh	Confidential utility data
				CO ₂ e (MT)	CO ₂ e (MT)	summed in the Results tab
Emissions from Stationary Fuel Combustion (USCP Required)	Commercial Natural Gas		I.2.1	Fuel Type	NA	Natural Gas
				Fuel Use	Therms	Confidential utility data
				CO ₂ e (MT)	CO ₂ e (MT)	Confidential utility data - Total emissions are summed in the Results tab

INDUSTRIAL ENERGY

ClearPath Calculator Name	Assigned Name	Notes	GPC Ref. #	Input	Unit	2022
Emissions from Grid Electricity (USCP Required)	Industrial Electricity - PGE Base Plan (Market-based)		I.3.2	Electricity Used	kWh	UNDER PGE NDA - REQUEST FROM PGE
				Factor Set-Grid Electricity	NA	PGE Base Plan Electricity Factor Set 2022
				Total Electricity Used	kWh	Confidential utility data
				CO ₂ e (MT)	CO ₂ e (MT)	Confidential utility data - Total emissions are summed in the Results tab

Emissions from Grid Electricity (USCP Required)	Industrial Electricity - Lodi Electric (Market-based)	NOTE: using total electricity use here as RECs are reflected in the PCL emissions factor, so need to use total kWh, not kWh without RECs	I.3.2	Electricity Used	kWh	Confidential utility data
				Factor Set-Grid Electricity	NA	Lodi Electric 2022 Market-based Electricity Factor Set
				Total Electricity Used	kWh	Confidential utility data
				REC Purchases	kWh	-
				CO ₂ e (MT)	CO ₂ e (MT)	Confidential utility data - Total emissions are summed in the Results tab
Emissions from Grid Electricity (USCP Required)	Industrial Electricity - Lathrop Irrigation District (Market-based)		I.3.2	Electricity Used	kWh	Confidential utility data
				Factor Set-Grid Electricity	NA	Lathrop Irrigation District 2022 Market-based Electricity Factor Set
				Total Electricity Used	kWh	Confidential utility data
				REC Purchases	kWh	-
				CO ₂ e (MT)	CO ₂ e (MT)	Confidential utility data - Total emissions are summed in the Results tab

TRANSPORTATION

ClearPath Calculator Name	Assigned Name	Notes	GPC Ref. #	Input	Unit	2022
On Road Transportation (USCP Required)	On-road: Personal Vehicles - Gasoline	Included PHEV gasoline	II.1.1	Calculation Method	NA	Direct Entry
				VMT Location	NA	In-boundary
				Travel Type	NA	[Leave Blank]
				Type of VMT or Emissions Data	NA	In Boundary
				Type of Freight VMT or Emissions Data	NA	In-boundary from Travel Model
				Fuel Type	NA	Gasoline
				VMT	Annual VMT	4,268,869,466
				Fuel Use	Gallons	[Leave Blank]
				Previously Calculated CO ₂	Metric tons	1,528,880
				Previously Calculated CH ₄	Metric tons	
				Previously Calculated N ₂ O	Metric tons	

				CO ₂ e (MT)	CO ₂ e (MT)	1,528,880
On Road Transportation (USCP Required)	On-road: Personal Vehicles - Diesel		II.1.1	Calculation Method	NA	Direct Entry
				VMT Location	NA	In-boundary
				Travel Type	NA	[Leave Blank]
				Type of VMT or Emissions Data	NA	In Boundary
				Type of Freight VMT or Emissions Data	NA	In-boundary from Travel Model
				Fuel Type	NA	Diesel
				VMT	Annual VMT	31,191,742
				Fuel Use	Gallons	[Leave Blank]
				Previously Calculated CO ₂	Metric tons	14,739
				Previously Calculated CH ₄	Metric tons	
				Previously Calculated N ₂ O	Metric tons	
				CO ₂ e (MT)	CO ₂ e (MT)	14,739
On Road Transportation (USCP Required)	On-road: Personal Vehicles - Electricity	Used PGE emissions factor as the most common. This accounts for BEVs and the electric miles from PHEVs. Electricity use is subtracted from the Commercial sector to avoid double-counting.	II.1.1	Factor Set- Grid Electricity	NA	PGE Base Plan Electricity Factor Set 2022
				Factor Set- Transportation	NA	Placeholder 2023 National Defaults
				Calculation Method	NA	Fuel Use
				VMT Location	NA	In-boundary
				Travel Type	NA	Passenger
				Type of VMT or Emissions Data	NA	In Boundary
				Type of Freight VMT or Emissions Data	NA	In-boundary from Travel Model
				Fuel Type	NA	Electric
				Is this a T&D Loss Record?	NA	No
				VMT	Annual VMT	99,494,899
				Fuel Use	kWh	36,427,407
				CO ₂ e (MT)	CO ₂ e (MT)	925
On Road Transportation (USCP Required)	On-road: Small Commercial Trucks and Buses - Diesel		II.1.1	Calculation Method	NA	Direct Entry
				VMT Location	NA	In-boundary
				Travel Type	NA	[Leave Blank]
				Type of VMT or Emissions Data	NA	In Boundary
				Type of Freight VMT or Emissions Data	NA	In-boundary from Travel Model
				Fuel Type	NA	[Leave Blank]
				VMT	Annual VMT	141,352,465
				Fuel Use	Gallons	[Leave Blank]
				Previously Calculated CO ₂	Metric tons	86,153
				Previously Calculated CH ₄	Metric tons	
				Previously Calculated N ₂ O	Metric tons	
				CO ₂ e (MT)	CO ₂ e (MT)	86,153
On Road Transportation (USCP Required)	On-road: Small Commercial Trucks and Buses - Gasoline		II.1.1	Calculation Method	NA	Direct Entry
				VMT Location	NA	In-boundary
				Travel Type	NA	[Leave Blank]
				Type of VMT or Emissions Data	NA	In Boundary
				Type of Freight VMT or Emissions Data	NA	In-boundary from Travel Model
				Fuel Type	NA	[Leave Blank]
				VMT	Annual VMT	74,108,122
				Fuel Use	Gallons	[Leave Blank]
				Previously Calculated CO ₂	Metric tons	52,874
				Previously Calculated CH ₄	Metric tons	
				Previously Calculated N ₂ O	Metric tons	
				CO ₂ e (MT)	CO ₂ e (MT)	52,874
On Road Transportation (USCP Required)	On-road: Medium Commercial Trucks and Buses - Diesel		II.1.1	Calculation Method	NA	Direct Entry
				VMT Location	NA	In-boundary
				Travel Type	NA	[Leave Blank]
				Type of VMT or Emissions Data	NA	In Boundary
				Type of Freight VMT or Emissions Data	NA	In-boundary from Travel Model
				Fuel Type	NA	[Leave Blank]
				VMT	Annual VMT	33,269,713
				Fuel Use	Gallons	[Leave Blank]
				Previously Calculated CO ₂	Metric tons	39,262
				Previously Calculated CH ₄	Metric tons	
				Previously Calculated N ₂ O	Metric tons	
				CO ₂ e (MT)	CO ₂ e (MT)	39,262
On Road Transportation (USCP Required)	On-road: Medium Commercial Trucks and Buses - Gasoline		II.1.1	Calculation Method	NA	Direct Entry
				VMT Location	NA	In-boundary
				Travel Type	NA	[Leave Blank]
				Type of VMT or Emissions Data	NA	In Boundary
				Type of Freight VMT or Emissions Data	NA	In-boundary from Travel Model
				Fuel Type	NA	[Leave Blank]
				VMT	Annual VMT	12,034,607
				Fuel Use	Gallons	[Leave Blank]
				Previously Calculated CO ₂	Metric tons	20,796
				Previously Calculated CH ₄	Metric tons	
				Previously Calculated N ₂ O	Metric tons	
				CO ₂ e (MT)	CO ₂ e (MT)	20,796
On Road Transportation (USCP Required)	On-road: Medium Commercial Trucks and Buses - Natural Gas		II.1.1	Calculation Method	NA	Direct Entry
				VMT Location	NA	In-boundary
				Travel Type	NA	[Leave Blank]
				Type of VMT or Emissions Data	NA	In Boundary
				Type of Freight VMT or Emissions Data	NA	In-boundary from Travel Model
				Fuel Type	NA	[Leave Blank]
				VMT	Annual VMT	680,876
				Fuel Use	Gallons	[Leave Blank]
				Previously Calculated CO ₂	Metric tons	750
				Previously Calculated CH ₄	Metric tons	
				Previously Calculated N ₂ O	Metric tons	
				CO ₂ e (MT)	CO ₂ e (MT)	750
On Road Transportation (USCP Required)	On-road: Medium Commercial Trucks and Buses - Electricity	Electricity use is subtracted from the Commercial sector to avoid double-counting.	II.1.1	Factor Set- Grid Electricity	NA	PGE Base Plan Electricity Factor Set 2022
				Factor Set- Transportation	NA	Placeholder 2023 National Defaults
				Calculation Method	NA	Fuel Use
				VMT Location	NA	In-boundary
				Travel Type	NA	Passenger
				Type of VMT or Emissions Data	NA	In Boundary
				Type of Freight VMT or Emissions Data	NA	In-boundary from Travel Model
				Fuel Type	NA	Electric
				Is this a T&D Loss Record?	NA	No
				VMT	Annual VMT	83,299
				Fuel Use	kWh	30,498
				CO ₂ e (MT)	CO ₂ e (MT)	1
On Road Transportation (USCP Required)	On-road: Large Commercial Trucks and Buses - Diesel		II.1.1	Calculation Method	NA	Direct Entry
				VMT Location	NA	In-boundary
				Travel Type	NA	[Leave Blank]
				Type of VMT or Emissions Data	NA	In Boundary
				Type of Freight VMT or Emissions Data	NA	In-boundary from Travel Model
				Fuel Type	NA	[Leave Blank]
				VMT	Annual VMT	176,107,482
				Fuel Use	Gallons	[Leave Blank]
				Previously Calculated CO ₂	Metric tons	293,652
				Previously Calculated CH ₄	Metric tons	
				Previously Calculated N ₂ O	Metric tons	
				CO ₂ e (MT)	CO ₂ e (MT)	293,652
On Road Transportation (USCP Required)	On-road: Large Commercial Trucks and Buses - Gasoline		II.1.1	Calculation Method	NA	Direct Entry
				VMT Location	NA	In-boundary
				Travel Type	NA	[Leave Blank]
				Type of VMT or Emissions Data	NA	In Boundary
				Type of Freight VMT or Emissions Data	NA	In-boundary from Travel Model
				Fuel Type	NA	[Leave Blank]
				VMT	Annual VMT	2,266,901

				Fuel Use	Gallons	[Leave Blank]
				Previously Calculated CO ₂	Metric tons	4,416
				Previously Calculated CH ₄	Metric tons	
				Previously Calculated N ₂ O	Metric tons	
				CO ₂ e (MT)	CO ₂ e (MT)	4,416
On Road Transportation (USCP Required)	On-road: Large Commercial Trucks and Buses - Natural Gas		II.1.1	Calculation Method	NA	Direct Entry
				VMT Location	NA	In-boundary
				Travel Type	NA	[Leave Blank]
				Type of VMT or Emissions Data	NA	In Boundary
				Type of Freight VMT or Emissions Data	NA	In-boundary from Travel Model
				Fuel Type	NA	[Leave Blank]
				VMT	Annual VMT	2,552,999
				Fuel Use	Gallons	[Leave Blank]
				Previously Calculated CO ₂	Metric tons	3,786
				Previously Calculated CH ₄	Metric tons	
				Previously Calculated N ₂ O	Metric tons	
				CO ₂ e (MT)	CO ₂ e (MT)	3,786
On Road Transportation (USCP Required)	On-road: Large Commercial Trucks and Buses - Electricity	Electricity use is subtracted from the Commercial sector to avoid double-counting.	II.1.1	Factor Set-Grid Electricity	NA	PGE Base Plan Electricity Factor Set 2022
				Factor Set- Transportation	NA	Placeholder 2023 National Defaults
				Calculation Method	NA	Fuel Use
				VMT Location	NA	In-boundary
				Travel Type	NA	Passenger
				Type of VMT or Emissions Data	NA	In Boundary
				Type of Freight VMT or Emissions Data	NA	In-boundary from Travel Model
				Fuel Type	NA	Electric
				Is this a T&D Loss Record?	NA	No
				VMT	Annual VMT	234,318
				Fuel Use	kWh	85,789
				CO ₂ e (MT)	CO ₂ e (MT)	2
Rail Transportation (USCP Recommended)	Passenger Rail - Renewable Diesel	Includes passenger rail emissions for ACE and Amtrak for San Joaquin County (both under San Joaquin Regional Rail Commission). NOTE: ClearPath does not have a renewable diesel fuel option - therefore, CH4 and N2O emissions were calculated using temporary ClearPath calculator for diesel train with CARB offroad locomotive passenger diesel gallons (507,980 gal); resulting CH4 and N2O emissions were hard-entered in final ClearPath rail calculator to derive total CO ₂ e emissions (all CO ₂ e emissions from	II.2.1	Were emissions calculated externally from ClearPath?	NA	Yes
				Location	NA	In-boundary
				Rail Type	NA	Passenger
				Local Attribution	%	100
				Previously Calculated CO2	MT	0
				Previously Calculated CH4	MT	0.41
				Previously Calculated N2O	MT	0.13
				CO ₂ e (MT)	CO ₂ e (MT)	46
Rail Transportation (USCP Recommended)	Freight Rail - Diesel		II.2.1	Were emissions calculated externally from ClearPath?	NA	Yes
				Location	NA	In-boundary
				Rail Type	NA	Freight
				Local Attribution	%	100
				Fuel Type	NA	Diesel
				Fuel Quantity	Gallons	
				Previously Calculated CO2	MT	32,530.86
				Previously Calculated CH4	MT	2.56
				Previously Calculated N2O	MT	0.83
				CO ₂ e (MT)	CO ₂ e (MT)	32,822
Water Transportation (USCP Recommended)	Water Transport - Freight		II.2.1	Were emissions calculated externally from ClearPath?	NA	Yes
				Location Type	NA	Within Jurisdiction
				Trip Purpose	NA	Freight
				Local Attribution	%	100
				Fuel Type	NA	Diesel
				Fuel Quantity	Gallons	277,878
				Previously Calculated CO2	MT	2,832
				Previously Calculated CH4	MT	0
				Previously Calculated N2O	MT	0
				CO ₂ e (MT)	CO ₂ e (MT)	2,832
Water Transportation (USCP Recommended)	Water Transport - Passenger		II.2.1	Were emissions calculated externally from ClearPath?	NA	Yes
				Location Type	NA	Within Jurisdiction
				Trip Purpose	NA	Passenger
				Local Attribution	%	100
				Fuel Type	NA	Gasoline
				Fuel Quantity	Gallons	4,097,503
				Previously Calculated CO2	MT	26,697
				Previously Calculated CH4	MT	0
				Previously Calculated N2O	MT	0
				CO ₂ e (MT)	CO ₂ e (MT)	26,697
Aviation Travel (USCP Recommended)	Aviation Travel		II.2.1	Were emissions calculated externally from ClearPath?	NA	Yes
				Aviation Type	NA	Between Jurisdictions
				Flight Type	NA	
				Local Attribution	%	100
				Fuel Type	NA	NA
				Fuel Loading	Gallons	1,348,451
				Previously Calculated CO2	MT	12,608
				Previously Calculated CH4	MT	0
				Previously Calculated N2O	MT	0
				CO ₂ e (MT)	CO ₂ e (MT)	12,608
Emissions from Off-road Vehicles (USCP Recommended)	Off-road: Agricultural		I.2.1	Were emissions calculated externally from ClearPath?	NA	Yes
				Equipment Type	NA	Agricultural
				Sector	NA	
				Previously Calculated CO ₂	Metric tons	180,860.30
				CO ₂ e (MT)	CO ₂ e (MT)	180,860
Emissions from Off-road Vehicles (USCP Recommended)	Off-road: Construction		I.2.1	Were emissions calculated externally from ClearPath?	NA	Yes
				Equipment Type	NA	Construction
				Sector	NA	
				Previously Calculated CO ₂	Metric tons	106,519.34
				CO ₂ e (MT)	CO ₂ e (MT)	106,519
Emissions from Off-road Vehicles (USCP Recommended)	Off-road: Large Utility		I.3.1	Were emissions calculated externally from ClearPath?	NA	Yes
				Equipment Type	NA	Large Utility
				Sector	NA	
				Previously Calculated CO ₂	Metric tons	123,842.01
				CO ₂ e (MT)	CO ₂ e (MT)	123,842
Emissions from Off-road Vehicles (USCP Recommended)	Off-road: Railroad		II.5.1	Were emissions calculated externally from ClearPath?	NA	Yes
				Equipment Type	NA	Locomotives
				Sector	NA	Transportation Facilities
				Previously Calculated CO ₂	Metric tons	6,545.13
				CO ₂ e (MT)	CO ₂ e (MT)	6,545.1
Emissions from Off-road Vehicles (USCP Recommended)	Off-road: Small Utility		II.5.1	Were emissions calculated externally from ClearPath?	NA	Yes
				Equipment Type	NA	Small Utility

Vehicles (USCP Recommended)	On-road: Small Utility		II.5.1	Sector	NA	
				Previously Calculated CO ₂	Metric tons	#REF!
				CO ₂ e (MT)	CO ₂ e (MT)	72,716
Emissions from Off-road Vehicles (USCP Recommended)	Off-road: Snowmobiles and Recreational		II.5.1	Were emissions calculated externally from ClearPath?	NA	Yes
				Equipment Type	NA	Small Utility
				Sector	NA	
				Previously Calculated CO ₂	Metric tons	1,459.90
				CO ₂ e (MT)	CO ₂ e (MT)	1,459.9

SOLID WASTE

ClearPath Calculator Name	Assigned Name	Notes	GPC Ref. #	Input	Unit	2022
Landfilled Waste (USCP Required, Preferred, where applicable)	Landfilled Waste	Includes Foothill Sanitary Landfill, North County Recycling Center and Sanitary Landfill, and Forward Landfill. Landfill moisture content from City of Stockton 2019 inventory.	VI.1	Were emissions calculated externally from ClearPath?		No
				Calculate emissions using tonnage or per capita waste generation defaults?		Tonnage
				Total Waste Generated	short tons	1,441,295
				Landfill Methane Collection Scenario		California Regulatory
				Landfill Moisture Content		Dry
				Waste Type of Calculate Emissions For		All
				Disposal Location		Inside Jurisdiction
				CO ₂ e (MT)	CO ₂ e (MT)	176,076
Emissions from Flaring of Landfill Gas	Flaring of Landfill Gas	Includes Forward, Foothill, North County Landfill waste flaring.	III.2.1, III.2.2	Landfill Gas Flared	Cubic Feet / Day	4,841,430
				Fraction of CH4 in Landfill Gas	Decimal	0.5 (default)
				Destruction Efficiency	Decimal	0.99 (default)
				Landfill Location	NA	Inside Jurisdiction
				CO ₂ e (MT)	CO ₂ e (MT)	4,638
Emissions from the Combustion of Landfill Gas	Combustion of Landfill Gas for Electricity Sent to Grid	Includes Forward Landfill gas combustion.	III.2.1, III.2.2	What data do you have?	NA	Heat Content
				Landfill Gas Combustion	Cubic Feet / Day	1,838,792
				Heat Content		500 (default)
				Is Energy Recovered from Combustion?	NA	Yes-sent to grid
				Landfill Location	NA	Inside Jurisdiction
				CO ₂ e (MT)	CO ₂ e (MT)	86.15
				Biogenic CO ₂ e (MT)	Biogenic CO ₂ e (MT)	17,486
Emissions from the Combustion of Landfill Gas	Combustion of Landfill Gas for Electricity Used on Site	Includes Foothill Landfill gas combustion.	III.2.1, III.2.2	What data do you have?	NA	Heat Content
				Landfill Gas Combustion	Cubic Feet / Day	2,060,000
				Heat Content		500 (default)
				Is Energy Recovered from Combustion?	NA	Yes-used on site
				Landfill Location	NA	Inside Jurisdiction
				CO ₂ e (MT)	CO ₂ e (MT)	96.52
				Biogenic CO ₂ e (MT)	Biogenic CO ₂ e (MT)	19,589
Biologic Treatment of Solid Waste (Composting)	Composted Waste		III.2.1, III.2.2	Quantity of Waste Composted	Short tons	86,771
				Waste Type	NA	Biowaste
				Disposal Location	NA	Generated and Disposed in Boundary
				CO ₂ e (MT)	CO ₂ e (MT)	15,336

WATER AND WASTEWATER

ClearPath Calculator Name	Assigned Name	Notes	GPC Ref. #	Input	Unit	2022
Process N ₂ O Emissions from Wastewater Treatment (USCP Recommended)	Wastewater Treatment Emissions - Manteca Wastewater Quality Control Facility	Manteca Wastewater Quality Control Facility	III.4.1	Were emissions calculated externally from ClearPath?	NA	No
				Nitrification/Denitrification as a step in the treatment process?		Yes
				Population Served	People	87,000
				Industrial Commercial Discharge Multiplier		1.25
				Wastewater Generation and Treatment Location	NA	Generated and Treated in Boundary
				CO ₂ e (MT)	CO ₂ e (MT)	201.70
Process N ₂ O from Effluent Discharge to River, Ocean, or Deep Well Injection (USCP Recommended, where applicable)	Effluent Emissions (Daily N Load data available) - Manteca Wastewater Quality Control Facility	Manteca Wastewater Quality Control Facility	III.4.1	Were emissions calculated externally from ClearPath?	NA	No
				Do You have daily N load data from your effluent discharge?	NA	Yes
				Daily N Load	kg N/day	121.9
				Population Served	People	87,000
				Is your effluent discharged to a river or stream, or directly into the ocean?	NA	River
				Wastewater Generation and Treatment Location	NA	Generated and Treated in Boundary
				CO ₂ e (MT)	CO ₂ e (MT)	92.621
Emissions from the Combustion of Digester Gas (USCP Recommended, where applicable)	Digester Gas Combustion - Manteca Wastewater Quality Control Facility	Manteca Wastewater Quality Control Facility	III.4.2	Calculation Type	NA	Population Based
				Population Served	People	87,000
				Is Energy Recovered from Combustion?	NA	Yes-used on site
				Wastewater Generation and Treatment Location	NA	Generated and Treated in Boundary
				CO ₂ e (MT)	CO ₂ e (MT)	5,4474
				Biogenic CO ₂ (MT)	Biogenic CO ₂ (MT)	1105.6
CO ₂ Emissions from the Use of Fossil Fuel Derived Methanol (USCP Recommended, where applicable)	Methanol Use - Manteca Wastewater Quality Control Facility	Manteca Wastewater Quality Control Facility (aerobic was not a choice and solids are not combusted, so selected raw solids disposal)	III.4.2	Were emissions calculated externally from ClearPath?	NA	No
				Daily Methanol Load	Metric Tons CH ₃ OH/day	9
				Wastewater Plant Treatment Type	NA	Raw Solids Disposal
				Population Served	People	87,000
				Wastewater Generation and Treatment Location	NA	Generated and Treated in Boundary
				CO ₂ e (MT)	CO ₂ e (MT)	3,602.8
Process N ₂ O Emissions from Wastewater Treatment (USCP Recommended)	Wastewater Treatment Emissions - Stockton Regional Wastewater Control Facility	Stockton Regional Wastewater Control Facility	III.4.1	Were emissions calculated externally from ClearPath?	NA	No
				Nitrification/Denitrification as a step in the treatment process?		No
				Population Served	People	322,489
				Industrial Commercial Discharge Multiplier		1.25
				Wastewater Generation and Treatment Location	NA	Generated and Treated in Boundary
				CO ₂ e (MT)	CO ₂ e (MT)	341.84
Process N ₂ O from Effluent Discharge to River, Ocean, or Deep Well Injection (USCP Recommended, where applicable)	Effluent Emissions (Daily N Load data available) - Stockton Regional Wastewater Control Facility	Stockton Regional Wastewater Control Facility	III.4.1	Were emissions calculated externally from ClearPath?	NA	No
				Do You have daily N load data from your effluent discharge?	NA	Yes
				Daily N Load	kg N/day	1925
				Population Served	People	322,489
				Is your effluent discharged to a river or stream, or directly into the ocean?	NA	River
				Wastewater Generation and Treatment Location	NA	Generated and Treated in Boundary
				CO ₂ e (MT)	CO ₂ e (MT)	1,462.6
Emissions from the				Calculation Type	NA	Population Based
				Population Served	People	322,489

Emissions from the Combustion of Digester Gas (USCP Recommended, where applicable)	Digester Gas Combustion - Stockton Regional Wastewater Control Facility	Stockton Regional Wastewater Control Facility	III.4.2	Is Energy Recovered from Combustion?	NA	Yes-used on site
				Wastewater Generation and Treatment Location	NA	Generated and Treated in Boundary
				CO ₂ e (MT)	CO ₂ e (MT)	20.192
				Biogenic CO ₂ (MT)	Biogenic CO ₂ (MT)	4098.3
Process N ₂ O Emissions from Wastewater Treatment (USCP Recommended)	Wastewater Treatment Emissions - White Slough Water Pollution Control Facility	White Slough Water Pollution Control Facility	III.4.1	Were emissions calculated externally from ClearPath?	NA	No
				Nitrification/Denitrification as a step in the treatment process?		Yes
				Population Served	People	65,000
				Industrial Commercial Discharge Multiplier		1.25
				Wastewater Generation and Treatment Location	NA	Generated and Treated in Boundary
				CO ₂ e (MT)	CO ₂ e (MT)	150.72
Process N ₂ O from Effluent Discharge to River, Ocean, or Deep Well Injection (USCP Recommended, where applicable)	Effluent Emissions (Daily N Load data not available) - White Slough Water Pollution Control Facility	White Slough Water Pollution Control Facility	III.4.1	Were emissions calculated externally from ClearPath?	NA	No
				Do You have daily N load data from your effluent discharge?	NA	No
				Population Served	People	65,000
				Industrial Commercial Discharge Multiplier	NA	1.25
				Is your facility predominantly an Aerobic or Anaerobic system?	NA	Aerobic
				Does your facility employ Nitrification/Denitrification?	NA	Yes
				Is your effluent discharged to a river or stream, or directly into the ocean?	NA	River
				Wastewater Generation and Treatment Location	NA	Generated and Treated in Boundary
				CO ₂ e (MT)	CO ₂ e (MT)	398
Emissions from the Flaring of Digester Gas (USCP Recommended, where applicable)	Digester Gas Flaring - White Slough Water Pollution Control Facility	White Slough Water Pollution Control Facility	III.4.2	Site Specific or Population Based Approach?	NA	Population Based
				Population Served	People	65,000
				Fraction of CH ₄ in Digester Gas	Decimal	0.65
				Destruction Efficiency	Decimal	0.99
				Wastewater Generation and Treatment Location	NA	Generated and Treated in Boundary
				CO ₂ e (MT)	CO ₂ e (MT)	80.95
Process N ₂ O Emissions from Wastewater Treatment (USCP Recommended)	Wastewater Treatment Emissions - City of Escalon Wastewater Treatment Facility	City of Escalon Wastewater Treatment Facility. No data provided. Assumed the same characteristics as Stockton Regional Wastewater Control Facility.	III.4.1	Were emissions calculated externally from ClearPath?	NA	No
				Nitrification/Denitrification as a step in the treatment process?	NA	No
				Population Served	People	7,456
				Industrial Commercial Discharge Multiplier	NA	1.25
				Wastewater Generation and Treatment Location	NA	Generated and Treated in Boundary
				CO ₂ e (MT)	CO ₂ e (MT)	7.903
Process N ₂ O from Effluent Discharge to River, Ocean, or Deep Well Injection (USCP Recommended, where applicable)	Effluent Emissions (Daily N Load data not available) - City of Escalon Wastewater Treatment Facility	City of Escalon Wastewater Treatment Facility. No data provided. Assumed the same characteristics as Stockton Regional Wastewater Control Facility.	III.4.1	Were emissions calculated externally from ClearPath?	NA	No
				Do You have daily N load data from your effluent discharge?	NA	No
				Population Served	People	7,456
				Industrial Commercial Discharge Multiplier	NA	1.25
				Is your facility predominantly an Aerobic or Anaerobic system?	NA	Aerobic
				Does your facility employ Nitrification/Denitrification?	NA	No
				Is your effluent discharged to a river or stream, or directly into the ocean?	NA	River
				Wastewater Generation and Treatment Location	NA	Generated and Treated in Boundary
				CO ₂ e (MT)	CO ₂ e (MT)	152.3
Emissions from the Combustion of Digester Gas (USCP Recommended, where applicable)	Digester Gas Combustion - City of Escalon Wastewater Treatment Facility	City of Escalon Wastewater Treatment Facility. No data provided. Assumed the same characteristics as Stockton Regional Wastewater Control Facility.	III.4.2	Calculation Type	NA	Population Based
				Population Served	People	7,456
				Is Energy Recovered from Combustion?	NA	Yes-used on site
				Wastewater Generation and Treatment Location	NA	Generated and Treated in Boundary
				CO ₂ e (MT)	CO ₂ e (MT)	0.46685
				Biogenic CO ₂ (MT)	Biogenic CO ₂ (MT)	94.752
Process N ₂ O Emissions from Wastewater Treatment (USCP Recommended)	Wastewater Treatment Emissions - Lathrop Consolidated Treatment Facility	Lathrop Consolidated Treatment Facility. No data provided. Confirmed plant uses nitrification/denitrification. Other characteristics assumed to be the same as Stockton Regional Wastewater Control Facility.	III.4.1	Were emissions calculated externally from ClearPath?	NA	No
				Nitrification/Denitrification as a step in the treatment process?		Yes
				Population Served	People	29,633
				Industrial Commercial Discharge Multiplier	NA	1.25
				Wastewater Generation and Treatment Location	NA	Generated and Treated in Boundary
				CO ₂ e (MT)	CO ₂ e (MT)	68.712
Process N ₂ O from Effluent Discharge to River, Ocean, or Deep Well Injection (USCP Recommended, where applicable)	Effluent Emissions (Daily N Load data not available) - Lathrop Consolidated Treatment Facility	Lathrop Consolidated Treatment Facility. No data provided. Confirmed plant uses nitrification/denitrification. Other characteristics assumed to be the same as Stockton Regional Wastewater Control Facility.	III.4.1	Were emissions calculated externally from ClearPath?	NA	No
				Do You have daily N load data from your effluent discharge?	NA	No
				Population Served	People	29,633
				Industrial Commercial Discharge Multiplier	NA	1.25
				Is your facility predominantly an Aerobic or Anaerobic system?	NA	Aerobic
				Does your facility employ Nitrification/Denitrification?	NA	Yes
				Is your effluent discharged to a river or stream, or directly into the ocean?	NA	River
				Wastewater Generation and Treatment Location	NA	Generated and Treated in Boundary
				CO ₂ e (MT)	CO ₂ e (MT)	181.53
Emissions from the Combustion of Digester Gas (USCP Recommended, where applicable)	Digester Gas Combustion - Lathrop Consolidated Treatment Facility	Lathrop Consolidated Treatment Facility. No data provided. Confirmed plant uses nitrification/denitrification. Other characteristics assumed to be the same as Stockton Regional Wastewater Control Facility.	III.4.2	Calculation Type	NA	Population Based
				Population Served	People	29,633
				Is Energy Recovered from Combustion?	NA	Yes-used on site
				Wastewater Generation and Treatment Location	NA	Generated and Treated in Boundary
				CO ₂ e (MT)	CO ₂ e (MT)	1.8554
				Biogenic CO ₂ (MT)	Biogenic CO ₂ (MT)	376.58
Process N ₂ O Emissions from Wastewater Treatment (USCP Recommended)	Wastewater Treatment Emissions - City of Ripon Wastewater Treatment Plant	City of Ripon Wastewater Treatment Plant. No data provided. Assumed the same characteristics as Stockton Regional Wastewater Control Facility.	III.4.1	Were emissions calculated externally from ClearPath?	NA	No
				Nitrification/Denitrification as a step in the treatment process?		No
				Population Served	People	16,092
				Industrial Commercial Discharge Multiplier	NA	1.25
				Wastewater Generation and Treatment Location	NA	Generated and Treated in Boundary
				CO ₂ e (MT)	CO ₂ e (MT)	17.058

Process N ₂ O from Effluent Discharge to River, Ocean, or Deep Well Injection (USCP Recommended, where applicable)	Effluent Emissions (Daily N Load data not available) - City of Ripon Wastewater Treatment Plant	City of Ripon Wastewater Treatment Plant. No data provided. Assumed the same characteristics as Stockton Regional Wastewater Control Facility.	III.4.1	Were emissions calculated externally from ClearPath?	NA	No
				Do You have daily N load data from your effluent discharge?	NA	No
				Population Served	People	16,092
				Industrial Commercial Discharge Multiplier	NA	1.25
				Is your facility predominantly an Aerobic or Anaerobic system?	NA	Aerobic
				Does your facility employ Nitrification/Denitrification?	NA	No
				Is your effluent discharged to a river or stream, or directly into the ocean?	NA	River
				Wastewater Generation and Treatment Location	NA	Generated and Treated in Boundary
				CO ₂ e (MT)	CO ₂ e (MT)	328.60

Emissions from the Combustion of Digester Gas (USCP Recommended, where applicable)	Digester Gas Combustion - City of Ripon Wastewater Treatment Plant	City of Ripon Wastewater Treatment Plant. No data provided. Assumed the same characteristics as Stockton Regional Wastewater Control Facility.	III.4.2	Calculation Type	NA	Population Based
				Population Served	People	16,092
				Is Energy Recovered from Combustion?	NA	Yes-used on site
				Wastewater Generation and Treatment Location	NA	Generated and Treated in Boundary
				CO ₂ e (MT)	CO ₂ e (MT)	1.0076
				Biogenic CO ₂ (MT)	Biogenic CO ₂ (MT)	204.5

Process N ₂ O Emissions from Wastewater Treatment (USCP Recommended)	Wastewater Treatment Emissions - City of Tracy Wastewater Treatment Plant	City of Tracy Wastewater Treatment Plant. Confirmed plant uses nitrification/denitrification. Other characteristics assumed to be the same as Stockton Regional Wastewater Control Facility.	III.4.1	Were emissions calculated externally from ClearPath?	NA	No
				Nitrification/Denitrification as a step in the treatment process?		Yes
				Population Served	People	122,428
				Industrial Commercial Discharge Multiplier	NA	1.25
				Wastewater Generation and Treatment Location	NA	Generated and Treated in Boundary
				CO ₂ e (MT)	CO ₂ e (MT)	283.88

Process N ₂ O from Effluent Discharge to River, Ocean, or Deep Well Injection (USCP Recommended, where applicable)	Effluent Emissions (Daily N Load data not available) - City of Tracy Wastewater Treatment Plant	City of Tracy Wastewater Treatment Plant. Confirmed plant uses nitrification/denitrification. Other characteristics assumed to be the same as Stockton Regional Wastewater Control Facility.	III.4.1	Were emissions calculated externally from ClearPath?	NA	No
				Do You have daily N load data from your effluent discharge?	NA	No
				Population Served	People	122,428
				Industrial Commercial Discharge Multiplier	NA	1.25
				Is your facility predominantly an Aerobic or Anaerobic system?	NA	Aerobic
				Does your facility employ Nitrification/Denitrification?	NA	Yes
				Is your effluent discharged to a river or stream, or directly into the ocean?	NA	River
				Wastewater Generation and Treatment Location	NA	Generated and Treated in Boundary
				CO ₂ e (MT)	CO ₂ e (MT)	749.99

Emissions from the Combustion of Digester Gas (USCP Recommended, where applicable)	Digester Gas Combustion - City of Tracy Wastewater Treatment Plant	City of Tracy Wastewater Treatment Plant. Confirmed plant uses nitrification/denitrification. Other characteristics assumed to be the same as Stockton Regional Wastewater Control Facility.	III.4.2	Calculation Type	NA	Population Based
				Population Served	People	122,428
				Is Energy Recovered from Combustion?	NA	Yes-used on site
				Wastewater Generation and Treatment Location	NA	Generated and Treated in Boundary
				CO ₂ e (MT)	CO ₂ e (MT)	7.6657
				Biogenic CO ₂ (MT)	Biogenic CO ₂ (MT)	1555.8

Emissions from the Supply of Potable Water (USCP Recommended)	Potable Water Supply Emissions	Subtracted this energy use from PGE commercial sector.	III.4.2	Grid Electricity Factor Set	NA	PGE Base Plan Electricity Factor Set 2022
				Were emissions calculated externally from ClearPath?	NA	No
				Electricity Used	kWh	40,585,652
				Natural Gas Used	MMBtu	NA
				Volume of Water Delivered (optional)	Million Gallons per Year	
				Population served (optional)	People	
				Facility Location	NA	
				CO ₂ e (MT)	CO ₂ e (MT)	1,031

Fugitive Emissions from Septic Systems	Septic Systems Emissions	Septic Users in Unincorporated San Joaquin County	III.4.2	Were emissions calculated externally from ClearPath?	NA	No
				Calculation Type	NA	Population Based
				BOD5 Load (optional for population based method)	kg BOD5/day	Leave Blank
				Population served (optional for BOD5 loading rate/site specific method)	People	103,726
				CO ₂ e (MT)	CO ₂ e (MT)	12.602

PROCESS & FUGITIVE EMISSIONS

ClearPath Calculator Name	Assigned Name	Notes	GPC Ref. #	Input	Unit	2022
Fugitive Emissions from Natural Gas Distribution (USCP Recommended)	Natural Gas Leakage	Used default values for natural gas characteristics.	I.8.1	Were emissions calculated externally from ClearPath?	NA	No
				Quantity of Natural Gas Used	Therms	128,176,498
				Leakage Rate	%	0.3%
				Nature Gas Energy Density	btu/scf	1,028
				Natural Gas Density	kg/m^3	0.8
				Natural Gas % CH ₄	%	93.4%
				Natural Gas % CO ₂	%	1.0%
				CO ₂ e (MT)	CO ₂ e (MT)	22.075

Other Process and Fugitive Emissions	Owens-Brockway Glass Container Inc. Process Emissions in Tracy		IV.1	Subpart type	NA	Subpart N - Glass Production
				Gas (CO2 equivalent)	Metric tons	20,368.6
				Data Source	NA	EPA Mandatory Reporting
				Are these emissions from a process or product use?	NA	Process
				CO ₂ e (MT)	CO ₂ e (MT)	20,369

Agriculture, Forestry, and Other Land Uses (AFOLU)

ClearPath Calculator Name	Assigned Name	Notes	GPC Ref. #	Input	Unit	2022
Emissions from Crop Agriculture (USCP optional)	Agricultural Soil Emissions - Plants, Residues & Legumes	Results from ICLEI Ag Scaling Tool	V.3	Crop Agricultural Process/Activity	NA	Residues & Legumes
				Are you entering Metric Tons CO ₂ Equivalent or Metric Tons?	NA	Metric Tons CO ₂ Equivalent
				Metric Tons CO ₂ e from Agriculture	Metric Tons CO ₂ e	3,300
				Acres (Required)	NA	31,335
				CO ₂ e (MT)	CO ₂ e (MT)	3,300

Emissions from Crop Agriculture (USCP optional)	Agricultural Soil Emissions - Plants, Fertilizer	Results from ICLEI Ag Scaling Tool	V.3	Crop Agricultural Process/Activity	NA	Fertilizer Application
				Are you entering metric tons CO ₂ Equivalent or Metric Tons?	NA	Metric Tons CO ₂ Equivalent
				Metric Tons CO ₂ e from Agriculture	Metric Tons CO ₂ e	5,800
				Acres (Required)	NA	12,109
				CO ₂ e (MT)	CO ₂ e (MT)	5,800

Emissions from Crop Agriculture (USCP optional)	Rice Cultivation	Results from ICLEI Ag Scaling Tool	V.3	Crop Agricultural Process/Activity	NA	Rice Cultivation
				Are you entering metric tons CO ₂ Equivalent or Metric Tons?	NA	Metric Tons CO ₂ Equivalent
				Metric Tons CO ₂ e from Agriculture	Metric Tons CO ₂ e	23,000

Signature (User: <i>Spencer</i>)				Acres (Required)	NA	8,561
				CO ₂ e (MT)	CO ₂ e (MT)	23,000
Emissions from Crop Agriculture (USCP optional)	Residue Burning	Results from ICLEI Ag Scaling Tool	V.3	Crop Agricultural Process/Activity	NA	Residue Burning
				Are you entering metric tons CO ₂ Equivalent as Metric Tons?	NA	Metric Tons CO ₂ Equivalent
				Metric Tons CO ₂ e from Agriculture	Metric Tons CO ₂ e	891
				Acres (Required)	NA	31,139
				CO ₂ e (MT)	CO ₂ e (MT)	891
Emissions from Livestock Enteric Fermentation (USCP optional)	Livestock Enteric Fermentation	Results from ICLEI Ag Scaling Tool	V.3	Are you entering metric tons CO ₂ Equivalent as Metric Tons?	NA	Metric Tons CO ₂ Equivalent
				Metric Tons CO ₂ e from Livestock Agriculture	Metric Tons CO ₂ e	632,000
				Livestock Type	NA	Combined Livestock
				Number of Livestock	Head Count	195,959
				Data Source	NA	Other
				CO ₂ e (MT)	CO ₂ e (MT)	632,000
Emissions from Livestock Manure Management (USCP optional)	Manure Management	Results from ICLEI Ag Scaling Tool	V.3	Are you entering metric tons CO ₂ Equivalent as Metric Tons?	NA	Metric Tons CO ₂ Equivalent
				Metric Tons CO ₂ e from Livestock Agriculture	Metric Tons CO ₂ e	250,230
				Livestock Type	NA	Combined Livestock
				Number of Livestock	Head Count	3,374,582
				Data Source	NA	Other
				CO ₂ e (MT)	CO ₂ e (MT)	250,230
Emissions from Livestock Agricultural Soils (USCP optional)	Livestock Agricultural Soils - Animals	Results from ICLEI Ag Scaling Tool	V.3	Are you entering metric tons CO ₂ Equivalent as Metric Tons?	NA	Metric Tons CO ₂ Equivalent
				Metric Tons CO ₂ e from Livestock Agriculture	Metric Tons CO ₂ e	383,000
				Livestock Type	NA	Combined Livestock
				Number of Livestock	Head Count	3,374,582
				Data Source	NA	Other
				CO ₂ e (MT)	CO ₂ e (MT)	383,000
Emissions and Removals from Forests (USCP Recommended)	Forest Emissions and Removals - Undisturbed Forest	Results from ICLEI LEARN Tool	V.3	Category	NA	Undisturbed Forest
				Land Area (optional - needed for forecasting)	Hectares	2,669
				Net Annual Carbon Flux for Category	Metric Tons CO ₂ e	(15,867)
				CO ₂ e (MT)	CO ₂ e (MT)	(15,867)
Emissions and Removals from Forests (USCP Recommended)	Forest Emissions and Removals - Forest Disturbances	Results from ICLEI LEARN Tool	V.3	Category	NA	Forest Disturbances
				Land Area (optional - needed for forecasting)	Hectares	26
				Net Annual Carbon Flux for Category	Metric Tons CO ₂ e	766
				CO ₂ e (MT)	CO ₂ e (MT)	766
Emissions and Removals from Forests (USCP Recommended)	Forest Emissions and Removals - Non-Forest to Forest	Results from ICLEI LEARN Tool	V.3	Category	NA	Non-Forest to Forest
				Land Area (optional - needed for forecasting)	Hectares	2
				Net Annual Carbon Flux for Category	Metric Tons CO ₂ e	-13
				CO ₂ e (MT)	CO ₂ e (MT)	(13)
Emissions and Removals from Forests (USCP Recommended)	Forest Emissions and Removals - Forest to Grassland	Results from ICLEI LEARN Tool	V.3	Category	NA	Forest to Grassland
				Land Area (optional - needed for forecasting)	Hectares	1,100
				Net Annual Carbon Flux for Category	Metric Tons CO ₂ e	13499
				CO ₂ e (MT)	CO ₂ e (MT)	13,499
Emissions and Removals from Trees Outside of Forests (USCP Recommended)	Tree Emissions and Removals	Results from ICLEI LEARN Tool	V.3	Canopy Area	Hectares	10361
				Emissions from Tree Loss Outside of Forests	Metric Tons CO ₂ e	156,229
				CO ₂ Removals from Trees Outside of Forests	Metric Tons CO ₂ e	-204542
				CO ₂ e (MT)	CO ₂ e (MT)	-48313
Emissions from Grid Electricity	Emissions from Grid Electricity Agriculture - PGE Base Plan		V.3	Factor Set	NA	PGE Base Plan Electricity Factor Set 2022
				Were emissions calculated externally from ClearPath?	NA	No
				Electricity Used	kWh	Confidential utility data
				CO ₂ e (MT)	CO ₂ e (MT)	Confidential utility data - Total emissions are summed in the Results tab
<i>Emissions from Grid Electricity</i>	<i>Emissions from Grid Electricity Agriculture (Location-based)</i>	<i>Information Only</i>	V.3	Factor Set	NA	2022 Location-based Electricity Factor Set
				Information Only	Na	Yes - Check Box
				Were emissions calculated externally from ClearPath?	NA	No
				Electricity Used	kWh	Confidential utility data
				CO ₂ e (MT)	CO ₂ e (MT)	Confidential utility data - Total emissions are summed in the Results tab

		County-wide Results	
Scope	GHG Emissions Source (By Sector and Subsector)	2022	%
	RESIDENTIAL ENERGY	618,051	12%
1	Emissions from Fuel Combustion Within the Region Boundary	492,901	10%
1	Natural Gas	492,901	10%
2	Emissions from Grid-supplied Energy Consumed Within the Region Boundary	125,150	2%
3	Transmission and Distribution Losses from Grid-supplied Energy		0%
	COMMERCIAL ENERGY	315,944	6%
1	Emissions from Fuel Combustion Within the Region Boundary	188,825	4%
1	Commercial Natural Gas	188,825	4%
2	Emissions from Grid-supplied Energy Consumed Within the Region Boundary	127,119	2%
2	Commercial Electricity	118,185	2%
2	Agricultural Electricity	8,934	0%
3	Transmission and Distribution Losses from Grid-supplied Energy		0%
	INDUSTRIAL ENERGY	40,396	1%
	Industrial and Manufacturing Buildings and Facilities	40,396	1%
1	Emissions from Fuel Combustion Within the Region Boundary	0	0%
1	Natural Gas	0	0%
2	Emissions from Grid-supplied Energy Consumed Within the Region Boundary	40,396	1%
3	Transmission and Distribution Losses from Grid-supplied Energy		0%
	Energy Industries	0	0%
1	Emissions from Energy Production Used in Power Plant Auxiliary Operations Within the Region		0%
2	Emissions from Grid-supplied Energy Consumed by Energy Industries		0%
3	Emissions from Transmission and Distribution Losses From Grid-supplied Energy Used in Power Plant Auxiliary Operations		0%
1	Emissions from Energy Generation Supplied to the Grid		0%
	PROCESS AND FUGITIVE EMISSIONS	42,444	1%
	Fugitive Emissions From Mining, Processing, Storage, and Transportation of Coal	0	0%
1	Fugitive Emissions from Mining, Processing, Storage, and Transportation of Coal Within the Region Boundary		0%
	Fugitive Emissions From Oil and Natural Gas Systems	22,075	0%
1	Fugitive Emissions from Natural gas Systems Within the Region Boundary	22,075	0%
1	Natural Gas Leakage	22,075	0%
	Industrial Processes	20,369	0%
1	Emissions from Industrial Processes Occurring in the Region Boundary	20,369	0%
1	Emissions from Product use Occurring Within the Region Boundary		0%
	TRANSPORTATION AND MOBILE SOURCES	2,613,183	51%
	On-road Transportation	2,046,236	40%
1	Emissions from Fuel Combustion On-road Transportation Occurring in the Region	2,045,308	40%
1	Personal Vehicles	1,543,619	30%
1	Small Commercial Trucks	139,027	3%
1	Medium Commercial Trucks and Buses	60,808	1%
1	Large Commercial Trucks and Buses	301,854	6%
2	Emissions from Grid-supplied Energy Consumed in the Region for On-road Transportation	928	0%
2	Personal Vehicles	925	0%
2	Small Commercial Trucks	0	0%
2	Medium Commercial Trucks and Buses	1	0%
2	Large Commercial Trucks and Buses	2	0%
3	Emissions from Transboundary Journeys Occurring Outside the Region and T&D Losses From Grid-supplied Energy Use		0%
	Railways	32,868	1%
1	Emissions from Fuel Combustion for Railway Transportation Occurring in the Region	32,868	1%
1	Passenger Rail - Renewable Diesel	46	0%
1	Freight Rail - Diesel	32,822	1%
2	Emissions from Grid-supplied Energy Consumed in the Region for Railways		0%

3	Emissions from Transboundary Journeys Occurring Outside the Region and T&D Losses from Grid-supplied Energy Use		0%
	Waterborne Navigation	29,529	1%
1	Emissions from Fuel Combustion for Waterborne Navigation Occurring in the Region	29,529	1%
2	Emissions from Grid-supplied Energy Consumed in the Region for Waterborne Navigation		0%
3	Emissions from Transboundary Journeys Occurring Outside the Region and T&D Losses from Grid-supplied Energy Use		0%
	Aviation	12,608	0%
1	Emissions from Fuel Combustion for Aviation Occurring in the Region	12,608	0%
2	Emissions from Grid-supplied Energy Consumed in the Region for Aviation		0%
3	Emissions from Transboundary Journeys Occurring Outside the Region and T&D Losses from Grid-supplied Energy Use		0%
	Off-road Transportation	491,942	10%
1	Emissions from Fuel Combustion for Off-road Transportation Occurring in the Region	491,942	10%
1	Off-road	491,942	10%
2	Emissions from Grid-supplied Energy Consumed in the Region for Off-road Transportation		0%
3	Emissions from Transboundary Journeys Occurring Outside the Region and T&D Losses from Grid-supplied Energy Use		0%
	SOLID WASTE	196,233	4%
	Solid Waste Disposal	180,897	4%
1	Emissions from Solid Waste Landfilled Within the Region	180,897	4%
3	Emissions from Solid Waste Generated in the Region and Disposed in Landfills or Open Dumps Outside the Region		0%
1	Emissions from Waste Generated Outside the Region and Disposed in Landfills or Open Dumps Within the Region		0%
	Biological Treatment of Waste	15,336	0%
1	Emissions from Solid Waste Treated Biologically in the Region	15,336	0%
3	Emissions from Solid Waste Generated in the Region but Treated Biologically Outside of the Region		0%
1	Emissions from Waste Generated Outside the Region Boundary but Treated in the Region		0%
	Incineration and Open Burning	0	0%
1	Emissions from Waste Generated and Treated Within the Region		0%
3	Emissions from Waste Generated Within but Treated Outside of the Region		0%
1	Emissions from Waste Generated Outside the Region Boundary but Treated Within the Region		0%
	WATER AND WASTEWATER	21,791	0%
	Potable Water Supply	1,031	0%
2	Electricity use for potable water supply	1,031	0%
	Wastewater Treatment and Discharge	20,760	0%
1	Emissions from Wastewater Generated and Treated Within the Region	20,760	0%
1	Wastewater Treatment	4,675	0%
1	Wastewater Effluent	3,366	0%
1	Wastewater Digester Gas Combustion or Flaring	118	0%
1	Septic Systems	12,602	0%
3	Emissions from Wastewater Generated Within but Treated Outside of the Region	0	0%
1	Emissions from Wastewater Generated Outside the Region Boundary but Treated Within the Region		0%
	AGRICULTURE	1,298,221	25%
1	Emissions from Livestock Within the Region Boundary	1,265,230	25%
1	Emissions from Crop Agriculture Within the Region Boundary	32,991	1%
	FORESTS AND TREES EMISSIONS	170,494	3%
1	Emissions from Forests within the Region boundary	14,265	0%
1	Emissions from Trees Outside of Forests within the Region boundary	156,229	3%
	FORESTS AND TREES REMOVALS	-220,422	-4%
1	Removals from Forests within the Region boundary	-15,880	0%
1	Removals from Trees Outside of Forests within the Region boundary	-204,542	-4%

	OTHER SCOPE 3	0	0%
3			0%
	GROSS TOTAL (excludes forest and tree emissions and removals)	5,146,263	100%
	NET TOTAL (includes forest and tree emissions and removals)	5,096,335	

REGION WIDE RESULTS

Simplified Sectors	MTCO2e
Transportation	2,613,183
Agriculture	1,298,221
Buildings	1,016,835
Waste and Water	218,024
Forest and Trees	-49,928
Net total	5,096,335

Sector	2022 GHG Emissions (MTCO ₂ e)	% of Total Gross Emissions
Transportation	2,613,183	51%
Agriculture	1,298,221	25%
Residential Energy	618,051	12%
Commercial Energy	315,944	6%
Solid Waste	196,233	4%
Process and Fugitive Emissions	42,444	1%
Industrial Energy	40,396	1%
Water and Wastewater	21,791	0%
Gross Emissions (Excluding Forest and Trees)	5,146,263	100%
Forests and Tree Emissions	170,494	NA
Forest and Tree Removals	-220,422	NA
Net Emissions (Including Forest and Trees)	5,096,335	NA

Sector and Activity Type	MT CO ₂ e	% of Gross Emissions
Transportation	2,613,183	50.8%
On-Road Fuel Use	2,046,236	39.8%
Other Off-Road	491,942	9.6%
Freight Rail	32,822	0.6%
Waterborne Craft	29,529	0.6%
Aviation	12,608	0.2%
Passenger Rail	46	0.0%
Agriculture	1,298,221	25.2%
Livestock	1,265,230	24.6%
Crop Agriculture	32,991	0.6%
Residential Energy	618,051	12.0%
Electricity	125,150	2.4%
Natural Gas	492,901	9.6%
Commercial Energy	315,944	6.1%
Electricity	127,119	2.5%
Natural Gas	188,825	3.7%
Solid Waste	196,233	3.8%
Landfilled Waste	180,897	3.5%
Composted Waste	15,336	0.3%
Process and Fugitive Emissions	42,444	0.8%
Fugitive Natural Gas Distribution	22,075	0.4%
Glass Production Processes	20,369	0.4%
Industrial Energy	40,396	0.8%
Electricity	40,396	0.8%
Water and Wastewater	21,791	0.4%
Potable Water Use	1,031	0.0%

Wastewater Treatment and Discharge	20,760	0.4%
Forest and Trees	-49,928	
Forests and Tree Emissions	170,494	
Forest and Tree Removals	-220,422	
Gross Emissions (Excluding Forest and Trees)	5,146,263	100.0%
Net Emissions (Including Forests and Trees)	5,096,335	

*Totals may not sum due to rounding

