

Description: Established in 1887, the Turlock Irrigation District (TID) was the first publicly owned irrigation district in the state and is one of only four in California today that also provides electric retail energy directly to homes, farms and businesses. Organized under the Wright Act, the District operates under the provisions of the California Water Code as a special district. TID is also an independent control area and is governed by a five member Board of Directors.

Since 1923, TID has been providing safe, affordable and reliable electricity to a growing retail customer base that now numbers in excess of 98,000 residential, farm, business, industrial and municipal accounts in an electric service area that encompasses 662 square-miles in portions of Stanislaus, Merced, Tuolumne and Mariposa counties.

TID provides irrigation water to more than 5,800 growers in a 307 square-mile service area that incorporates 149,500 acres of Central Valley farmland. The District has been delivering irrigation water to growers since completing its gravity-fed water conveyance system of canals and laterals in 1900. The Tuolumne River is the District's primary source of water, originating at Mt. Lyell in Yosemite National Park. Water for irrigation and hydroelectric power production is kept at Don Pedro Reservoir about 50 miles east of Turlock in the Sierra Nevada foothills near the historic gold rush era town of La Grange.

Industry: 22 - Utilities

Address: 333 East Canal Dr **Contact:** 209-535-7797 www.tid.org

Reporting Information

Inventory Type Complete

Reporting Protocol: GRP 3.0

GWP Standard: AR5

Base Year:

Scope 2 method N/A - No Base Year reported

Reporting Year Type Calendar Year

Consolidation Methodology: Operational Control Only

Status: TCR Accepted

Verification Information

Verification Body: TÜV SÜD America, Inc - Ruby Canyon

Level of Assurance: Reasonable

Entity Emissions | Total in metric tons of CO2e

Scope 1 - Direct Emissions	Total CO2e (t)	CO2 (t)	CH4 (t of CO2e)	N2O (t of CO2e)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t of CO2e)	SF6 (t of CO2e)
Stationary Combustion - Scope 1	810,871.038424	800,136.00082	540.033431	10,195.004173	0	0	0	0
Mobile Combustion - Scope 1	3,188.828178	3,162.244021	5.469475	21.114682	0	0	0	0
Fugitive - Scope 1	47.72373	6.118	0	0	12.82528	0	0	28.78045
Total	814,107.590332	803,304.362841	545.502906	10,216.118855	12.82528	0	0	28.78045
Applied Offsets								
Net Total	814,107.590332							

Scope 2 - Location Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t of CO2e)	N2O (t of CO2e)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t of CO2e)	SF6 (t of CO2e)
Purchased Electricity - Location Based - Scope 2	8,858.813744	8,816.36871	18.212344	24.23269	0	0	0	0
Purchased Heating - Location Based - Scope 2	0	0	0	0	0	0	0	0
Total	8,858.813744	8,816.36871	18.212344	24.23269	0	0	0	0
Applied Offsets								
Net Total	8,858.813744							

Scope 2 - Market Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t of CO2e)	N2O (t of CO2e)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t of CO2e)	SF6 (t of CO2e)
Purchased Electricity - Market Based - Scope 2	6,398.362169	6,369.261795	12.625793	16.474581	0	0	0	0
Purchased Heating - Market Based - Scope 2	0	0	0	0	0	0	0	0

Total	6,398.362169	6,369.261795	12.625793	16.474581	0	0	0	0
Applied Offsets								
Net Total	6,398.362169							

Entity Emissions | Total in metric tons of gas

Scope 1 - Direct Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC CO2e (t of CO2e)	NF3 (t)	SF6 (t)
Stationary Combustion - Scope 1	810,871.038424	800,136.00082	19.286899	38.471704	0	0	0	0
Mobile Combustion - Scope 1	3,188.828178	3,162.244021	0.195334	0.079674	0	0	0	0
Fugitive - Scope 1	47.72373	6.118	0	0	12.82528	0	0	0.001224
Total	814,107.590332	803,304.362841	19.482233	38.551378	12.82528	0	0	0.001224

Scope 2 - Location Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC CO2e (t of CO2e)	NF3 (t)	SF6 (t)
Purchased Electricity - Location Based - Scope 2	8,858.813744	8,816.36871	0.650436	0.091438	0	0	0	0
Purchased Heating - Location Based - Scope 2	0	0	0	0	0	0	0	0
Total	8,858.813744	8,816.36871	0.650436	0.091438	0	0	0	0

Scope 2 - Market Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC CO2e (t of CO2e)	NF3 (t)	SF6 (t)
Purchased Electricity - Market Based - Scope 2	6,398.362169	6,369.261795	0.450917	0.062164	0	0	0	0

Purchased Heating - Market Based - Scope 2	0	0	0	0	0	0	0	0
Total	6,398.362169	6,369.261795	0.450917	0.062164	0	0	0	0

Simplified Estimation Methods (SEMs)

	Total Estimated CO2e (t)	Total Emissions (t of CO2e)	Estimated CO2e as a Percentage of Total*
Location-based	0	822,967	0.00%
Market-based	0	820,506	0.00%

*Total based on Scope 1, Scope 2, & biomass emissions

Facility Emissions | Almond 2 Power Plant

Equity share - 100.00 | Entity controls the facility emissions - Yes

Scope 1 - Direct Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Stationary Combustion - Scope 1	71,674.075431	71,211.18928	5.099934	1.207879	0	0	0	0
Total	71,674.075431	71,211.18928	5.099934	1.207879	0	0	0	0

Facility Emissions | Almond Power Plant

Equity share - 100.00 | Entity controls the facility emissions - Yes

Scope 1 - Direct Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Stationary Combustion - Scope 1	33,291.04316	33,076.052783	2.368709	0.561004	0	0	0	0
Fugitive - Scope 1	1.18	1.18	0	0	0	0	0	0
Total	33,292.22316	33,077.232783	2.368709	0.561004	0	0	0	0

Facility Emissions | Buildings

Equity share - 100.00 | Entity controls the facility emissions - Yes

Scope 1 - Direct Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Stationary Combustion - Scope 1	110.601039	110.272473	0.009764	0.000204	0	0	0	0
Total	110.601039	110.272473	0.009764	0.000204	0	0	0	0

Scope 2 - Location Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Purchased Heating - Location Based - Scope 2	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0

Scope 2 - Market Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
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Purchased Heating - Market Based - Scope 2	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0

Facility Emissions | Don Pedro Recreation Agency

Equity share - 100.00 | Entity controls the facility emissions - Yes

Scope 1 - Direct Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Mobile Combustion - Scope 1	231.319607	229.100131	0.028586	0.005352	0	0	0	0
Total	231.319607	229.100131	0.028586	0.005352	0	0	0	0

Scope 2 - Location Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Purchased Electricity - Location Based - Scope 2	9.342934	9.307382	0.000561	0.000074	0	0	0	0
Total	9.342934	9.307382	0.000561	0.000074	0	0	0	0

Scope 2 - Market Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Purchased Electricity - Market Based - Scope 2	3.895664	3.860112	0.000561	0.000074	0	0	0	0
Total	3.895664	3.860112	0.000561	0.000074	0	0	0	0

Facility Emissions | Emergency Generators

Equity share - 100.00 | Entity controls the facility emissions - Yes

Scope 1 - Direct Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Stationary Combustion - Scope 1	5.247714	5.227508	0.000247	0.000048	0	0	0	0
Total	5.247714	5.227508	0.000247	0.000048	0	0	0	0

Facility Emissions | Mobile Fleet Combustion Emissions

Equity share - 100.00 | Entity controls the facility emissions - Yes

Scope 1 - Direct Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Mobile Combustion - Scope 1	2,957.508571	2,933.14389	0.166748	0.074322	0	0	0	0
Fugitive - Scope 1	12.82528	0	0	0	12.82528	0	0	0
Total	2,970.333851	2,933.14389	0.166748	0.074322	12.82528	0	0	0

Facility Emissions | Power Plants and Substations

Equity share - 100.00 | Entity controls the facility emissions - Yes

Scope 2 - Location Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Purchased Electricity - Location Based - Scope 2	40.55972	40.405384	0.002434	0.000322	0	0	0	0

Total	40.55972	40.405384	0.002434	0.000322	0	0	0	0
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Scope 2 - Market Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Purchased Electricity - Market Based - Scope 2	16.911805	16.757469	0.002434	0.000322	0	0	0	0
Total	16.911805	16.757469	0.002434	0.000322	0	0	0	0

Facility Emissions | Transmission and Distribution System

Equity share - 100.00 | Entity controls the facility emissions - Yes

Scope 1 - Direct Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Fugitive - Scope 1	28.78045	0	0	0	0	0	0	0.001224
Total	28.78045	0	0	0	0	0	0	0.001224

Scope 2 - Location Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Purchased Electricity - Location Based - Scope 2	8,808.91109	8,766.655944	0.647441	0.091042	0	0	0	0
Total	8,808.91109	8,766.655944	0.647441	0.091042	0	0	0	0

Scope 2 - Market Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Purchased Electricity - Market Based - Scope 2	6,377.5547	6,348.644214	0.447922	0.061768	0	0	0	0

Total	6,377.5547	6,348.644214	0.447922	0.061768	0	0	0	0
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Facility Emissions | Walnut Energy Center

Equity share - 100.00 | Entity controls the facility emissions - Yes

Scope 1 - Direct Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Stationary Combustion - Scope 1	705,527.347911	695,471.498615	11.796633	36.700164	0	0	0	0
Fugitive - Scope 1	4.938	4.938	0	0	0	0	0	0
Total	705,532.285911	695,476.436615	11.796633	36.700164	0	0	0	0

Facility Emissions | Walnut Power Plant

Equity share - 100.00 | Entity controls the facility emissions - Yes

Scope 1 - Direct Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Stationary Combustion - Scope 1	262.723169	261.760161	0.011612	0.002405	0	0	0	0
Fugitive - Scope 1	0	0	0	0	0	0	0	0
Total	262.723169	261.760161	0.011612	0.002405	0	0	0	0