

Colorado State University Greenhouse Gas Report for FY22

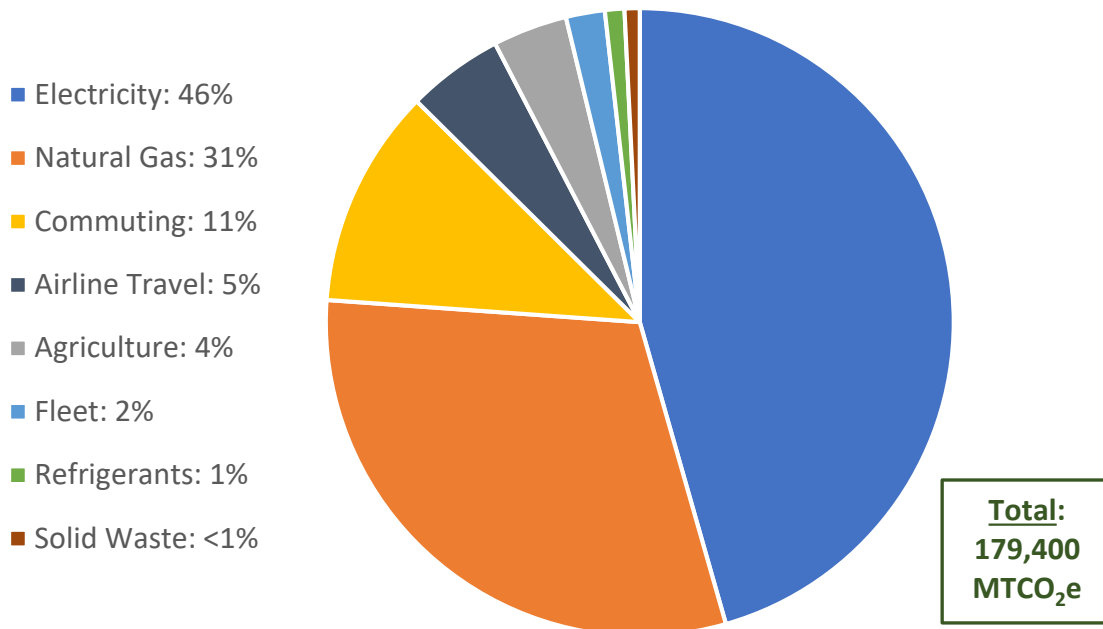
What is a greenhouse gas inventory? And how is Colorado State doing?

Organizations use greenhouse gas (GHG) inventories to measure the environmental impacts and GHG emissions. All the organization's activities are accounted for, and the global warming potential of each gas is then converted into equivalent units of CO₂ (carbon dioxide).

Most higher education institutions complete an annual GHG inventory, as do many major businesses, cities, counties, and states. Each sector follows defined protocols to gather and report data. CSU follows criteria unique to higher education, which enables CSU to compare emissions within the higher education sector and consistently track progress over time.

Measuring impacts at CSU

CSU's FY22 GHG inventory summarized in eight categories:



What surprises you about CSU's emissions? Did you notice purchased electricity is the largest portion of our footprint, or that solid waste is the smallest – why is that? Why are electricity and natural gas so BIG? ...buildings – and all the fossil-based fuels used to operate them.

If you want to help CSU reduce its GHG footprint – help reduce the amount of electricity we consume! Until the electricity we purchase comes from 100% renewable sources, reducing the amount of electricity we consume has the largest direct impact to our carbon footprint.

Reducing electricity consumption is a way each of us has an opportunity to help make a difference every day. A GHG inventory tells a lot about an organization's operational impacts, and highlights areas that need the greatest focus to reduce GHG emissions.

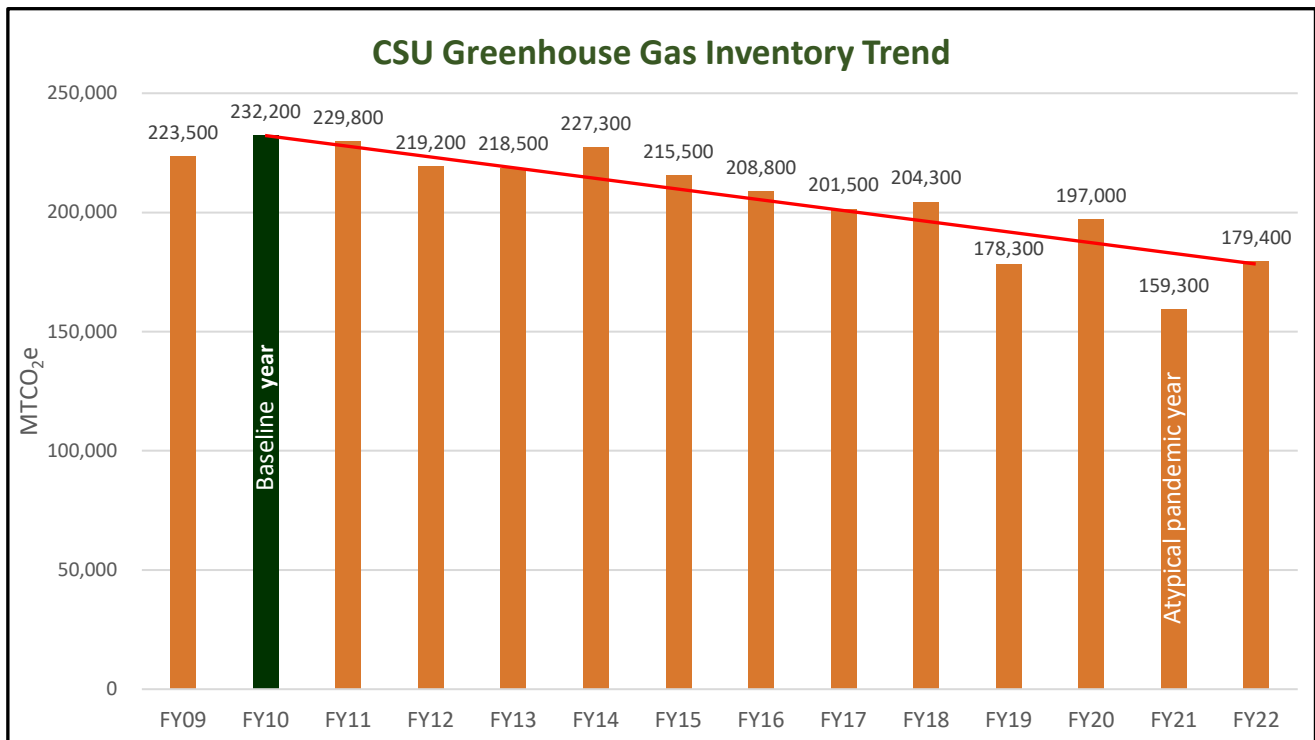
The FY22 inventory is presented as a pie chart above and as a table below – the categories and impacts are the same.

CSU’s FY22 GHG inventory summarized in eight categories:

Category	FY22 MTCO ₂ e	Percent	Scope
Electricity	81,900	46%	2,3
Natural Gas	54,900	31%	1
Commuting	20,300	11%	3
Airline Travel	8,900	5%	3
Agriculture	6,900	4%	1
Fleet Vehicles	3,600	2%	1
Refrigerants	1,800	1%	1
Solid Waste	1,400	<1%	3
Credits (Compost)	-100	<1%	N/A
Total	179,400	100%	

Emissions by category in metric tons of CO₂ equivalents (MTCO₂e), percent contribution, and scope.

How are we doing over time?



CSU’s GHG Emissions Trend – 23% reduction since FY10

CSU's first GHG emissions inventory began with FY06; however, FY10 is the baseline year to which others are compared, aligning with CSU's first adopted Climate Action Plan. Overview:

- 232,200 MTCO₂e – FY10, baseline which future inventories are measured against
- 178,300 MTCO₂e – FY19, down 23% from baseline (this sizeable reduction was mostly attributed to a large purchase of renewable energy credits – RECs)
- 159,300 MTCO₂e – FY21, down 31% from baseline. This atypical year was significantly impacted by the COVID-19 global pandemic, airline travel and commuting most of all. Absent the pandemic, it is estimated that emissions would have been 187,200 MTCO₂e, which would reflect progress of 20% below baseline.
- 179,400 MTCO₂e – FY22, down 23% from baseline year. FY22 was higher than FY21 due to the greater volume of commuting and airline travel as COVID-19 pandemic restrictions eased and in-person attendance increased, but continued a downward trend from the baseline year.

CSU adopted its first Climate Action Plan (CAP) in 2010 to chart the course to reduce emissions. The plan is revised every few years. In 2021, CSU adopted a new goal of carbon neutrality by 2040. The current CAP, completed mid-2022, reflects this updated goal by outlining strategies for emission reductions in the key emission categories. View the 2022 Climate Action Plan Update [here](#) or visit the [Facilities Management Sustainability Reports Page](#) to see previous versions of the CAP and past GHG Inventories.

For questions related to the GHG inventory, the data collection, input activity, or formal output, please contact Carol.Dollard@colostate.edu or Stacey.Baumgarn@colostate.edu. For a more technical view and reference, see the summary output of the Excel-based inventory tool below:

FY22 – GHG Summary – Colorado State University		
Scope	Source / Category	Total Emissions MTCO ₂ e
Scope 1	Stationary Fuels – Natural Gas, Propane	54,900
	Fleet Fuels	3,600
	Refrigerants	1,800
	Agriculture – Animals & Fertilizers	6,900
Scope 2	Purchased Electricity	78,900
Scope 3	Faculty Commuting	1,100
	Staff Commuting	4,100
	Student Commuting	15,100
	Directly Financed Air Travel	8,900
	Solid Waste	1,400
	Scope 3 Transmission & Distribution Losses	3,000
Offsets	Additional Offsets (composting)	-100
	Non-Additional Offsets – already subtracted from Electricity Use	0
	Scope 1 total	67,100
	Scope 2 total	78,900
	Scope 3 total	33,500
	Total All Scopes	179,500
	Total Offsets	-100
	FY22 Net Emissions	179,400