

December JSC Sustainable Procurement Program and Procurement Emissions Inventory update

December 13, 2023




OFFICE OF
SUSTAINABILITY

CITY OF AUSTIN



Sustainable Procurement Program

- 
- **Past-** Timeline
 - **Present-** Program development supported by SPLC
 - **Future-** Next Steps

Sustainable Procurement Initiatives

- 2004 Air Quality Improvement Through contracting preference
- 2005 United Nations Urban Environmental Accords Zero Waste by 2040
- 2007 Carbon Neutrality Plan, Sustainability Standards in Municipal Projects
- 2008 Responsible (Green) Purchasing Program initiated ;
Resolution to Eliminate Purchasing of Plastic Bottles
- 2014-2017 Internal training materials developed
- 2018 Sustainable Procurement Program policy vision text developed
- 2020 Climate Equity Plan goals adopted
- 2022 Baseline Procurement Emission Inventory Year w/ Parametrix
- 2023 SPLC Sustainable Procurement Program support

Sustainable Procurement Leadership Council Coaching

SP Foundations+

- Four virtual 1-hour workshops over a 2 –4-month period, plus additional SPLC staff consulting hours for set hourly rate
- 1 – 4 people from the same organization
- Activities: document existing organizational commitments/priorities/activities; fine tune vision and define program; filter goals by feasibility and impact; work through strategy cycle for selected strategies
- Outputs: organizational inventory, program vision and charter, strategic program plan including goals & strategies, recommended resources for your program
- Quarterly check-ins with SPLC staff

SP Program Components

- - Vision
- × - Program Charter
- × - Establishing Goals and Metrics
- × - Strategy Development
- × - Staff Engagement and Accountability

Vision

We envision a future where every purchase we make is a statement of our commitment to sustainability, fostering a balance between people, planet, and prosperity. By choosing climate-friendly, environmentally preferred and ethically-sourced products, and investing in small businesses, we strive to create a positive impact on the environment, communities, and future generations.

Strengthening the City's sustainable procurement program

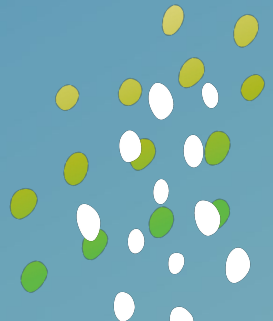
A **program charter** defines the ways in which our program will work toward the vision and includes:

- × Program objectives
- × Program and Resource Commitments
- × Program Structure
- × Prioritization
- × Focus Areas
- × Metrics for Success
- × Continuous Improvements

Next Steps:

Continue sustainable procurement program coaching with SPLC

Plan to spend 2023-2024 budgeted \$100K on sustainable procurement program development and climate plan implementation Goal 2 Strategies #1-2



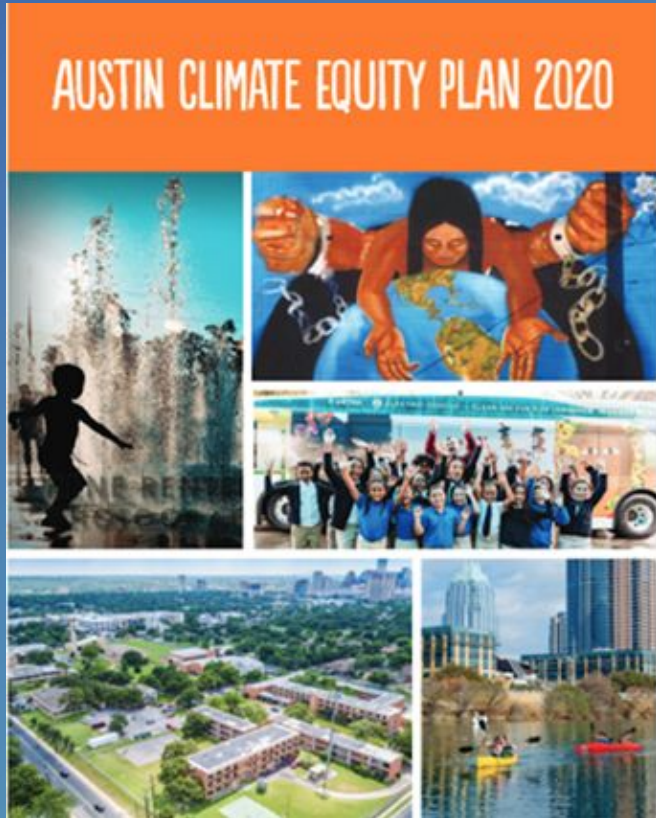


Sustainable Procurement Program Focus Area Update:

Procurement Emissions and Impacts

- Procurement Inventory Intro
- Preliminary Results
- Next Steps

Climate plan and Procurement

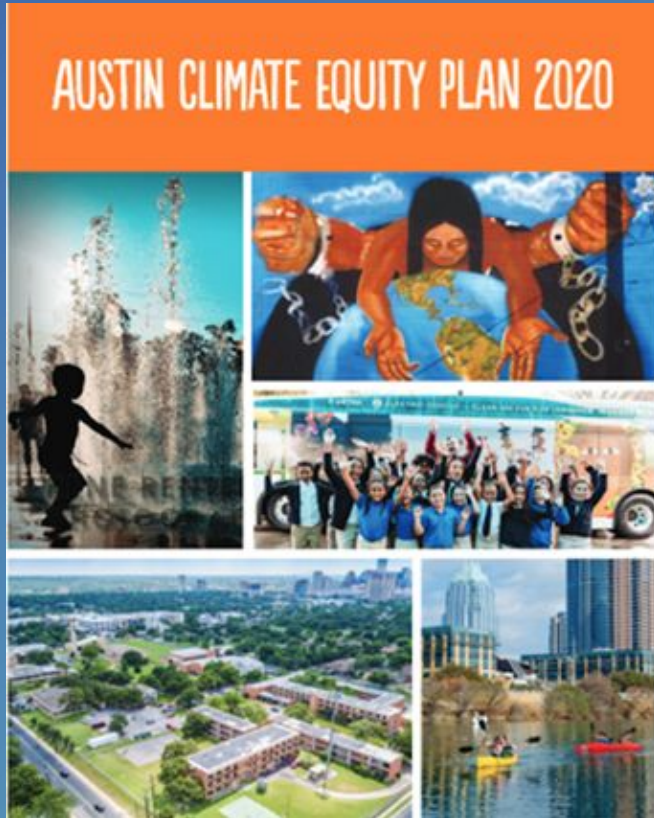


Food and Product Consumption Goals

Goal 2: By 2030, reduce greenhouse gas emissions from institutional, commercial, and government purchasing by at least 50%.

1. Measure institutional lifecycle emissions
 - Develop a methodology to measure lifecycle *greenhouse gas emissions* and other environmental and social impacts *from non-residential purchasing* and identify a baseline for progress
2. Strengthen the City's sustainable purchasing program
3. Strengthen non-City institutional purchasing programs
4. Expand the City's Circular Economy Program

Climate plan and Procurement



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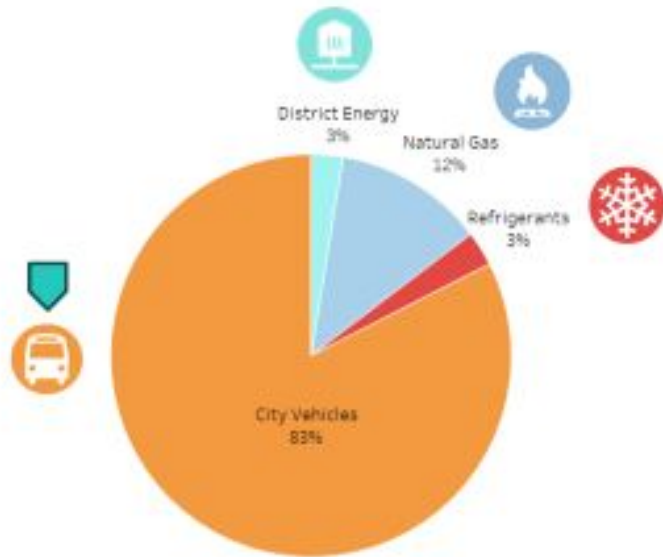
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Carbon Emission “Scopes”



City of Austin Municipal Footprint

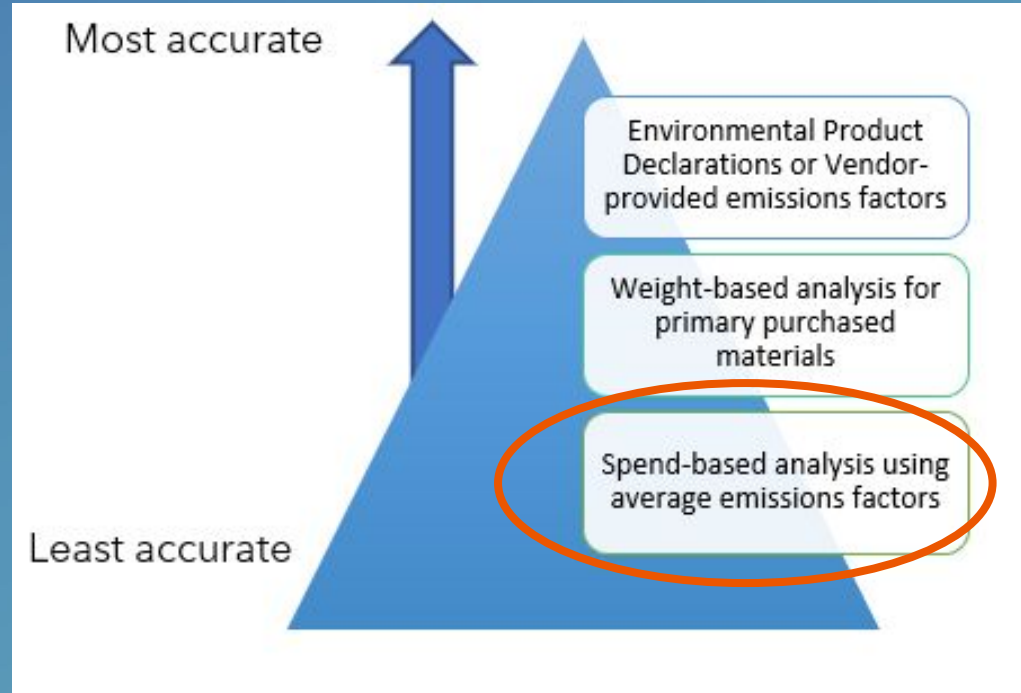
Scopes 1 and 2



2022 Net Emissions: 44k metric tons CO₂e

Methodology characteristics

- Developed from universally accepted guidance
- Spend-based methodology uses basic industry-wide emissions factors to estimate emissions, and does not consider Austin's spending commitments or use EPDs or vendor provided emissions factors



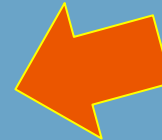
Emissions and Impacts from Purchasing, inventory process:

Basic accounting for
first/baseline year;
Follow-up inventory

Analysis for action
planning and
prioritization

Develop purchasing
emissions reduction
(CO2/\$) strategies

Implement and
monitor



Emissions and Impacts from Purchasing, inventory process:

DRAFT RESULTS

Basic accounting for
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Spending by Category- Draft

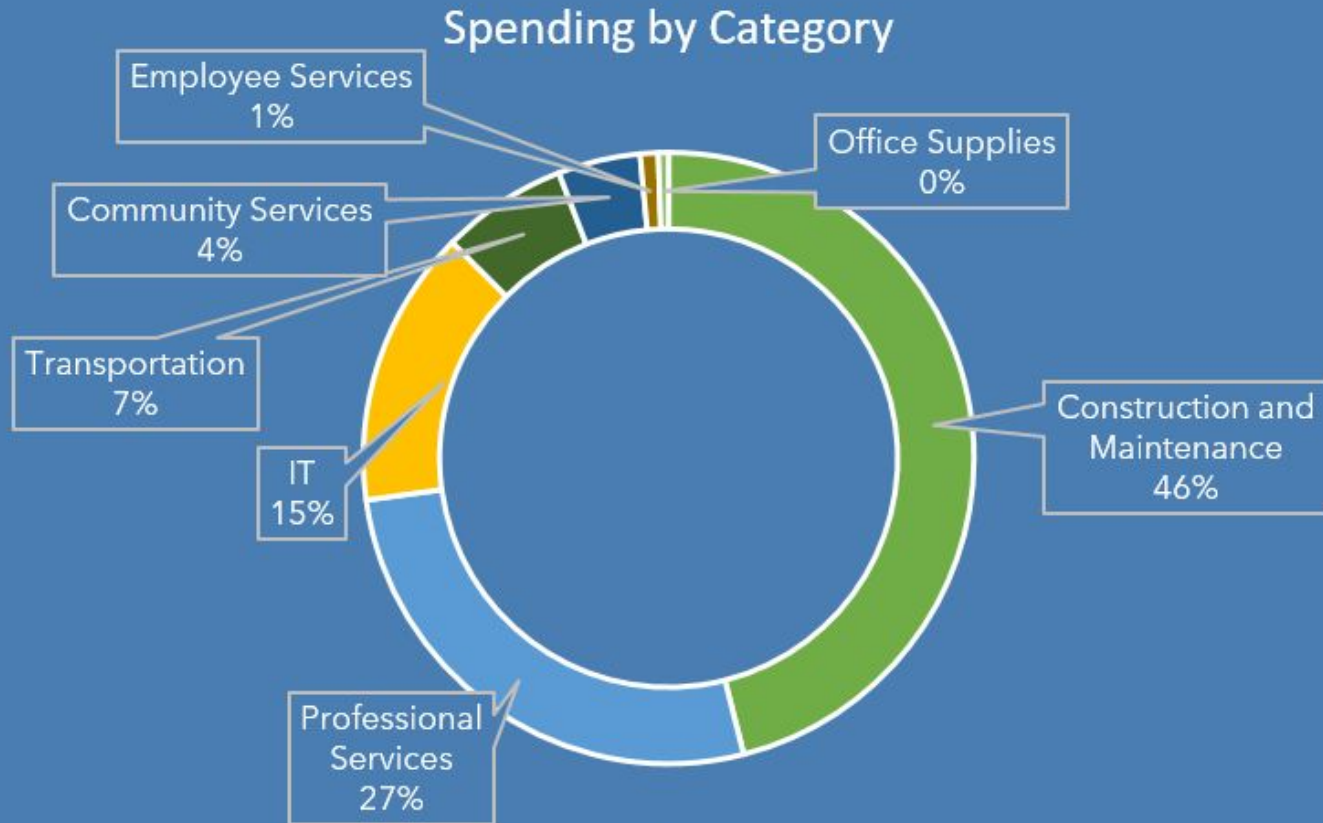


Chart A

Human Respiratory Impacts - Draft

Figure 4: Category contributions to HRSP impacts

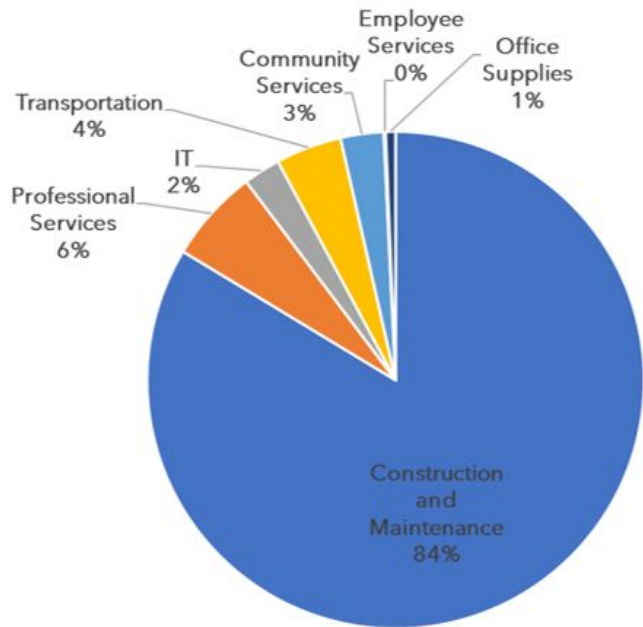


Figure 3: Top 10 HRSP impacts by intensity



Overall HRSP impacts from 2022 City of Austin purchasing was 223,000 kg PM2.5e.

ETOX intensity - Draft

Figure 6: Category contributions to ETOX impacts

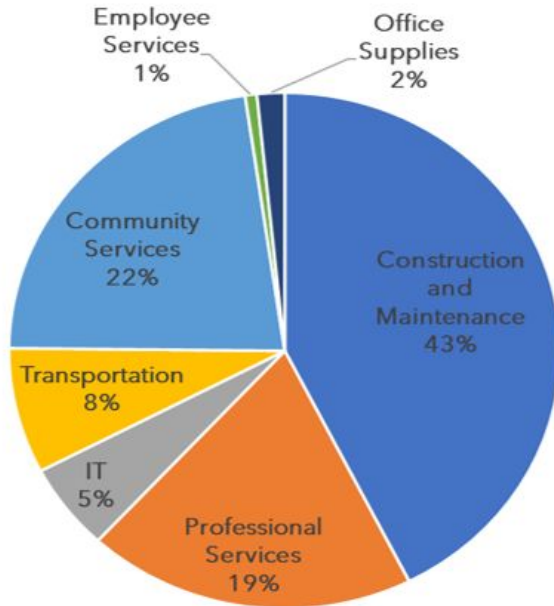
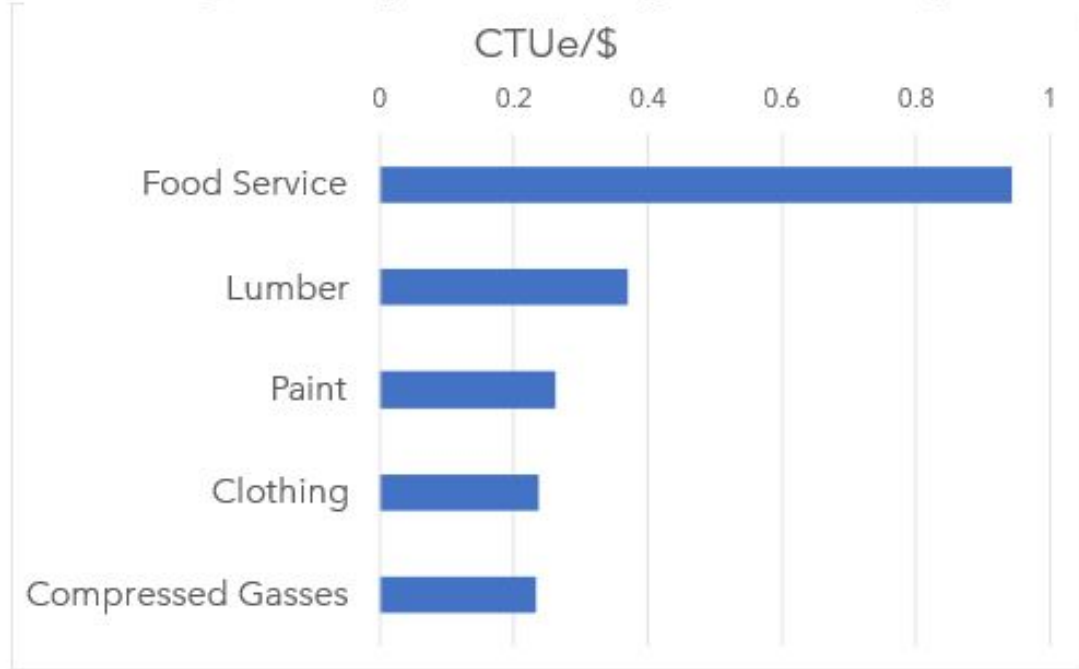


Figure 5: Top 5 Products by ETOX intensity



Water use Intensity - Draft

Figure 7: Category contributions to Water Use intensity

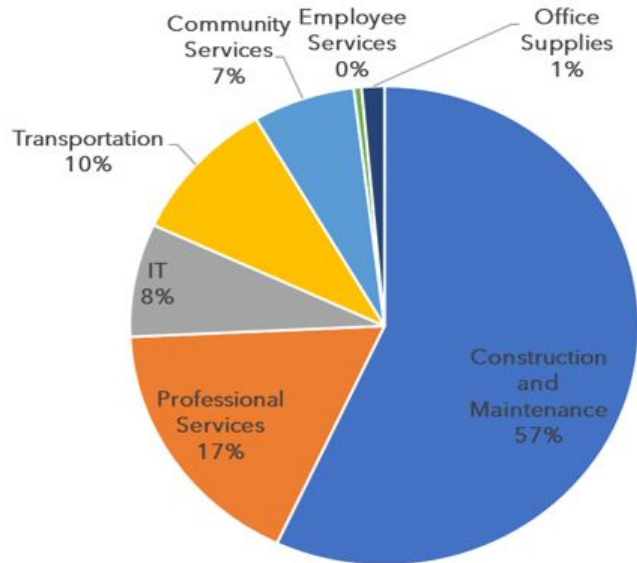
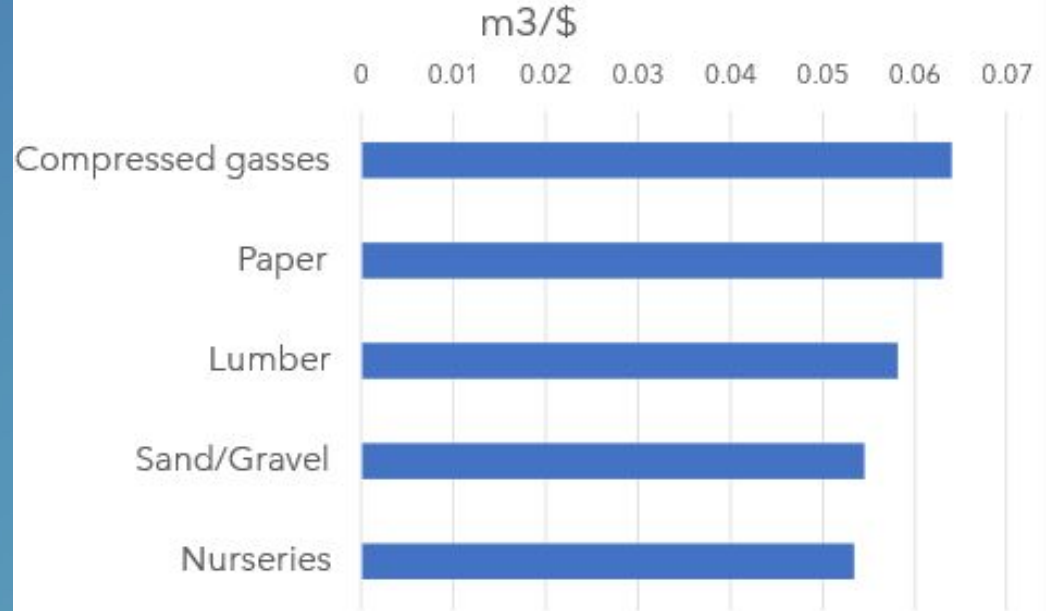


Figure 8: Water use intensity



Energy Impacts- Draft

Figure 10 Energy Impacts by Category

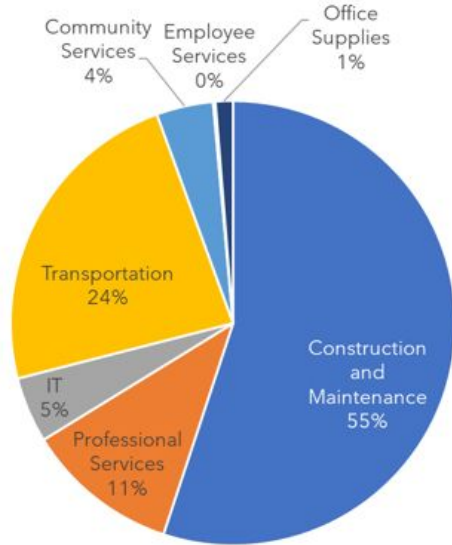
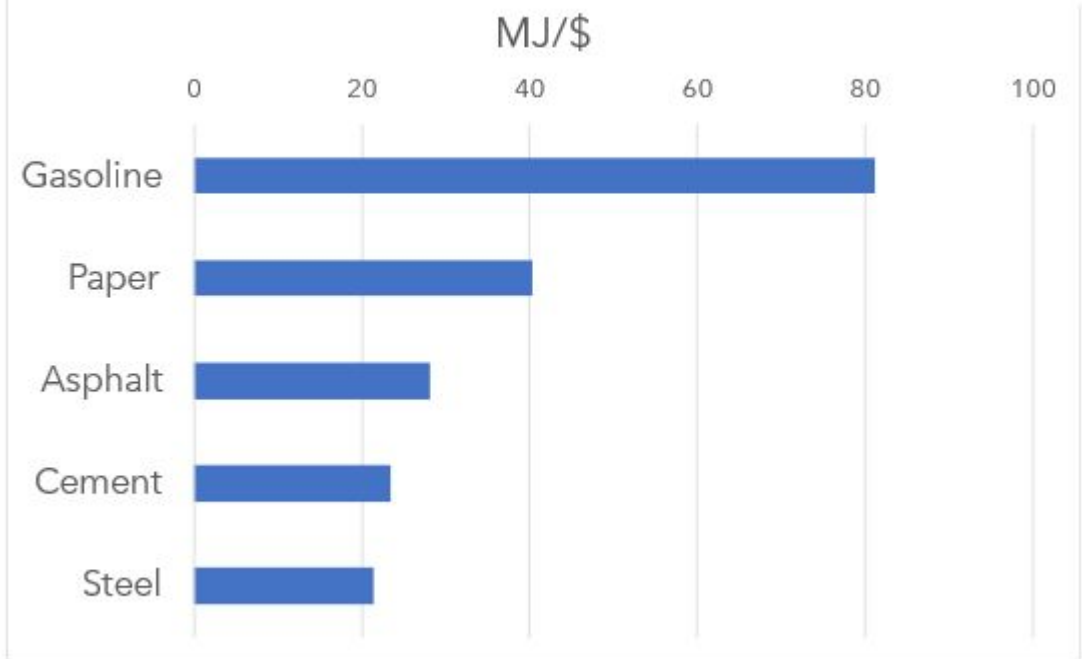


Figure 9: Top 5 products by Energy Use Intensity

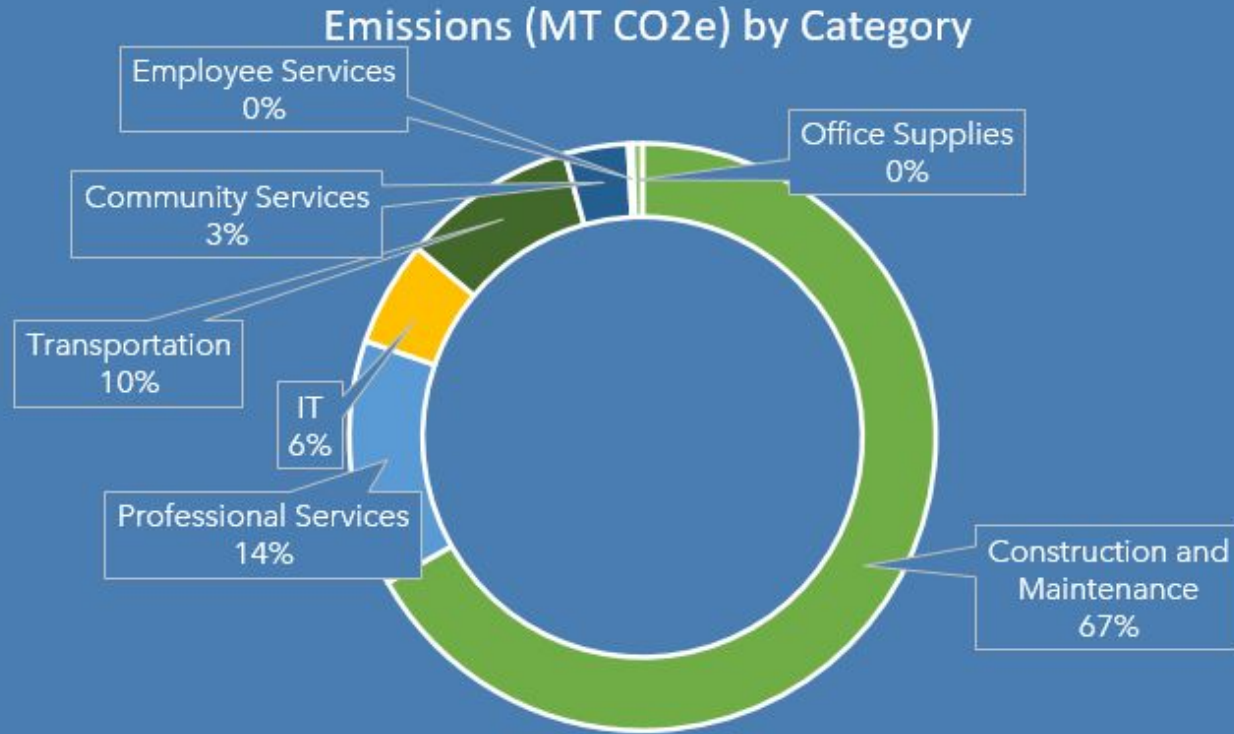


Emissions

by Spending category - Draft

		Total Spend \$	GHG Emissions MT CO2e
Construction and maintenance	Capital Construction	\$ 216,809,429	86,544
	Green Space Maintenance	\$ 14,998,125	5,625
	Major Equipment	\$ 45,464,013	12,751
	Operations & Maintenance	\$ 98,461,336	28,616
	Small hardware and accessories	\$ 51,499,611	18,735
	Waste and Recycling	\$ 55,018	53
Professional Services	Consultants	\$ 79,884,641	7,308
	Education & Training	\$ 3,131,863	337
	Engineering	\$ 142,953,767	18,810
	Insurance	\$ 2,877,780	128
	Other	\$ 19,505,916	1,991
IT	Software	\$ 68,649,365	4,494
	Data Services	\$ 18,075,321	1,718
	Hardware and Equipment	\$ 29,123,027	4,278
	IT Services	\$ 20,213,351	1,845
Transportation	Equipment	\$ 1,467,690	166
	Fuel	\$ 9,184,810	5,752
	Maintenance	\$ 1,742,505	568
	New vehicles	\$ 49,597,097	15,027
Community Services	Supplies	\$ 19,769,861	5,068
	Support and Assistance Programmin	\$ 9,000,226	2,058
	Utility Services	\$ 11,681,675	2,928
Employee Services	Administration	\$ 435,815	36
	Insurance	\$ 7,894,217	319
	Other benefits	\$ 503,878	113
Office Supplies	Furniture	\$ 1,967,341	707
	Printing & Postage	\$ 1,209,018	954
	Supplies	\$ 1,814,920	522

Emissions by Spending Category



2022 Procurement emissions:
206,000 MT CO₂e

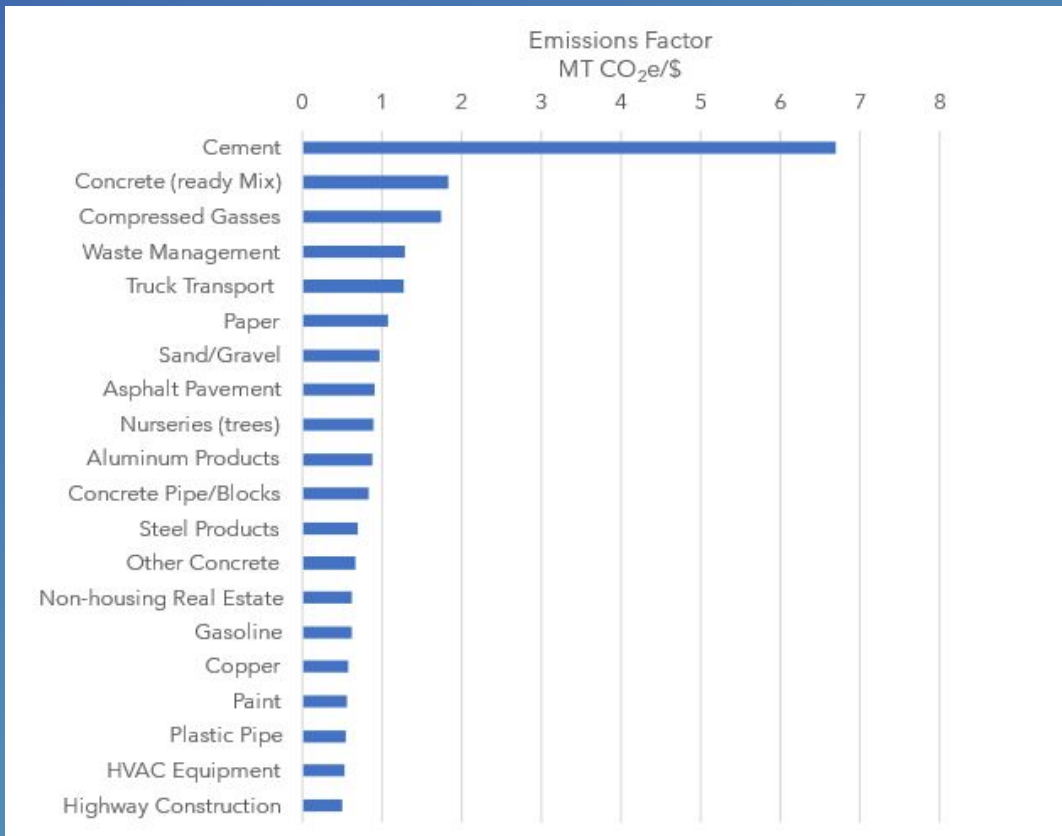
Impact intensities

by Spend Category

- Draft

		GHG Emissions MT CO ₂ e/1000\$
Construction and maintenance	Capital Construction	0.399
	Green Space Maintenance	0.375
	Major Equipment	0.280
	Operations & Maintenance	0.291
	Small hardware and accessories	0.364
	Waste and Recycling	0.970
Professional Services	Consultants	0.091
	Education & Training	0.108
	Engineering	0.132
	Insurance	0.045
	Other	0.102
IT	Software	0.065
	Data Services	0.095
	Hardware and Equipment	0.147
	IT Services	0.091
Transportation	Equipment	0.113
	Fuel	0.626
	Maintenance	0.326
	New vehicles	0.303
Community Services	Supplies	0.256
	Support and Assistance Programmin	0.229
	Utility Services	0.251
Employee Services	Administration	0.082
	Insurance	0.040
	Other benefits	0.224
Office Supplies	Furniture	0.360
	Printing & Postage	0.789
	Supplies	0.288

High Intensity Products



Half of the highest intensity commodities are related to construction, and construction has the highest impact in terms of total City spend.

Top vendors

Spend x Industry-wide Emissions factor = Emissions

\$ x eCo2/\$ = eCo2

The top 20 “Tier 1” vendors for the City of Austin procurement in 2022 represent nearly 40% of procurement spending in 2022, and nearly 53% of emissions

Top vendor types:

1. “Construction”
2. “Tech” Utilities
3. “Concrete”
4. “Concrete”
5. “Construction”
6. “Construction”
7. “Petroleum”

Next Steps:

Identify potential actions to reduce procurement emissions

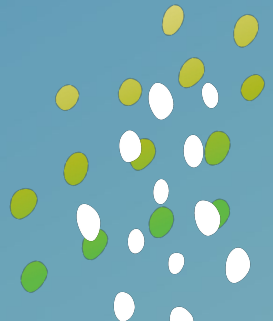
Study recommendations on prioritized spending categories and products

Study recommendations on prioritized vendors, their contracts

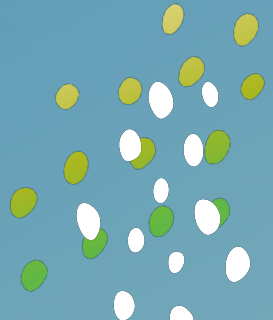
Prepare to:

Document and monitor progress through future inventory estimates,

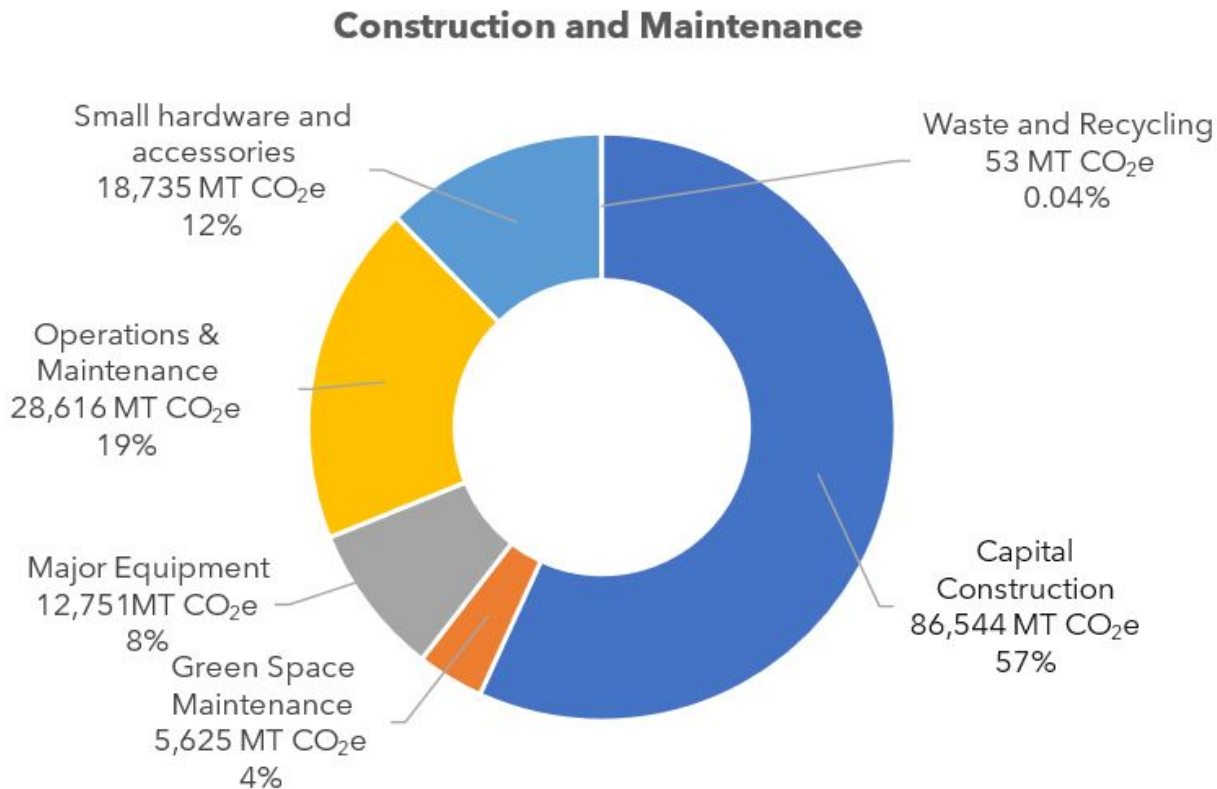
Share process with relevant stakeholders



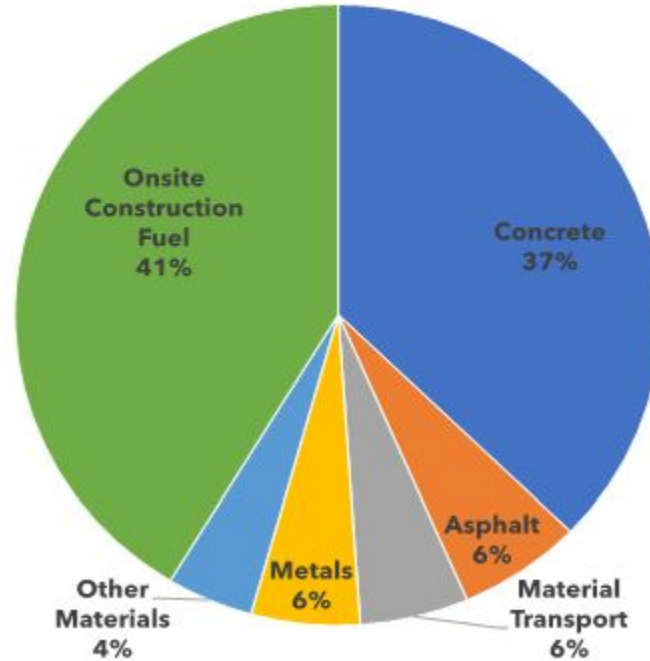
Addendum slides



Emissions breakdown for Construction and Maintenance



Rough emissions breakdown for Road Construction



Concrete emissions breakdown

