

Austin Climate Protection Data Management and Reporting



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December 7, 2011

Outline



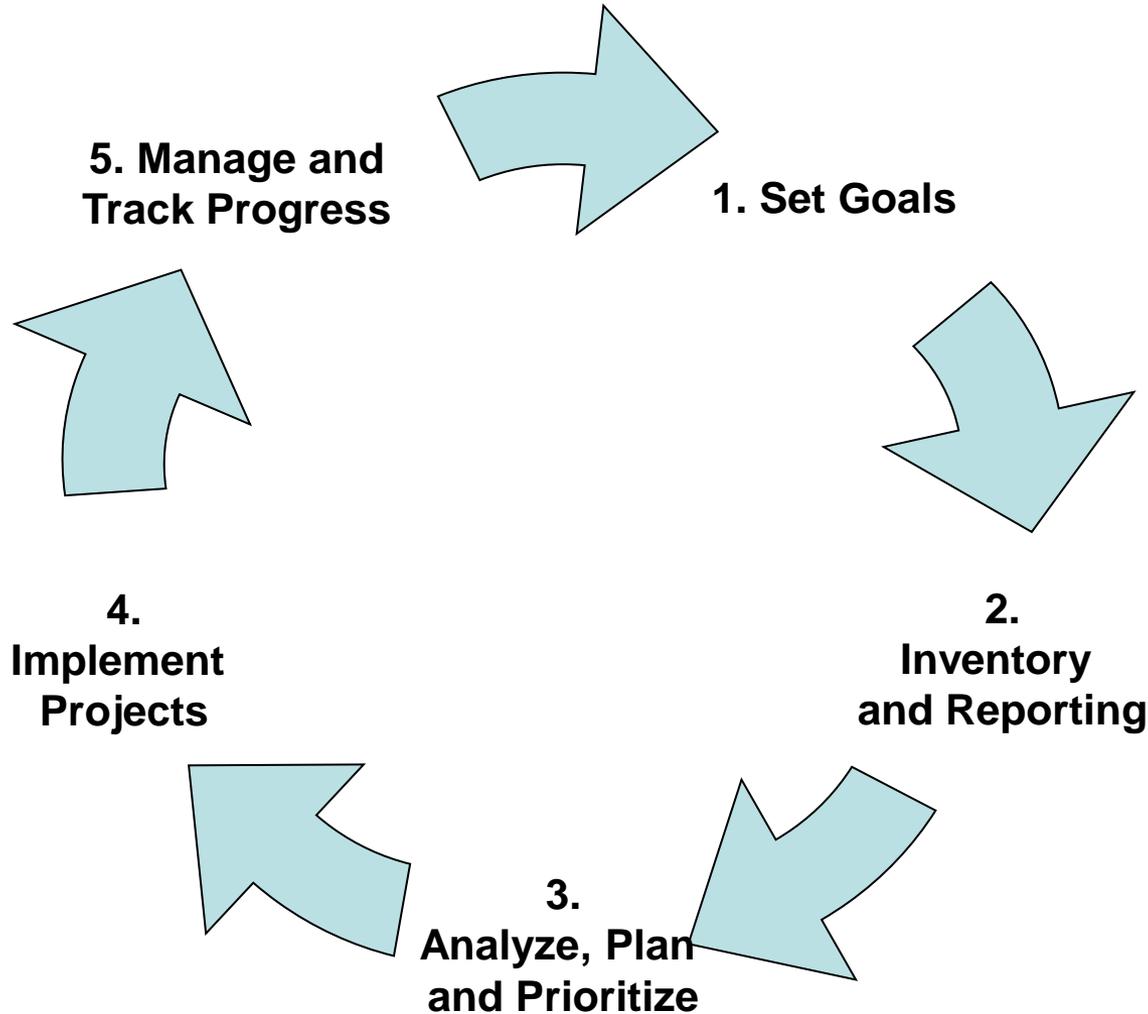
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- Climate Protection Program Overview
- What we report to who and when
- How we collect, calculate, and report
- Lessons Learned
- The Future of Reporting

Our Process



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Measure



Manage



Reduce



BEGIN AGAIN

2007 City Council Resolution



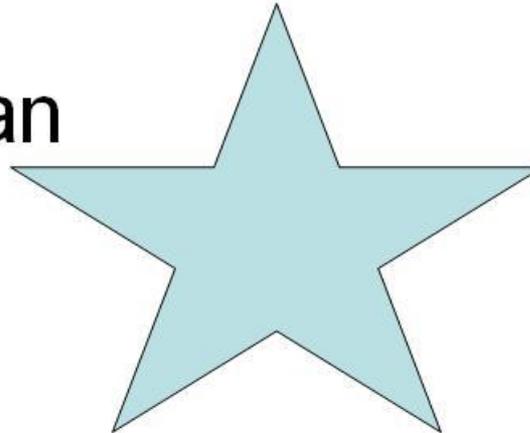
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Community Plan



Municipal Plan



Utility Plan



Go Neutral Plan

Homes and
Buildings Plan



To whom?



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- Stakeholders
 - The Public
 - City Council
 - Boards and Commissions
 - City Manager's Office
 - Department Directors
 - Departmental Green Teams



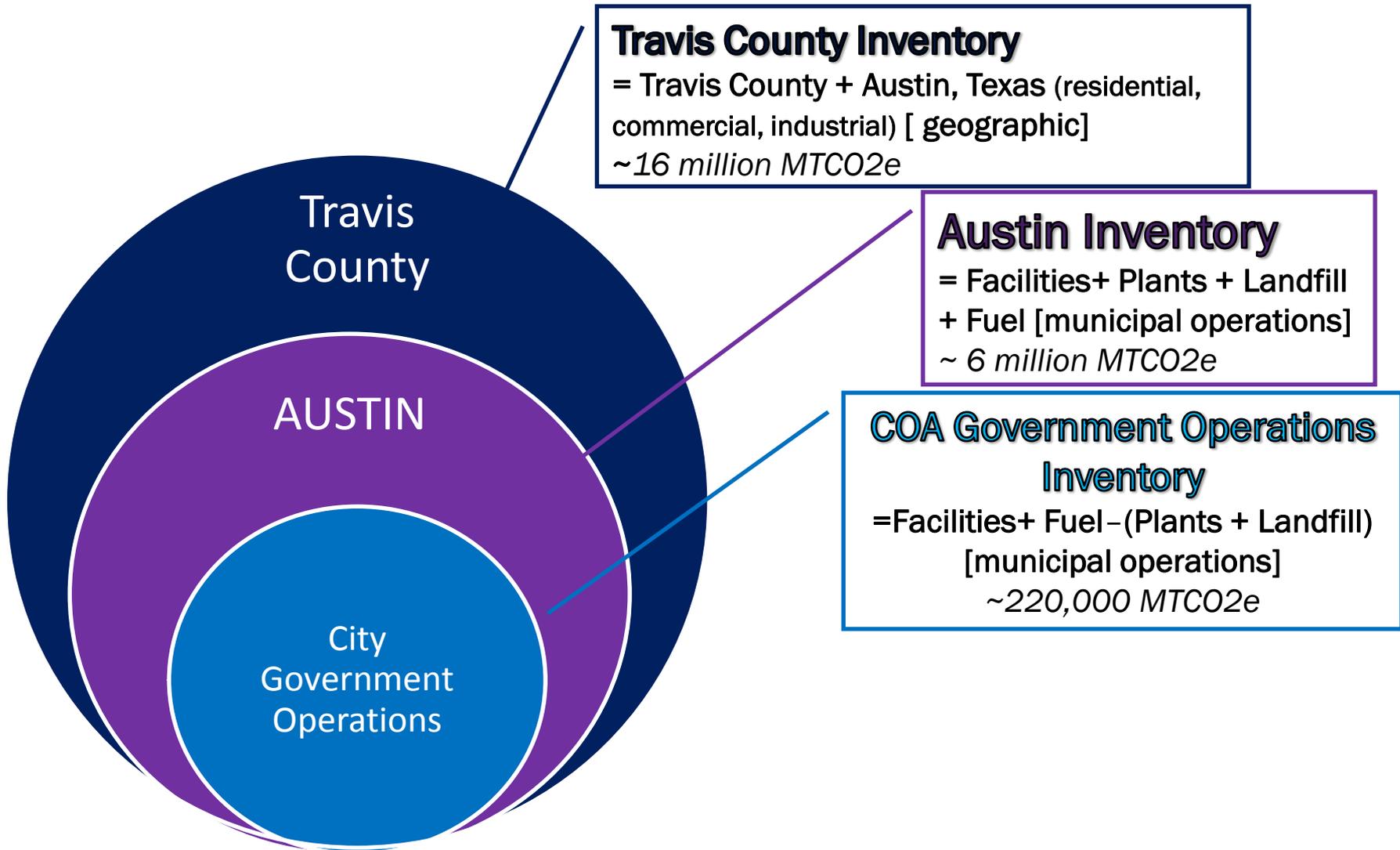
What do we report?

- Annual Carbon Footprint
 - Total + Trends
 - Vehicle Fuels
 - Electricity
 - Stationary Combustion (diesel / natural gas)
 - Water
 - Waste
 - Intensity / Efficiency Metric
 - Per employee
 - Per service delivery
 - Per square foot
- Action Implementation
 - Project and Type
 - General Info
 - Status of each action
 - Barriers
 - Schedule
 - Costs
 - Benefits

Inventory Boundaries



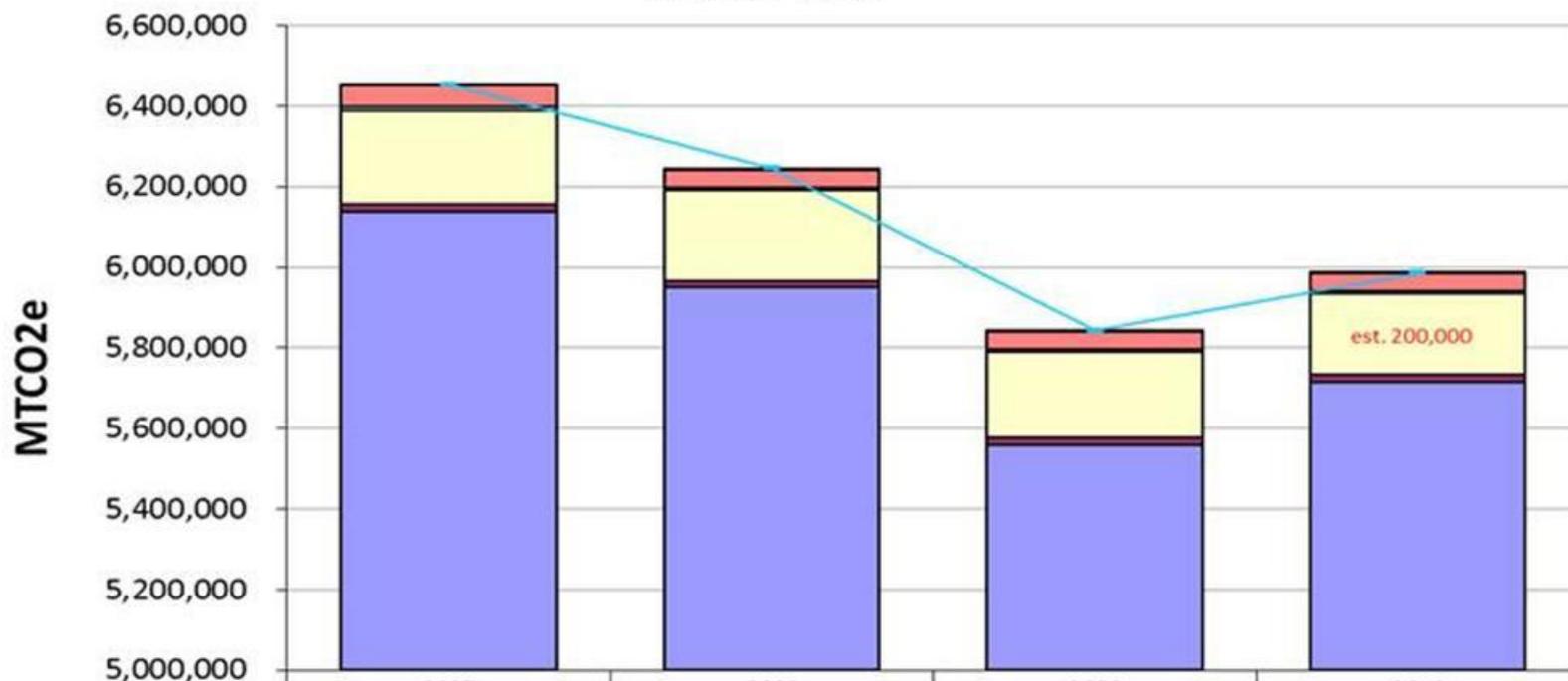
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City of Austin Municipal GHG Emissions Summary

The City's municipal operations greenhouse gas emissions directly from the point of production

2007-2010



	2007	2008	2009	2010
Electricity Use from Non-AE Sources	2,550	3,442	2,643	2,478
Refrigerant Use	7	17	15	20
Transportation Fuel Use	53,717	45,001	44,845	41,975
Diesel Use for Back-up Generators	194	478	307	308
Natural Gas Use	6,733	5,879	5,984	7,229
FM 812 Landfill	233,560	224,080	213,390	200,000
Wastewater Treatment	16,990	17,148	17,525	18,946
Power Generation & Delivery	6,139,811	5,949,023	5,558,979	5,715,067
Total Emissions	6,453,561	6,245,069	5,843,689	5,986,022

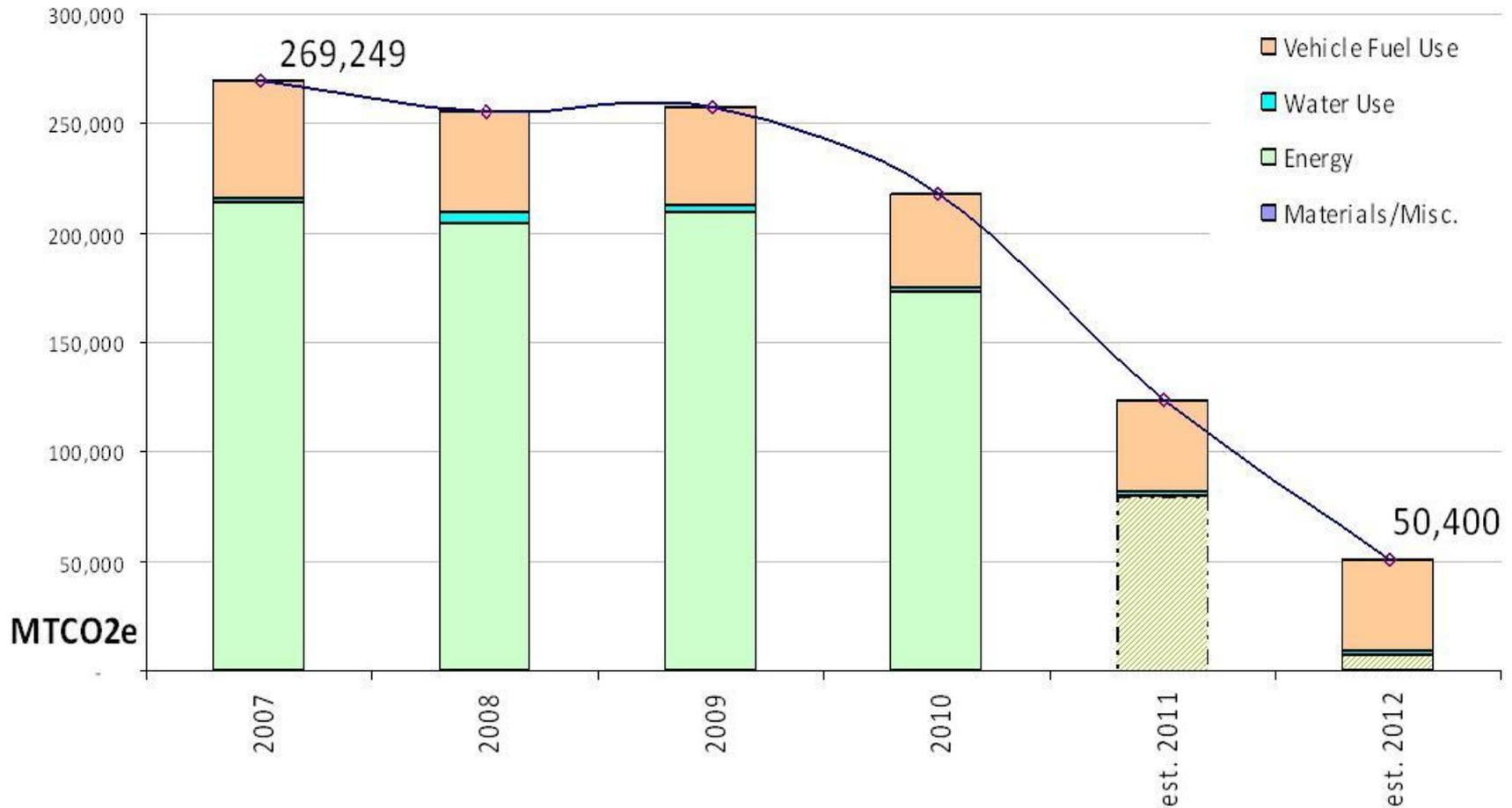
(Power plant smokestacks, wastewater treatment lagoons, natural gas boilers, landfills, and tailpipe combustion owned and/or operated by the City of Austin municipality)

City of Austin Government Operations Consumption

The City's municipal operations greenhouse gas emissions indirectly from the point of consumption

2007-2012 Carbon Footprint

Electricity 100% GreenChoice by 2012



SharePoint Data Analysis



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Investment

Savings

Project Status	Capital (\$)	Staff (hrs)	Savings (\$)	GHG (mtCO2)	Water (gal)	Electricity (MWh)	Waste Divert (tons)
Completed	\$900	100	\$14,000	91	0	175	0
In Progress	\$240,000	116	\$145,000	1748	35 Mg	3,600	334,612
Deferred	\$50,750	320	\$3,000	2	0	0	0
TOTAL	\$291,650	536	\$162,000	1841	35 Mg	3,775	334,612

Reporting Process



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- Data Call – February / March
 - Emails / Phone Calls
- Data Scrubbing - QA/QC – March / April
 - Manual / time intensive
- Calculations – April / May
 - MS Excel
 - MS Sharepoint web database
- Verification – June / July
 - 3rd Party
- Communications – July / August
 - Reports, PPTs

This effort = ½ - 1 FTE

**The Climate Registry -
Local Government
Operations Protocol v1.1**

Data from where?



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- Internal
 - Electricity
 - Austin Energy - CIS Database
 - Vehicle Fuel and Mileage
 - Fleet Services - M5 Database
 - Financial Services - Advantage 3 Database
 - Refrigerants
 - Building Services, various facilities managers
 - Water
 - Austin Water – CIS Database
 - Waste
 - Solid Waste Services Department
 - Other
 - HR, Building Services
- External
 - Natural Gas
 - Texas Gas Service Database
 - Community Electricity
 - Perdenales and Bluebonnet Electric
 - Transportation
 - Texas Transportation Institute

Lessons Learned



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- Develop an inventory management plan
 - Sets boundaries
 - Reference and guide for continuity
 - Be decisive and document assumptions
- Build relationships with data owners
- Climate Registry + Verification is valuable
- Leadership buy-in is **ESSENTIAL**

The Future



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- **NO MORE SPREADSHEETS**
 - Many competing solutions
 - None are cheap or easy
 - Investment that will pay off in the future
- **Dashboards**
 - Timely Feedback
 - Metrics and Trends
 - Efficiency
- **More focus on \$ costs / benefits**

A large flock of birds, likely terns, is captured in flight against a clear blue sky. The birds are silhouetted against the light, creating a dense pattern of dark shapes. In the foreground, a group of people is silhouetted against the sky, standing on a pier or boardwalk and looking up at the birds. The overall scene is peaceful and scenic.

Thank you!

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