



## ***Atascadero City Council***

### ***Management Report – Community Development Department***

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#### **Final Draft of Baseline Greenhouse Gas Inventory Community-Wide and Government Operations 2005**

#### **RECOMMENDATION:**

Council review and accept baseline greenhouse gas inventory report.

#### **REPORT-IN-BRIEF:**

The final draft of the baseline greenhouse gas inventory has been completed and is being presented for City Council and public review. This report identifies baseline emissions for the year 2005, and will be used to assist the City in identifying opportunities for future emissions reductions.

#### **DISCUSSION:**

Background: Assembly Bill 32 was adopted by the California State Assembly in 2006 to combat global warming and reduce GHG emissions. AB 32 establishes a State goal of reducing GHG emissions within California to 1990 levels by the year 2020, which is approximately a 30% reduction from “business-as-usual” emissions levels projected for 2020.

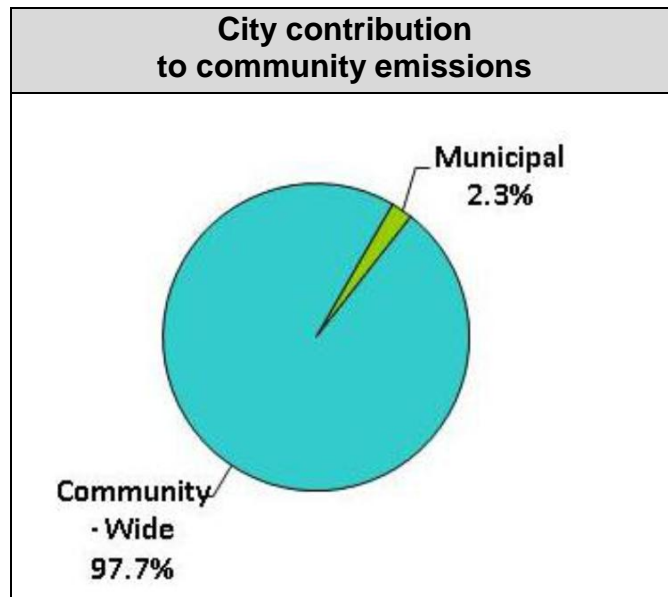
The first step in reducing emissions and initiating compliance with AB 32 is to create a baseline inventory of our current emissions levels. In March 2009, City Council adopted a resolution to join ICLEI (Local Governments for Sustainability) and accepted a grant from the San Luis Obispo Air Pollution Control District (SLO APCD) to conduct a greenhouse gas (GHG) emissions inventory. Over the last year, the SLO APCD’s consultant, PMC, has worked with City staff to compile all of the City’s data into a final report which identifies both community-wide and government operations emissions for the baseline year of 2005.

Analysis: The City of Atascadero’s GHG emissions inventory is split into two sections: community-wide and municipal government operations.

The community-wide inventory is a broad look at total emissions produced by all activities within city boundaries. Community-wide emissions are included in the inventory because cities can create policies and programs which they can use to help influence development and activities within their jurisdictions.

Municipal emissions are a subset of the larger community-wide emissions inventory. This part of the inventory analyzes emissions which are produced through the City government operations. For the City of Atascadero, municipal operations create about 2.3% of the total emissions within the City boundaries. Although this is only a small portion of total emissions, local government emissions reporting is important in order to establish the City as a climate leader in the community. In this way, the City can lead by example in energy efficiency and climate-friendly operations.

This GHG Inventory report found that the overall community produced 176,234 metric tons of CO<sub>2</sub>e in the base year 2005, and City government operations produced 4,128 metric tons of CO<sub>2</sub>e, or 2.3% of the total emissions within City boundaries.



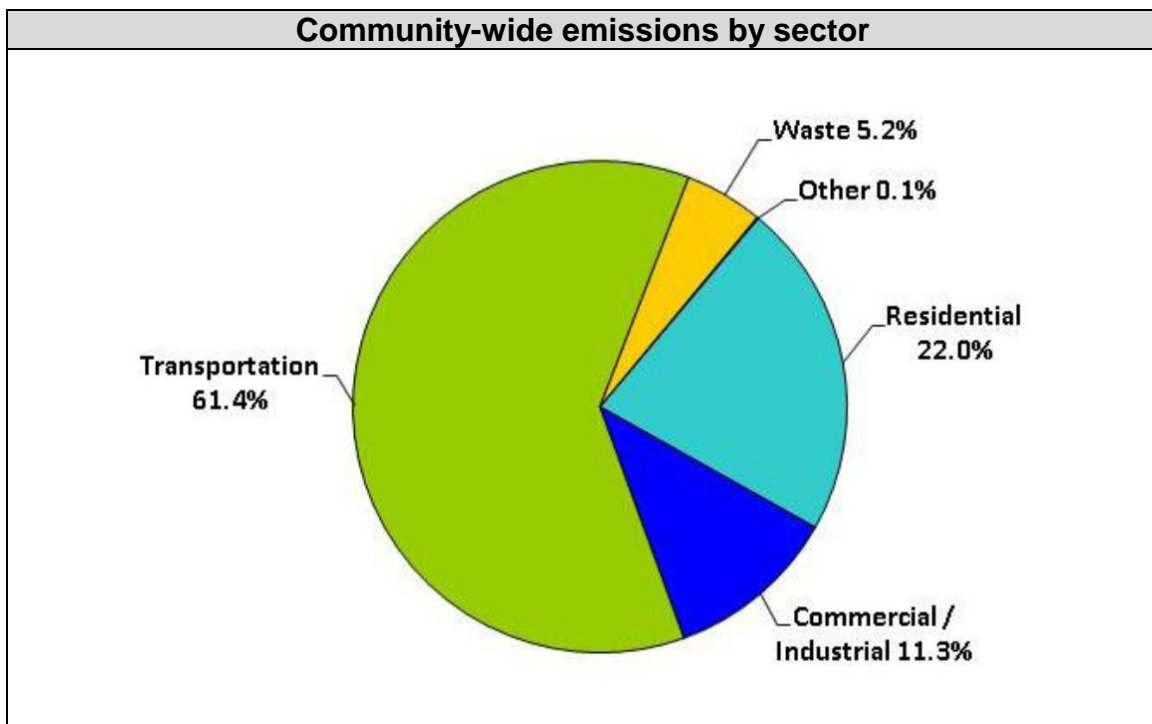
Community-wide Emissions Summary

The GHG Inventory identified transportation as the largest portion of community-wide emissions within the City of Atascadero, making up 61.4% of total emissions. The majority of these emissions (56.4%) come from travel on local roads, while about 43.6% of transportation emissions come from highway travel. The City likely does not have jurisdictional control to reduce emissions from the highway transportation sector,

however, ICLEI and State protocol require that these emissions be accounted for in local inventories. This keeps information consistent throughout the State and avoids double-counting of emissions.

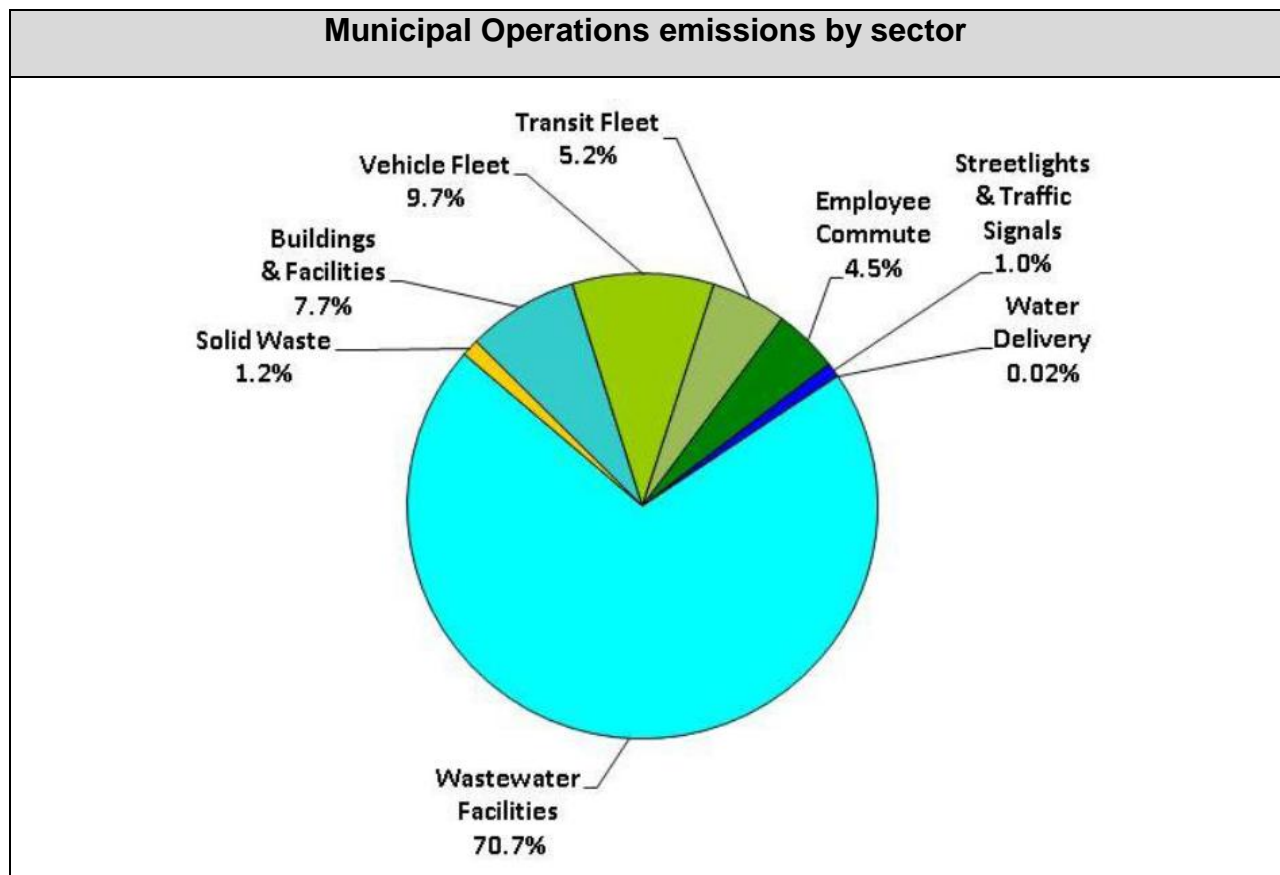
The next largest contributor to community-wide emissions (33.3%) is the built environment, consisting of residential, commercial, and industrial natural gas and electricity consumption for buildings. The residential sector contributes 66% to the built environment emissions within the City of Atascadero. Commercial and industrial buildings make up the other 34%.

Solid waste in landfills is responsible for 5.2% of community-wide emissions. Most of the waste emissions come from the disposal of paper products (55.8%), the rest coming from food waste, plant debris, and wood/textiles.

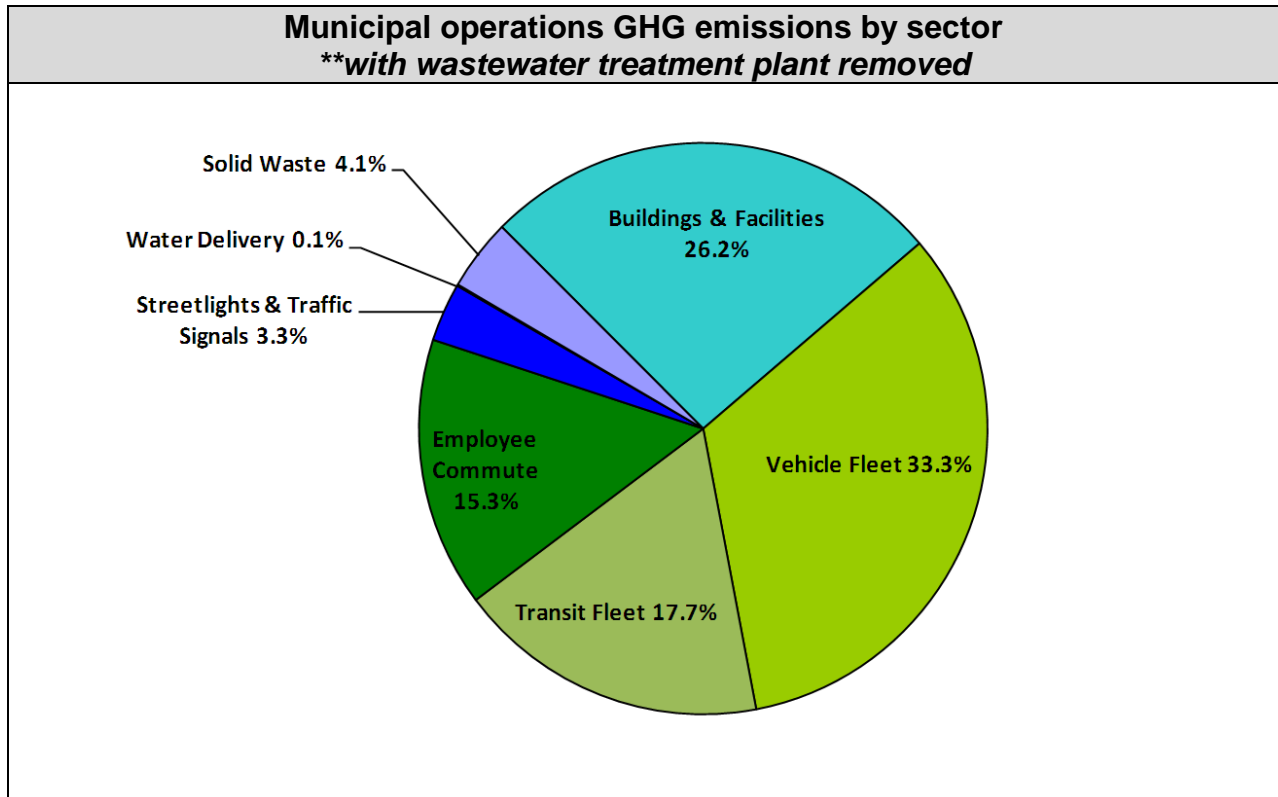


### Municipal Operations Emissions Summary

The GHG Inventory found that the largest contributor to City government emissions is the City’s wastewater treatment plant, making up 70.7% of the emissions produced by the municipal operations. Electricity consumption from the wastewater facilities makes up only 9% of the total emissions attributable to wastewater. The majority of the emissions produced by the wastewater treatment facility (91%) are methane, a greenhouse gas which is produced from solid waste decomposition as a result of the open lagoon system which the City uses for treatment. This lagoon type system is inexpensive to operate; however, since these are uncovered lagoons, a large amount of greenhouse gas is emitted into the atmosphere. No other local cities operate this type of treatment facility themselves, so the results for the City of Atascadero’s GHG inventory are different than those of the other cities in the area.



While the wastewater treatment plant is a major contributor to the government operations emissions, it is important not to overlook other sectors and sources. In order to clearly see other opportunities for reductions within government operations, PMC has provided a chart which analyzes the remaining municipal emissions with the wastewater treatment facility taken out of the equation.

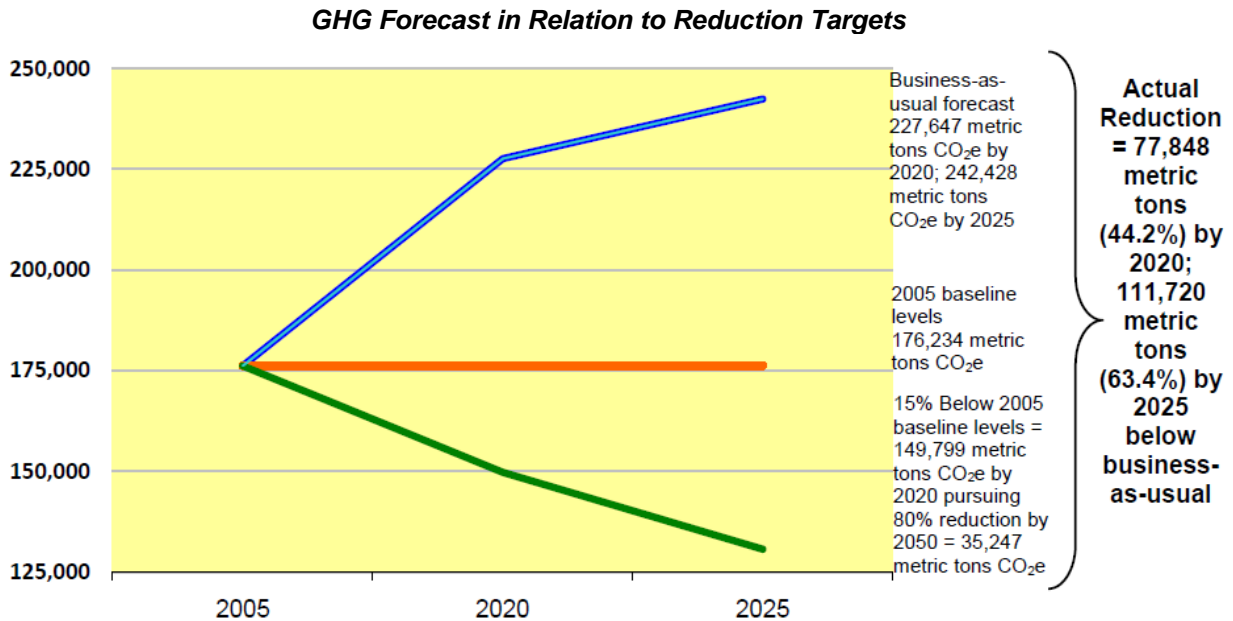


Of the remaining emissions contributed, after removing the wastewater treatment plant from the equation, the data shows that the City’s vehicle and transit fleet make up about 51% of the remaining emissions. Transit includes the City buses, and the vehicle fleet includes City cars and trucks operated by the Fire, Police, Community Services, Community Development, Public Works, and other City departments. The City employee commute is calculated separately, contributing 15.3% of the government emissions.

The other main contributors to municipal emissions were government buildings and facilities, making up 26.2% of the remaining municipal emissions. The source of these emissions includes energy consumption by facilities owned and operated by the municipality, excluding the wastewater treatment plant. The facilities included in this analysis consist of City Hall, fire and police stations, recreation facilities, the Charles Paddock Zoo, parks, and other City facilities.

Next steps

This GHG Inventory report will serve as a baseline to measure future emission levels against, and will assist the City in determining areas of greatest opportunity to reduce current emissions. The figure below illustrates the business as usual forecast, as well as where the City needs to be in 2020 in order to comply with AB 32.



The completed emissions inventory will give the City baseline emissions data in order to create a future Climate Action Plan (CAP) to plan out how to reduce emissions. Currently, the Cities of Paso Robles, Arroyo Grande, Grover Beach, Morro Bay, Pismo Beach, and the City of Atascadero have agreed to take part in a joint Sustainable Planning and Incentives Program Grant application to acquire funds for the creation of individual CAP's tailored each city. PMC has been contracted by the SLO APCD to write the grant application for the Small Cities of SLO County Climate Action Plan Grant. Applications are due August 31, 2010. Staff will provide the Council with an update on the CAP timeline once grant applications are reviewed and awarded.

Conclusion: The final draft of the baseline greenhouse gas inventory has been completed and is being presented for City Council and public review. The report identifies the major sources of City emissions, including transportation, buildings, and waste, and therefore will be able to focus on the greatest opportunities for emissions reductions with the future Climate Action Plan.

**FISCAL IMPACT:**

No current fiscal impact; report completed by grant through APCD.

**ALTERNATIVES:**

The Council may choose to send the greenhouse gas inventory report back to staff and the consultant for additional analysis or clarification.

**ATTACHMENTS:**

1. Final GHG Inventory Report Prepared by PMC April 2010