



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

ENERGY SAVINGS PLAN

Annual Update

January 2007

Executive Summary

Pursuant to Executive Order RP 49, the Texas Commission on Environmental Quality (TCEQ) submitted its initial Energy Savings Plan in December 2005, detailing a number of measures that the agency would be implementing to reduce energy consumption. In the initial Plan, the TCEQ established a goal of reducing its energy consumption by 5 percent over the next five years.

This annual update provides the current status of the energy conservation efforts identified in the initial Plan, data summaries of total electricity and fleet fuel consumption for calendar year (CY) 2006, and the status of any additional measures implemented subsequent to the development of the initial Plan.

Electricity consumption data from the fourth quarter of CY 2006 shows that total electricity consumption each month was below the annual monthly average electricity consumption as compared with CY 2005. October was the only fourth-quarter month when electricity consumption exceeded the average for fourth-quarter months from CY 2005. The total electricity consumption for CY 2006 was about 1.6 percent higher than total electricity consumption for CY 2005.

Fleet fuels consumption data for the three fourth-quarter months shows monthly consumption to be below baseline annual monthly averages during November and December. Total fleet fuel consumption for CY 2006 was approximately 5.2 percent below total averages. This data demonstrates progress towards achieving the agency's goal of a 5 percent reduction in energy consumption from baseline levels.

TCEQ Fourth Quarter 2006 Energy Consumption Update

	Oct. 2006 Consumption	Percentage of Monthly Average +/-	Nov. 2006 Consumption	Percentage of Monthly Average +/-	Dec. 2006 Consumption	Percentage of Monthly Average +/-	2006 Total Consumption	Total Consumption Percentage +/- (2006 vs. 2005)
Electricity	1,131,341 kWh	-0.8%	1,047,238 kWh	-8.1%	1,044,667 kWh	-8.4%	13,874,004 kWh	+1.6%
Fleet Fuels	24,025 gallons	+9.5%	19,742 gallons	-17.1%	19,271 gallons	-19.0%	270,130 gallons	-5.2%

Throughout CY 2006, the TCEQ implemented a number of separate efforts aimed at improving energy efficiency in specific areas, as well as efforts aimed at increasing employee awareness of energy efficiency strategies. Many of these efforts are ongoing that will continue in CY 2007. However, several projects, including making the solar panels installed on Building A operational and renewing the TCEQ GREENCHOICE commitment, were completed during 2006.

In addition to identifying new strategies for improving energy efficiency, completing any outstanding tasks will be one of the primary goals for CY 2007. Future quarterly reports will include updates on these efforts.

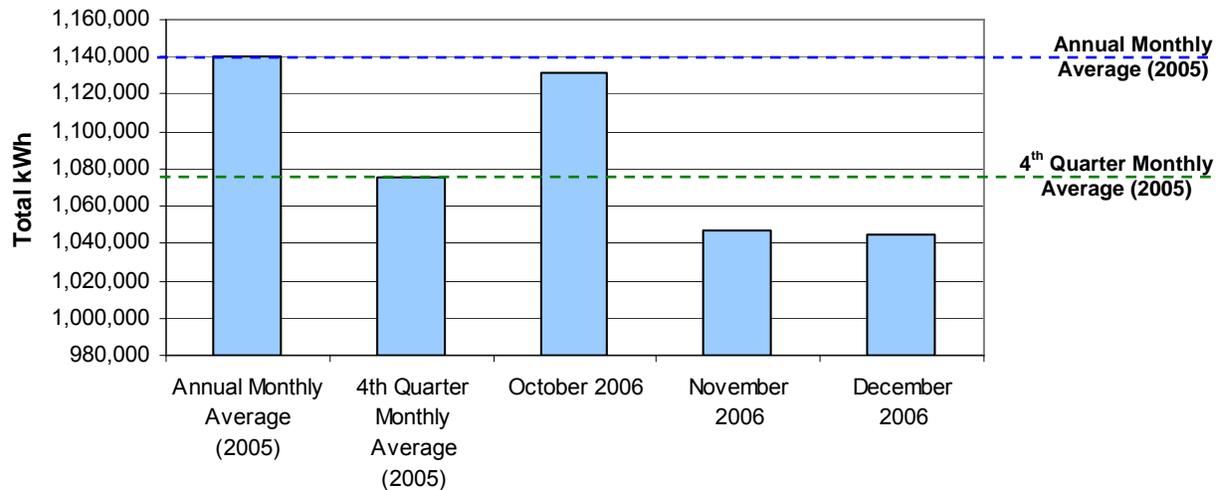
This annual update and other quarterly updates are posted on the TCEQ external web site for public review and comment, along with the original Energy Savings Plan at:

<http://www.tceq.state.tx.us/admin/support-services/tceq-energy-savings-plan.html>

TCEQ Electricity Consumption Update

Data on electricity consumption for the fourth quarter of 2006 is provided below.

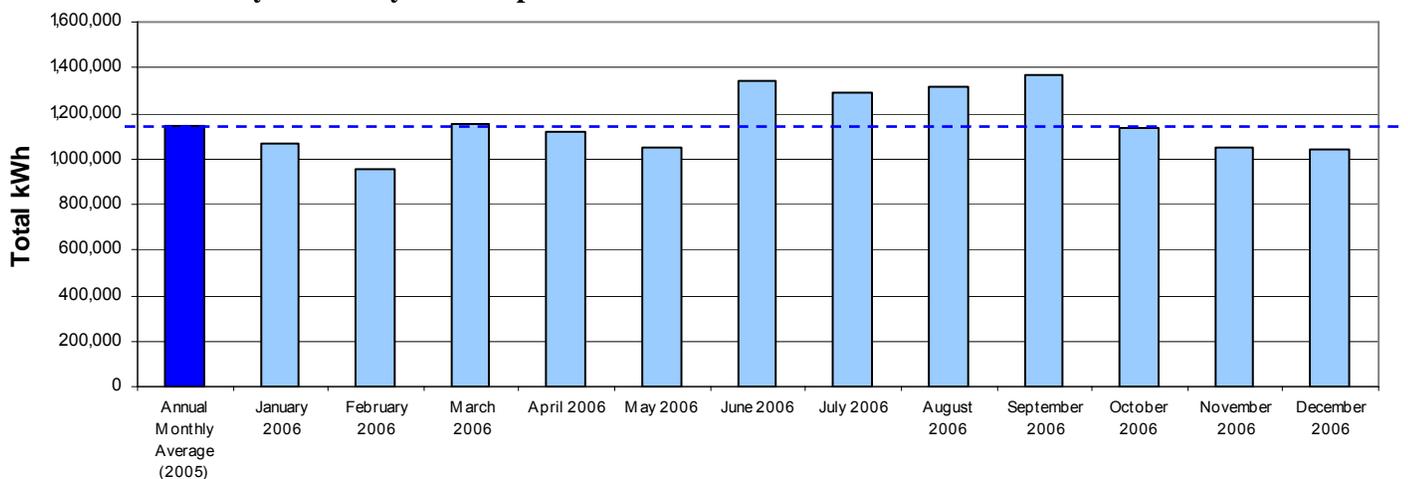
CY 2006 Fourth Quarter Electricity Consumption



As the graph above shows, electricity consumption for all three months in the fourth quarter was lower than the annual monthly average: October 2006 (1,131,341 kWh) was 0.8 percent lower; November 2006 (1,047,238 kWh) was 8.1 percent lower; and December 2006 (1,044,667 kWh) was 8.4 percent lower. Only the electricity consumption for the month of October 2006 was above the average consumption for fourth-quarter months in 2005 (1,075,244 kWh), an increase of approximately 5.2 percent.

Total electricity consumption during CY 2006 (13,857,044 kWh) was 1.6 percent higher than it was in CY 2005 (13,650,181 kWh). The graph below provides a month-by-month comparison of electricity consumption in CY 2006, along with the annual monthly average from CY 2005.

CY 2006 Monthly Electricity Consumption



One potential explanation for the slight increase in electricity consumption is believed to be an increased demand on the heating, ventilation, and air conditioning system (HVAC) in each building as a result of warmer temperatures. During each quarter in 2006, it was noticed that there was often a correlation between those months where temperatures were warmer and those months where electricity consumption increased as compared with the same period in 2005. The table below provides a summary of the average daily deviation when comparing high temperatures from CY 2005 and CY 2006, and when comparing CY 2006 high temperatures to long-term highs.

Comparison of Daily High Temperatures: Year-to-Year and Long-Term

	Temperature Comparison		Monthly Electricity Consumption Comparison
	2006 vs. long term	2006 vs. 2005	2006 vs. 2005
January	+13.1°F	+8.6°F	+5.4%
February	+2.0°F	+3.1°F	+7.4%
March	+5.2°F	+5.2°F	+15.7%
April	+8.3°F	+6.8°F	+3.3%
May	+5.0°F	+4.0°F	+2.4%
June	+3.0°F	-0.9°F	+4.1%
July	+0.8°F	-0.9°F	-7.1%
August	+4.1°F	+2.8°F	+0.2%
September	+1.6°F	-5.4°F	-1.5%
October	+2.2°F	-0.1°F	-4.7%
November	+4.4°F	-3.4°F	+1.4%
December	+2.0°F	-1.1°F	+3.8%

As the table shows, daily high temperatures were on average warmer during six of the 12 months during 2006. In fact, daily high temperatures were on average 1.6 degrees warmer in 2006 than they were in 2005. This trend of warmer temperatures during 2006 is even more apparent when daily high temperatures from 2006 are compared with long-term, average high temperatures. In each of the 12 months of 2006, average daily high temperatures were warmer than long-term average highs, with an average difference of about 4.31 degrees. Increased electricity consumption correlated to higher temperatures between a given month in 2006 and that same month in 2005 in nine out of the 12 months.

TCEQ Fleet Update

The table below provides a summary of total fleet fuel consumption during the fourth quarter of 2006.

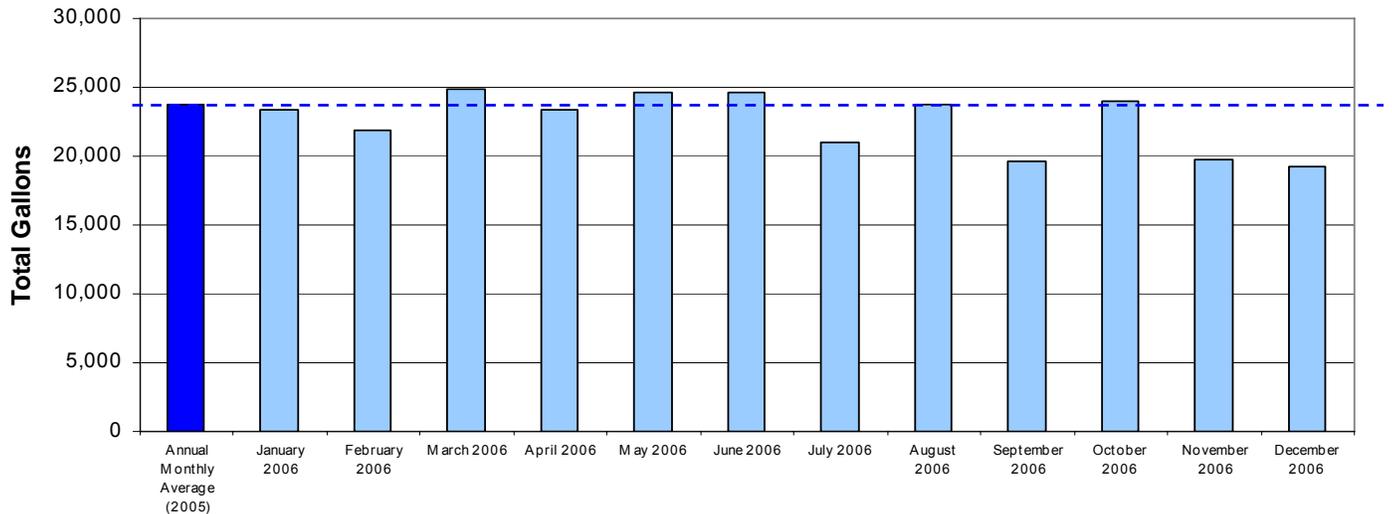
TCEQ Fleet Fuel Consumption: Fourth Quarter CY 2006 (in gallons)

2006	October 2006	November 2006	December 2006	2005 Annual Monthly Avg. Baseline	2005 4th Quarter Avg. Baseline
Gas/Diesel	19,596 gallons	16,655 gallons	15,992 gallons	17,000 gallons	15,700 gallons
LPG	4,429 gallons	3,087 gallons	3,279 gallons	6,800 gallons	6,300 gallons
Total	24,025 gallons	19,742 gallons	19,271 gallons	23,800 gallons	22,000 gallons

As the table shows, total fuel consumption for October was above both the annual and quarterly monthly averages, but below both averages in November. Fuel consumption in October (24,024 gallons) was approximately 0.9 percent above the annual monthly average from 2005. Fuel consumption in November (19,742 gallons) fell to 17.1 percent below the annual monthly average, while fuel consumption in December (19,271 gallons) was 19.0 percent below the annual monthly average.

Through the 12 months of CY 2006, total fleet fuel consumption was 270,130 gallons. This total was 5.2 percent below total fleet fuel consumption from CY 2005. As the graph below shows, fuel consumption for eight months in CY 2006 was below the annual monthly average from CY 2005.

TCEQ CY 2006 Fleet Fuel Consumption: Monthly Comparison (in gallons)



TCEQ Fleet Profile

The TCEQ has integrated hybrid-electric vehicles and other alternative fuel technologies into its fleet as a part of ongoing efforts to improve fuel economy and reduce emissions. The table below details the current statewide distribution of alternative fuel vehicles, including hybrid-electric vehicles, in the TCEQ fleet.

TCEQ Fleet Summary: By Fuel Type (as of December 31, 2006)

TCEQ Office	Total Vehicles	Liquid Propane	Hybrid-Electric	E85
Park 35	64	12	6	2
Reg 1	14	6	0	6
Reg 2	8	6	0	2
Reg 3	12	5	0	4
Reg 4	45	30	4	5
Reg 5	20	4	1	6
Reg 6	10	7	0	2
Reg 7	11	6	0	2
Reg 8	9	3	0	2
Total	193	79	11	31

TCEQ Office	Total Vehicles	Liquid Propane	Hybrid-Electric	E85
Reg 9	15	6	0	6
Reg 10	26	14	3	4
Reg 11	14	10	1	0
Reg 12	62	27	7	3
Reg 13	24	17	1	2
Reg 14	25	8	1	5
Reg 15	18	8	0	4
Reg 16	6	4	0	2
Total	190	94	13	26

Fleet Total	383	173	24	57
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As this table shows, approximately 66 percent of the current TCEQ fleet is equipped with an alternative-fuel capability, with hybrids comprising approximately 6 percent of the fleet. Many of the alternative-fueled vehicles already in the TCEQ fleet were purchased pursuant to requirements that state agencies maintain at least 50 percent of their fleets as alternative fuel. These requirements, which exclude law enforcement and emergency vehicles, also provide a number of other waivers. Once the law enforcement/emergency vehicles and the vehicles with waivers already granted are considered in the fleet totals, more than 80 percent of the TCEQ fleet is alternative fueled, exempt, or waived.

Status of Additional TCEQ Energy Savings Efforts Calendar Year 2006

In an effort to maintain progress towards the goal of reducing energy consumption by 5 percent, the TCEQ continues to implement measures identified in the initial Energy Savings Plan, while also working to identify additional measures that can contribute to this goal. A summary of the current status of the measures undertaken during CY 2006 is provided in the table below.

Electricity Conservation	
Conservation Measures	Status
▪ Renew commitment to Austin Energy GREENCHOICE Program	Renewed through March 1, 2011
▪ Prioritize efficiency in planning for new HVAC equipment and facilities	Ongoing
▪ Install occupancy sensors for common areas	Under Review
▪ Purchase energy saving, flat-screen monitors when replacing existing equipment	Ongoing
▪ Ensure that solar panels installed on Building A are operational	Completed
▪ Identify and remove redundant network and desktop printers	Ongoing
▪ Equip conference rooms with power strips for TVs, DVD players, and other electronic equipment	Completed
▪ Modify outdoor lighting controls	Completed
▪ Lower settings on water heaters in Buildings B-E to 120°F	Under Review

Fuel Conservation	
Conservation Measures	Status
▪ Purchase hybrid-electric, flexible-fuel, and alternative-fuel vehicles	Ongoing
▪ Promote video-conferencing to reduce employee travel for inter-agency meetings	Ongoing
▪ Prohibit unnecessary idling in agency fleet vehicles	Completed

Employee Awareness	
Conservation Measures	Status
▪ Conduct survey to gauge awareness of energy savings strategies	Completed
▪ Post energy efficiency reminders in conference rooms and other common areas	Completed
▪ Provide employees with a "pre-departure" checklist of energy efficiency reminders	Completed
▪ Distribute a paycheck stuffer with energy efficiency reminders	Ongoing
▪ Place reminders of agency idling policy in all agency vehicles	Completed



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