

## Cambridge GreenSense Program Stays Right on Track

An improvement over last quarter, the City's GreenSense program saw a 5% reduction in electricity use in its 3<sup>rd</sup> Quarter (April-June). These results show that the program is keeping on track in exceeding its initial energy reduction goal. Over the first 3 quarters of GreenSense, the program has realized a 6% reduction in electricity use in municipal buildings. These efforts have resulted in a cost savings of \$53,800.

This most recent quarter was centered around Tip 3, "Summer Sense." While employees continued to turn off unnecessary lights and equipment and power down computers, this new tip raised their awareness of summer "peak demand." Employees conserved electricity during this peak electric demand period by closing curtains/blinds when the afternoon sun is hottest and by turning off window air conditioning units or fans at the end of the day.

Here are some highlights for the April-June quarter of Cambridge GreenSense:

- The overall kWh electricity savings that the GreenSense program has realized over these first 9 months is enough to power **58** New England homes for **A YEAR**. We have also **prevented nearly 200,000 lbs of CO2 emissions**—the equivalent of taking **32 cars** off the road!
- The Valente Branch Library had an excellent quarter, reducing electricity use 17% compared to last year. This branch has had an overall reduction of 10%. Bill Courier, Libraries Director, attributes the results to the staff helping with the little things such as turning off the lights in rooms not being used, shutting lights off in most areas after hours that were previously left on, and installing a Prophilix energy system which controls and monitors the AC system via software from his office desk.
- Human Services continued to do well this quarter with an overall 10% reduction this quarter for all of its buildings. The Area IV Youth Center had an excellent quarter in particular, reducing its electricity use by 23%, while the Golf Course Clubhouse and Maintenance Building reduced electricity consumption 15% and 10%, respectively. Trent Ramsey, Area IV Youth Center Director, says that they have been making sure to power down computers and keep the gym lights off when no one is using it. This simple effort is paying off in energy savings.
- The Coffon Building, City Hall, and the Fire Department continue to impress us with big reductions again this quarter. Coffon went down 26%; City Hall went down 13%; and the Fire Department went down 12%. Engine 5 had a particularly huge improvement, decreasing its usage 16% this quarter after two quarters of increases.

The following pages show summary data for the 3<sup>rd</sup> Quarter as well as for the first 3 quarters combined for the whole City, as well as breakdowns by department. If there is any information not provided in the tables that you would like to see, or if you would like to see it displayed in another way, please contact Kari Hewitt at ext. 6947 or [khewitt@cambridgema.gov](mailto:khewitt@cambridgema.gov).

### Third Quarter Summary

#### Electricity Consumption October 2008 to June 2009

FACILITY***	Quarter 1 % Change	Quarter 2 % Change	Quarter 3 % Change	Total Year 1 to Year 2 % Change
Area IV Youth Center	-21	-13	-23	-19
Cemetery Complex (3 Bldgs)	10	14	-2	9
Central Sq. Branch	-9	-4	17	0
City Hall	-13	-11	-13	-12
City Hall Annex (McCusker Bldg)*	-37	8	14	5
Coffon Building	-6	-18	-26	-17
Corporal Burns Building*	-33	-8	-27	-13
Danehy Park Comfort Station*	-22	-20	0	-10
DPW Complex (3 Bldgs)	-17	1	-5	-7
E. Cambridge Parking Garage	1	-10	1	-3
Engine 2	-17	-17	-28	-21
Engine 3	-16	-6	21	-2
Engine 4	-17	-20	-27	-21
Engine 5	23	8	-16	5
Engine 6	-16	-10	-27	-18
Engine 8	-17	4	-7	-7
Engine 9	-3	-19	-12	-11
Fire Headquarters	-21	-15	-25	-16
Frisoli Youth Center	0	18	3	7
Gately Youth Center	-14	-2	-5	-7
Gold Star Pool	-28	-29	-31	-25
Golf Course Clubhouse	-26	51	-15	-2
Golf Course Maintenance Building	36	11	-10	9
Green Street Garage	-4	-5	-9	-6
Heritage Branch	-14	-3	2	-5
Lombardi Building	-14	13	19	5
Moore Youth Center	7	22	-16	3
Mt. Auburn Branch	-21	-12	10	-9
No. Camb. Branch	200	-2	20	6
North Cambridge Crime Task Force Trailer*	1	-2	-27	-4
North Cambridge Senior Center	-18	41	-13	-3
Observatory Branch	-6	-4	-27	-3
Police Maintenance Garage	-5	9	15	7
Senior Center	-7	-15	-9	-10
Traffic Meter and Maintenance Shop	-46	-26	-3	-30
Valente Branch	-6	-5	-17	-10
<b>Grand Total**</b>	<b>-10</b>	<b>-1</b>	<b>-5</b>	<b>-6</b>

\*Percentage change based on weather-normalized data in winter months to account for increase in electric use due to winter heating requirements.

\*\*Totals based on raw data--nothing weather normalized.

\*\*\**Not all facilities included above.* Please see Water Dept, School Dept, and any other missing facilities' data in the sections that follow.

First Three Quarters (Oct - June)		Electricity	
Facilities	year 1	year 2	change
Area IV Youth Center	170,640	138,000	-19%
Cemetery Complex (3 Bldgs)	66,825	72,650	9%
Central Sq. Branch	48,240	48,480	0%
City Hall	568,740	498,012	-12%
City Hall Annex (McCusker Bldg)	447,720	468,820	5%
Coffon Building	222,480	184,080	-17%
Corporal Burns Building	38,411	33,410	-13%
Danehy Park Comfort Station	59,513	53,359	-10%
DPW Complex (3 Bldgs)	301,540	281,244	-7%
E. Cambridge Parking Garage	421,154	406,753	-3%
Electrical Dept. Garage	31,719	29,874	-6%
Engine 2	51,701	40,987	-21%
Engine 3	79,680	78,240	-2%
Engine 4	31,960	25,200	-21%
Engine 5	35,578	37,281	5%
Engine 6	23,037	18,991	-18%
Engine 8	62,800	58,440	-7%
Engine 9	17,941	15,906	-11%
Fire Headquarters	63,837	53,538	-16%
Frisoli Youth Center	171,920	183,280	7%
Gately Youth Center	69,733	64,565	-7%
Gold Star Pool	6,037	4,557	-25%
Golf Course Clubhouse	88,911	86,700	-2%
Golf Course Maintenance Building	29,675	32,202	9%
Green Street Garage	118,800	112,000	-6%
Heritage Branch	12,954	12,325	-5%
Lombardi Building	218,538	229,938	5%
Moore Youth Center	37,151	38,232	3%
Mt. Auburn Branch	9,330	8,505	-9%
No. Camb. Branch	23,356	24,831	6%
North Cambridge Crime Task Force Trailer	11,693	11,233	-4%
North Cambridge Senior Center	8,936	8,646	-3%
Observatory Branch	13,961	13,550	-3%
Police Maintenance Garage	17,882	19,117	7%
Senior Center	402,432	361,116	-10%
Traffic Meter and Maintenance Shop	31,895	22,474	-30%
Valente Branch	28,210	25,530	-10%
<b>TOTAL</b>	<b>4,044,930</b>	<b>3,802,066</b>	<b>-6%</b>

**Cost Savings**

	ELECTRIC Cost (\$)			% Change Year 1 to 2	Savings
	2007	2008	2009		
<b>City of Cambridge</b>					
<b>Quarter 1</b>					
Oct	\$70,890.47	\$57,151.30		-19%	\$13,739.17
Nov	\$66,108.35	\$60,303.51		-9%	\$5,804.84
Dec	\$66,577.92	\$63,267.18		-5%	\$3,310.74
<b>Quarter 2</b>					
Jan		\$69,489.96	\$67,498.98	-3%	\$1,990.98
Feb		\$68,710.95	\$63,609.60	-7%	\$5,101.35
Mar		\$61,640.48	\$57,163.04	-7%	\$4,477.44
<b>Quarter 3</b>					
Apr		\$61,971.18	\$57,780.21	-7%	\$4,190.97
May		\$58,203.20	\$56,891.37	-2%	\$1,311.83
Jun		\$72,129.39	\$58,243.73	-19%	\$13,885.66
<b>TOTAL SAVINGS FIRST 3 QUARTERS*</b>					<b>\$53,812.98</b>
*Total does not include costs from Water Dept, School Dept, or Healy Public Safety Building.					

Adding the savings from the Water Department of \$82,500, the total cost savings comes to \$136,300.

School Department- 3<sup>rd</sup> Quarter

School Department Quarter 3 (April-June)	Change in Quarter 3 (April-June)		
	year 1	year 2	% change
Administration Bldg.	45,703	40,583	-11%
Baldwin School	156,270	161,742	4%
Cambridge Rindge & Latin School	1,119,175	1,033,275	-8%
Cambridgeport School	116,856	113,124	-3%
Fletcher-Maynard Academy	106,080	105,720	0%
Graham & Parks School	87,144	86,400	-1%
Haggerty School	174,461	174,068	0%
Kennedy/Longfellow School	305,131	302,175	-1%
King Open School	127,890	118,386	-7%
King/Amigos School	219,540	203,580	-7%
Morse School	159,288	147,996	-7%
Peabody School	281,485	251,141	-11%
Russell Field Field House	24,200	30,440	26%
Solomon Garage	38,560	38,960	1%
Tobin School	461,513	461,438	0%
<b>SCHOOL DEPT TOTAL</b>	<b>3,423,296</b>	<b>3,269,028</b>	<b>-5%</b>

School Department – Overall

School Department	Electricity			
	Total First 3 Quarters (Oct - June)	year 1	year 2	change
Administration Bldg.		138,526	124,126	-10%
Baldwin School		467,990	456,614	-2%
Cambridge Rindge & Latin School		3,496,551	3,226,051	-8%
Cambridgeport School		368,676	364,776	-1%
Fletcher-Maynard Academy		351,480	325,440	-7%
Graham & Parks School		280,764	271,212	-3%
Haggerty School		530,272	507,933	-4%
Kennedy/Longfellow School		939,012	955,698	2%
King Open School		419,730	399,618	-5%
King/Amigos School		711,240	719,520	1%
Morse School		470,796	453,204	-4%
Peabody School		805,837	761,189	-6%
Russell Field Field House		88,040	105,320	20%
Solomon Garage		124,320	116,000	-7%
Tobin School		2,083,734	2,326,584	12%
<b>TOTAL</b>		<b>11,276,968</b>	<b>11,113,285</b>	<b>-1%</b>

**Water Department**

Water Department Quarter 3 (April-June)	Change in Quarter 3 (April-June)		
	year 1	year 2	% change
Garage/Shop Bldg.	NA	NA	NA
Gate House	6,499	7,570	16%
Sullivan Purification Facility	2,220,000	2,099,040	-5%
Valve Chamber	11,190	12,178	9%
Water-Shed Barn	845	1,107	31%
<b>WATER DEPT TOTAL</b>	<b>2,238,534</b>	<b>2,119,895</b>	<b>-5%</b>

Water Department Total First 3 Quarters (Oct - June)	Electricity		
	year 1	year 2	change
Garage/Shop Bldg.	NA	NA	NA
Gate House	23,320	21,765	-7%
Sullivan Purification Facility	6,480,240	6,289,200	-3%
Valve Chamber	33,267	36,937	11%
Water-Shed Barn	4,202	4,023	-4%
<b>WATER DEPT TOTAL</b>	<b>6,541,029</b>	<b>6,351,925</b>	<b>-3%</b>

## Fire Department

FIRE DEPARTMENT Quarter 3 (April-June)	ELECTRIC Use (kWh)		
	2008	2009	% Change
<b>Engine 2</b>			
<b>Total</b>	<b>16,701</b>	<b>12,033</b>	<b>-28%</b>
Apr	5,657	4,096	-28%
May	4,855	3,793	-22%
Jun	6,189	4,144	-33%
<b>Engine 3</b>			
<b>Total</b>	<b>24,480</b>	<b>29,520</b>	<b>21%</b>
Apr	7,360	6,640	-10%
May	7,040	9,680	38%
Jun	10,080	13,200	31%
<b>Engine 4</b>			
<b>Total</b>	<b>9,720</b>	<b>7,080</b>	<b>-27%</b>
Apr	3,600	2,840	-21%
May	2,760	2,120	-23%
Jun	3,360	2,120	-37%
<b>Engine 5</b>			
<b>Total</b>	<b>11,495</b>	<b>9,704</b>	<b>-16%</b>
Apr	3,967	3,865	-3%
May	3,560	2,821	-21%
Jun	3,968	3,018	-24%
<b>Engine 6</b>			
<b>Total</b>	<b>7,158</b>	<b>5,214</b>	<b>-27%</b>
Apr	2,473	1,874	-24%
May	2,157	1,783	-17%
Jun	2,528	1,557	-38%
<b>Engine 8</b>			
<b>Total</b>	<b>18,280</b>	<b>16,960</b>	<b>-7%</b>
Apr	6,080	5,920	-3%
May	5,360	5,000	-7%
Jun	6,840	6,040	-12%
<b>Engine 9</b>			
<b>Total</b>	<b>5,255</b>	<b>4,632</b>	<b>-12%</b>
Apr	1,999	1,629	-19%
May	1,570	1,538	-2%
Jun	1,686	1,465	-13%
<b>Fire Headquarters</b>			
<b>Total</b>	<b>22,312</b>	<b>16,774</b>	<b>-25%</b>
Apr	6,370	5,260	-17%
May	6,684	5,482	-18%
Jun	9,258	6,032	-35%
<b>FIRE DEPARTMENT TOTAL</b>	<b>115,401</b>	<b>101,917</b>	<b>-12%</b>

## Libraries

LIBRARIES Quarter 3 (April - June)	ELECTRIC Use (kWh)		
	2008	2009	% Change
<b>Central Sq. Branch</b>			
<b>Total</b>	<b>14,520</b>	<b>16,920</b>	<b>17%</b>
Apr	4,920	4,920	0%
May	3,840	4,920	28%
Jun	5,760	7,080	23%
<b>Heritage Branch</b>			
<b>Total</b>	<b>4,245</b>	<b>4,341</b>	<b>2%</b>
Apr	1,284	1,400	9%
May	1,359	1,435	6%
Jun	1,602	1,506	-6%
<b>Mt. Auburn Branch</b>			
<b>Total</b>	<b>2,736</b>	<b>3,013</b>	<b>10%</b>
Apr	840	876	4%
May	709	1,048	48%
Jun	1,187	1,089	-8%
<b>No. Camb. Branch</b>			
<b>Total</b>	<b>8,496</b>	<b>10,156</b>	<b>20%</b>
Apr	2,392	2,337	-2%
May	2,370	2,370	0%
Jun	3,734	5,449	46%
<b>Observatory Branch</b>			
<b>Total</b>	<b>5,077</b>	<b>5,115</b>	<b>1%</b>
Apr	1,449	1,653	14%
May	1,339	1,811	35%
Jun	2,289	1,651	-28%
<b>Valente Branch</b>			
<b>Total</b>	<b>10,567</b>	<b>8,817</b>	<b>-17%</b>
Apr	2,945	2,903	-1%
May	3,258	2,899	-11%
Jun	4,364	3,015	-31%
<b>LIBRARIES TOTAL</b>	<b>45,641</b>	<b>48,362</b>	<b>6%</b>

**Traffic Department**

TRAFFIC DEPT Quarter 3 (April - June)	ELECTRIC Use (kWh)		
	2008	2009	% Change
<b>E. Cambridge Parking Garage</b>			
<b>Total</b>	<b>132,432</b>	<b>133,709</b>	<b>1%</b>
Apr	48,492	49,289	2%
May	40,810	43,370	6%
Jun	43,130	41,050	-5%
<b>Green Street Garage</b>			
<b>Total</b>	<b>35,800</b>	<b>32,600</b>	<b>-9%</b>
Apr	13,600	12,200	-10%
May	11,200	10,400	-7%
Jun	11,000	10,000	-9%
<b>Traffic Meter and Maintenance Shop</b>			
<b>Total</b>	<b>5,373</b>	<b>5,211</b>	<b>-3%</b>
Apr	2,264	2,533	12%
May	1,549	1,221	-21%
Jun	1,560	1,457	-7%
<b>TRAFFIC DEPARTMENT TOTAL</b>	<b>173,605</b>	<b>171,520</b>	<b>-1%</b>

**Police Department**

POLICE DEPT Quarter 3 (April - June)	ELECTRIC Use (kWh)		
	2008	2009	% Change
<b>North Cambridge Crime Task Force Trailer</b>			
<b>Total</b>	<b>1,847</b>	<b>1,349</b>	<b>-27%</b>
Apr	1,109	892	-20%
May	451	206	-54%
Jun	287	251	-13%
<b>Police Maintenance Garage</b>			
<b>Total</b>	<b>5,619</b>	<b>6,461</b>	<b>15%</b>
Apr	2,397	2,594	8%
May	1,617	1,974	22%
Jun	1,605	1,893	18%
<b>Robert W. Healy Public Safety Facility</b>			
<b>Total</b>		<b>762,320</b>	<b>NA</b>
Apr		281,680	NA
May		249,240	NA
Jun		231,400	NA
<b>POLICE DEPARTMENT TOTAL*</b>	<b>7,466</b>	<b>7,810</b>	<b>5%</b>
*Total not including Robert W. Healy Building			

## Human Services

HUMAN SERVICE PROGRAMS Quarter 3 (April - June)	ELECTRIC Use (kWh)		% Change
	2008	2009	
<b>Area IV Youth Center</b>			
<b>Total</b>	<b>61,120</b>	<b>47,200</b>	<b>-23%</b>
Apr	20,080	14,960	-25%
May	18,800	15,440	-18%
Jun	22,240	16,800	-24%
<b>Danehy Park Comfort Station</b>			
<b>Total</b>	<b>11,192</b>	<b>11,148</b>	<b>0%</b>
Apr	6,714	6,652	-1%
May	2,196	1,950	-11%
Jun	2,282	2,546	12%
<b>Frisoli Youth Center</b>			
<b>Total</b>	<b>58,080</b>	<b>59,600</b>	<b>3%</b>
Apr	16,800	19,280	15%
May	17,200	17,120	0%
Jun	24,080	23,200	-4%
<b>Gately Youth Center</b>			
<b>Total</b>	<b>21,885</b>	<b>20,781</b>	<b>-5%</b>
Apr	8,004	7,546	-6%
May	7,241	6,452	-11%
Jun	6,640	6,783	2%
<b>Gold Star Pool</b>			
<b>Total</b>	<b>1,626</b>	<b>999</b>	<b>-39%</b>
Apr	481	350	-27%
May	471	341	-28%
Jun	674	308	-54%
<b>Golf Course Clubhouse</b>			
<b>Total</b>	<b>34,244</b>	<b>29,228</b>	<b>-15%</b>
Apr	11,448	10,409	-9%
May	8,769	8,434	-4%
Jun	14,027	10,385	-26%
<b>Golf Course Maintenance Building</b>			
<b>Total</b>	<b>9,418</b>	<b>8,496</b>	<b>-10%</b>
Apr	4,178	4,349	4%
May	2,616	2,577	-1%
Jun	2,624	1,570	-40%
<b>Moore Youth Center</b>			
<b>Total</b>	<b>13,802</b>	<b>11,555</b>	<b>-16%</b>
Apr	3,530	4,397	25%
May	3,859	3,887	1%
Jun	6,413	3,271	-49%

<b>North Cambridge Senior Center</b>			
<b>Total</b>	<b>3,757</b>	<b>3,287</b>	<b>-13%</b>
Apr	841	791	-6%
May	720	1,029	43%
Jun	2,196	1,467	-33%
<b>Senior Center</b>			
<b>Total</b>	<b>150,660</b>	<b>136,764</b>	<b>-9%</b>
Apr	44,328	43,080	-3%
May	43,812	47,436	8%
Jun	62,520	46,248	-26%
<b>HUMAN SERVICES TOTAL</b>			
	<b>365,784</b>	<b>329,058</b>	<b>-10%</b>

Public Works

PUBLIC WORKS DEPT Quarter 3 (April - June)	ELECTRIC Use (kWh)		
	2008	2009	% Change
<b>Cemetery Complex (3 Bldgs)</b>			
<b>Total</b>	<b>17,483</b>	<b>17,115</b>	<b>-2%</b>
Apr	7,104	8,549	20%
May	5,560	5,214	-6%
Jun	4,819	3,352	-30%
<b>City Hall</b>			
<b>Total</b>	<b>183,864</b>	<b>159,552</b>	<b>-13%</b>
Apr	58,176	52,500	-10%
May	59,772	53,556	-10%
Jun	65,916	53,496	-19%
<b>City Hall Annex (McCusker Bldg)</b>			
<b>Total</b>	<b>117,880</b>	<b>134,500</b>	<b>14%</b>
Apr	39,280	51,020	30%
May	37,200	42,800	15%
Jun	41,400	40,680	-2%
<b>Coffon Building</b>			
<b>Total</b>	<b>82,320</b>	<b>61,200</b>	<b>-26%</b>
Apr	28,240	19,200	-32%
May	26,400	21,120	-20%
Jun	27,680	20,880	-25%
<b>Corporal Burns Building</b>			
<b>Total</b>	<b>4,124</b>	<b>3,002</b>	<b>-27%</b>
Apr	2,828	2,101	-26%
May	884	435	-51%
Jun	412	466	13%
<b>DPW Complex (3 Bldgs)</b>			
<b>Total</b>	<b>85,824</b>	<b>81,810</b>	<b>-5%</b>
Apr	28,004	30,876	10%
May	24,963	26,496	6%
Jun	32,857	24,438	-26%
<b>Lombardi Building</b>			
<b>Total</b>	<b>76,800</b>	<b>91,200</b>	<b>19%</b>
Apr	22,320	25,080	12%
May	21,000	31,080	48%
Jun	33,480	35,040	5%
<b>PUBLIC WORKS TOTAL</b>	<b>568,295</b>	<b>548,379</b>	<b>-4%</b>