

# **Energy Report Summary for June 2014**

#### Prepared for:



Natural Resources Canada Ressources Naturelles Canada



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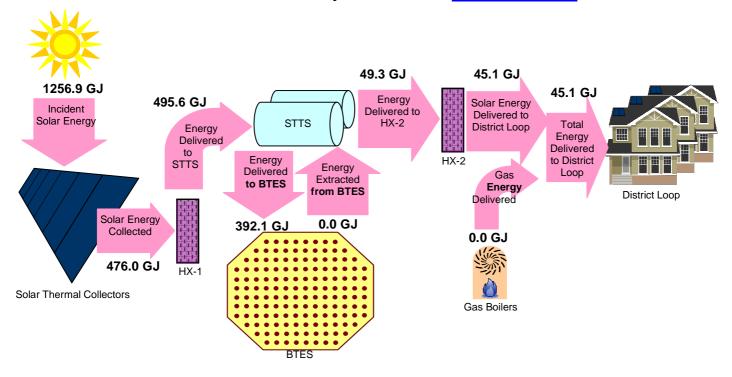
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# **Drake Landing Solar Community Energy Overview for June 2014**

This document summarizes the energy generated and used within the Drake Landing Solar Community at Okotoks Alberta.

### Additional Information may be found here: http://www.dlsc.ca



**System Energy Diagram** 

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Table 0-1 Summary for June 2014				
Description	This Month		Since July 1, 2013	
Total Incident Solar Energy	1256.9	GJ	11447.5	GJ
Total Solar Energy Collected	476.0	GJ	3811.0	GJ
Total Solar Energy Delivered to STTS	495.6	GJ	4025.8	GJ
Total Energy Delivered to BTES	392.1	GJ	2067.3	GJ
Total Energy Extracted from BTES	0.0	GJ	1372.5	GJ
Total Energy Delivered from STTS to HX-2	49.3	GJ	2866.6	GJ
Total Solar Energy Delivered to District Loop	45.1	GJ	2735.7	GJ
Natural Gas Energy Used	0.0	GJ <sup>1</sup>	232.5	GJ
Boiler Thermal Energy Delivered to the District Loop	0.0	GJ	252.3	GJ
Total Energy Delivered to District Loop	45.1	GJ	2987.8	GJ
Average Solar Collector Efficiency	38	%	33	%
Average Efficiency of HX-1	104	%	106	%
Average Efficiency of HX-2	91	%	95	%
Average BTES core temperature	48.7	$\mathcal C$	51.4	C
Electrical energy used	2.0	GJ <sup>2</sup>	87.5	GJ <sup>3</sup>
PV energy generated	10.1949	GJ	55.8	GJ
Net change in energy stored in STTS	54.2	GJ	258.3	GJ
Solar Fraction	100.0	%	91.6	%

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<sup>&</sup>lt;sup>1</sup> Gas consumption is reported during monthly maintenance inspections which may not coincide with the reporting period. The reported gas consumption is for the period between June 5, and June 28, 2014
<sup>2</sup> The electrical energy consumption is reported during monthly maintenance inspections which may not coincide with the

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<sup>3</sup> Since June 14, 2013.