



## Energy Report Summary for January 2015

Prepared for:



Natural Resources  
Canada

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Canada

Canada

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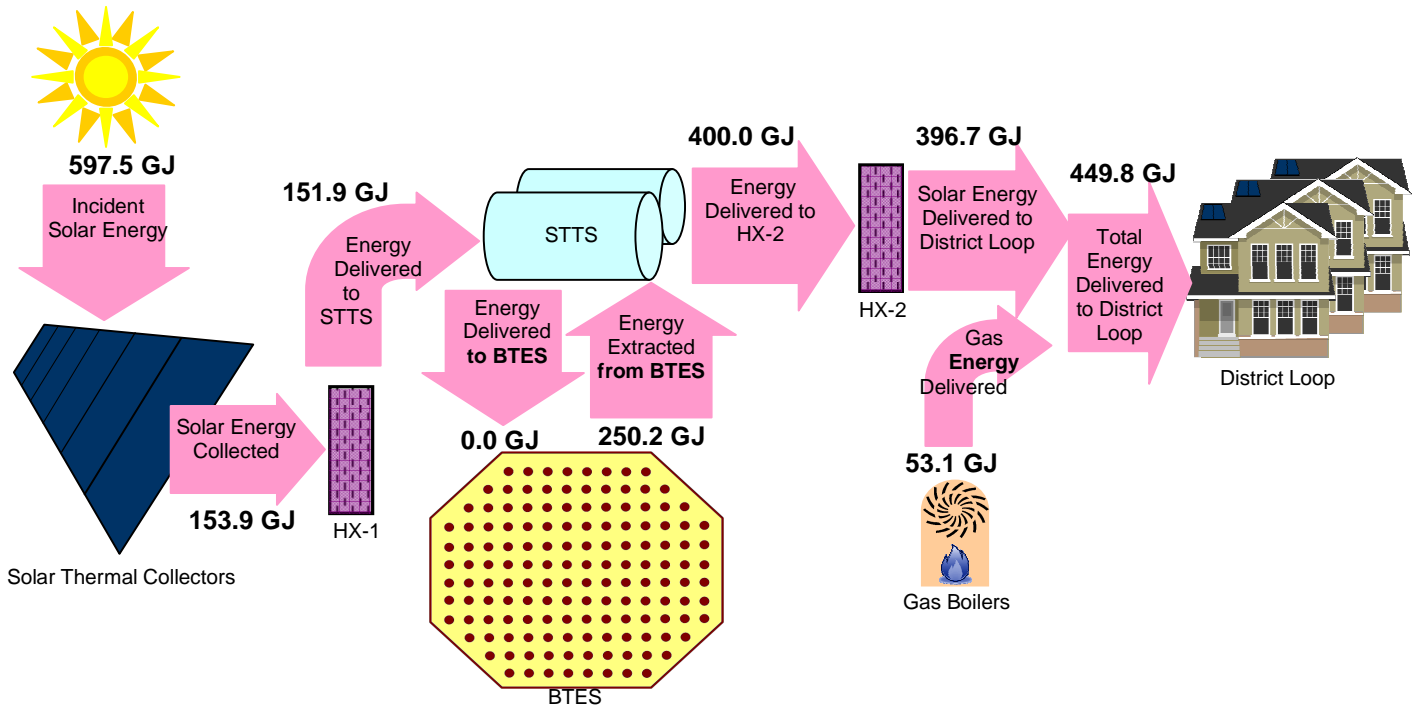
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**PROPRIETARY**

## Drake Landing Solar Community Energy Overview for January 2015

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

<b>Table 0-1 Summary for January 2015</b>		
<b>Description</b>	<b>This Month</b>	<b>Since July 1, 2015</b>
Total Incident Solar Energy	597.5 GJ	6573.9 GJ
Total Solar Energy Collected	153.9 GJ	2197.2 GJ
Total Solar Energy Delivered to STTS	151.9 GJ	2236.0 GJ
Total Energy Delivered to BTES	0.0 GJ	1384.2 GJ
Total Energy Extracted from BTES	250.2 GJ	857.0 GJ
Total Energy Delivered from STTS to HX-2	400.0 GJ	1500.6 GJ
Total Solar Energy Delivered to District Loop	396.7 GJ	1462.7 GJ
Natural Gas Energy Used	42.4 GJ <sup>1</sup>	76.5 GJ
Boiler Thermal Energy Delivered to the District Loop	53.1 GJ	69.7 GJ
Total Energy Delivered to District Loop	449.8 GJ	1532.4 GJ
Average Solar Collector Efficiency	26 %	33 %
Average Efficiency of HX-1	99 %	102 %
Average Efficiency of HX-2	99 %	97 %
Average BTES core temperature	44.2 °C	55.2 °C
Electrical energy used	16.0 GJ <sup>2</sup>	52.1 GJ <sup>3</sup>
PV energy generated	1.2625 GJ	34.8 GJ
Net change in energy stored in STTS	2.1 GJ	272.2 GJ
Solar Fraction	88.2 %	95.5 %

<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 January 9, and February 25, 2015

<sup>2</sup> The electrical energy consumption is reported during monthly maintenance inspections which may not coincide with the reporting period. The reported gas consumption is for the period between December 15, 2015 and January 9, 2015.

<sup>3</sup> Since June 26, 2015.