



Energy Report Summary for January 2014

Prepared for:



Natural Resources
Canada

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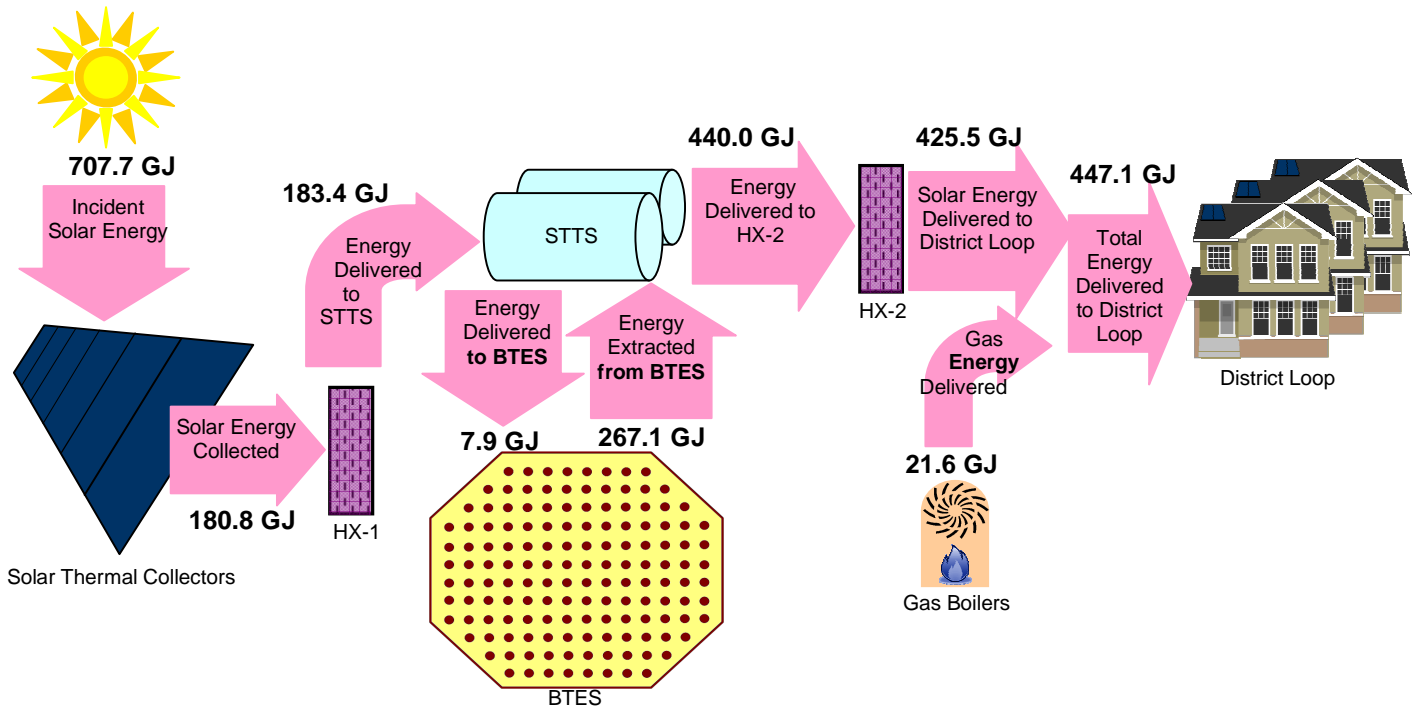
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PROPRIETARY

Drake Landing Solar Community Energy Overview for January 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

Table 0-1 Summary for January 2014		
Description	This Month	Since July 1, 2013
Total Incident Solar Energy	707.7 GJ	6836.6 GJ
Total Solar Energy Collected	180.8 GJ	2242.7 GJ
Total Solar Energy Delivered to STTS	183.4 GJ	2369.7 GJ
Total Energy Delivered to BTES	7.9 GJ	1416.6 GJ
Total Energy Extracted from BTES	267.1 GJ	992.7 GJ
Total Energy Delivered from STTS to HX-2	440.0 GJ	1624.2 GJ
Total Solar Energy Delivered to District Loop	425.5 GJ	1556.1 GJ
Natural Gas Energy Used	16.5 GJ ¹	35.1 GJ
Boiler Thermal Energy Delivered to the District Loop	21.6 GJ	49.1 GJ
Total Energy Delivered to District Loop	447.1 GJ	1605.2 GJ
Average Solar Collector Efficiency	26 %	33 %
Average Efficiency of HX-1	101 %	106 %
Average Efficiency of HX-2	97 %	96 %
Average BTES core temperature	45.8 °C	56.3 °C
Electrical energy used	14.0 GJ ²	8854.0 GJ ³
PV energy generated	0.9256 GJ	33.5 GJ
Net change in energy stored in STTS	-104.3 GJ	230.7 GJ
Solar Fraction	95.2 %	96.9 %

¹ 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 December 13, 2013 and January 15, 2014

² 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 13, 2013 and January 15, 2014.

³ Since June 14, 2013.