



Energy Report Summary for December 2014

Prepared for:



Natural Resources
Canada

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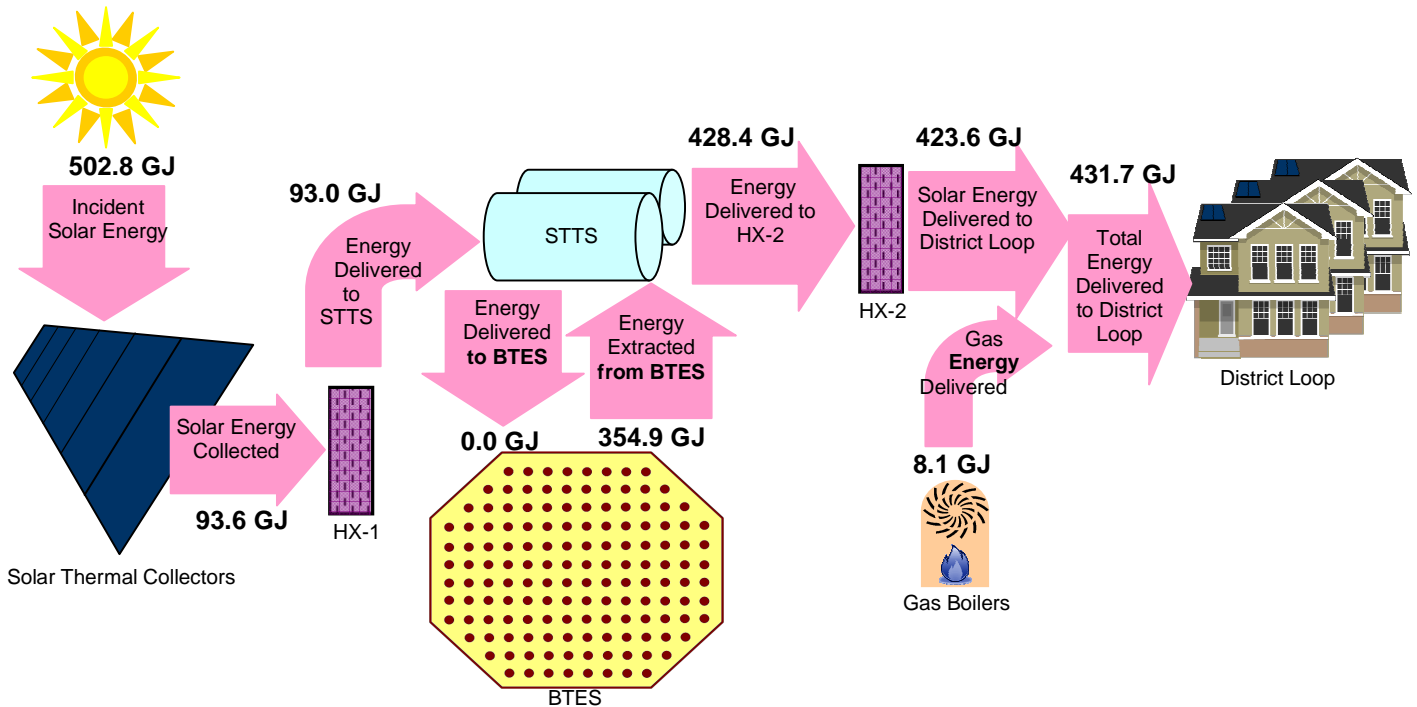
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PROPRIETARY

Drake Landing Solar Community Energy Overview for December 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 December 2014		
Description	This Month	Since July 1, 2014
Total Incident Solar Energy	502.8 GJ	5976.4 GJ
Total Solar Energy Collected	93.6 GJ	2043.3 GJ
Total Solar Energy Delivered to STTS	93.0 GJ	2084.1 GJ
Total Energy Delivered to BTES	0.0 GJ	1384.2 GJ
Total Energy Extracted from BTES	354.9 GJ	606.8 GJ
Total Energy Delivered from STTS to HX-2	428.4 GJ	1100.6 GJ
Total Solar Energy Delivered to District Loop	423.6 GJ	1066.0 GJ
Natural Gas Energy Used	24.8 GJ ¹	34.1 GJ
Boiler Thermal Energy Delivered to the District Loop	8.1 GJ	16.6 GJ
Total Energy Delivered to District Loop	431.7 GJ	1082.6 GJ
Average Solar Collector Efficiency	19 %	34 %
Average Efficiency of HX-1	99 %	102 %
Average Efficiency of HX-2	99 %	97 %
Average BTES core temperature	51.7 °C	57.1 °C
Electrical energy used	11.4 GJ ²	36.1 GJ ³
PV energy generated	0.8524 GJ	33.5 GJ
Net change in energy stored in STTS	19.5 GJ	270.1 GJ
Solar Fraction	98.1 %	98.5 %

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 15, 2014 and January 9, 2015

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 15, 2014 and January 9, 2015.

³ Since June 26, 2014.