



Energy Report Summary for March 2014

Prepared for:



Natural Resources
Canada

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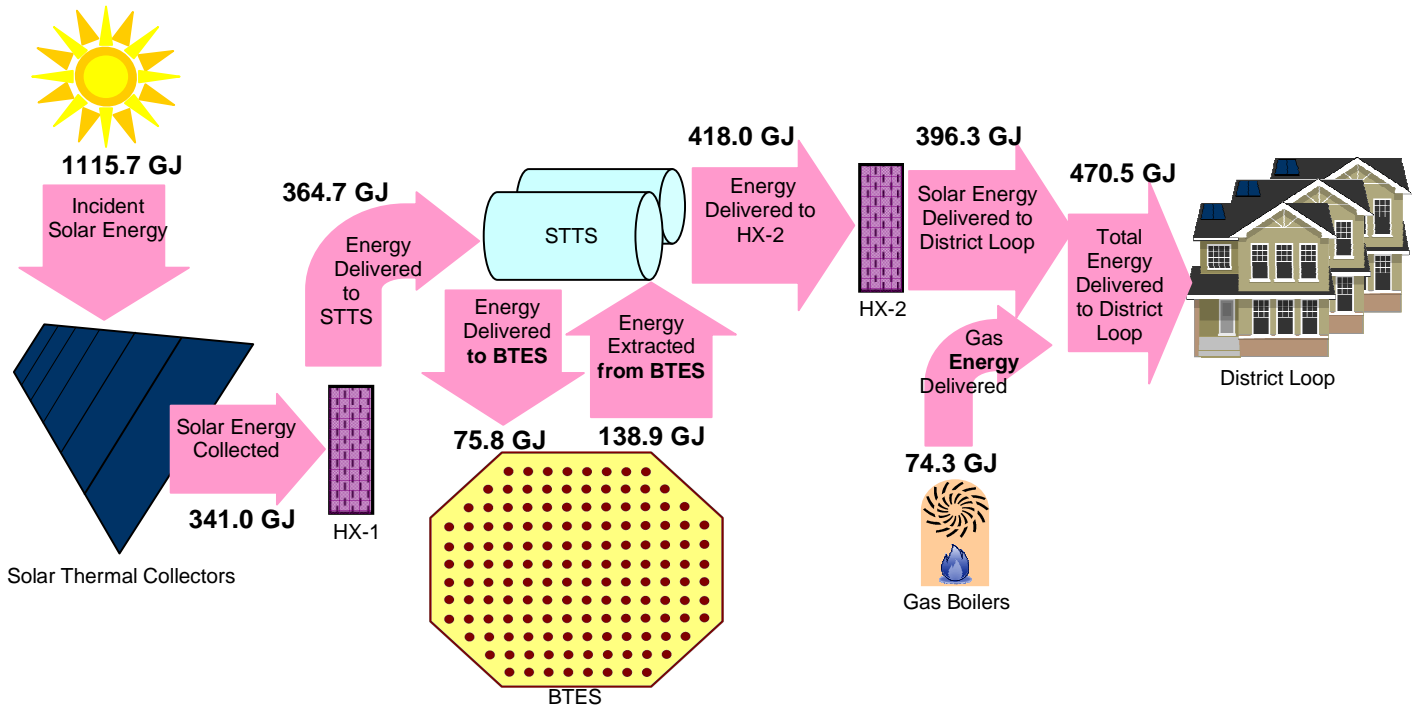
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PROPRIETARY

Drake Landing Solar Community Energy Overview for March 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 March 2014		
Description	This Month	Since July 1, 2013
Total Incident Solar Energy	1115.7 GJ	8927.8 GJ
Total Solar Energy Collected	341.0 GJ	2852.3 GJ
Total Solar Energy Delivered to STTS	364.7 GJ	3021.5 GJ
Total Energy Delivered to BTES	75.8 GJ	1492.6 GJ
Total Energy Extracted from BTES	138.9 GJ	1321.4 GJ
Total Energy Delivered from STTS to HX-2	418.0 GJ	2509.6 GJ
Total Solar Energy Delivered to District Loop	396.3 GJ	2400.6 GJ
Natural Gas Energy Used	74.4 GJ ¹	232.5 GJ
Boiler Thermal Energy Delivered to the District Loop	74.3 GJ	248.8 GJ
Total Energy Delivered to District Loop	470.5 GJ	2649.3 GJ
Average Solar Collector Efficiency	31 %	32 %
Average Efficiency of HX-1	107 %	106 %
Average Efficiency of HX-2	95 %	96 %
Average BTES core temperature	40.6 °C	52.8 °C
Electrical energy used	12.6 GJ ²	8884.4 GJ ³
PV energy generated	3.8130 GJ	38.8 GJ
Net change in energy stored in STTS	-39.6 GJ	227.8 GJ
Solar Fraction	84.2 %	90.6 %

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 February 26 and March 31, 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 February 26 and March 31, 2014.

³ Since June 14, 2013.