



Energy Report Summary for April 2014

Prepared for:



Natural Resources
Canada

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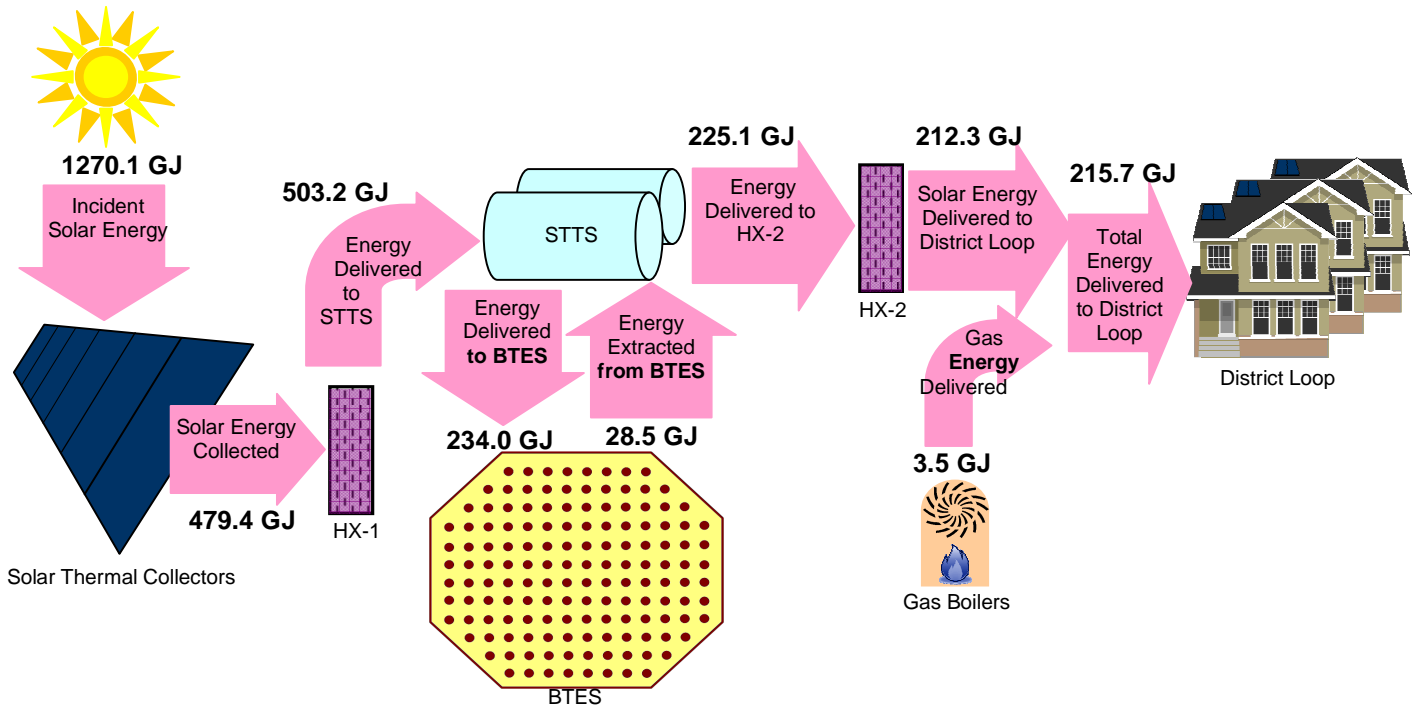
May 5, 2014
Document Version 1.0
CM002171

PROPRIETARY

Drake Landing Solar Community Energy Overview for April 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 April 2014		
Description	This Month	Since July 1, 2013
Total Incident Solar Energy	1270.1 GJ	10197.9 GJ
Total Solar Energy Collected	479.4 GJ	3331.7 GJ
Total Solar Energy Delivered to STTS	503.2 GJ	3524.7 GJ
Total Energy Delivered to BTES	234.0 GJ	1726.6 GJ
Total Energy Extracted from BTES	28.5 GJ	1349.9 GJ
Total Energy Delivered from STTS to HX-2	225.1 GJ	2734.7 GJ
Total Solar Energy Delivered to District Loop	212.3 GJ	2612.9 GJ
Natural Gas Energy Used	0.0 GJ ¹	232.5 GJ
Boiler Thermal Energy Delivered to the District Loop	3.5 GJ	252.3 GJ
Total Energy Delivered to District Loop	215.7 GJ	2865.0 GJ
Average Solar Collector Efficiency	38 %	33 %
Average Efficiency of HX-1	105 %	106 %
Average Efficiency of HX-2	94 %	96 %
Average BTES core temperature	43.3 °C	51.9 °C
Electrical energy used	5.2 GJ ²	8889.6 GJ ³
PV energy generated	7.6441 GJ	46.4 GJ
Net change in energy stored in STTS	72.6 GJ	300.4 GJ
Solar Fraction	98.4 %	91.2 %

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 March 31, and May 1, 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 March 31, and May 1, 2014.

³ Since June 14, 2013.