



Energy Report Summary for January 2016

Prepared for:



Natural Resources
Canada

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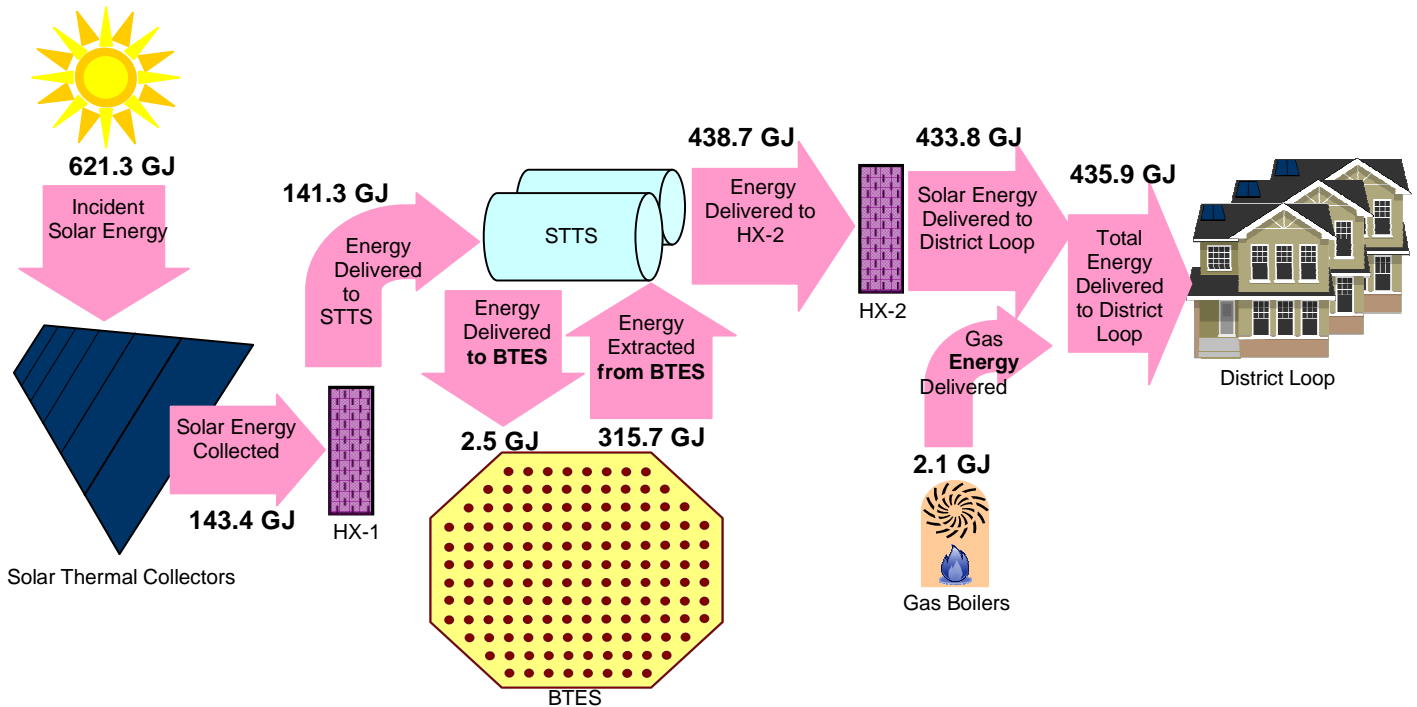
February 26, 2016
Document Version 1.0
CM002171

PROPRIETARY

Drake Landing Solar Community Energy Overview for January 2016

This document summarizes the energy generated and used within the Drake Landing Solar Community at Okotoks Alberta.

Additional Information can be found here: <http://www.dlsc.ca>



System Energy Diagram

Table 0-1 Summary for January 2016		
Description	This Month	Since July 1, 2015
Total Incident Solar Energy	621.3 GJ	6739.1 GJ
Total Solar Energy Collected	143.4 GJ	2186.9 GJ
Total Solar Energy Delivered to STTS	141.3 GJ	2186.7 GJ
Total Energy Delivered to BTES	2.5 GJ	1338.9 GJ
Total Energy Extracted from BTES	315.7 GJ	756.4 GJ
Total Energy Delivered from STTS to HX-2	438.7 GJ	1472.2 GJ
Total Solar Energy Delivered to District Loop	433.8 GJ	1425.3 GJ
Natural Gas Energy Used	1.0 GJ ¹	1.0 GJ
Boiler Thermal Energy Delivered to the District Loop	2.1 GJ	2.1 GJ
Total Energy Delivered to District Loop	435.9 GJ	1427.4 GJ
Average Solar Collector Efficiency	23 %	32 %
Average Efficiency of HX-1	99 %	100 %
Average Efficiency of HX-2	99 %	97 %
Average BTES core temperature	- °C	58.0 °C
Electrical energy used	11.6822 GJ	52.1 GJ ²
PV energy generated	0.8017 GJ	35.4 GJ
Net change in energy stored in STTS	15.8 GJ	132.0 GJ
Solar Fraction	99.5 %	99.9 %

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 1, 2015, and January 7, 2016

² Since June 30, 2015.