



Energy Report Summary for October 2015

Prepared for:



Natural Resources
Canada

Ressources Naturelles
Canada

Canada

Prepared by:



leidos



*Leidos Canada
(Formerly SAIC Canada)*

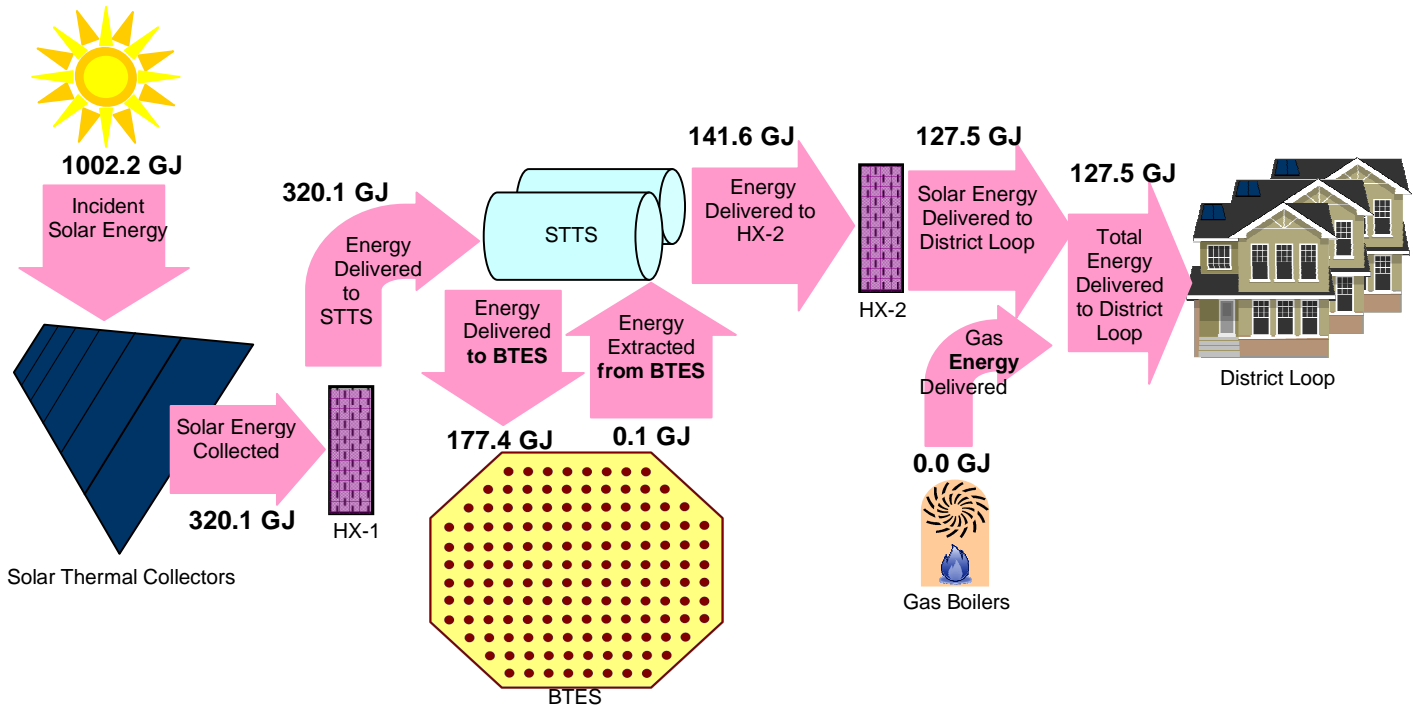
January 20, 2016
Document Version 1.0
CM002171

PROPRIETARY

Drake Landing Solar Community Energy Overview for October 2015

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 October 2015		
Description	This Month	Since July 1, 2015
Total Incident Solar Energy	1002.2 GJ	4831.6 GJ
Total Solar Energy Collected	320.1 GJ	1706.2 GJ
Total Solar Energy Delivered to STTS	320.1 GJ	1713.6 GJ
Total Energy Delivered to BTES	177.4 GJ	1336.4 GJ
Total Energy Extracted from BTES	0.1 GJ	0.1 GJ
Total Energy Delivered from STTS to HX-2	141.6 GJ	267.1 GJ
Total Solar Energy Delivered to District Loop	127.5 GJ	235.4 GJ
Natural Gas Energy Used	0.0 GJ ¹	0.0 GJ
Boiler Thermal Energy Delivered to the District Loop	0.0 GJ	0.0 GJ
Total Energy Delivered to District Loop	127.5 GJ	235.4 GJ
Average Solar Collector Efficiency	32 %	35 %
Average Efficiency of HX-1	100 %	100 %
Average Efficiency of HX-2	90 %	88 %
Average BTES core temperature	- °C	- °C
Electrical energy used	6.2667 GJ	21.0 GJ ²
PV energy generated	4.7197 GJ	32.0 GJ
Net change in energy stored in STTS	1.2 GJ	110.2 GJ
Solar Fraction	100.0 %	100.0 %

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 September 30, and October 30, 2015

² Since June 30, 2015.