



Energy Report Summary for March 2010

Prepared for:



Natural Resources
Canada

Ressources Naturelles
Canada

Canada

Prepared by:



*Science Applications International Corporation
(SAIC Canada)*

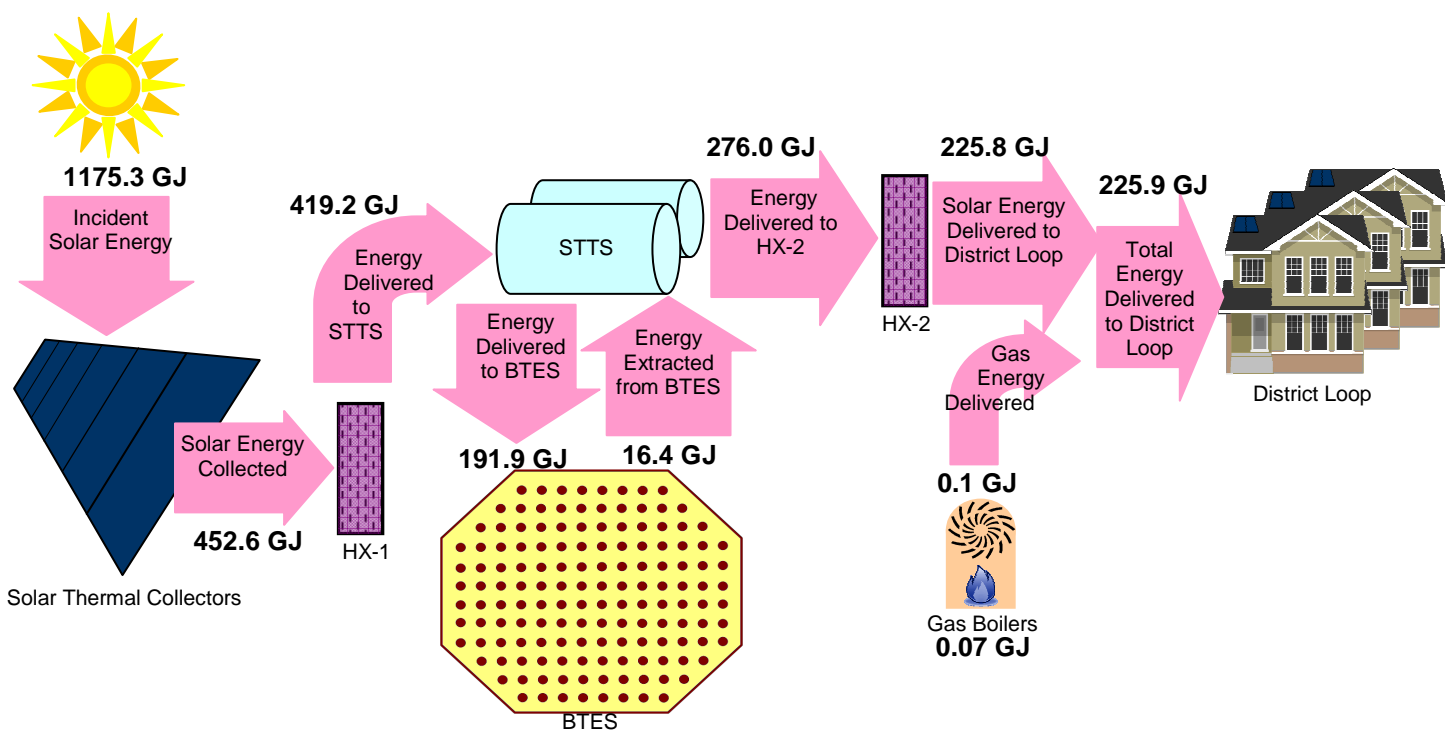
April 23, 2010
Document Version 2.0
CM002171

PROPRIETARY

Drake Landing Solar Community Energy Overview for March 2010

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 2010		
Description	This Month	Since July 1, 2009
Total Incident Solar Energy	1175.3 GJ	8788.6 GJ
Total Solar Energy Collected	452.6 GJ	2876.4 GJ
Total Solar Energy Delivered to STTS	419.2 GJ	2744.0 GJ
Total Energy Delivered to BTES	191.9 GJ	1654.0 GJ
Total Energy Extracted from BTES	16.4 GJ	801.4 GJ
Total Energy Delivered from STTS to HX-2	276.0 GJ	2105.8 GJ
Total Solar Energy Delivered to District Loop	225.8 GJ	1656.7 GJ
Natural Gas Energy Used	0.07 GJ	542.5 GJ
Boiler Thermal Energy Delivered to the District Loop	0.1 GJ	519.4 GJ
Total Energy Delivered to District Loop	225.9 GJ	2176.0 GJ
Average Solar Collector Efficiency	38.5 %	32.7 %
Average Efficiency of HX-1	92.6 %	95.4 %
Average Efficiency of HX-2	81.8 %	78.7 %
Average BTES core temperature	50.1 °C	40.7 °C
Electrical energy used	13.6 GJ	95.7 GJ
PV energy generated	1.2196 GJ	8.6 GJ
Net change in energy stored in STTS	-13.34 GJ	-24.1 GJ
Solar Fraction	100.0 %	76.1 %