



## Energy Report Summary for October 2009

Prepared for:



Natural Resources  
Canada

Ressources Naturelles  
Canada

Canada

Prepared by:



*Science Applications International Corporation  
(SAIC Canada)*

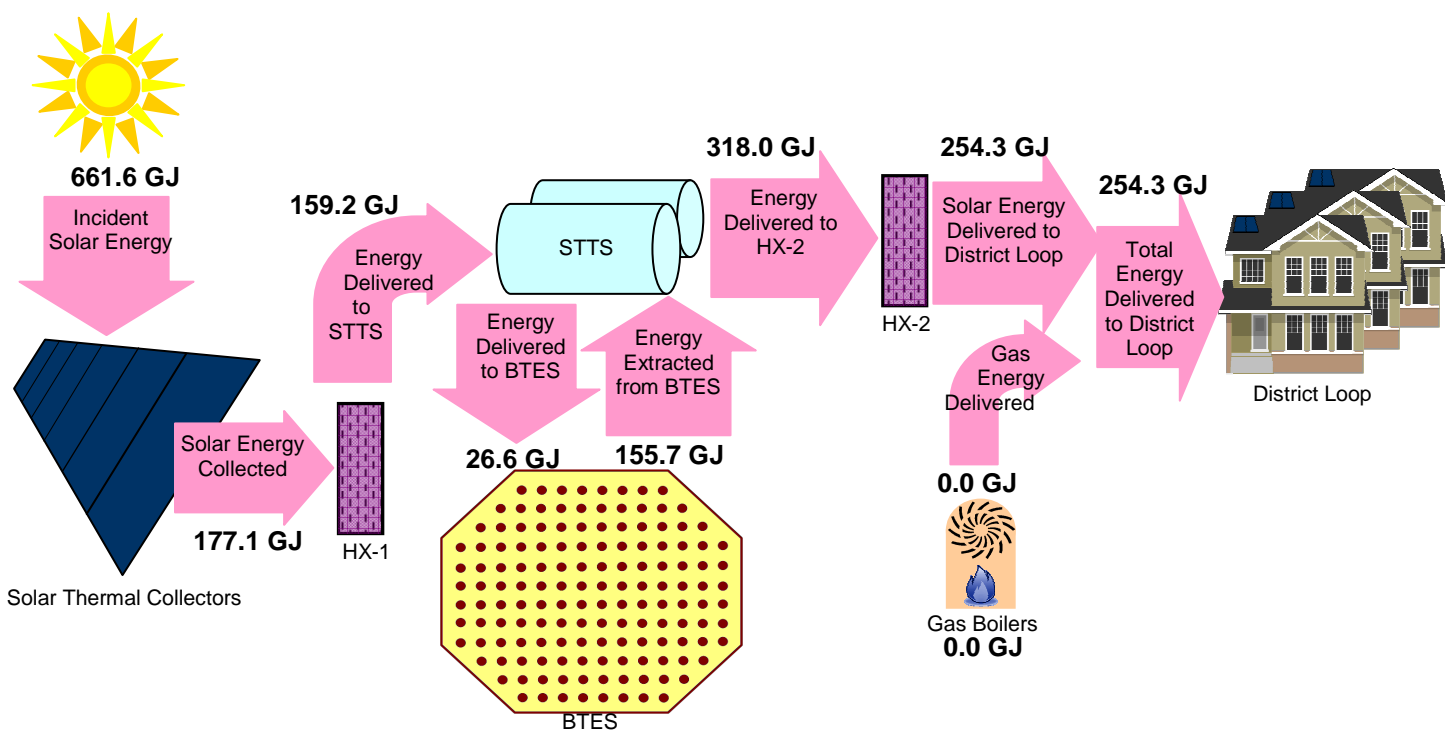
January 5, 2010  
Document Version 2.0  
CM002171

**PROPRIETARY**

## Drake Landing Solar Community Energy Overview for October 2009

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

<b>Table 0-1 Summary for October 2009</b>		
<b>Description</b>	<b>This Month</b>	<b>Since July 1, 2009</b>
Total Incident Solar Energy	661.6 GJ	4982.7 GJ
Total Solar Energy Collected	177.1 GJ	1668.0 GJ
Total Solar Energy Delivered to STTS	159.2 GJ	1658.4 GJ
Total Energy Delivered to BTES	26.6 GJ	1366.2 GJ
Total Energy Extracted from BTES	155.7 GJ	155.7 GJ
Total Energy Delivered from STTS to HX-2	318.0 GJ	422.9 GJ
Total Solar Energy Delivered to District Loop	254.3 GJ	333.9 GJ
Natural Gas Energy Used	0.0 GJ	0.0 GJ
Boiler Thermal Energy Delivered to the District Loop	0.0 GJ	0.0 GJ
Total Energy Delivered to District Loop	254.3 GJ	333.9 GJ
Average Solar Collector Efficiency	26.8%	33.5%
Average Efficiency of HX-1	89.9%	99.4%
Average Efficiency of HX-2	80.0%	79.0%
Average BTES core temperature	46.5 °C	40.0 °C
Electrical energy used	12.8 GJ	13.4 GJ
PV energy generated	0.6478 GJ	5.1 GJ
Net change in energy stored in STTS	-7.56 GJ	-11.0 GJ
Solar Fraction	100.0%	100.0%