



## Energy Report Summary for May 2009

Prepared for:



Natural Resources  
Canada

Ressources Naturelles  
Canada

Canada

Prepared by:



*Science Applications International Corporation  
(SAIC Canada)*

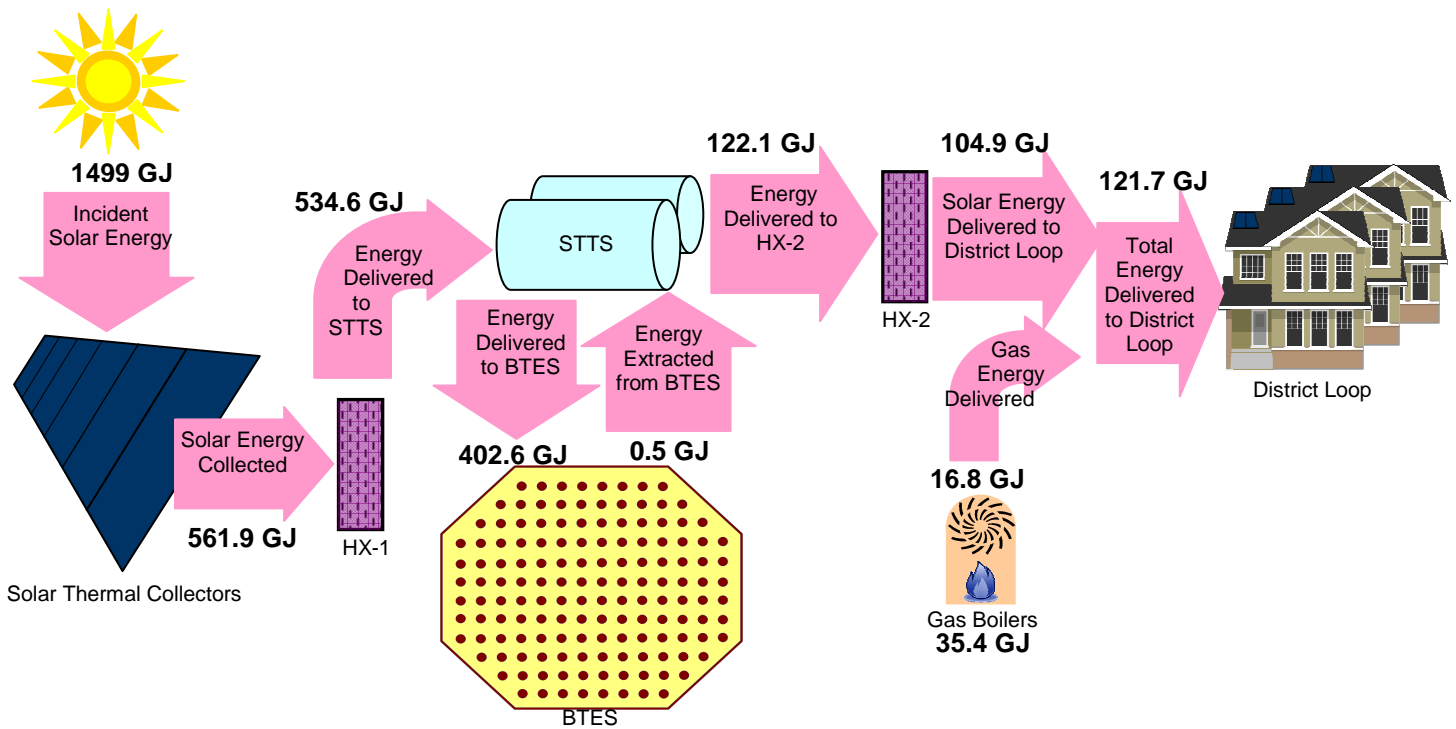
1 June, 2009  
Document Version 1.0  
CM002171

**PROPRIETARY**

## Drake Landing Solar Community Energy Overview for May 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 1 Summary for May 2009</b>		
<b>Description</b>	<b>This Month</b>	<b>Since July 1, 2008</b>
Total Incident Solar Energy	1499.2 GJ	12377.6 GJ
Total Solar Energy Collected	561.9 GJ	4030.8 GJ
Total Solar Energy Delivered to STTS	534.6 GJ	3786.2 GJ
Total Energy Delivered to BTES	402.6 GJ	2348.9 GJ
Total Energy Extracted from BTES	0.5 GJ	561.7 GJ
Total Energy Delivered from STTS to HX-2	122.1GJ	1674.2 GJ
Total Solar Energy Delivered to District Loop	104.9 GJ	1738.2 GJ
Natural Gas Energy Used	35.4 GJ	1192.5 GJ
Boiler Thermal Energy Delivered to the District Loop	16.8 GJ	1172.2 GJ
Total Energy Delivered to District Loop	121.7 GJ	2910.4 GJ
Average Solar Collector Efficiency	37.5 %	32.6%
Average Efficiency of HX-1	95.1 %	93.9%
Average Efficiency of HX-2	85.9 %	103.8%
Average BTES core temperature	33.2 °C	45.0 °C
Electrical energy used	0.0 GJ	90.2 GJ
PV energy generated	1.6562 GJ	12.0 GJ
Net change in energy stored in STTS	8.88 GJ	6.3 GJ
Solar Fraction	86.2 %	59.7%