

## Energy Report Summary for May 2010

Prepared for:



Natural Resources Canada  
Ressources Naturelles  
Canada

Canada

Prepared by:



*Science Applications International Corporation  
(SAIC Canada)*

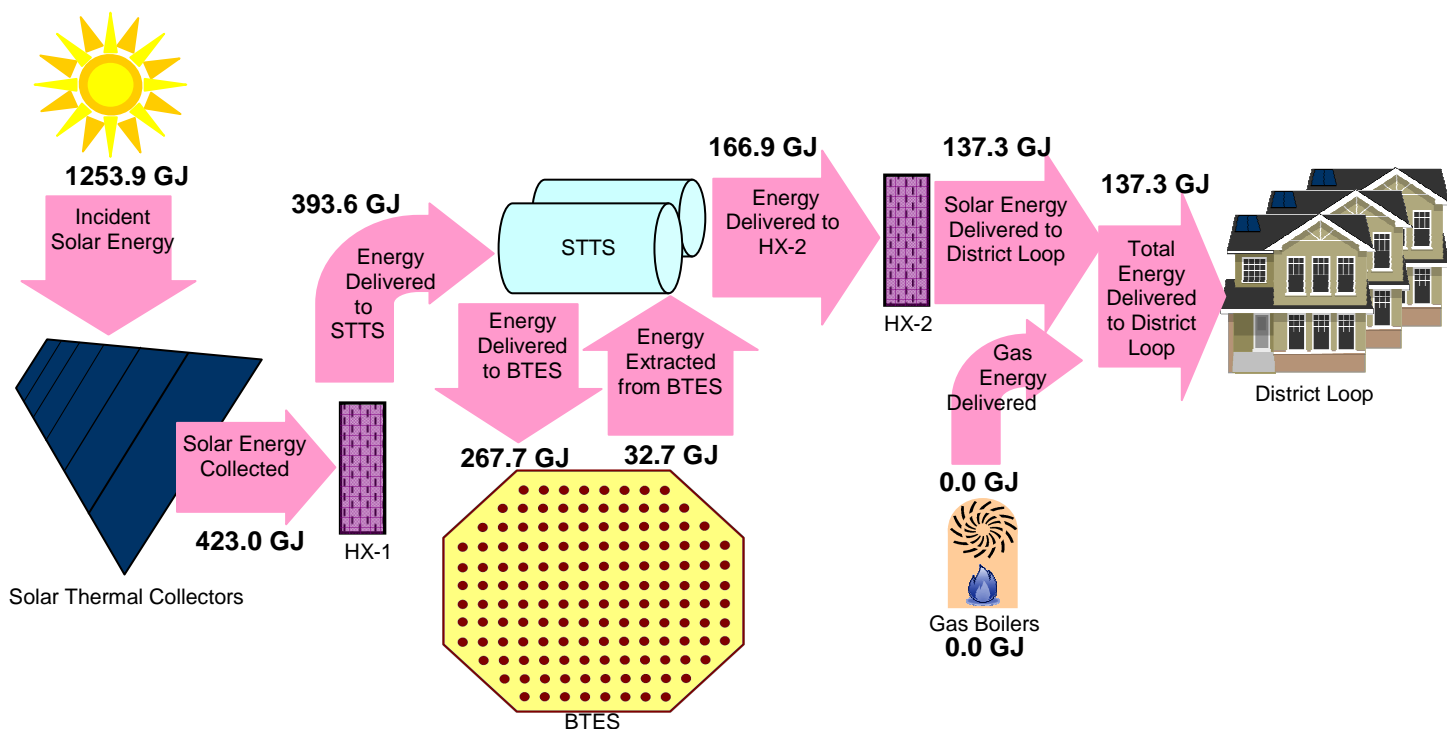
June 6, 2010  
Document Version 1.0  
CM002171

**PROPRIETARY**

## Drake Landing Solar Community Energy Overview for May 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

<b>Table 0-1 Summary for May 2010</b>		
<b>Description</b>	<b>This Month</b>	<b>Since July 1, 2009</b>
Total Incident Solar Energy	1253.9 GJ	11370.6 GJ
Total Solar Energy Collected	423.0 GJ	3786.1 GJ
Total Solar Energy Delivered to STTS	393.6 GJ	3589.0 GJ
Total Energy Delivered to BTES	267.7 GJ	2161.9 GJ
Total Energy Extracted from BTES	32.7 GJ	860.1 GJ
Total Energy Delivered from STTS to HX-2	166.9 GJ	2494.0 GJ
Total Solar Energy Delivered to District Loop	137.3 GJ	1974.7 GJ
Natural Gas Energy Used	0.0 GJ	543.6 GJ
Boiler Thermal Energy Delivered to the District Loop	0.0 GJ	519.5 GJ
Total Energy Delivered to District Loop	137.3 GJ	2494.1 GJ
Average Solar Collector Efficiency	33.7 %	33.3 %
Average Efficiency of HX-1	93.0 %	94.8 %
Average Efficiency of HX-2	82.3 %	79.2 %
Average BTES core temperature	54.2 °C	43.1 °C
Electrical energy used	14.8 GJ	116.0 GJ
PV energy generated	1.3666 GJ	11.3 GJ
Net change in energy stored in STTS	-19.19 GJ	-28.3 GJ
Solar Fraction	100.0 %	79.2 %