

## Energy Report Summary for September 2010

Prepared for:



Natural Resources Canada  
Ressources Naturelles Canada

Canada

Prepared by:



*Science Applications International Corporation  
(SAIC Canada)*

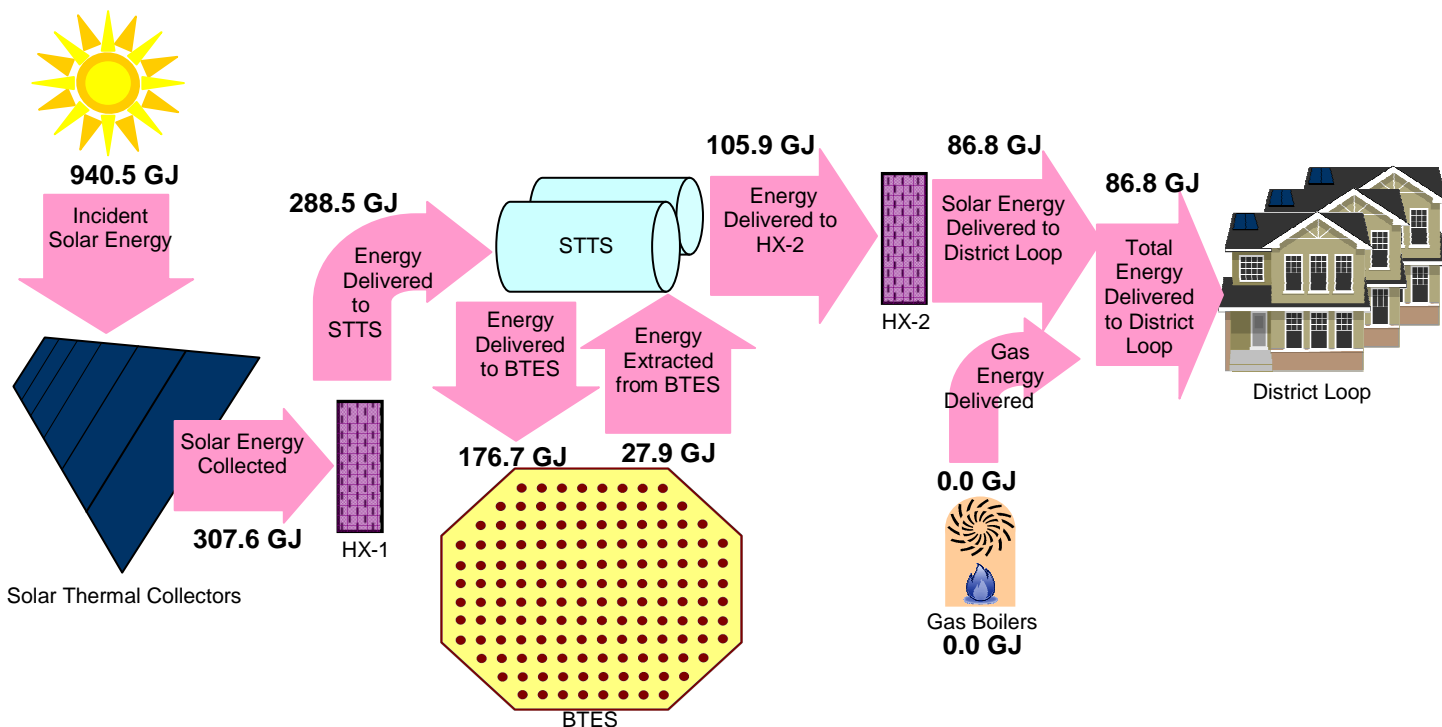
December 21, 2010  
Document Version 2.0  
CM002171

**PROPRIETARY**

## Drake Landing Solar Community Energy Overview for September 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 September 2010</b>		
<b>Description</b>	<b>This Month</b>	<b>Since July 1, 2010</b>
Total Incident Solar Energy	940.5 GJ	3762.7 GJ
Total Solar Energy Collected	307.6 GJ	1295.5 GJ
Total Solar Energy Delivered to STTS	288.5 GJ	1228.2 GJ
Total Energy Delivered to BTES	176.7 GJ	998.8 GJ
Total Energy Extracted from BTES	27.9 GJ	27.9 GJ
Total Energy Delivered from STTS to HX-2	105.9 GJ	140.8 GJ
Total Solar Energy Delivered to District Loop	86.8 GJ	124.3 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	86.8 GJ	124.3 GJ
Average Solar Collector Efficiency	32.7 %	34.4% %
Average Efficiency of HX-1	93.8 %	94.8% %
Average Efficiency of HX-2	82.0 %	88.3% %
Average BTES core temperature	59.5 °C	59.5 °C
Electrical energy used	4.0 GJ	18.0 GJ
PV energy generated	0.9407 GJ	4.0 GJ
Net change in energy stored in STTS	10.21 GJ	2.1 GJ
Solar Fraction	100.0 %	100.0% %