



## Energy Report Summary for February 2008

Prepared for:



Natural Resources  
Canada

Ressources naturelles  
Canada

Canada

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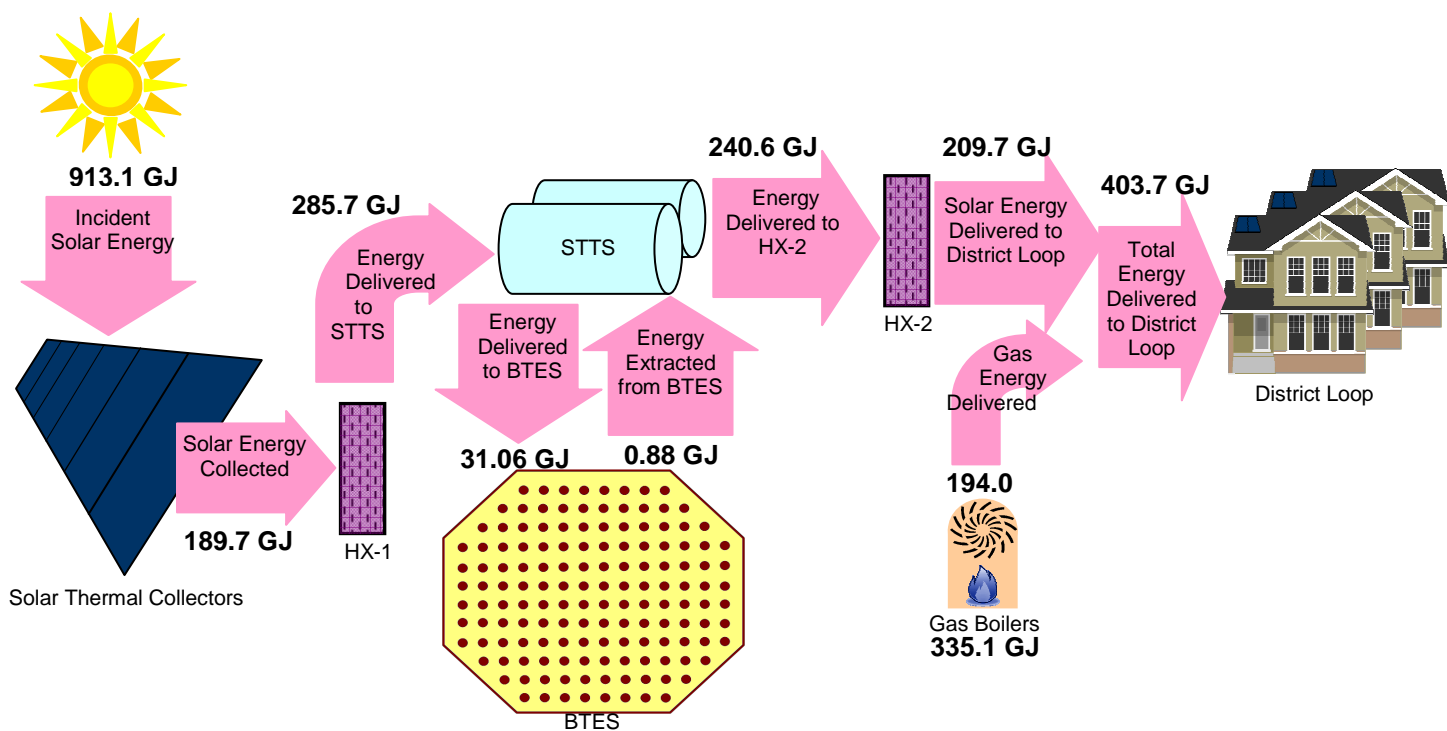
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**PROPRIETARY**

## Drake Landing Solar Community Energy Overview for February 2008

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>Summary for February 2008</b>		
Description	This Month	Since July 1, 2007
Total Incident Solar Energy for the month	913.1 GJ	8183 GJ
Total Solar Energy Collected for the month <sup>1</sup>	189.7 GJ	2699 GJ
Total Solar Energy Delivered to STTS for the month	285.7 GJ	3050 GJ
Total Energy Delivered to BTES for the month	31.06 GJ	1624.4 GJ
Total Energy Extracted from BTES for the month	0.88 GJ	130.4 GJ
Total Energy Delivered from STTS to HX-2	240.6 GJ	1557.7 GJ
Total Solar Energy Delivered to District Loop for the month	209.7 GJ	1012.0 GJ
Natural Gas Energy Used	335.1 GJ	1483.4 GJ
Boiler Thermal Energy Delivered to the District Loop for the month	194.0 GJ	1285.3 GJ
Total Energy Delivered to District Loop for the month	403.7 GJ	2297.2 GJ
Average Solar Collector Efficiency for the month	20.8%	33%
Average Efficiency of HX-1 for the month	n/a	89%
Average Efficiency of HX-2 for the month	86.4%	65%
Average BTES core temperature for the month	32.73 °C	39.49 °C
Average BTES core temperature at start of month	32.02 °C	40.30 °C
Average BTES core temperature at end of month	32.26 °C	38.80 °C
Change in average BTES core Temperature during the month	0.23 °C	-1.50 °C
Electrical energy used for the month	15.99 GJ	130.54 GJ
PV energy generated for the month	0.823 GJ	5.16 GJ
Net change in energy stored in STTS during the month	6.14 GJ	-10.33 GJ
Solar Fraction	51.5%	44%

<sup>1</sup> Corrected for glycol concentration variance