



## Energy Report Summary for October 2007

Prepared for:



Natural Resources  
Canada

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Canada

Canada

Prepared by:



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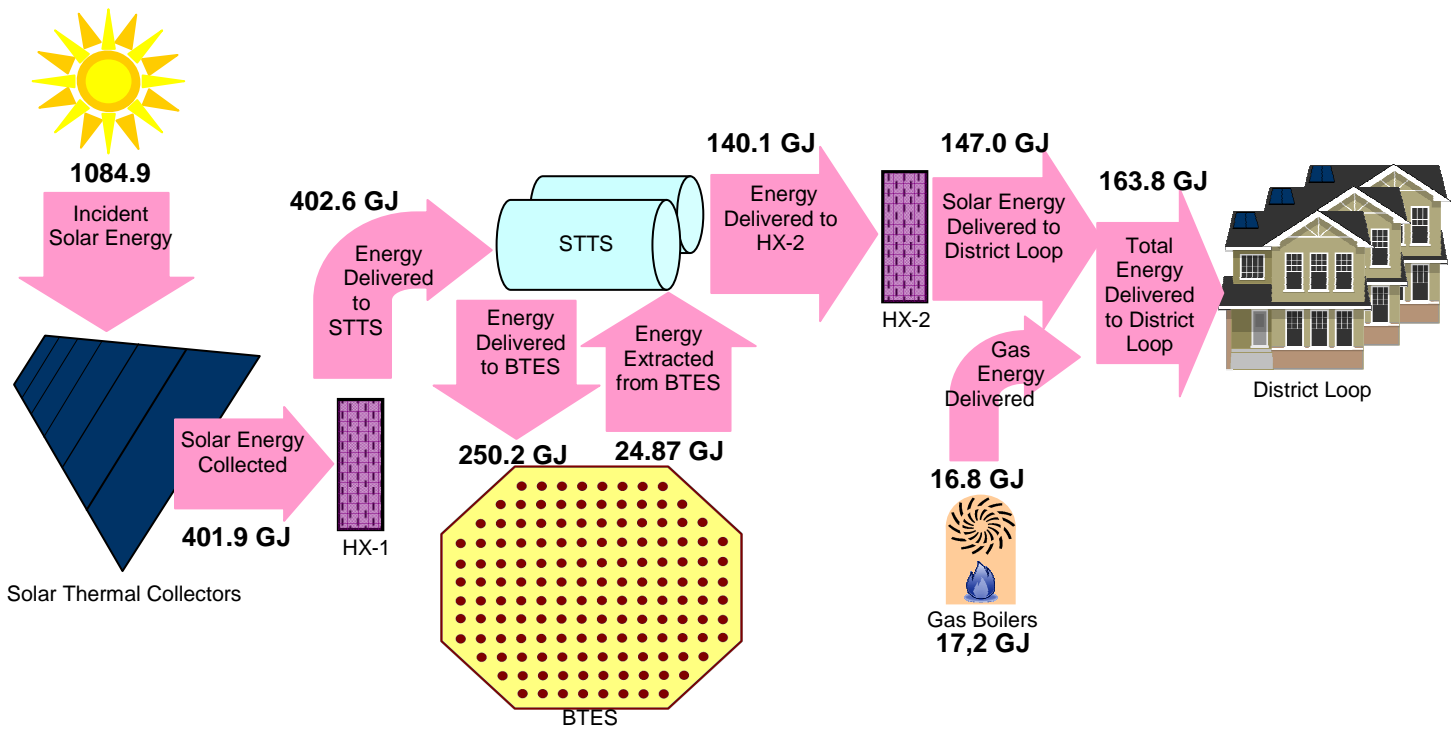
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**PROPRIETARY**

## Drake Landing Solar Community Energy Overview for October 2007

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 October 2007</b>		
Description	This Month	Since July 1, 2007
Total Incident Solar Energy for the month	1084.9 GJ	5395 GJ
Total Solar Energy Collected for the month <sup>1</sup>	401.9 GJ	2189 GJ
Total Solar Energy Delivered to STTS for the month	402.6 GJ	2250 GJ
Total Energy Delivered to BTES for the month	250.2 GJ	1593.0 GJ
Total Energy Extracted from BTES for the month	24.87 GJ	43.0 GJ
Total Energy Delivered from STTS to HX-2	140.1 GJ	238.5 GJ
Total Solar Energy Delivered to District Loop for the month	147.0 GJ	313.4 GJ
Natural Gas Energy Used	17.2 GJ	20.8 GJ
Boiler Thermal Energy Delivered to the District Loop for the month	16.8 GJ	17.4 GJ
Total Energy Delivered to District Loop for the month	163.8 GJ	330.7 GJ
Average Solar Collector Efficiency for the month	37.0%	41%
Average Efficiency of HX-1 for the month	100%	97%
Average Efficiency of HX-2 for the month	105%	131%
Average BTES core temperature for the month	42.33 °C	43.20 °C
Average BTES core temperature at start of month	47.35 °C	45.12 °C
Average BTES core temperature at end of month	41.22 °C	44.36 °C
Change in average BTES core Temperature during the month	-6.14 °C	-0.76 °C
Electrical energy used for the month	16.73 GJ	54.82 GJ
PV energy generated for the month	1.041 GJ	2.67 GJ
Net change in energy stored in STTS during the month	-1.47 GJ	-7.99 GJ
Solar Fraction	89.7%	95%

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