

## **Energy Report Summary for April 2008**

## **Prepared for:**



Natural Resources Canada Ressources naturelles Canada



## Prepared by:



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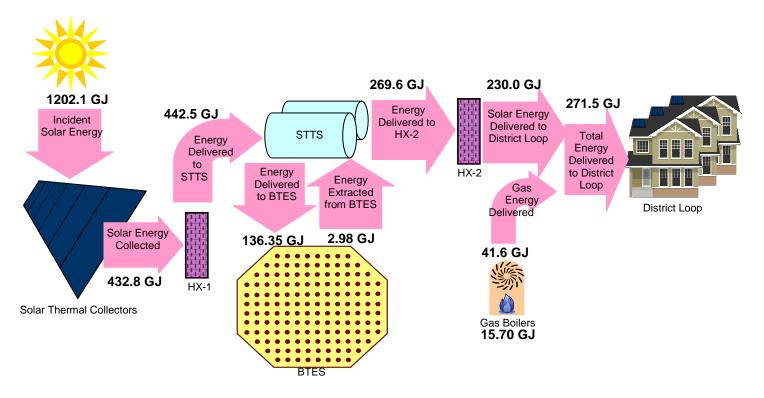
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**PROPRIETARY** 

## **Drake Landing Solar Community Energy Overview for April 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** 

Summary for April 2008		
Description	This Month	Since April 1, 2007
Total Incident Solar Energy for the month	1322.3 GJ	1322.3 GJ
Total Solar Energy Collected for the month <sup>1</sup>	432.98 GJ	432.98 GJ
Total Solar Energy Delivered to STTS for the month	442.5 GJ	442.5 GJ
Total Energy Delivered to BTES for the month	136.35 GJ	136.35 GJ
Total Energy Extracted from BTES for the month	2.98 GJ	2.98 GJ
Total Energy Delivered from STTS to HX-2	269.6 GJ	269.6 GJ
Total Solar Energy Delivered to District Loop for the month	230.0 GJ	230.0 GJ
Natural Gas Energy Used	15.70 GJ	15.70 GJ
Boiler Thermal Energy Delivered to the District Loop for the month	41.6 GJ	41.6 GJ
Total Energy Delivered to District Loop for the month	271.5 GJ	271.5 GJ
Average Solar Collector Efficiency for the month	32.7%	32.7%
Average Efficiency of HX-1 for the month	102%	102%
Average Efficiency of HX-2 for the month	85.3%	85.3%
Average BTES core temperature for the month	37.91 °C	37.91 ℃
Average BTES core temperature at start of month	33.82 ℃	33.82 ℃
Average BTES core temperature at end of month	50.69 ℃	50.69 ℃
Change in average BTES core Temperature during the month	16.88 ℃	16.88 ℃
Electrical energy used for the month	0.00 GJ	0.00 GJ
PV energy generated for the month	1.344 GJ	1.344 GJ
Net change in energy stored in STTS during the month	23.48 GJ	23.48 GJ
Solar Fraction	84.7%	84.7%

<sup>&</sup>lt;sup>1</sup> Corrected for glycol concentration variance