



Energy Report Summary for January 2007

Prepared for:



Natural Resources
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Prepared by:



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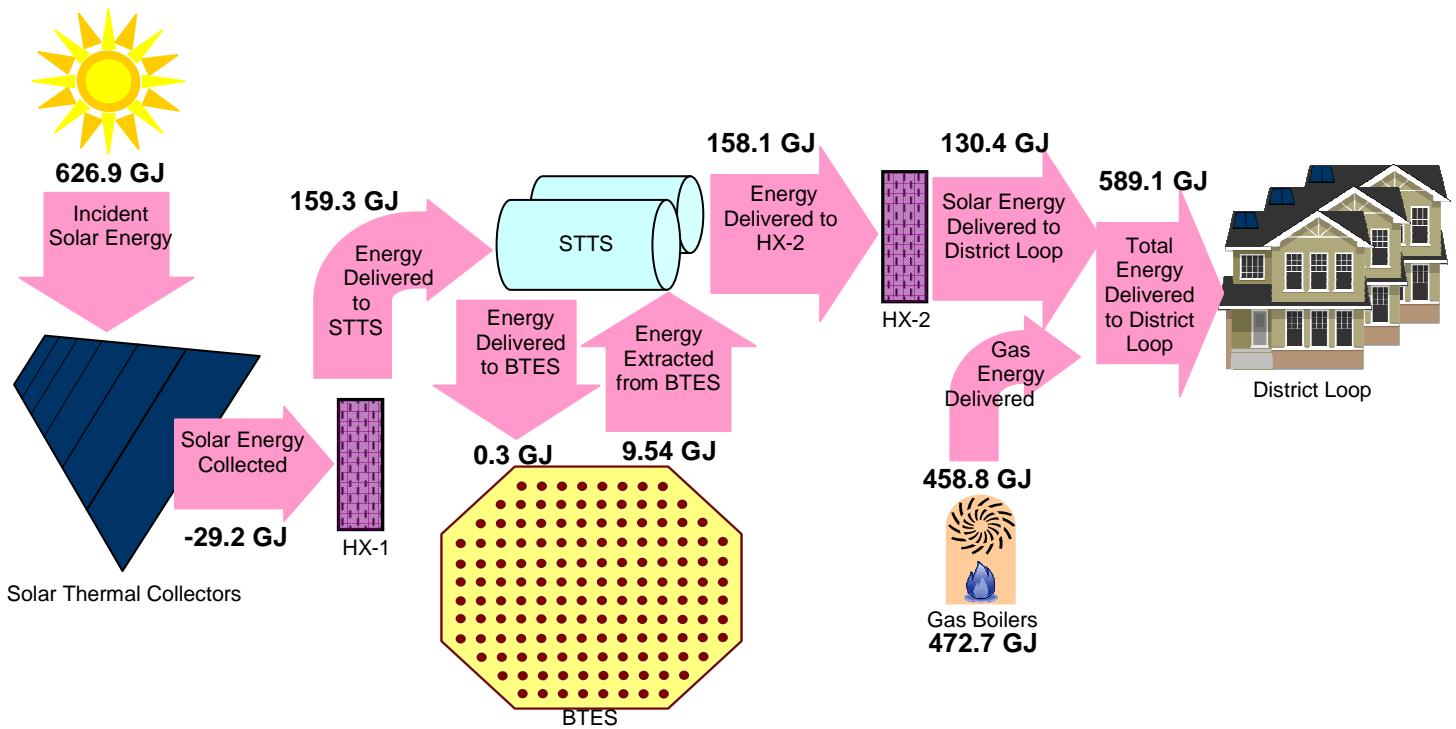
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PROPRIETARY

Drake Landing Solar Community Energy Overview for January 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

Summary for January 2007		
Description	This Month	Since July 1, 2007
Total Incident Solar Energy for the month	626.9 GJ	7270 GJ
Total Solar Energy Collected for the month ¹	-29.2 GJ	2510 GJ
Total Solar Energy Delivered to STTS for the month	159.3 GJ	2764 GJ
Total Energy Delivered to BTES for the month	0.3 GJ	1593.3 GJ
Total Energy Extracted from BTES for the month	9.54 GJ	129.5 GJ
Total Energy Delivered from STTS to HX-2	158.1 GJ	1317.1 GJ
Total Solar Energy Delivered to District Loop for the month	130.4 GJ	802.3 GJ
Natural Gas Energy Used	472.7 GJ	1148.3 GJ
Boiler Thermal Energy Delivered to the District Loop for the month	458.8 GJ	1091.4 GJ
Total Energy Delivered to District Loop for the month	589.1 GJ	1893.5 GJ
Average Solar Collector Efficiency for the month	-4.7%	35%
Average Efficiency of HX-1 for the month	n/a	91%
Average Efficiency of HX-2 for the month	82.5%	61%
Average BTES core temperature for the month	32.55 °C	40.61 °C
Average BTES core temperature at start of month	33.03 °C	39.46 °C
Average BTES core temperature at end of month	32.02 °C	39.74 °C
Change in average BTES core Temperature during the month	-1.01 °C	-1.75 °C
Electrical energy used for the month	21.63 GJ	114.6 GJ
PV energy generated for the month	0.525 GJ	4.34 GJ
Net change in energy stored in STTS during the month	4.86 GJ	-16.47 GJ
Solar Fraction	22.1%	42%

¹ Corrected for glycol concentration variance