



Energy Report Summary for January 2010

Prepared for:



Natural Resources
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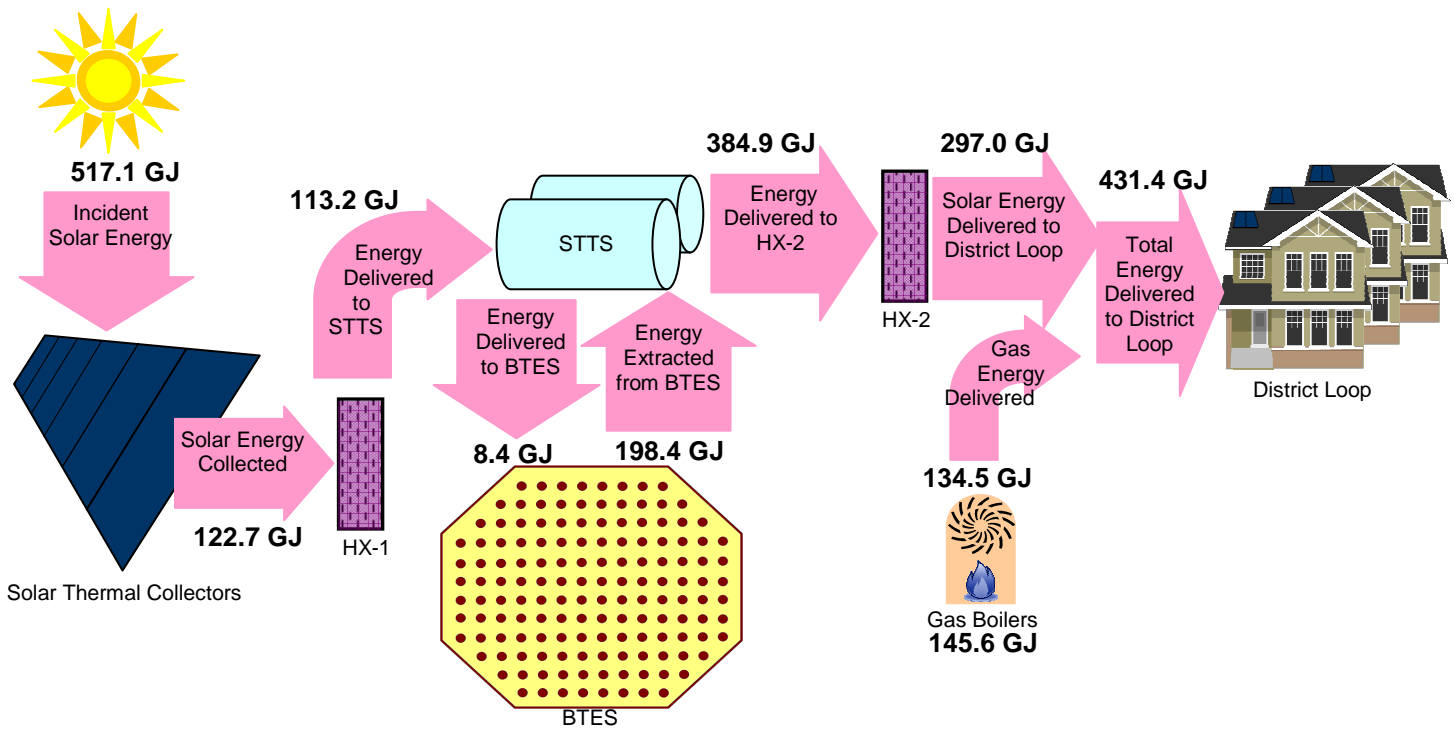
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PROPRIETARY

Drake Landing Solar Community Energy Overview for January 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

Table 0-1 Summary for January 2010		
Description	This Month	Since July 1, 2009
Total Incident Solar Energy	517.1 GJ	6780.3 GJ
Total Solar Energy Collected	122.7 GJ	2117.6 GJ
Total Solar Energy Delivered to STTS	113.2 GJ	2062.5 GJ
Total Energy Delivered to BTES	8.4 GJ	1414.2 GJ
Total Energy Extracted from BTES	198.4 GJ	670.3 GJ
Total Energy Delivered from STTS to HX-2	384.9 GJ	1459.2 GJ
Total Solar Energy Delivered to District Loop	297.0 GJ	1118.5 GJ
Natural Gas Energy Used	145.6 GJ	512.8 GJ
Boiler Thermal Energy Delivered to the District Loop	134.5 GJ	500.1 GJ
Total Energy Delivered to District Loop	431.4 GJ	1618.5 GJ
Average Solar Collector Efficiency	23.7 %	31.2 %
Average Efficiency of HX-1	92.3 %	97.4 %
Average Efficiency of HX-2	77.2 %	0.0 %
Average BTES core temperature	29.7 °C	38.9 °C
Electrical energy used	18.1 GJ	65.5 GJ
PV energy generated	0.4044 GJ	6.5 GJ
Net change in energy stored in STTS	-23.97 GJ	-37.4 GJ
Solar Fraction	68.9 %	69.1 %