

Energy Report Summary for January 2011

Prepared for:



Natural Resources
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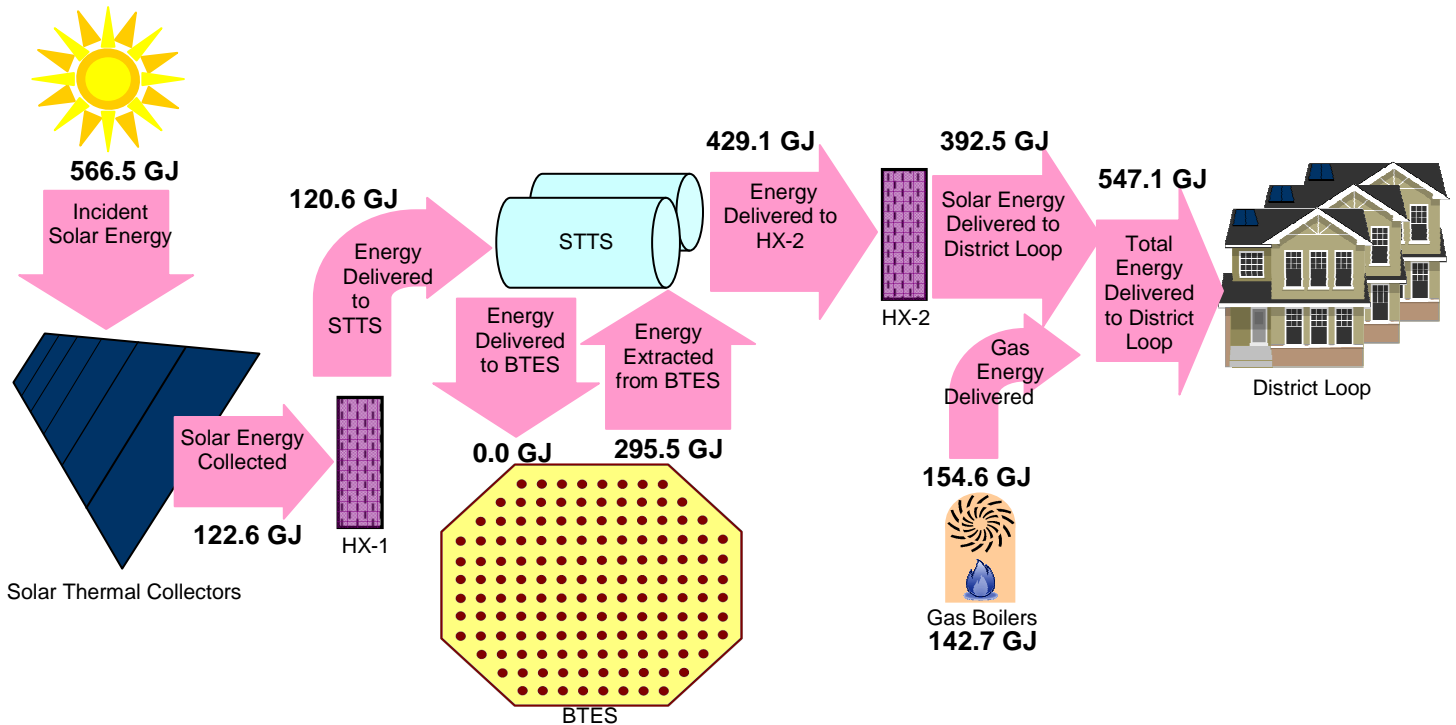
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PROPRIETARY

Drake Landing Solar Community Energy Overview for January 2011

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 2011		
Description	This Month	Since July 1, 2010
Total Incident Solar Energy	566.5 GJ	6560.3 GJ
Total Solar Energy Collected	122.6 GJ	2050.8 GJ
Total Solar Energy Delivered to STTS	120.6 GJ	1973.4 GJ
Total Energy Delivered to BTES	0.0 GJ	1241.2 GJ
Total Energy Extracted from BTES	295.5 GJ	921.0 GJ
Total Energy Delivered from STTS to HX-2	429.1 GJ	1576.3 GJ
Total Solar Energy Delivered to District Loop	392.5 GJ	1426.5 GJ
Natural Gas Energy Used	142.7 GJ	214.9 GJ
Boiler Thermal Energy Delivered to the District Loop	154.6 GJ	204.7 GJ
Total Energy Delivered to District Loop	547.1 GJ	1631.2 GJ
Average Solar Collector Efficiency	22 %	31 %
Average Efficiency of HX-1	98 %	96 %
Average Efficiency of HX-2	91 %	90 %
Average BTES core temperature	46.6 °C	56.9 °C
Electrical energy used	17.9 GJ	65.4 GJ
PV energy generated	0.2253 GJ	6.1 GJ
Net change in energy stored in STTS	3.18 GJ	-35.1 GJ
Solar Fraction	72 %	87 %