

## Energy Report Summary for April 2011

Prepared for:



Natural Resources  
Canada

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Canada

Canada

Prepared by:



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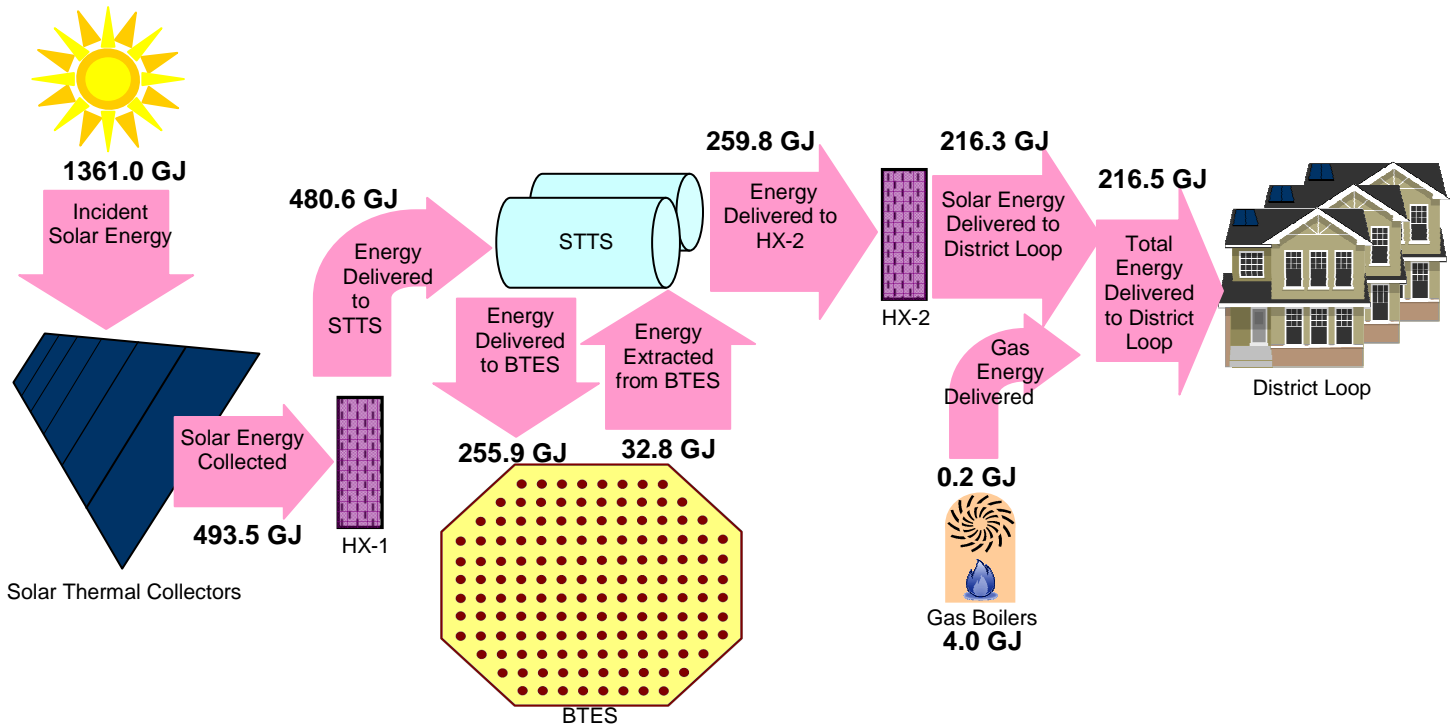
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**PROPRIETARY**

## Drake Landing Solar Community Energy Overview for April 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

<b>Table 0-1 Summary for April 2011</b>		
<b>Description</b>	<b>This Month</b>	<b>Since July 1, 2010</b>
Total Incident Solar Energy	1361.0 GJ	9882.8 GJ
Total Solar Energy Collected	493.5 GJ	3137.7 GJ
Total Solar Energy Delivered to STTS	480.6 GJ	3030.0 GJ
Total Energy Delivered to BTES	255.9 GJ	1579.2 GJ
Total Energy Extracted from BTES	32.8 GJ	1203.3 GJ
Total Energy Delivered from STTS to HX-2	259.8 GJ	2589.3 GJ
Total Solar Energy Delivered to District Loop	216.3 GJ	2329.7 GJ
Natural Gas Energy Used	4.0 GJ	436.1 GJ
Boiler Thermal Energy Delivered to the District Loop	0.2 GJ	403.3 GJ
Total Energy Delivered to District Loop	216.5 GJ	2733.1 GJ
Average Solar Collector Efficiency	36 %	32 %
Average Efficiency of HX-1	97 %	97 %
Average Efficiency of HX-2	83 %	90 %
Average BTES core temperature	45.1 °C	53.0 °C
Electrical energy used	11.3 GJ	111.2 <sup>1</sup> GJ
PV energy generated	01.3684 GJ	8.9 GJ
Net change in energy stored in STTS	-10.87 GJ	-27.2 GJ
Solar Fraction	100.0 %	85.2 %

<sup>1 1</sup> Note that the reported annual electrical consumption does not represent the actual electrical consumption since the electric meter was not functioning for a period of approximately 155 days. The value shown is not corrected for the loss of data.