

**CITY OF KIMBERLEY  
FINANCIAL INFORMATION  
IN SUPPORT OF THE 1 MWp SUN MINE PROJECT REFERENDUM**

Referendum Information

Electors will have an opportunity to vote on borrowing for the Sun Mine Project on Saturday, November 19, 2011 and at Advance Polls (dates to be advertised). The question submitted to electors will be:

“Are you in favour of the City of Kimberley adopting Bylaw No. 2429, “The Sun Mine Project Loan Authorization Bylaw, No. 2429, 2011” to authorize the City to borrow an amount up to Two Million Dollars (\$2,000,000) to construct the Sun Mine Project – a Grid-Connected Solar Photovoltaic Power Plant with a 1 Mega Watt Peak (MWp) capacity?”

Sun Mine Project Description

This project will see Kimberley constructing the first on-grid large solar plant in BC and the largest solar power plant in Western Canada. The City will construct a 1 Mega Watt Peak (MWp) grid connected solar photovoltaic power plant on a brownfield in Kimberley, owned by Teck Metals (former industrial lands for the Sullivan Mine). The solar energy produced by the sun will be fed into a nearby transmission line and sold back into BC Hydro’s power grid. This 1 MWp project is intended to provide a platform that can be expanded to up to 200 MWp in the future.

The proposed Sun Mine project aligns with our recently completed *ImagineKimberley* Community Sustainability Plan, which, among many other objectives, encourages a move toward meeting more of the community’s energy needs by use of renewable energy sources and toward a more adaptable and resilient economy based on efficient technologies, sustainable resources and innovative industries. The Sun Mine initiative demonstrates leadership and commitment toward a more sustainable future for Kimberley. Other benefits of this project are

- Innovative brownfield re-development (liability to asset);
- Attract R/D, education, centre of excellence and cleantech investment in Kimberley;
- The Province of BC will benefit from development of a new, clean source of energy that will contribute to future energy needs.

This project is the result of a year long pilot study carried out by Eco Smart Foundation Inc. (a non-profit Canadian corporation) and supported through a memorandum of understanding between the City of Kimberley, Teck Metals Ltd and Eco Smart.

The total project cost is estimated at \$4 million. The City of Kimberley has already been awarded a \$1 million Innovative Clean Energy Fund (ICE) grant and is applying for a \$1 million grant from the Western Economic Development Corporation. Discussions are under way with the Federation of Canadian Municipalities to borrow the remaining \$2 million from the FCM’s Green Municipal Fund at an estimated rate of 2.00% over 20 years.

Estimates indicate that the revenue generated from selling the power to BC Hydro will cover the yearly borrowing and operating costs and result in a profit for Kimberley. Therefore, estimates indicate that there will be no cost to the taxpayers of Kimberley.

Kimberley has a proud history of being entrepreneurial and making success stories out of non-traditional Municipal projects. In the 1980's the City negotiated a loan with the Credit Union to buy the local Ski Resort that was in bankruptcy and threatening loss of jobs and recreation for the community. The City successfully ran the Ski Resort, paid the loan off early and carried out expansion projects. The City of Kimberley also constructed and operated Trickle Creek Golf Resort and Happy Hans Campground (and later Happy Hans Riverside Resort). All of these entrepreneurial projects have contributed to Kimberley's transition from a mining town to the resort community that it is today.

Financial Plan

This project is not currently in the 5 year financial plan. The project will be included in a financial plan amendment in December 2011 if the project receives approval of the electors through Referendum which is to be held on Saturday, November 19, 2011 in conjunction with the Municipal Elections.

Funding Sources

This project will be funded through a combination of grants and City of Kimberley borrowing. Discussions have been initiated with the FCM's Green Municipal Fund to borrow up to \$2 million with an amortization period of 20 years at a projected rate of 2.00%.

Capital Budget

Eco Smart is in the process of preparing a detailed project budget which will be reviewed and approved by the partners in the Memorandum of Understanding between Eco Smart, the City and Teck Metals. The estimated project budget includes a 9.06% contingency.

**Project Budget**

Equipment	\$ 2,500,000
Engineering	240,720
Construction	185,550
Salary	548,692
Other	<u>192,663</u>
Estimated Capital Cost	\$ 3,667,625
Contingency (9.06%)	<u>332,375</u>
Total Project Budget	\$ 4,000,000

**Project Funding**

ICE Grant (approved)	\$1,000,000
WED Grant (application phase)	1,000,000
Green Municipal Fund Loan	<u>2,000,000</u>
Total Project Funding	\$4,000,000

\*\* Teck Metals has indicated that they would be interested in providing some components of the project budget via an "in kind" contribution (ie. engineering, etc.). Details of that contribution are still being negotiated. Monies saved from Teck's in kind contribution will increase the contingency for the project.

Cost Recovery

Kimberley City Council is in favour of the 1 MWp Sun Mine project proceeding with the qualification that ***the project must not result in a cost to the tax payers of Kimberley.***

If project funding, BC Hydro revenue or operating expenses significantly change and the project is not self sustainable, the project will not proceed.

Eco Smart indicates that once the Sun Mine is built, there will be very little operating costs required to operate it. This information is based on operating costs experienced by other Solar generating projects researched by Eco Smart.

This project will convert free energy from the sun into electricity which will be sold to BC Hydro. Eco Smart is in the process of working with BC Hydro to satisfy conditions for Kimberley to qualify for BC Hydro's standard offer to purchase electricity and add to the overall hydro grid.

The rate quoted below is BC Hydro's current standard offer rate. Electricity consumption in BC is predicted to continue to grow in the future. Therefore the City is comfortable in stating that the standard offer rate will not decrease and will most probably increase in the future.

### Estimated Yearly Cash Flow

<b>Revenue</b>	
BC Hydro (1,950 mwh @ \$102.60)	\$200,070
<b>Expenses</b>	
FCM Loan Payment *	\$140,000
Yearly Maintenance	20,000
Insurance	3,300
Permits	2,000
Communications/Security	<u>2,500</u>
Total Debt & Operating Costs	<u>\$167,800</u>
Yearly Gross Profit	\$ 32,270

\* yearly interest of 2.00% on the full \$2,000,000 principal. The actual loan interest will be calculated using a declining balance method.

### 25 Year Financial Forecast

<b>Revenue</b>	
BC Hydro*	\$5,001,750
<b>Expenses</b>	
FCM Loan Payment **	\$ 2,420,000
Yearly Maintenance***	640,606
Insurance, Permits, Security***	<u>249,836</u>
Total Debt & Operating Costs	<u>\$ 3,310,442</u>
25 Year Gross Profit	\$1,691,308

\*assumes no increase in BC Hydro rate (to be conservative)

\*\* loan payments once per year at 2.00% interest

\*\*\* assumes 2.00% annual inflation rate

### PAY BACK PERIOD

If estimated yearly profits were applied to the loan principal, this project would have a payback period of 14 years and 2 months.