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September 4, 2013

#### SIF Solar Energy Income & Growth Fund – Acquisition and Development of Solar Energy Installations in Ontario

#### **Sector/Industry: Renewable Energy**

www.solarincomefund.com

Summ	ary of the Proposed Offering
Issuer	SIF Solar Energy Income & Growth Fund
Offering	Minimum: No minimum Maximum: Up to \$30.0 million
Unit Price	\$100 per trust unit
Minimum Subscription	\$1,000 (10 units)
Target distribution	9% p.a. payable monthly
Management Compensation and Fees	1)40% of distributable income in excess of 9% prefered return, payable annually. 2)\$1.62 million - a one time development fee. 3)An electricity grid connection fee of \$39,000 per MW
Marketing fee	1.25% of the gross proceeds
Selling Fees and Compensation	11% of the gross proceeds
Auditor	MNP LLP

Amount raised, as of September 3, 2013 - \$16.83 million

Source: Offering Memorandum, July 3, 2013

#### **Investment Highlights**

- SIF Solar Energy Income & Growth Fund ("fund") intends to acquire, develop and operate solar power sites, totaling up to 20 MW, primarily in Ontario with existing feed-in tariff ("FIT") contracts.
- Through the Ontario government's FIT program, the fund intends to sell the electricity produced from the solar installations, at fixed rates, through 20 year
- Most utility companies have long-term purchase agreements, making them relatively low risk investments.
- A recent review of the FIT program, in 2013, recommended lowering FIT rates effective August 26, 2013 – the lower rates will only apply to new contracts, and will not be retroactive on existing contracts.
- The fund intends to acquire older contracts, which have a higher average rate of between 50 cents and 55 cents per kWh.
- Including this fund, management has setup five solar energy funds.
- The total number of photovoltaics (PV) installations in Ontario accounts for about 90% of the PVs installed in Canada.
- Since 2003, Ontario has reduced its use of coal-fired power by 90%. The remaining plants will be shut down by the end of 2014. The government expects to replace a portion of this lost power with solar PV installations.
- Management received offers from a third-party to acquire two of its previous LPs (LP #2 and LP #3). Subsequently, the fund entered into acquisition agreements to acquire LP #2 for \$4.2 million.

- Competition for available solar projects under the old FIT rates.
- Although the revised lower FIT rates are only applicable to new contracts, and are not retroactive, there is no guarantee that future policies will not make any changes to the older contracts.
- Delay in execution may affect investors' distributions.
- This is a blind pool management has sole discretion on which projects to invest
- Timely deployment of cash is critical.
- Although the solar panels have manufacturer's guarantees, there is no assurance that the manufacturer will stay in the business over the 20 year period.
- Operating and capital costs can be higher than our estimates.
- Management plans to set aside only \$100k per month for cash redemptions.
- Interest rate risk
- Political risk a change in government may discourage programs supporting solar energy in the province.

FRC Rating Base-Case IRR 11% p.a. Rating 2-Risk 3

<sup>\*</sup>see back of report for rating and risk definitions



#### **Overview**

SIF Solar Energy Income & Growth Fund ("fund") was formed by Solar Income Fund Inc. on February 4, 2013 in Alberta. The fund plans to purchase, develop and operate solar energy power installations (capacity of up to 20 MW), supported by long-term (20 years) Power Purchase Agreements (PPA), on designated lands and rooftops in Ontario, and in the US (maximum of 5%, as per management). The fund plans to take advantage of old FIT rates, and receive an average price of between 50 to 55 cents per kWh.

The total cost for up to 20 MW capacity is estimated at about \$102.46 million, which primarily includes \$90.50 million for development and acquisition of installations, and \$2.40 million for development and electricity grid connection fees (to management). The cost is expected to be funded by the proposed maximum offering of \$30 million, and debt totaling \$72.46 million.

#### **Purpose**

The purpose of this report is to analyze the risk and returns associated with the trust units.

#### Management

Solar Income Fund Inc. ("SIF Inc.", "manager"), was formed in Ontario on December 18, 2009. The company's head office is located in Toronto, Ontario. SIF Inc. provides management, consulting, development and administrative services to the fund.

The following are brief biographies of the management team:

#### Paul Ghezzi, CA - President and Director

Mr. Ghezzi started his Public Accounting career with Coopers and Lybrand in 1993. In 1996 he moved to a private industry position with Bombardier Inc. in their accounting and corporate finance group. From 1998 to 2005 he operated as an independent financial consultant in Ontario. In 2005, Mr. Ghezzi sold his financial practice to focus on creating structured investment opportunities in the renewable energy sector. His career of providing financial management advice spans over 15 years and is highlighted by a personal dedication to creating a sustainable future thorough socially responsible investing. Since 2006 Mr. Ghezzi has been involved in the structuring of over \$50 million of solar energy deals. Under his leadership SIF has grown their project under development pipeline to over \$100 million. Mr. Ghezzi is a professional member of the Institute of Chartered Accountants of Ontario (ICAO) and the Socially Responsible Investment Organization (SIO).

#### Allan Grossman, CA – Chief Operating Officer

Mr. Grossman, a chartered accountant, founded a boutique private equity firm in 1988. Through a worldwide network of financiers, entrepreneurs and professionals, it has facilitated start-ups, product/service extension and market expansions for companies in Canada, the US and Israel and has raised more than \$800 million through private placements. Mr. Grossman has extensive knowledge of the real estate sector and financing of real estate. Mr. Grossman has been actively involved in the solar energy power generation sector since 2008. Until June 30, 2005 Mr. Grossman was also a partner of Horwath Orenstein LLP. His education includes a Bachelor of Arts from the University of Toronto and a Chartered Accountant Designation from the Canadian Institute of Chartered Accountants.



Allan Grossman, has been subject to bankruptcy proceedings. In 2007, Mr. Grossman was a participant in several real estate development projects. Mr. Grossman was required to personally guarantee the debts of one of those projects, where in the past he never had. Due to the global economic deterioration in the debt, and equity markets in 2007, and 2008, a number of such projects suffered severe financial problems resulting from the downturn in the real estate market, and the lenders called upon Mr. Grossman's guarantee. Mr. Grossman was unable to make payments on the personal guarantee. At the same time, Mr. Grossman was reassessed for prior years' income taxes. As a result, on May 26, 2010, Mr. Grossman made a proposal to his creditors under the Bankruptcy and Insolvency Act (Canada) to settle all debts. However, the proposal was rejected by Mr. Grossman's creditors, and therefore, under the bankruptcy laws of Canada, he became a bankrupt. As of the date hereof, Mr. Grossman's bankruptcy proceedings are continuing and he has not yet been discharged. Notwithstanding his bankruptcy, Mr. Grossman remains in good standing with the Institute of Chartered Accountants of Ontario.

In an Offering Memorandum dated November 1, 2011, Solar Income Fund LP (#3) failed to disclose the facts concerning Mr. Grossman's bankruptcy proceedings, and the British Columbia Securities Commission issued a deficiency letter with respect to the prior Offering Memorandum. Solar Income Fund LP (#3) settled with the British Columbia Securities Commission by rectifying the deficiency in the above Offering Memorandum, and offered rights of rescission to unit holders of Solar Income Fund LP (#3) as a result of failing to disclose Mr. Grossman's bankruptcy.

#### **Kenneth Kadonoff- Director of Business Development**

Prior to joining SIF Inc, Mr. Kadonoff practiced law with two major Toronto law firms in the areas of joint ventures, franchising, commercial leasing, real estate and contract. He then transitioned into the business world, working as the chief operating officer of a TSX listed company. Mr. Kadonoff has a keen ability to take on complex strategic business problems and find practical legal, partnering and operational solutions. He has consulted in many industries such as international real estate brokerage and petroleum retailers. Mr. Kadonoff's education includes a Bachelor of Commerce together with both Bachelor of Civil Law and Bachelor of Common Law.

Past Performance

Overall, SIF Inc. manages 30 solar energy installations with an approximate capacity of 4,950 KW. Below is a summary of SIF Inc.'s previous / current funds under management.



	Project	Projected Size (kWh)	Location	Offering Amount	Amount Raised	Date of Inception
Solar Income Fund L.P.	Acquisition of solar PV installations		Germany	Up to \$33 million	\$1 - \$3 million	18-Nov-08
Solar Income Fund (LP#2)	Acquisition of 22 micro- FIT (capacity of 10 KW or less), and 5 solar PV rooftops	2,120,000	Ontario	Up to \$3.58 million	\$3.58 million	26-Jan-11
Solar Income Fund (LP #3)	Acquisition of 150 micro- FITsolar PV rooftops	3,600,000	Ontario	Up to \$7.15 million	\$7.15 million	27-Oct-11
SIF Capital Canada Inc.	Acquisition of about 5,225 KW solar PV rooftops	6,000,000	Ontario	Up to \$8.00 million	\$8 million	23-Feb-11

Source: Management

**Solar Income Fund L.P.** - Management stated that they **decided not to go through** with the project due to unfavorable currency rates; the money raised was returned to investors.

Solar Income Fund LP (#2) -25 (micro-fit) ground-mount and 2 rooftops are up and running (588 KW has been connected to the Ontario electricity grid). According to management, construction of another 4 rooftops (representing 613 KW) is complete, and will be connected into the grid in the next 30 days. Management also indicated that construction of another rooftop with a capacity of 650 KW will be completed, and connected into the grid in 60 days.

LP#2 has engaged Etho Solar Inc. for the construction of each installation (on a fixed–price contract basis). Etho Solar is an Ontario-based private company incorporated in 2010. Etho Solar specializes in grid-tied solar solutions for fixed, and tracking systems, for both rooftop, and ground-mount purposes.

LP#2 generated \$0.43 million in revenues, and operating income (excluding amortization) of \$0.21 million in 2012 (12 months ended December 2012). During the first six months ended June 2013, LP#2's revenues and operating income (excluding amortization) were \$0.29 million and \$0.15 million, respectively. **The target capacity of the LP is 1,851 KW. We have verified all the contracts confirming this capacity** (such as lease agreements, distribution agreements, FIT contracts, asset purchase contracts, operation and maintenance agreements, etc.) Management estimates total revenues from the fund to be \$1.6 million, when the target capacity is reached. Based on the capacity and the eligible FIT rates, we believe this is a reasonable estimate.

The fund was established in January 2011. However, as of this date, only about 32% of the capacity of the fund is operating. We discussed with management about the delays. Management attributed it to the backlog in Connection Impact Assessments ("CIA"),



conducted by local hydro companies in Ontario. A CIA is an assessment of a project's impact on the grid. Due to the significant increase in the number of applications, the average time for a CIA has increased from 60-90 days to approximately 15 months recently. Although the 20 year FIT contract does not start until a project is connected to the grid, we believe this delay will negatively affect return on investment as there is a delay in the commencement of cash flow generation. On a positive note, management indicated that they were able to reduce the capital cost of their projects by 7% due to a drop in solar panel/equipment costs during the delay period.

LP#2 has obtained a \$2.24 million long-term loan, and a commitment for a loan facility of \$7.4 million, with CIT Financial Ltd. (NYSE: CIT). As of the date of the OM, approximately \$1.1 million has been withdrawn from the loan facility. CIT, founded in 1908, is a public bank holding company with about \$35 billion in financing and leasing assets.

On January 11, 2013, management received an offer from Ontario Solar Manufacturing Corp. ("OSM Solar Corp") for the purchase of the units of LP #2 for \$4 million; which is in line with an evaluation of between \$3.5 - \$4.2 million, by Ernst & Young ("EY"), dated March 11, 2013. OSM Solar, a private corporation headquartered in Welland, Ontario, designs, assembles, manufactures and distributes PV solar panels in Canada. We have reviewed and verified the valuation document.

Subsequently, on June 28, 2013, the fund entered into an acquisition agreement with LP#2, to acquire all the units for \$4.2 million. This price reflects an Internal Rate of Return ("IRR") of 18% - 19% for investors. Details on this acquisition agreement are presented later in the report.

**Solar Income Fund LP (#3)** - This LP has a 20% equity interest in the Whitewater project (a large solar project in Ottawa with a total capacity of 3,800 KW), which is up and running. Also, the LP invested in a commercial rooftop (with the capacity of 263 KW), which is currently operating. **The total operating capacity of the LP is currently at 1,023 KW.** Management expects to commence construction of 2 ground-mount and 4 rooftops (with a total target capacity of 1,776 KW) shortly. We have reviewed all the documents confirming the target capacity.

Management anticipates to start construction in 45 days. It should be noted that management has yet to receive CIA approval for the non-operating projects. As mentioned earlier, due to a possible delay in the approval process, delays in construction are possible.

LP#3 generated just \$0.09 million in revenues in 2012, as the fund started operations late last year. During the first six months ended June 2013, LP#3 generated \$0.39 million in revenues and \$0.17 million in operating losses (excluding amortization).

Management estimates total revenues from the target capacity of 2,799 KW is \$2.7 million. Revenues per KW are higher for this LP, relative to the other funds/LPs, primarily because the projects in this LP have a higher FIT rate.



In January 11, 2013, management received an offer from OSM for the purchase of LP#3 units for \$8 million. We have reviewed the offers from OSM Solar. According to management, Ernst & Young has been engaged to provide a valuation and fairness opinion.

SIF Capital Canada Inc. - The corporation has a 80% interest in the Whitewater project, with a net capacity of 3,040 KW. Construction of another rooftop (with a target capacity of 300 KW) was recently completed, and it is currently operating. We have reviewed related documents (such as lease agreements, distribution agreements, FIT contracts, asset purchase contracts, co-tenancy agreements, development agreements, etc.) Also, construction of 2 commercial rooftops with a target capacity of 1,300 KW is expected. Management anticipates that construction will commence within 60 days.

SIF Capital Canada generated just \$0.10 million in revenues in 2012, as the corporation started operations late last year, and had an operating loss (excluding amortization) of \$0.15 million. During the first six months of 2013, the corporation recorded revenue of \$0.65 million, and operating losses (excluding amortization) of \$0.03 million. Management's estimate of total revenues from the target capacity of 5,090 KW is \$2.96 million.

The first three funds used a limited partnership structure. For the fourth fund, management chose a corporate structure in order to make the investment RRSP/TFSA eligible. For this offering, management decided to use a trust structure - a trust structure has tax benefits, and may allow the investment to be eligible for registered plans.

The following table shows distributions to investors since inception.

		Distribution		EB	SITDA
	2011	2012	2013 (6 Months)	2012 (Million)	2013 (6 Months) (Million)
LP #2	1% (\$20,600): 100% from the reserved capital	10% (\$257,518): 28% from income and 72% from the reserved capital	5.8%: 95% from income and 5% from the reserved capital	\$0.33	\$0.23
LP #3		11% (\$403,531): 100% from the reserved capital	5.9%: 59% from income and 41% from the reserved capital	\$0.03	\$0.33
SIF Capital Canada Inc.		2.875% debenture payment: 100% from the reserved capital	5.5% debenture payment: 61% from income and 39% from the reserved capital	\$0.05	\$0.61

Source: 2011 and 2012 Audited financial statements, and 2013 unaudited financial statement

#### Business Plan

The fund may acquire new installations or may purchase existing ones from related (including installations in the existing funds) or unrelated parties. The fund may develop and operate the existing installations by its own or with other parties.

For new installations, management chooses a third party manufacturer. From our discussions with management, they indicated that they have not selected the manufacturer(s) yet. As for previous projects, management engaged a number of recognized manufacturers including: Canadian Solar Inc. (NASDAQ: CSIQ - is one of the top 4 global module suppliers) and Magna international Inc. (TSX: MG - a global supplier of automotive systems, components and complete modules, located in Ontario). It should be noted that, according to management,



typically manufacturers are chosen by financiers/lenders.

For selecting solar projects, management uses the following key criteria/parameters:

- Expected annual solar radiation
- long-term PPAs
- Accessibility to the grid
- Environmental and geographical conditions
- Long term sustainability, and regional and political support of renewable energy development.

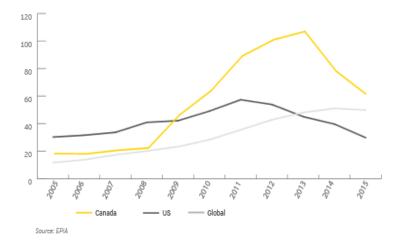
In the case of acquisitions, the key issues the fund reviews are:

- All required permits and applicable approvals
- Long-term PPAs and electricity connection agreement with the local electricity distribution company
- Third party structural engineering approval, warranties, service and support
- Third party validation of annual energy production and O&M costs
- Installation meets target return of the fund
- Acceptance of the installation by the fund's lenders for long term debt financing and commercial insurance suppliers

With respect to the land required for the installations, management typically leases land or rooftop space under 20 year leases. The lease rates paid by SIF's other funds are between 5% - 10% of revenues.

Canada's Solar Market PV capacity in Canada increased YOY by 187% in 2009, 111% in 2010, 182% in 2011, and 47% in 2012. During 2012, Canada's solar PV sector outpaced both global and US annual growth rates, and it is expected that the trend will continue in the future (graph below). Currently, Canada is ranked as 22<sup>nd</sup> in the global solar PV market. According to Ernst & Young, Canada will rise to the top 10 by 2015.

#### Five-year solar PV rolling compound annual growth rate



<sup>© 2013</sup> Fundamental Research Corp.



As of 2012, Canada had 831 MW of solar PV capacity installed, approximately 0.8% of the world's capacity of 102,156 MW. Germany is the number one producer, with about 24.5% of global capacity. Germany started a FIT program in 2000, which allowed it to become the leader in solar energy production.

Why Invest in Solar Power Generation in Ontario?

Below we discuss the benefits of solar power generation investments in Ontario.

• The price that the fund can sell electricity is guaranteed by the Ontario Government for 20 years after the installation is connected to the electricity grid. This reduces counter-party risks associated with the revenue stream. The Government of Ontario has a good investment grade credit rating. Below is a chart of the different ratings given by the major credit rating agencies.

	Long-term	Short-term
Standard & Poor's	AA- (N)	A-1+
Moody's Investors Service	Aa2	P-1
DBRS	AA (low)	R-1 (mid)

Short-term Ratings are for debt maturities of less than one year. Ratings are graded into several categories, ranging from the highest-quality obligations to default. A-1+, P-1 and R-1(mid), all implied superior credit quality.

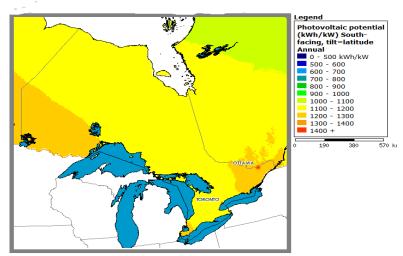
Long-term Ratings are also assigned an outlook indicating the likely direction of an issuer's rating over the intermediate term, typically ranging from 6 months to 2 years. The outlook is denoted (P) for Positive Outlook, (N) for Negative Outlook or (D) for Developing Outlook. No identifier is attached to the rating if the outlook is Stable. All of the long-term ratings indicate strong capacity to meet financial commitments and low credit risk.

Source: Ontario Financing Authority - July 2013

- Ontario's population is projected to rise over 34.4% by 2036, an increase of over 4.5 million people. Electricity demand is expected to grow by approximately 15% between 2010 and 2030.
- Currently, Ontario is a leading jurisdiction for solar PV in North America. In 2010 and 2011, Ontario ranked second (after California) for solar PV installations among US states and Canadian provinces and territories.
- Ontario has a PV potential of between 1,100–1,300 kWh/kW, which is second only to parts of Alberta, Saskatchewan and Manitoba (which have a potential of 1,300-1,400 kWh/kW). (Map below)

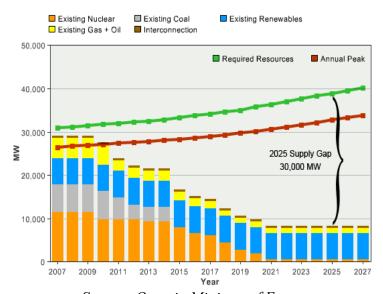


#### PV potential and insolation



Source: Natural Resource Canada

• The Ministry of Energy, from a review of Ontario's electricity system, concluded that approximately 80% of existing power facilities will have to be replaced or refurbished in the next 20 years.

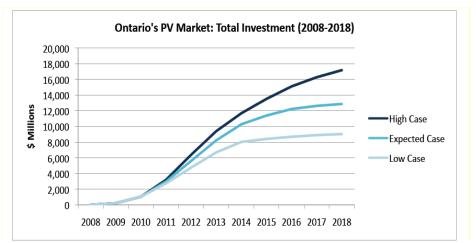


Source: Ontario Ministry of Energy

Also, the Ontario government intends to **replace 6.4 gigawatts of energy produced by coal-fired power plants with renewable energy** by 2014. The government expects that 2.4 GW of this new energy will be created by PV generated power. (Source: www.osmsolar.com)

• By 2018, Ontario's solar PV market is expected to **drive \$12.9** billion of total private investment. (Graph below)





**Source:** ClearSky Advisors Inc. 2011

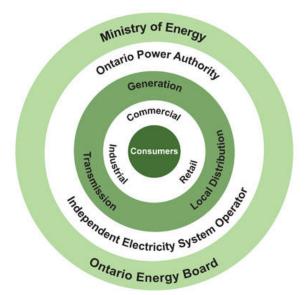
• There are multiple players in the solar energy market in Ontario, with the two biggest being **TransCanada (TSX: TRP) and Enbridge (TSX: ENB).** Together, these two companies have over \$1 billion in assets in solar energy contracts in Ontario. The presence of these two conglomerates in the Ontario solar scene, we believe, is a huge vote of confidence for players such as SIF Inc.

Due to all of the mentioned factors, we believe the outlook of Ontario's solar energy is promising, and that the current market size is large enough for SIF to find projects totalling 20 MW in capacity.

Ontario Green Energy Act The chart below describes how the electricity market in Ontario works. The Ministry of Energy is responsible for setting policy direction and regulating the energy market. The Ontario Energy Board is responsible for regulating Ontario's natural gas and electricity sectors. The Ontario Power Authority (OPA) is responsible for ensuring a reliable, sustainable supply of electricity for Ontario.

The electricity produced by generators (such as SIF Inc.) is moved across long distances, by transmitters (such as Hydro One), to where it is needed. The power is finally delivered to homes and businesses by the 80+ distributors who are licensed by Ontario Energy Board across the province.





Source: Ontario Power Authority

The Green Energy Act, and the resulting FIT program, are integral to the fund's success; below we discuss its merits and possible future hurdles.

In 2009, the Ontario government passed the Green Energy Act (GEA) which is aimed at creating growth in clean, and renewable energy sources, in addition to creating jobs and investments within Ontario. In order to make renewable energy projects competitive, and profitable, the GEA implemented a FIT program which guarantees fixed power prices from renewable sources for 20 years.

Below is a schedule of the fixed prices that the Ontario government is offering developers of PV sites. The OPA recently updated the FIT and microFIT price schedule; the new price schedule has come into effect on August 26, 2013. As shown below, the original FIT contract prices are significantly higher than the current contract prices. The original FIT rates were intended to provide a rate of return of just 11% p.a. for solar producers (Source: Ontario Auditor general, 2011 annual report). Therefore, when PV equipment prices dropped, the government accordingly lowered the FIT rates on new contracts. It should be noted that solar module prices dropped approximately 75% in just the past three years (Source: Navigant Consulting and other market data).



	Project Size	Original Price (¢/kWh)	Price-As of April 5, 2012(¢/kWh)	Price-As of August 26,2013(¢/kWh)
Solar Rooftop	$\leq 10 \text{ kW}$	80.2	54.9	39.6
	$> 10 \text{ kW} \le 100 \text{ kW}$		54.8	34.5
	$\leq$ 250 kW	71.3		
	$> 250 \le 500 \text{ kW}$	63.5		
	$> 100 \text{ kW} \le 500 \text{ kW}$		53.9	32.9
	> 500 kW	53.9	48.7	32.9
Solar Groundmount	$\leq 10 \text{ kW}$	64.2	44.5	29.1
	$> 10 \text{ kW} \le 500 \text{ kW}$	44.3	38.8	28.8
	$> 500 \text{ kW} \le 5 \text{ MW}$	44.3	35	28.8
	> 5 MW	44.3	34.7	28.8

Source: Ontario Power Authority (August 26, 2013)

The fund intends to acquire contracts with an average rate between 50 cents and 55 cents per kWh). Our research indicates that just prior to the first revision of FIT prices (in April 2013), about 2,200+ FIT contracts were issued for medium and large projects, of which, 300+ projects were operating. Also, approximately 11,000+ micro-FIT contracts were connected and/or expected to be connected shortly. The fund's main target will be these contracts. We believe the fund's target market is significant enough to be able to acquire projects totaling up to 20 MW. Note that SIF's other funds alone have a target capacity of 9.5 MW – 10 MW.

# Ontario FIT program review and strategies

A 2-year review of the FIT was conducted in October 2011, which confirmed that the program was performing as per expectations. Some key highlights follow (Source: Ontario.ca, FIT Program 2-year Review):

- Compared to 2003, Ontario has reduced its use of coal-fired power by 90%. In total, Ontario has shut down eight of 19 coal units; the remaining units will close by the end of 2014.
- The FIT program has attracted about \$27 billion in private financing. So far, the program has created about 20,000 new jobs, and it is projected to create an additional 30,000 jobs by 2014.

Some of the recommendations for the FIT program are as follows:

- FIT prices will be reviewed annually
- The Ontario Long Term Energy Plan (LTEP) aims to have 10,700 MW of power online from solar, wind and bioenergy projects by the end of 2018. However, as we can see in the table below, as of March 2012, only an additional 80 MW of solar contracts were needed to achieve the 2018 target. The FIT review recommended that the government should review at if the target needs to be increased by the end of 2013,.



LTEP Technolo	ogy Targets
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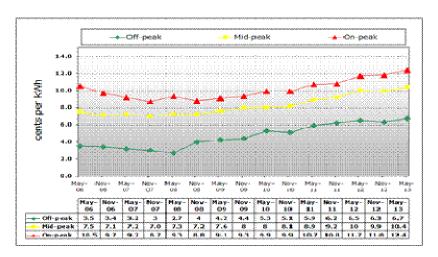
Fuel Type	% of 2030 Energy Demand	GWh	Capacity Factor	Forecast MW	IPSP II	Contracted or Committed	Needed to Meet Target (No Attrition)
Wind	10%	19,800	29%	7,790		6,850	940
Solar PV	2%	2,970	14%	2,510	10,700	2,430	80
BioEnergy	1%	2,574	75%	390		220	170
Water	20%	39,600	50%	9,040	9,000	9,330	(290)
Total					19,700	18,830	900

Source: Canment Energy March 2012

Risks of cancellation of contracts

The following points highlight some of the negative developments with respect to the solar space in Ontario. However, it should be noted that that we do not believe the FIT program carries a high risk of cancellation.

- The Czech Republic and Spain instituted a FIT that fixed rates for 20 and 25 years, respectively. However, in 2011, due to higher than expected demand and related costs for the program, the Czech Republic government imposed a 26% retroactive tax on recently built solar plants. Also, Spain implemented a retroactive 30% subsidy cut on existing plants (Source: CFA Journal, May/August 2011). The Czech Republic and Spain have very different economies than Canada. However, the above highlights the possibility of the potential for cancellation/amendment of agreements. Most countries who have similar feed-in tariff programs, and who have made changes to these programs, have only reduced the fixed rates for new contracts in response to the price drop of solar equipment.
- Green energy policies are considered to be one cause of the significant increase in electricity rates in Ontario. (graph below)



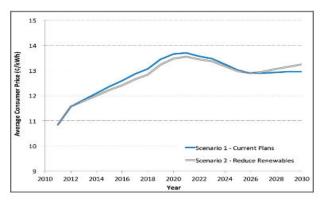
Source: Ontario Energy Board

Recently, the Ontario government slashed its \$9.7 billion green energy deal (wind and solar) with Samsung by more than one-third. Based on their initial contract, the government agreed to pay 13.5 cents per kWh for wind power, and 44.3 cent per kWh



for solar power, which were later dropped to 10.5 cents per kWh for wind, and 29.5 cents per kWh for solar. Several factors are considered to have resulted in this cancellation, with one of them being the government's intent to cut costs to control electricity prices for users.

However, a study conducted by the Pembina Institute, an organization which provides policy research leadership and education on climate change in Canada, showed that no matter what source of energy is used, Ontario's electricity prices will rise (graph below). The study compares electricity costs in two scenarios (scenario #1 uses the current renewable energy target of 10,700 MW through the FIT program, and scenario #2 uses natural gas and some large-scale hydro as sources of energy), from 2011 to 2030.



Source: Bridgepoint Group-Renewable Energy Fact

- The U.S., Japan and the European Union (EU) have been challenging the GEA's Domestic Content Requirement (DCR) as being a breach of World Trade Organization (WTO) agreements. The GEA is blamed to have been unfairly pressurizing producers to buy 60% of the overall hardware and services from companies located within the province. On August 16, 2013, the Minister of Energy announced that Ontario intends to comply with the WTO agreements, and reduce domestic content requirements for new FIT contracts. The minimum required domestic content level will be reduced from 60% to between 19% and 28% (depending on the type of technology). This is positive for solar producers, as the new regulations allow them to purchase equipment from foreign and Chinese manufacturers at lower costs. The flip side of it is that the lower costs may prompt the government to continue to reduce FIT prices (as it did on August 26, 2013).
- Another risk to the sector is a change in government that does not encourage programs supporting solar energy in the province.

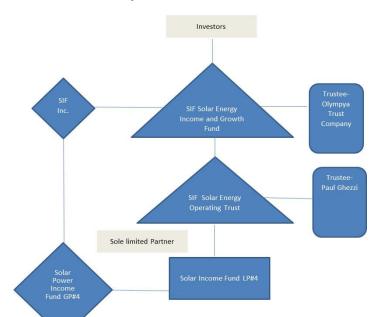
## Structure of the fund

Below is a summary of the structure of the fund:

Solar Income Fund LP#4 ("LP#4") was formed on May 14, 2013. Solar Power Income Fund GP#4, an Ontario corporation, is the general partner of LP#4. Paul Ghezzi is the only director of GP#4.

SIF Solar Energy Operating Trust ("trust"), formed on May 14, 2013, is the only limited





partner of LP#4. Paul Ghezzi is the only trustee of the trust.

Source: OM

On June 19, 2013, LP #4 entered into a development agreement with OSM Solar Corp. Based on this agreement, OSM, on behalf of LP #4, will **secure up to 400 rooftop lease agreements with homeowners**, and LP #4 agrees to - i) act as the homeowners' agent to obtain and administer micro-fit contracts with OPA, and ii) develop, operate and maintain the rooftop solar installations. Pursuant to this agreement, LP#4 will purchase all equipment and services from OSM. Each rooftop solar installation will have a capacity of about 10 KW and is expected to generate about 11,150 kWh of electricity.

As of September 3, 2013, the fund had raised a total of \$16.83 million. In addition to the money raised through this offering, the fund plans to use debt financing of approximately \$72,462,000 (assuming the company raises the maximum amount as per this offering). The loans are likely to be guaranteed by equipment, contracts, and warranties, as well as a first priority security interest in all of the fund's assets. The use of leverage is common with independent power producers. Most independent power producers have power purchase agreements (similar to the feed-in tariff) which allow them to acquire debt financing due to the high certainty of their cash flows.

**Portfolio** 

This offering is a blind pool. The management team is currently reviewing different projects in Ontario and the US for acquisition. According to management, they plan to invest not more than 5% of the funds in the US. The target regions in the US are Massachusetts and North Carolina.

As mentioned earlier in the report, on June 28, 2013, the fund entered into an acquisition agreement with LP#2, to acquire 100% of the units of LP#2 for \$4.2 million. The



completion of the acquisition is subject to the approval of LP #2's limited partners. Management has indicated that, subject to the adequacy of funds, they might consider the possibility of acquiring assets in the other existing funds (LP#3 and SIF Capital Canada Inc). Like LP#2, management will obtain an independent valuation opinion on the targets.

Distributions

Management expects to pay out **monthly cash distributions of 9% p.a to investors.** Any distribution income in excess of 9% will be shared 40% by management, and 60% by investors, on an annual basis.

Redemption

Units can be redeemed in any month. However, management plans to set aside only \$100k per month for cash redemptions. The unit price will be equal to an applicable percentage of the most recent market value per unit, determined by the manager (annually). The applicable percentages are as follows:

Applicable	Percentage
February 4, 2013 to	90%
June 30, 2014	7070
July 1, 2014 to June 30,	92%
2015	7270
July 1, 2015 to June 30,	94%
2016	7470
July 1, 2016 to June 30,	96%
2017	7070
July 1, 2017 to June 30,	98%
2018	7670
July 1, 2018 and	100%
thereafter	10070

Source: Offering Memorandum

Exit Strategy

The exit strategy is to sell the assets to an institutional investor, or other similar entity seeking stable, relatively low-risk cash flows. In the event of a purchase offer, management will hire a third party to get an independent fair value opinion. **Management expects a 3-5 year time horizon for this investment.** 

**Fees** The following chart summarizes the fees associated with this offering.

Fees	Description
Development Fee	One-time fee of \$1.62 million payable to Solar Income Fund Inc.
Electricity grid connection fee	\$39k per MW (\$0.78 million for 20 MW) payable to SIF
Selling fees and compensation	11% of the gross proceeds
Marketing fee	1.25% of the gross proceeds

Source: Offering Memorandum

Selling and marketing fees are approximately 12.25%, which is higher than the typical fee of



8% - 10% in the exempt market space.

Management receives – a) a one-time development fee of \$1.62 million, which will be paid in 12 equal monthly installments (no more than \$135k per month; and a minimum of \$70k), and b) \$39k per each MW of capacity connected to the grid. The total management fee will be \$2.4 million, or 8% of the gross proceeds (assuming a maximum offering). There is no annual management fee or salary. Overall, the fee is higher than comparable offerings. However, we believe it is reasonable considering the expected return-risk of the investment, and the significant amount of upfront work required by management to acquire and/or develop sites. Also, note that the connection fee of \$39k per MW is paid based on how much MWs are connected to the grid.

Source and Use of Funds The following tables show the use and source of funds:

Source of Funds			
Investors	\$	30,000,000	
Debt	\$	72,462,000	
Total	S	102,462,000	

Use of Funds	
Hard costs to develop or acquire installations	\$ 90,500,000
Development fee	\$ 1,620,000
Electricity grid connection fee	\$ 780,000
Bank cash reserve to be held in trust (regarding long term debt)	\$ 2,840,000
Bank closing costs	\$ 375,000
Bank loan fees	\$ 905,775
Legal and professional fees for acquisition of Installations	\$ 450,000
Investor distribution reserve	\$ 1,200,000
Marketing costs	\$ 375,000
Estimated offering costs (e.g., legal, accounting, audit)	\$ 116,225
Selling commissions and fees	\$ 3,300,000
Total	\$ 102,462,000

Source: OM

#### Notes:

- \$90.5 million to develop and acquire 20 MW installations implies a total cost of \$4.5 per watt; we believe this is reasonable as our research indicates that the average cost per watt is between \$4 and \$5.
- Management intends to reserve 4% of the proceeds of the offering to finance cash distributions to investors.



#### Financial Analysis

The following are the assumptions we made to construct our base-case financial model:

- The fund will raise the maximum of \$30 million (gross) through this offering.
- The fund is able to acquire / develop / operate projects with a total of 20 MW capacity.
- Loan amount of \$72,462,000 with an interest rate of 5.5% amortized over 18 years. These terms are in line with the terms received by the other funds under management.
- Assumed the fund will operate at 30% and 60% of total capacity, and therefore, the same portion of total CAPEX will be used in year 1 and year 2, respectively. Note that management expects the fund to be in full operation (connected to the grid) within 12-18 months.
- Used an average FIT price of 50¢ per kWh management is seeking an average price between 50¢ per kWh and 55¢ per kWh. Our Year 1 revenue estimate (at 30% capacity) is \$3,538,500, degrading at 0.50% annually.
- Used average solar radiation of 1,179.5 kWh/kW, which is a conservative assumption.
- We assumed that the projects' contracts will have a 20 year life. However, as the actual life of the PV installations is 25 to 30 years, we assumed 5 more years of operations after the 20 year contract. During this period, we assumed the electricity generated will be sold into the grid at \$0.17¢. this was calculated based on the current on-peak rate in Ontario (12.4 cents per kWh), and 1.5% p.a. inflation.
- Assumed operating expenses (lease expenses, insurance, inverter reserve and operating and maintenance) of 12% of revenues this is in line with operating expenses of comparable projects.
- Management's goal is to exit in 3-5 years. Our base-case uses 4 years.

In order to estimate the fair value of the assets at year 4 (exit), we applied two methods - i) Discount Cash Flow (DCF) and ii) Market Valuation approach:

- *In the DCF approach*, we used a cost of equity of 15.78%, and a cost of capital (WACC) of 7.48% - calculations are presented in the table below.



Cost of Equity	
10-Year Government Bond Yield	2.18%
Market Risk Premium	4.00%
Size Premium	2.00%
Liquidity Risk Premium	3.00%
Industry Premium	4.60%
Discount Rate	15.78%
WACC	
Debt to Capital Ratio	70.72%
Cost of Debt	5.50%
Cost of Equity	15.78%
Corporate Tax rate	26.50%

Source: Fundamental Research Corp. and Various Sources

- *In the market valuation approach*, we used the average EV/EBITDA multiple of public companies in the same line of business as the fund, and discounted them by 5% to account for liquidity risks associated with non-public entities (see table below).



Company	EV/ EBITDA
Alerion clean power spa (BIT:ARN)	9.20
Etrion Corporation (TSX:ETX)	12.40
SAG Solarstrom AG (DB:SAG)	14.60
Boralex Inc (TSX:BLX)	11.31
Capital Power Corporation (TSX:CPX)	8.50
Edisun Power Europe AG (SWX:ESUN)	15.40
Enel Green Power S.p.A. (BIT:EGPW)	8.40
ErgyCapital S.p.A. (BIT:ECA)	14.00
Fersa Energias Renovables, S.A. (CATS:FRS)	8.40
Innergex Renewable Energy Inc. (TSX:INE)	15.60
Northland Power Inc. (TSX:NPI)	20.10
Adjusted Average	11.91

Our valuation of the fund's assets, based on the two methods, is shown below:

	Fair value in year 4	
DCF		\$100,936,195
Market Valuation		\$99,337,193
Average		\$100,136,694

The following table shows our base-case cash flow projections:

		Year 1	Year 2	Year 3	Year 4
Gross Equity Financing		\$ 30,000,000			
FIT Revenue (0.50% annual degradation)		\$ 3,538,500	\$ 7,041,615	\$ 11,677,050	\$ 11,618,075
Expenses					
Operating Costs-12% of revenue		\$ (424,620)	\$ (844,994)	\$ (1,401,246)	\$ (1,394,169)
Annual Bank Loan Admin Fees		\$ (9,000)	\$ (18,000)	\$ (30,000)	\$ (30,000)
Accounting/Audit		\$ (15,000)	\$ (15,000)	\$ (15,000)	\$ (15,000)
Financing Interest		\$ (1,195,623)	\$ (2,391,246)	\$ (3,985,410)	\$ (3,850,225)
Financing Principal		\$ (737,371)	\$ (1,474,743)	\$ (2,457,905)	\$ (2,593,090)
Net Cash Flow		\$ 1,156,886	\$ 2,297,632	\$ 3,787,489	\$ 3,735,591
EBITDA		\$ 3,116,419	\$ 6,391,589	\$ 10,725,309	\$ 10,670,020
Enterprise Value					\$100,136,694
Less Selling Costs					-\$2,002,734
Net cash (time of sale)					\$40,080,429
Return of Principal		\$ -	\$ -		\$ 30,000,000
Investors - preferred return of 9%		\$ 1,156,886	\$ 2,297,632	\$ 2,700,000	\$ 2,700,000
Investors - 60% in excess of 9%		\$ -	\$ -	\$ 652,493	\$ 4,428,258
<b>Total Cash to Investors</b>		\$ 1,156,886	\$ 2,297,632	\$ 3,352,493	\$ 37,128,258
Management Receives (40% in excess of 9%)		-	-	434,996	2,952,172
\$	(30,000,000)	\$ 1,156,886	\$ 2,297,632	\$ 3,352,493	\$ 37,128,258
IRR		10.8%			

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Based on all the assumptions above, we arrived at a base-case IRR (internal rate of return) of 10.8% for investors.

#### Sensitivity

The following table shows the sensitivity of our IRR estimate to various assumptions. The FIT rate is the most sensitive variable. The range of possible returns, based on the analysis below, is -6.9% to 20.2%.

Sensitivity Analysis								
FIT Rate	\$0.40	\$0.45	Base Case \$0.50	\$0.55	\$0.60			
	-6.9%	4.3%	10.8%	15.8%	20.2%			
Years of Operation	20 years	23 years	Base Case 25 Years	28 years	30 years			
	10.1%	10.6%	10.8%	11.2%	11.3%			
Exit Year	Year 7	Year 6	Year 5	Base Case Year 4	Year 3			
	9.4%	9.7%	10.2%	10.8%	11.9%			
Average Solar Radiation per Year	1,079.5	1,129.5	Base Case 1,179.5	1,229.5	1,279.5			
	5.3%	8.4%	10.8%	13.1%	15.3%			
Operating Costs as a Percentage of Revenues	16%	14%	Base Case 12%	10%	8%			
	10.1%	10.4%	10.8%	11.2%	11.6%			
Cost of Capital	13.5%	10.5%	Base Case 7.5%	6.5%	5.5%			
	1.2%	6.6%	10.8%	12.3%	13.8%			

#### Risks

The following, we believe, are the key risks associated with this offering.

- Competition for available solar projects under the old FIT rates.
- Although the revised lower FIT rates are only applicable to new contracts, and are not retroactive, there is no guarantee that future policies will not make any changes to the older contracts.
- Delay in execution may affect investors' distributions.
- This is a blind pool management has sole discretion on which projects to invest in.
- Timely deployment of cash is critical.
- Although the solar panels have a manufacturer's guarantee, there is no assurance that the manufacturer will stay in business over the 20 year period.
- Operating and capital costs can be higher than our estimates.
- Management plans to set aside only \$100k per month for cash redemptions.
- Interest rate risk
- Political risk a change in government that discourages programs supporting solar energy in the province.



### **Rating** We assigned an overall rating of 2- with a risk rating of 3.

FRC Rating	
Base-Case IRR	11% p.a.
Rating	2-
Risk	3



#### Fundamental Research Corp. Rating Scale:

Rating - 1: Excellent Return to Risk Ratio

Rating - 2: Very Good Return to Risk Ratio

Rating - 3: Good Return to Risk Ratio

Rating - 4: Average Return to Risk Ratio

Rating – 5: Weak Return to Risk Ratio

Rating - 6: Very Weak Return to Risk Ratio

Rating – 7: Poor Return to Risk Ratio

A "+" indicates the rating is in the top third of the category, A "-" indicates the lower third and no "+" or "-" indicates the middle third of the category.

#### Fundamental Research Corp. Risk Rating Scale:

- 1 (Low Risk)
- 2 (Below Average Risk)
- 3 (Average Risk)
- 4 (Speculative)
- 5 (Highly Speculative)

FRC Distribution of Ratings				
Rating - 1	0%	Risk - 1	0%	
Rating - 2	23%	Risk - 2	0%	
Rating - 3	50%	Risk - 3	33%	
Rating - 4	5%	Risk - 4	40%	
Rating - 5	5%	Risk - 5	0%	
Rating - 6	0%	Suspended	27%	
Rating - 7	0%			
Suspended	18%			

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