

# OPEL TECHNOLOGIES INC.

(formerly OPEL Solar International Inc.)

Management's Discussion and Analysis Year ended December 31, 2011

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## **OPEL Technologies Inc.**

(formerly OPEL Solar International Inc.)

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## MANAGEMENT'S DISCUSSION AND ANALYSIS FOR THE YEAR ENDED DECEMBER 31, 2011

The following discussion and analysis of the operations, results, and financial position of OPEL Technologies Inc., ("OPEL" or the "Company") for the year ended December 31, 2011 (the "Period") should be read in conjunction with the Company's December 31, 2011 audited consolidated financial statements prepared in accordance with International Financial Reporting Standards ("IFRS") and the Company's December 31, 2010 audited consolidated financial statements and the related notes thereto where applicable. The December 31, 2010 audited consolidated financial statements were prepared in accordance with Canadian generally accepted accounting principles ("GAAP"). The effective date of this report is April 25, 2012. All financial figures are in United States dollars (USD) unless otherwise indicated.

## Forward-Looking Statements

This management discussion and analysis contains forward-looking statements that involve risks and uncertainties. It uses words such as "may", "would", "could", "will", "likely", "except", "anticipate", "believe", "intend", "plan", "forecast", "project", "estimate", and other similar expressions to identify forward-looking statements. Forward-looking statements are subject to a variety of risks and uncertainties which could cause actual events or results to differ from those reflected in the forward-looking statements, including, without limitation, risks and uncertainties relating to the early stage of the Company's development and the possibility that future development of the Company's technology and business will not be consistent with management's expectations, difficulties in achieving commercial production or interruptions in such production if achieved, the inherent uncertainty of cost estimates and the potential for unexpected costs and expenses, the uncertainty of profitability and failure to obtain adequate financing on a timely basis. The Company undertakes no obligation to update forward-looking statements if circumstances or Management's estimates or opinions should change, except to the extent required by law. The reader is cautioned not to place undue reliance on forward-looking statements.

#### **Business Overview**

The Company is incorporated under the laws of the Province of Ontario. OPEL Solar, Inc., a U.S. company, is engaged in (a) the manufacturing and deployment of dual and single-axis trackers designed for CPV and PV systems for energy applications worldwide and the marketing of high-concentration photovoltaic panels and (b) through ODIS Inc., a U.S. company, is a semiconductor device and process developer designing III-V semiconductor devices for military, industrial and commercial applications, including infrared sensor arrays and ultra-low-power random access memory. OPEL has 36 patents issued and 15 patents pending in PV systems and for its semiconductor POET process, which enables the monolithic fabrication of integrated circuits containing both electronic and optical elements, with potential high-speed and power-efficient applications in devices such as servers, tablet computers and smartphones. The Company's shares trade under the symbol "OPL" on the TSX Venture Exchange.

#### a) Solar Business

The mission of OPEL Solar, Inc. is to develop and supply innovative solutions to harness electricity from the sun in the most efficient and cost effective manner. During the 2011 business year, OPEL Solar began to redirect its focus away from HCPV deployment and fully directed its efforts toward building a dominant position in the worldwide solar tracker marketplace. OPEL Solar markets a complete line of universal single and dual axis solar trackers to mount solar panels for the optimum power output. In the case of the TF-800, this tracker line highlights ease of installation in the construction process and incorporates backtracking capability in order to reduce any impact from shadowing. Additionally, OPEL trackers utilize its patented wireless control capability to reduce installation and maintenance costs associated with large solar field operations. These are some examples of the innovative spirit which runs as a common thread throughout OPEL Solar. The TF-800 utility scale tracker is rapidly becoming the tracker of choice in the world markets.

Europe had been an early adopter of solar energy. Moving to increase OPEL's presence in Europe, OPEL formed OPL Solar Europe SPRL ("OSE"), a Belgium-based subsidiary, to better address business opportunities in Europe. OPEL formed a relationship with IG Solar to penetrate not only Europe, but also the Middle East, South America and select other countries where they have a presence. OPEL's business development activities in Europe led to growing

project opportunities in Europe, Africa and China. OPEL Solar Asia, ("OSA") a joint venture formed in 2010 with Ecotech Environmental Technology, a Hong Kong based company, made inroads in China during 2011 by installing both dual axis trackers and CPV solar panels in two trial locations for two of China's five national power companies, which service the ever growing solar market within China.

## b) Semiconductor Technology

OPEL, through ODIS Inc., a U.S. company, (an acronym for "OPEL Defense Integrated Systems"), designs a wide array of devices for potential military, consumer, commercial, and industrial applications. ODIS continues to develop gallium arsenide-based chip design processes having several potential major market applications, including: (i) infrared sensor arrays for military as well as Homeland Security monitoring and imaging, and (ii) the unique combination of optical lasers, and electronic control circuits on the same microchip for potential use in various military programs and potentially telecom applications such as, Fiber To The Home ("FTTH"). The use of gallium arsenide is a key material in ODIS's Planar Opto-Electronic Technology ("POET") process development for these products. ODIS has been awarded more than a dozen U.S. Department of Defense projects since 2000. These have supported and continue to support the development of ODIS's POET process, infrared sensing technology, optical/laser development and the combination of electronic circuits and lasers on the same microchip. ODIS remains active in this area with projects underway with the U.S. Department of Defense and a major U.S. Defense Contractor. ODIS and the POET Technology were formally introduced to shareholders at the Annual General Meeting held in June 2010 and again in June 2011, where investors were able to learn more about the chip development potential and the POET technology's impact may have in commercial and government market sectors. At the June 2011 Annual General Meeting Dr. Geoffrey Taylor, of ODIS, presented actual wafers containing multiple devices made with POET Technology. He answered questions about their attributes and potential commercial uses. In March 2011, a third party valuation of the POET Technology was received indicating a significant potential market value of the intellectual property of this technology. In June 2011, BAE Systems independently produced operational transistors on gallium arsenide wafers, further validating critical components of the POET process. In August 2011, BAE Systems ran a "lot" of five wafers using POET Technology. The chips that came from these wafers were reviewed and tested to further validate the varied capabilities and devices developed utilizing the POET Technology platform. ODIS has made significant progress regarding POET as it pertains to its advancements in Optical Interconnection of High Speed Circuits, making it possible for the first time to implement an optical interface as a single chip to connect existing CMOS processors as described in the POET White Paper/Roadmap posted on the ODIS website www.odis.com. ODIS and BAE Systems continue on the path of producing a much sought after Infrared Detector (IR) Device contracted for by the U.S. Air Force Research Laboratory, (AFRL).

ODIS, just as all U.S. Government contractors, was notified that funding to continue ongoing projects would see dramatic cuts throughout 2011 and possible termination in 2012. ODIS began experiencing cutbacks in financial support to projects throughout 2011, including the very important BAE project which by the year end, was no longer funded. Of course recognizing the importance this development effort has to the overall future of ODIS, funds to continue this project were redirected while alternative sources of funding were being sought.

#### **Industry Outlook**

Alternative energy has attained a position of heightened awareness due to the high cost of all forms of energy over the past few years and recently the concern with nuclear power. In addition, the world wide concern over the carbon footprint left from the pollution of fossil fuel use, global warming and homeland security concerns regarding the safety and reliability of foreign energy sources have all contributed to the demand for alternative energy solutions. In order to have widespread adoption and installation of alternative energy sources, like solar and wind, it requires a financial subsidy or feed-in tariff to make these sources competitive with fossil fuels for the medium term.

The German market once enjoyed a robust solar installation market for several years due to a well thought out feed-in tariff structure provided by its Government to initiate early adoption of solar. During 2011, Germany's tariff structure was scaled back to some degree. Following Germany's initial lead, Spain put in place a feed-in tariff which also led to a boom in wind and solar installations. However, during 2011, following Germany's lead, Spain commenced scaling back its feed-in tariff as well. As was discussed during the June 2011 Annual General Meeting, the unrest in North Africa and tensions in the Middle East has led to OPEL slowing our solar activity in those regions. Likewise, the recent economic conditions in Europe have made it necessary for most countries to scale back the level of the feed-in tariffs, which is now forcing solar companies to seek new markets to continue the momentum and expand solar adoption.

China has announced to the world one of the most aggressive goals for renewable energy usage, and is working out the project details and financial support of a huge solar installation program. In Canada, Ontario began its move into the solar arena during 2011 with a multi-structured feed-in tariff, addressing grid field applications as well as

commercial and residential rooftops. However, most of the active solar installations in Ontario were related to the OPA's 2008 \$0.42 feed-in-tariff program. The new structure was hard to comply with and slow to gain traction. As 2011 concluded, the United States has become more active than most countries with solar and wind activity over the past several years with a combination of State (which varies greatly from State to State) and Federal subsidies beginning to be enacted. Currently, the installed base is still relatively low, but is showing remarkable signs of steady and continued growth. As of December 31, 2011, the U.S. stimulus package put in place in early 2009, enacted to support manufacturing and jobs creation within the solar industry, came to an end. Fueled by ever increasing oil prices, the U.S. has embarked on a massive fracking operation in several locations which has led to a marked decrease in the pricing of natural gas. Alternative green energy initiatives will likely become an increasing priority for the U.S. Government. One such initiative is the renewal of the IRS Section 1603 cash grants in lieu of tax credits for recently launched solar projects. It is widely accepted within select government circles that should the United States pass further Federal legislation for a clean energy bill, the market potential in the U.S. for renewable energy sources like solar will further open the door for continued steady growth to possibly become the largest solar market in the world.

The relative size of planned and quoted installations demonstrates that a huge growth cycle is starting, fueled greatly by the steep drop in Flat Plate (PV) pricing. As evidenced by the ever increasing dollar volume of OPEL Solar's tracker quotations book, the future looks very bright indeed. We have seen the average selling price ("ASP") of tier one silicon solar panels drop from \$4.50 per watt in early 2008 to \$0.90-1.10 per watt at year end. This aids greatly in the adoption of solar and demonstrates the ability for solar power to approach grid parity with fossil fuels. The lower ASP is a direct result of the large production volume providing the necessary economies of scale, like any other product. Ultimately, the goal is for solar power to be competitive on its own merit, without the need for subsidies.

#### Key Success Drivers ("KSD")

The Company has several KSDs, including its newly created emphasis on its single and dual axis tracker systems, integrated wireless tracking technologies, and the POET technology.

While the HCPV technology development spurred the Company's market recognition over the past two years, it is the Company's innovation in solar tracking systems that is garnering the most recent interest and growth potential. To review, the Company demonstrated its single axis rooftop tracker capability in 2009, with an installation on a school roof in Connecticut. After more than two years of operation, the installation continues performing well above expectation, providing electricity at a reduced cost to the school system. OPEL's solar tracking systems, roof mounted or ground mounted provide a way for customers to increase the kWh production of most solar projects by 15-25% over fixed solar installations. OPEL provides a full line of single and dual axis solar tracking systems for use in commercial or utility grade installations. Another KSD added in 2010 is the TF-800 series of single axis trackers mentioned above. However, it bears re-emphasizing that this line of trackers is very attractive for utility scale projects due to its ease of installation, its reverse tracking capabilities and its wireless network control technology. The TF-800 was found to meet or exceed the standards requirement of the American Society of Civil Engineers and the American Institute of Steel Construction thereby exceeding the bankability needs of our customers. As OPEL's deployment and technology successes continue to grow, the Company's tracker presence grows exponentially into the marketplace as well, significantly increasing interest in OPEL's solar tracking systems in the United States in the last year. OPEL has been actively quoting many utility scale installations, in many cases providing a "one stop shop" approach and sometimes including construction management, and will be a beneficiary of that growth as projects are launched. Some of the projects completed during 2011 including Toray Plastics, Aquarion Water Company, Newtown Water Treatment, Conergy, Global Energy Services (GES), and Schroeder Solar Homes are examples of a growing list of projects addressed at these different levels.

OPEL believes that the financing of solar projects is starting to gain momentum and support. During 2011, OPEL Solar concentrated its sales efforts on its universal tracker systems in those locations in Europe and North America that had active feed-in tariffs or alternative energy stimulus packages which resulted in more near term revenue opportunities.

OPEL has grown to be recognized worldwide as a very competitive and most technologically advanced universal tracker provider, offering a full line of universal single and dual axis tracking systems to use with any solar panel technology, which is suited to any specific locations. This adaptability gives OPEL an advantage in that the Company has a solar tracking solution for all types of panels addressing a mixture of installation demands, a fact that opens a worldwide spectrum of solar projects to OPEL.

ODIS Inc. continued to develop enhancements to its POET platform during 2011. POET is a semiconductor fabrication process which enables the monolithic fabrication of integrated circuits containing both electronic and optical elements. The POET platform, being developed via OPEL's U.S. affiliate ODIS Inc. which is covered by

numerous patents and patents pending, makes possible the economic production of fully-integrated optoelectronic semiconductor devices with higher speeds and reduced power consumption compared to conventional silicon-based devices. Utilizing POET, ODIS designs infrared sensor type products for military and industrial applications. ODIS develops gallium arsenide-based processes and semi-conductor microchip products having several potential major market applications: infrared sensor arrays for Homeland Security monitoring and imaging along with the unique combination of optical lasers, and electronic control circuits on the same microchip for potential applications in various military programs, higher efficiency computing systems, and potentially telecom for Fiber to The Home. ODIS chip design capabilities allow for optical and electronic signals to be used on the same chip when necessary and allow for direct connection to optical fiber without conversion to electronic signals.

## Significant Events During 2011

OPEL continued to make progress in 2011. Following are some significant events in the growth and development of the Company which add to the foundation for the achievement of the Company's future success:

- 1. In January, ODIS was awarded a development contract from the National Aeronautics and Space Administration ("NASA") that involved a Phase I Award of \$100,000 to develop Optoelectronic Infrastructure of RF/Optical phased arrays.
- 2. In March, OPEL announced it was in receipt of a third party valuation for its POET Technology which had been developed by its U.S. affiliate ODIS Inc.
- 3. In March, OPEL was awarded a 5MW order from its Chinese venture partner, OPEL Solar Asia, for OPEL's HCPV solar panels and dual axis tracking systems. Initial deliveries and installations were made in 2011, and the project is awaiting results and additional funding to move forward.
- 4. In March, OPEL was awarded a contract to deliver a 35kW solar installation at the Aquarion Water Company's local water treatment facility. The installation will showcase OPEL's TF-800 single axis tracking system as well as the SF-45 dual axis tracker. Solar power is well suited to the power usage of a water treatment facility and is expected to produce 10% of their power requirements. Aquarion may wish to expand its usage of solar power in the future. This installation was completed in January 2012.
- 5. In April, OPEL was awarded a contract to deliver a 125kW TF-800 single axis tracker order from Greenlight Power Company for the first phase of a 1.4MW solar farm for a business park in Maryland. The installation of the 125kW phase one was completed in June.
- 6. In April, OPEL's ODIS affiliate demonstrated an on chip laser capability for the first time in gallium arsenide. This proves ODIS's POET technology is capability of producing a monolithic integrated circuit combining both electronic and optical elements.
- 7. In May, OPEL was awarded a turn-key solar installation of 95kW by the Town of Newtown, CT. OPEL is using its TF-800 advanced single axis tracking system and silicon solar panels to power Newtown's waste water treatment facility. This installation is in its final stages of installation.
- 8. In May, OPEL was chosen to be the exclusive, worldwide supplier of trackers for Grape Solar. Grape Solar is a major supplier of solar panels and OPEL intends to use Grape to supply some of its installations, like Newtown.
- 9. In June, BAE Systems successfully produced working transistors on gallium arsenide wafers using ODIS, Inc.'s POET technology. ODIS is OPEL's US affiliate company. This is the first step in validating the ability to commercialize products developed using the POET technology, which is capable of integrating optical and electronic circuits within the same chip.
- 10. In June, OPEL signed an agreement with the second of China's five utility companies, for the delivery of its HCPV panels and dual axis trackers. This was done through the Chinese JV with Ecotech, to meet the demands of the solar market in China. This order adds another 5MW of CPV and trackers for solar fields in Inner Mongolia and the Project is awaiting results of the trial installation done in 2011 and additional funding.
- 11. In August, ODIS Inc. presented two papers on the POET technology at the SPIE Optics and Photonics Conference in San Diego, California. SPIE is the international society for optics and photonics to advance light-based technologies.
- 12. ODIS contracted with BAE Systems to produce a series of wafers from their foundry with devices developed using the POET technology. The first wafer lot was started in late August with others to follow during 2012.
- 13. OPEL has initiated Warranty Insurance coverage for its trackers and has passed critical reviews by several independent engineering firms, all of which allow its trackers to be "bankable" for commercial installations.

- 14. Following approval by shareholders in June 2011, the Company changed its name to OPEL Technologies Inc. and trading under the new name commenced on the TSXV on August 29, 2011.
- 15. OPEL selected GrowthPoint Technology Partners to provide strategic advice to the Company relative to ODIS' proprietary POET technology and how to optimize its value for the Company and its shareholders. No significant developments have materialized to-date.
- 16. In September, OPEL completed the delivery of 480kW of its TF-800 single axis tracking system to Conergy for an installation in California's Central Valley. The installation is to power a waste water treatment facility.
- 17. OPEL's TF-800 single axis tracking system receives the nod of approval from three independent engineering firms for its structural integrity, wind tunnel testing, and technology assessment. The TF-800 was found to meet or exceed the standards requirement of the American Society of Civil Engineers and the American Institute of Steel Construction. OPEL has also secured Manufacture's Product Warranty Insurance provided by Energi Insurance Services. This all makes OPEL's trackers very bankable to project financiers.
- 18. In November, OPEL closed a \$5M Line of Credit from Silicon Valley Bank in November. Any draw downs on this line will be secured by OPEL's Accounts Receivable. This facility has been replaced by a broader line of credit from TCA Global Credit Master Fund, LP, effective April 2012.
- 19. In December, OPEL signed a sales representation agreement with IG Solar of Madrid, Spain to sell OPEL's line of utility scale solar tracking systems and HCPV solar panels. IG Solar will represent OPEL's solar products in the Mediterranean countries and South America. Still in its early stages, no orders have yet been generated from this relationship.
- 20. In December, ODIS Inc. was issued a U. S. patent directed to an array of thyristor devices that determines the angle-of-arrival of an incident laser beam with high angular resolution (typically referred to as a "HARLID").
- 21. OPEL ended the year with \$5.9M in Revenue, a significant increase over 2010. This ramp in revenue was pointed to as possible during the June Annual General Meeting, when it was stated that because of the manufacturing and land preparation time necessary to begin installations revenue generally trails by six months after purchase orders are received.

## Summary of Quarterly Results

Following are the highlights of financial data of the Company for the most recently completed eight quarters which have been derived from the Company's financial statements prepared in accordance with IFRS. All amounts herein are expressed in United States dollars unless otherwise indicated:

	Dec. 31/11	Sep. 30/11	Jun. 30/11	Mar. 31/11	Dec. 31/10	Sep. 30/10	Jun. 30/10	Mar. 31/10
Sales	\$1,054,553	\$ 2,170,804	\$ 1,166,070	\$ 1,486,502	\$ 375,747	\$ 479,141	\$ 447,432	\$ 345,318
Cost of goods sold	4,697,722	2,626,545	666,746	925,590	178,058	125,474	72,536	58,559
Research and development	953,399	1,067,601	940,307	926,967	1,069,729	1,261,464	759,242	700,627
Depreciation, amortization and impairment	1,606,913	64,793	60,992	60,963	57,370	60,146	77,167	46,588
Professional fees	158,188	197,052	148,389	202,738	124,862	113,334	153,850	177,445
Stock-based compensation	439,000	593,864	462,999	307,149	158,573	261,636	79,111	93,255
General and administrative	924,302	1,043,287	1,016,456	1,078,781	966,128	777,233	1,102,480	1,183,730
Loss on dives- titure on ASM	-	-	-	-	-	-	40,572	-
Investment income and other income	5,349	(9,359)	(15,309)	(4,107)	(11,119)	(6,772)	(6,130)	(15,569)
Foreign exchange loss (gain)	-	-	-	-	-	-	10,231	-
Net loss	\$(7,730,320)	\$(3,412,979)	\$(2,114,510)	\$(2,011,579)	\$(2,167,854)	\$(2,113,374)	\$ (1,841,627)	\$(1,899,317)

#### **Explanation of Quarterly Results**

In the quarter ending December 31, 2011, revenue was higher by \$678,806 over the same quarter of 2010. The Company has increased the U.S. sales of solar trackers by 235 units allowing for the increase. Most of the solar revenues were associated with three ongoing projects in this quarter.

The cost of goods sold was higher this quarter due to the \$246,415 write off of older generation solar panels and a write down of \$3,570,406 in raw materials for our HCPV solar panels. Some older version HCPV solar products were also sold at a negative margin in the quarter. The rapidly falling pricing of silicon solar panels from China has made it extremely difficult to compete effectively in this market. The U.S. Government has stepped in to review claims of unfair trade practices in this regard but for now our product pricing is above market. Strategically, OPEL has decided not to market its HCPV panels while the marketplace remains in turmoil.

The three months ended December 31, 2011 included the non-cash expense of \$439,000 related to stock options, some of which were granted in a prior year. This was higher by \$280,427 than the year earlier. The Company believes it is necessary to grant incentive stock options to attract and hold highly skilled employees and directors.

OPEL decreased its R&D expenses by approximately \$116,000 when compared to the same quarter of 2010. OPEL utilizes outside contracting houses to assist in the design of some of its future product enhancements allowing for lower permanent headcount. Going forward, our R&D expense rate is expected to decrease without sacrificing our product innovation. However, ODIS now makes up a larger portion of R&D expenses since the U.S. Government has cut back on funding to support the projects ODIS was funded for.

Depreciation and amortization increased in the quarter over last year due to the addition of new assets and \$1,501,692 in a one-time impairment of our solar field asset in Spain due to uncertainty about the feed-in tariff and our ability to sell the facility.

OPEL's G&A expenses were slightly lower for the quarter over the same quarter last year by \$42,000 and should remain at or below these levels going forward. OPEL's increased Sales activities are paying off in our increased revenue.

## Explanation of Results for the Twelve Months Ended December 31, 2011

For the twelve months ended December 31, 2011, revenue increased by \$4,230,291 over the full year, 2010. The Company has increased its U.S. sales of solar trackers by 593 units, reflecting an increase of \$2,488,549. Additional solar panel sales of 2,079 units, generated an increase of \$1,131,582, and revenue from subcontracted installation of OPEL's trackers added \$610,000. The solar tracker revenues were associated with seven different installations in 2011. Gross margin for the year of 2011 was approximately 19%, excluding inventory write-off.

In the twelve months ended December 31, 2011, cost of goods sold was higher due to one time inventory adjustments for old and slow moving solar materials of \$4,125,134. The rapidly falling pricing of silicon solar panels from China has made it extremely difficult to compete in this market. The U.S. Government has stepped in to review claims of unfair trade practices in this regard but for now our product pricing is above market. Strategically, OPEL has decided not to market its HCPV panels while the marketplace remains in turmoil.

The twelve months ended December 31, 2011 included the non-cash expense of \$1,803,012 related to stock options, some of which were granted in a prior year. This was higher by \$1,211,153 than the 2010's expense as more options were granted at higher market prices. The Company believes it is necessary to grant incentive stock options to attract and hold highly skilled employees and directors.

Depreciation and amortization increased in the year as compared to last year due to the addition of new assets and \$1,501,692 in a one-time impairment of our solar field asset in Spain due to uncertainty about the feed-in tariff and our ability to sell the facility.

OPEL's other G&A expenses were higher by \$33,255 year over year due to growth in sales and marketing activities to grow our product sales, efforts that are paying off in our increased revenue.

OPEL increased its R&D expenses by approximately \$97,212 when compared to the same period of 2010, but the prior year's activity was low and in transition to provide our new utility grade tracking system, the TF-800, the inclusion of the wireless tracking control feature, and the newly released Mk-1X HCPV panel. These two new products are what OPEL is selling into the market today and is directly responsible for OPEL Solar's increased revenue. OPEL utilizes outside contracting houses to assist in the design of some of our future product enhancements allowing for lower permanent headcount. However, ODIS now makes up a larger portion of R&D expenses since the U.S. Government has cut back on funding.

#### Explanation of Material Variations by Quarter for the Last Eight Quarters

For the quarter ending December 31, 2011, the cost of goods sold was significantly higher due to a one time write down of raw materials used in our solar products totaling \$3,570,406 and a \$246,415 write off of older generation solar panels. The rapidly falling pricing of silicon solar panels from China has made it extremely difficult to compete in this market. The U.S. Government has stepped in to review claims of unfair trade practices in this regard but for now our product pricing is above market. Strategically, OPEL has decided not to market its HCPV panels while the marketplace remains in turmoil.

In the quarter ending September 30, 2011, revenue was higher than any other quarter due to the continuing increase in the U.S. sales of solar trackers. Most of the solar revenues were associated with four tracker installations completed in 2011. The cost of goods sold was higher this quarter due to the \$172,000 write off of older generation tracker components and the reserve of \$131,300 for solar panels previously inventoried at higher prices. Some older version HCPV solar products were also sold at a negative margin and subcontracted installation provided by others carried no margin but are only associated with two installations where we acted as the turn-key integrator.

In the quarters ending March 31, 2011, June 30, 2011, September 30, 2011, and December 31, 2011 revenue was higher than in each of the corresponding four quarters in 2010 due to the increased U.S. sales of solar trackers. This is due to our expanded sales focus and customer acceptance of our utility grade TF-800 solar tracking systems.

In the quarter ending December 31, 2011, depreciation and amortization increased significantly over all other quarters. This was due to the purchase of additional new assets and \$1,501,692 for a one-time impairment of our solar field asset in Spain caused by the uncertainties of the Spanish economy.

In the December and September 2010 quarters, OPEL increased its R&D expenses when compared to the previous quarters. This was a temporary increase related to subcontracting expenses used to support the manufacturing start-up of its utility grade tracking system, the TF-800, the inclusion of the wireless tracking control feature, and the newly released Mk-1X HCPV panel. This 40-70% increase in R&D was temporary as the development was nearing completion as of December, 2010. The Company used the services of engineering firms and consultants to complete the design and development of the new solar panels which will increase efficiency by an additional 20% over the existing Mk-1X panels, while reducing its cost to manufacture by 20%. Both changes will serve to increase future margin on our solar panels.

In the quarter ending June 30, 2010, OPEL took a one time charge of \$40,572 in divesting itself from Alcapi Solartwent Management GmBH ("ASM"), one of the investments made under OPEL Solar Europe. After careful analysis, the Company felt that its investment in ASM GmbH would not yield the desired success that was projected. No further capital outlay was committed to ASM. The Company recovered a loan of \$470,000 from ASM during the year. The Company will continue to monitor all of its international investments to ensure success or a quick exit if market conditions suggest otherwise.

Due to the high tech nature of the organization, it is necessary to retain highly skilled managers and employees. Stock options form part of an employee's overall compensation package. The fair value of these options are amortized and reflected quarterly. These are non cash expenses. The higher expense levels in December 2011, September 2011, June 2011 and March 2011, and similarly in December 2010 and September 2010, were due to stock options being granted in those quarters. As the options are amortized over 18 months the expense is reduced each quarter.

#### Segment Disclosure

The Company and its subsidiaries operate in two distinct segments; (1) the manufacture and sale of high efficiency solar panels and multi-axis solar tracking systems and (2) the design of infrared sensor type products for military and industrial applications. The Company's operating and reporting segments reflect the management reporting structure of the organization and the manner in which the chief operating decision maker regularly assesses information for decision making purposes, including the allocation of resources. There are no intersegment sales. The Company's segments and their products and services are summarized below:

OPEL Solar, Inc.

OPEL Solar markets a complete line of universal single and dual axis solar trackers to mount solar panels for the optimum power output. During the 2011 business year, the Company's complete tracker offerings built strong market momentum. In the case of the TF-800, this tracker line highlights ease of installation in the construction process and incorporates backtracking capability in order to reduce any impact from shadowing. Additionally, OPEL trackers utilize its patented wireless control capability to reduce installation and maintenance costs associated with large solar field operations. The TF-800 utility scale tracker is rapidly becoming the tracker of choice in the world markets.

The use of OPEL's solar tracking systems can increase the kWh production of silicon, or thin film solar installations by 15-30% over a fixed installation. OPEL has a full line of solar tracking systems for roof or ground mounted installations.

ODIS Inc. ("OPEL Defense Integrated Systems")

ODIS designs infrared sensor type products for military and industrial applications. ODIS develops gallium arsenide-based processes and semi-conductor microchip products having several potential major market applications: infrared sensor arrays for Homeland Security monitoring and imaging along with the unique combination of optical lasers, and electronic control circuits on the same microchip for potential applications in various military programs, higher efficiency computing systems, and potentially telecom for Fiber to The Home.

Segmented information for the year ended December 31, 2011 and December 31, 2010 is as follows:

		2011			2010		
	OPEL	ODIS	Total	OPEL	ODIS	Total	
Revenue	\$ 5,122,507	\$ 755,422	\$ 5,877,929	\$ 539,784	\$ 1,107,854	\$ 1,647,638	
Interest income	8,374	-	8,374	2,901	-	2,901	
Cost of goods sold	8,916,603	-	8,916,603	434,627	-	434,627	
Operating expenses	6,439,280	1,775,657	8,214,937	6,624,447	1,499,298	8,123,745	
Amortization and							
impairment charge	1,780,885	4,193	1,785,078	229,698	4,193	233,891	
Loss attributable to non							
controlling interest	107,662	-	107,662	29,825	-	29,825	
Loss on divestiture of ASM	-	-	-	40,572	-	40,572	
Segment loss	11,898,225	1,024,428	12,922,653	6,756,834	395,637	7,152,471	
Corporate operations	-		2,239,073	-		839,876	
Net loss attributable to equity	y shareholders		\$ 15,161,726			\$ 7,992,347	

Assets and capital expenditures at December 31,

	OPEL	2011 ODIS	Total	OPEL	2010 ODIS	Total	
Total assets	\$ 5,046,615	\$ 70,743	\$ 5,117,358	\$12,038,741	\$ 237,012	\$ 12,275,753	
Capital expenditures	\$ 244,132	\$ 1,647	\$ 245,779	\$ 423,425	\$ -	\$ 423,425	

Segmented information for the three months ended December 31, 2011 and December 31, 2010 is as follows:

	OPEL	2011 ODIS	Total	OPEL	2010 ODIS	Total	
Revenue	1,046,923	\$ 7,630	\$ 1,054,553	\$ 100,333	\$ 275,414	\$ 375,747	
Interest income	438	-	2,085	(600)	-	(600)	
Cost of goods sold	4,697,722	-	4,697,722	178,384	-	178,384	
Operating expenses	1,502,592	452,865	1,955,457	1,759,348	386,654	2,146,002	
Amortization	1,605,913	1,048	1,606,913	53,856	1,048	54,904	
Loss attributable to non							
controlling interest	81,877	-	81,877	21,561	-	21,561	
Loss on divestiture of ASM	-	-	-	-	-	-	
Segment loss	1,718,260	446,283	2,164,543	1,870,294	112,288	1,982,582	
Corporate operations	-	-	533,802	-	-	153,599	
Net loss attributable to equity	shareholders		\$ 7,730,320			\$ 2,136,181	

The Company operates geographically in the United States of America, Canada and Europe.

As of December 31,	US	201	1 Canada	Europe	Co	onsolidated
Current assets	\$ 2,890,651	\$	483,520	\$ 60,779	\$	3,434,950
Property and equipment	1,798,779		-	-		1,798,779
Patents and licenses	169,971		-	-		169,971
Investment in Opel Solar Asia	197,178		-	-		197,178
	\$ 5,056,579	\$	483,520	\$ 60,779	\$	5,600,878

Year ended December 31,	US	201	1 Canada	Europe	Co	onsolidated
Revenue	\$ 5,877,929	\$	-	\$ -	\$	5,877,929
Cost of goods sold	8,753,420		-	163,183		8,916,603
General and administration	4,535,934		3,755,817	74,115		8,365,866
Research and development	3,888,274		-	-		3,888,274
Investment and other income	(8,374)		(15,052)	-		(23,426)

As of December 31,	US	201	10 Canada	Europe	C	onsolidated
Current assets Property and equipment Patents and licenses	\$ 8,122,165 1,813,389 192,968	\$	4,595,151 - -	\$ 645,539 1,501,692	\$	13,362,855 3,315,081 192,968
	\$ 10,128,522	\$	4,595,151	\$ 2,147,231	\$	16,870,904

Year ended December 31,	US	<b>201</b> (	) anada	Europe	2	Consc	lidated
Revenue	\$ 1,645,715	\$	-	\$	1,923	\$	1,647,638
Cost of goods sold	418,829		-		15,798		434,627
General and administration	4,406,305		906,390		120,213		5,432,908
Research and development	3,791,062		-		-		3,791,062
Investment and other income	(2,695)		(36,689)		(206)		(39,590)

## Liquidity and Capital Resources

The Company had working capital of \$1,703,175 at December 31, 2011, compared to \$11,243,092 at December 31, 2010 and \$13,732,982 as of January 1, 2010.

The Company is not in a position to cover its liabilities as they come due. To offset its continued losses, the Company will need to seek debt or equity financing to fund its operations. Although the Company has been successful in obtaining such financing in the past, there is no assurance that it will be able to do so in the future.

OPEL recently entered into a credit agreement for a revolving credit facility of up to \$5,000,000 with TCA Global Credit Master Fund, LP. Funds will be made available to the Company on an "as needed basis" on normal commercial terms and an initial draw down of \$850,000 was completed. A revolving note and a security agreement create a valid security interest in any Collateral in which the Company has rights, and any Collateral in which the Company hereafter acquires rights, to secure payment and performance of the obligations of the Company.

#### Related party transactions

Compensation to key management personnel were as follows:

	2011	2010	
Salaries	\$ 992,000	\$ 1,094,000	
Share-based payments (1)	742,252	223,347	
Total	\$ 1,734,252	\$ 1,317,347	

(1) Share-based payments are the fair value of options (calculated using Black-Scholes method) which were granted to key management personnel and expensed during the year.

## Critical Accounting Estimates

### Stock-based Compensation

Stock options and warrants awarded to non-employees are accounted for using the fair value of the instrument awarded or service provided, whichever is considered more reliable. Stock options and warrants awarded to employees are accounted for using the fair value method. The fair value of such stock options and warrants granted is recognized as an expense on a proportionate basis consistent with the vesting features of each tranche of the grant. The fair value is calculated using the Black-Scholes option pricing model with assumptions applicable at the date of grant.

#### Other stock-based payments

The Company accounts for other stock-based payments based on the fair value of the equity instruments issued or service provided, whichever is more reliable.

#### Inventory Valuation

Inventory consists of solar panels, solar trackers, and the components necessary to produce the Company's solar products. Inventory is stated at the lower of cost determined by first-in, first-out basis or current market value.

Additionally, OPEL has approximately \$4,200,000 in Boeing-Spectrolab solar cell assemblies to be used in its HCPV solar panels. This particular inventory has been written down to \$795,000, representing approximately 19% of its cost, due to the extreme competitive pressure from Chinese made silicon solar panels. The low pricing of silicon solar panels has greatly delayed the adoption of newer technologies, like HCPV. Strategically, OPEL has decided not to market its HCPV panels while the worldwide solar panel market remains in turmoil.

#### Cumulative Translation Adjustment

IFRS requires certain gains and losses such as certain exchange gains and losses arising from the translation of the financial statements of a self-sustaining foreign operation to be included in comprehensive income.

## **Contractual Obligations**

OPEL leases office space and research facilities. The office lease for the Shelton, CT facility extends to June 30, 2014. The lease on the research facility at the University of Connecticut extends to March 31, 2013. The total obligation to the end of both leases is \$360,363.

#### Recent Accounting Pronouncements

In November 2009, the IASB issued IFRS 9, Financial Instruments ("IFRS 9"), which represents the completion of the first part of a three-part project to replace IAS 39, Financial Instruments: Recognition and Measurement, with a new standard. Per recent updates to IFRS 9, an entity choosing to measure a liability at fair value will present the portion of the change in its fair value due to changes in the entity's own credit risk in the other comprehensive income or loss section of the entity's statement of comprehensive loss, rather than within profit or loss. Additionally, IFRS 9 includes revised guidance related to the derecognition of financial instruments. IFRS 9 applies to financial statements for annual periods beginning on or after January 1, 2013, with early adoption permitted. The Company currently is evaluating any impact that this new guidance may have on the Company's consolidated financial statements.

#### Financial Instruments and Risk Management

The Company's financial instruments consist of cash, short-term investments, accounts receivable, marketable securities, and accounts payable and accrued liabilities. Unless otherwise noted, it is management's opinion that the Company is not exposed to significant interest or credit risks arising from these financial instruments. The Company estimates that the fair value of these instruments approximate the carrying values due to their short term nature.

Financial instruments that potentially subject the Company to concentrations of credit risk consist of short-term investments and accounts receivable. Short-term investments consist of US Treasury notes, held with reputable financial institutions from which management believes the risk of loss is remote. The Company has accounts receivable from parties in various industries and governmental agencies that are currently concentrated in the United States of America. While economic factors can affect credit risk, the Company manages risk by providing credit terms on a case by case basis. The Company has not experienced any significant instances of non-payment from its customers. At December 31, 2011, balances were concentrated among three customers which accounted for 88% of the accounts receivable.

#### Exchange Rate Risk

The functional currency of OPEL Technologies Inc. is the Canadian dollar. The Company's operations in the United States and Europe are considered to be self-sustaining. Operations in foreign markets are exposed to the risk of foreign currency fluctuations for transactions denominated in a currency other than the functional currency of the Company's foreign operating unit. Currencies in which the Company is exposed to foreign currency risk are mainly the Canadian dollar and Euro. A 10% change in the Canadian dollar and the Euro would increase or decrease other comprehensive income (loss) by \$52,315. Since the Company's operations predominantly transact their sales and purchases in their respective domestic currencies, the exposure is reduced. Therefore, the Company typically does not hedge accounts receivable and accounts payable that are denominated in a foreign currency.

#### Interest Rate Risk

Short-term investments bear interest at fixed rates, and as such, are subject to interest rate risk resulting from changes in fair value from market fluctuations in interest rates. The Company does not depend on interest from its investments to fund its operations. The Company does not and is not planning to take short term loans from institutions to fund operations.

#### World Economic Risk

Like many other companies, the world economic climate has impacted OPEL's business and the business of many of its current and prospective customers. The difficult economic climate has made it more challenging for our customers to secure financing for solar projects and has in some cases, reduced certain feed-in tariffs that made such projects financially viable. However, lower interest rates, a lower value of the dollar and rising global liquidity have helped to counterbalance some of these global economic challenges.

#### Liquidity Risk

OPEL recently entered into a credit agreement for a revolving credit facility of up to \$5,000,000 with TCA Global Credit Master Fund, LP. Funds will be made available to the Company on an "as needed basis" on normal commercial terms and an initial draw down of \$850,000 was completed. A revolving note and a security agreement create a valid security interest in any Collateral in which the Company has rights, and any Collateral in which the Company hereafter acquires rights, to secure payment and performance of the obligations of the Company.

OPEL predominately relied on previous equity funding for liquidity to meet current and foreseeable financial requirements. As the Company's revenue grows, it will also be able to rely more on the cash generated from operations. The contractual maturity of financial liabilities mainly comprising accounts payable and accrued liabilities is less than one year, as at the latest reporting date.

#### Market Risk

Market risk arises from the possibility that changes in market prices will affect the value of the financial instruments of the Company. The Company is exposed to fair value fluctuations on its short-term investments and marketable securities. The Company's other financial instruments (cash, accounts receivable and accounts payable and accrued liabilities) are not subject to market risk, due to the short-term nature of these instruments.

#### Environmental and Climate Change Issues

OPEL faces few, if any, of these issues directly as it uses contract manufacturers and the inherent characteristics of its products are not environmentally hazardous. However, OPEL's products allow its customers to make great contributions to climate change. Each 1MW of OPEL's solar products installed by a customer avoids 600 tons of CO<sub>2</sub> from being discharged into the atmosphere each year, the equivalent of planting 93 acres of trees. OPEL's HCPV panels also require approximately 2,000 times less active material as standard silicon panels to produce.

#### Strategy and Outlook

During 2012, there are a number of projects planned which will address the short-term and long-term growth plans of the Company including, but not limited to the following:

- Target sales and marketing efforts to the following customer markets: Independent Power Producers (IPP), Utilities in high REC areas, Brownfields, Distribution Centers, Parking Garage Owners, Convention Centers, Malls, and Municipalities and Governments with high Renewable Energy Standards.
- Establish additional teaming relationships to expand the Company's access to project opportunities and expand its technical capabilities.
- Pursue selected Program Management and "One-Stop-Shop" opportunities where the potential exists for multiple projects with the same customer such that OPEL is at the top of the decision chain.
- Develop a "drop-in" solution for the military marketplace using the POET technology, develop a Military Spec focused device and acquire a Contractor and Government Entity (CAGE) Code for its products.
- Increase the North American production capability for its single and dual axis tracking system, for both roof and ground mounting. Identify multiple sourcing capabilities to handle projected growth.
- Begin to search for resources to fill out key management and field operational positions to sustain growth as orders increase.
- Expand OPEL's integrator network to help promote our solar products in Mexico, Canada and the U.S.

- Identify and cultivate relationships with strategically located and positioned Solar EPC's to be able to provide turn-key solar installations for larger customers with utility scale installations in mind.
- Develop a small/medium solar package program targeted at municipalities that can be offered in the form of a PPA in selected states where incentives are favorable to package these projects to investors.
- Identify and cultivate external funding sources interested in solar project finance or ownership.
- Continue to complete the third party validation of the patented POET technology to a fabrication facility that can prove its viability and product potential through ODIS.
- Expand the ODIS engineering team with placement of additional team members at both the ODIS's R&D facility and the fabrication facility in Nashua, New Hampshire.
- Procure additional equipment which is required for the continuing development of POET on a speedier and more efficient basis.
- Actively engage with all Departments of the Military including other Government Agencies pressing for SBIR funding directed at ODIS for projects which serve to enhance POET's development.
- Heighten prospects of U.S. Solar Legislation favoring solar incentives and other solar related financial opportunities, like feed-in tariffs or State and Federal grants.
- Refocus the Company's Public and Investor Relations Program with branding and strategic marketing planning efforts.

#### Outlook

OPEL Solar currently has active solar tracker price quotations of over \$1B for multiple projects to be delivered globally in 2012, 2013 and 2014. The size of these projects range in size from 1.5MW to 250MW with multiple EPC partners. There can be no assurance that these price quotations will result in installations or revenues to the Company. The growing market acceptance of OPEL's trackers is due in part to the increasing effectiveness of the Company's sales and marketing efforts. The projects on which the Company has provided such price quotations has increased in size from our recent average installation size of 500kW-2.5MW in 2011, to 10-20MW in size for future years.

## Significant Events Since December 31, 2011

- In January 2012, OPEL supplied 4.6MW of its TF-850 utility grade solar tracking systems to Global Energy Services for installation on two California sites being developed by Gestamp Solar, a leading developer of utility scale solar projects.
- 2) In January 2012, OPEL announced the commissioning of a turn-key solar installation for Aquarion Water Company in Connecticut, showcasing OPEL's solar tracking systems. The system demonstrates how solar systems can dramatically lower the energy costs associated with water treatment facilities.
- 3) In March 2012, ODIS announced significant progress, made in the first quarter, regarding POET as it pertains to its advancements in Optical Interconnection of High Speed Circuits as outlined in a White Paper/Roadmap posted on the ODIS website <www.odis.com>. These achievements when successfully added to the POET platform under development, will make it possible for the first time to implement an optical interface as a single chip to connect existing CMOS processors. The advancements are significant and ongoing steps in the POET technology development and have made it possible to produce a well defined military and commercial Roadmap for POET.
- 4) In April 2012, OPEL entered into a credit agreement for a revolving credit facility of up to \$5,000,000 with TCA Global Credit Master Fund, LP. Funds will be made available to the Company on an "as needed basis" on normal commercial terms and an initial draw down of \$850,000 was completed. A revolving note and a security agreement create a valid security interest in any Collateral in which the Company has rights, and any Collateral in which the Company hereafter acquires rights, to secure payment and performance of the obligations of the Company. This credit arrangement replaced the line of credit with Silicon Valley Bank announced on November 28, 2011.

## **Outstanding Share Data**

#### Common Shares

As at December 31, 2011 and April 25, 2012, there were respectively 93,025,421 and 93,555,421 outstanding common shares of the Company.

#### Special Voting Share

Additionally, there was one (1) special voting share which carries 135,000 votes at December 31, 2011 and April 25, 2012. These votes are for the benefit of the holders of exchangeable shares of OPEL, Inc. The exchangeable shares are convertible into common shares of the Company on a one for one basis.

#### Stock Options and Warrants

As at December 31, 2011 and April 25, 2012, the Company had 11,839,560 warrants outstanding to purchase common shares at prices ranging from \$0.30 – \$1.90.

Total stock options outstanding as at December 31, 2011 and April 25, 2012 were respectively 9,532,750 and 11,251,500 shares respectively priced between \$0.16 and \$1.50 per common share.

Additional detailed share data information is available the Company's Consolidated Financial Statement.

## Off-Balance Sheet Arrangements

The Company has not entered into any off-balance sheet arrangements.

#### Key Business Risks and Uncertainties

Dependence Upon Key Personnel – OPEL depends on its senior management and technical staff. If OPEL is unable to attract and retain key personnel, it may have a material adverse effect on the Company. In an effort to manage this risk, the Company has established a competitive compensation grid for all staff especially senior management that includes certain benefits and stock options. The Company frequently compares its rates of pay to its competitors and the compensation package that would normally be offered to such senior individuals both inside and outside the industry. The Company is confident that its compensation package is above the standard required to retain highly skilled management.

Product Development – Delays in product development or the transition to commercial scale production may cause a material adverse effect to the Company. Product development in OPEL follows a strict path of concept, research, business analysis, design, beta testing and technical implementation. These milestones are reviewed regularly with the head of product development to ensure timely release of new products. The advancement of technology has aided the Company in bringing new product to market in a timely fashion. Should major delays ensue, the Company has a policy of advising its stake holders of significant delays and the impact of any such delay.

Financial Liquidity – OPEL may not have adequate financial reserves to continue the development of POET by ODIS and to enable the growth of its solar business at the pace required to serve its customer base, if substantial orders were received and were backlogged and if no new SBIR grants are received. The Company has not earned profits, so its ability to finance operations is chiefly dependent on equity financings. To date the Company has raised over 50 million dollars in equity financing and while it is not certain of its ability to do so in the future, the Company has no reason to believe that it will not be able to do so in the future. In addition, the Company has also embarked on an aggressive sales campaign to bolster its U.S. sales and grow its Asian business.

Governmental Incentives – Projects that OPEL might participate in directly or through ODIS may not be funded due to reductions, changes in timing, and/or the removal of government incentives. There is no assurance that the Company will be successful in continuing to focus its energies on commercial applications of the ODIS technology and minimizing its reliance on SBIRs to mitigate this risk.

Ability to Reach Profitability – OPEL has no history of profitability and may not be able to sell enough products at a high enough margin to cover its costs of operation on an ongoing basis. This risk is short term as the Company must absorb low margins and at this early stage in order to develop brand and market awareness. Creating market awareness through public announcements and delivering product to the market place is part of the Company's strategy. This strategy is beginning to yield success as projections for the next 18 months have indicated that the market is recognizing OPEL's Trackers. As the Company continues to gain awareness in both government and commercial market places, margins will begin to normalize and increase especially with high volume production.

Market Acceptance of New Products – OPEL's utility scale tracking systems are a new technology which as yet has little installed base and may not be embraced for large scale installation. Branding is a key to creating market acceptance. There is no assurance that public announcements, demonstration installations in the United States and Europe along with advertising the Company's high efficiency technology in comparison to competitor products will mitigate this risk.

Technology Changes – OPEL's products are highly reliant upon keeping pace with technological changes. OPEL's products are complex and rely on state-of-the-art design methodologies to optimize them for market. If OPEL cannot

afford to keep pace with these changes, it may have a material adverse effect on the Company. Retaining qualified engineers and scientists has been identified as a KSD for the Company. Qualified personnel will continue to ensure that the Company is not only keeping in touch with technological developments but are also implementing these new developments. Compensation is key in hiring and retaining these individuals. As discussed above, our Compensation packages have been identified as above standard in the industry. We will continue to not only monitor technological changes but also lead these changes.

Major Competitors – OPEL may face several competitors before or after it brings its products to market which could result in the loss of market share thereby having a material adverse effect on the Company. The Company continues to work with emerging markets such as Asia and certain areas of Europe to extend its market base. Through research and competitive data, OPEL feels that these markets are ready for a new entrant especially with the efficiency of the OPEL products. Staying ahead of the curve with R&D, and consistency in new product development will be key to keeping to developing and maintaining market share.

#### International Financial Reporting Standards

The accompanying financial statements were prepared under IFRS, which the Company adopted on January 1, 2011. IFRS employs a conceptual framework that is similar to Canadian GAAP; however, significant differences exist in certain areas of recognition, measurement, presentation and disclosure.

Prior to the adoption of IFRS, the Company established a strategy for the successful adoption of IFRS which included the following:

- 1. Hiring outside consultants to provide guidance and assistance to the Company as it addressed its transition to IFRS.
- 2. Developing a transition plan which was executed.
- 3. Developed a detailed analysis and understanding of the differences between IFRS and Canadian GAAP.
- 4. Implemented the necessary changes to; systems, process and disclosure controls.

While the adoption of IFRS did not result in changes to actual cash flows of current or prior period consolidated financial statements, there were changes to the results and equity of the Company. Notes 2 and 20 of the audited consolidated financial statements provides the currently adopted accounting policies of the Company and a detailed analysis of the impact of the Company's transition to IFRS. A summary of the impact of the adoption of IFRS is presented below:

In preparing the statements, comparative financial results for the twelve months ended December 31, 2010 and the balance sheet as at December 31, 2010 were adjusted to comply with IFRS from amounts previously reported in accordance with GAAP.

The guidance for first-time adopters of IFRS is set out in IFRS 1, which provides for certain mandatory exceptions and optional exemptions. In preparing these interim financial statements, the Company applied the following:

## **Optional Exemptions:**

#### Business combinations

IFRS 1 allows a first-time adopter to elect not to apply IFRS 3, Business Combinations, retrospectively to business combinations that occurred before the date of transition to IFRS. The Company has elected to exercise this election.

#### Cumulative translation differences

IFRS 1 allows cumulative translation differences for all foreign operations to be deemed zero at the date of transition to IFRS, with future gains or losses on subsequent disposal of any foreign operations to exclude translation differences arising prior to the transition date. The Company has chosen to reset its cumulative translation balance to zero at transition date.

#### Share-based payment transactions

IFRS 1 encourages but does not require first-time adopters to apply IFRS 2, Share-based Payment, to equity instruments that were granted on or before November 7, 2002 and vested before the transition date. The Company has elected not to apply IFRS 2 to awards that vested prior to January 1, 2010.

#### **Mandatory Exceptions:**

#### Estimates

Hindsight is not used to create or revise estimates. The estimates previously made by the Company under GAAP were not revised upon adoption of IFRS except where necessary to reflect any differences in accounting policies.

Impact on the Company's Financial Reporting

The adoption of IFRS had the following impact on the Company:

- IAS 36 "Impairment of Assets" IFRS requires a write-down of assets if the higher of the fair market value and the value-in-use of a group of assets is less than its carrying value. Value-in-use is determined using discounted estimated future cash flows. Under current Canadian GAAP a write down to estimated fair value is only required when the undiscounted estimated future cash flows of a group of assets are less than its carrying value. The Company's accounting policies will be changed to reflect the differences between IFRS and Canadian GAAP. There was no impact on the Company.
- IFRS 2 "Share-Based Payments" IFRS requires that stock-based awards that vest in installments be accounted for as though each installment or vesting is a separate award on a graded rather than pooled basis. This change had a recognition, measurement and disclosure impact on the Company, accordingly, Contributed Surplus decreased by an approximately \$3,900 with a corresponding increase to Deficit.
- IAS 21 "Effects of Changes in Foreign Exchange Rates" IFRS 1 allows cumulative translation differences for all foreign operations to be deemed zero at the date of transition to IFRS, with future gains or losses on subsequent disposal of any foreign operations to exclude translation differences arising prior to the transition date. The Company has chosen to reset its cumulative translation balance to zero at transition date. The approximate impact on the Company was a decrease in Accumulated Comprehensive Income of approximately \$2,895,000 and a corresponding increase to Deficit.
- Asset Retirement Obligations (Decommissioning Liabilities) Under IFRS, a liability must be recognized at the time when the entity becomes legally or constructively obliged to rehabilitate a disturbance resulting from mining activities, while under Canadian GAAP, a liability is only recognized when the entity is legally bound. Discount rates used should reflect the risks specific to the decommissioning provision. IFRS requires re-measurement of the liability at each reporting date whereas Canadian GAAP requires re-measurement of the liability in the event of changes in the amount or timing of cash flows required to settle the obligation. IFRS also requires the remeasurement of the provision for reclamation and rehabilitation if there is a change in the current market-based discount rate. The Company re-measured its Asset Retirement Obligation. The result of re-measurement was decrease in Asset Retirement Obligation of approximately \$67,000 and a corresponding increase in Deficit.

The Company identified other IFRS changes that had a non-financial impact on the Company. These include but were not limited to; IFRS 8 "Operating Segments", IFRS 7 "Financial Instrument Disclosures" and IAS 17 "Leases".

The following is a reconciliation of the Company's equity, net loss and comprehensive income from Canadian GAAP to IFRS for the periods required under IFRS:

#### **Reconciliation of Equity**

onemation of Equity	December 31, 2010	January 1, 2010
Total equity under GAAP Differences increasing (decreasing) reported shareholders equity	\$ 14,030,667	\$ 14,836,399
Contributed surplus	(152,847)	(3,906)
Deficit	(2,651,111)	(2,890,753)
Accumulated other comprehensive loss	2,803,917	2,894,659
Non-controlling interest	1,811	-
	1,770	-
Total equity under IFRS	\$ 14,032,437	\$ 14,836,399

## **Reconciliation of Net Loss**

	Year Ended December 31, 2010	Three	Months Ended December 31, 2010
Net loss under GAAP	\$ 8,256,750	\$	2,219,772
Differences increasing (decreasing) reported net loss General and administrative Foreign currency translation loss	(150,711) (83,867)		(35,903) (17,863)
	(234,578)		(53,766)
Net loss under IFRS	\$ 8,022,172	\$	2,166,006
Net loss attributable to non-controlling interest	\$ (29,825)	\$	(21,561)
	(7.002.247)		(2,144,445)
Net loss attributable to equity shareholders	(7,992,347)		(2,144,443)
Net loss attributable to equity shareholders  onciliation of Comprehensive Loss	Year Ended December 31, 2010		e Months Ended becember 31, 2010
onciliation of Comprehensive Loss  Comprehensive loss under GAAP	\$ Year Ended December 31,		e Months Ended becember 31,
onciliation of Comprehensive Loss	\$ Year Ended December 31, 2010	D	e Months Ended lecember 31, 2010
Comprehensive loss under GAAP Differences increasing (decreasing) reported comprehensive loss Differences affecting net loss reported under GAAP	\$ Year Ended December 31, 2010 7,930,904 (234,578)	D	e Months Ended december 31, 2010 2,138,187 (53,766)
Comprehensive loss under GAAP Differences increasing (decreasing) reported comprehensive loss Differences affecting net loss reported under GAAP	\$ Year Ended December 31, 2010 7,930,904 (234,578) 83,867	D	e Months Ended december 31, 2010 2,138,187 (53,766) 17,863
Comprehensive Loss  Comprehensive loss under GAAP  Differences increasing (decreasing) reported comprehensive loss  Differences affecting net loss reported under GAAP  Net change in unrealized gains on currency translation	Year Ended December 31, 2010 7,930,904 (234,578) 83,867 (150,711)	\$	e Months Ended december 31, 2010  2,138,187  (53,766) 17,863  (35,903)

The adoption of IFRS has had no impact on the net cash flows of the Company. The changes made to the statements of financial position and statements of consolidated income have resulted in reclassifications of various amounts on the statements of cash flows, however as there have been no changes to the net cash flows, no reconciliations have been presented.

## Additional Information

Additional information relating to the Company is available on SEDAR at www.sedar.com.





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