

# **BERKLEY RENEWABLES INC.**

MANAGEMENT'S DISCUSSION AND ANALYSIS

Nine months ended September 30, 2016

#### MANAGEMENT'S DISCUSSION AND ANALYSIS

Berkley Renewables Inc. ("Berkley" or the "Company") is a junior oil and gas exploration, production and development company based in Vancouver, BC. Additional information relating to the Company, including its audited annual financial statements, is available on the SEDAR website at <a href="https://www.sedar.com">www.sedar.com</a>. Berkley is a reporting issuer in the provinces of British Columbia, Alberta and Ontario. Berkley's common shares are listed for trading on the Canadian Securities Exchange ("CSE") under the symbol "BKS" and on the US OTC under the symbol "BRKDF".

The following Management's Discussion and Analysis ("MD&A") is dated November 30, 2016 and discloses specified information up to that date. The following discussion and analysis of the operations, results and financial position of the Company for the nine months ended September 30, 2016 should be read in conjunction with the unaudited financial statements for the nine months ended September 30, 2016 and the audited financial statements for the year ended December 31, 2015.

The Company is classified as a "Venture Issuer" for the purposes of National Instrument 51-102. The Company's financial statements are prepared in accordance with International Financial Reporting Standards ("IFRS") in Canada. Unless otherwise cited, references to dollar amounts are in Canadian dollars.

#### **Forward-Looking Information**

Certain statements in this MD&A and the documents incorporated by reference contain forward-looking information, which includes forward-looking statements within the meaning of applicable Canadian securities laws. Forward-looking statements are statements which relate to future events or our future performance, including our future financial performance. In some cases, you can identify forward-looking statements by terminology such as "may", "should", "expects", "plans", "anticipates", "believes", "estimates", "predicts", or "potential" or the negative of these terms or other comparable terminology. These statements are only predictions and involve known and unknown risks, uncertainties and other factors that may cause the Company's or the industry's actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. No assurance can be given that any of the events anticipated by the forward-looking information and statements will occur or, if they do occur, what benefits the Company will obtain from them. This MD&A contains forward-looking information and statements, which may include but are not limited to: statements with respect to the financial and operating performance of the Company; investments objectives and strategies; the business goals and strategies; forecast operating and financial results; planned capital expenditures; potential future market for products; the Company's plans for, and results of, exploration and development activities; the Company's treatment under governmental regulatory and royalty regimes and tax laws; competitive advantages; business prospects and opportunities; costs and timing of developmental new projects; management's assessment of future plans and operations; and requirements for additional capital.

While these forward-looking statements, and any assumptions upon which they are based, are made in good faith and reflect management's current judgment regarding the direction of the business, actual results will almost always vary, sometimes materially, from any estimates, predictions, projections, assumptions or other future performance suggested in this MD&A. These assumptions, which includes management's current expectations, estimates and assumptions about certain projects and the markets in which the Company operates, the global economic environment, interest rates, the successful and timely implementation of capital projects; the Company's ability to generate sufficient cash flow from operations to meet current and future obligations and other risks and uncertainties described from time to time in the filings made with securities regulatory authorities; the impact of increasing competition; the Company's ability to obtain qualified staff, equipment and services in a timely and cost efficient manner; the ability of the operator of the project in which the Company has interests to operate in a safe, efficient and effective manner; future commodity prices; currency, exchange and interest rates; the regulatory framework regarding royalties, taxes and environmental matters in the jurisdictions in which the Company operates may prove to be incorrect. A number of risks and uncertainties would cause the Company's actual results to differ materially from those expressed or implied by the forward-looking information and statements, including, but not limited to: the failure of the Company to execute business plans; general economic conditions affecting the Company; risks arising from operations generally; competition; accuracy of cost estimates; fluctuations in commodities prices; fluctuations in product supply and demand; risks associated with technology and its application to the business; changes in the applicable regulatory framework, including changes in regulatory approval process and land-use designations, royalty, tax, environmental, greenhouse gas, carbon and other laws and regulations, or changes to the associated with compliance; the loss of key management employees; the Company's abilities to control operating costs, general administrative and other expenses; other factors beyond the Company's control; insufficient investor interest in the Company's securities which may impact its ability to raise additional financing as required.

These forward-looking statements are based on the estimates and opinions of management at the time they are made. Although management believes that the expectations reflected in these forward-looking statements are reasonable, future results, levels of activity, performance or achievements cannot be guaranteed. Readers of this MD&A are cautioned not to rely on these forward-looking statements. Except as required by applicable securities law, the Company does not intend to update any of the forward-looking statements in this MD&A to conform these statements to actual results.

#### Overview

Berkley is a publicly-traded, Vancouver-based, oil and gas company engaged in the acquisition, development and production of petroleum and natural gas interests and the operations management of photovoltaic power generation projects. The Company has interests in producing natural gas wells in the Province of Alberta and manages clean energy projects.

The Company operates two divisions:

#### Oil and Gas Division ("OG")

Operating under the name Berkley Renewables Inc., the OG division is involved in the development and production of oil and natural gas from petroleum and natural gas interests in Alberta, Canada.

#### Solar Management Division ("SM")

Operating under the names Solar Flow-Through 2012-I Management Ltd., Solar Flow-Through 2013-I Management Ltd., Solar Flow-Through 2014-I Management Ltd., Solar Flow-Through 2015-I Management Ltd. and Solar Flow-Through 2016-I Management Ltd. the SM division provides consulting services relating to the financing, strategy and operations management to companies in the renewable energy industry, specifically photovoltaic power generation.

### Strategy

Berkley's main focus is the exploration and development of its existing properties and diversification into renewable sources of energy. In addition to providing management consulting services for photovoltaic power generation projects, the Company is seeking opportunities to acquire and operate photovoltaic power generation projects within Canada.

Management intends to refocus its resources on renewable energy sources, such as its management consulting services in the photovoltaic power generation industry, and dispose of its remaining oil and gas interests over the next two quarters.

#### **Results of Operations**

The Company reports its results in two business segments: oil and gas and solar management.

Operating results for the Company's OG Division continue to be weak due to continuing depressed commodity pricing. In addition, a number of wells on its various interests have been shut-in with no expectation these interests coming on-stream again in the near term.

Operating results for the Company's SM Division for the three months ended September 30, 2016 remain consistent with prior quarters in fiscal 2016, however; management anticipates that revenues will increase significantly in Q4 due to the closing of recent financing transactions as well as increased operations management due to a number of solar projects that have now reached commercial operations status.

The discussion of segment operating results is set out below:

# Three months Ended September 30, 2016 compared with the three months ended September 30, 2015

#### **OG** Division operations

**Revenue:** Revenue from the sale of oil and natural gas (net of royalties) decreased significantly to \$1,403 in the guarter ended September 30, 2016 compared to \$9,297 in the same guarter 2015. The

Company expects future production revenue to remain flat or continue to decline as there has been no improvement in commodity pricing and ongoing production shutdowns.

**Expenses:** Operating costs were \$2,060 in the quarter ended September 30, 2016 compared with \$6,839 in the same quarter 2015.

**Net Oil and Gas Income:** Net oil and gas income includes a charge for depletion and accretion expense, a non-cash charge to operations based on an estimate of changes to oil and gas reserves. The Company had net oil and gas income (loss) of \$(801) for the quarter ended September 30, 2016 compared with a loss of \$47 in 2015.

**General and Administration Expenses:** General and administrative ("G&A") expense was \$43,250 during the guarter ended September 30, 2016 compared to \$63,501 in 2015.

#### **SM Division operations**

**Revenue:** The Company recorded no revenue from operations management in the quarter ended September 30, 2016 compared to revenue of \$468,094 in the same quarter 2015. This is largely due to the timing of financing transactions throughout the year.

**General and Administration Expenses:** General and administrative ("G&A") expense increased significantly to \$477,693 in the three months ended September 30, 2016 compared to \$24,000 in 2015. This is due mainly to much of management's time and resources being redirected to the solar division, as well as a need for more management consultants for the administration and management of a number of projects that have reached commercial operations. A corresponding increase has also occurred due to a need for additional office premises, utilities, and is due to increased consulting fees paid in connection with the completion of development on several solar projects.

# Nine months ended September 30, 2016 compared with the nine months ended September 30, 2015

**Revenue:** Revenue from the sale of oil and natural gas (net of royalties) increased slightly to \$13,832 in the nine months ended September 30, 2016 compared to \$9,297 in the same quarter 2015. The increase is due to a one-time recovery for road use revenue. Net of this recovery, the Company has had decreased production revenue due to well shut-ins, continuing operating and maintenance costs and weak commodity pricing.

**Expenses:** Operating costs were \$8,495 in the nine months ended September 30, 2016 compared with \$19,987 in the same period 2015.

**Net Oil and Gas Income:** Net oil and gas income includes a charge for depletion and accretion expense, a non-cash charge to operations based on an estimate of changes to oil and gas reserves. The Company had net oil and gas income income (loss) of \$3,905 for the nine months ended September 30, 2016 compared with a loss of \$18,183 during the same period 2015.

**General and Administration Expenses:** General and administrative ("G&A") expense was \$39,344 during the nine months ended September 30, 2016 compared to \$8,000 in 2015.

### **SW Division operations**

**Revenue:** The Company recorded no revenue from operations management in the nine months ended September 30, 2016 compared to revenue of \$777,683 in the same period 2015. This is due mainly to

timing of closing of financing transactions in the current fiscal year, whereas such transactions closed earlier in fiscal 2015.

**General and Administration Expenses:** General and administrative ("G&A") expense was \$477,693 in 2016 compared to \$117,966 in 2015 and is due to increased consulting fees and other related general and administrative costs paid in connection with the completion of development on several solar projects as well as consulting required for financing efforts.

Revenue and Expense Summary

	Sept. 30,	June 30,	Mar. 31,	Dec. 31	Sept. 30	June 30,	Mar. 31,	Dec. 31,
	2016	2016	2016	2015	2015	2015	2015	2014
	\$		\$	\$	\$	\$	\$	\$
Revenue	1,403	2,506	9,923	(5,548)	477,391	305,060	4,189	1,020,118
Operating costs	2,060	2,415	4,024	18,589	7,056	5,131	7,559	9,257
Revenue after operating costs	657	91	5,899	(24,137)	470,335	299,929	(3,370)	1,010,861
Depletion and accretion expense	144	1,415	1,169	1,862	2,288	1,415	3,790	4,157
General and admin expense (recovery)	283,095	163,167	230,605	663,453	87,501	163,167	179,142	728,481
Income (loss) before other items	(283,889)	(222,606)	(225,864)	(762,615)	380,546	135,347	(186,302)	278,223
Other income (expenses) and comprehensive income	(15,952)	(52,500)	(57,690)	(179,619)	7,351	(130,060)	197,396	(567,102)
Total comprehensive income (loss) for the period	(299,841)	(275,106)	(283,554)	(942,214)	387,897	5,287	11,094	(288,279)

#### **Liquidity and Capital Resources**

Berkley currently earns revenue from its oil and natural gas interests and operations management consulting from photovoltaic power generation projects. The Company invests its cash and cash equivalents with major Canadian financial institutions with investment grade credit ratings. Berkley has no outstanding bank debt or other interest bearing indebtedness as at September 30, 2016. As at September 30, 2016, Berkley had \$78,538 in cash and cash equivalents (December 31, 2015 - \$214,582) and a working capital deficiency of \$1,251,817 (December 31, 2015 – working capital deficiency of \$554,140). These balances will be used to fund future capital expenditures including photovoltaic power projects, office and administrative expenses and working capital requirements.

In order to undertake exploration and development programs, the Company will require further financial resources. Berkley assesses its financing requirements and its ability to access debt or equity markets on an ongoing basis. Given the current conditions of the financial markets, the company will seek to maintain financial flexibility and will monitor and assess its financing requirements as its activities progress. The Company's ability to access the equity or debt markets in the future may be affected by prolonged market instability. The inability to access the equity or debt markets for sufficient capital, at acceptable terms, and within required timeframes, could have a materially adverse effect on the Company's financial condition, results of operations and prospects. Further discussion on these risks can be found in the "Risk Factors" section of the MD&A.

#### **Outstanding Share Data**

As of the date of this MD&A, Berkley has the following securities outstanding:

10,411,451 common shares.

#### **Financial Instruments and Business Risks**

#### **Fair Values**

Fair value estimates of financial instruments are made at a specific point in time, based on relevant information about financial markets and specific financial instruments. As these estimates are subjective in nature, involving uncertainties and matters of significant judgement, they cannot be determined with precision. Changes in assumptions can significantly affect estimated fair values. At September 30, 2016 and December 31, 2015, the Company's financial instruments include cash and cash equivalents, trade and other receivables, marketable securities, investment in RepliCel Life Sciences, accounts payable and accrued liabilities and due to related parties.

Fair value represents the price at which a financial instrument could be exchanged in an orderly market, in an arm's length transaction between knowledgeable and willing parties who are under no compulsion to act.

Berkley classifies the fair value of the financial instruments according to the following hierarchy based on the amount of observable inputs used to value the instrument:

- Level inputs to the valuation methodology are quoted prices for identical assets or liabilities in active markets:
- Level 2 inputs to the valuation methodology included quoted prices for identical assets or liabilities in
  active markets, and inputs that are observable for the asset or liability, either directly or indirectly, for
  substantially the full term of the financial instrument. Level 2 valuations are based on inputs, including
  quoted forward prices for commodities, time value and volatility factors, which can be substantially
  observed or corroborated in the marketplace; and,
- Level 3 inputs to the valuation methodology are not based on observable market data.

Cash and cash equivalents, marketable securities and the investment are recorded based on Level 1 of the fair-value hierarchy. Investment in RepliCel is recorded based on Level 1 of the fair value hierarchy for shares released from escrow and shares in escrow are recorded based on Level 2 of the fair value hierarchy.

The carrying value of trade and other receivables, due from related parties, accounts payable and accrued liabilities and due to related parties equals fair value due to the short-term nature of these balances.

The Company's risk management policies are established to identify and analyze the risks faced by the Company, to set appropriate risk limits and controls, and to monitor risks and adherence to market conditions and the Company's activities. The Company has exposure to credit risk, liquidity risk and market risk as a result of its use of financial instruments. This note presents information about the Company's exposure to each of the above risks and the Company's objectives, policies and processes for measuring and managing these risks. Further quantitative disclosures are included throughout these consolidated financial statements. The Board of Directors has overall responsibility for the establishment and oversight of the Company's risk management framework. The Board has implemented and monitors compliance with the risk management policies as set out herein:

#### Credit risk

Credit risk is the risk of financial loss to the Company if a customer or counterparty to a financial instrument fails to meet its contractual obligations. The carrying amount of cash and cash equivalents and trade and other receivables represents the maximum credit exposure. A substantial portion of the Company's trade and other receivables are with natural gas and liquids marketers and joint venture partners in the oil and gas industry and are subject to normal industry credit risks. As at September 30, 2016, the maximum credit exposure is the carrying amount of the trade and other receivables of \$17,843 (2015 – \$2,893). As at September 30, 2016, the Company had cash of \$78,538 (2015 - \$487,345) that is deposited in banks. Management has assessed the risk of loss to be minimal. The Company did not provide for any doubtful accounts nor was it required to write-off any receivables during the nine months ended September 30, 2016 (2015 – \$nil).

The Company considers its trade and other receivables to be aged as follows:

	Sept. 30, 2016
Past due by less than 30 days	\$ 9,218
Past due by less than 90 days	8,625
Past due by more than 90 days	-
	\$ 17,843

#### Liquidity risk

Liquidity risk is the risk that the Company will incur difficulties meeting its financial obligations as they are due. The Company's approach to managing liquidity is to ensure, as far as possible, that it will have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions without incurring unacceptable losses or risking harm to the Company's reputation.

The Company's operating cash requirements are continuously monitored by management. As factors impacting cash requirements change, liquidity risks may necessitate the need for the Company to raise capital by issuing equity. The Company's financial liabilities are comprised of accounts payable and accrued liabilities and due to related parties, which have expected maturities of less than one year.

#### Market risk

The significant market risk exposures affecting the financial instruments held by the Company are those related to foreign currency exchange rates and commodity price risk which are explained as follows:

#### i. Currency risk

Foreign currency exchange rate risk is the risk that the fair value or future cash flows will fluctuate as a result of changes in foreign exchange rates. The Company enters into transactions denominated in United States currency for which the related expenses and accounts payable balances are subject to exchange rate fluctuations. As at September 30, 2016, the following items are denominated in United

States currency:	Sept. 30,
	2016
	CAD\$
Cash and cash equivalents	754

The Company's foreign exchange sensitivity is in relation to movements of the USD against the Canadian dollar. Based on USD balances as at June 30, 2016, a 5% increase/decrease of the USD against the Canadian dollar would result in an increase/decrease in total comprehensive loss of approximately \$Nil (2015 - \$4,439).

#### ii. Commodity price risk

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Accounts payable and accrued liabilities

Commodity price risk is the risk that the cash flows and operations of the Company will fluctuate as a result of changes in commodity prices. Significant changes in commodity prices can also impact the Company's ability to raise capital or obtain additional debt financing. Commodity prices for crude oil are impacted by world economic events that dictate the levels of supply and demand.

The Company's financial performance is closely linked to crude oil and natural gas prices. While the Company may employ the use of financial instruments in the future to manage these price exposures, it currently does not have enough producing wells to hedge its production, and its crude oil and natural gas liquids are sold into spot markets. Given productions levels, a 10% change in commodity prices would not have a material effect on earnings.

#### **Critical Accounting Estimates**

The timely preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingencies, if any, as at the date of the financial statements and the reported amounts of revenues and expenses during the period. By their nature, estimates are subject to measurement uncertainty and changes in such estimates in future years could require a material change in the financial statements. These assumptions are based on historical experience and other factors that management believes to be reasonable under the circumstances, and are subject to change as new events occur, as more industry experience is acquired, as additional information is obtained and as the Company's operating environment changes.

# **Related Party Transactions**

The consolidated financial statements include the financial statements of Berkley Renewables Inc. and the subsidiaries listed below:

	% equity interest			
Name	Country of Incorporation	Functional Currency	June 30, 2016	Dec. 31, 2015
American Uranium Corp.	US	Canadian Dollars	53%	53%
Solar Flow-Through 2012-I General Partner Ltd.	Canada	Canadian Dollars	95%	95%
Solar Flow-Through 2012-I Management Ltd.	Canada	Canadian Dollars	95%	95%
Solar Flow-Through 2013-I General Partner Ltd.	Canada	Canadian Dollars	95%	95%
Solar Flow-Through 2013-I Management Ltd.	Canada	Canadian Dollars	95%	95%
Solar Flow-Through 2014-I General Partner Ltd.	Canada	Canadian Dollars	95%	95%
Solar Flow-Through 2014-I Management Ltd.	Canada	Canadian Dollars	95%	95%
Solar Flow-Through 2015-I General Partner Ltd.	Canada	Canadian Dollars	95%	95%
Solar Flow-Through 2015-I Management Ltd.	Canada	Canadian Dollars	95%	95%
Solar Flow-Through 2016-I General Partner Ltd.	Canada	Canadian Dollars	95%	-
Solar Flow-Through 2016-I Management Ltd.	Canada	Canadian Dollars	95%	-

Balances and transactions between Berkley and its subsidiaries have been eliminated on consolidation and are not disclosed in this note. Details of transactions with other related parties are disclosed below:

Due to related parties	Sept. 30, 2016	December 31, 2015
Directors, management and other	(104,620)	(74,104)
Solar Flow-Through 2012 Limited Partnership	(199,600)	-
Solar High Yield Projects #1 (2012) Ltd.	(174,144)	(325,066)
Solar Flow-Through 2013 Limited Partnership	(80,929)	(80,929)
Solar Flow-Through Project #1 (2013) Ltd.	(9,841)	(78,500)
Solar Flow-Through 2014 Limited Partnership	(3,767)	(378,068)
Solar Flow-Through (2014) Ltd.	(200,000)	(200,000)
Solar Flow-Through 2015 Limited Partnership	(10,000)	-
Solar Flow-Through (2015) Ltd.	(215,000)	-
Solar Flow-Through 2016 Limited Partnership	(710,000)	-
Solar Flow-Through (2016) Ltd.	<u>-</u>	<u> </u>
	(1,707,901)	(1,136,667)

Due from related parties	Sept. 30, 2016	December 31, 2015
Directors, management and other	2,000	2,000
Solar Flow-Through 2012 Limited Partnership	283,422	344,480
Solar High Yield Projects #1 (2012) Ltd.	80,911	80,311
Solar Flow-Through 2013 Limited Partner	662,162	999,779
Solar Flow-Through Project #1 (2013) Ltd.	1,201	-
Solar Flow-Through 2014 Limited Partnership	136,917	199,252
Solar Flow-Through (2014) Ltd.	25,104	-
Solar Flow-Through 2015 Limited Partnership	274,936	155,091
Solar Flow-Through (2015) Ltd.	20,062	-
Solar Flow-Through 2016 Limited Partnership	97,495	-
Solar Flow-Through (2016) Ltd.	3,500	-
	1,587,710	1,788,230

Balances and transactions between Berkley and its subsidiaries have been eliminated on consolidation and are not disclosed in this note. Details of transactions with other related parties are disclosed below:

- a) Due to related parties consists of \$104,620 (2015 \$70,604) due to Directors of Berkley for Directors fees, consulting fees and expenses.
- b) Berkley takes part in a cost sharing arrangement to reimburse Oniva International Services Corporation ("Oniva"), a private company owned by public companies having common Directors, for a variable percentage of its overhead expenses, to reimburse 100% of its out-of-pocket expenses incurred on behalf of Berkley, and to pay a percentage fee based on the total overhead and corporate expenses. The agreement may be terminated with one-month notice by either party. Rent, administrative services, office supplies and accounting charges totalling \$16,675 were incurred by the Company to Oniva during the period ended September 30, 2016 (2015 \$30,775).

Management and consulting fees totalling \$282,500 were paid or accrued to management and their private companies in the period ended September 30, 2016 (2015 - \$237,500).

## Compensation of key management personnel

The remuneration of directors and other members of key management personnel during the nine months ended September 30, 2016 and 2015 consisted of salaries and bonuses, as follows:

	Sept. 30,	Sept. 30,
	2016	2015
	\$	\$
Compensation	282,500	237,500
	282,500	237,500

#### Recent accounting pronouncements

Standards issued but effective for annual period beginning after January 1, 2016 are listed below. This listing is of standards and interpretations issued, which the Company reasonably expects to be applicable at a future date.

- i) IFRS 9, "Financial Instruments: Classification and Measurement" is a new financial instruments standard effective for annual periods beginning on or after January 1, 2018 that replaces IAS 39 and IFRIC 9 for classification and measurement of financial assets and financial liabilities. The Company is currently assessing the impact of this standard.
- ii) IFRS 15, "Revenue from Contract with Customers" was issued in 2014 and replaces the two main recognition standards IAS 18, "Revenue", and IAS 11, "Construction Contracts". The new standard provides a five step model framework as a core principle upon which an entity recognizes revenue and becomes effective January 1, 2018. The Company is currently assessing the impact of this standard.
- iii) IFRS 16, "Leases" was issued and IAS 17 "Leases" was amended. IFRS 16 specifies how to recognize, measure, present and disclose leases effective for annual period beginning on or after January 1, 2019. The standard provides a single lessee accounting model, requiring the recognition of assets and liabilities for all leases, unless the lease term is 12 months or less or the underlying asset has a low value. Lessor accounting however remains largely unchanged from IAS 17 and the distinction between operating and finance leases is retained. IAS 17, as revised, now prescribes the accounting policies and disclosures applicable to leases, both for lessees and lessors. The Company is currently assessing the impact of this standard.