

**BERKLEY RENEWABLES INC.**

**FORM 51-101F1**

**STATEMENT OF RESERVES DATA  
AND OTHER OIL AND GAS INFORMATION**

**PART 1: RELEVANT DATES**

**Item 1.1 Date of Statement and Statement Information**

This Statement of Reserves Data and Other Oil and Gas Information of Berkley Renewables Inc. ("Berkley" or the "Company") is dated April 27, 2016. The effective date of the information provided in this Statement is December 31, 2015 unless otherwise indicated. The information was prepared between December 31, 2015 and April 27, 2016.

**PART 2: DISCLOSURE OF RESERVES DATA**

Deloitte LLP ("Deloitte") has prepared a report dated April 27, 2016 (the "Deloitte Report"), in which it has evaluated as at December 31, 2015 the oil and natural gas reserves attributable to the principal properties of the Corporation.

The Deloitte Report also presents the estimated net present value of future revenue of the Company's properties before and after taxes, at various discount rates. Assumptions and qualifications relating to costs, prices for future production and other matters are summarized in the notes to the following tables.

The extent and nature of all information supplied by Berkley and/or the operator of its properties, which may have included ownership data, well information, geological information, reservoir studies, timing and future production, gas sales contract information, current product prices, operating cost data, capital budget forecasts and future operating plans, have been relied upon by Deloitte in preparing the Deloitte Report and were accepted as represented without independent verification. In the absence of such information, Deloitte relied, with the approval of Berkley, upon its opinion of reasonable practice in the industry. All information provided to Deloitte was as at December 31, 2015 and, accordingly, certain of such information may not be representative of current conditions.

The definitions of the various categories of reserves and expenditures are those set out in National Instrument 51-101 - *Standards of Disclosure for Oil and Gas Activities* ("**NI 51-101**").

Certain natural gas volumes have been converted to Boe on the basis of six (6) Mcf to one (1) bbl. Disclosure provided herein in respect of Boe may be misleading, particularly if used in isolation. A Boe conversion ratio of 6 Mcf: 1 bbl is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead. Given that the value ratio based on the current price of crude oil as compared to natural gas is significantly different from the energy equivalency of 6:1, utilizing a conversion on a 6:1 basis may be misleading as an indication of value.

*It should not be assumed that the present worth of estimated future net revenue represents the fair market value of the reserves. There is no assurance that the escalating price and cost assumptions contained in the Sproule Report will be attained and variances could be material. The reserve and revenue estimates set forth below are estimates only and the actual reserves and realized revenue may be greater or less than those calculated.*

## Item 2.1 RESERVES DATA (FORECASE PRICES AND COSTS)

The following table discloses, in the aggregate, the Company's gross and net proved reserves, estimated using forecast prices and costs, by product type. "Forecast prices and costs" means future prices and costs used by Deloitte in the Deloitte Report that are generally accepted as being a reasonable outlook of the future, or fixed or currently determinable future prices or costs to which the Company is bound.

### Summary of Oil and Gas Reserves (As of December 31, 2015)

#### Forecast Prices and Costs

Reserves Category	Company Reserves							
	Light and Medium Oil		Heavy Oil		Natural Gas [1]		Natural Gas Liquids	
	Gross Mbbbl	Net Mbbbl	Gross Mbbbl	Net Mbbbl	Gross MMcf	Net MMcf	Gross Mbbbl	Net Mbbbl
<b>PROVED</b>								
Developed Producing	-	-	-	-	32.5	28.4	-	-
<b>TOTAL PROVED</b>	-	-	-	-	<b>32.5</b>	<b>28.4</b>	-	-
<b>PROBABLE</b>	-	-	-	-	30.0	26.1	-	-
<b>TOTAL PROVED PLUS PROBABLE</b>	-	-	-	-	<b>62.5</b>	<b>54.5</b>	-	-

Reference: Item 2.1(1) of NI 51-101F1

**Note:**

(1) Figures in table may not add due to rounding.

The following tables discloses, in the aggregate, the net present value of the Company's future net revenue attributable to the reserves categories in the previous table, estimated using forecast prices and costs, before and after deducting future income tax expenses, and calculated without discount and using discount rates of 0 percent, 5 percent, 10 percent 15 percent and 20 percent.

**Summary of Net Present Values of Future Net Revenue  
(As of December 31, 2015)**

**Forecast Prices and Costs**

**Before Income Tax**

Reserves Category	Net Present Values of Future Net Revenue					Unit Value
	Discounted at					Discounted at
	0% yr.	5% yr.	10% yr.	15% yr.	20% yr.	10%/yr
	M\$	M\$	M\$	M\$	M\$	\$/Boe
<b>PROVED</b>						
Developed Producing	-60.8	-43.8	-33.6	-26.8	-22.0	-7.10
<b>TOTAL PROVED</b>	<b>-60.8</b>	<b>-43.8</b>	<b>-33.6</b>	<b>-26.8</b>	<b>-22.0</b>	<b>-7.10</b>
<b>PROBABLE</b>	60.7	32.3	17.8	10.6	6.9	4.08
<b>TOTAL PROVED PLUS PROBABLE</b>	<b>-0.2</b>	<b>-11.5</b>	<b>-15.8</b>	<b>-16.2</b>	<b>-15.2</b>	<b>-1.74</b>

**After Income Tax**

Reserves Category	Net Present Values of Future Net Revenue					Unit Value
	Discounted at					Discounted at
	0% yr.	5% yr.	10% yr.	15% yr.	20% yr.	10%/yr
	M\$	M\$	M\$	M\$	M\$	\$/Boe
<b>PROVED</b>						
Developed Producing	-60.8	-43.8	-33.6	-26.8	-22.0	-7.10
<b>TOTAL PROVED</b>	<b>-60.8</b>	<b>-43.8</b>	<b>-33.6</b>	<b>-26.8</b>	<b>-22.0</b>	<b>-7.10</b>
<b>PROBABLE</b>	60.7	32.3	17.8	10.6	6.9	4.08
<b>TOTAL PROVED PLUS PROBABLE</b>	<b>-0.2</b>	<b>-11.5</b>	<b>-15.8</b>	<b>-16.2</b>	<b>-15.2</b>	<b>-1.74</b>

Reference: Item 2.1(2) of NI 51-101F1

**Notes:** NPV of FNR include all resource income:  
 Sale of oil, gas, by-product reserves  
 Processing third party reserves  
 Other income  
 Unit Values are based on net reserve volumes  
 Barrel of Oil Equivalent (Boe): 6 Mcf = 1 Boe

**Income Taxes:**  
 Includes all resource income  
 Apply appropriate income tax calculations  
 Include prior tax pools

The following two tables provide additional information regarding the future net revenue attributable to total proved reserves outlined in the previous table.

This table discloses, in the aggregate, certain elements of the Corporation's future net revenue attributable to its proved reserves and its proved plus probable reserves, estimated using forecast prices and costs, and calculated without discount.

**Total Future Net Revenue (Undiscounted)  
(As of December 31, 2015)**

**Forecast Prices and Costs**

Reserve Category Totals	Revenue M\$	Royalties M\$	Operating Costs M\$	Well Abandonment Costs M\$	Future Net Revenues BIT M\$	Income Taxes M\$	Future Net Revenues AIT M\$
<b>Proved</b>	159.8	18.0	117.1	85.5	-60.8	0	-60.8
<b>Probable</b>	241.9	28.6	150.6	2.0	60.7	0	60.7
<b>Proved Plus Probable</b>	<b>401.7</b>	<b>46.6</b>	<b>267.7</b>	<b>87.5</b>	<b>-0.2</b>	<b>0</b>	<b>-0.2</b>

Reference: Item 2.1(3) (b) of NI 51-101F1

This tables discloses, by production group, the net present value of the Company's future net revenue attributable to its proved and its proved plus probably reserves, before deducting future income tax expenses, estimated using forecast prices and costs, and calculated using a 10% discount rate.

**Net Present Value of Future Net Revenue  
By Production Group  
(As of December 31, 2015)**

**Forecast Prices and Costs**

Reserve Category Totals	Production Group	Future Net Revenue Before Income Taxes Discounted at 10%/yr. M\$	Unit Value Before Income Taxes Discounted at 10%/Year (\$/Boe)
<b>Proved</b>	Light and Medium Oil (including solution gas and other by-products)	-	-
	Heavy Oil (including solution gas and other by-products)	-	-
	Natural Gas (including by-products but not solution gas)	-33.6	-7.10
<b>Proved Plus Probable</b>	Light and Medium Oil (including solution gas and other by-products)	-	-
	Heavy Oil (including solution gas and other by-products)	-	-
	Natural Gas (including by-products but not solution gas)	-15.8	-1.74

Reference: Item 2.1(3) (c) NI 51-101F1

Note: Unit Values are based on net reserve volumes  
Barrel of Oil Equivalent (Boe): 6 Mcf = 1 Boe

### **PART 3: PRICING ASSUMPTIONS**

#### **Item 3.1 Forecast Prices Used in Estimates**

The forecast reference prices used in preparing Berkley's reserves data are provided in the table below:

**Deloitte**  
**Forecast Prices Used in Estimates**  
**Inflation and Exchange Rates**  
**(As of December 31, 2015)**

Year	Natural Gas		Inflation Rate	Exchange Rate
	Alberta Par Price (\$/mcf)	Alberta Spot Sales (\$/mcf)	% Per Annum	\$Cdn to \$US
2016	2.25	2.45	2.0	0.740
2017	2.65	2.85	2.0	0.770
2018	2.90	3.10	2.0	0.800
2019	3.25	3.45	2.0	0.800
2020	3.50	3.75	2.0	0.800
2021	3.90	4.15	2.0	0.800
2022	4.15	4.40	2.0	0.800
2023	4.40	4.65	2.0	0.800
2024	4.75	5.00	2.0	0.800
2025	4.90	5.15	2.0	0.800
2026	5.25	5.50	2.0	0.800
Thereafter:	Escalation rate of 2.0%			

Reference: Item 3.1 NI 51-101F1

Notes: Product sale prices will reflect these reference prices with further adjustments for quality and transportation to point of sale.

**PART 4: RECONCILIATION OF CHANGES ON RESERVES AND FUTURE NET REVENUE**

**Item 4.1 Reserves Reconciliation**

**Reconciliation of Company Net Reserves**

**(As of December 31, 2015)**

	Associated and Non-Associated Gas		
	Proved (MMcf)	Probable (MMcf)	Proved Plus Probable (MMcf)
December 31, 2014	55.7	44.3	100.0
Production	-6.4	0.0	-6.4
Acquisitions	0.0	0.0	0.0
Dispositions	0.0	0.0	0.0
Technical Revisions	-12.8	-10.2	-23.0
Economic Factors	-4.0	-4.1	-8.1
<b>December 31, 2015</b>	<b>32.5</b>	<b>30.0</b>	<b>62.5</b>

## **PART 5: Additional Information Relating to Reserves Data**

### **Item 5.1 Significant Factors and Uncertainties**

The process of estimating oil and gas reserves is complex. It requires significant judgments and decisions based on available geological, geophysical, engineering and economic data. These estimates may change substantially as additional data from ongoing development activities and production performance becomes available and as economic conditions impacting oil and gas processing and costs change. The reserve estimates contained herein are based on current production forecasts, prices and economic conditions and are evaluated by an independent engineering firm.

As circumstances change and additional data become available, reserve estimates also change. Estimates made are reviewed and revised, either upward or downward, as warranted by the new information. Revisions are often required due to changes in well performance, prices, economic conditions and governmental restrictions.

Although every reasonable effort is made to ensure that reserve estimates are accurate, reserve estimation is an inferential science. As a result, the subjective decisions, new geological or production information and a changing environment may impact these estimates. Revisions to reserve estimates can arise from changes in year-end oil and gas prices and reservoir performance. Such revisions can be either positive or negative. The reserve estimates of the Company's oil, NGL and natural gas reserves provided in the Statements of Reserves Data and Other Oil and Gas Information are estimates only and there is no assurance or guarantee that the estimated reserves will be recovered. Actual reserves may be greater or less than the estimates provided herein.

## **PART 6: Other Oil and Gas Information**

### **Gas Properties**

#### **JOHN LAKE**

The John Lake property is located between Townships 55 and 58, Range 1 W4M, approximately 20 miles northwest of Edmonton, Alberta. The property consists of ten gas wells, five of which are currently on production. All of the producers are uneconomic due to the gas prices and associated costs and consequently no reserves have been assigned to the property. The Company holds an eleven (11) per cent working interest and is burdened by Crown royalty and a 15 percent gross overriding royalty in the only producing well on this property.

#### **CARBON**

The Carbon property is located in Township 29, Range 22 W4M, approximately 15 miles west of Drumheller, AB. The Company holds working interests ranging from six (6) to ten (10) per cent on four gas wells within the property. All four wells currently target gas production from the Viking formation.

Proved developed producing reserves have been assigned to two of the four wells based on exponential decline analysis with consideration to previous performance. No reserves have been assigned to the 100/12-28-028-22W4/0 and 102/06-32-029-22W4/0 wells which are currently at uneconomic rates given current operating costs and gas prices.

### Forward Contracts and Financial Instruments

The company has no forward contracts or financial instruments unless required by securities law.

### Abandonment and Reclamation Costs

The Company uses its Evaluator to estimate its abandonment and reclamation costs. The costs are estimated on an area by area basis. The industry's historical costs are used when available. If representative comparisons are not readily available, an estimate is prepared based on the various regulatory abandonment requirements.

The total of such costs, forecast net of estimated salvage value, is \$52,800 (undiscounted) and \$29,200 (discounted at 10%) in respect of proved reserves for, approximately, 5 net wells.

### Tax Horizons

Based on Deloitte's projection of cash flow, as of December 31, 2015, and in conjunction with Berkley's current Tax Pools and Tax Loss Carry Forwards the Company will not be taxable until 2027 as forecast in the Proved and Probable cash flow.

### Production Estimates

The following table sets forth the volume of production estimated by Deloitte for 2015 (12 months):

<b>TOTAL PROVED RESERVES</b>		
<b>AREA</b>	<b>Oil &amp; NGL Mbbbl</b>	<b>Gas (MMcf)</b>
Carbon	-	3
John Lake	-	-
<b>Total for all areas</b>	-	3

<b>TOTAL PROVED PLUS PROBABLE RESERVES</b>		
<b>AREA</b>	<b>Oil &amp; NGL Mbbbl</b>	<b>Gas (MMcf)</b>
Carbon	-	3
John Lake	-	-
<b>Total for all areas</b>	-	3

These values are gross to Company's working interest before deduction of royalties.



## PRODUCTION HISTORY

The following table discloses for each important area and in total, the Company's gross production volumes for its most recently completed fiscal year:

	<b>Natural Gas (Mcf)</b>				
	<u>Qtr 1</u>	<u>Qtr 2</u>	<u>Qtr 3</u>	<u>Qtr 4</u>	<u>Total</u>
Alberta					
John Lake	644	647	641	617	2,549
Carbon	1,288	1,373	1,125	1,221	5,007
Company Total	<u>1,932</u>	<u>2,020</u>	<u>1,766</u>	<u>1,838</u>	<u>7,556</u>

The following table sets forth certain information in respect of product prices received, royalties, production costs and netbacks received by the Company for each quarter of its most recently completed fiscal year:

Product Type	Gross Average Daily Production	Average Per Unit of Daily Production			
	Mcf/day	Price \$/Mcf	Royalties \$/Mcf	Costs \$/Mcf	Netbacks \$/Mcf
<b>Natural Gas</b>					
Qtr 1	21.47	2.95	0.07	4.14	-
Qtr 2	22.19	2.69	0.06	3.25	-
Qtr 3	19.19	3.12	0.08	4.01	-
Qtr 4	19.97	2.63	0.09	8.44	-
<b>Total</b>	20.70	2.84	0.08	4.96	-

## **ABBREVIATIONS AND CONVERSION**

The following are selected abbreviations and definitions of terms used herein:

“bbl” means barrels of total petroleum liquids;

“boe” means barrels of oil equivalent natural gas converted at 6 mcf of natural gas per barrel of oil;

“boe/day” means barrels of oil equivalent per day;

“bopd” means barrels of oil per day;

“mbbl” means thousands of barrels of oil;

“mboe” means thousands of barrels of oil equivalent;

“mbtu” means thousands of British Thermal Units;

“mcf” means thousands of cubic feet;

“mscf” means thousands of standard cubic feet;

“mscf/day” means thousands of standard cubic feet per day;

“mstb” means thousands of stock tank barrels;

“NGL’s” means natural gas liquids including condensate;

“NI 51-101” means National Instrument 51-101 – Standards of Disclosure for Oil and Gas Activities of the Canadian Securities Administrators;