

Altius Renewable Royalties Corp.

Management's Discussion and Analysis of Financial Conditions and Results of Operations

Year Ended December 31, 2022

This Management's Discussion and Analysis ("MD&A") should be read in conjunction with the Altius Renewable Royalties Corp. (the "Corporation", "ARR" or the "Company") consolidated financial statements for the year ended December 31, 2022 and related notes. This MD&A has been prepared as of March 1, 2023. This MD&A is expressed in US dollars and rounded to the nearest hundred, except per share amounts.

Caution Concerning Forward-Looking Statements, Forward-Looking Information

Management's discussion and analysis of financial condition and results of operations contains forward–looking statements. By their nature, these statements involve risks and uncertainties, many of which are beyond the Corporation's control, which could cause actual results to differ materially from those expressed in such forward-looking statements. Readers are cautioned not to place undue reliance on these statements. The Corporation disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

Caution Concerning Non-GAAP Financial Measures

Proportionate royalty and other revenue ("proportionate revenue") and adjusted EBITDA do not have any standardized meaning prescribed under IFRS and should not be considered in isolation or as a substitute for measures of performance. These measures are not necessarily indicative of operating profit or cash flow from operations as determined under IFRS. Other companies may calculate these measures differently. Detailed definitions and reconciliation to various IFRS measures can be found under 'Non-GAAP Financial Measures'.

Additional information regarding the Corporation, including the Corporation's continuous disclosure materials, is available on the Corporation's website at www.arr.energy or through the SEDAR website at www.sedar.com.

Description of Business

Altius Renewable Royalties Corp. is a renewable energy royalty company whose investments result in the creation of gross revenue royalties and royalty-like structures related to development through to operating-stage wind, solar, battery storage and other types of renewable energy projects. The Corporation's operations are primarily managed through its Great Bay Renewables Holdings, LLC and Great Bay Renewables Holdings II, LLC joint ventures, collectively referred to herein as GBR or the Joint Venture, in which it is partnered equally with certain funds (the "Apollo Funds") managed by affiliates of Apollo Global Management, Inc. ("Apollo").

A summary of the Joint Venture's operating and construction stage royalty interests is listed below and further information can be found in Appendix A within this MD&A.

| Project | Renewable Energy | Royalty Basis | Facility Size (MW) |
|------------------------------|------------------|-----------------|--------------------|
| Clyde River | Hydro | 10% of revenue | 5 |
| Prospero 2 | Solar | Variable | 250 |
| Phantom | Solar | Variable | 15 |
| Titan | Solar | Variable | 70 |
| Old Settler | Wind | Variable | 150 |
| Cotton Plains | Wind | Variable | 50 |
| Young Wind | Wind | 2.5% of revenue | 500 |
| Hansford County Wind Project | Wind | Fixed per MWh | 658 |
| Appaloosa | Wind | 1.5% of revenue | 175 |
| JayHawk | Wind | 2.5% of revenue | 195 |
| Operational | | | 2,068 MW |
| El Sauz | Wind | 2.5% of revenue | 300 |
| Construction | | | 300 MW |

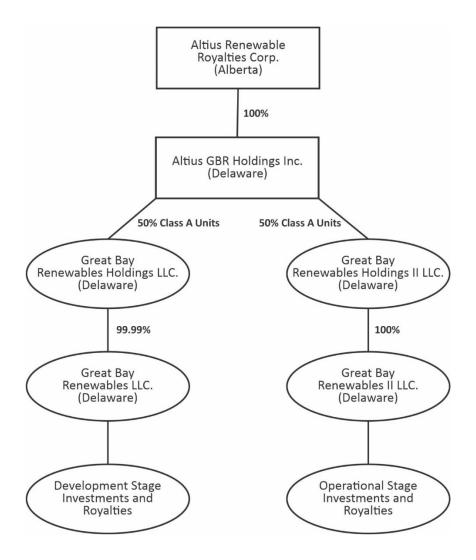
In addition to the operating and construction stage royalties noted above, the Joint Venture also holds:

- II royalties on wind projects representing total expected future production capacity of 2,695MW (see Appendix B in this MD&A);
- II royalties on solar projects representing total expected future production capacity of 2,966MW (see Appendix C in this MD&A);
- royalty entitlements to 1,500MW of renewable projects to be developed in North America through its investment in Nova Clean Energy (see "Bluestar Capital LLC & Nova Clean Energy, LLC" in this MD&A); and
- royalty entitlements to a 2,400MW portfolio of renewable projects to be developed in North America and any future development projects until a target return is achieved through its investment in Hodson Energy (see "Hodson Energy, LLC." in this MD&A).



Organizational Structure

The Corporation equity accounts for its 50% ownership interest in each of Great Bay Renewables Holdings I, LLC ("GBR I") and Great Bay Renewables Holdings II, LLC ("GBR II") and reports its share of earnings or loss and its share of other comprehensive earnings or loss. The renewable energy investments form part of the Joint Venture and the Corporation's share of revaluation of those investments is recorded in the Corporation's other comprehensive earnings. The following represents a summarized organizational chart for ARR.



Strategy

ARR's long-term strategy is to gain exposure to renewable energy assets by owning and managing a portfolio of diversified renewable energy royalties. The Corporation's primary approach to growing the business is to provide tailored financing solutions to renewable energy project developers and operators in return for a royalty on a project's gross revenues.

ARR has identified demand for capital investment within the renewable energy sector in return for royalty-based financing. Royalty-based financing has been used extensively in other industries, such as finite natural resource, industrial manufacturing, healthcare and

music. Furthermore, the adoption of royalty-based financing has often been a major growth catalyst for certain industries. As a specific comparable, within the mining sector, where adoption of royalty financing has become widespread, it provides an alternative to traditional sources of capital, increases the overall supply of capital and ultimately finances a significant component of project development. Based upon the Corporation's success to date in deploying capital, it believes that royalty-based financing will continue to gain sector adoption and will play an important role within the renewable energy sector.

ARR is able to invest in any stage of a renewable energy project's life cycle. ARR seeks to optimize the risk adjusted return of its investments depending on the stage at which it invests. For development stage opportunities, the Corporation has structured its investments using a portfolio approach, mitigating the development and construction risk of any one specific project, while ensuring the agreements are structured to meet minimum return thresholds. In addition to development stage projects, ARR also makes investments in operating stage projects. Operational investments are typically tailored to meet the specific needs of the project owners, while again maintaining a minimum target return threshold for the Joint Venture. The mix of investments in operating assets and development stage projects provides the Joint Venture with current positive cash flow while growing a pipeline of development and construction stage projects to build for future growth of the Joint Venture.

The Corporation does not operate renewable energy assets or directly develop projects. ARR's business model is focused on passively financing development or operating stage projects in order to grow a portfolio of long-term renewable energy royalties. The Corporation believes that the advantages of this business model include the following:

Focus and Scalability. As the Corporation's management does not handle operational decisions or tasks relating to the development or operation of renewable power projects, they are able to focus their time and resources on carrying out the Corporation's growth strategy of identifying and executing on renewable royalty-based investment opportunities. As such, ARR's business model allows it to gain exposure to and monitor more renewable projects than an operating company of similar size could generally effectively manage.

Exposure to Redevelopment Upside without Project Costs and Overhead. The Corporation believes that its royalty and royalty-like investment model provides exposure to several forms of project upside. ARR may benefit from any life extensions, re-powering, and other project enhancements, without incurring additional associated operating, development, or sustaining costs.

Asset Diversification. The Corporation is able to invest and create royalty interests in a broad portfolio of renewable power assets across a spectrum of geographic regions and operators, thus reducing its dependency on any one asset, project, location, or counterparty.

Price Exposure. Several of the Corporation's royalty interests maintain exposure or partial exposure to market electricity prices. These prices have been generally increasing in recent periods owing to inflationary and other marginal cost pressures in the broader electrical generation industry. As the royalty interests are typically top-line or revenue-based, the Corporation can benefit from higher prices without meaningful direct exposure to inflationary cost pressures.



Outlook

The Corporation has now grown the portfolio of royalty generating projects to a level that is sufficient to cover its overhead costs. This positive cash flow is expected to continue to grow in the near term with the commencement of commercial operations of two projects, Young Wind and Appaloosa, totaling 675MW late in 2022 and with an additional 300MW expected to come online and begin generating revenue in the first half of 2023. In addition, GBR completed the acquisition of two operational royalties in late 2022 (refer to *Annual Operational Highlights* below) that will further augment royalty revenue on a go forward basis.

With over \$325,000,000 in investment agreements closed over the past four years, the Corporation believes that the royalty financing model for the renewable energy sector is growing and will increasing be adopted by the sector. ARR continues to evaluate new royalty investment opportunities spanning the full spectrum of development to operational stage assets, which are expected to augment its embedded growth profile. The Joint Venture grew its team late in the year to harness the growth opportunities it has been seeing, and to enable it to manage its growing portfolio of producing assets.

The Inflation Reduction Act in the U.S. provides extensions of the Investment Tax Credit and Production Tax Credit and other incentives for developers and operators of renewable energy projects which is expected to contribute to continued growth of the industry and opportunity for our royalty finance offering. Some of this positive sentiment has been offset by rising interest rates, supply chain constraints, interconnection backlogs and higher general equipment and construction costs. The Corporation will continue to carefully review broader market conditions to ensure that it continues to earn an appropriate risk-adjusted return on its investments and to seize upon the opportunities that challenges often create.

Non-GAAP Financial Measures

Management uses the following non-GAAP financial measures in this MD&A and other documents: proportionate royalty and other revenue (proportionate revenue) and adjusted earnings before interest, taxes, depreciation and amortization (adjusted EBITDA).

Management uses these measures to monitor the financial performance of the Corporation and believes these measures enable investors and analysts to compare the Corporation's financial performance with its competitors and/or evaluate the results of its underlying business. These measures are intended to provide additional information, not to replace International Financial Reporting Standards (IFRS) measures, and do not have a standard definition under IFRS and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with IFRS. As these measures do not have a standardized meaning, they may not be comparable to similar measures provided by other companies. Further information on the composition and usefulness of each non-GAAP financial measure, including reconciliation to their most directly comparable IFRS measures, is included in the non-GAAP financial measures section starting on page 25.

Annual Operational Highlights

The Corporation's Joint Venture, GBR, reported total royalty revenue for 2022 of \$7,300,000 which exceeded the increased guidance range of \$6,500,000 to \$7,000,000 as reported in the fourth quarter. The Corporation's proportionate revenue was \$4,420,700 compared to \$417,400 in the prior year.

Financing Growth

In December 2022 the Corporation completed a public offering of 4,268,800 common shares at a price of C\$9.00 per share for gross proceeds of \$28,194,200 (C\$38,419,200).

Investment Growth

During the year ended December 31, 2022 GBR invested a total of \$88,497,900 (ARR and Apollo each provided new funding of \$43,850,000 with the remainder funded from retained cash flows) into new operating, construction and development stage renewable energy projects noted in the table below. GBR now holds or is entitled to royalties on over 30 hydro, wind and solar projects in the United States representing approximately 11 GW of renewable energy production.

| Project | Description | Investment |
|--|---|------------------|
| Hansford County Wind Project | Operating 658 MW wind project | \$ 17,788,900 |
| Titan Solar | Operating 70 MW solar project | 46,799,100 |
| Hodson Energy, LLC. | Development stage, 2,400 MW royatly entitlement | 14,271,800 |
| Tri-Global Energy, LLC. | Development stage, tranche investment | 1,529,200 |
| Bluestar Capital, LLC. & Nova Clean Energy, LLC. | Development stage, 1,500 MW royalty entitlement | 8,106,800 |
| Other | | 2,100 |
| Total Investment | | \$ 88,497,900 |

For additional details on the projects funded during the year ended December 31, 2022, refer to *Investment Growth - Joint Venture Analysis* below.



Selected Annual Information

| Expressed in United States Dollars, rounded to | | Year ended | |
|--|-------------------|-------------------|-------------------|
| the nearest hundred (except per share amounts) | December 31, 2022 | December 31, 2021 | December 31, 2020 |
| Revenue per consolidated financial statements | \$ 781,400 | \$ 81,600 | \$ 183,600 |
| Royalty | \$ 3,637,700 | \$ 335,800 | \$ 206,900 |
| Management fee | - | - | 18,000 |
| Interest | 783,000 | 81,600 | 55,800 |
| $Proportionaterevenue^{(i)}$ | \$ 4,420,700 | \$ 417,400 | \$ 280,700 |
| Adjusted EBITDA ^(t) | \$ 830,500 | \$ (2,958,100) | \$ (973,800) |
| Net loss | (779,900) | (3,415,600) | (1,975,400) |
| Net loss per share - basic and diluted | \$ (0.03) | \$ (0.14) | \$ (0.15) |
| Totalassets | \$ 201,612,900 | \$ 165,565,400 | \$ 71,533,500 |
| Total liabilities | 6,565,300 | 6,509,500 | 1,264,400 |

⁽¹⁾ See non-GAAP financial measures section for definition and reconciliation

Revenue for the current year consists of interest income and is higher than 2021 and 2020 due to increased interest rates and higher cash balances during the year. Growth in proportionate royalty revenue for 2022 relates to the newly acquired operating stage royalties acquired in 2022 as well as reflecting a full year of revenues from royalties acquired in 2021.

Adjusted EBITDA, which excludes the impact of non-cash share-based compensation, increased year over year as a result of the growth in revenue noted above combined with consistent general and administrative costs year over year. Net loss in the current year was positively impacted by revenue growth in the Joint Venture. The growth of assets and liabilities primarily reflects the acquisition of renewable royalty investments during the year, increasing the Corporation's investment in GBR, which are described in greater detail in the Annual Operational Highlights and Financial Performance and Results of Operations for activities during the year ended December 31, 2022 and 2021.

Financial Performance and Results of Operations

This section of the MD&A covers the financial performance and results of operation of the Corporation using its financial information as prepared under IFRS. The Corporation uses non-GAAP financial measures to assist in reporting its investment in joint venture which is described in the following section "Non-GAAP Financial Measures Analysis—Joint Venture Analysis".

Revenue and Other Income

| Expressed in United States Dollars, rounded to the nearest hundred | | | Yea | r ended | | | | Thr | ee months ended | |
|--|--------|--------------|-------|--------------|---------------|------|----------------|-----|-----------------|----------|
| Revenue and other income | Decemb | oer 31, 2022 | Decem | ber 31, 2021 | Variance | Dece | ember 31, 2022 | De | cember 31, 2021 | Variance |
| Interest income | \$ | 781,400 | \$ | 81,600 | \$ 699,800 | \$ | 372,000 | \$ | 27,200 \$ | 344,800 |

Interest income for the year and quarter ended December 31, 2022 is higher than the comparable periods in 2021 due to increased interest rates on higher average cash balances.

Costs and Expenses

| Expressed in United States Dollars, rounded to the nearest hundred | | | Yea | r ended | | | | Th | ree n | nonths ended | |
|--|-------|---------------|-----|-----------------|----|----------|-----|----------------|-------|----------------|-----------|
| Costs and Expenses | Decer | nber 31, 2022 | De | cember 31, 2021 | V | ariance | Dec | ember 31, 2022 | Dec | ember 31, 2021 | Variance |
| General and administrative expenses | | | | | | | | | | | |
| Office and administrative | \$ | 642,500 | \$ | 544,500 | \$ | 98,000 | \$ | 152,800 | \$ | 181,400 | (28,600) |
| Professional fees | | 598,800 | | 508,000 | | 90,800 | | 112,900 | | 321,800 | (208,900) |
| Management fees | | 526,300 | | 513,400 | | 12,900 | | 125,500 | | 136,800 | (11,300) |
| Director fees | | 178,500 | | 278,300 | | (99,800) | | 84,400 | | 80,900 | 3,500 |
| Travel and accomodations | | 26,000 | | - | | 26,000 | | 12,500 | | - | 12,500 |
| Total general and aministrative expenses | | 1,972,100 | | 1,844,200 | | 127,900 | | 488,100 | | 720,900 | (232,800) |
| Share-based compensation | | 320,100 | | 290,200 | | 29,900 | | 39,700 | | 59,600 | (19,900) |
| Foreign exchange (gain) loss | | (300,500) | | (245,100) | | (55,400) | | (317,500) | | (4,100) | (313,400) |
| | \$ | 1,991,700 | \$ | 1,889,300 | \$ | 102,400 | \$ | 210,300 | \$ | 776,400 \$ | (566,100) |

Office and administrative costs for the year ended December 31, 2022 were primarily related to public company costs and insurance expense which commenced after the Corporation's IPO in March 2021, resulting in an increase in the current year. For the three months ended December 31, 2022 the office and administrative costs were lower than the comparable 2021 period. The 2021 fourth quarter included additional marketing costs.

Professional fees incurred during the year ended December 31, 2022 were higher than the comparable periods as a result of increased accounting, consulting and investor relations costs. Professional fees for the quarter ended December 31, 2022 are lower than the comparable prior year quarter reflecting the differences in timing of the various initiatives and transactions undertaken by the Corporation. Professional fees directly related to the Corporation's IPO in 2021 and bought deal public offering in 2022 were recognized as share issuance costs.

Management fees relate to the Altius Minerals ("Altius") Management Services Agreement pursuant to which Altius provides office space, management, and administrative services to ARR. This agreement commenced in February 2021 and as a result management fees were higher in the year ended December 31, 2022. In addition, management fees are charged in Canadian dollars and are subject to foreign exchange fluctuations, resulting in a decrease for the quarter ended December 31, 2022 versus the comparable 2021 period (See Related Party Transactions).

Director fees incurred during the year ended December 31, 2022 were lower than the comparable year as a result of the Corporation's directors electing to receive partial share based compensation for their services, in turn, share based compensation expenses were higher than the prior year due to this election. Director fees were comparable for the three months ended December 31, 2022 and 2021. Share based compensation costs were lower in the fourth quarter of 2022 due to the timing of recognition in the prior year.

Travel and accommodations increased during the quarter and year ended December 31, 2022 as COVID-19 travel restrictions were lifted and as corporate development increased.



Foreign exchange revaluations reflect the fluctuations of foreign currencies held in bank accounts. In the fourth quarter of 2022 the Corporation held higher amounts in Canadian dollars after the closing of its equity offering which resulted in larger foreign exchange fluctuations.

Other factors which contributed to the change in the Corporation's earnings are:

| Expressed in United States Dollars, rounded to the | | | Year | ended | | Three months ended | | | | | | |
|--|-------|---------------|-------|--------------|-------------------|--------------------|---------------|-----|----------------|----|-----------|--|
| nearest hundred | Decem | nber 31, 2022 | Decem | ber 31, 2021 | Variance | Decer | nber 31, 2022 | Dec | ember 31, 2021 | V | ariance | |
| Dilution (gain) on issuance of equity in joint venture | \$ | - | \$ | (462,500) | \$ 462,500 | \$ | - | \$ | - | \$ | - | |
| Share of (earnings) loss in joint venture | | (520,600) | | 1,533,900 | (2,054,500) | | 779,600 | | 237,100 | | 542,500 | |
| | \$ | (520,600) | \$ | 1,071,400 | \$ (1,592,000) | \$ | 779,600 | \$ | 237,100 | \$ | 542,500 | |
| | | | | | | | | | | | | |
| Income tax expense (recovery) | \$ | 90,000 | \$ | 536,500 | \$ (446,500) | \$ | (236,200) | \$ | 205,600 | \$ | (441,800) | |

There were no dilution gains recorded in the quarter and year ended December 31, 2022. During the prior year, the Corporation's ownership in GBR decreased to 50% from 89% resulting in a dilution gain of \$462,500.

The Corporation recorded its share of losses from its Joint Venture of \$779,600 and earnings of \$520,600 for the quarter and year ended December 31, 2022 respectively compared to its share of losses of \$237,100 and \$1,533,900 for the comparable periods. The current quarter and year ended December 31, 2022 reflect increased revenues at GBR offset by increased costs. The prior year periods reflected losses at GBR compounded by the Corporation's higher ownership percentage during 2021. Please refer to *Non-GAAP Financial Measures Analysis– Joint Venture Analysis* for detailed discussion of revenue and costs at the Joint Venture.

Income tax expense (recovery) reflect any earnings from the Joint Venture as well as any deferred tax changes in the Corporation's underlying investment in GBR. Any tax expense (recovery) relating to the royalty investments held in GBR is recorded in other comprehensive earnings. The Corporation recognizes all deferred tax liabilities and, if applicable, any offsetting deferred tax assets at its subsidiary level. Any deferred tax assets relating to loss carry forwards and other tax pools at the parent level will not be recognized until there is a history of earnings.

Other Comprehensive Earnings

| Expressed in United States Dollars, rounded to the nearest hundred | | | Year (| ended | | | Three months ended | | | | | |
|--|---------|------------|--------|--------------|----|-------------|--------------------|------|-------------------|----|-------------|--|
| Other comprehensive earnings ⁽¹⁾ | Decembe | r 31, 2022 | Decem | ber 31, 2021 | 1 | Variance | December 31, 202 | 2 I | December 31, 2021 | | Variance | |
| Revaluation gains on investments | \$ | 11,852,100 | \$ | 18,096,000 | \$ | (6,243,900) | \$ 499,40 | o \$ | 6,900,300 | \$ | (6,400,900) | |

(1) See non-GAAP financial measures section for definition and reconciliation

During the year ended December 31, 2022 the Corporation recognized its share of revaluation gains on investments held in the Joint Venture of \$11,852,100 compared to the prior year period of \$18,096,000. During the quarter ended December 31, 2022 the Corporation recognized its share of revaluation gains on investments held in the Joint Venture of \$499,400 compared to gains in the prior year period of \$6,900,300. These revaluation gains were recorded in other comprehensive earnings and in the current year periods relate to the Joint Venture's investment in TGE, Longroad and Northleaf. All other investments are recent and cost is used as a proxy for fair

value. Revaluation gains in the prior year were attributable to the Joint Venture's investment in TGE of \$5,042,300 as well as \$13,053,700 related to the redemption of Apex Clean Energy.

Liquidity and Cash Flows

The Corporation has available cash of \$50,092,200 at December 31, 2022. In addition, GBR has available cash of \$2,863,000 at December 31, 2022 which is sufficient to fund working capital and operations at the GBR level. The Corporation expects to co-fund any new investments made by GBR with its joint venture partner, Apollo. The Corporation's sources of cash flow are from royalty revenue and other income in the Joint Venture as well as the issuance of shares.

At December 31, 2022 the Corporation had current assets of \$50,517,700 (December 31, 2021 - \$49,425,800), including cash and cash equivalents of \$50,092,200 (December 31, 2021 - \$49,304,200) and current liabilities of \$565,600 (December 31, 2021 - \$2,363,400).

| Expressed in United States Dollars, rounded to the nearest hundred | | Year e | ended |
|--|------|----------------|-------------------|
| Summary of Cash Flows | Dece | ember 31, 2022 | December 31, 2021 |
| Operating activities | \$ | (1,172,200) | \$ (1,365,800) |
| Financing activities | | 26,597,500 | 78,531,300 |
| Investing activities | | (24,637,300) | (27,880,500) |
| Net increase in cash and cash equivalents | | 788,000 | 49,285,000 |
| Cash and cash equivalents, beginning of year | | 49,304,200 | 19,200 |
| Cash and cash equivalents, end of year | \$ | 50,092,200 | \$ 49,304,200 |

Operating Activities

The Corporation used cash to fund operations for the year ended December 31, 2022 which is lower than the prior year and is consistent with an increase in public company expenses offset by increased interest income.

Financing Activities

During the year ended December 31, 2022 the Corporation completed a bought deal public offering for total gross proceeds of \$28,194,200 less share issuance costs paid of \$1,596,700. The Corporation's parent, Altius Minerals Corporation acquired 2,298,700 shares for \$15,160,300 (C\$20,688,300) in the Offering and holds approximately 58% of the issued and outstanding common shares of ARR. Financing activities for the prior year primarily reflect net proceeds of \$78,695,800 from the Corporation's IPO in the first half of 2021.

Investing Activities

During the year ended December 31, 2022 the Corporation received a cash distribution from GBR of \$20,850,000 and paid taxes of \$1,637,300 related to the \$13,053,700 realized gain on the Apex redemption which was recorded in other comprehensive earnings in 2021. The Corporation also invested \$43,850,000 (2021 - \$27,880,500) in the Joint Venture to fund investments into renewable energy projects as described in detail above.



Investment Growth - Joint Venture Analysis

The Corporation's 50% Joint Venture, GBR, invested a total of \$88,497,900 during the year ended December 31, 2022.

Hansford County Wind Project

On December 20, 2022 GBR acquired a pre-existing royalty interest from Apex Clean Energy for \$17,788,900, after standard working capital and other adjustments. The royalty relates to a wind project located in Hansford County, Texas owned and operated by a major renewables owner-operator. Under the royalty, GBR will receive a fixed dollar amount per megawatt hour produced from a distinct 658MW of the IGW project, which achieved commercial operations in September 2022. The Corporation expects the royalty to contribute approximately \$1,500,000 to its revenue in 2023.

Titan Solar ("Titan")

On December I, 2022 the Corporation's joint venture entered into a \$46,000,000 royalty investment agreement with Longroad Energy ("Longroad") to support Longroad's acquisition of the 70 MWac Titan Solar project in Imperial County, CA ("Titan"). As part of the Titan acquisition, Longroad is buying down an existing hedge associated with the project such that starting in 2026 approximately 70% of the expected revenues will be market-based with the remainder relating to contracted capacity payments and renewable energy credits. In addition, GBR recognized acquisition costs of \$799,100.

The royalty investment has been structured using royalty rates that vary over time and achieve GBR's investment hurdles while optimizing Longroad's project level cash flow profile. GBR expects its royalty on Titan to contribute approximately \$3,000,000-\$3,500,000 to its revenues in 2023, and to average \$4,000,000-\$4,500,000 annually over its first 10 years.

Hodson Energy, LLC ("Hodson")

On July 29, 2022 GBR entered into a transaction with U.S. renewable energy developer, Hodson, to gain future royalties related to Hodson's portfolio of solar plus battery storage development projects. GBR will be granted a 3% gross revenue royalty on all projects developed and vended by Hodson until a minimum total return threshold is achieved. The targeted IRR threshold is consistent with the upper part of GBR's previously disclosed 8-12% base hurdle rate range before factoring potential longer-term option value realizations and the potential value of warrants in the common equity of Hodson that it received as part of the transaction.

The \$40,000,000 royalty investment into Hodson will be invested in tranches over approximately the next three years as Hodson achieves certain project advancement milestones, with an initial investment upon closing of \$14,000,000. Approximately \$9,800,000 of the original investment was used by Hodson to retire an existing development loan facility and to acquire new projects. Following the loan retirement Hodson carries no debt on its balance sheet and will require GBR's consent before incurring new debt obligations.

GBR may elect to receive a portion of cash proceeds from project sales with any cash GBR received counting towards the target return threshold. GBR also has the option to invest an additional \$20,000,000 as royalty financing in the future.

During the year ended December 31, 2022 GBR invested \$14,000,000 into Hodson and incurred acquisition costs of \$271,700 for a total recorded investment balance of \$14,034,800.

Tri Global Energy LLC ("TGE")

On February 7, 2019 the Corporation entered into its first renewable energy royalty transaction with leading Texas-based wind and solar energy developer Tri Global Energy LLC. GBR committed to investing in tranches a total of \$30,000,000 as TGE achieved certain advancement milestones. On October 28, 2020, GBR agreed to an additional \$25,000,000 royalty investment bringing the total royalty capital commitment to \$55,000,000. In exchange, GBR was granted the right to a 1.5%-3% gross revenue royalty on each individual pipeline project created until an implied target return threshold is achieved.

On September 29, 2022 TGE announced that it had been acquired by Enbridge Inc. ("Enbridge"). Following the acquisition GBR will continue to receive royalty contracts from the approximately 5.5 GW of projects existing in TGE's development pipeline at the time of the acquisition ("GBR TGE Portfolio") until it hits its threshold return. After GBR receives sufficient royalty contracts for it to achieve its threshold return, GBR will have the option to acquire additional royalties on remaining projects from the GBR TGE Portfolio following each project's achievement of commercial operations, using the same valuation methodology.

During the year ended December 31, 2022, prior to the Enbridge acquisition, GBR invested \$1,500,000 and incurred acquisition costs of \$29,200 relating to its agreement with TGE (December 31, 2021 – \$14,000,000 and acquisition costs of \$142,700) and it has no further funding obligations under the agreement.

During the year ended December 31, 2022 the Appaloosa Wind Project royalty ("Appaloosa") was assigned to GBR through the agreement with TGE. The fair value of \$4,813,000 was determined using a pre-determined discounted cash flow model input methodology and was reclassified from investments to royalty interests. The project achieved commercial operation in December 2022.

As at December 31, 2022 the total invested in TGE is \$47,116,000 including acquisition costs of \$616,000 (December 31, 2021 - \$45,586,800 including acquisition costs of \$586,800).

Bluestar Capital LLC ("Bluestar") & Nova Clean Energy, LLC ("Nova")

On May 4, 2022 GBR announced that it executed agreements to invest a total of \$32,500,000 into a new global renewables development platform, Bluestar Energy Capital LLC, which was recently founded and majority-owned by Declan Flanagan, former CEO of Orsted Onshore and Lincoln Clean Energy.

GBR will invest the majority of the total \$32,500,000 commitment into Nova Clean Energy LLC the North American renewables development subsidiary of Bluestar and in exchange will receive royalties on 1.5 GW of renewable energy projects commercialized by Nova as well as a minority equity interest in Nova. GBR is also investing alongside S2G Ventures, part of the Builders Vision impact platform, for a minority equity ownership in Bluestar, with Declan Flanagan remaining as the majority shareholder of Bluestar. GBR's investments in Bluestar and Nova are classified as investments in associates and accounted for using the equity method.

During the year ended December 31, 2022 GBR invested \$3,000,000 into Bluestar and invested \$5,000,000 and incurred acquisition costs of \$106,800 in Nova for a total investment of \$8,106,800.



Non-GAAP Financial Measures Analysis – Joint Venture Analysis

This section of the MD&A uses non-GAAP financial measures to describe certain results as if the Corporation proportionately consolidated its Joint Venture on a 50% basis. See definitions, reconciliations and additional information for each specific non-GAAP measure on page 25 of this MD&A. Refer to Note 4 of the Corporation's Annual Consolidated Financial Statements for the results and operations of the Joint Venture.

Proportionate Revenue and Adjusted EBITDA

The following table and discussion reflect revenue and adjusted EBITDA on a 50% basis in 2022. During 2021 the Corporation diluted its ownership from 89% to 50%.

| Expressed in United States Dollars, rounded to the nearest hundred | | | Year ended | | | | Thr | ee months ended | |
|--|----------------|--------|-------------------|-----------------|----|------------------|-----|------------------|----------|
| Proportionate revenue | December 31, 2 | 2022 | December 31, 2021 | Variance | D | ecember 31, 2022 | D | ecember 31, 2021 | Variance |
| Proportionate interest | \$ 78 | 33,000 | \$ 111,600 | 671,400 | \$ | 373,500 | \$ | 27,200 | 346,300 |
| Proportionate royalty revenue | | | | | | | | | |
| Northleaf investment | 2,66 | 50,700 | 195,800 | 2,464,900 | | 520,100 | | 190,800 | 329,300 |
| Prospero 2 | 48 | 82,500 | - | 482,500 | | 142,800 | | - | 142,800 |
| Titan Solar | IC | 07,900 | - | 107,900 | | 107,900 | | - | 107,900 |
| Other | 38 | 36,600 | 110,000 | 276,600 | | 89,900 | | 46,100 | 43,800 |
| Total proportionate revenue ⁽¹⁾ | \$ 4,42 | 20,700 | \$ 417,400 | \$ 4,003,300 | \$ | 1,234,200 | \$ | 264,100 \$ | 970,100 |
| Adjusted EBITDA (1) | \$ 83 | 30,500 | \$ (2,958,100) | \$ 3,788,600 | \$ | 55,800 | \$ | (859,000) \$ | 914,800 |

⁽¹⁾ See non-GAAP financial measures section for definition and reconciliation

During the year and quarter ended December 31, 2022, the Corporation recognized proportionate royalty revenue of \$2,660,700 and \$520,100 respectively from the Northleaf investment royalties which were acquired on September 30, 2021. The portfolio had strong generation from February through July of this year and one of the projects within this investment benefited from its merchant price exposure with strong realized prices during the summer months. GBR's revenues are recognized upon each project's actual receipt of payment from contract and merchant sales, which typically lag the timing of generation.

Prospero 2 project proportionate royalty revenue of \$482,500 and \$142,800 was recognized during the year and quarter ended December 31, 2022, respectively. In early June, the project experienced some damage from a hailstorm resulting in a loss of capacity estimated at approximately 7%. As per GBR's royalty agreement, revenue was recognized on insurance proceeds for the replacement of lost production revenue during the current quarter.

The Titan solar project, acquired late in the fourth quarter, contributed proportionate royalty revenue of \$107,900 during the year and quarter ended December 31, 2022.

Other proportionate royalty revenue of \$386,600 and \$89,900 for the year and quarter ended December 31, 2022, primarily includes amounts from Jayhawk, Appaloosa, Young Wind, and the Hansford County Wind Project, all of which have commenced operations during the current year, in additional to Clyde River royalty and revenue from geothermal wells.

Clyde River was slightly lower from the prior year due to lower waterflow and damage which occurred in fall 2021. All units have been brought back online in 2022. In addition, during the year ended December 31, 2022 the Corporation recognized \$125,000 of investment income relating to consent fees under its agreement with TGE. On January 6, 2023, GBR sold the assets of NEO Geothermal for a sale price of \$435,000, subject to any standard transaction costs. The assets, consisting of a geothermal wellfield located under a building in Portsmouth, New Hampshire, were sold to the building owner.

Adjusted EBITDA, increased to \$830,500 and \$55,800 for the year and three months ended December 31, 2022 respectively. Factors impacting Adjusted EBITDA include proportionate revenue as well as general and administrative expenses at the Corporation and the Joint Venture.

During the year ended December 31, 2022 expenses recognized by ARR and the Joint Venture were slightly higher than the prior year due to increased professional fees, salaries and compensation as well as office and administrative expenses directly related to the growth of the Corporation and Joint Venture and its increased investing and business development activity. During the quarter ended December 31, 2022 ARR expenses and the Corporation's proportionate share of GBR expenses were slightly higher than the prior year period due to increased salary and compensation expenses as the Joint Venture increased staffing levels during the period. This was partially offset by decreased professional fees for the current quarter reflecting the differences in timing of the various initiatives and transactions undertaken by the Corporation.

Liquidity and Cashflow at the Joint Venture

The following table and discussion reflect 100% of cash flows in the Joint Venture.

| Expressed in United States Dollars, rounded to the nearest hundred | | Year | ended | |
|--|------|---------------|-------|-----------------|
| Summary of Joint Venture Cash Flows | Dece | mber 31, 2022 | Dec | cember 31, 2021 |
| Operating activities | \$ | 2,670,600 | \$ | (1,952,300) |
| Financing activities | | 46,000,000 | | 125,522,900 |
| Investing activities | | (88,497,900) | | (81,538,000) |
| Net increase in cash and cash equivalents | | (39,827,300) | | 42,032,600 |
| Cash and cash equivalents, beginning of year | | 42,690,300 | | 657,700 |
| Cash and cash equivalents, end of year | \$ | 2,863,000 | \$ | 42,690,300 |

Operating Activities

During the year ended December 31, 2022 the Joint Venture generated cash from operations of \$2,670,600 reflecting the addition of operating royalties and resulting revenue growth in comparison to 2021. Current year operating cash flow was affected by an increase in non cash working capital as a direct impact of the revenue growth recognized during the year.



Financing Activities

During the year ended December 31, 2022 financing cash inflows related to partner funding into the Joint Venture from ARR and Apollo for the acquisition of investments and royalty interests noted below net of distributions of \$41,700,000 related to the Apex Redemption. Prior year cash inflows relate to partner funding from Apollo and the Corporation for the acquisition of investments.

Investing Activities

Investing cash outflows of \$88,497,900 for the year ended December 31, 2022 related to the acquisition of the Great Prairie royalty and investments in Titan, Hodson, Bluestar, and Nova, as well as a tranche payment to TGE. These agreements are described in the *Investment Growth - Joint Venture Analysis section* of this MD&A. The amounts in the prior year reflect acquisitions of Northleaf, Longroad and additional tranche payments to TGE.

Summary of Quarterly Financial Information of the Corporation

The table below outlines select financial information related to the Corporation's eight most recent quarters. The financial information is extracted from the Corporation's consolidated financial statements and should be read in conjunction with the same.

| Expressed in United States Dollars, rounded to the nearest hundred | Dec | ember 31, 2022 | Se | ptember 30, 2022 | June 30, 2022 | N | March 31, 2022 |
|--|-----|----------------|----|------------------|---------------|----|----------------|
| Revenue per consolidated financial statements | \$ | 372,000 | \$ | 234,700 | \$ 133,900 | \$ | 40,800 |
| Proportionate revenue $^{(1)}$ | | 1,234,200 | | 1,805,400 | 732,000 | | 649,100 |
| Adjusted EBITDA ⁽¹⁾ | | 55,800 | | 999,100 | (63,000) | | (161,400) |
| Net earnings (loss) | | (381,700) | | 313,000 | (468,500) | | (242,500) |
| Net earnings (loss) per share - basic and diluted | \$ | (0.01) | \$ | 0.01 | \$ (0.02) | \$ | (0.01) |

| Expressed in United States Dollars, rounded to the nearest hundred | De | cember 31, 2021 | Sep | otember 30, 2021 | June 30, 2021 | March 31, 2021 |
|--|----|-----------------|-----|------------------|---------------|----------------|
| Revenue per consolidated financial statements | \$ | 27,200 | \$ | 35,500 | \$ 16,600 | \$ 2,500 |
| Proportionate revenue (1) | | 264,100 | | 52,800 | 70,200 | 30,300 |
| Adjusted EBITDA ^(t) | | (859,000) | | (680,100) | (841,800) | (577,200) |
| Net earnings (loss) | | (1,191,700) | | (1,410,500) | (682,500) | (130,900) |
| Net earnings (loss) per share - basic and diluted | \$ | (0.05) | \$ | (0.05) | \$ (0.03) | \$ (0.01) |

⁽¹⁾ See Non-GAAP financial measures section for definition and reconciliation

Revenue in the consolidated financial statements includes interest income. Proportionate revenue was generated from renewable royalty investments as described in greater details in Non-GAAP financial measures analysis section in this MD&A. Adjusted EBITDA, net earnings (loss) and net earnings (loss) per share have fluctuated reflecting the underlying growth of the business over these periods and from variability in electricity prices in some markets. See additional discussion in *Financial Performance and Results of Operations – IFRS* and *Non-GAAP Financial Measures Analysis – Joint Venture Analysis* above.

Commitments and Contractual Obligations

As at December 31, 2022, the following are the Corporation's commitments and contractual obligations over the next five calendar years:

| | _ | Mgmt services agreement | | estar & Nova ⁽¹⁾ | Hodson ⁽¹⁾ | Hodson ⁽¹⁾ | | | |
|------|----|-------------------------|----|-----------------------------|-----------------------|-----------------------|------------|--|--|
| 2023 | \$ | 517,500 | \$ | 3,000,000 \$ | 9,500,000 | \$ | 13,017,500 | | |
| 2024 | | - | | 9,250,000 | 3,500,000 | | 12,750,000 | | |
| 2025 | | - | | - | - | | - | | |
| 2026 | | - | | - | - | | - | | |
| 2027 | | - | | - | - | | - | | |
| | \$ | 517,500 | \$ | 12,250,000 \$ | 13,000,000 | \$ | 25,767,500 | | |

⁽¹⁾ GBR commitments are presented at a 50% basis

GBR is committed under a consulting agreement to remit the following payments on the Hodson investment until royalty funding has been completed or the agreement terminated:

- \$150,000 on each date that the Joint Venture signs definitive documentation in connection with a royalty investment
- 1.5% of the first \$20,000,000 in funded value; plus
- 1% of funded value greater than \$20,000,000 but less than \$50,000,000; less
- The aggregate amount of the above payments.

GBR has committed under the Bluestar and Nova and Hodson investment agreements to fund up to an additional \$24,500,000 and \$26,000,000 respectively. The commitments are associated with the expectation of future capital calls and the timing and amounts are at the discretion of the board or manager of each company. In addition, Hodson must achieve certain milestones for future funding to be requested.

The Corporation anticipates it will meet its obligations with its current cash float and any royalty income it will ultimately receive from the investments made by GBR. The Corporation anticipates it will meet its obligations under the Bluestar and Nova and Hodson Agreements with its available cash and support from Apollo Funds pursuant to the Joint Venture agreement.

The final value of royalties assigned to GBR under the Apex agreement was to be determined six months following the commercial operation date of the associated project. Apex and the Joint Venture agreed to a true-up mechanism to be used in the future in the event that the current estimates for the final value of the royalties used in determining the redemption payment differ from the actual final values determined. The true-up mechanism is based on the same valuation methodology that would have been used if the redemption did not occur. Based on the final valuation of each royalty, Apex may owe a cash payment to the Joint Venture, or vice versa. As of the date of these financial statements, the amount is not determinable, and no amount is reflected herein (Note 4).



Off Balance Sheet Arrangements

The Corporation does not have any off balance sheet arrangements.

Related Party Transactions

Altius Minerals Services Agreement

The Corporation and Altius entered into a services agreement dated January 15, 2021 pursuant to which Altius will provide office space, management, and administrative services, including the services of certain executives to the Corporation for a monthly fee of C\$50,000 plus applicable taxes beginning on February 1, 2021, which amount was calculated on a cost recovery basis, and will be reviewed and adjusted by agreement of the parties, if necessary. The fees will be subject to a yearly review by the independent directors of the Corporation. Altius is also entitled to be reimbursed for reasonable out-of-pocket costs it incurs directly for the Corporation. Either the Corporation or Altius may terminate the Altius Minerals Services Agreement on 60 days' written notice to the other and in other prescribed circumstances, including in certain events of insolvency and if there is a violation of the confidentiality and non-use obligations set forth in the agreement.

During the year ended December 31, 2022 Altius billed the Corporation \$526,300 (C\$690,000) (December 31, 2021 - \$513,400 (C\$632,500)) for office space, management, and administrative services. At December 31, 2022 the balance owing to Altius is \$nil.

GBR Services Agreement

GBR I, LLC and Altius entered into the GBR Services Agreement on October II, 2020 pursuant to which Altius agreed to provide GBR with certain back office services including bookkeeping, accounting, treasury services as well as other services previously provided to GBR. For 2022 Altius performed all bookkeeping, accounting and financial reporting services whereas in 2021 these services were outsourced by GBR and were limited solely to finalizing 2020 accounting and financial reporting. Altius will also invoice GBR for certain direct costs that it incurs on GBR's behalf.

During the year ended December 31, 2022 Altius billed GBR \$90,000 (December 31, 2021 - \$17,500) for finance and administrative services. At December 31, 2022 the balance owing to Altius is \$nil.

GBR-ARR Services Agreement

GBR and the Corporation entered into the GBR-ARR Services Agreement pursuant to which GBR has agreed to provide certain services to the Corporation for IPO and post initial public offering support services, including communications with shareholders and stakeholders of the Corporation, review of public disclosure documents, assistance with the preparation of reports to the Board, attendance at Board meetings and such other services reasonably requested by ARR. As consideration for the services, the Corporation shall pay GBR a daily rate ranging from US\$800 to US\$2,000 for each individual providing services to the Corporation under the GBR-ARR Services Agreement. The GBR-ARR Services Agreement also stipulates the maximum amount of time per employee that may be spent on various services under the GBR-ARR Services Agreement.

During the year ended December 31, 2022 GBR billed the Corporation \$56,200 (December 31, 2021 - \$105,000) for support services. At December 31, 2022 the balance owing to GBR is \$nil.

Other

During the year ended December 31, 2021 the Corporation repaid a loan to its Parent for \$164,500. There were no loans incurred or repaid during the year ended December 31, 2022 and no amounts are outstanding.

During the year ended December 31, 2022 the Corporation paid salaries and benefits to directors of \$168,900 (December 31, 2021 - \$263,300) and recognized share-based compensation of \$320,100 (December 31, 2021 - \$290,200).

These transactions are in the normal course of operations and are measured at the exchange amount, which is the amount of consideration established and agreed to by the parties.

Significant Accounting Policies

The preparation of financial statements in accordance with IFRS requires management to establish accounting policies and make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent liabilities and the reported amounts of revenues and expenses during the reporting period. The Corporation's significant accounting policies are described in Notes 2 and 3 to the annual financial statements for the year ended December 31, 2022. The Corporation has not adopted any new accounting policies during the year ended December 31, 2022. The Corporation's significant accounting policies are as follows:

Impairment of interest in joint venture

At each reporting date the carrying amounts of the Corporation's interests in joint ventures are reviewed to determine whether there is any indication that those assets are impaired. If an impairment indicator exists, the Corporation then must determine its recoverable amount. The recoverable amount is the higher of fair value less costs of disposal and value in use, which is the present value of future cash flows expected to be derived from the asset.

In assessing value in use, the estimated future cash flows are discounted to their present value, using a post-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset is estimated to be less than its carrying amount, the carrying amount is reduced to the recoverable amount. Impairment is recognized immediately in the consolidated statement of earnings. If an impairment subsequently reverses, the carrying amount is increased to the revised estimate of recoverable amount but only to the extent that this does not exceed the carrying value that would have been determined if no impairment had previously been recognized. A reversal is recognized as a reduction in impairment in the statement of loss.



Investments

Under IFRS 9 – Financial Instruments, on initial recognition, the Corporation may make an irrevocable election (on an instrument-by-instrument basis) to designate investments in equity instruments as at FVTOCI. Designation at FVTOCI is not permitted if the equity investment is held for trading or if it is contingent consideration recognized by an acquirer in a business combination. Investments in equity instruments at FVTOCI are initially measured at fair value plus transaction costs. Subsequently, they are measured at fair value with gains and losses arising from changes in fair value recognized in other comprehensive earnings. The cumulative gain or loss is not reclassified to the statement of earnings on disposal of the equity investments, instead, it is transferred within another component of equity.

Investments in associates over which the Corporation exercise significant influence are accounted for using the equity method. Under this method, the Corporation's share of the associate's earnings or losses is included in the consolidated statement of loss and other comprehensive earnings and the carrying amount of the investment is adjusted by a like amount.

Impairment of renewable royalty interests

At each reporting date the carrying amounts of the royalties held by the Corporation are reviewed to determine whether there is any indication that those assets are impaired. If an impairment indicator exists, the Corporation then must determine its recoverable amount. The recoverable amount is the higher of fair value less costs of disposal and value in use, which is the present value of future cash flows expected to be derived from the asset.

In assessing value in use, the estimated future cash flows are discounted to their present value, using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset is estimated to be less than its carrying amount, the carrying amount is reduced to the recoverable amount. Impairment is recognized immediately in the consolidated statement of loss and comprehensive loss. If an impairment subsequently reverses, the carrying amount is increased to the revised estimate of recoverable amount but only to the extent that this does not exceed the carrying value that would have been determined if no impairment had previously been recognized. A reversal is recognized as a reduction in impairment in the consolidated statement of loss and comprehensive loss.

Revenue recognition

Royalty and investment income is recognized when either the underlying renewable asset generates energy, or receives payment for generated energy and other revenue streams of the asset subject to the royalty, the amount can be reliably measured and it is probable that the economic benefits associated with the transaction will flow to the Corporation and the costs incurred or to be incurred in respect of the transaction can be reliably measured. Interest income is recognized on an accrual basis. Management fee revenue for office administration and support is recognized when a customer obtains control of promised services in an amount that reflects the consideration the Corporation expects to receive in exchange for those goods and services. The Corporation determined that royalty income is not in scope of IFRS 15 as it does not meet the criteria for contract with a customer.

Intangible assets – renewable royalty interests

Royalty interests acquired are recognized separately from goodwill if the asset is separable or arises from contractual or legal rights. These intangible assets are also recognized when acquired individually or with a group of other assets. Royalty interests are initially recorded at their estimated fair value. Intangible assets with a finite life are amortized on a straight-line basis over their useful economic lives of 17-25 years as appropriate with the amortization expense included in the consolidated statements of loss and comprehensive loss. Intangible assets that are not yet ready for use are not amortized until available for use. All intangible assets are reviewed for impairment indicators at each reporting period. The useful lives are reviewed at each reporting period to ensure no adjustments are needed. The Corporation has no identifiable intangible assets for which the expected useful life is indefinite.

Critical Accounting Estimates

Areas requiring the use of management estimates include business combinations and related purchase price allocations, share based compensation including inputs to calculate such as interest rates and volatility, useful lives assessment for amortization and depletion of the renewable royalty interests and intangible assets, deferred income taxes and the consideration that deferred tax assets recorded meet the criteria for recognition, and the assumptions used in the determination of the fair value measurement and valuation process for investments in which there is no publicly traded market including key inputs, significant unobservable inputs and the relationship and sensitivity of those inputs to fair value. Details of the Corporation's critical accounting estimates can be found in Note 3 of the annual consolidated financial statements.

Income taxes

The Corporation has available unused operating losses and temporary timing differences as disclosed in Note 5 to the annual financial statements. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that all or part of the related tax benefit will be realized.

Investments in joint ventures

The Corporation has the ability to jointly control the relevant activities of these joint arrangements and has classified these investments as joint ventures (Note 4 of the annual consolidated financial statements). The Corporation's joint venture holds renewable royalty interests and investments in renewable royalties. The amortization of renewable royalty interests is recorded straight line over the expected life of the asset. The investments in renewable royalties are recorded at fair value and, considering the longevity of the projects, the Corporation has determined that any investment income is a return on investment and is therefore recorded in earnings. Any estimates used for amortization and fair value affect the related amount of the equity pickup and the assessment of the recoverability of the carrying value of these investments in joint ventures.

Fair value measurements and valuation processes

Certain of the Corporation's assets are measured at fair value, and at each reporting date the Corporation determines the appropriate valuation techniques and inputs for fair value measurements. In estimating the fair value of an asset or a liability, the Corporation uses market-observable data to the extent it is available. Where Level I inputs are not available, the Corporation uses an income approach



valuation methodology such as discounted cash flows and net present valuation calculations. When an income approach is not possible or the purchase is recent, the Corporation uses cost as a proxy for fair value.

The Corporation's joint venture holds investments in preferred shares (Note 4 of the consolidated financial statements) that will yield cash distributions or distributions in the form of renewable royalty contracts on renewable energy projects at a future date. The Joint Venture has the right to receive cash distributions based on a percentage of the gross revenues of the renewable assets associated with each investment with Northleaf and Longroad. The Joint Venture also has the right to receive a gross revenue royalty until the estimated value of such royalties at the time of commercial operations achieve a minimum return threshold on the investment under the agreement with TGE. The number of royalties to be granted is dependent on pricing, timing of permits, and construction timing of commercial operations, technology, size of the project and expected energy rates.

These investments are not traded in the active market and the fair value is determined using an income approach methodology and primarily using the discounted cash flow valuation of the expected portfolio of royalties to be granted. The valuations of these private equity investments can be sensitive to changes in one or more unobservable inputs which are considered reasonably possible within the next financial year. Further information on unobservable inputs and related qualitative analysis are provided in Note 10 in the consolidated financial statements.

The Corporation measures fair value by level using a fair value hierarchy.

Level I - valuation based on quoted prices (unadjusted) observed in active markets for identical assets or liabilities;

Level 2 – valuation techniques based on inputs that are quoted prices of similar instruments in active markets; inputs other than quoted prices used in a valuation model that are observable for that instrument; inputs that are derived principally from or corroborated by observable market data by correlation or other means; and estimates of expected volatility, expected life and expected risk-free rate of return; and

Level 3 - valuation techniques with significant unobservable market inputs.

During the quarter and year ended December 31, 2022 the Corporation recorded revaluation gains on investments held in joint venture of \$499,400 and \$11,852,100, respectively. During the quarter and year ended December 31, 2021 the Corporation recognized revaluation gains on investments held in joint venture of \$6,900,300 and \$18,096,000 respectively.

Valuation technique and key inputs

The Corporation applies an income approach methodology primarily modelled with risk adjusted discounted cash flows to capture the present value of expected future economic benefits to be derived from the ownership of the investments (Longroad and Northleaf) and the royalty contracts that have been or will be granted in exchange for the investments (TGE). The Corporation uses publicly available information for regional power purchase agreement prices expectations and merchant power pricing, as well as estimates related to timing of revenues and cash flows, discounts rates and timing of commercial operations all of which are key inputs into the valuation model.

The total number and value of royalty contracts to be ultimately awarded under the TGE investment agreement is subject to a minimum return threshold, which has the effect of muting the potential value impact of several of the unobservable inputs. The total cash distributions to be received under the Longroad and Northleaf Agreements are also subject to various return thresholds. The Corporation works with valuation specialists to establish valuation methodologies and techniques for Level 3 assets including the valuation approach, assumptions using publicly available and internally available information, updates for changes to inputs to the model and reconciling any changes in the fair value of the assets for each reporting date within its financial models.

Internal Control over Financial Reporting

Management is responsible for the establishment and maintenance of a system of internal control over financial reporting. This system has been designed to provide reasonable assurance that assets are safeguarded and that the financial reporting is accurate and reliable. The certifying officers have evaluated the effectiveness of the Corporation's internal control over financial reporting as of December 31, 2022 and have concluded that such controls are adequate and effective to ensure accurate and complete financial reporting in public filings. The consolidated financial statements have been prepared by management in accordance with IFRS and in accordance with accounting policies set out in the notes to the consolidated financial statements for the year ended December 31, 2022. There has been no change in the Corporation's internal control over financial reporting during the Corporation's year ended December 31, 2022, that has materially affected, or is reasonably likely to materially affect, the Corporation's internal control over financial reporting.

Evaluation and Effectiveness of Disclosure Controls and Procedures

The Corporation has established and maintains disclosure controls and procedures over financial reporting. The certifying officers have evaluated the effectiveness of the issuer's disclosure controls and procedures as of December 31, 2022 and have concluded that such procedures are adequate and effective to ensure accurate and complete disclosures in public filings. There are inherent limitations in all control systems and no disclosure controls and procedures can provide complete assurance that no future errors or fraud will occur. An economically feasible control system, no matter how well conceived or operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

Risk Factors

An investment in securities of the Corporation involves a significant degree of risk that should be considered prior to making an investment decision. In addition to discussions of key success factors and business issues elsewhere in this MD&A, the investor should consider risk factors. Please refer to the Corporation's Annual Information Form ("AIF") for the year ended December 31, 2022 for a complete listing of risk factors specific to the Corporation.

Financial instrument Risk

The Corporation's financial assets and financial liabilities are exposed to various risk factors that may affect the fair value presentation or the amount ultimately received or paid on settlement of its assets and liabilities. The Corporation manages these risks through prudent investment and business decisions, and, where the exposure is deemed too high, the Corporation may enter into derivative contracts to reduce this exposure. The Corporation does not utilize derivative financial instruments for trading or speculative purposes.



A summary of the major financial instrument risks and the Corporation's approach to the management of these risks are included below.

Credit risk

Credit risk is the risk that a third-party might fail to fulfill its performance obligations under the terms of a financial instrument. Credit risk arises from cash and cash equivalents and receivables. The Corporation closely monitors its financial assets, including the receivables from royalty operators who are responsible for remitting royalty income. The Corporation's cash and cash equivalents are held in fully segregated accounts and include only Canadian and U.S. dollar instruments. The Corporation does not expect any liquidity issues or credit losses on these instruments.

Foreign currency risk

Foreign currency rate risk is the risk that the fair value of future cash flows will fluctuate because of the changes in foreign exchange rates. The Corporation has a portion of its cash denominated in Canadian dollars for certain working capital items and corporate costs. The Corporation does not enter into any derivative contracts to reduce this exposure and maintains limited balances in other currencies. Foreign currency gains of were \$300,500 and \$245,100 were recognized for the years ended December 31, 2022 and 2021 respectively.

Liquidity risk

Liquidity risk is the risk that the Corporation will not be able to meet its financial obligations as they fall due. The Corporation has adequate working capital, expected future cash flows from its joint venture and continues to explore external funding options and believes that it is able to meet current and future obligations. This conclusion could change with a significant change in the operations of the Corporation or as a result of other developments. See discussion in Liquidity section above.

Other price risk

The value of the Corporation's investments is exposed to fluctuations in price depending on a number of factors, including general market conditions, Corporation-specific operating performance and the success of the sale of projects. The Corporation does not utilize any derivative contracts to reduce this exposure.

COVID-19

In March 2020, the World Health Organization declared a global pandemic related to COVID-19. The impacts on global commerce have been, and are anticipated to continue to be, far-reaching. To date, there has been significant stock market volatility, significant volatility in foreign exchange markets, restrictions on the conduct of business and the global movement of people and the availability of some goods has been constrained. Uncertainty remains surrounding COVID-19 and the extent and duration of the impacts that it may have on our operating partners' ability to operate on forecasted production amounts, on operating partners' logistics and supply chains, on the Corporation's employees and on global financial markets.

Outstanding Share Data

On January 15, 2021, the Corporation filed articles of amendment and consolidated its Common Shares on the basis of one post-consolidation Common Share for every four pre-consolidation Common Shares. The consolidation was effected on January 15, 2021. The Corporation's number of issued and outstanding Common Shares are retrospectively presented to reflect the 4:1 share consolidation including the weighted average number of outstanding Common Shares used in the net earnings (loss) per share calculations and the number and pricing of outstanding and exercisable options and warrants.

At March I 2023, the Corporation had 30,782,689 Common Shares outstanding, 3,093,835 warrants outstanding and I,I47,082 stock options outstanding.

Non-GAAP Financial Measures

Management uses certain Non-GAAP Financial Measures to monitor the financial performance of the Corporation and believes these measures enable investors and analysts to compare the Corporation's financial performance with its competitors and/or evaluate the results of its underlying business. These measures are intended to provide additional information, not to replace International Financial Reporting Standards (IFRS) measures, and do not have a standard definition under IFRS and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with IFRS. As these measures do not have a standardized meaning, they may not be comparable to similar measures provided by other companies.

The non-GAAP financial measures are reconciled to the most directly comparable IFRS measure in the sections below. Tabular amounts are presented in US dollars, rounded to the nearest hundred.

Proportionate revenue

Proportionate revenue, formally referred to as attributable revenue, is defined by the Corporation as total revenue and other income from the consolidated financial statements plus the Corporation's proportionate share of revenue in the Joint Venture. Proportionate royalty revenue is the proportionate share of total royalty revenue in the Joint Venture. The Corporation's key decision makers use proportionate royalty revenue as a basis to evaluate the business performance. The Joint Venture revenue and general and administrative costs are not reported gross in the consolidated statement of (loss) since they are generated in a joint venture in accordance with IFRS II Joint Arrangements which requires net reporting as an equity pick up. Management uses proportionate revenue to reflect the Corporation's economic interest in its operations prior to the application of equity accounting to help allocate financial resources and provide investors with information that it believes is useful in understanding the scope of its business, irrespective of the accounting treatment. Details of the Joint Venture's operations are disclosed in Note 4 to the Corporation's consolidated financial statements.



The table below reconciles proportionate revenue to revenue in the consolidated financial statements.

| Expressed in United States Dollars, rounded to the nearest hundred | | Year e | nde | d | | Three months ended | | | |
|---|----|-------------------|-----|-------------------|----|--------------------|----|-------------------|--|
| Reconciliation to non-GAAP financial measures Proportionate revenue | | December 31, 2022 | | December 31, 2021 | | December 31, 2022 | | December 31, 2021 | |
| IFRS revenue per consolidated financial statements | \$ | 781,400 | \$ | 81,600 | \$ | 372,000 | \$ | 27,200 | |
| Adjust: joint venture revenue ⁽¹⁾ | | 3,639,300 | | 335,800 | | 862,200 | | 236,900 | |
| Proportionate revenue | \$ | 4,420,700 | \$ | 417,400 | \$ | 1,234,200 | \$ | 264,100 | |
| Joint venture revenue consists of | | | | | | | | | |
| Northleaf Investment | \$ | 2,660,700 | \$ | 195,800 | \$ | 520,100 | \$ | 190,800 | |
| Prospero 2 | | 482,500 | | - | | 142,800 | | - | |
| Titan | | 107,900 | | - | | 107,900 | | - | |
| Interest | | 1,600 | | - | | 1,600 | | - | |
| Other | | 386,600 | | 140,000 | | 89,800 | | 46,100 | |
| Total joint venture revenue | \$ | 3,639,300 | \$ | 335,800 | \$ | 862,200 | \$ | 236,900 | |

⁽I) Based on the Corporation's proportionate share of the Joint Venture's revenue

Adjusted EBITDA

Adjusted EBITDA is defined by the Corporation as net earnings (loss) before taxes, amortization, interest, non-recurring items, non-cash amounts such as foreign exchange, losses and gains, and share based compensation. The Corporation also adjusts earnings in joint ventures to reflect our proportionate share of EBITDA on those joint ventures which exclude amortization of royalty interests as well as adjusting for any one time items. Adjusted EBITDA is a useful measure of the performance of our business, especially for demonstrating the impact that EBITDA in joint ventures have on the overall business. Management uses adjusted EBITDA to determine the cash generated in a given period that will be available to fund the Corporation's future operations, growth opportunities, shareholder dividends and to service debt obligations as well as to provide a level of comparability to similar entities. Management believes adjusted EBITDA provides useful information to investors in evaluating the Corporation's operating results in the same manner as Management and the Board of Directors.

The table below reconciles net earnings (loss) per the consolidated financial statements to adjusted EBITDA:

| Expressed in United States Dollars, rounded to the nearest hundred | | Year en | ded | | Three months ended | | | | |
|--|-------|----------------|-----|----------------|--------------------|-------------------|--|--|--|
| Reconciliation to non-GAAP financial measures Adjusted EBITDA | Decei | ember 31, 2022 | | ember 31, 2021 | December 31, 2022 | December 31, 2021 | | | |
| Earnings (loss) before income taxes | \$ | (689,700) | \$ | (2,879,100) \$ | (617,900) | \$ (986,100) | | | |
| Addback(deduct): | | | | | | | | | |
| Share based compensation | | 320,100 | | 290,200 | 39,800 | 59,600 | | | |
| Dilution gain on issuance of equity in joint venture | | - | | (462,500) | - | - | | | |
| Foreign currency (gain) loss | | (300,500) | | (245,100) | (317,500) | (4,100) | | | |
| (Earnings) loss from joint ventures | | (520,600) | | 1,533,900 | 779,600 | 237,100 | | | |
| GBR EBITDA (1) | | 2,021,200 | | (1,195,500) | 171,800 | (165,500) | | | |
| Adjusted EBITDA | \$ | 830,500 | \$ | (2,958,100) \$ | 55,800 | \$ (859,000) | | | |
| (I) GBR EBITDA | | | | | | | | | |
| Revenue | \$ | 3,639,300 | \$ | 336,000 \$ | 862,300 | 236,800 | | | |
| Operating income (expenses) | | (1,618,100) | | (1,531,500) | (690,500) | (402,300) | | | |
| GBR Adjusted EBITDA | \$ | 2,021,200 | \$ | (1,195,500) \$ | 171,800 | \$ (165,500) | | | |

⁽¹⁾ The Corporation's proportionate share of GBR for each reporting period

The table below reconciles both non-GAAP financial measures above using the financial statements of both ARR and the GBR Joint Venture (see Note 4 to the Corporation's consolidated financial statements).

| Expressed in United States Dollars, rounded to the nearest hundred | | Year ended December 31, 2022 | | | | | | Year ended December 31, 2021 | | | | | | |
|---|----|------------------------------|--------------------|------------------------------|----------|-----------|----|------------------------------|--------------------|-------|--|----------------------|---------|-------------|
| Reconciliation to non-GAAP financial measures Proportionate revenue and Adjusted EBITDA | AR | R ⁽¹⁾ | GBR ⁽²⁾ | Elimination of Partner's 50% | | Total | | $ARR^{(i)}$ | GBR ⁽²⁾ | Е | Elimination of Partner ⁽³⁾ | Other Adjustments | 4) | Total |
| Revenue | | | | | | | | | | | | | | |
| Interest | \$ | 781,400 \$ | 3,100 | \$ (1 | ,500) \$ | 783,000 | \$ | 81,600 \$ | 60,00 | o \$ | (30,000) | \$ | - \$ | 111,600 |
| Royalty | | - | 7,275,400 | (3,637 | ,700) | 3,637,700 | | - | 543,60 | 0 | (237,800) | | - | 305,800 |
| Other | | - | - | | - | - | | - | 105,00 | 0 | - | (105,0 | 000) | - |
| Proportionate revenue | \$ | 781,400 \$ | 7,278,500 | \$ (3,639 | 200) \$ | 4,420,700 | \$ | 81,600 \$ | 708,60 | o \$ | (267,800) | \$ (105,0 | 000) \$ | 417,400 |
| Adjusted EBITDA | \$ | (1,190,700) \$ | 4,042,300 | \$ (2,02) | ,100) \$ | 830,500 | \$ | (1,762,600) \$ | (1,662,20 | o) \$ | 419,700 | \$ 47,9 | 000 \$ | (2,958,100) |

| Expressed in United States Dollars, rounded to the nearest hundred | Three months ended December 31, 2022 | | | | | Three months ended December 31, 2021 | | | | | | | | | |
|---|--------------------------------------|--------------------|--------------------|------|--|--------------------------------------|----|--------------------|--------------------|------|---|----|----------------------------------|-------|-----------|
| Reconciliation to non-GAAP financial measures Proportionate revenue and Adjusted EBITDA | | ARR ⁽¹⁾ | GBR ⁽²⁾ | | Elimination of Partner's 50% ⁽³⁾ | Total | | ARR ⁽¹⁾ | GBR ⁽²⁾ | | imination of artner 50% ⁽³⁾ | | Other istments ⁽⁴⁾ | | Total |
| Revenue | | | | | | | | | | | | | | | |
| Interest | \$ | 372,000 | \$ 3,10 | o \$ | (1,600) \$ | 373,500 | \$ | 27,200 \$ | - | \$ | - | \$ | - | \$ | 27,200 |
| Royalty | | - | 1,721,40 | 0 | (860,700) | 860,700 | | - | 473,800 | | (236,900) | | - | | 236,900 |
| Proportionate revenue | \$ | 372,000 | \$ 1,724,50 | o \$ | (862,300) \$ | 1,234,200 | \$ | 27,200 \$ | 473,800 | \$ | (236,900) | \$ | - | \$ | 264,100 |
| Adjusted EBITDA | \$ | (116,000) | \$ 343,40 | 0 \$ | (171,700) \$ | 55,800 | \$ | (694,000) \$ | (333,600 |) \$ | 173,900 | \$ | (5,30 | o) \$ | (859,000) |

⁽¹⁾ As per the Corporation's Consolidated Financial Statements



⁽²⁾ Represents GBR on a 100% basis as per Note 4 of the Corporation's consolidated financial statements

⁽³⁾ Reflects elimination of other partner ownership, 2021 ownership was diluted from 89% to 50%

⁽⁴⁾ Reflects elimination of balances between the Corporation and GBR

Appendix A – Summary of Operating and Construction Stage Renewable Energy Royalties

| Project | Location | Project Seller | Renewable Energy Source | Project Owner/Developer | Facility Size (MWac) | Grid Connection | Status | Expected COD ⁽³⁾ | Royalty Basis |
|--------------------------------|---|----------------|----------------------------|-----------------------------|-------------------------|-----------------|--------------|-----------------------------|---|
| Prospero 2 | Andrews County, Texas (USA) | - | Solar | Longroad Energy | 250 | ERCOT | Operational | N/A | Variable ⁽¹⁾ |
| JayHawk | Crawford and Bourboun County, Kansas (USA) | Apex | Wind | WEC Energy / Invenergy | 195 | SPP | Operational | N/A | 2.5% of revenue |
| Old Settler ⁽²⁾ | Floyd County, Texas (USA) | - | Wind | Northleaf Capital | 150 | ERCOT | Operational | N/A | $Variable^{(\tau)}$ |
| Cotton Plains ⁽²⁾ | Floyd County, Texas (USA) | - | Wind | Northleaf Capital | 50 | ERCOT | Operational | N/A | $Variable^{(\tau)}$ |
| Young Wind | Texas (USA) | Apex | Wind | NextEra Energy Resources | 500 | ERCOT | Operational | N/A | 2.5% of revenue |
| Appaloosa | Upton County, Texas (USA) | TGE | Wind | NextEra Energy Resources | 175 | ERCOT | Operational | N/A | 1.5% of revenue |
| Undisclosed Hansford County | Texas (USA) | Apex | Wind | ТВА | 658 | TBA | Operational | N/A | Fixed per MWh |
| Phantom ⁽²⁾ | Bell County, Texas (USA) | - | Solar | Northleaf Capital | 15 | DND | Operational | N/A | Variable ⁽¹⁾ |
| Titan Solar | California (USA) | Sunpin | Solar | Longroad Energy | 70 | CAISO | Operational | N/A | $Variable^{({\scriptscriptstyle \rm I})}$ |
| Clyde River | Orleans County, Vermont (USA) | - | Hydro | Gravity Renewables | 5 | ISO New England | Operational | N/A | 10% of revenue |
| El Sauz | Willacy County, Texas (USA) | Apex | Wind | JERA Renewables | 300 | ERCOT | Construction | QI 2023 | 2.5% of revenue |

I. Royalties with variable rates adjust under certain conditions, guaranteeing a minumum return threshold under certain timelines, after which a lower royalty percentage is applied

^{2.} While Old Settler Wind Project, Cotton Plains Wind Project, and Phantom Solar Project are three separate projects, GBR's investment was under one agreement, which includes the three projects as a single portfolion of the project of the proje

^{3.} Commercial Operations Date (COD) estimated from public information, project originators, and project owners. Dates are subject to change.

Appendix B – Summary of Development Wind Properties Under Royalty

| Project ⁽³⁾ | Location | Renewable Energy | Project | Facility Size | Grid Connection | Status | Expected COD ⁽²⁾ | Royalty Basis |
|------------------------|----------|------------------|--------------------------------------|---------------|-----------------|-------------|-----------------------------|--------------------|
| | | Source | Owner/Developer | (MWac) | | | 1 | |
| Blackford Wind | Indiana | Wind | Leeward | 200 | PJM | Development | Q4 2023 | 3% of revenue |
| Water Valley Wind | Texas | Wind | Enbridge | 150 | ERCOT | Development | 2023 | 3% of revenue |
| Vermillion Grove Wind | Illinois | Wind | Enbridge | 255 | РЈМ | Development | 2023 | 3% of revenue |
| Canyon ⁽¹⁾ | Texas | Wind | TBA | 360 | ERCOT | Development | Q4 2024 | 2.5% sliding scale |
| Panther Grove 1 | Illinois | Wind | Copenhagen Infastructure Partners | 400 | РЈМ | Development | 2024 | 3% of revenue |
| Hoosier Line | Indiana | Wind | Leeward | 180 | РЈМ | Development | 2024 | 3% of revenue |
| Sugar Loaf Wind | Nebraska | Wind | Enbridge | 150 | SPP | Development | 2024 | 3% of revenue |
| Shannon Wind | Illinois | Wind | Enbridge | 150 | РЈМ | Development | 2024 | 3% of revenue |
| Wyoming I | Wymoning | Wind | Enbridge | 250 | WECC | Development | 2025 | 3% of revenue |
| Easter | Texas | Wind | Enbridge | 300 | SPP | Development | 2025 | 3% of revenue |
| Cone/Crosby III | Texas | Wind | Enbridge | 300 | SPP | Development | 2026 | 3% of revenue |

^{1.} Facility size may be completed in phases

^{2.} Expected COD based on Enbridge release on January 31, 2023

^{3.} Project seller: TGE

Appendix C – Summary of Development Solar Properties Under Royalty

| Project ⁽⁴⁾ | Location | Renewable Energy Source | Project Owner/Developer | Facility Size (MWac) | Grid Connection | Status | Expected COD ⁽²⁾ | Royalty Basis |
|----------------------------|--------------|----------------------------|----------------------------|----------------------|-----------------|-------------|-----------------------------|---|
| Lawrence Solar | Pennsylvania | Solar | Enbridge | 175 | РЈМ | Development | 2023 | 1.5% of revenue |
| Cadillac Solar - El Dorado | Texas | Solar | Enbridge | 400 | ERCOT | Development | 2023 | 1.5% of revenue |
| Blackford Solar | Indiana | Solar | Leeward | 150 | РЈМ | Development | QI 2024 | 1.5% of revenue |
| Cadillac Solar - Deville | Texas | Solar | Enbridge | 350 | ERCOT | Development | 2024 | 1.5% of revenue |
| Gloucester Solar | Virginia | Solar | Enbridge | 150 | РЈМ | Development | 2024 | 1.5% of revenue |
| Vermillion Solar | Illinois | Solar | Enbridge | 150 | РЈМ | Development | 2024 | 1.5% of revenue |
| Honey Creek ⁽¹⁾ | Indiana | Solar | Leeward | 400 | РЈМ | Development | 2024 | 1.5% of revenue |
| Flatland | Texas | Solar | TBA | 180 | ERCOT | Development | Q4 2025 | 1.5% of revenue equiv ⁽³⁾ |
| 3 Early Stage TGE Projects | Western USA | Solar | Enbridge | IOII | WECC | Development | TBA | 1.5% of revenue |

I. Facility size may be completed in phases

Disclosure with respect to the TGE investment, including: a minimum return threshold range; methodology to calculate the minimum return threshold; the development projects and the energy capacity relating thereto; a detailed description of the investment; an overview of the steps the Corporation has taken and the information the Corporation has reviewed and continues to review in order to evaluate the performance and risks of its material investments and a description as to how the Corporation has determined the fair value of these investments at each reporting date; and other material terms of the contract, can be found in the Corporation's long-form prospectus dated February 25, 2021.

^{2.} Expected COD based on Enbridge release on January 31, 2023

^{3.} Flatland payments fixed equivalent to 1.5%, see ARR press release dated June 29, 2022