



Canadian Natural

CANADIAN NATURAL RESOURCES LIMITED

**MANAGEMENT'S DISCUSSION & ANALYSIS
FOR THE THREE MONTHS AND YEAR ENDED DECEMBER 31, 2022**

MARCH 1, 2023

MANAGEMENT'S DISCUSSION AND ANALYSIS

ADVISORY

Special Note Regarding Forward-Looking Statements

Certain statements relating to Canadian Natural Resources Limited (the "Company") in this document or documents incorporated herein by reference constitute forward-looking statements or information (collectively referred to herein as "forward-looking statements") within the meaning of applicable securities legislation. Forward-looking statements can be identified by the words "believe", "anticipate", "expect", "plan", "estimate", "target", "continue", "could", "intend", "may", "potential", "predict", "should", "will", "objective", "project", "forecast", "goal", "guidance", "outlook", "effort", "seeks", "schedule", "proposed", "aspiration" or expressions of a similar nature suggesting future outcome or statements regarding an outlook. Disclosure related to expected future commodity pricing, forecast or anticipated production volumes, royalties, production expenses, capital expenditures, income tax expenses, and other targets provided throughout this Management's Discussion and Analysis ("MD&A") of the financial condition and results of operations of the Company, constitute forward-looking statements. Disclosure of plans relating to and expected results of existing and future developments, including, without limitation, those in relation to: the Company's assets at Horizon Oil Sands ("Horizon"), the Athabasca Oil Sands Project ("AOSP"), the Primrose thermal oil projects, the Pelican Lake water and polymer flood projects, the Kirby Thermal Oil Sands Project, the Jackfish Thermal Oil Sands Project and the North West Redwater bitumen upgrader and refinery; construction by third parties of new, or expansion of existing, pipeline capacity or other means of transportation of bitumen, crude oil, natural gas, natural gas liquids ("NGLs") or synthetic crude oil ("SCO") that the Company may be reliant upon to transport its products to market; the development and deployment of technology and technological innovations; the financial capacity of the Company to complete its growth projects and responsibly and sustainably grow in the long-term; and the impact of the Pathways Alliance ("Pathways") initiative and activities, government support for Pathways and the ability to achieve net zero emissions from oil production, also constitute forward-looking statements. These forward-looking statements are based on annual budgets and multi-year forecasts, and are reviewed and revised throughout the year as necessary in the context of targeted financial ratios, project returns, product pricing expectations and balance in project risk and time horizons. These statements are not guarantees of future performance and are subject to certain risks. The reader should not place undue reliance on these forward-looking statements as there can be no assurances that the plans, initiatives or expectations upon which they are based will occur.

In addition, statements relating to "reserves" are deemed to be forward-looking statements as they involve the implied assessment based on certain estimates and assumptions that the reserves described can be profitably produced in the future. There are numerous uncertainties inherent in estimating quantities of proved and proved plus probable crude oil, natural gas and NGLs reserves and in projecting future rates of production and the timing of development expenditures. The total amount or timing of actual future production may vary significantly from reserves and production estimates.

The forward-looking statements are based on current expectations, estimates and projections about the Company and the industry in which the Company operates, which speak only as of the earlier of the date such statements were made or as of the date of the report or document in which they are contained, and are subject to known and unknown risks and uncertainties that could cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Such risks and uncertainties include, among others: general economic and business conditions (including as a result of effects of the novel coronavirus ("COVID-19") pandemic, the actions of the Organization of the Petroleum Exporting Countries Plus ("OPEC+") and inflation) which may impact, among other things, demand and supply for and market prices of the Company's products, and the availability and cost of resources required by the Company's operations; volatility of and assumptions regarding crude oil, natural gas and NGLs prices including due to actions of OPEC+ taken in response to COVID-19 or otherwise; fluctuations in currency and interest rates; assumptions on which the Company's current targets are based; economic conditions in the countries and regions in which the Company conducts business; political uncertainty, including actions of or against terrorists, insurgent groups or other conflict including conflict between states; industry capacity; ability of the Company to implement its business strategy, including exploration and development activities; impact of competition; the Company's defense of lawsuits; availability and cost of seismic, drilling and other equipment; ability of the Company and its subsidiaries to complete capital programs; the Company's and its subsidiaries' ability to secure adequate transportation for its products; unexpected disruptions or delays in the mining, extracting or upgrading of the Company's bitumen products; potential delays or changes in plans with respect to exploration or development projects or capital expenditures; ability of the Company to attract the necessary labour required to build, maintain, and operate its thermal and oil sands mining projects; operating hazards and other difficulties inherent in the exploration for and production and sale of crude oil and natural gas and in the mining, extracting or upgrading of the Company's bitumen products; availability and cost of financing; the Company's and its subsidiaries' success of exploration and development activities and its ability to replace and expand crude oil and natural gas reserves; the Company's ability to meet its targeted production levels; timing and success of integrating the business and operations of acquired companies and assets; production levels; imprecision of reserves estimates and estimates of recoverable quantities of crude oil, natural gas and NGLs not currently classified as proved; actions by governmental authorities; government regulations and the expenditures required to comply with them (especially safety and environmental laws and regulations and the impact of climate change initiatives on capital expenditures and production expenses); asset retirement obligations; the sufficiency of the Company's liquidity to support its growth strategy and to sustain its operations in the short, medium, and long-term; the strength of the Company's balance sheet; the flexibility of the Company's capital structure; the adequacy of the Company's provision for taxes; and other circumstances affecting revenues and expenses.

The Company's operations have been, and in the future may be, affected by political developments and by national, federal, provincial, state and local laws and regulations such as restrictions on production, changes in taxes, royalties and other amounts payable to governments or governmental agencies, price or gathering rate controls and environmental protection regulations. Should one or more of these risks or uncertainties materialize, or should any of the Company's assumptions prove incorrect, actual results may vary in material respects from those projected in the forward-looking statements. The impact of any one factor on a particular forward-looking statement is not determinable with certainty as such factors are dependent upon other factors, and the Company's course of action would depend upon its assessment of the future considering all information then available.

Readers are cautioned that the foregoing list of factors is not exhaustive. Unpredictable or unknown factors not discussed in this MD&A could also have adverse effects on forward-looking statements. Although the Company believes that the expectations conveyed by the forward-looking statements are reasonable based on information available to it on the date such forward-looking statements are made, no assurances can be given as to future results, levels of activity and achievements. All subsequent forward-looking statements, whether written or oral, attributable to the Company or persons acting on its behalf are expressly qualified in their entirety by these cautionary statements. Except as required by applicable law, the Company assumes no obligation to update forward-looking statements in this MD&A, whether as a result of new information, future events or other factors, or the foregoing factors affecting this information, should circumstances or the Company's estimates or opinions change.

Special Note Regarding Non-GAAP and Other Financial Measures

This MD&A includes references to non-GAAP measures, which include non-GAAP and other financial measures as defined in National Instrument 52-112 – Non-GAAP and Other Financial Measures Disclosure ("NI 52-112"). Non-GAAP measures are used by the Company to evaluate its financial performance, financial position or cash flow. Descriptions of the Company's non-GAAP and other financial measures included in this MD&A, and reconciliations to the most directly comparable GAAP measure, as applicable, are provided in the "Non-GAAP and Other Financial Measures" section of this MD&A.

Special Note Regarding Currency, Financial Information and Production

This MD&A should be read in conjunction with the Company's unaudited interim consolidated financial statements (the "financial statements") for the three months and year ended December 31, 2022 and the Company's MD&A and audited consolidated financial statements for the year ended December 31, 2021. All dollar amounts are referenced in millions of Canadian dollars, except where noted otherwise. The Company's financial statements for the three months and year ended December 31, 2022 and this MD&A have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB").

Production volumes and per unit statistics are presented throughout this MD&A on a "before royalties" or "company gross" basis, and realized prices are net of blending and feedstock costs and exclude the effect of risk management activities. In addition, reference is made to crude oil and natural gas in common units called barrel of oil equivalent ("BOE"). A BOE is derived by converting six thousand cubic feet ("Mcf") of natural gas to one barrel ("bbl") of crude oil (6 Mcf:1 bbl). This conversion may be misleading, particularly if used in isolation, since the 6 Mcf:1 bbl ratio is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead. In comparing the value ratio using current crude oil prices relative to natural gas prices, the 6 Mcf:1 bbl conversion ratio may be misleading as an indication of value. In addition, for the purposes of this MD&A, crude oil is defined to include the following commodities: light and medium crude oil, primary heavy crude oil, Pelican Lake heavy crude oil, bitumen (thermal oil), and SCO. Production on an "after royalties" or "company net" basis is also presented for information purposes only.

The following discussion and analysis refers primarily to the Company's financial results for the three months and year ended December 31, 2022 in relation to the comparable periods in 2021 and the third quarter of 2022. In addition, this MD&A details the Company's targeted capital program for 2023. The accompanying tables form an integral part of this MD&A. Additional information relating to the Company, including its Annual Information Form for the year ended December 31, 2021, is available on SEDAR at www.sedar.com, and on EDGAR at www.sec.gov. Information on the Company's website does not form part of and is not incorporated by reference in this MD&A. This MD&A is dated March 1, 2023.

FINANCIAL HIGHLIGHTS

(\$ millions, except per common share amounts)	Three Months Ended			Year Ended	
	Dec 31 2022	Sep 30 2022	Dec 31 2021	Dec 31 2022	Dec 31 2021
Product sales ⁽¹⁾	\$ 11,012	\$ 12,574	\$ 10,190	\$ 49,530	\$ 32,854
Crude oil and NGLs	\$ 9,508	\$ 11,001	\$ 8,979	\$ 43,009	\$ 29,256
Natural gas	\$ 1,287	\$ 1,342	\$ 958	\$ 5,236	\$ 2,716
Net earnings	\$ 1,520	\$ 2,814	\$ 2,534	\$ 10,937	\$ 7,664
Per common share – basic	\$ 1.37	\$ 2.52	\$ 2.16	\$ 9.64	\$ 6.49
– diluted	\$ 1.36	\$ 2.49	\$ 2.14	\$ 9.52	\$ 6.46
Adjusted net earnings from operations ⁽²⁾	\$ 2,194	\$ 3,493	\$ 2,626	\$ 12,863	\$ 7,420
Per common share – basic ⁽³⁾	\$ 1.98	\$ 3.12	\$ 2.24	\$ 11.33	\$ 6.28
– diluted ⁽³⁾	\$ 1.96	\$ 3.09	\$ 2.21	\$ 11.19	\$ 6.25
Cash flows from operating activities	\$ 4,544	\$ 6,098	\$ 4,712	\$ 19,391	\$ 14,478
Adjusted funds flow ⁽²⁾	\$ 4,176	\$ 5,208	\$ 4,338	\$ 19,791	\$ 13,733
Per common share – basic ⁽³⁾	\$ 3.78	\$ 4.66	\$ 3.69	\$ 17.44	\$ 11.63
– diluted ⁽³⁾	\$ 3.73	\$ 4.60	\$ 3.66	\$ 17.22	\$ 11.57
Cash flows used in investing activities	\$ 1,262	\$ 1,129	\$ 1,615	\$ 4,987	\$ 3,703
Net capital expenditures ⁽²⁾	\$ 1,317	\$ 1,249	\$ 1,804	\$ 5,471	\$ 4,908

(1) Further details related to product sales are disclosed in note 18 to the financial statements.

(2) Non-GAAP Financial Measure. Refer to the "Non-GAAP and Other Financial Measures" section of this MD&A.

(3) Non-GAAP Ratio. Refer to the "Non-GAAP and Other Financial Measures" section of this MD&A.

SUMMARY OF FINANCIAL HIGHLIGHTS

Consolidated Net Earnings and Adjusted Net Earnings from Operations

Net earnings for the year ended December 31, 2022 were \$10,937 million compared with \$7,664 million for the year ended December 31, 2021. Net earnings for the year ended December 31, 2022 included non-operating items, net of tax, of \$1,926 million compared with \$244 million for the year ended December 31, 2021 related to the effects of share-based compensation, risk management activities, fluctuations in foreign exchange rates, the impact of realized foreign exchange on the settlement of the cross currency swap and repayment of US dollar debt securities, the gain on acquisitions, the gain from investments, a recoverability charge relating to the de-booking of reserves at the Ninian field in the North Sea, and government grant income under the provincial well-site rehabilitation programs. Excluding these items, adjusted net earnings from operations for the year ended December 31, 2022 were \$12,863 million compared with \$7,420 million for the year ended December 31, 2021.

Net earnings for the fourth quarter of 2022 were \$1,520 million compared with \$2,534 million for the fourth quarter of 2021 and \$2,814 million for the third quarter of 2022. Net earnings for the fourth quarter of 2022 included non-operating items, net of tax, of \$674 million compared with \$92 million for the fourth quarter of 2021 and \$679 million for the third quarter of 2022 related to the effects of share-based compensation, risk management activities, fluctuations in foreign exchange rates, the impact of realized foreign exchange on the repayment of US dollar debt securities, the gain from investments, a recoverability charge relating to the de-booking of reserves at the Ninian field in the North Sea, and government grant income under the provincial well-site rehabilitation programs. Excluding these items, adjusted net earnings from operations for the fourth quarter of 2022 were \$2,194 million compared with \$2,626 million for the fourth quarter of 2021 and \$3,493 million for the third quarter of 2022.

The increase in net earnings and adjusted net earnings from operations for the year ended December 31, 2022 from the year ended December 31, 2021 primarily reflected:

- higher crude oil and NGLs netbacks⁽¹⁾ and crude oil and NGLs sales volumes in the North America segment;
- higher natural gas netbacks and natural gas sales volumes in the Exploration and Production segments; and
- higher realized SCO sales price⁽¹⁾ in the Oil Sands Mining and Upgrading segment;

partially offset by:

- lower SCO sales volumes in the Oil Sands Mining and Upgrading segment.

The decrease in net earnings and adjusted net earnings from operations for the fourth quarter of 2022 from the fourth quarter of 2021 primarily reflected:

- lower crude oil and NGLs netbacks in the North America segment; and
- lower SCO sales volumes in the Oil Sands Mining and Upgrading segment;

partially offset by:

- higher natural gas netbacks and natural gas sales volumes in the Exploration and Production segments.

The decrease in net earnings and adjusted net earnings from operations for the fourth quarter of 2022 from the third quarter of 2022 primarily reflected:

- lower crude oil and NGLs netbacks in the North America segment;
- lower natural gas netbacks in the Exploration and Production segments; and
- lower realized SCO sales price and sales volumes in the Oil Sands Mining and Upgrading segment;

partially offset by:

- higher crude oil and NGLs sales volumes in the Exploration and Production segments.

The impacts of share-based compensation, risk management activities, fluctuations in foreign exchange rates, the gain on acquisitions, income from North West Redwater Partnership ("NWRP"), and the gain from investments, also contributed to the movements in net earnings. These items are discussed in detail in the relevant sections of this MD&A.

Prevailing regulatory and economic conditions in 2022 and the increasingly challenging commercial outlook in the United Kingdom, including the impact of higher natural gas and carbon costs, led the Company to assess the viability of its North Sea operations. Following a detailed review of its development plans, the Company determined that the Ninian field is no longer economic, de-booked associated crude oil reserves as at December 31, 2022, and is accelerating abandonment. As a result, the Company completed a recoverability assessment of its assets in the North Sea, and recognized a non-cash charge of \$651 million (after-tax) related to the Ninian field property, plant and equipment, comprised of a recoverability charge of \$1,620 million recognized in depletion, depreciation and amortization, net of deferred tax recoveries of \$969 million.

Cash Flows from Operating Activities and Adjusted Funds Flow

Cash flows from operating activities for the year ended December 31, 2022 were \$19,391 million compared with \$14,478 million for the year ended December 31, 2021. Cash flows from operating activities for the fourth quarter of 2022 were \$4,544 million compared with \$4,712 million for the fourth quarter of 2021 and \$6,098 million for the third quarter of 2022. The fluctuations in cash flows from operating activities from the comparable periods were primarily due to the factors previously noted related to the fluctuations in adjusted net earnings from operations, together with the impact of net changes in non-cash working capital.

Adjusted funds flow for the year ended December 31, 2022 was \$19,791 million compared with \$13,733 million for the year ended December 31, 2021. Adjusted funds flow for the fourth quarter of 2022 was \$4,176 million compared with \$4,338 million for the fourth quarter of 2021 and \$5,208 million for the third quarter of 2022. The fluctuations in adjusted funds flow from the comparable periods were primarily due to the factors noted above related to the fluctuations in cash flows from operating activities, excluding the impact of the net change in non-cash working capital, abandonment expenditures, government grant income under the provincial well-site rehabilitation programs, and movements in other long-term assets, including the unamortized cost of the share bonus program.

(1) Non-GAAP Ratio. Refer to the "Non-GAAP and Other Financial Measures" section of this MD&A.

Production Volumes

Crude oil and NGLs production before royalties for the fourth quarter of 2022 of 942,258 bbl/d decreased 6% from 1,004,425 bbl/d for the fourth quarter of 2021 and decreased 4% from 983,678 bbl/d for the third quarter of 2022. Natural gas production before royalties for the fourth quarter of 2022 increased 14% to 2,115 MMcf/d from 1,857 MMcf/d for the fourth quarter of 2021 and was comparable with 2,132 MMcf/d for the third quarter of 2022. Total production before royalties for the fourth quarter of 2022 of 1,294,679 BOE/d was comparable with 1,313,900 BOE/d for the fourth quarter of 2021 and decreased 3% from 1,338,940 BOE/d for the third quarter of 2022. Crude oil and NGLs and natural gas production volumes are discussed in detail in the "Daily Production, before royalties" section of this MD&A.

Product Prices

In the Company's Exploration and Production segments, realized crude oil and NGLs prices⁽¹⁾ averaged \$69.34 per bbl for the fourth quarter of 2022, a decrease of 5% compared with \$72.81 per bbl for the fourth quarter of 2021, and a decrease of 18% from \$84.91 per bbl for the third quarter of 2022. The realized natural gas price increased 19% to average \$6.39 per Mcf for the fourth quarter of 2022, from \$5.35 per Mcf for the fourth quarter of 2021, and decreased 3% from \$6.57 per Mcf for the third quarter of 2022. In the Oil Sands Mining and Upgrading segment, the Company's realized SCO sales price increased 17% to average \$103.79 per bbl for the fourth quarter of 2022 from \$88.48 per bbl for the fourth quarter of 2021, and decreased 14% from \$120.91 per bbl for the third quarter of 2022. The Company's realized pricing reflected prevailing benchmark pricing. Crude oil and NGLs and natural gas prices are discussed in detail in the "Business Environment", "Realized Product Prices – Exploration and Production", and the "Oil Sands Mining and Upgrading" sections of this MD&A.

Production Expense

In the Company's Exploration and Production segments, crude oil and NGLs production expense⁽²⁾ averaged \$20.37 per bbl for the fourth quarter of 2022, an increase of 30% from \$15.70 per bbl for the fourth quarter of 2021, and an increase of 21% from \$16.86 per bbl for the third quarter of 2022. Natural gas production expense⁽²⁾ averaged \$1.25 per Mcf for the fourth quarter of 2022, an increase of 12% from \$1.12 per Mcf for the fourth quarter of 2021, and an increase of 8% from \$1.16 for the third quarter of 2022. In the Oil Sands Mining and Upgrading segment, production expense⁽²⁾ averaged \$25.48 per bbl for the fourth quarter of 2022, an increase of 30% from \$19.55 per bbl for the fourth quarter of 2021, and an increase of 14% from \$22.35 per bbl for the third quarter of 2022. Crude oil and NGLs and natural gas production expense is discussed in detail in the "Production Expense – Exploration and Production" and the "Oil Sands Mining and Upgrading" sections of this MD&A.

(1) Non-GAAP Ratio. Refer to the "Non-GAAP and Other Financial Measures" section of this MD&A.

(2) Calculated as respective production expense divided by respective sales volumes.

SUMMARY OF QUARTERLY FINANCIAL RESULTS

The following is a summary of the Company's quarterly financial results for the eight most recently completed quarters:

(\$ millions, except per common share amounts)	Dec 31 2022	Sep 30 2022	Jun 30 2022	Mar 31 2022
Product sales ⁽¹⁾	\$ 11,012	\$ 12,574	\$ 13,812	\$ 12,132
Crude oil and NGLs	\$ 9,508	\$ 11,001	\$ 11,727	\$ 10,773
Natural gas	\$ 1,287	\$ 1,342	\$ 1,605	\$ 1,002
Net earnings	\$ 1,520	\$ 2,814	\$ 3,502	\$ 3,101
Net earnings per common share				
– basic	\$ 1.37	\$ 2.52	\$ 3.04	\$ 2.66
– diluted	\$ 1.36	\$ 2.49	\$ 3.00	\$ 2.63
(\$ millions, except per common share amounts)	Dec 31 2021	Sep 30 2021	Jun 30 2021	Mar 31 2021
Product sales ⁽¹⁾	\$ 10,190	\$ 8,521	\$ 7,124	\$ 7,019
Crude oil and NGLs	\$ 8,979	\$ 7,607	\$ 6,382	\$ 6,288
Natural gas	\$ 958	\$ 694	\$ 509	\$ 555
Net earnings	\$ 2,534	\$ 2,202	\$ 1,551	\$ 1,377
Net earnings per common share				
– basic	\$ 2.16	\$ 1.87	\$ 1.31	\$ 1.16
– diluted	\$ 2.14	\$ 1.86	\$ 1.30	\$ 1.16

(1) Further details related to product sales for the three months ended December 31, 2022 and 2021 are disclosed in note 18 to the financial statements.

Volatility in the quarterly net earnings over the eight most recently completed quarters was primarily due to:

- **Crude oil pricing** – Fluctuating global supply/demand including crude oil production levels from OPEC+ and its impact on world supply; the impact of geopolitical and market uncertainties, including those due to COVID-19 and in connection with governmental responses to COVID-19 and the impact of the Russian invasion of Ukraine, on worldwide benchmark pricing; the impact of shale oil production in North America; the impact of the Western Canadian Select ("WCS") Heavy Differential from the West Texas Intermediate reference location at Cushing, Oklahoma ("WTI") in North America; and the impact of the differential between WTI and Dated Brent ("Brent") benchmark pricing in the International segments.
- **Natural gas pricing** – The impact of fluctuations in both the demand for natural gas and inventory storage levels, third-party pipeline maintenance and outages, the impact of geopolitical and market uncertainties, the impact of seasonal conditions, and the impact of shale gas production in the US.
- **Crude oil and NGLs sales volumes** – Fluctuations in production from the Kirby and Jackfish Thermal Oil Sands Projects, fluctuations in production due to the cyclic nature of the Primrose thermal oil projects, fluctuations in the Company's drilling program in North America and the International segments, natural decline rates, the impact of turnarounds and pitstops in the Oil Sands Mining and Upgrading segment, and the impact of shut-in production due to lower demand during COVID-19. Sales volumes also reflected fluctuations due to timing of liftings and maintenance activities in the International segments.
- **Natural gas sales volumes** – Fluctuations in production due to the Company's drilling program in North America and the International segments, natural decline rates, the temporary shutdown and subsequent reinstatement of the Pine River Gas Plant during 2021, and the impact and timing of acquisitions.
- **Production expense** – Fluctuations primarily due to the impacts of the demand and cost for services, fluctuations in product mix and production volumes, seasonal conditions, increased carbon tax and energy costs, inflationary cost pressures, cost optimizations across all segments, the impact and timing of acquisitions, turnarounds and pitstops in the Oil Sands Mining and Upgrading segment, and maintenance activities in the International segments.
- **Depletion, depreciation and amortization expense** – Fluctuations due to changes in sales volumes including the impact and timing of acquisitions and dispositions, proved reserves, asset retirement obligations, finding and development costs associated with crude oil and natural gas exploration, estimated future costs to develop the Company's proved undeveloped reserves, fluctuations in International sales volumes subject to higher depletion rates, the impact of turnarounds and pitstops in the Oil Sands Mining and Upgrading segment, and a recoverability charge relating to the de-booking of reserves at the Ninian field in the North Sea.
- **Share-based compensation** – Fluctuations due to the measurement of fair market value of the Company's share-based compensation liability.
- **Risk management** – Fluctuations due to the recognition of gains and losses from the mark-to-market and subsequent settlement of the Company's risk management activities.
- **Interest expense** – Fluctuations due to changing long-term debt levels, and the impact of movements in benchmark interest rates on outstanding floating rate long-term debt and accrued interest on the deferred Petroleum Revenue Tax ("PRT") recovery.
- **Foreign exchange** – Fluctuations in the Canadian dollar relative to the US dollar, which impact the realized price the Company receives for its crude oil and natural gas sales, as sales prices are based predominantly on US dollar denominated benchmarks. Fluctuations in realized and unrealized foreign exchange gains and losses were also recorded with respect to US dollar denominated debt, partially offset by the impact of any cross currency swap hedges outstanding.
- **Gain on acquisitions, gain from investments and income from NWRP** – Fluctuations due to the recognition of gains on acquisitions, gain from the investments in PrairieSky Royalty Ltd. and Inter Pipeline Ltd. shares, and the distribution from NWRP in the second quarter of 2021.

BUSINESS ENVIRONMENT

Global benchmark crude oil prices increased significantly in the first half of 2022, primarily in response to the impact of the Russian invasion of Ukraine and the OPEC+ decision to adhere to previously agreed upon production cut agreements, together with the improvement of global economic conditions and outlook due to the lessening of COVID-19 restrictions. In the second half of 2022, global benchmark crude oil prices decreased from levels in the first half of 2022 due to demand concerns related to the temporary reinstatement of COVID-19 restrictions in China, the impact of rising interest rates and concerns of a global recession.

Liquidity

As at December 31, 2022, the Company had undrawn revolving bank credit facilities of \$5,520 million. Including cash and cash equivalents and short-term investments, the Company had approximately \$6,931 million in liquidity⁽¹⁾. The Company also has certain other dedicated credit facilities supporting letters of credit.

The Company remains committed to maintaining a strong balance sheet, adequate available liquidity and a flexible capital structure. Refer to the "Liquidity and Capital Resources" section of this MD&A for further details.

Capital Spending

Safe, reliable, effective and efficient operations continue to be a focus for the Company. On November 30, 2022, the Company announced its 2023 base capital budget⁽²⁾ targeted at approximately \$4,190 million. The budget also includes incremental strategic growth capital of approximately \$1,020 million that targets to add additional production and capacity growth beyond 2023 in the Company's Exploration and Production segments, and long life low decline thermal in situ and Oil Sands Mining and Upgrading assets. Production for 2023 is targeted between 1,330,000 BOE/d and 1,374,000 BOE/d. Annual budgets are developed and scrutinized throughout the year and can be changed, if necessary, in the context of price volatility, project returns and the balancing of project risks and time horizons. The 2023 capital budget constitutes forward-looking statements. Refer to the "Advisory" section of this MD&A for further details on forward-looking statements.

Risks and Uncertainties

COVID-19, including variants of concern, continues to have the potential to further disrupt the Company's operations, projects, and financial condition, through the disruption of the local or global supply chain and transportation services, or the loss of manpower, any of which may require the Company to temporarily reduce or shut down its operations depending on their extent and severity. The global economy, including Canada, is experiencing higher and more persistent inflation, in part due to the Russian invasion of Ukraine and ongoing supply constraints due to the impacts of COVID-19. As a result of these conditions, the Company has experienced and may continue to experience higher than normal fluctuations in commodity prices, and may experience inflationary pressures on operating and capital expenditures.

Benchmark Commodity Prices

(Average for the period)	Three Months Ended			Year Ended	
	Dec 31 2022	Sep 30 2022	Dec 31 2021	Dec 31 2022	Dec 31 2021
WTI benchmark price (US\$/bbl)	\$ 82.62	\$ 91.64	\$ 77.17	\$ 94.23	\$ 67.96
Dated Brent benchmark price (US\$/bbl)	\$ 88.15	\$ 99.34	\$ 79.55	\$ 99.80	\$ 70.49
WCS Heavy Differential from WTI (US\$/bbl)	\$ 25.65	\$ 19.87	\$ 14.65	\$ 18.26	\$ 13.04
SCO price (US\$/bbl)	\$ 86.78	\$ 100.51	\$ 75.39	\$ 98.66	\$ 66.36
Condensate benchmark price (US\$/bbl)	\$ 83.33	\$ 87.15	\$ 79.10	\$ 93.69	\$ 68.24
Condensate Differential from WTI (US\$/bbl)	\$ (0.71)	\$ 4.49	\$ (1.93)	\$ 0.54	\$ (0.28)
NYMEX benchmark price (US\$/MMBtu)	\$ 6.27	\$ 8.18	\$ 5.83	\$ 6.64	\$ 3.85
AECO benchmark price (C\$/GJ)	\$ 5.29	\$ 5.51	\$ 4.67	\$ 5.28	\$ 3.38
US/Canadian dollar average exchange rate (US\$)	\$ 0.7366	\$ 0.7660	\$ 0.7937	\$ 0.7686	\$ 0.7979

(1) Non-GAAP Financial Measure. Refer to the "Non-GAAP and Other Financial Measures" section of this MD&A.

(2) Forward-looking non-GAAP Financial Measure. The capital budget is based on net capital expenditures (Non-GAAP Financial Measure) and excludes net acquisition costs. Refer to the "Non-GAAP and Other Financial Measures" section of this MD&A for more details on Net Capital Expenditures.

Substantially all of the Company's production is sold based on US dollar benchmark pricing. Specifically, crude oil is marketed based on WTI and Brent indices. Canadian natural gas pricing is primarily based on AECO reference pricing, which is derived from the NYMEX reference pricing and adjusted for its basis or location differential to the NYMEX delivery point at Henry Hub. The Company's realized prices are directly impacted by fluctuations in foreign exchange rates. Product revenue continued to be impacted by the volatility of the Canadian dollar as the Canadian dollar sales price the Company received for its crude oil and natural gas sales is based on US dollar denominated benchmarks.

Crude oil sales contracts in the North America segment are typically based on WTI benchmark pricing. WTI averaged US\$94.23 per bbl for the year ended December 31, 2022, an increase of 39% from US\$67.96 per bbl for the year ended December 31, 2021. WTI averaged US\$82.62 per bbl for the fourth quarter of 2022, an increase of 7% from US\$77.17 per bbl for the fourth quarter of 2021, and a decrease of 10% from US\$91.64 per bbl for the third quarter of 2022.

Crude oil sales contracts for the Company's International segments are typically based on Brent pricing, which is representative of international markets and overall global supply and demand. Brent averaged US\$99.80 per bbl for the year ended December 31, 2022, an increase of 42% from US\$70.49 per bbl for the year ended December 31, 2021. Brent averaged US\$88.15 per bbl for the fourth quarter of 2022, an increase of 11% from US\$79.55 per bbl for the fourth quarter of 2021, and a decrease of 11% from US\$99.34 per bbl for the third quarter of 2022.

The increase in WTI and Brent pricing for the three months and year ended December 31, 2022 from the comparable periods in 2021 primarily reflected the impact of the Russian invasion of Ukraine, the OPEC+ decision to adhere to the previously agreed upon production cut agreements, and an increase in global demand for crude oil due to improved economic conditions as a result of the lessening of earlier COVID-19 restrictions. The decrease in WTI and Brent pricing for the fourth quarter of 2022 from the third quarter of 2022 primarily reflected demand concerns related to temporary reinstatement of COVID-19 restrictions in China, rising interest rates and concerns of a global recession.

The WCS Heavy Differential averaged US\$18.26 per bbl for the year ended December 31, 2022, compared with US\$13.04 per bbl for the year ended December 31, 2021. The WCS Heavy Differential averaged US\$25.65 per bbl for the fourth quarter of 2022, compared with US\$14.65 per bbl for the fourth quarter of 2021, and US\$19.87 per bbl for the third quarter of 2022. The widening of the WCS Heavy Differential for the three months and year ended December 31, 2022 from the comparable periods in 2021 primarily reflected weakening US Gulf Coast pricing due to increased sour supply from the US Strategic Petroleum Reserve and lower Russian pricing as a result of the Ukraine invasion. The widening of the WCS Heavy Differential for the fourth quarter of 2022 from the third quarter of 2022 primarily reflected lower seasonal demand, unplanned refinery maintenance in the US Midwest and lower fuel oil pricing in the US Gulf Coast.

The SCO price averaged US\$98.66 per bbl for the year ended December 31, 2022, an increase of 49% from US\$66.36 per bbl for the year ended December 31, 2021. The SCO price averaged US\$86.78 per bbl for the fourth quarter of 2022, an increase of 15% from US\$75.39 per bbl for the fourth quarter of 2021, and a decrease of 14% from US\$100.51 per bbl for the third quarter of 2022. The increase in SCO pricing for the three months and year ended December 31, 2022 from the comparable periods in 2021 primarily reflected the increase in WTI benchmark pricing. The decrease in SCO pricing for the fourth quarter of 2022 from the third quarter of 2022 primarily reflected the decrease in WTI benchmark pricing.

NYMEX natural gas prices averaged US\$6.64 per MMBtu for the year ended December 31, 2022, an increase of 72% from US\$3.85 per MMBtu for the year ended December 31, 2021. NYMEX natural gas prices averaged US\$6.27 per MMBtu for the fourth quarter of 2022, an increase of 8% from US\$5.83 per MMBtu for the fourth quarter of 2021, and a decrease of 23% from US\$8.18 per MMBtu for the third quarter of 2022. The increase in NYMEX natural gas prices for the three months and year ended December 31, 2022 from the comparable periods in 2021 primarily reflected increased global commodity prices due to lower European inventories and the Russian invasion of Ukraine. The decrease in NYMEX natural gas prices for the fourth quarter of 2022 from the third quarter of 2022 primarily reflected lower than expected demand due to the impact of warmer seasonal weather conditions and strong production volumes, combined with further delays in the restart of the Freeport LNG facility.

AECO natural gas prices averaged \$5.28 per GJ for the year ended December 31, 2022, an increase of 56% from \$3.38 per GJ for the year ended December 31, 2021. AECO natural gas prices averaged \$5.29 per GJ for the fourth quarter of 2022, an increase of 13% from \$4.67 per GJ for the fourth quarter of 2021, and a decrease of 4% from \$5.51 per GJ for the third quarter of 2022. The increase in AECO natural gas prices for the three months and year ended December 31, 2022 from the comparable periods in 2021 primarily reflected lower storage levels and increased NYMEX benchmark pricing. The decrease in AECO natural gas prices for the fourth quarter of 2022 from the third quarter of 2022 primarily reflected increased production levels and decreased NYMEX benchmark pricing.

DAILY PRODUCTION, before royalties

	Three Months Ended			Year Ended	
	Dec 31 2022	Sep 30 2022	Dec 31 2021	Dec 31 2022	Dec 31 2021
Crude oil and NGLs (bbl/d)					
North America – Exploration and Production	486,559	471,632	478,738	479,971	472,621
North America – Oil Sands Mining and Upgrading ⁽¹⁾	428,784	487,553	493,406	425,945	448,133
International – Exploration and Production					
North Sea	14,006	10,855	17,860	12,890	17,633
Offshore Africa	12,909	13,638	14,421	14,343	14,017
Total International ⁽²⁾	26,915	24,493	32,281	27,233	31,650
Total Crude oil and NGLs	942,258	983,678	1,004,425	933,149	952,404
Natural gas (MMcf/d) ⁽³⁾					
North America	2,105	2,117	1,841	2,075	1,680
International					
North Sea	3	1	3	2	3
Offshore Africa	7	14	13	13	12
Total International	10	15	16	15	15
Total Natural gas	2,115	2,132	1,857	2,090	1,695
Total Barrels of oil equivalent (BOE/d)	1,294,679	1,338,940	1,313,900	1,281,434	1,234,906
Product mix					
Light and medium crude oil and NGLs	11%	10%	10%	11%	10%
Pelican Lake heavy crude oil	4%	4%	4%	4%	5%
Primary heavy crude oil	5%	5%	5%	5%	5%
Bitumen (thermal oil)	20%	18%	20%	20%	21%
Synthetic crude oil ⁽¹⁾	33%	36%	38%	33%	36%
Natural gas	27%	27%	23%	27%	23%
Percentage of gross revenue ^{(1) (4)} (excluding Midstream and Refining revenue)					
Crude oil and NGLs	87%	88%	90%	88%	91%
Natural gas	13%	12%	10%	12%	9%

(1) SCO production before royalties excludes SCO consumed internally as diesel.

(2) "International" includes North Sea and Offshore Africa Exploration and Production segments in all instances used.

(3) Natural gas production volumes approximate sales volumes.

(4) Net of blending costs and excluding risk management activities.

DAILY PRODUCTION, net of royalties

	Three Months Ended			Year Ended	
	Dec 31 2022	Sep 30 2022	Dec 31 2021	Dec 31 2022	Dec 31 2021
Crude oil and NGLs (bbl/d)					
North America – Exploration and Production	381,546	361,987	403,305	374,089	404,637
North America – Oil Sands Mining and Upgrading	372,894	391,165	440,492	351,740	410,385
International – Exploration and Production					
North Sea	13,985	10,776	17,825	12,849	17,588
Offshore Africa	11,153	11,965	13,638	12,972	13,354
Total International	25,138	22,741	31,463	25,821	30,942
Total Crude oil and NGLs	779,578	775,893	875,260	751,650	845,964
Natural gas (MMcf/d)					
North America	1,937	1,920	1,721	1,885	1,593
International					
North Sea	3	1	3	2	3
Offshore Africa	6	12	12	11	11
Total International	9	13	15	13	14
Total Natural gas	1,946	1,933	1,736	1,898	1,607
Total Barrels of oil equivalent (BOE/d)	1,103,833	1,098,001	1,164,613	1,068,063	1,113,878

The Company's business approach is to maintain large project inventories and production diversification among each of the commodities it produces; namely light and medium crude oil and NGLs, primary heavy crude oil, Pelican Lake heavy crude oil, bitumen (thermal oil), SCO and natural gas.

Crude oil and NGLs production before royalties for the year ended December 31, 2022 averaged 933,149 bbl/d, comparable with 952,404 bbl/d for the year ended December 31, 2021. Crude oil and NGLs production for the fourth quarter of 2022 averaged 942,258 bbl/d, a decrease of 6% from 1,004,425 bbl/d for the fourth quarter of 2021, and a decrease of 4% from 983,678 bbl/d for the third quarter of 2022. The decrease in crude oil and NGLs production for the fourth quarter of 2022 from the comparable periods primarily reflected an unplanned outage at Horizon in October and the impact of extreme cold weather conditions on the Oil Sands Mining and Upgrading and the North America Exploration and Production segments late in the fourth quarter of 2022.

Annual crude oil and NGLs production for 2022 was slightly below the Company's previously issued production forecast of 943,000 bbl/d. Annual crude oil and NGLs production for 2023 is targeted to average between 969,000 bbl/d and 1,001,000 bbl/d. Production targets constitute forward-looking statements. Refer to the "Advisory" section of this MD&A for further details on forward-looking statements.

Natural gas production before royalties for the year ended December 31, 2022 of 2,090 MMcf/d increased 23% from 1,695 MMcf/d for the year ended December 31, 2021. Natural gas production for the fourth quarter of 2022 of 2,115 MMcf/d increased 14% from 1,857 MMcf/d for the fourth quarter of 2021, and was comparable with 2,132 MMcf/d for the third quarter of 2022. The increase in natural gas production for the three months and year ended December 31, 2022 from the comparable periods in 2021 primarily reflected strong drilling results and the acquisition completed in the fourth quarter of 2021, partially offset by natural field declines and the impact of extreme cold weather conditions late in the fourth quarter of 2022.

Annual natural gas production for 2022 was slightly below the Company's previously issued production forecast of 2,112 MMcf/d. Annual natural gas production for 2023 is targeted to average between 2,170 MMcf/d and 2,242 MMcf/d. Production targets constitute forward-looking statements. Refer to the "Advisory" section of this MD&A for further details on forward-looking statements.

North America – Exploration and Production

North America crude oil and NGLs production before royalties for the year ended December 31, 2022 averaged 479,971 bbl/d, comparable with 472,621 bbl/d for the year ended December 31, 2021. North America crude oil and NGLs production for the fourth quarter of 2022 of 486,559 bbl/d was comparable with 478,738 bbl/d for the fourth quarter of 2021 and increased 3% from 471,632 bbl/d for the third quarter of 2022. The increase in crude oil and NGLs production for the fourth quarter of 2022 from the third quarter of 2022 primarily reflected higher thermal oil production and added production from the conventional drilling program, partially offset by natural field declines and the impact of extreme cold weather conditions late in the fourth quarter of 2022.

The Company's thermal in situ assets continued to demonstrate long life production before royalties, averaging 253,188 bbl/d for the fourth quarter of 2022, a decrease of 4% from 263,110 bbl/d for the fourth quarter of 2021, and an increase of 4% from 243,393 bbl/d for the third quarter of 2022, primarily reflecting strong production at Jackfish following planned maintenance activities completed during the third quarter of 2022, and partially offset by natural field declines.

Pelican Lake heavy crude oil production before royalties for the fourth quarter of 2022 averaged 48,221 bbl/d, a decrease of 9% from 52,963 bbl/d for the fourth quarter of 2021, and a decrease of 4% from 50,051 bbl/d for the third quarter of 2022, primarily reflecting a temporary injection reduction in the fourth quarter of 2022, together with natural field declines.

Natural gas production before royalties for the year ended December 31, 2022 averaged 2,075 MMcf/d, an increase of 24% from 1,680 MMcf/d for the year ended December 31, 2021. Natural gas production for the fourth quarter of 2022 averaged 2,105 MMcf/d, an increase of 14% from 1,841 MMcf/d for the fourth quarter of 2021, and comparable with 2,117 MMcf/d for the third quarter of 2022. The increase in natural gas production for the three months and year ended December 31, 2022 from the comparable periods in 2021 primarily reflected strong drilling results and the acquisition completed in the fourth quarter of 2021, partially offset by natural field declines and the impact of extreme cold weather conditions late in the fourth quarter of 2022.

North America – Oil Sands Mining and Upgrading

SCO production before royalties for the year ended December 31, 2022 of 425,945 bbl/d decreased 5% from 448,133 bbl/d for the year ended December 31, 2021. SCO production for the fourth quarter of 2022 of 428,784 bbl/d decreased 13% from 493,406 bbl/d for the fourth quarter of 2021 and decreased 12% from 487,553 bbl/d for the third quarter of 2022. The decrease in SCO production for the year ended December 31, 2022 from the year ended December 31, 2021 primarily reflected the extended turnaround at the Scotford Upgrader ("Scotford") in the first half of 2022, the unplanned outage at Horizon in October, and the impact of extreme cold weather conditions late in the fourth quarter at both mines. The decrease in SCO production for the fourth quarter of 2022 from the comparable periods primarily reflected the unplanned outage at Horizon in October, and the impact of extreme cold weather conditions late in the fourth quarter at both mines.

International – Exploration and Production

International crude oil and NGLs production before royalties for the year ended December 31, 2022 averaged 27,233 bbl/d, a decrease of 14% from 31,650 bbl/d for the year ended December 31, 2021. International crude oil and NGLs production for the fourth quarter of 2022 averaged 26,915 bbl/d, a decrease of 17% from 32,281 bbl/d for the fourth quarter of 2021 and an increase of 10% from 24,493 bbl/d for the third quarter of 2022. The decrease in crude oil and NGLs production for the three months and year ended December 31, 2022 from comparable periods in 2021 primarily reflected natural field declines, together with the impact of maintenance activities in the North Sea in 2022. The increase in crude oil and NGLs production for the fourth quarter of 2022 from the third quarter of 2022 primarily reflected the completion of maintenance activities in the North Sea and Offshore Africa in the third quarter of 2022.

International Crude Oil Inventory Volumes

The Company recognizes revenue on its crude oil production when control of the product passes to the customer and delivery has taken place. Revenue has not been recognized in the International segments on crude oil volumes held in various storage facilities or FPSOs, as follows:

(bbl)	Dec 31 2022	Sep 30 2022	Dec 31 2021
International	390,959	1,126,786	727,439

OPERATING HIGHLIGHTS – EXPLORATION AND PRODUCTION

	Three Months Ended			Year Ended	
	Dec 31 2022	Sep 30 2022	Dec 31 2021	Dec 31 2022	Dec 31 2021
Crude oil and NGLs (\$/bbl) ⁽¹⁾					
Realized price ⁽²⁾	\$ 69.34	\$ 84.91	\$ 72.81	\$ 90.64	\$ 63.71
Transportation ⁽²⁾	4.11	4.10	3.93	4.13	3.86
Realized price, net of transportation ⁽²⁾	65.23	80.81	68.88	86.51	59.85
Royalties ⁽³⁾	13.56	19.48	10.67	18.91	8.59
Production expense ⁽⁴⁾	20.37	16.86	15.70	18.17	14.71
Netback ⁽²⁾	\$ 31.30	\$ 44.47	\$ 42.51	\$ 49.43	\$ 36.55
Natural gas (\$/Mcf) ⁽¹⁾					
Realized price ⁽⁵⁾	\$ 6.39	\$ 6.57	\$ 5.35	\$ 6.55	\$ 4.07
Transportation ⁽⁶⁾	0.55	0.51	0.42	0.51	0.45
Realized price, net of transportation	5.84	6.06	4.93	6.04	3.62
Royalties ⁽³⁾	0.51	0.61	0.35	0.61	0.22
Production expense ⁽⁴⁾	1.25	1.16	1.12	1.22	1.18
Netback	\$ 4.08	\$ 4.29	\$ 3.46	\$ 4.21	\$ 2.22
Barrels of oil equivalent (\$/BOE) ⁽¹⁾					
Realized price ⁽²⁾	\$ 56.83	\$ 66.04	\$ 57.72	\$ 70.07	\$ 49.67
Transportation ⁽²⁾	3.80	3.64	3.40	3.72	3.44
Realized price, net of transportation ⁽²⁾	53.03	62.40	54.32	66.35	46.23
Royalties ⁽³⁾	9.31	12.88	7.48	12.75	5.98
Production expense ⁽⁴⁾	15.17	12.68	12.33	13.76	11.98
Netback ⁽²⁾	\$ 28.55	\$ 36.84	\$ 34.51	\$ 39.84	\$ 28.27

(1) For crude oil and NGLs and BOE sales volumes, refer to the "Non-GAAP and Other Financial Measures" section of this MD&A. For natural gas sales volumes, refer to the "Daily Production, before royalties" section of this MD&A.

(2) Non-GAAP Ratio. Refer to the "Non-GAAP and Other Financial Measures" section of this MD&A.

(3) Calculated as royalties divided by respective sales volumes.

(4) Calculated as production expense divided by respective sales volumes.

(5) Calculated as natural gas sales divided by natural gas sales volumes.

(6) Calculated as natural gas transportation expense divided by natural gas sales volumes.

REALIZED PRODUCT PRICES – EXPLORATION AND PRODUCTION

	Three Months Ended			Year Ended	
	Dec 31 2022	Sep 30 2022	Dec 31 2021	Dec 31 2022	Dec 31 2021
Crude oil and NGLs (\$/bbl) ⁽¹⁾					
North America ⁽²⁾	\$ 65.79	\$ 83.62	\$ 71.57	\$ 88.43	\$ 62.10
International average ⁽³⁾	\$ 118.44	\$ 120.09	\$ 95.23	\$ 128.41	\$ 87.04
North Sea ⁽³⁾	\$ 118.91	\$ 123.18	\$ 100.45	\$ 129.04	\$ 87.98
Offshore Africa ⁽³⁾	\$ 117.74	\$ 119.08	\$ 75.42	\$ 127.85	\$ 85.71
Crude oil and NGLs average ⁽²⁾	\$ 69.34	\$ 84.91	\$ 72.81	\$ 90.64	\$ 63.71
Natural gas (\$/Mcf) ^{(1) (3)}					
North America	\$ 6.36	\$ 6.51	\$ 5.33	\$ 6.51	\$ 4.05
International average	\$ 13.70	\$ 14.83	\$ 7.77	\$ 12.78	\$ 6.21
North Sea	\$ 13.51	\$ 20.88	\$ 3.20	\$ 15.75	\$ 2.94
Offshore Africa	\$ 13.80	\$ 14.27	\$ 9.00	\$ 12.23	\$ 7.17
Natural gas average	\$ 6.39	\$ 6.57	\$ 5.35	\$ 6.55	\$ 4.07
Average (\$/BOE) ^{(1) (2)}	\$ 56.83	\$ 66.04	\$ 57.72	\$ 70.07	\$ 49.67

(1) For crude oil and NGLs and BOE sales volumes, refer to the "Non-GAAP and Other Financial Measures" section of this MD&A. For natural gas sales volumes, refer to the "Daily Production, before royalties" section of this MD&A.

(2) Non-GAAP Ratio. Refer to the "Non-GAAP and Other Financial Measures" section of this MD&A.

(3) Calculated as crude oil and NGLs sales and natural gas sales divided by respective sales volumes.

North America

North America realized crude oil and NGLs prices increased 42% to average \$88.43 per bbl for the year ended December 31, 2022 from \$62.10 per bbl for the year ended December 31, 2021. North America realized crude oil and NGLs prices decreased 8% to average \$65.79 per bbl for the fourth quarter of 2022 from \$71.57 per bbl for the fourth quarter of 2021, and decreased 21% from \$83.62 per bbl for the third quarter of 2022. The increase for the year ended December 31, 2022 from the year ended December 31, 2021 primarily reflected higher WTI benchmark pricing. The decrease for the fourth quarter of 2022 from the fourth quarter of 2021 primarily reflected the widening of the WCS Heavy Differential. The decrease for the fourth quarter of 2022 from the third quarter of 2022 primarily reflected lower WTI benchmark pricing and the widening of the WCS Heavy Differential. The Company continues to focus on its crude oil blending marketing strategy and in the fourth quarter of 2022 contributed approximately 173,000 bbl/d of heavy crude oil blends to the WCS stream.

North America realized natural gas prices increased 61% to average \$6.51 per Mcf for the year ended December 31, 2022 from \$4.05 per Mcf for the year ended December 31, 2021. North America realized natural gas prices increased 19% to average \$6.36 per Mcf for the fourth quarter of 2022 from \$5.33 per Mcf for the fourth quarter of 2021, and was comparable with \$6.51 per Mcf for the third quarter of 2022. The increase for the three months and year ended December 31, 2022 from the comparable periods in 2021 primarily reflected increased AECO benchmark pricing.

Comparisons of the prices received in North America Exploration and Production by product type were as follows:

(Quarterly average)	Three Months Ended		
	Dec 31 2022	Sep 30 2022	Dec 31 2021
Wellhead Price ⁽¹⁾			
Light and medium crude oil and NGLs (\$/bbl)	\$ 77.08	\$ 82.26	\$ 74.41
Pelican Lake heavy crude oil (\$/bbl)	\$ 73.25	\$ 91.98	\$ 77.40
Primary heavy crude oil (\$/bbl)	\$ 69.20	\$ 89.80	\$ 75.47
Bitumen (thermal oil) (\$/bbl)	\$ 58.13	\$ 80.74	\$ 68.45
Natural gas (\$/Mcf)	\$ 6.36	\$ 6.51	\$ 5.33

(1) Amounts expressed on a per unit basis are based on sales volumes of the respective product type.

International

International realized crude oil and NGLs prices increased 48% to average \$128.41 per bbl for the year ended December 31, 2022 from \$87.04 per bbl for the year ended December 31, 2021. International realized crude oil and NGLs prices increased 24% to average \$118.44 per bbl for the fourth quarter of 2022 from \$95.23 per bbl for the fourth quarter of 2021, and was comparable with \$120.09 per bbl for the third quarter of 2022. Realized crude oil and NGLs prices per barrel in any particular period are dependent on the terms of the various sales contracts, the frequency and timing of liftings from each field, and prevailing crude oil prices and foreign exchange rates at the time of lifting. The increase in realized crude oil and NGLs prices for the three months and year ended December 31, 2022 from the comparable periods in 2021 reflected prevailing Brent benchmark pricing at the time of liftings, together with the impact of movements in the Canadian dollar.

ROYALTIES – EXPLORATION AND PRODUCTION

	Three Months Ended			Year Ended	
	Dec 31 2022	Sep 30 2022	Dec 31 2021	Dec 31 2022	Dec 31 2021
Crude oil and NGLs (\$/bbl) ⁽¹⁾					
North America	\$ 14.07	\$ 19.78	\$ 11.21	\$ 19.64	\$ 9.06
International average	\$ 6.56	\$ 11.24	\$ 1.01	\$ 6.38	\$ 1.75
North Sea	\$ 0.18	\$ 0.86	\$ 0.19	\$ 0.30	\$ 0.19
Offshore Africa	\$ 16.02	\$ 14.61	\$ 4.10	\$ 11.79	\$ 3.94
Crude oil and NGLs average	\$ 13.56	\$ 19.48	\$ 10.67	\$ 18.91	\$ 8.59
Natural gas (\$/Mcf) ⁽¹⁾					
North America	\$ 0.51	\$ 0.61	\$ 0.35	\$ 0.61	\$ 0.22
Offshore Africa	\$ 0.71	\$ 1.73	\$ 0.41	\$ 1.50	\$ 0.33
Natural gas average	\$ 0.51	\$ 0.61	\$ 0.35	\$ 0.61	\$ 0.22
Average (\$/BOE) ⁽¹⁾	\$ 9.31	\$ 12.88	\$ 7.48	\$ 12.75	\$ 5.98

(1) Calculated as royalties divided by respective sales volumes. For crude oil and NGLs and BOE sales volumes, refer to the "Non-GAAP and Other Financial Measures" section of this MD&A. For natural gas sales volumes, refer to the "Daily Production, before royalties" section of this MD&A.

North America

North America crude oil and NGLs and natural gas royalties for the three months and year ended December 31, 2022 and the comparable periods reflected movements in benchmark commodity prices, fluctuations in the WCS Heavy Differential and the impact of sliding scale royalty rates.

Crude oil and NGLs royalty rates ⁽¹⁾ averaged approximately 22% of product sales for the year ended December 31, 2022 compared with 15% of product sales for the year ended December 31, 2021. Crude oil and NGLs royalty rates averaged approximately 21% of product sales for the fourth quarter of 2022 compared with 16% for the fourth quarter of 2021 and 24% for the third quarter of 2022. The increase in royalty rates for the three months and year ended December 31, 2022 from the comparable periods in 2021 was primarily due to higher benchmark prices together with fluctuations in the WCS Heavy Differential. The decrease in royalty rates for the fourth quarter of 2022 from the third quarter of 2022 was primarily due to lower benchmark prices.

Natural gas royalty rates averaged approximately 9% of product sales for the year ended December 31, 2022 compared with 5% of product sales for the year ended December 31, 2021. Natural gas royalty rates averaged approximately 8% of product sales for the fourth quarter of 2022 compared with 7% for the fourth quarter of 2021 and 9% for the third quarter of 2022. The increase in royalty rates for the three months and year ended December 31, 2022 from the comparable periods in 2021 was primarily due to higher benchmark prices.

(1) Non-GAAP Ratio. Refer to the "Non-GAAP and Other Financial Measures" section of this MD&A.

Offshore Africa

Under the terms of the various Production Sharing Contracts royalty rates fluctuate based on realized commodity pricing, capital expenditures and production expenses, the status of payouts, and the timing of liftings from each field.

Royalty rates as a percentage of product sales averaged approximately 9% for the year ended December 31, 2022, compared with 5% of product sales for the year ended December 31, 2021. Royalty rates as a percentage of product sales averaged approximately 13% for the fourth quarter of 2022 compared with 5% of product sales for the fourth quarter of 2021 and 12% for the third quarter of 2022. Royalty rates as a percentage of product sales reflected the timing of liftings and the status of payout in the various fields.

PRODUCTION EXPENSE – EXPLORATION AND PRODUCTION

	Three Months Ended			Year Ended	
	Dec 31 2022	Sep 30 2022	Dec 31 2021	Dec 31 2022	Dec 31 2021
Crude oil and NGLs (\$/bbl) ⁽¹⁾					
North America	\$ 16.80	\$ 15.98	\$ 13.55	\$ 16.25	\$ 13.12
International average	\$ 69.70	\$ 40.86	\$ 54.91	\$ 51.01	\$ 37.77
North Sea	\$ 100.30	\$ 115.41	\$ 64.96	\$ 88.99	\$ 54.13
Offshore Africa	\$ 24.30	\$ 16.64	\$ 16.75	\$ 17.25	\$ 14.73
Crude oil and NGLs average	\$ 20.37	\$ 16.86	\$ 15.70	\$ 18.17	\$ 14.71
Natural gas (\$/Mcf) ⁽¹⁾					
North America	\$ 1.22	\$ 1.13	\$ 1.08	\$ 1.19	\$ 1.15
International average	\$ 8.07	\$ 4.99	\$ 5.51	\$ 5.16	\$ 5.07
North Sea	\$ 10.38	\$ 12.67	\$ 9.19	\$ 9.27	\$ 7.31
Offshore Africa	\$ 6.98	\$ 4.27	\$ 4.52	\$ 4.40	\$ 4.41
Natural gas average	\$ 1.25	\$ 1.16	\$ 1.12	\$ 1.22	\$ 1.18
Average (\$/BOE) ⁽¹⁾	\$ 15.17	\$ 12.68	\$ 12.33	\$ 13.76	\$ 11.98

(1) Calculated as production expense divided by respective sales volumes. For crude oil and NGLs and BOE sales volumes, refer to the "Non-GAAP and Other Financial Measures" section of this MD&A. For natural gas sales volumes, refer to the "Daily Production, before royalties" section of this MD&A.

North America

North America crude oil and NGLs production expense for the year ended December 31, 2022 averaged \$16.25 per bbl, an increase of 24% from \$13.12 per bbl for the year ended December 31, 2021. North America crude oil and NGLs production expense for the fourth quarter of 2022 of \$16.80 per bbl increased 24% from \$13.55 per bbl for the fourth quarter of 2021 and increased 5% from \$15.98 per bbl for the third quarter of 2022. The increase in crude oil and NGLs production expense per bbl for the three months and year ended December 31, 2022 from the comparable periods in 2021 primarily reflected higher energy and service costs. The increase in crude oil and NGLs production expense per bbl for the fourth quarter of 2022 from the third quarter of 2022 primarily reflected higher energy costs in the fourth quarter of 2022.

North America natural gas production expense averaged \$1.19 per Mcf for the year ended December 31, 2022, an increase of 3% from \$1.15 per Mcf for the year ended December 31, 2021. North America natural gas production expense for the fourth quarter of 2022 averaged \$1.22 per Mcf, an increase of 13% from \$1.08 per Mcf for the fourth quarter of 2021 and an increase of 8% from \$1.13 per Mcf for the third quarter of 2022. The increase in natural gas production expense per Mcf for the three months and year ended December 31, 2022 from all comparable periods reported primarily reflected higher energy costs.

International

International crude oil and NGLs production expense for the year ended December 31, 2022 averaged \$51.01 per bbl, an increase of 35% from \$37.77 per bbl for the year ended December 31, 2021. International crude oil and NGLs production expense for the fourth quarter of 2022 of \$69.70 per bbl increased 27% from \$54.91 per bbl for the fourth quarter of 2021 and increased 71% from \$40.86 per bbl for the third quarter of 2022. The increase in crude oil and

NGLs production expense per bbl for the three months and year ended December 31, 2022 from the comparable periods primarily reflected the timing of liftings from various fields that have different cost structures, the impact of lower production volumes, higher energy costs, and fluctuations in foreign exchange.

DEPLETION, DEPRECIATION AND AMORTIZATION – EXPLORATION AND PRODUCTION

(\$ millions, except per BOE amounts)	Three Months Ended			Year Ended	
	Dec 31 2022	Sep 30 2022	Dec 31 2021	Dec 31 2022	Dec 31 2021
North America	\$ 949	\$ 913	\$ 939	\$ 3,595	\$ 3,569
North Sea	1,653	15	33	1,747	160
Offshore Africa	41	39	19	173	142
Depletion, Depreciation and Amortization	\$ 2,643	\$ 967	\$ 991	\$ 5,515	\$ 3,871
Less: Recoverability charge ⁽¹⁾	1,620	—	—	1,620	—
Adjusted depletion, depreciation and amortization ⁽²⁾	\$ 1,023	\$ 967	\$ 991	\$ 3,895	\$ 3,871
\$/BOE ⁽³⁾	\$ 12.78	\$ 12.48	\$ 13.03	\$ 12.45	\$ 13.49

(1) Prevailing regulatory and economic conditions in 2022 and the increasingly challenging commercial outlook in the United Kingdom, including the impact of higher natural gas and carbon costs, led the Company to assess the viability of its North Sea operations. Following a detailed review of its development plans, the Company determined that the Ninian field is no longer economic, de-booked associated crude oil reserves as at December 31, 2022, and is accelerating abandonment. As a result, the Company completed a recoverability assessment of its assets in the North Sea, and recognized a recoverability charge of \$1,620 million in depletion, depreciation and amortization.

(2) This is a non-GAAP measure used to calculate depletion, depreciation and amortization, excluding the impact of non-recurring charges that do not reflect the Company's normal course depletion, depreciation and amortization costs. It may not be comparable to similar measures presented by other companies, and should not be considered an alternative to or more meaningful than the most directly comparable financial measure presented in the financial statements (depletion, depreciation and amortization expense), as applicable, as an indication of the Company's performance. It is calculated as depletion, depreciation and amortization expense, less the impact of non-recurring charges.

(3) Non-GAAP ratio calculated as adjusted depletion, depreciation and amortization divided by sales volumes. For sales volumes, refer to the "Non-GAAP and Other Financial Measures" section of this MD&A.

Adjusted depletion, depreciation and amortization expense for the year ended December 31, 2022 of \$12.45 per BOE decreased 8% from \$13.49 per BOE for the year ended December 31, 2021. Adjusted depletion, depreciation and amortization expense for the fourth quarter of 2022 of \$12.78 per BOE was comparable with \$13.03 per BOE for the fourth quarter of 2021 and comparable with \$12.48 per BOE for the third quarter of 2022. The decrease in adjusted depletion, depreciation and amortization expense per BOE for the year ended December 31, 2022 from the year ended December 31, 2021 primarily reflected lower depletion rates due to increases to the Company's North America Exploration and Production reserve estimates at December 31, 2021, including the impact of acquisitions completed during the prior year.

Adjusted depletion, depreciation and amortization expense on an absolute and per BOE basis also reflects the impact of the timing of liftings from each field in the North Sea and Offshore Africa.

ASSET RETIREMENT OBLIGATION ACCRETION – EXPLORATION AND PRODUCTION

(\$ millions, except per BOE amounts)	Three Months Ended			Year Ended	
	Dec 31 2022	Sep 30 2022	Dec 31 2021	Dec 31 2022	Dec 31 2021
North America	\$ 51	\$ 50	\$ 25	\$ 171	\$ 101
North Sea	10	10	5	33	21
Offshore Africa	2	2	2	7	6
Asset Retirement Obligation Accretion	\$ 63	\$ 62	\$ 32	\$ 211	\$ 128
\$/BOE ⁽¹⁾	\$ 0.78	\$ 0.80	\$ 0.42	\$ 0.67	\$ 0.44

(1) Calculated as asset retirement obligation accretion divided by sales volumes. For sales volumes, refer to the "Non-GAAP and Other Financial Measures" section of this MD&A.

Asset retirement obligation accretion expense represents the increase in the carrying amount of the asset retirement obligation due to the passage of time.

Asset retirement obligation accretion expense for the year ended December 31, 2022 of \$0.67 per BOE increased 52% from \$0.44 per BOE for the year ended December 31, 2021. Asset retirement obligation accretion expense for the fourth quarter of 2022 of \$0.78 per BOE increased 86% from \$0.42 per BOE for the fourth quarter of 2021 and decreased 3% from \$0.80 per BOE for the third quarter of 2022. The increase in asset retirement obligation accretion expense per BOE for the three months and year ended December 31, 2022 from the comparable periods in 2021 primarily reflected the cost estimate and discount rate revisions made to the asset retirement obligation in the fourth quarter of 2021 and the second quarter of 2022. The decrease in asset retirement obligation accretion expense per BOE for the fourth quarter of 2022 from the third quarter of 2022 primarily reflected fluctuating sales volumes from different underlying operations.

OPERATING HIGHLIGHTS – OIL SANDS MINING AND UPGRADING

The Company continues to focus on safe, reliable and efficient operations and leveraging its technical expertise across the Horizon and AOSP sites. SCO production averaged 428,784 bbl/d in the fourth quarter of 2022, reflecting an unplanned outage at Horizon in October and the impact of extreme cold weather conditions late in the fourth quarter of 2022 at both mines.

The Company incurred production expense of \$1,017 million for the fourth quarter of 2022, an increase of 17% from \$871 million for the fourth quarter of 2021, and comparable with \$1,005 million for the third quarter of 2022. The increase from the fourth quarter of 2021 primarily reflected increased energy and maintenance services costs.

REALIZED PRODUCT PRICES, ROYALTIES AND TRANSPORTATION – OIL SANDS MINING AND UPGRADING

(\$/bbl)	Three Months Ended			Year Ended	
	Dec 31 2022	Sep 30 2022	Dec 31 2021	Dec 31 2022	Dec 31 2021
Realized SCO sales price ⁽¹⁾	\$ 103.79	\$ 120.91	\$ 88.48	\$ 117.69	\$ 77.95
Bitumen value for royalty purposes ⁽²⁾	\$ 58.24	\$ 82.19	\$ 65.80	\$ 83.07	\$ 58.39
Bitumen royalties ⁽³⁾	\$ 14.48	\$ 24.87	\$ 9.16	\$ 20.71	\$ 6.62
Transportation ⁽¹⁾	\$ 1.80	\$ 1.55	\$ 1.33	\$ 1.71	\$ 1.21

(1) Non-GAAP Ratio. Refer to the "Non-GAAP and Other Financial Measures" section of this MD&A.

(2) Calculated as the quarterly average of the bitumen methodology price.

(3) Calculated as royalties divided by sales volumes.

The realized SCO sales price averaged \$117.69 per bbl for the year ended December 31, 2022, an increase of 51% from \$77.95 per bbl for the year ended December 31, 2021. The realized SCO sales price averaged \$103.79 per bbl for the fourth quarter of 2022, an increase of 17% from \$88.48 per bbl for the fourth quarter of 2021 and a decrease of 14% from \$120.91 per bbl for the third quarter of 2022. The increase in the realized SCO sales price for the three months and year ended December 31, 2022 from the comparable periods in 2021 primarily reflected the increase in WTI benchmark pricing. The decrease for the fourth quarter of 2022 from the third quarter of 2022 primarily reflected the decrease in WTI benchmark pricing.

The increase in bitumen royalties per bbl for the three months and year ended December 31, 2022 from the comparable periods in 2021 primarily reflected the impact of Horizon reaching full payout in the second quarter of 2022 and higher sliding scale royalty rates. The decrease for the fourth quarter of 2022 from the third quarter of 2022 primarily reflected the impact of lower prevailing bitumen pricing.

Transportation expense averaged \$1.71 per bbl for the year ended December 31, 2022, an increase of 41% from \$1.21 per bbl for the year ended December 31, 2021. Transportation expense averaged \$1.80 per bbl for the fourth quarter of 2022, an increase of 35% from \$1.33 per bbl for the fourth quarter of 2021 and an increase of 16% from \$1.55 per bbl for the third quarter of 2022. The increase in transportation expense per bbl for the three months and year ended December 31, 2022 from the comparable periods primarily reflected the impact of higher pipeline tolls, partially offset by lower sales volumes.

PRODUCTION EXPENSE – OIL SANDS MINING AND UPGRADING

The following tables are reconciled to the Oil Sands Mining and Upgrading production expense disclosed in note 18 to the financial statements.

(\$ millions)	Three Months Ended			Year Ended	
	Dec 31 2022	Sep 30 2022	Dec 31 2021	Dec 31 2022	Dec 31 2021
Production expense, excluding natural gas costs	\$ 933	\$ 935	\$ 796	\$ 3,743	\$ 3,176
Natural gas costs	84	70	75	333	238
Production expense	\$ 1,017	\$ 1,005	\$ 871	\$ 4,076	\$ 3,414

(\$/bbl)	Three Months Ended			Year Ended	
	Dec 31 2022	Sep 30 2022	Dec 31 2021	Dec 31 2022	Dec 31 2021
Production expense, excluding natural gas costs ⁽¹⁾	\$ 23.37	\$ 20.77	\$ 17.86	\$ 23.91	\$ 19.45
Natural gas costs ⁽²⁾	2.11	1.58	1.69	2.13	1.46
Production expense ⁽³⁾	\$ 25.48	\$ 22.35	\$ 19.55	\$ 26.04	\$ 20.91
Sales volumes (bbl/d)	433,731	489,146	483,972	428,820	447,230

(1) Calculated as production expense, excluding natural gas costs divided by sales volumes.

(2) Calculated as natural gas costs divided by sales volumes.

(3) Calculated as production expense divided by sales volumes.

Production expense for the year ended December 31, 2022 of \$26.04 per bbl increased 25% from \$20.91 per bbl for the year ended December 31, 2021. Production expense for the fourth quarter of 2022 averaged \$25.48 per bbl, an increase of 30% from \$19.55 per bbl for the fourth quarter of 2021 and an increase of 14% from \$22.35 per bbl for the third quarter of 2022. The increase in production expense per bbl for the three months and year ended December 31, 2022 from the comparable periods in 2021 primarily reflected increased energy and maintenance services costs, together with lower production volumes. The increase in production expense per bbl for the fourth quarter of 2022 from the third quarter of 2022 primarily reflected lower production volumes in the fourth quarter of 2022.

DEPLETION, DEPRECIATION AND AMORTIZATION – OIL SANDS MINING AND UPGRADING

(\$ millions, except per bbl amounts)	Three Months Ended			Year Ended	
	Dec 31 2022	Sep 30 2022	Dec 31 2021	Dec 31 2022	Dec 31 2021
Depletion, depreciation and amortization	\$ 481	\$ 484	\$ 478	\$ 1,822	\$ 1,838
\$/bbl ⁽¹⁾	\$ 12.07	\$ 10.75	\$ 10.73	\$ 11.64	\$ 11.26

(1) Calculated as depletion, depreciation and amortization divided by sales volumes.

Depletion, depreciation and amortization expense for the year ended December 31, 2022 of \$11.64 per bbl increased 3% from \$11.26 per bbl for the year ended December 31, 2021. Depletion, depreciation and amortization expense for the fourth quarter of 2022 of \$12.07 per bbl increased 12% from \$10.73 per bbl for the fourth quarter of 2021, and increased 12% from \$10.75 per bbl for the third quarter of 2022. The increase in depletion, depreciation and amortization expense on a per barrel basis for the three months and year ended December 31, 2022 from the comparable periods primarily reflected the impact of lower production volumes during the fourth quarter of 2022.

ASSET RETIREMENT OBLIGATION ACCRETION – OIL SANDS MINING AND UPGRADING

(\$ millions, except per bbl amounts)	Three Months Ended			Year Ended	
	Dec 31 2022	Sep 30 2022	Dec 31 2021	Dec 31 2022	Dec 31 2021
Asset retirement obligation accretion	\$ 19	\$ 20	\$ 14	\$ 70	\$ 57
\$/bbl ⁽¹⁾	\$ 0.49	\$ 0.43	\$ 0.32	\$ 0.45	\$ 0.35

(1) Calculated as asset retirement obligation accretion divided by sales volumes.

Asset retirement obligation accretion expense represents the increase in the carrying amount of the asset retirement obligation due to the passage of time.

Asset retirement obligation accretion expense for the year ended December 31, 2022 of \$0.45 per bbl increased 29% from \$0.35 per bbl for the year ended December 31, 2021. Asset retirement obligation accretion expense for the fourth quarter of 2022 of \$0.49 per bbl increased 53% from \$0.32 per bbl for the fourth quarter of 2021, and increased 14% from \$0.43 per bbl for the third quarter of 2022. The increase in asset retirement obligation accretion expense on a per barrel basis from comparable periods in 2021 primarily reflected the impact of cost estimate and discount rate revisions made to the asset retirement obligation during the second quarter of 2022. The increase in asset retirement obligation accretion expense on a per barrel basis for the fourth quarter of 2022 from the third quarter of 2022 primarily reflected the impact of lower production volumes during the fourth quarter of 2022.

MIDSTREAM AND REFINING

(\$ millions)	Three Months Ended			Year Ended	
	Dec 31 2022	Sep 30 2022	Dec 31 2021	Dec 31 2022	Dec 31 2021
Product sales					
Midstream activities	\$ 21	\$ 21	\$ 17	\$ 80	\$ 78
NWRP, refined product sales and other	205	134	200	906	681
Segmented revenue	226	155	217	986	759
Less:					
NWRP, refining toll	57	66	37	247	213
Midstream activities	6	6	5	24	21
Production expense	63	72	42	271	234
NWRP, transportation and feedstock costs	155	113	165	691	550
Depreciation	5	3	4	16	15
Income from NWRP	—	—	—	—	(400)
Segmented earnings (loss)	\$ 3	\$ (33)	\$ 6	\$ 8	\$ 360

The Company's Midstream and Refining assets consist of two crude oil pipeline systems, a 50% working interest in an 84-megawatt cogeneration plant at Primrose and the Company's 50% equity investment in NWRP.

NWRP operates a 50,000 bbl/d bitumen upgrader and refinery that processes approximately 12,500 bbl/d (25% toll payer) of bitumen feedstock for the Company and 37,500 bbl/d (75% toll payer) of bitumen feedstock for the Alberta Petroleum Marketing Commission ("APMC"), an agent of the Government of Alberta. The Company is unconditionally obligated to pay its 25% pro rata share of the debt component of the monthly fee-for-service toll over the 40-year tolling period until 2058. Sales of diesel and refined products and associated refining tolls are recognized in the Midstream and Refining segment. For the fourth quarter of 2022, production of ultra-low sulphur diesel and other refined products averaged 54,593 BOE/d (13,648 BOE/d to the Company), (three months ended December 31, 2021 – 71,433 BOE/d; 17,858 BOE/d to the Company), reflecting the completion of turnaround activities during the quarter.

During the third quarter of 2022, NWRP extended its \$3,000 million syndicated credit facility and increased it to \$3,175 million. The revolving portion of the credit facility was increased to \$2,175 million, with \$118 million maturing in June 2023, and \$2,057 million maturing in June 2025. The \$1,000 million non-revolving portion of the credit facility was extended, with \$60 million maturing in June 2023, and \$940 million maturing in June 2025. During the third quarter of 2022, NWRP also entered into a \$150 million facility to support letters of credit. As at December 31, 2022, NWRP had borrowings of \$2,318 million under the syndicated credit facility (December 31, 2021 – \$1,981 million).

As at December 31, 2022, the Company's cumulative unrecognized share of the equity loss and partnership distributions from NWRP was \$551 million (December 31, 2021 – \$562 million). For the three months ended December 31, 2022, the Company's recovery of its share of unrecognized equity losses was \$37 million (year ended December 31, 2022 – recovery of unrecognized equity losses of \$11 million; three months ended December 31, 2021 – unrecognized equity loss of \$12 million; year ended December 31, 2021 – unrecognized equity loss of \$9 million and partnership distributions of \$400 million).

ADMINISTRATION EXPENSE

	Three Months Ended			Year Ended	
	Dec 31 2022	Sep 30 2022	Dec 31 2021	Dec 31 2022	Dec 31 2021
Expense (\$ millions)	\$ 108	\$ 94	\$ 97	\$ 415	\$ 366
\$/BOE ⁽¹⁾	\$ 0.90	\$ 0.76	\$ 0.81	\$ 0.88	\$ 0.81
Sales volumes (BOE/d) ⁽²⁾	1,303,996	1,331,189	1,310,878	1,285,877	1,233,457

(1) Calculated as administration expense divided by sales volumes.

(2) Total Company sales volumes.

Administration expense for the year ended December 31, 2022 of \$0.88 per BOE increased 9% from \$0.81 per BOE for the year ended December 31, 2021. Administration expense for the fourth quarter of 2022 of \$0.90 per BOE increased 11% from \$0.81 per BOE for the fourth quarter of 2021 and increased 18% from \$0.76 per BOE for the third quarter of 2022. The increase in administration expense per BOE for the three months and year ended December 31, 2022 from the comparable periods was primarily due to higher personnel costs, partially offset by the impact of higher overhead recoveries.

SHARE-BASED COMPENSATION

(\$ millions)	Three Months Ended			Year Ended	
	Dec 31 2022	Sep 30 2022	Dec 31 2021	Dec 31 2022	Dec 31 2021
Expense (recovery)	\$ 319	\$ (4)	\$ 191	\$ 804	\$ 514

The Company's Stock Option Plan provides employees with the right to receive common shares or a cash payment in exchange for stock options surrendered. The Performance Share Unit ("PSU") plan provides certain executive employees of the Company with the right to receive a cash payment, the amount of which is determined by individual employee performance and the extent to which certain other performance measures are met.

The Company recognized \$804 million of share-based compensation expense for the year ended December 31, 2022, primarily as a result of the measurement of the fair value of outstanding stock options related to the impact of normal course graded vesting of stock options granted in prior periods, the impact of vested stock options exercised or surrendered during the period, and changes in the Company's share price.

INTEREST AND OTHER FINANCING EXPENSE

(\$ millions, except effective interest rate)	Three Months Ended			Year Ended	
	Dec 31 2022	Sep 30 2022	Dec 31 2021	Dec 31 2022	Dec 31 2021
Interest and other financing expense	\$ 76	\$ 150	\$ 171	\$ 549	\$ 711
Interest income and other ⁽¹⁾	93	18	2	121	32
Interest on long-term debt and lease liabilities ⁽¹⁾	\$ 169	\$ 168	\$ 173	\$ 670	\$ 743
Average current and long-term debt ⁽²⁾	\$ 13,174	\$ 13,714	\$ 16,084	\$ 13,986	\$ 18,935
Average lease liabilities ⁽²⁾	1,508	1,526	1,578	1,531	1,619
Average long-term debt and lease liabilities ⁽²⁾	\$ 14,682	\$ 15,240	\$ 17,662	\$ 15,517	\$ 20,554
Average effective interest rate ⁽³⁾⁽⁴⁾	4.5%	4.3%	3.9%	4.3%	3.5%
Interest and other financing expense per \$/BOE ⁽⁵⁾	\$ 0.63	\$ 1.23	\$ 1.42	\$ 1.17	\$ 1.58
Sales volumes (BOE/d) ⁽⁶⁾	1,303,996	1,331,189	1,310,878	1,285,877	1,233,457

(1) Item is a component of interest and other financing expense.

(2) The average of current and long-term debt and lease liabilities outstanding during the respective period.

(3) This is a non-GAAP ratio and may not be comparable to similar measures presented by other companies, and should not be considered an alternative to or more meaningful than the most directly comparable financial measure presented in the financial statements, as applicable, as an indication of the Company's performance.

(4) Calculated as the total of interest on long-term debt and lease liabilities divided by the average long-term debt and lease liabilities balance for the respective period. The Company presents its average effective interest rate for financial statement users to evaluate the Company's average cost of debt borrowings.

(5) Calculated as interest and other financing expense divided by sales volumes.

(6) Total Company sales volumes.

Interest and other financing expense per BOE for the year ended December 31, 2022 decreased 26% to \$1.17 per BOE from \$1.58 per BOE for the year ended December 31, 2021. Interest and other financing expense per BOE for the fourth quarter of 2022 decreased 56% to \$0.63 per BOE from \$1.42 per BOE for the fourth quarter of 2021 and decreased 49% from \$1.23 per BOE for the third quarter of 2022. The decrease in interest and other financing expense per BOE for the three months and year ended December 31, 2022 from the comparable periods was primarily due to lower debt levels in 2022 and accrued interest on the deferred PRT recovery.

The Company's average effective interest rate for the three months and year ended December 31, 2022 increased from the comparable periods primarily due to higher prevailing interest rates on floating rate debt held during 2022.

RISK MANAGEMENT ACTIVITIES

The Company utilizes various derivative financial instruments to manage its commodity price, interest rate and foreign currency exposures. These derivative financial instruments are not intended for trading or speculative purposes.

(\$ millions)	Three Months Ended			Year Ended	
	Dec 31 2022	Sep 30 2022	Dec 31 2021	Dec 31 2022	Dec 31 2021
Foreign currency contracts	\$ 3	\$ (43)	\$ (11)	\$ (37)	\$ 1
Natural gas financial instruments ⁽¹⁾	(6)	(3)	6	13	17
Crude oil and NGLs financial instruments ⁽¹⁾	1	2	(1)	17	(1)
Net realized (gain) loss	(2)	(44)	(6)	(7)	17
Foreign currency contracts	(2)	—	16	(16)	6
Natural gas financial instruments ⁽¹⁾	18	(44)	(10)	(10)	11
Crude oil and NGLs financial instruments ⁽¹⁾	(1)	(4)	2	(2)	2
Net unrealized loss (gain)	15	(48)	8	(28)	19
Net loss (gain)	\$ 13	\$ (92)	\$ 2	\$ (35)	\$ 36

(1) Commodity financial instruments were assumed in the acquisition of Storm Resources Ltd. ("Storm") in the fourth quarter of 2021.

During the year ended December 31, 2022, net realized risk management gains were related to the settlement of foreign currency contracts, partially offset by losses on natural gas financial instruments, and crude oil and NGLs financial instruments. The Company recorded a net unrealized gain of \$28 million (\$25 million after-tax of \$3 million) on its risk management activities for the year ended December 31, 2022, including an unrealized loss of \$15 million (\$11 million after-tax of \$4 million) for the fourth quarter of 2022 (three months ended September 30, 2022 – unrealized gain of \$48 million, \$37 million after-tax of \$11 million; three months ended December 31, 2021 – unrealized loss of \$8 million, \$10 million after-tax of \$2 million; year ended December 31, 2021 – unrealized loss of \$19 million, \$16 million after-tax of \$3 million).

Further details related to outstanding derivative financial instruments as at December 31, 2022 are disclosed in note 16 to the financial statements.

FOREIGN EXCHANGE

(\$ millions)	Three Months Ended			Year Ended	
	Dec 31 2022	Sep 30 2022	Dec 31 2021	Dec 31 2022	Dec 31 2021
Net realized loss (gain)	\$ 18	\$ (49)	\$ (27)	\$ (114)	\$ 78
Net unrealized (gain) loss	(203)	785	(79)	852	(205)
Net (gain) loss ⁽¹⁾	\$ (185)	\$ 736	\$ (106)	\$ 738	\$ (127)

(1) Amounts are reported net of the hedging effect of cross currency swaps.

The net realized foreign exchange gain for the year ended December 31, 2022 was primarily due to foreign exchange rate fluctuations on settlement of working capital items denominated in US dollars or UK pounds sterling and the settlement of the US\$550 million cross currency swap during the second quarter of 2022. The net unrealized foreign exchange loss for the year ended December 31, 2022 was primarily related to the impact of a weaker Canadian dollar with respect to outstanding US dollar debt and the reclassification of the gain on the US\$550 million cross currency swap to realized foreign exchange due to its settlement in the second quarter of 2022. The US/Canadian dollar exchange rate as at December 31, 2022 was US\$0.7389 (September 30, 2022 – US\$0.7300, December 31, 2021 – US\$0.7901).

INCOME TAXES

(\$ millions, except effective tax rates)	Three Months Ended			Year Ended	
	Dec 31 2022	Sep 30 2022	Dec 31 2021	Dec 31 2022	Dec 31 2021
North America ⁽¹⁾	\$ 345	\$ 755	\$ 691	\$ 2,789	\$ 1,841
North Sea	33	14	(3)	69	7
Offshore Africa	23	21	3	74	21
PRT – North Sea	(5)	(36)	(12)	(42)	(34)
Other taxes	3	3	4	16	13
Current income tax	399	757	683	2,906	1,848
Deferred corporate income tax	(148)	194	193	302	399
Deferred PRT – North Sea	(441)	—	—	(441)	—
Deferred income tax	(589)	194	193	(139)	399
Income tax	\$ (190)	\$ 951	\$ 876	\$ 2,767	\$ 2,247
Earnings before taxes	\$ 1,330	\$ 3,765	\$ 3,410	\$ 13,704	\$ 9,911
Effective tax rate on net earnings ⁽²⁾	(14)%	25%	26%	20%	23%
Income tax	\$ (190)	\$ 951	\$ 876	\$ 2,767	\$ 2,247
Tax effect on non-operating items ⁽³⁾	980	(15)	—	964	5
Current PRT - North Sea	5	36	12	42	34
Other taxes	(3)	(3)	(4)	(16)	(13)
Effective tax on adjusted net earnings	\$ 792	\$ 969	\$ 884	\$ 3,757	\$ 2,273
Adjusted net earnings from operations ⁽⁴⁾	\$ 2,194	\$ 3,493	\$ 2,626	\$ 12,863	\$ 7,420
Effective tax on adjusted net earnings	792	969	884	3,757	2,273
Adjusted net earnings from operations, before taxes	\$ 2,986	\$ 4,462	\$ 3,510	\$ 16,620	\$ 9,693
Effective tax rate on adjusted net earnings from operations ^{(5) (6)}	27%	22%	25%	23%	23%

(1) Includes North America Exploration and Production, Oil Sands Mining and Upgrading, and Midstream and Refining segments.

(2) Calculated as total of current and deferred income tax divided by earnings before taxes.

(3) Includes the net tax effect of PSUs, unrealized risk management, abandonment expenditure recovery, and the recoverability charge recognized in the fourth quarter of 2022 in adjusted net earnings from operations.

(4) Non-GAAP Financial Measure. Refer to the "Non-GAAP and Other Financial Measures" section of this MD&A.

(5) This is a non-GAAP ratio and may not be comparable to similar measures presented by other companies, and should not be considered an alternative to or more meaningful than the most directly comparable financial measure presented in the financial statements, as applicable, as an indication of the Company's performance.

(6) Calculated as effective tax on adjusted net earnings divided by adjusted net earnings from operations, before taxes. The Company presents its effective tax rate on adjusted net earnings from operations for financial statement users to evaluate the Company's effective tax rate on its core business activities.

The effective tax rate on net earnings and adjusted net earnings from operations for the three months and year ended December 31, 2022 and the comparable periods included the impact of non-taxable items in North America and the North Sea and the impact of differences in jurisdictional income and tax rates in the countries in which the Company operates, in relation to net earnings.

The current corporate income tax and PRT in the North Sea for the three months and year ended December 31, 2022 and the comparable periods included the impact of carrybacks of PRT losses, including expenditures related to the decommissioning activities at the Company's platforms in the North Sea. Deferred PRT and income taxes for the three months and year ended December 31, 2022 also reflected the impact of the recoverability charge recognized in depletion, depreciation and amortization during the period.

The Company files income tax returns in the various jurisdictions in which it operates. These tax returns are subject to periodic examinations in the normal course by the applicable tax authorities. The tax returns as prepared may include filing positions that could be subject to differing interpretations of applicable tax laws and regulations, which may take several years to resolve. The Company does not believe the ultimate resolution of these matters will have a material impact upon the Company's reported results of operations, financial position or liquidity.

NET CAPITAL EXPENDITURES ^{(1) (2)}

(\$ millions)	Three Months Ended			Year Ended	
	Dec 31 2022	Sep 30 2022	Dec 31 2021	Dec 31 2022	Dec 31 2021
Exploration and Evaluation					
Net expenditures	\$ 11	\$ 2	\$ 2	\$ 36	\$ 12
Net property (dispositions) acquisitions	(2)	1	(6)	(3)	(11)
Total Exploration and Evaluation	9	3	(4)	33	1
Property, Plant and Equipment					
Net property acquisitions ⁽³⁾	—	1	973	513	1,112
Well drilling, completion and equipping	407	410	196	1,545	918
Production and related facilities	351	378	180	1,233	802
Other	15	15	23	59	64
Total Property, Plant and Equipment	773	804	1,372	3,350	2,896
Total Exploration and Production	782	807	1,368	3,383	2,897
Oil Sands Mining and Upgrading					
Project costs	98	77	65	294	236
Sustaining capital	367	223	270	1,171	1,035
Turnaround costs	16	18	23	287	145
Net property dispositions	(40)	—	—	(40)	—
Other ⁽⁴⁾	1	3	1	7	331
Total Oil Sands Mining and Upgrading	442	321	359	1,719	1,747
Midstream and Refining	2	2	3	9	9
Head office	7	5	7	25	23
Abandonments expenditures, net ⁽²⁾	84	114	67	335	232
Net capital expenditures	\$ 1,317	\$ 1,249	\$ 1,804	\$ 5,471	\$ 4,908
By segment					
North America	\$ 677	\$ 736	\$ 1,301	\$ 3,133	\$ 2,662
North Sea	48	40	48	126	173
Offshore Africa	57	31	19	124	62
Oil Sands Mining and Upgrading	442	321	359	1,719	1,747
Midstream and Refining	2	2	3	9	9
Head office	7	5	7	25	23
Abandonments expenditures, net ⁽²⁾	84	114	67	335	232
Net capital expenditures	\$ 1,317	\$ 1,249	\$ 1,804	\$ 5,471	\$ 4,908

(1) Net capital expenditures exclude the impact of lease assets and fair value and revaluation adjustments, and include non-cash transfers of property, plant and equipment to inventory due to change in use.

(2) Non-GAAP Financial Measure. Refer to the "Non-GAAP and Other Financial Measures" section of this MD&A.

(3) Includes cash consideration of \$771 million and the settlement of long-term debt of \$183 million assumed in the acquisition of Storm in the fourth quarter of 2021.

(4) Includes the acquisition of a 5% net carried interest on an existing oil sands lease in the second quarter of 2021.

The Company's strategy is focused on building a diversified asset base that is balanced among various products. In order to facilitate efficient operations, the Company concentrates its activities in core areas. The Company focuses on maintaining its land inventories to enable the continuous exploitation of play types and geological trends, greatly reducing overall exploration risk. By owning associated infrastructure, the Company is able to maximize utilization of its production facilities, thereby increasing control over production expenses.

Net capital expenditures for the year ended December 31, 2022 were \$5,471 million compared with \$4,908 million for the year ended December 31, 2021. Net capital expenditures for the year ended December 31, 2022 included base capital expenditures ⁽¹⁾ of \$3,956 million and strategic growth capital expenditures ⁽¹⁾ of \$1,045 million, in accordance with the Company's capital budget. The Company also completed strategic acquisitions ⁽¹⁾ of \$470 million during the year ended December 31, 2022. Net capital expenditures were \$1,317 million for the fourth quarter of 2022 compared with \$1,804 million for the fourth quarter of 2021 and \$1,249 million for the third quarter of 2022.

2023 Capital Budget

On November 30, 2022, the Company announced its 2023 base capital budget ⁽²⁾ targeted at approximately \$4,190 million. The budget also includes incremental strategic growth capital of approximately \$1,020 million that targets to add additional production and capacity growth beyond 2023 in the Company's Exploration and Production segments, and long life low decline thermal in situ and Oil Sands Mining and Upgrading assets.

The 2023 capital budget constitutes forward-looking statements. Refer to the "Advisory" section of this MD&A for further details on forward-looking statements.

Drilling Activity ⁽¹⁾⁽²⁾

	Three Months Ended			Year Ended	
	Dec 31 2022	Sep 30 2022	Dec 31 2021	Dec 31 2022	Dec 31 2021
(number of net wells)					
Net successful crude oil wells ⁽³⁾	80	98	22	317	149
Net successful natural gas wells	15	14	9	72	49
Dry wells	—	—	—	1	1
Total	95	112	31	390	199
Success rate	100%	100%	100%	99%	99%

(1) Includes drilling activity for North America and International segments.

(2) In addition, during the fourth quarter of 2022, on a net basis, the Company drilled 22 stratigraphic and 1 service well in the Oil Sands Mining and Upgrading segment, 19 service wells in the Company's thermal oil projects and 1 service well in Northwest Alberta. During the year ended December 31, 2022, on a net basis, the Company drilled 373 stratigraphic and 5 service wells in the Oil Sands Mining and Upgrading segment, 18 stratigraphic and 53 service wells in the Company's thermal oil projects, and 3 service wells in Northwest Alberta.

(3) Includes bitumen wells.

North America

During the fourth quarter of 2022, the Company drilled 15 net natural gas wells, 60 net primary heavy crude oil wells, 6 net Pelican Lake heavy crude oil wells, 9 net bitumen (thermal oil) wells and 5 net light crude oil wells.

(1) Item is a component of net capital expenditures. Refer to the "Non-GAAP and Other Financial Measures" section of this MD&A for more details on net capital expenditures.

(2) Forward looking non-GAAP Financial Measure. The capital budget is based on net capital expenditures (Non-GAAP Financial Measure) and excludes net acquisition costs. Refer to the "Non-GAAP and Other Financial Measures" section of this MD&A for more details on Net Capital Expenditures.

LIQUIDITY AND CAPITAL RESOURCES

(\$ millions, except ratios)	Dec 31 2022	Sep 30 2022	Dec 31 2021
Adjusted working capital ⁽¹⁾	\$ (1,190)	\$ (606)	\$ (480)
Long-term debt, net ⁽²⁾	\$ 10,525	\$ 12,384	\$ 13,950
Shareholders' equity	\$ 38,175	\$ 38,139	\$ 36,945
Debt to book capitalization ⁽²⁾	21.6%	24.5%	27.4%
After-tax return on average capital employed ⁽³⁾	22.1%	24.0%	15.6%

(1) Calculated as current assets less current liabilities, excluding the current portion of long-term debt.

(2) Capital Management Measure. Refer to the "Non-GAAP and Other Financial Measures" section of this MD&A.

(3) Non-GAAP Ratio. Refer to the "Non-GAAP and Other Financial Measures" section of this MD&A.

As at December 31, 2022, the Company's capital resources consisted primarily of cash flows from operating activities, available bank credit facilities and access to debt capital markets. Cash flows from operating activities and the Company's ability to renew existing bank credit facilities and raise new debt is dependent on factors discussed in the "Business Environment" section of this MD&A and in the "Risks and Uncertainties" section of the Company's annual MD&A for the year ended December 31, 2021. In addition, the Company's ability to renew existing bank credit facilities and raise new debt reflects current credit ratings as determined by independent rating agencies, and market conditions. The Company continues to believe its internally generated cash flows from operating activities, supported by the implementation of its ongoing hedge policy, the flexibility of its capital expenditure programs and multi-year financial plans, its existing bank credit facilities, and its ability to raise new debt on commercially acceptable terms will provide sufficient liquidity to sustain its operations in the short, medium and long-term and support its growth strategy.

On an ongoing basis the Company continues to focus on its balance sheet strength and available liquidity by:

- Monitoring cash flows from operating activities, which is the primary source of funds;
- Monitoring exposure to individual customers, contractors, suppliers and joint venture partners on a regular basis and when appropriate, ensuring parental guarantees or letters of credit are in place, and as applicable, taking other mitigating actions to minimize the impact in the event of a default;
- Actively managing the allocation of maintenance and growth capital to ensure it is expended in a prudent and appropriate manner with flexibility to adjust to market conditions. The Company continues to exercise its capital flexibility to address commodity price volatility and its impact on operating expenditures, capital commitments and long-term debt;
- Monitoring the Company's ability to fulfill financial obligations as they become due or the ability to monetize assets in a timely manner at a reasonable price;
- Reviewing bank credit facilities and public debt indentures to ensure they are in compliance with applicable covenant packages; and
- Reviewing the Company's borrowing capacity:
 - During the second quarter of 2022, the Company repaid and cancelled the \$500 million non-revolving portion of the \$1,000 million term credit facility, reducing the remaining facility to the \$500 million revolving facility maturing February 2023. During the fourth quarter of 2022, the facility was extended from February 2023 to February 2024.
 - During the first quarter of 2022, the Company repaid \$500 million of the \$1,150 million non-revolving term credit facility maturing February 2023. During the second quarter of 2022, the Company repaid the remaining \$650 million and the facility was cancelled.
 - During the first quarter of 2022, the Company discontinued its £5 million demand credit facility related to its North Sea operations.
 - The Company's borrowings under its US commercial paper program are authorized up to a maximum of US\$2,500 million. The Company reserves capacity under its revolving bank credit facilities for amounts outstanding under this program.
 - Borrowings under the Company's revolving term credit facilities may be made by way of pricing referenced to Canadian dollar bankers' acceptances, US dollar bankers' acceptances, LIBOR, SOFR, US base rate or Canadian prime rate.

- During the fourth quarter of 2022, the Company repaid through market purchases \$18 million of medium-term notes with interest rates ranging from 1.45% to 3.55%, originally due between 2023 and 2028 (year ended December 31, 2022 - \$498 million).
- During the first quarter of 2022, the Company repaid \$1,000 million of 3.31% medium-term notes.
- In July 2021, the Company filed a base shelf prospectus that allows for the offer for sale from time to time of up to \$3,000 million of medium-term notes in Canada, which expires in August 2023. If issued, these securities may be offered in amounts and at prices, including interest rates, to be determined based on market conditions at the time of issuance.
- During the fourth quarter of 2022, the Company early repaid US\$1,000 million of 2.95% debt securities, originally due January 15, 2023.
- In July 2021, the Company filed a base shelf prospectus that allows for the offer for sale from time to time of up to US\$3,000 million of debt securities in the United States, which expires in August 2023. If issued, these securities may be offered in amounts and at prices, including interest rates, to be determined based on market conditions at the time of issuance.

As at December 31, 2022, the Company had undrawn revolving bank credit facilities of \$5,520 million. Including cash and cash equivalents and short-term investments, the Company had approximately \$6,931 million in liquidity. The Company also has certain other dedicated credit facilities supporting letters of credit.

During the second quarter of 2022, the Company settled the US\$550 million cross currency swap designated as a cash flow hedge of a portion of the US\$1,100 million 6.25% US dollar debt securities due March 2038. The Company realized cash proceeds of \$158 million on settlement. As at December 31, 2022, the Company had no cross currency swap contracts outstanding. As at December 31, 2022, there were no foreign currency contracts designated as cash flow hedges.

Long-term debt, net was \$10,525 million as at December 31, 2022, resulting in a debt to book capitalization ratio ⁽¹⁾ of 21.6% (December 31, 2021 – 27.4%); this ratio was below the 25% to 45% internal range utilized by management. This range may be exceeded in periods when a combination of capital projects, acquisitions, or lower commodity prices occurs. The Company may be below the low end of the targeted range when cash flows from operating activities are greater than current investment activities. The Company remains committed to maintaining a strong balance sheet, adequate available liquidity and a flexible capital structure. Further details related to the Company's long-term debt as at December 31, 2022 are discussed in note 9 to the financial statements.

The Company is subject to a financial covenant that requires debt to book capitalization as defined in its credit facility agreements to not exceed 65%. As at December 31, 2022, the Company was in compliance with this covenant.

The Company periodically utilizes commodity derivative financial instruments under its commodity hedge policy to reduce the risk of volatility in commodity prices and to support the Company's cash flow for its capital expenditure programs. This policy currently allows for the hedging of up to 60% of the near 12 months budgeted production and up to 40% of the following 13 to 24 months estimated production. For the purpose of this policy, the purchase of put options is in addition to the above parameters. Further details related to the Company's commodity derivative financial instruments outstanding as at December 31, 2022 are discussed in note 16 to the financial statements.

As at December 31, 2022, the maturity dates of long-term debt and other long-term liabilities and related interest payments were as follows:

		Less than 1 year	1 to less than 2 years	2 to less than 5 years	Thereafter
Long-term debt ⁽¹⁾	\$	404	\$ 1,009	\$ 3,757	\$ 6,344
Other long-term liabilities ⁽²⁾	\$	247	\$ 156	\$ 416	\$ 724
Interest and other financing expense ⁽³⁾	\$	584	\$ 577	\$ 1,410	\$ 3,790

(1) Long-term debt represents principal repayments only and does not reflect interest, original issue discounts and premiums or transaction costs.

(2) Lease payments included within other long-term liabilities reflect principal payments only and are as follows; less than one year, \$244 million; one to less than two years, \$156 million; two to less than five years, \$416 million; and thereafter, \$724 million.

(3) Includes interest and other financing expense on long-term debt and other long-term liabilities. Payments were estimated based upon applicable interest and foreign exchange rates as at December 31, 2022.

(1) Capital management measure. Refer to the "Non-GAAP and Other Financial Measures" section of this MD&A.

Share Capital

As at December 31, 2022, there were 1,102,636,000 common shares outstanding (December 31, 2021 – 1,168,369,000 common shares) and 31,150,000 stock options outstanding. As at February 28, 2023, the Company had 1,099,741,000 common shares outstanding and 31,902,000 stock options outstanding.

On March 1, 2023, the Board of Directors approved a 6% increase in the quarterly dividend to \$0.90 per common share, beginning with the dividend payable on April 5, 2023.

On November 2, 2022, the Board of Directors approved a 13% increase in the quarterly dividend to \$0.85 per common share, beginning with the dividend paid on January 5, 2023.

On August 3, 2022, the Board of Directors approved a special dividend of \$1.50 per common share, paid on August 31, 2022.

On March 2, 2022, the Board of Directors approved a 28% increase in the quarterly dividend to \$0.75 per common share. On November 3, 2021, the Board of Directors approved a 25% increase in the quarterly dividend to \$0.5875 per common share. On March 3, 2021, the Board of Directors approved an 11% increase in the quarterly dividend to \$0.47 per common share, from \$0.425 per common share. The dividend policy undergoes periodic review by the Board of Directors and is subject to change.

On March 8, 2022, the Company's application was approved for a Normal Course Issuer Bid to purchase through the facilities of the Toronto Stock Exchange ("TSX"), alternative Canadian trading platforms, and the New York Stock Exchange ("NYSE"), up to 101,574,207 common shares, representing 10% of the public float, over a 12-month period commencing March 11, 2022 and ending March 10, 2023.

For the year ended December 31, 2022, the Company purchased 77,338,200 common shares at a weighted average price of \$72.03 per common share for a total cost of \$5,571 million. Retained earnings were reduced by \$4,868 million, representing the excess of the purchase price of common shares over their average carrying value. Subsequent to December 31, 2022, up to and including February 28, 2023, the Company purchased 6,000,000 common shares at a weighted average price of \$77.72 per common share for a total cost of \$466 million.

On March 1, 2023, the Board of Directors approved a resolution authorizing the Company to file a Notice of Intention with the TSX to purchase, by way of Normal Course Issuer Bid, up to 10% of the public float (as determined in accordance with the rules of the TSX) of its issued and outstanding common shares. Subject to acceptance of the Notice of Intention by the TSX, the purchases would be made through facilities of the TSX, alternative Canadian trading platforms, and the NYSE.

COMMITMENTS AND CONTINGENCIES

In the normal course of business, the Company has committed to certain payments. The following table summarizes the Company's commitments as at December 31, 2022:

(\$ millions)	2023	2024	2025	2026	2027	Thereafter
Product transportation and processing ⁽¹⁾	\$ 1,171	\$ 1,349	\$ 1,168	\$ 1,102	\$ 1,052	\$ 11,095
North West Redwater Partnership service toll ⁽²⁾	\$ 151	\$ 152	\$ 151	\$ 133	\$ 118	\$ 4,884
Offshore vessels and equipment	\$ 44	\$ 35	\$ —	\$ —	\$ —	\$ —
Field equipment and power	\$ 36	\$ 27	\$ 24	\$ 23	\$ 22	\$ 215
Other	\$ 23	\$ 24	\$ 21	\$ 16	\$ —	\$ —

(1) Includes commitments pertaining to a 20-year product transportation agreement on the Trans Mountain Pipeline Expansion.

(2) Pursuant to the processing agreements, the Company pays its 25% pro rata share of the debt component of the monthly fee-for-service toll. Included in the toll is \$2,863 million of interest payable over the 40-year tolling period, ending in 2058.

In addition to the commitments disclosed above, the Company has entered into various agreements related to the engineering, procurement and construction of its various development projects. These contracts can be cancelled by the Company upon notice without penalty, subject to the costs incurred up to and in respect of the cancellation.

LEGAL PROCEEDINGS AND OTHER CONTINGENCIES

The Company is defendant and plaintiff in a number of legal actions arising in the normal course of business. In addition, the Company is subject to certain contractor construction claims. The Company believes that any liabilities that might arise pertaining to any such matters would not have a material effect on its consolidated financial position.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The preparation of financial statements requires the Company to make estimates, assumptions and judgements in the application of IFRS that have a significant impact on the financial results of the Company. Actual results may differ from estimated amounts, and those differences may be material. A comprehensive discussion of the Company's significant accounting estimates is contained in the Company's annual MD&A and audited consolidated financial statements for the year ended December 31, 2021.

CONTROL ENVIRONMENT

There have been no changes to internal control over financial reporting during the year ended December 31, 2022 that have materially affected, or are reasonably likely to materially affect the Company's internal control over financial reporting. Due to inherent limitations, disclosure controls and procedures and internal control over financial reporting may not prevent or detect misstatements, and even those controls determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation.

NON-GAAP AND OTHER FINANCIAL MEASURES

This MD&A includes references to non-GAAP and other financial measures as defined in NI 52-112. These financial measures are used by the Company to evaluate its financial performance, financial position or cash flow and include non-GAAP financial measures, non-GAAP ratios, total of segments measures, capital management measures, and supplementary financial measures. These financial measures are not defined by IFRS and therefore are referred to as non-GAAP and other financial measures. The non-GAAP and other financial measures used by the Company may not be comparable to similar measures presented by other companies, and should not be considered an alternative to or more meaningful than the most directly comparable financial measure presented in the financial statements, as applicable, as an indication of the Company's performance. Descriptions of the Company's non-GAAP and other financial measures included in this MD&A, and reconciliations to the most directly comparable GAAP measure, as applicable, are provided below.

Adjusted Net Earnings from Operations

Adjusted net earnings from operations is a non-GAAP financial measure that adjusts net earnings as presented in the Company's consolidated Statements of Earnings, for non-operating items, net of tax. The Company considers adjusted net earnings from operations a key measure in evaluating its performance, as it demonstrates the Company's ability to generate after-tax operating earnings from its core business areas. A reconciliation for adjusted net earnings from operations is presented below.

(\$ millions)	Three Months Ended			Year Ended	
	Dec 31 2022	Sep 30 2022	Dec 31 2021	Dec 31 2022	Dec 31 2021
Net earnings	\$ 1,520	\$ 2,814	\$ 2,534	\$ 10,937	\$ 7,664
Share-based compensation, net of tax ⁽¹⁾	309	(8)	183	780	495
Unrealized risk management loss (gain), net of tax ⁽²⁾	11	(37)	10	(25)	16
Unrealized foreign exchange (gain) loss, net of tax ⁽³⁾	(203)	785	(79)	852	(205)
Realized foreign exchange loss (gain), net of tax ⁽⁴⁾	7	—	—	(62)	118
Gain on acquisitions, net of tax ⁽⁵⁾	—	—	—	—	(478)
Gain from investments, net of tax ⁽⁶⁾	(88)	(36)	(3)	(182)	(132)
Recoverability charge, net of tax ⁽⁷⁾	651	—	—	651	—
Other, net of tax ⁽⁸⁾	(13)	(25)	(19)	(88)	(58)
Non-operating items, net of tax	674	679	92	1,926	(244)
Adjusted net earnings from operations	\$ 2,194	\$ 3,493	\$ 2,626	\$ 12,863	\$ 7,420

(1) Share-based compensation includes costs incurred under the Company's Stock Option Plan and PSU plan. The fair value of the share-based compensation is recognized as a liability on the Company's balance sheets and periodic changes in the fair value are recognized in net earnings. Pre-tax share-based compensation for the three months ended December 31, 2022 was an expense of \$319 million (three months ended September 30, 2022 – \$4 million recovery, three months ended December 31, 2021 – \$191 million expense; year ended December 31, 2022 – \$804 million expense, year ended December 31, 2021 – \$514 million expense).

(2) Derivative financial instruments are recognized at fair value on the Company's balance sheets, with changes in the fair value of non-designated hedges recognized in net earnings. The amounts ultimately realized may be materially different than those amounts reflected in the financial statements due to changes in prices of the underlying items hedged, primarily crude oil, natural gas and foreign exchange. Pre-tax unrealized risk management loss for the three months ended December 31, 2022 was \$15 million (three months ended September 30, 2022 – \$48 million gain, three months ended December 31, 2021 – \$8 million loss; year ended December 31, 2022 – \$28 million gain, year ended December 31, 2021 – \$19 million loss).

(3) Unrealized foreign exchange losses and gains result primarily from the translation of US dollar denominated long-term debt to period-end exchange rates, partially offset by the impact of cross currency swaps, and are recognized in net earnings. Pre- and after-tax amounts for these unrealized foreign exchange losses and gains are the same.

(4) During the fourth quarter of 2022, the Company early repaid US\$1,000 million of 2.95% debt securities, originally due January 15, 2023, resulting in a realized foreign exchange loss of \$7 million. During the second quarter of 2022, the Company settled the US\$550 million cross currency swap designated as a cash flow hedge of a portion of the US\$1,100 million 6.25% US dollar debt securities due March 2038, resulting in a realized foreign exchange gain of \$69 million. During the third quarter of 2021, the Company repaid US\$500 million of 3.45% debt securities, originally due November 2021, resulting in a realized foreign exchange loss of \$118 million. Pre- and after-tax amounts for these realized foreign exchange gains and losses are the same.

(5) During the third quarter of 2021, the Company completed two acquisitions resulting in a gain of \$478 million.

(6) The Company's investments have been accounted for at fair value through profit and loss and are measured each period with (gains) losses recognized in net earnings. There is zero net tax impact on these (gains) losses from investments.

(7) The Company recognized a recoverability charge of \$1,620 million in depletion, depreciation and amortization at December 31, 2022 relating to the de-booking of reserves at the Ninian field in the North Sea. Prevailing regulatory and economic conditions in 2022 and the increasingly challenging commercial outlook in the United Kingdom, including the impact of higher natural gas and carbon costs, led the Company to assess the viability of its North Sea operations. Following a detailed review of its development plans, the Company determined that the Ninian field is no longer economic, de-booked associated crude oil reserves as at December 31, 2022, and is accelerating abandonment.

(8) Other relates to the impact of government grant income under the provincial well-site rehabilitation programs. Pre-tax other for the three months ended December 31, 2022 was \$16 million (three months ended September 30, 2022 – \$33 million, three months ended December 31, 2021 – \$25 million; year ended December 31, 2022 – \$114 million, year ended December 31, 2021 – \$75 million).

Adjusted Funds Flow

Adjusted funds flow is a non-GAAP financial measure that represents cash flows from operating activities as presented in the Company's consolidated Statements of Cash Flows, adjusted for the net change in non-cash working capital, abandonment expenditures excluding the impact of government grant income under the provincial well-site rehabilitation programs, and movements in other long-term assets. The Company considers adjusted funds flow a key measure in evaluating its performance, as it demonstrates the Company's ability to generate the cash flow necessary to fund future growth through capital investment and to repay debt. A reconciliation for adjusted funds flow, from cash flows from operating activities is presented below.

(\$ millions)	Three Months Ended			Year Ended	
	Dec 31 2022	Sep 30 2022	Dec 31 2021	Dec 31 2022	Dec 31 2021
Cash flows from operating activities	\$ 4,544	\$ 6,098	\$ 4,712	\$ 19,391	\$ 14,478
Net change in non-cash working capital	(517)	(1,024)	(420)	(79)	(964)
Abandonment expenditures, net ⁽¹⁾	84	114	67	335	232
Movements in other long-term assets ⁽²⁾	65	20	(21)	144	(13)
Adjusted funds flow	\$ 4,176	\$ 5,208	\$ 4,338	\$ 19,791	\$ 13,733

(1) Non-GAAP Financial Measure. A reconciliation of abandonment expenditures, net is presented in the "Abandonment Expenditures, net" section below.

(2) Includes the unamortized cost of the share bonus program and accrued interest on the deferred PRT recovery.

Adjusted Net Earnings from Operations and Adjusted Funds Flow, Per Common Share (Basic and Diluted)

Adjusted net earnings from operations and adjusted funds flow, per common share (basic and diluted), are non-GAAP ratios that represent those non-GAAP measures divided by the weighted average number of basic and diluted common shares outstanding for the period, respectively, as presented in note 15 to the financial statements. These non-GAAP measures, disclosed on a per share basis, enable a comparison to the per share amounts disclosed in the Company's financial statements prepared in accordance with IFRS.

Abandonment Expenditures, net

Abandonment expenditures, net, is a non-GAAP financial measure that represents the abandonment expenditures to settle asset retirement obligations as reflected in the Company's annual capital budget. Abandonment expenditures, net is calculated as abandonment expenditures, as presented in the Company's consolidated Statements of Cash Flows, adjusted for the impact of government grant income under the provincial well-site rehabilitation programs. A reconciliation of abandonment expenditures, net is presented below.

(\$ millions)	Three Months Ended			Year Ended	
	Dec 31 2022	Sep 30 2022	Dec 31 2021	Dec 31 2022	Dec 31 2021
Abandonment expenditures	\$ 100	\$ 147	\$ 92	\$ 449	\$ 307
Government grants for abandonment expenditures	(16)	(33)	(25)	(114)	(75)
Abandonment expenditures, net	\$ 84	\$ 114	\$ 67	\$ 335	\$ 232

Netback

Netback is a non-GAAP ratio that represents net cash flows provided from core activities after the impact of all costs associated with bringing a product to market, on a per unit basis. The Company considers netback a key measure in evaluating its performance, as it demonstrates the efficiency and profitability of the Company's activities. Refer to the "Operating Highlights – Exploration and Production" section of this MD&A for the netback calculations on a per unit basis for crude oil and NGLs, natural gas and on a total barrels of oil equivalent basis.

The netback calculations include the non-GAAP financial measures: realized price and transportation, reconciled below to their respective line item in note 18 to the financial statements.

Realized Price (\$/bbl and \$/BOE) – Exploration and Production

Realized price (\$/bbl and \$/BOE) is a non-GAAP ratio calculated as realized crude oil and NGLs sales and total realized BOE sales (non-GAAP financial measures) divided by respective sales volumes. Realized crude oil and NGLs sales and total realized BOE sales include the impact of blending costs and other by-product sales. The Company considers realized price a key measure in evaluating its performance, as it demonstrates the realized pricing per unit the Company obtained on the market for its crude oil and NGLs sales volumes and BOE sales volumes.

Reconciliations for Exploration and Production realized crude oil and NGLs sales and BOE sales and the calculations for realized price are presented below.

(\$ millions, except bbl/d and \$/bbl)	Three Months Ended			Year Ended	
	Dec 31 2022	Sep 30 2022	Dec 31 2021	Dec 31 2022	Dec 31 2021
Crude oil and NGLs (bbl/d)					
North America	482,931	469,532	490,448	480,691	471,331
International					
North Sea	20,854	4,229	21,360	13,215	18,942
Offshore Africa	14,059	13,020	5,624	14,866	13,452
Total International	34,913	17,249	26,984	28,081	32,394
Total sales volumes	517,844	486,781	517,432	508,772	503,725
Crude oil and NGLs sales ⁽¹⁾	\$ 4,505	\$ 4,813	\$ 4,667	\$ 22,072	\$ 15,505
Less: Blending costs ⁽²⁾	1,202	1,010	1,202	5,239	3,792
Realized crude oil and NGLs sales	\$ 3,303	\$ 3,803	\$ 3,465	\$ 16,833	\$ 11,713
Realized price (\$/bbl)	\$ 69.34	\$ 84.91	\$ 72.81	\$ 90.64	\$ 63.71

(1) Crude oil and NGLs sales in note 18 to the financial statements.

(2) Blending costs are a component of transportation, blending and feedstock expense as reconciled below in the "Transportation – Exploration and Production" section.

(\$ millions, except BOE/d and \$/BOE)	Three Months Ended			Year Ended	
	Dec 31 2022	Sep 30 2022	Dec 31 2021	Dec 31 2022	Dec 31 2021
Barrels of oil equivalent (BOE/d)					
North America	833,719	822,257	797,185	826,526	751,330
International					
North Sea	21,375	4,447	21,940	13,598	19,512
Offshore Africa	15,171	15,339	7,781	16,933	15,385
Total International	36,546	19,786	29,721	30,531	34,897
Total sales volumes	870,265	842,043	826,906	857,057	786,227
Barrels of oil equivalent sales ⁽¹⁾	\$ 5,751	\$ 6,100	\$ 5,581	\$ 27,071	\$ 18,025
Less: Blending costs ⁽²⁾	1,202	1,010	1,202	5,239	3,792
Less: Sulphur income	(3)	(25)	(12)	(88)	(21)
Realized barrels of oil equivalent sales	\$ 4,552	\$ 5,115	\$ 4,391	\$ 21,920	\$ 14,254
Realized price (\$/BOE)	\$ 56.83	\$ 66.04	\$ 57.72	\$ 70.07	\$ 49.67

(1) Barrels of oil equivalent sales includes crude oil and NGLs sales and natural gas sales in note 18 to the financial statements.

(2) Blending costs are a component of transportation, blending and feedstock expense as reconciled below in the "Transportation – Exploration and Production" section.

Transportation – Exploration and Production

Transportation (\$/BOE, \$/bbl and \$/Mcf) is a non-GAAP ratio calculated as transportation (a non-GAAP financial measure) divided by the respective sales volumes. The Company calculates transportation to demonstrate its cost to deliver products to the market excluding the impact of blending costs. A reconciliation for Exploration and Production transportation and the calculations for transportation on a per unit basis are presented below.

(\$ millions, except \$ per unit amounts)	Three Months Ended			Year Ended	
	Dec 31 2022	Sep 30 2022	Dec 31 2021	Dec 31 2022	Dec 31 2021
Transportation, blending and feedstock ⁽¹⁾	\$ 1,506	\$ 1,292	\$ 1,461	\$ 6,401	\$ 4,780
Less: Blending costs	1,202	1,010	1,202	5,239	3,792
Transportation	\$ 304	\$ 282	\$ 259	\$ 1,162	\$ 988
Transportation (\$/BOE)	\$ 3.80	\$ 3.64	\$ 3.40	\$ 3.72	\$ 3.44
Amounts attributed to crude oil and NGLs	\$ 196	\$ 184	\$ 187	\$ 767	\$ 710
Transportation (\$/bbl)	\$ 4.11	\$ 4.10	\$ 3.93	\$ 4.13	\$ 3.86
Amounts attributed to natural gas	\$ 108	\$ 98	\$ 72	\$ 395	\$ 278
Transportation (\$/Mcf)	\$ 0.55	\$ 0.51	\$ 0.42	\$ 0.51	\$ 0.45

(1) Transportation, blending and feedstock in note 18 to the financial statements.

North America – Realized Product Prices and Royalties

Realized crude oil and NGLs price (\$/bbl) is a non-GAAP ratio calculated as realized crude oil and NGLs sales (non-GAAP financial measure) divided by sales volumes. Realized crude oil and NGLs sales include the impact of blending costs. The Company considers the realized crude oil and NGLs price a key measure in evaluating its performance, as it demonstrates the realized pricing per unit that the Company obtained on the market for its crude oil and NGLs sales volumes.

Crude oil and NGLs royalty rate is a non-GAAP ratio that is calculated as crude oil and NGLs royalties divided by realized crude oil and NGLs sales. The Company considers crude oil and NGLs royalty rate a key measure in evaluating its performance, as it describes the Company's royalties for crude oil and NGLs sales volumes on a per unit basis.

A reconciliation for North America realized crude oil and NGLs sales and the calculations for realized crude oil and NGLs prices and the royalty rates are presented below.

(\$ millions, except \$/bbl and royalty rates)	Three Months Ended			Year Ended	
	Dec 31 2022	Sep 30 2022	Dec 31 2021	Dec 31 2022	Dec 31 2021
Crude oil and NGLs sales ⁽¹⁾	\$ 4,124	\$ 4,622	\$ 4,431	\$ 20,755	\$ 14,478
Less: Blending costs ⁽²⁾	1,202	1,010	1,202	5,239	3,792
Realized crude oil and NGLs sales	\$ 2,922	\$ 3,612	\$ 3,229	\$ 15,516	\$ 10,686
Realized crude oil and NGLs prices (\$/bbl)	\$ 65.79	\$ 83.62	\$ 71.57	\$ 88.43	\$ 62.10
Crude oil and NGLs royalties ⁽³⁾	\$ 625	\$ 854	\$ 506	\$ 3,445	\$ 1,558
Crude oil and NGLs royalty rates	21%	24%	16%	22%	15%

(1) Crude oil and NGLs sales in note 18 to the financial statements.

(2) Blending costs are a component of transportation, blending and feedstock expense as reconciled above in the "Transportation – Exploration and Production" section.

(3) Item is a component of royalties in note 18 to the financial statements.

Realized Product Prices and Transportation – Oil Sands Mining and Upgrading

Realized SCO sales price (\$/bbl) is a non-GAAP ratio calculated as realized SCO sales (non-GAAP financial measure) including the impact of blending and feedstock costs, divided by SCO sales volumes. The Company considers realized SCO sales price a key measure in evaluating its performance, as it demonstrates the realized pricing per unit that the Company obtained on the market for its SCO sales volumes.

Transportation (\$/bbl) is a non-GAAP ratio calculated as transportation (a non-GAAP financial measure) divided by SCO sales volumes. The Company calculates transportation to demonstrate its cost to deliver product to the market excluding the impact of blending and feedstock costs.

Reconciliations for Oil Sands Mining and Upgrading realized SCO sales and transportation and the calculations for realized SCO sales price and transportation on a per unit basis are presented below.

(\$ millions, except for bbl/d and \$/bbl)	Three Months Ended			Year Ended	
	Dec 31 2022	Sep 30 2022	Dec 31 2021	Dec 31 2022	Dec 31 2021
SCO sales volumes (bbl/d)	433,731	489,146	483,972	428,820	447,230
Crude oil and NGLs sales ⁽¹⁾	\$ 4,935	\$ 6,056	\$ 4,408	\$ 20,804	\$ 14,033
Less: Blending and feedstock costs	795	615	468	2,384	1,309
Realized SCO sales	\$ 4,140	\$ 5,441	\$ 3,940	\$ 18,420	\$ 12,724
Realized SCO sales price (\$/bbl)	\$ 103.79	\$ 120.91	\$ 88.48	\$ 117.69	\$ 77.95
Transportation, blending and feedstock ⁽²⁾	\$ 867	\$ 684	\$ 527	\$ 2,652	\$ 1,505
Less: Blending and feedstock costs	795	615	468	2,384	1,309
Transportation	\$ 72	\$ 69	\$ 59	\$ 268	\$ 196
Transportation (\$/bbl)	\$ 1.80	\$ 1.55	\$ 1.33	\$ 1.71	\$ 1.21

(1) Crude oil and NGLs sales in note 18 to the financial statements.

(2) Transportation, blending and feedstock in note 18 to the financial statements.

Net Capital Expenditures

Net capital expenditures is a non-GAAP financial measure that represents cash flows used in investing activities as presented in the Company's consolidated Statements of Cash Flows, adjusted for the net change in non-cash working capital, the proceeds from investments, the repayment of NWRP subordinated debt advances, and abandonment expenditures including the impact of government grant income under the provincial well-site rehabilitation programs. The Company considers net capital expenditures a key measure in evaluating its performance, as it provides an understanding of the Company's capital spending activities in comparison to the Company's annual capital budget. A reconciliation of net capital expenditures is presented below.

(\$ millions)	Three Months Ended			Year Ended	
	Dec 31 2022	Sep 30 2022	Dec 31 2021	Dec 31 2022	Dec 31 2021
Cash flows used in investing activities	\$ 1,262	\$ 1,129	\$ 1,615	\$ 4,987	\$ 3,703
Net change in non-cash working capital	(29)	6	(61)	149	107
Proceeds from investment	—	—	—	—	128
Repayment of NWRP subordinated debt advances	—	—	—	—	555
Capital expenditures	1,233	1,135	1,554	5,136	4,493
Abandonment expenditures, net ⁽¹⁾	84	114	67	335	232
Settlement of long-term debt acquired ⁽²⁾	—	—	183	—	183
Net capital expenditures ⁽³⁾	\$ 1,317	\$ 1,249	\$ 1,804	\$ 5,471	\$ 4,908

(1) Non-GAAP Financial Measure. A reconciliation of abandonment expenditures, net is presented in the "Abandonment Expenditures, net" section above.

(2) Relates to the settlement of long-term debt assumed in the acquisition of Storm in the fourth quarter of 2021.

(3) For the year ended December 31, 2022, includes base capital expenditures of \$3,956 million, net property, plant and equipment acquisitions and net exploration and evaluation asset dispositions of \$470 million, and strategic growth capital expenditures of \$1,045 million. Strategic growth capital expenditures represent the allocation of the Company's free cash flow that will be directed to strategic capital growth opportunities that target to increase production volumes in future periods and that exceed the Company's base capital expenditures for the current fiscal year, as outlined in the Company's capital budget.

Liquidity

Liquidity is a non-GAAP financial measure that represents the availability of readily available undrawn bank credit facilities, cash and cash equivalents, and other highly liquid assets to meet short-term funding requirements and to assist in assessing the Company's financial position. The Company's calculation of liquidity is presented below.

(\$ millions)	Dec 31 2022	Sep 30 2022	Dec 31 2021
Undrawn bank credit facilities	\$ 5,520	\$ 5,520	\$ 6,098
Cash and cash equivalents	920	565	744
Investments	491	403	309
Liquidity	\$ 6,931	\$ 6,488	\$ 7,151

Long-term Debt, net

Long-term debt, net, is a capital management measure that represents long-term debt less cash and cash equivalents, as disclosed in note 14 to the financial statements.

Debt to Book Capitalization

Debt to book capitalization is a capital management measure intended to enable financial statement users to evaluate the Company's capital structure, as disclosed in note 14 to the financial statements.

After-Tax Return on Average Capital Employed

After-tax return on average capital employed as defined by the Company is a non-GAAP ratio. The ratio is calculated as net earnings plus after-tax interest and other financing expense for the twelve month trailing period; as a percentage of average capital employed (defined as current and long-term debt plus shareholders' equity) for the twelve month trailing period. The Company considers this ratio a key measure in evaluating the Company's ability to generate profit and the efficiency with which it employs capital. A reconciliation of the Company's after-tax return on average capital employed is presented below.

(\$ millions, except ratios)	Dec 31 2022	Sep 30 2022	Dec 31 2021
Interest adjusted after-tax return:			
Net earnings, 12 months trailing	\$ 10,937	\$ 11,951	\$ 7,664
Interest and other financing expense, net of tax, 12 months trailing ⁽¹⁾	424	497	547
Interest adjusted after-tax return	\$ 11,361	\$ 12,448	\$ 8,211
12 months average current portion long-term debt ⁽²⁾	\$ 1,359	\$ 1,478	\$ 1,483
12 months average long-term debt ⁽²⁾	11,761	12,707	16,769
12 months average common shareholders' equity ⁽²⁾	38,218	37,688	34,458
12 months average capital employed	\$ 51,338	\$ 51,873	\$ 52,710
After-tax return on average capital employed	22.1%	24.0%	15.6%

(1) The blended tax rate on interest was 23% for each of the periods presented.

(2) For the purpose of this non-GAAP ratio, the measurement of average current and long-term debt and common shareholders equity are determined on a consistent basis, as an average of the opening and quarterly period end values for the 12 month trailing period for each of the periods presented.