

# Canadian Natural

**2021**  
**ANNUAL**  
**REPORT**



# 2021 Performance Highlights

Canadian Natural's diverse and balanced asset base along with the Company's continued focus on effective and efficient operations delivered several record operational and financial results in 2021. These strong results created significant value for the Company's shareholders in the year.

	2021	2020	2019
<b>FINANCIAL</b> (\$ millions, except per common share amounts)			
Product sales <sup>(1)</sup>	\$ 32,854	\$ 17,491	\$ 24,394
Net earnings (loss)	\$ 7,664	\$ (435)	\$ 5,416
Per common share – basic	\$ 6.49	\$ (0.37)	\$ 4.55
– diluted	\$ 6.46	\$ (0.37)	\$ 4.54
Adjusted net earnings (loss) from operations <sup>(2)</sup>	\$ 7,420	\$ (756)	\$ 3,795
Per common share – basic <sup>(3)</sup>	\$ 6.28	\$ (0.64)	\$ 3.19
– diluted <sup>(3)</sup>	\$ 6.25	\$ (0.64)	\$ 3.18
Cash flows from operating activities	\$ 14,478	\$ 4,714	\$ 8,829
Adjusted funds flow <sup>(2)</sup>	\$ 13,733	\$ 5,200	\$ 10,267
Per common share – basic <sup>(3)</sup>	\$ 11.63	\$ 4.40	\$ 8.62
– diluted <sup>(3)</sup>	\$ 11.57	\$ 4.40	\$ 8.61
Cash flows used in investing activities	\$ 3,703	\$ 2,819	\$ 7,255
Net capital expenditures <sup>(2)</sup>	\$ 4,908	\$ 3,206	\$ 7,121
Long-term debt, net <sup>(4)</sup>	\$ 13,950	\$ 21,269	\$ 20,843
Shareholders' equity	\$ 36,945	\$ 32,380	\$ 34,991
Debt to book capitalization <sup>(4)</sup>	27%	40%	37%

(1) Further details related to product sales are disclosed in the "Segmented Information" note to the Company's audited consolidated financial statements.

(2) Non-GAAP Financial Measure. Refer to the "Non-GAAP and Other Financial Measures" section of the Company's annual Management's Discussion and Analysis ("MD&A") for the year ended December 31, 2021, dated March 2, 2022, included in this annual report.

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

(4) Capital Management Measure. Refer to the "Non-GAAP and Other Financial Measures" section of the Company's MD&A.

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	2021	2020	2019
<b>OPERATING</b>			
<b>Daily production, before royalties</b> <sup>(1)</sup>			
Crude oil and NGLs (Mbb/d)			
North America - Exploration and Production	473	460	406
North America - Oil Sands Mining and Upgrading	448	417	395
North Sea	18	23	28
Offshore Africa	14	17	21
	<b>952</b>	918	850
Natural gas (MMcf/d)			
North America	1,680	1,450	1,443
North Sea	3	12	24
Offshore Africa	12	15	24
	<b>1,695</b>	1,477	1,491
Barrels of oil equivalent (MBOE/d) <sup>(2)</sup>	<b>1,235</b>	1,164	1,099
<b>Drilling activity</b> <sup>(3)</sup>			
North America	193	71	102
North Sea	6	1	5
Offshore Africa	—	—	1
	<b>199</b>	72	108

(1) Numbers may not add due to rounding.

(2) A barrel of oil equivalent ("BOE") is derived by converting six thousand cubic feet of natural gas to one barrel 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.

(3) Net wells. Excludes net stratigraphic test and service wells.

**1,235,000**  
BOE/D  
RECORD PRODUCTION

**60%**  
OF LIQUIDS PRODUCTION IS  
SCO, LIGHT CRUDE OIL & NGLS

# Letter to our Shareholders

**Throughout 2021, our unique and diverse asset base combined with our track record of operational excellence and our dedicated teams, delivered record average production volumes of 1,235 MBOE/d, including record liquids production of 952 MBOE/d and record natural gas production of 1,695 MMcf/d, representing an increase of approximately 71 MBOE/d over 2020 levels. Our strong operational results during 2021 delivered robust annual adjusted funds flow of approximately \$13.7 billion, which after dividends of approximately \$2.2 billion and capital expenditures, excluding acquisitions, of approximately \$3.5 billion, resulted in annual free cash flow of approximately \$8.0 billion.**

One of Canadian Natural's key strengths is the diversity of our world class assets. Strategically assembled and developed over several decades, our top tier assets have a low decline rate as well as low maintenance capital relative to the size and quality of our reserves, which affords us significant flexibility when balancing our four pillars of capital allocation: returns to shareholders, balance sheet strength, resource value growth and opportunistic acquisitions. We delivered on all four of our pillars in 2021. As we exited 2020, the COVID-19 pandemic continued to affect every aspect of our lives including global energy markets which remained volatile. We took a prudent and conservative approach to planning our 2021 capital program with the goal of focusing on safe, reliable and effective and efficient operations, maximizing value for our shareholders.

Strengthening commodity prices during the first half of 2021 increased our cash flow and by mid-year positioned us to balance an expansion of our capital program with additional debt repayment and increases to both dividends and share repurchases. In November 2021 the Board of Directors enhanced our free cash flow allocation policy which, once the Company's net debt was below \$15 billion, targeted to allocate 50% of free cash flow to the balance sheet, less strategic growth capital / opportunistic acquisitions, and 50% of free cash flow to share repurchases. This free cash flow allocation policy was a significant development in 2021 and provided transparency and structure to the allocation of future free cash flows.

Throughout 2021, we significantly increased returns to shareholders. We announced two increases to our quarterly dividend for a combined annual increase of 38% to \$2.35 per share annually. Direct returns to shareholders in 2021 totaled approximately \$3.8 billion, comprised of our sustainable and growing dividend of approximately \$2.2 billion and share repurchases throughout the year which totaled approximately \$1.6 billion, as well as indirect returns to shareholders through net debt reduction of approximately \$7.3 billion. In early 2022, we further increased our quarterly dividend by 28% to \$0.75 per share quarterly, equal to \$3.00 per share annualized, continuing the Company's leading track record of 22 consecutive years of dividend increases with a compound annual growth rate of 22% over that period of time.

Environmental, Social and Governance ("ESG") performance remained a top priority in 2021. We target to incorporate ESG practices that strengthen our long term sustainability across all aspects of our business. Since 2009, Canadian Natural has invested \$3.9 billion in research and development, driving the necessary improvements that reduced our corporate Greenhouse Gas ("GHG") emission intensity by 18% and methane emissions by 28% from 2016 levels as we move toward our target of net zero emissions in the oil sands. Canadian Natural has a defined pathway that is driving a long-term reduction of GHG emissions through an integrated emissions management strategy that includes investment in research, technology and innovation, all of which contribute to the Company reaching its goal of net zero oil sands emissions intensity.

In June, Canadian Natural together with oil sands industry participants formally announced the Oil Sands Pathways to Net Zero initiative, known as Pathways. The goal of this unique alliance, working collectively with the federal and Alberta governments, is to achieve net zero GHG emissions from oil sands operations by 2050 to help Canada meet its climate goals, including its Paris Agreement commitments and 2050 net zero aspirations. We look forward to sharing more about this initiative in the coming years.

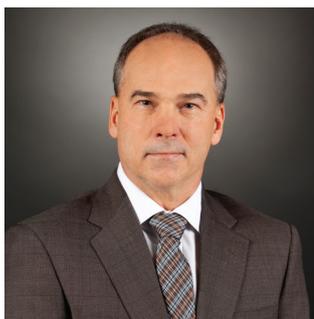
Canadian Natural is committed to a long-term presence in the communities where we operate in Canada, the United Kingdom and Africa. This group of stakeholders includes more than 24,000 landowners, 160 municipalities and 80 Indigenous communities in Western Canada, as well as industry, governments, regulators, academia, and non-governmental groups. The Company works with these diverse communities to identify opportunities for education and training, employment, business development and community investment. Canadian Natural also has a strong commitment to corporate governance, which assures stakeholders that the Company always operates with the highest levels of integrity and ethical standards.

~\$7.3 BILLION  
NET DEBT REDUCTION

~\$3.8 BILLION  
RETURNED TO SHAREHOLDERS



**N. MURRAY EDWARDS**  
Executive Chairman



**TIM S. MCKAY**  
President



**MARK A. STAINTHORPE**  
Chief Financial Officer and  
Senior Vice-President, Finance

Operationally, 2021 was a strong year for Canadian Natural. Our asset base remained one of the strongest in our industry, underpinned by our long life, no decline Oil Sands Mining and Upgrading asset base. These assets generate significant free cash flow due to the low cost of maintaining production, amenable to economic margin enhancement and long-term GHG emissions reducing investments. Oil Sands Mining and Upgrading production was approximately 36% of total corporate production in 2021, averaging record annual production of 448,133 bbl/d of high value Synthetic Crude Oil ("SCO"), an increase of more than 7% compared to 2020 levels.

Canadian Natural's North American E&P operations include crude oil, natural gas and NGL producing assets and represented approximately 61% of the Company's total production volumes in 2021 on a BOE basis. These assets delivered 472,621 bbl/d of liquids production, including record thermal in situ production of 259,284 bbl/d. Natural gas prices strengthened during 2021 creating an opportunity for Canadian Natural to capitalize on the Company's deep inventory of high-quality natural gas opportunities, resulting in average daily natural gas production of 1,680 MMcf/d, an increase of 16% compared to 2020 levels.

Canadian Natural is a unique E&P company that is delivering free cash flow, strong and growing returns to shareholders and increasing returns on capital. Canadian Natural has a strong track record of optimizing capital allocation to our four pillars and we believe 2022 will continue our track record of maximizing shareholder value. The 2022 capital budget of approximately \$4.3 billion, consists of approximately \$3.6 billion of base capital and strategic growth capital of approximately \$0.7 billion, driving annual production growth of approximately 60,000 BOE/d from 2021 production levels. Having achieved net debt of approximately \$14.0 billion at year end 2021, we target to balance the allocation of free cash flow to debt reduction, less strategic growth capital / opportunistic acquisitions, and to share repurchases, on a 50/50 basis per the free cash flow allocation policy. We believe this positions Canadian Natural to balance near term returns to shareholders with longer term investments in the Company's balanced and strategic asset base.

Finally, the COVID-19 pandemic affected our employees in different ways but it has taught us all the importance of supporting each other to ensure we continued to deliver safe, reliable, effective and efficient operations across all areas of our business. In the context of collaboration and resiliency, we would like to thank our employees, contractors and stakeholders for your commitment to operational excellence, adhering to our protocols and supporting each other by working together. You are a corporate advantage that underpins the ongoing success of our business and are the source of our continuous improvement culture. We believe Canadian Natural remains well-positioned to continue delivering long-term value to our shareholders through top tier effective and efficient operations, a robust balance sheet, and the focus of our dedicated people.

**N. MURRAY EDWARDS**  
Executive Chairman

**TIM S. MCKAY**  
President

**MARK A. STAINTHORPE**  
Chief Financial Officer and  
Senior Vice-President, Finance

*Note: Refer to page 5 and the "Non-GAAP and Other Financial Measures" section of the Company's MD&A for additional details.*

## NON-GAAP AND OTHER FINANCIAL MEASURES

This report includes references to non-GAAP and other financial measures as defined in National Instrument 52-112 – Non-GAAP and Other Financial Measures Disclosure. These financial measures are used by the Company to evaluate its financial performance, financial position or cash flow and are not defined by IFRS and therefore are referred to as non-GAAP and other financial measures. These 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 Company's financial statements.

### FREE CASH FLOW

Free cash flow is a non-GAAP financial measure that represents cash flows from operating activities, as determined in accordance with IFRS, as presented in the Company's consolidated Statements of Cash Flows, adjusted for the net change in non-cash working capital from operating activities, abandonment, certain movements in other long-term assets, less net capital expenditures before net property acquisitions and dividends on common shares. The Company considers free cash flow a key measure in demonstrating the Company's ability to generate cash flow to fund future growth through capital investment, pay returns to shareholders, and to repay debt.

(\$ millions)	2021	2020	2019
Adjusted Funds Flow <sup>(1)</sup>	\$ 13,733	\$ 5,200	\$ 10,267
Less: Net Capital Expenditures <sup>(1)</sup>	4,908	3,206	7,121
Net Property Acquisitions <sup>(2)</sup>	(1,425)	(505)	(3,298)
Dividends on Common Shares	2,170	1,950	1,743
Free Cash Flow	\$ 8,080	\$ 549	\$ 4,701

(1) Refer to the descriptions and reconciliations to the most directly comparable GAAP measure, as applicable, provided in the "Non-GAAP and Other Financial Measures" section of the Company's MD&A.

(2) Amount includes net exploration and evaluation asset dispositions and net property acquisitions and the acquisition of a 5% net carried interest on an existing oil sands lease in the second quarter of 2021 per the Company's MD&A.

### CAPITAL BUDGET

Capital budget is a forward looking non-GAAP financial measure. The capital budget is based on net capital expenditures (Non-GAAP Financial Measure) and excludes net property acquisition costs. Refer to the "Non-GAAP and Other Financial Measures" section of the Company's MD&A for more details on Net Capital Expenditures.

# Our World-Class Team

Our proven strategy and disciplined business approach are supported by our dedicated teams and experienced management team. Canadian Natural's exponential growth reflects dedication, planning and resilience from its main resource: our employees.

G. Aalders, E. Aasen, A. Abadier, A. Abakar, Z. Abbas, T. Abbasi, D. Abbott, J. Abbott, M. Abbott, I. Abdi, A. Abdolmaleki, S. Abdulghany, M. Abdurhman, A. Abeda, W. Abeda, D. Abel, V. Abeng, T. Abercrombie, G. Abou Mechrek, R. Abrams, N. Abro, C. Abt, D. Ackerman, R. Ackerman, J. Acosta, J. Acteson-Grill, N. Adair, T. Adair, I. Adam, S. Adam, T. Adam, D. Adams, K. Adams, M. Adams, D. Adamson, C. Adan, T. Adobous, A. Adebayo, O. Adebayo, M. Aden, A. Adesanya, K. Adesanya, O. Adigun, B. Adjoussou, B. Adkins, N. Agarwal, J. Agate, F. Agbadou, A. Agnihotri, K. Agombar, I. Agu, O. Agu, U. Agu, R. Aguilera Maestre, A. Agustin, C. Agyemang-Badu, A. Ahmad, I. Ahmad, J. Ahmad, K. Ahmad, M. Ahmad, N. Ahmad, R. Ahmad, S. Ahmad, A. Ahmadi, M. Ahmadi, F. Ahmaddoo, A. Ahmari, R. Ahmed, S. Ahmed, N. Ahonon, M. Ahoonmanesh, R. Aikens, D. Aikins, G. Ailsby, T. Ailsby, J. Airtou, S. Aitken, S. Ajayi, T. Ajayi, O. Ajibouni, J. Ajedegba, L. Ajilolaiya, S. Akhtar, R. Akinde, D. Akins, A. Akinsanya, J. Akolkar, N. Akolkar, S. Akolkar, C. Alarcon, E. Albert, J. Alcalá, E. Alconcel, N. Aldi, J. Aleman, D. Alexander, J. Alexander, P. Alexander, S. Alexander, G. Ali, R. Aliazas, H. Aljanabi, M. Al-Kaisy, P. Allain, C. Allan, E. Allan, J. Allan, E. Allard, J. Allard, A. Allen, B. Allen, J. Allen, T. Allen, W. Allen, J. Allison, R. Allison, S. Allport, J. Allsop, M. Almaraz Bustamante, S. Almstrong, J. Alonso, Y. Al-Saeedi, A. Al-Saleem, R. Al-Samarrai, S. Al-Siani, A. Alstad, J. Alvarez, J. Alvarez Luzon, B. Alyman, C. Amadi, D. Amalaman, G. Amalia, J. Aman, M. Amar, T. Amara, A. Amay, B. Amer, K. Amer, J. Amero, E. Amos, W. Amy, A. Amyotte, D. Ancil, J. Andel, D. Andersen, J. Andersen, T. Andersen, A. Anderson, B. Anderson, C. Anderson, D. Anderson, G. Anderson, J. Anderson, K. Anderson, L. Anderson, M. Anderson, N. Anderson, R. Anderson, S. Anderson, W. Anderson, I. Andonov, D. Andreoli, C. Andres, B. Andrews, E. Andrews, K. Andrews, T. Andrews, E. Anfort, C. Angeles, G. Angeles, P. Angell, L. Angen, K. Angerman, M. Anis, R. Annett, L. Anongba, A. Ansell, C. Ansong-Danquah, D. Ansonger, R. Anstett, V. Anstey, E. Antle, J. Antle, C. Antoine, M. Antoine, A. Anton, K. Antonishyn, A. Antunes, S. Anwar, H. Aparicio Ramos, P. Appiah, J. Aquila, R. Aranguren, F. Arano, L. Arbour, R. Arcilla, H. Arias, L. Arias, J. Arizaleta, S. Arjomandi, J. Arkley, R. Armagost, T. Armfelt, A. Armstrong, D. Armstrong, J. Armstrong, B. Arneson, B. Arnold, C. Arnold, J. Arnold, A. Arowosebe, F. Arrau, F. Arratia, M. Arratia, K. Arstall, A. Arthur Brown, B. Artz, S. Arunachalam, A. Arya, B. Asake, D. Asafeday, J. Ashe, R. Askes, A. Aslam, R. Aslin, R. Asmundson, R. Aspden, S. Aspden, H. Aspeslet, M. Asselstine, D. Assing, J. Assou, V. Asshouh-Ouattara, J. Assougnon, A. Assoum, A. Astalos, R. Astalos, I. Astete, M. Atchuda Reddy, N. Athavan, K. Atieh, A. Atienza, R. Atkins, J. Atkinson, K. Atkinson, L. Attreo, E. Au, G. Au, J. Auch, P. Aucoin, J. Audia, A. Auger, L. Auger, P. Auger, S. Auger, C. Aular, L. Austin, R. Austin, A. Avery, B. Avery, F. Avery, S. Avery, M. Avila, C. Aviles, O. Ayanleke, A. Ayasse, W. Ayres, A. Ayoub, J. Ayub, F. Azam, Z. Azim, Y. Babaoglu, A. Babiarz, A. Babiker, O. Babiker, M. Bachand, C. Bachelet, C. Bachman, W. Bachmeier, A. Baciulica, C. Backer, A. Badamchi Zadeh, W. Bader, C. Badger, N. Badgley, O. Baffoh, N. Bagheri, K. Bagley, M. Bahraei, D. Baichev, D. Baier, J. Baier, M. Bailer, R. Bailer, A. Bailey, B. Bailey, J. Bailey, K. Bailey, S. Bailey, T. Bailey, S. Baillargeon, M. Baillie, B. Bain, E. Bain, C. Baird, D. Baisley, D. Bak, L. Bakaas, A. Baker, C. Baker, D. Baker, J. Baker, R. Baker, A. Bakhtiary Fard, D. Bakkar, J. Bakker, J. Balacang, B. Balaski, B. Baldonado, J. Baldonado, C. Baldwin, G. Baldwin, M. Baldwin, R. Baldwin, M. Baleja, P. Balfour, R. Balfour, I. Balicanta, J. Balkam, G. Ball, J. Ball, L. Ball, M. Ball, P. Ball, J. Ballard, S. Ballas, B. Balog, D. Balogoum, A. Balsom, D. Balson, J. Baltesson, B. Baluyot, B. Bam, R. Bama, L. Bamba, B. Bamber, R. Banack, J. Banak, D. Banash, J. Banawa, N. Banerjee, R. Banfield, S. Banfield, O. Bango, S. Baniak, L. Banks, C. Ban-Nelson, R. Bannerholt, B. Bannis, M. Banwait, R. Barabe, L. Barbaro, G. Barber, J. Barbour, G. Barfield, K. Barham, M. Bari, M. Barilela, K. Barker, R. Barker, S. Barker, A. Barley, S. Barlund, D. Barnes, M. Barnes, N. Barnes, R. Barnes, V. Barnes, B. Barnett, S. Barr, E. Barreto, C. Barrett, M. Barrett, R. Barrett, T. Barrett, S. Barriault, C. Barrie, D. Barron, R. Barron, S. Barrows, D. Barry, A. Barstad, G. Bartel, C. Bartels, P. Barter, A. Bartko, B. Bartlett, M. Bartlett, D. Bartman, M. Bartoszewski, S. Barriach, A. Barysheva, J. Basabe, K. Basarab, R. Basile, L. Basines, P. Bass, S. Basso, C. Bast, A. Bastardo, H. Bastidas Martinez, C. Bastien, S. Basu, M. Batac, C. Bateman, D. Bateman, M. Bateman, P. Bateman, T. Bateman, D. Bath, L. Bath, M. Batovanja, D. Batt, U. Batta, K. Batten, R. Batten, C. Battrum, J. Batuyong, D. Bauer, R. Bauer, T. Bauld, C. Baumgardner, J. Baxter, M. Baxter, A. Bayduza, J. Bayles, D. Bayley, F. Bayuk, A. Bazowski, B. Beach, A. Beachon, W. Beach, C. Beamam, G. Beamish, D. Bean, G. Bean, R. Bear, C. Beaton, N. Beaton, A. Beattie, C. Beattie, S. Beattie, J. Beauchamp, S. Beauchamp, C. Beaudoin, J. Beaudoin, R. Beaudoin, C. Beaudrie, B. Beaulac, J. Beaulieu, M. Beaulieu, L. Beauonyer, M. Beauonyer, K. Beazer, D. Bechtel, N. Beck, C. Becker, R. Becker-Faubert, R. Beckner, S. Beckow, J. Beda, I. Bedard, L. Bedard, M. Bedard, D. Bedell, G. Bedi, M. Bednarchuk, S. Beebe, T. Beebe, M. Beeks, C. Beeler, K. Begg, W. Behnke, G. Belanger, R. Belanger, H. Belas, L. Belcourt, R. Belcourt, J. Belik, R. Belisle, A. Bell, D. Bell, J. Bell, L. Bell, N. Bell, R. Bell, S. Bell, J. Bellavance, J. Beller, M. Beller, A. Bellentini, J. Belliveau, A. Bellows, C. Bellows, Y. Belyatsev, M. Belzile, M. Bembridge, A. Bendahmane, K. Bendahmane, C. Bender, R. Benedictson, M. Benko, D. Benn, T. Benn, K. Benner, C. Bennett, D. Bennett, E. Bennett, J. Bennett, N. Bennett, R. Bennett, S. Bennett, A. Benoit, P. Benoit, D. Bensley, M. Benson, A. Benson-Bartko, J. Bent, A. Bentley, R. Bentley, I. Bentsianov, J. Berdan, J. Beresford, A. Berg, D. Berg, R. Berg, L. Berge, O. Bergeron, M. Bergeson, B. Bergley, J. Bergquist, J. Bergsma, D. Berlinguette, J. Bernardin, T. Bernhart, J. Bernier, K. Berreth, R. Berry, W. Berscht, D. Bershadsky, S. Bertelmann, A. Bertrand, B. Bertrand, M. Bertucci, B. Berube, R. Besinger, C. Best, J. Best, C. Betancur Pelaez, C. Bettany, T. Betteridge, S. Bettinson, R. Beveridge, W. Bewski, B. Beyer, J. Beytelt, S. Bezpalchuk, J. Bezruchak, M. Bezugley, A. Bhaduria, A. Bhaduri, L. Bhamare, J. Bhangoo, H. Bhathal, H. Bhatia, B. Bhatt, J. Bhatt, R. Bhatt, V. Bhikare, P. Bhojapoojary, J. Bianchini, L. Bianco, K. Bibby, A. Bibo, J. Bick, S. Biddle, T. Biddlecombe, C. Bieber, D. Bielech, E. Bielecki, D. Biendarra, D. Biener, V. Biesinger, K. Biever, C. Biggin, M. Biggs, A. Bilal, D. Biles, B. Bill, L. Billard, T. Billard, J. Bilous, D. Bilston, W. Binda, B. Binns, T. Bisbing, B. Bischoff, C. Bischoff, R. Bischoff, S. Bischoff, C. Bish, H. Bishop, J. Bishop, K. Bishop, T. Bishop, C. Bisschop, L. Bissell, C. Bisson, D. Bittner, J. Bizuk, A. Black, B. Black, C. Black, D. Black, J. Black, K. Black, N. Black, W. Blackburn, T. Blackett, K. Blackmore, R. Blackmore, S. Blackstone, T. Blackwell, A. Blacquire, D. Blain, G. Blain, A. Blair, D. Blair, K. Blair, L. Blair, J. Blais, A. Blake, D. Blake, J. Blake, L. Blake, T. Blake, P. Blakely, B. Blakney, J. Blanc, A. Blanchard, D. Blanchard, G. Blanchard, R. Blanchett, K. Blanchette, A. Blanco, G. Blanco, U. Blanco, W. Blanco, S. Blaquiere, E. Blawat, S. Blaydes, K. Blencowe, J. Blesa, A. Blesa Gomez, M. Blinkhorn, S. Blize, R. Blondin, G. Blouin, P. Bluemke, J. Blume, C. Blyan, C. Boadas Salazar, J. Bobbett, A. Bobrowski, H. Bocalan, R. Bock, G. Boddy, J. Bodell, R. Bodell, S. Bodell, A. Bodnar, K. Bodnar, J. Bodnarchuk, B. Bodner, G. Bodner, D. Bodoano, D. Boeckx, M. Boehm, D. Boehmer, M. Boggust, T. Bohach, S. Bohay, B. Bohlken, J. Bohlken, E. Bohme, N. Bohning, J. Bohorquez, J. Boissoneault, C. Boisvert, J. Boisvert, M. Boisvert, B. Bokenfohr, D. Bokota, R. Boksteyn, D. Bolam, S. Bolduc, C. Bolger, D. Bolster, B. Bolt, J. Bolt, P. Bolt, G. Bolzon, G. Bond, K. Bond, N. Bond, S. Bond, T. Bond, T. Bondaruk, A. Bone, A. Bonilla, K. Bonjour, E. Bonneton, C. Bonogofski, A. Bonwick, S. Booker, J. Boomgard, A. Boone, B. Boone, M. Boone, K. Booth, M. Booth, R. Booth, B. Borbely, K. Bordeleau, R. Bordeleau, C. Borgel, P. Bork, J. Borkowski, S. Borkowsky, M. Borlaza, M. Born, N. Born, K. Borromeo, E. Borsa, E. Borsini Marin, M. Borst, S. Borys, D. Bosch, J. Bosch, S. Bosch, J. Boschman, S. Bose, G. Bosma, L. Bosoi, P. Bossel, K. Bothwell, J. Botterill, D. Bouchard, L. Bouchard, T. Bouchard, J. Bouchard Lacoste, C. Boucher, T. Boucher, J. Bourdrie, K. Bougie, H. Boulton, B. Boulton, J. 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R. Smith, S. Smith, T. Smith, C. Smitham, E. Smolyaninova, A. Smyl, B. Smyl, R. Smyl, J. Sneddon, K. Sneer, R. Snell, T. Snell, G. Snider, J. Snider, P. Snider, I. Snook, J. Snow, K. Snow, K. Snowden, D. Snowdon, J. Snowdon, D. Snyder, J. Soar, J. Soenen, D. Soetaert, D. Sohlbach, D. Sokoloski, K. Sokoloski, S. Solanki, J. Solano, J. Soley, S. Solis, V. Sollid, M. Sollows, S. Soloshy, A. Soloway, K. Soltys, L. Somerville, L. Sommer, W. Sommerfeld, R. Somorai, D. Soni, A. Sompal, N. Soodyall, W. Sookram, M. Soolagallu, T. Sopatky, G. Sopczak, H. Sorensen, R. Sorensen, C. Sorenson, M. Sorgard, L. Sorge, I. Soro, C. Sorochan, L. Sorochan, D. Soroko, L. Soucy, M. Soucy, R. Soucy, A. Soundararaj, L. Soutar, J. Southern, E. Spagrud, D. Spanics, M. Sparks, E. Spearman, B. Speedtsberg, G. Speer, L. Speer, D. Spencer, S. Spencer, B. Spendiff, E. Sperrer, D. Spidell, A. Spohn, C. Spolidis, M. Sprinkle, C. Sproat, A. Spurrell, E. Spurrell, N. Spurrell, P. Spurvey, R. Spychka, C. Spykerman, N. Squarek, J. Squire, P. Squires, T. Squires, R. Sran, A. Sriram, S. St. Croix, R. St. Jean, R. St. Martin, J. St. Onge, E. St. Pierre, M. St. Pierre, R. St. Pierre, K. St. Laurent, A. Stacey, K. Stacey, I. Stacey-Salmon, P. Stackhouse, G. Stadnichuk, S. Stadnichuk, S. Stadyk, D. Stagg, J. Stagg, T. Stagg, M. Stainthorpe, K. Stairs, J. Stajkowski, M. Stalker, B. Stamp, R. Stamp, A. Stan, A. Standing, J. Stanford, B. Stang, C. Stang, M. Stang, R. Stang, R. Stanger, J. Stanley, T. Stanley, A. Staples, J. Staples, P. Stapleton, K. Stark, L. Stark, R. Starujala, D. Staszewski, K. Staszewicz, S. Stauth, A. Stavropoulos, K. Stawinski, M. Stebner, M. Stec, R. Steele, B. Steeves, L. Steeves, S. Stefan, T. Stefansson, A. Stefura, M. Steinbach, I. Steiner, G. Steinke, J. Steinkey, S. Steinkey, A. Stella, D. Stemmann, W. Stenhouse, G. Stephen, M. Stephens, T. Stephens, B. Stephenson, J. Stephenson, L. Stephenson, G. Stetar, N. Stevens, R. Stevens, A. Stevens-Dicks, D. Stevens-Dicks, A. Stevenson, H. Stevenson, N. Stevenson, R. Stevenson, T. Stevers, B. Stewart, C. Stewart, D. Stewart, J. Stewart, L. Stewart, M. Stewart, R. Stewart, T. Stewart, W. Stichel, G. Stickelmier, R. Stieben, M. Stiefel, D. Stinn, M. St-Jacques, M. Stobart, D. Stobbe, J. Stober, M. Stockes, C. Stocking, M. Stockton, C. Stoddard, J. Stokes, T. Stokke, S. Stoller, C. Stolz, T. Stolz, D. Stone, M. Stone, T. Stone, M. Stordahl, D. Stormo, B. Stortz, D. Stout, D. Stoyles, S. Strachan, R. Stranberg, C. Strand, W. Strand, J. Strandquist, R. Strang, D. Strankman, N. Strantz, B. Straticuh, D. Stratmoen, M. Straughan, M. Street, S. Street, R. Stretch, H. Strickland, R. Strickland, R. Striegler, J. Strilchuk, M. Stroh, J. Strong, R. Strong, M. Stronski, R. Struski, D. Strynadka, D. Stuart, L. Stuart, P. Stuart, C. Stubbs, G. Stuber, K. Stuckey, P. Stuckey, V. Stuckless, R. Stuckless, J. Studer, C. Study, J. Stuebing, G. Sturdy, F. Sturge, J. Sturge, P. Sturge, J. Sturgeon, D. Sturrock, A. Styles, L. Su, W. Su, M. Suarez, V. Subasic, I. Subasinghe, V. Subban, J. Subramaniam, R. Subramaniam, B. Suchan, R. Sudan, A. Suhel, R. Sukkel, J. Sukoveoff, J. Sullivan, M. Sullivan, R. Sullivan, T. Sullivan, P. Sultanian, B. Summerfeldt, C. Summers, D. Summers, E. Sumner, E. Sumner, T. Sun, X. Sun, Y. Sun, J. Sundar, P. Sundaravideulu, C. Surgenor, A. Surugiu, G. Surugiu, T. Sutcliffe, C. Sutherland, D. Sutherland, C. Suttie, B. Sutton, P. Sutton, S. Sverdah, T. Svoboda, A. Swain, D. Swain, S. Swain, T. Swallow, D. Swan, J. Swannack, J. Swanson, E. Sweeney, S. Sweetapple, C. Swenarchuk, N. Swennumson, G. Swenson, E. Switzer, A. Sychak, K. Sydorko, D. Syed, W. Syed, T. Sylvester, A. Symons, M. Symons, T. Sypher-Michel, D. Syrnky, G. Sywack, E. Szeto, C. Szemata, A. Szoke, M. Szoke, D. Sztukowski, D. Szym, S. Szubzda, M. Szucs, C. Szutiak, K. Szzydlik, J. Ta, C. Tacadena, M. Tade, D. Taggart, A. Taghipour, A. Tahir, Y. Tai, P. Taiani, M. Tainsh, D. Tainton, D. Tait, G. Tait, O. Tait, J. Taite, A. Tajik, D. Tajiri, G. Talati, S. Talati, C. Talbot, J. Talbot, M. Talerico, D. Tallas, B. Talma, K. Tam, B. Tamas, B. Tan, C. Tan, K. Tan, S. Tan, M. Tanasescu, B. Tancowley, L. Tang, X. Tang, T. Tanigami, J. Tanner, M. Tapley, G. Tapp, C. Tarache, A. Tarasenco, R. Tarasoff, C. Tardif, G. Tarditi, W. Tarkowski, M. Taron, B. Tasek, J. Tatarin, R. Tatro, N. Tavassoli, A. Taylor, C. Taylor, G. Taylor, H. Taylor, J. Taylor, K. Taylor, L. Taylor, M. Taylor, N. Taylor, P. Taylor, R. Taylor, S. Taylor, J. Taylor-Kay, M. Teeple, J. Teixeira, F. Tejada, A. Telan, R. Tellier, B. Temesgen, J. Temple, C. Templeton, S. Templeton, S. Tenhunen, K. Tenney, J. Teppin, E. Tertsakian, W. Terway, G. Teske, A. Teslak, L. Tessier, W. Teszeri, W. Tetachuk, C. Tetreau, J. Tetterson, B. Tetz, J. Tetz, S. Tetz, I. Tewfik, F. Thaddaues, L. Thai, T. Tham, P. Thannhauser, J. Theis, G. Theriault, G. Therrien, B. Thevarajah, G. Thibault, J. Thibeau, R. Thibodeau, C. Thiessen, J. Thiessen, R. Thiessen, E. Thillman, M. Thoen, D. Thomas, E. Thomas, L. Thomas, S. Thomas, J. Thomas Cotton, T. Thomassen, A. Thompson, C. Thompson, E. Thompson, I. Thompson, J. Thompson, K. Thompson, L. Thompson, R. Thompson, S. Thompson, T. Thompson, P. Thomsen, A. Thomson, J. Thomson, K. Thomson, P. Thomson, S. Thomson, T. Thomson, W. Thomson, K. Thornburn, T. Thornburn, L. Thorhaug, J. Thorleifson, D. Thorne, L. Thorne, B. Thornhill, E. Thornton, K. Thornton, N. Thorp, K. Thors, K. Trendyle, E. Thunæs, M. Thyer, T. Tian, M. Tiedje, P. Tieu, D. Tillapaugh, J. Tiller, D. Tilley, M. Tilley, K. Tillotson, T. Tillotson, S. Timothy, N. Tindall, M. Tineo, D. Tipper, A. Tishchenko, B. Titus, D. Tiwary, R. Tiwary, C. Tkach, D. Tkachuk, K. Tobias, B. Tobin, C. Tobin, K. Tobin, V. Tobin, K. Tobler, B. Todd, C. Todd, T. Tolen, D. Tomar, B. Tomchuk, G. Tomchuk, D. Tomiuk, J. Tomiuk, C. Tomlinson, K. Tomlinson, M. Tompkins, A. Tomszak, N. Tomte, L. Tong, W. Tong, T. Tonge, M. Tonon, S. Tooke, A. Toop, V. Topacio, S. Topolnitsky, K. Tordon, P. Torrance, C. Torraville, F. Torraville, J. Torraville, N. Torres, D. Touchette, S. Touchette, D. Toulelan, T. Tourand, M. Townsend, J. Tozer, O. Tozser, A. Tran, C. Tran, D. Tran, J. Tran, M. Trang, C. Trapp, G. Trask, L. Trautman, M. Travers, L. Travers, J. Tredder, G. Treen, M. Trefon, J. Trelinski, W. Trelinski, J. Treliving, L. Tremblay, M. Tremblay, C. Tremblett, W. Tremblay, J. Trenholm, H. Trepanier, J. Trieu, J. Trieu-Ly, W. Trigger, A. Trinh, D. Trinh, E. Triumbari, C. Troake, P. Troy, J. Trto, J. Trudeau, R. Trudeau, A. Truong, H. Truong, N. Truong, S. Truong, L. Tsapraillis, M. Tschaja, C. Tse, E. Tse, Y. Tse, G. Tsemenko, M. Tsineili, Y. Tu, C. Tubi, A. Tuck, B. Tucker, D. Tucker, J. Tucker, R. Tuerke, A. Tuico, D. Tuite, J. Tuite, S. Tulan, B. Tulloch, N. Tulloch, B. Tumbach, P. Tung, M. Tunke, T. Tupper, T. Turbide, J. Turcotte, T. Turgeon, B. Turner, C. Turner, D. Turner, J. Turner, P. Turner, S. Turner, D. Turpin, T. Turpin, V. Turksa, S. Turton, S. Tutkaluk, R. Tuttle, I. Tutto, B. Tuttioli, L. Tuttioli, J. Tweten, P. Twomey, D. Twyne, O. Tyan, A. Tyler, M. Tyler, W. Tymchuk, D. Tymchyna, R. Tymchyna, C. Tyssen, S. Uddenberg, J. Uddin, J. Uhlman, T. Uhrich, S. Ulloa, J. Ulmer, E. Ulrich, J. Umali, O. Umana, M. Umeh, U. Umoh, L. Underhill, K. Underwood, N. Underwood, R. Underwood, T. Ung, B. Unrath, L. Unrau, H. Unruh, P. Unruh, M. Upadhyay, S. Upadhyay, U. Upadhyaya, M. Upton, J. Urdaneta, T. Urkow, C. Urlacher, K. Urmeneta, A. Ustariz, P. Uwabor, K. Uyanwene, R. Vachon, S. Vadnai, K. Vaideswaran, M. Vajdik, V. Vajjinejad, A. Valentine, D. Valin, T. Valin, A. Valiquette, G. Valiquette, J. Valle, L. Vallee, M. Vallee, G. Vallis, A. Valmadrid, K. Van Buskirk, C. Van de Reep, W. Van den Oever, M. van der Burgh, N. Van Der Merwe, A. Van Donkersvoort, H. Van Dyck, B. van Dyke, N. Van Dyke, P. van Eerde, J. Van Es, D. Van Genne, L. Van Genne, L. van Heerden, J. Van Nes, C. van Niekerk, F. Van Overloop, S. Van Rensburg, C. Van Rooijen, D. Van Roolselaar, C. Van Schoor, K. van Son, R. Van Steinburg, R. van Zanden, M. Vanberg, B. Vanbeselaere, D. Vanbocquestal, J. Vancoughnett, J. Vandelig, R. Vandemark, T. Vandemark, D. Vandenberg, G. Vander Veen, N. Vandergriend, T. Vandermeer, V. Vandersluis, S. Vandervlis, J. Vandervoort, E. Vandette, E. Vanopian, G. van't Wout, S. Varatharajan, C. Vare, N. Varey, S. Varey, M. Varga, D. Varty, N. Vaschetto, A. Vasquez, C. Vasquez, M. Vasquez-Placid, G. Vassberg, J. Vasseur, R. Vassor, R. Vauban, A. Vaughan, N. Vaughan, S. Vea, O. Vedmedenko, F. Veenbaas, B. Veitch, S. Vekved, T. Vekved, B. Velagapudi, B. Velichka, T. Velichka, M. Velumuran, R. Veloso, S. Venkatesh, G. Venkateshvaralu, R. Venn, D. Venning, J. Vera, L. Verbaas, D. Verbeek, D. Verbiicky, M. Verburg, A. Verge, J. Verge, M. Verge, K. Vernon, S. Veroba, J. Verot, B. Verreard, D. Versnick-Brown, K. Veysey, J. Vezina, C. Viana, G. Vibert, J. Vicio, N. Vick, G. Viljoen, R. Villanueva, B. Villecourt, M. Villemaire, C. Villeneuve, K. Vincent, R. Vincent, S. Vineham, B. Viney, R. Vinkle, A. Virk, G. Virus, K. Virus, A. Visotto, K. Viswabarathi, R. Vivian, R. Vloet, S. Voigt, B. Volkman, J. Vollman, W. Volschenk, L. Vondermuhll, A. Vosburgh, A. Votta, A. Vrededor, J. Vroslon, N. Vu, N. Vuic, L. Vuong, O. Vuong, G. Wack, E. Waddell, T. Waddell, K. Waddy, J. Wade, W. Wade, T. Wagil, D. Wagner, G. Wagner, J. Wagner, N. Wagner, M. Wahl, D. Wakaruk, L. Wakaruk, L. Wakefield, T. Wakulchuk, A. Walchuk, D. Waldner, D. Waldo, K. Waldron, A. Walintschek, A. Walker, C. Walker, D. Walker, G. Walker, J. Walker, K. Walker, R. Walker, S. Walker, T. Walker, K. Walko, D. Wall, S. Wall, A. Wallace, C. Wallace, D. Wallace, E. Wallace, H. Wallace, K. Wallace, T. Wallace, V. Wallace, M. Wallis, V. Wallwork, T. Walraven, A. Walsh, B. Walsh, E. Walsh, L. Walsh, M. Walsh, P. Walsh, R. Walsh, S. Walsh, T. Walsh, W. Walsh, L. Walter, A. Walters, D. Walters, K. Walters, I. Walton, K. Wambolt, N. Wan, C. Wang, H. Wang, J. Wang, L. Wang, Q. Wang, R. Wang, T. Wang, W. Wang, X. Wang, Z. Wang, B. Wangler, D. Wannas, T. Warburton, E. Ward, K. Ward, R. Ward, B. Warehime, D. Warford, W. Warholik, C. Wark, W. Warman, F. Warrach, G. Warren, J. Warren, K. Warren, R. Warren, S. Warren, D. Warrington, M. Warsame, B. Wartman, K. Warwaruk, J. Washburn, M. Washington, A. Wasikowski, P. Wassell, C. Wasylciuk, J. Wasyluk, W. Wasylucha, A. Watchon, D. Waterfield, C. Waters, D. Watson, G. Watson, J. Watson, M. Watson, D. Watt, G. Watt, B. Watton, B. Watts, T. Wawro, A. Wazir, B. Weatherby, D. Weatherby, M. Weatherby, C. Weatherhead, A. Webb, G. Webb, P. Webb, B. Webber, J. Webber, O. Websdale, K. Webster, D. Weed, E. Weenink, B. Wegenast, B. Wei, Z. Wei, J. Weibracht, J. Weigl, J. Weik, C. Weingarten, R. Weir, R. Weisbrodt, M. Weishaar, C. Weiss, J. Weller, P. Weller, B. Wellman, M. Wellman, E. Wells, L. Wells, N. Wells, R. Wells, T. Wells, A. Welsh, W. Welte, W. Welygan, Z. Wen, G. Weng, P. Wenger, J. Wenisch, G. Wennberg, P. Wennerstrom, A. Wentworth, D. Werbowy, N. Wert, B. Weslake, E. Wessel, D. West, J. West, R. West, M. Westad, D. Westbrook, K. Westland, B. Wetthuhn, T. Whalen, D. Wheatling, L. Wheatling, J. Wheaton, S. Wheaton, A. Wheeler, B. Wheeler, C. Wheeler, K. Wheeler, L. Wheeler, C. Whelan, D. Whelan, K. Whelan, R. Whelan-Maloney, A. White, B. White, D. White, F. White, H. White, J. White, M. White, P. White, R. White, S. White, T. White, Z. White, J. Whitehead, T. Whitehead, D. Whitehouse, N. Whiteknife, J. Whitelaw, A. Whiteside, C. Whitford, R. Whitman, H. Whitmore, K. Whitney, M. Whittaker, A. Whitten, D. Whitty, A. Whitwell, L. Wichmann, R. Wicht, K. Wickenhauser, C. Wickwire, G. Wideman, M. Widing, A. Wiede, D. Wiede, N. Wiede, T. Wiede, D. Wiede, W. Wieg, T. Wielgus, B. Wiens, B. Wiesener, C. Wietzel, Z. Wigglesworth, S. Wight, T. Wight, D. Wijesingha, C. Wilbee, D. Wilbee, A. Wilcox, J. Wilcox, M. Wilcox, D. Wilde, E. Wildeman, D. Wiles, R. Wiles, C. Wilk, T. Wilk, C. Wilkes, N. Wilkes, C. Wilkin, L. Wilkin, D. Wilkins, J. Wilkinson, K. Wilkinson, P. Will, D. Willard, E. Willard, A. Willcott, B. Willcott, C. Willey, R. Willey, A. Williams, B. Williams, C. Williams, D. Williams, G. Williams, J. Williams, L. Williams, M. Williams, N. Williams, R. Williams, T. Williams, W. Williams, C. Williamson, D. Williamson, J. Williamson, M. Williamson, J. Willcock, M. Willis, S. Willis, J. Williscroft, J. Williston, D. Willis, S. Willis, C. Willshire, C. Willson, D. Willson, A. Wilson, C. Wilson, D. Wilson, G. Wilson, H. Wilson, J. Wilson, L. Wilson, M. Wilson, S. Wilson, J. Wiltshire, A. Winfield, P. Winfield, B. Wingate, A. Wingert, J. Winia, B. Winiarz, I. Winland, R. Winnick, T. Winquist, R. Winslow, J. Winsor, L. Winsor, O. Winsor, W. Winsor, A. Winter, T. Winter, C. Winterhalt, G. Winters, R. Winters, G. Wirachowsky, J. Wirachowsky, M. Wiseman, P. Wiseman, W. Wiseman, I. Wishart, N. Withers, C. Witwi, M. Wittmer, Z. Witt, B. Wittenborn, C. Wlad, A. Wlos, M. Woehleke, D. Voitas, J. Voitas, T. Voitte, R. Wojtowicz, S. Wolf, D. Wolfe, J. Wolfe, D. Wollum, C. Woloshyn, J. Wolstenholme, J. Wolter, R. Wolters, A. Wong, C. Wong, G. Wong, J. Wong, L. Wong, N. Wong, C. Woo, J. Woo, L. Woo, A. Wood, G. Wood, J. Wood, K. Wood, L. Wood, P. Wood, T. Woodburn, R. Woodburne, J. Woodd, M. Woodfin, S. Woodfine, N. Woodford, S. Woodford, T. Woodford, A. Woodger, C. Woodhead, M. Woodhead, D. Woods, J. Woods, T. Woods, M. Woodske, J. Woodridge, B. Wooley, S. Woolfitt, T. Woolley, R. Woolner, R. Wootton, M. Workun, M. Woronuk, B. Worthington, C. Worthman, J. Wotten, B. Woytenko, C. Wright, L. Wright, R. Wright, G. Wrinn, B. Wu, C. Wu, D. Wu, H. Wu, J. Wu, M. Wu, P. Wuorinen, B. Wurzer, A. Wutzke, K. Wutzke, G. Wynnham, D. Wyshynski, L. Wysocki, S. Wytrychowski, Y. Xiao, Y. Xie, H. Xu, J. Xu, Q. Xu, Z. Xu, D. Yackel, A. Yaghoubi, N. Yagolnyk, K. Yakemchuk, K. Yakimowich, L. Yakiwchuk, D. Yang, L. Yang, D. Yanke, G. Yanota, K. Yao, W. Yao, H. Yare, A. Yaremko, R. Yarmuch, J. Yaroslawsky, S. Yasin, M. Yachuk, P. Yazdani, B. Yehoue, B. Yee, G. Yee, K. Yee, R. Yee, C. Yen, C. Yeoman, D. Yep, P. Yeps, J. Yeremy, J. Yeske, R. Yetman, A. Yevushenko, C. Ying, O. Ying, Y. Ying, J. Yip, K. Yip, L. Yip, F. Yohannes, R. Yong, J. Yoo, F. York, P. York, A. Yoshikawa, X. You, M. Youell, B. Young, D. Young, E. Young, J. Young, L. Young, M. Young, P. Young, S. Young, T. Young, N. Younis, P. Youssef, R. Youney, E. Yu, J. Yu, B. Yue, C. Yuen, D. Yuill, J. Yuill, R. Yurist, R. Zabek, A. Zaboloski, T. Zabo, A. Zacharias, T. Zachada, C. Zackowski, J. Zaderery, N. Zaderery, B. Zagoruy, E. Zahacy, B. Zaitsof, S. Zakeri, D. Zambrano Suarez, R. Zamudio Baca, B. Zandstra, D. Zandoni, C. Zaparyniuk, M. Zarichney, D. Zarowny, G. Zarowny, K. Zarowny, M. Zarowny, Z. Zarowny, S. Zawada, K. Zayac, D. Zazula, R. Zazula, S. Zbrodoff, K. Zeer, G. Zeiler, T. Zeiser, I. Zelazny, D. Zelman, B. Zembik, D. Zelmak, A. Zenide, W. Zeniuk, G. Zeran, K. Zern, J. Zerna, K. Zerr, M. Zerr, S. Zurski, B. Zhang, J. Zhang, M. Zhang, Q. Zhang, W. Zhang, X. Zhang, Y. Zhang, Z. Zhang, B. Zhao, L. Zhao, R. Zhao, G. Zheng, S. Zheng, W. Zheng, H. Zhou, Q. Zhou, Y. Zhou, J. Zhu, L. Zhu, W. Zhu, E. Zhuromsky, P. Zia, S. Ziadeh, K. Zielinski, A. Zielke, D. Zilinski, C. Zimmerman, S. Zitaruk, R. Zoerb, A. Zoglauer, L. Zseder, J. Zuk, N. Zukowski, S. Zukowski, S. Zwyer



# 2021 Year End Reserves

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## DETERMINATION OF RESERVES

For the year ended December 31, 2021, the Company retained Independent Qualified Reserves Evaluators (IQREs), Sproule Associates Limited, Sproule International Limited and GLJ Ltd., to evaluate and review all of the Company's proved and proved plus probable reserves. The evaluation and review was conducted and prepared in accordance with the standards contained in the Canadian Oil and Gas Evaluation Handbook. The reserves disclosure is presented in accordance with NI 51-101 requirements using forecast prices and escalated costs.

The Reserves Committee of the Company's Board of Directors has met with and carried out independent due diligence procedures with the IQREs as to the Company's reserves.

Additional reserves information is disclosed in the Company's Annual Information Form.

## RESERVES INFORMATION HIGHLIGHTS

A key differentiator for Canadian Natural is the strength, diversity and balance of our world class, top tier reserves. Strategically assembled and developed over several decades, these assets have a low decline as well as low maintenance capital relative to the size and quality of the reserves. The low maintenance capital requirements of our reserves affords the Company significant flexibility when balancing our four pillars of capital allocation to maximize shareholder value.

- Total proved reserves increased 6% to 12.813 billion BOE, with reserves additions and revisions of 1.158 billion BOE. Total proved plus probable reserves increased 6% to 16.950 billion BOE, with reserves additions and revisions of 1.476 billion BOE.
  - The strength and depth of the Company's assets are evident as approximately 77% of total proved reserves are long life low decline reserves. This results in a total proved BOE reserves life index <sup>(1)</sup> of approximately 30 years and a total proved plus probable BOE reserves life index of approximately 40 years.
    - Additionally, high value, zero decline SCO is approximately 55% of total proved reserves with a reserve life index of approximately 45 years.
- In 2021, Canadian Natural continued its track record of top tier finding and development costs:
  - FD&A <sup>(1)</sup> costs, excluding changes in Future Development Cost ("FDC"), are \$4.01/BOE for total proved reserves and \$3.15/BOE for total proved plus probable reserves.
  - FD&A costs, including changes in FDC, are \$5.88/BOE for total proved reserves and \$5.49/BOE for total proved plus probable reserves.
- Total proved reserves additions and revisions replaced 2021 production by 257%. Total proved plus probable reserves additions and revisions replaced 2021 production by 328%.
- Proved developed producing reserves additions and revisions are 703 million BOE, replacing 2021 production by 156%. The proved developed producing BOE reserves life index is approximately 21 years.
- The net present value of future net revenues, before income tax, discounted at 10%, is approximately \$86.9 billion for proved developed producing reserves, approximately \$120.3 billion for total proved reserves, and approximately \$145.9 billion for total proved plus probable reserves.

(1) Supplementary financial measure. Refer to the notes of the "2021 Year End Reserves" on page 8.

## Summary of Company Gross Reserves

as of December 31, 2021

Forecast Prices and Costs

	Light and Medium Crude Oil (MMbbl)	Primary Heavy Crude Oil (MMbbl)	Pelican Lake Heavy Crude Oil (MMbbl)	Bitumen (Thermal Oil) (MMbbl)	Synthetic Crude Oil (MMbbl)	Natural Gas (Bcf)	Natural Gas Liquids (MMbbl)	Barrels of Oil Equivalent (MMBOE)
<b>Total Company</b>								
Proved								
Developed Producing	135	83	215	587	6,960	4,494	130	8,859
Developed Non-Producing	50	11	—	32	—	262	5	142
Undeveloped	115	74	56	2,012	37	7,413	283	3,812
<b>Total Proved</b>	<b>300</b>	<b>169</b>	<b>270</b>	<b>2,631</b>	<b>6,998</b>	<b>12,168</b>	<b>418</b>	<b>12,813</b>
Probable	125	80	118	1,706	537	8,080	224	4,137
<b>Total Proved plus Probable</b>	<b>424</b>	<b>249</b>	<b>388</b>	<b>4,337</b>	<b>7,535</b>	<b>20,249</b>	<b>643</b>	<b>16,950</b>

## Reconciliation of Company Gross Reserves

as of December 31, 2021

Forecast Prices and Costs

<b>TOTAL PROVED</b>	Light and Medium Crude Oil (MMbbl)	Primary Heavy Crude Oil (MMbbl)	Pelican Lake Heavy Crude Oil (MMbbl)	Bitumen (Thermal Oil) (MMbbl)	Synthetic Crude Oil (MMbbl)	Natural Gas (Bcf)	Natural Gas Liquids (MMbbl)	Barrels of Oil Equivalent (MMBOE)
<b>Total Company</b>								
December 31, 2020	315	177	265	2,483	6,962	9,465	326	12,106
Discoveries	—	—	—	—	—	—	—	—
Extensions	1	7	—	119	—	598	15	243
Infill Drilling	3	4	—	—	—	170	13	47
Improved Recovery	—	—	1	19	—	3	—	21
Acquisitions	—	—	—	—	—	1,715	59	345
Dispositions	—	—	—	—	—	(1)	—	—
Economic Factors	14	13	22	—	—	309	10	110
Technical Revisions	(5)	(9)	2	105	199	528	13	392
Production	(28)	(23)	(20)	(95)	(164)	(619)	(18)	(451)
<b>December 31, 2021</b>	<b>300</b>	<b>169</b>	<b>270</b>	<b>2,631</b>	<b>6,998</b>	<b>12,168</b>	<b>418</b>	<b>12,813</b>

<b>TOTAL PROVED PLUS PROBABLE</b>	Light and Medium Crude Oil (MMbbl)	Primary Heavy Crude Oil (MMbbl)	Pelican Lake Heavy Crude Oil (MMbbl)	Bitumen (Thermal Oil) (MMbbl)	Synthetic Crude Oil (MMbbl)	Natural Gas (Bcf)	Natural Gas Liquids (MMbbl)	Barrels of Oil Equivalent (MMBOE)
<b>Total Company</b>								
December 31, 2020	463	260	395	4,157	7,496	15,922	500	15,925
Discoveries	—	—	—	—	—	—	—	—
Extensions	2	10	—	158	—	1,004	30	368
Infill Drilling	4	6	—	—	—	687	21	146
Improved Recovery	—	—	2	23	—	4	—	26
Acquisitions	—	—	—	—	—	2,979	100	596
Dispositions	—	—	—	—	—	(1)	—	—
Economic Factors	18	18	7	2	—	368	11	116
Technical Revisions	(34)	(22)	5	91	202	(94)	(1)	224
Production	(28)	(23)	(20)	(95)	(164)	(619)	(18)	(451)
<b>December 31, 2021</b>	<b>424</b>	<b>249</b>	<b>388</b>	<b>4,337</b>	<b>7,535</b>	<b>20,249</b>	<b>643</b>	<b>16,950</b>

## NOTES TO RESERVES:

1. Company Gross reserves are working interest share before deduction of royalties and excluding any royalty interests.
2. Information in the reserves data tables may not add due to rounding. BOE values and oil and gas metrics may not calculate exactly due to rounding.
3. Forecast pricing assumptions utilized by the Independent Qualified Reserves Evaluators in the reserves estimates are the 3-consultant-average of price forecasts developed by Sproule Associates Limited, GLJ Ltd. and McDaniel & Associates Consultants Ltd., dated December 31, 2021:

		2022	2023	2024	2025	2026
<b>Crude Oil and NGLs</b>						
WTI	US\$/bbl	72.83	68.78	66.76	68.09	69.45
WCS	C\$/bbl	74.42	69.17	66.54	67.87	69.23
Canadian Light Sweet	C\$/bbl	86.82	80.73	78.01	79.57	81.16
Cromer LSB	C\$/bbl	87.30	82.30	79.69	81.29	82.92
Edmonton C5+	C\$/bbl	91.85	85.53	82.98	84.63	86.33
Brent	US\$/bbl	75.33	71.46	69.62	71.01	72.44
<b>Natural Gas</b>						
AECO	C\$/MMBtu	3.56	3.21	3.05	3.11	3.17
BC Westcoast Station 2	C\$/MMBtu	3.48	3.14	2.98	3.03	3.10
Henry Hub	US\$/MMBtu	3.85	3.44	3.17	3.24	3.30

All prices increase at a rate of 2% per year after 2026.

A foreign exchange rate of 0.7967 US\$/C\$ for 2022 and 0.7967 US\$/C\$ after 2022 was used in the year end 2021 evaluation.

4. A barrel of oil equivalent ("BOE") is derived by converting six thousand cubic feet of natural gas to one barrel 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.
5. Oil and gas metrics included herein are commonly used in the crude oil and natural gas industry and are determined by Canadian Natural as set out in the notes below. These metrics do not have standardized meanings and may not be comparable to similar measures presented by other companies and may be misleading when making comparisons. Management uses these metrics to evaluate Canadian Natural's performance over time. However, such measures are not reliable indicators of Canadian Natural's future performance and future performance may vary.
6. Reserves additions and revisions are comprised of all categories of Company Gross reserves changes, exclusive of production.
7. Reserves replacement or Production replacement ratio is the Company Gross reserves additions and revisions, for the relevant reserves category, divided by the Company Gross production in the same period.
8. Reserves Life Index is based on the amount for the relevant reserves category divided by the 2022 proved developed producing production forecast prepared by the Independent Qualified Reserves Evaluators.
9. Finding, Development and Acquisition ("FD&A") costs excluding changes in Future Development Costs ("FDC") are calculated by dividing the sum of total exploration, development and acquisition capital costs incurred in 2021 by the sum of total additions and revisions for the relevant reserves category.
10. FD&A costs including changes in FDC are calculated by dividing the sum of total exploration, development and acquisition capital costs incurred in 2021 and net changes in FDC from December 31, 2020 to December 31, 2021 by the sum of total additions and revisions for the relevant reserves category. FDC excludes all abandonment, decommissioning and reclamation costs.
11. Abandonment, decommissioning and reclamation ("ADR") costs included in the calculation of the Future Net Revenue (FNR) consist of both the Company's total Asset Retirement Obligation ("ARO"), before inflation and discounting, for development existing as at December 31, 2021 and forecast estimates of ADR costs attributable to future development activity.

# Management's Discussion and Analysis

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## Definitions and Abbreviations

<b>AECO</b>	Alberta natural gas reference location	<b>IBOR</b>	Interbank Offered Rate
<b>AIF</b>	Annual Information Form	<b>IFRS</b>	International Financial Reporting Standards
<b>AOSP</b>	Athabasca Oil Sands Project	<b>LIBOR</b>	London Interbank Offered Rate
<b>API</b>	specific gravity measured in degrees on the American Petroleum Institute scale	<b>Mbbl</b>	thousand barrels
<b>ARO</b>	asset retirement obligations	<b>Mbbl/d</b>	thousand barrels per day
<b>bbl</b>	barrel	<b>MBOE</b>	thousand barrels of oil equivalent
<b>bbl/d</b>	barrels per day	<b>MBOE/d</b>	thousand barrels of oil equivalent per day
<b>Bcf</b>	billion cubic feet	<b>Mcf</b>	thousand cubic feet
<b>Bcf/d</b>	billion cubic feet per day	<b>Mcfe</b>	thousand cubic feet equivalent
<b>Bitumen</b>	a naturally occurring solid or semi-solid hydrocarbon consisting mainly of heavier hydrocarbons that are too heavy or thick to flow at reservoir conditions, and recoverable at economic rates using thermal in situ recovery methods	<b>Mcf/d</b>	thousand cubic feet per day
<b>BOE</b>	barrels of oil equivalent	<b>MMbbl</b>	million barrels
<b>BOE/d</b>	barrels of oil equivalent per day	<b>MMBOE</b>	million barrels of oil equivalent
<b>Brent</b>	Dated Brent	<b>MMBtu</b>	million British thermal units
<b>C\$</b>	Canadian dollars	<b>MMcf</b>	million cubic feet
<b>CAGR</b>	compound annual growth rate	<b>MMcf/d</b>	million cubic feet per day
<b>CAPEX</b>	capital expenditures	<b>NGLs</b>	natural gas liquids
<b>CO<sub>2</sub></b>	carbon dioxide	<b>NWRP</b>	North West Redwater Partnership
<b>CO<sub>2</sub>e</b>	carbon dioxide equivalents	<b>NYMEX</b>	New York Mercantile Exchange
<b>Crude oil</b>	includes light and medium crude oil, primary heavy crude oil, Pelican Lake heavy crude oil, bitumen (thermal oil), and synthetic crude oil	<b>NYSE</b>	New York Stock Exchange
<b>CSS</b>	Cyclic Steam Stimulation	<b>OPEC+</b>	Organization of the Petroleum Exporting Countries Plus
<b>EOR</b>	Enhanced Oil Recovery	<b>PRT</b>	Petroleum Revenue Tax
<b>E&amp;P</b>	Exploration and Production	<b>SAGD</b>	Steam-Assisted Gravity Drainage
<b>FASB</b>	Financial Accounting Standards Board	<b>SCO</b>	synthetic crude oil
<b>FPSO</b>	Floating Production, Storage and Offloading Vessel	<b>SEC</b>	United States Securities and Exchange Commission
<b>GHG</b>	greenhouse gas	<b>SOFR</b>	Secured Overnight Financing Rate
<b>GJ</b>	gigajoules	<b>Tcf</b>	trillion cubic feet
<b>GJ/d</b>	gigajoules per day	<b>TSX</b>	Toronto Stock Exchange
<b>Horizon</b>	Horizon Oil Sands	<b>UK</b>	United Kingdom
<b>IASB</b>	International Accounting Standards Board	<b>US</b>	United States
		<b>US GAAP</b>	generally accepted accounting principles in the United States
		<b>US\$</b>	United States dollars
		<b>WCS</b>	Western Canadian Select
		<b>WCS Heavy Differential</b>	WCS Heavy Differential from WTI
		<b>WTI</b>	West Texas Intermediate reference location at Cushing, Oklahoma

# 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, 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, NGLs or 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 "Outlook" section of this MD&A, particularly in reference to the 2022 targets provided with respect to budgeted capital expenditures, and the timing and impact of the Oil Sands Pathways to Net Zero ("Pathways") initiative, 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 and the actions of OPEC+) 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 and 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 mining, extracting or upgrading 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 (including any production curtailments mandated by the Government of Alberta); 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, PRODUCTION AND RESERVES**

This MD&A should be read in conjunction with the audited consolidated financial statements for the year ended December 31, 2021. It should also be read in conjunction with the Company's MD&A for the three months and year ended December 31, 2021. All dollar amounts are referenced in millions of Canadian dollars, except where noted otherwise. The Company's consolidated financial statements and this MD&A have been prepared in accordance with IFRS as issued by the IASB.

Production volumes, per unit statistics and reserves data 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 in this MD&A for information purposes only.

The following discussion and analysis refers primarily to the Company's 2021 financial results compared to 2020 and 2019, unless otherwise indicated. In addition, this MD&A details the Company's targeted capital program for 2022. Additional information relating to the Company, including its quarterly MD&A for the three months and year ended December 31, 2021, its Annual Information Form for the year ended December 31, 2021, and its audited consolidated financial statements for the year ended December 31, 2021, is available on SEDAR at [www.sedar.com](http://www.sedar.com), and on EDGAR at [www.sec.gov](http://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 2, 2022.

## Objectives and Strategy

The Company's objectives are to increase crude oil and natural gas production, reserves, cash flow and net asset value <sup>(1)</sup> on a per common share basis through the economic and sustainable development of its existing crude oil and natural gas properties and through the discovery and/or acquisition of new reserves. The Company strives to meet these objectives in a sustainable and responsible way, maintaining a commitment to environmental stewardship and safety excellence.

The Company strives to meet these objectives by having a defined growth and value enhancement plan for each of its products and segments. The Company takes a balanced approach to growth and investments and focuses on creating long-term shareholder value. The Company allocates its capital by maintaining:

- Balance among its products, namely light and medium crude oil and NGLs, primary heavy crude oil, Pelican Lake heavy crude oil <sup>(2)</sup>, bitumen (thermal oil), SCO and natural gas;
- A large, balanced, diversified, high quality, long life low decline asset base;
- Balance among acquisitions, development and exploration;
- Balance between sources and terms of debt financing and a strong financial position; and
- Commitment to environmental stewardship throughout the decision-making process.

The Company's three-phase crude oil marketing strategy includes:

- Blending various crude oil streams with diluents to create more attractive feedstock;
- Supporting and participating in pipeline expansions and/or new additions; and
- Supporting and participating in projects that will increase the downstream conversion capacity for heavy crude oil and bitumen (thermal oil).

Operational discipline, safe, effective and efficient operations, and cost control are fundamental to the Company and embrace the key piece of the Company's mission statement: "doing it right". By consistently managing costs throughout all cycles of the industry, the Company believes it will achieve continued growth. Effective and efficient operations and cost control are attained by developing area knowledge, and by maintaining high working interests and operator status in the Company's properties.

The Company is committed to maintaining a strong balance sheet and flexible capital structure. The Company believes it has built the necessary financial capacity to complete its growth projects. Additionally, the Company periodically utilizes its risk management hedging program to reduce the risk of volatility in commodity prices and foreign exchange rates and to support the Company's cash flow for its capital expenditure programs.

Strategic accretive acquisitions are a key component of the Company's strategy. The Company has used a combination of internally generated cash flows and debt and equity financing to selectively acquire properties generating future cash flows in its core areas. The Company's financial discipline, commitment to a strong balance sheet, and capacity to internally generate cash flows provides the means to responsibly and sustainably grow in the long term.

(1) Discounted value of crude oil and natural gas reserves plus value of unproved land, less net debt.

(2) Pelican Lake heavy crude oil is 12–17° API oil, which receives medium quality crude netbacks due to lower production expense and lower royalty rates.

# Financial and Operational Highlights

(\$ millions, except per common share amounts)		2021	2020	2019
Product sales <sup>(1)</sup>		\$ 32,854	\$ 17,491	\$ 24,394
Crude oil and NGLs		\$ 29,256	\$ 15,579	\$ 22,950
Natural gas		\$ 2,716	\$ 1,478	\$ 1,419
Net earnings (loss)		\$ 7,664	\$ (435)	\$ 5,416
Per common share – basic		\$ 6.49	\$ (0.37)	\$ 4.55
– diluted		\$ 6.46	\$ (0.37)	\$ 4.54
Adjusted net earnings (loss) from operations <sup>(2)</sup>		\$ 7,420	\$ (756)	\$ 3,795
Per common share – basic <sup>(3)</sup>		\$ 6.28	\$ (0.64)	\$ 3.19
– diluted <sup>(3)</sup>		\$ 6.25	\$ (0.64)	\$ 3.18
Cash flows from operating activities		\$ 14,478	\$ 4,714	\$ 8,829
Adjusted funds flow <sup>(2)</sup>		\$ 13,733	\$ 5,200	\$ 10,267
Per common share – basic <sup>(3)</sup>		\$ 11.63	\$ 4.40	\$ 8.62
– diluted <sup>(3)</sup>		\$ 11.57	\$ 4.40	\$ 8.61
Dividends declared per common share <sup>(4)</sup>		\$ 2.00	\$ 1.70	\$ 1.50
Total assets		\$ 76,665	\$ 75,276	\$ 78,121
Total long-term liabilities		\$ 32,298	\$ 37,818	\$ 36,493
Cash flows used in investing activities		\$ 3,703	\$ 2,819	\$ 7,255
Net capital expenditures <sup>(2)</sup>		\$ 4,908	\$ 3,206	\$ 7,121
Average realized price				
Crude oil and NGLs - Exploration and Production (\$/bbl) <sup>(3)</sup>		\$ 63.71	\$ 31.90	\$ 55.08
Natural gas - Exploration and Production (\$/Mcf) <sup>(5)</sup>		\$ 4.07	\$ 2.40	\$ 2.34
SCO - Oil Sands Mining and Upgrading (\$/bbl) <sup>(3)</sup>		\$ 77.95	\$ 43.98	\$ 70.18
Daily production, before royalties (BOE/d)		1,234,906	1,164,136	1,098,957
Crude oil and NGLs (bbl/d)		952,404	917,958	850,393
Natural gas (MMcf/d) <sup>(6)</sup>		1,695	1,477	1,491

(1) Further details related to product sales are disclosed in note 22 to the Company's audited consolidated 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.

(4) On November 3, 2021, the Board of Directors approved a 25% increase in the quarterly dividend to \$0.5875 per common share, from \$0.47 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. On March 4, 2020, the Board of Directors approved a 13% increase in the quarterly dividend to \$0.425 per common share, from \$0.375 per common share. On March 6, 2019, the Board of Directors approved a 12% increase in the quarterly dividend to \$0.375 per common share, from \$0.335 per common share. The dividend policy undergoes periodic review by the Board of Directors and is subject to change.

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

(6) Natural gas production volumes approximate sales volumes.

## CONSOLIDATED NET EARNINGS (LOSS) AND ADJUSTED NET EARNINGS (LOSS)

For 2021, the Company reported net earnings of \$7,664 million compared with a net loss of \$435 million for 2020 (2019 – net earnings of \$5,416 million). Net earnings for 2021 included non-operating items (after-tax) of \$244 million compared with \$321 million for 2020 (2019 – \$1,621 million) related to the effects of share-based compensation, risk management activities, fluctuations in foreign exchange rates including the impact of a realized foreign exchange loss on repayment of US dollar debt securities, the realized foreign exchange gain on the settlement of the cross currency swaps, the gain on acquisitions, the (gain) loss from investments, government grant income under the provincial well-site rehabilitation programs, and a provision relating to the Keystone XL pipeline project. Excluding these items, adjusted net earnings from operations for 2021 were \$7,420 million compared with an adjusted net loss from operations of \$756 million for 2020 (2019 – adjusted net earnings from operations of \$3,795 million).

The net earnings and the adjusted net earnings from operations for 2021 compared with a net loss and adjusted net loss from operations for 2020 primarily reflected:

- higher realized SCO sales price <sup>(1)</sup> in the Oil Sands Mining and Upgrading segment;
- higher crude oil and NGLs netbacks <sup>(1)</sup> and natural gas netbacks <sup>(1)</sup> in the Exploration and Production segments;
- higher natural gas sales volumes in the North America segment;
- higher SCO sales volumes in the Oil Sands Mining and Upgrading segment; and
- lower depletion, depreciation and amortization expense.

A detailed reconciliation of the changes in the Company's product sales is provided in the "Analysis of Changes in Product Sales" section of this MD&A.

The impacts of share-based compensation, risk management activities, fluctuations in foreign exchange rates, the gain on acquisitions, income from NWRP, and the (gain) loss from investments, also contributed to the movements in net earnings (loss) for 2021 from 2020. These items are discussed in detail in the relevant sections of this MD&A.

## CASH FLOWS FROM OPERATING ACTIVITIES AND ADJUSTED FUNDS FLOW

Cash flows from operating activities for 2021 were \$14,478 million compared with \$4,714 million for 2020 (2019 – \$8,829 million). The increase in cash flows from operating activities for 2021 from 2020 were primarily due to the factors previously noted related to the fluctuations in net earnings (loss) from operations, as well as due to the impact of changes in non-cash working capital, and excluding the impact of changes in depletion, depreciation and amortization expense.

Adjusted funds flow for 2021 was \$13,733 million (\$11.63 per common share) compared with \$5,200 million for 2020 (\$4.40 per common share) (2019 – \$10,267 million; \$8.62 per common share). The increase in adjusted funds flow for 2021 from 2020 was 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 excluding the impact of 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, accrued interest on subordinated debt advances to NWRP, and prepaid cost of service tolls.

## PRODUCTION VOLUMES

Crude oil and NGLs production before royalties for 2021 increased 4% to average 952,404 bbl/d from 917,958 bbl/d in 2020 (2019 – 850,393 bbl/d). Natural gas production before royalties for 2021 increased 15% to average 1,695 MMcf/d from 1,477 MMcf/d in 2020 (2019 – 1,491 MMcf/d). Total production before royalties for 2021 of 1,234,906 BOE/d increased 6% from 1,164,136 BOE/d in 2020 (2019 – 1,098,957 BOE/d). Crude oil and NGLs and natural gas production volumes are discussed in detail in the "Daily Production" section of this MD&A.

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

## PRODUCT PRICES

In the Company's Exploration and Production segments, the 2021 realized crude oil and NGLs prices <sup>(1)</sup> increased 100% to average \$63.71 per bbl from \$31.90 per bbl in 2020 (2019 – \$55.08 per bbl), and the 2021 realized natural gas price <sup>(1)</sup> increased 70% to average \$4.07 per Mcf from \$2.40 per Mcf in 2020 (2019 – \$2.34 per Mcf). In the Oil Sands Mining and Upgrading segment, the Company's 2021 realized SCO sales price increased 77% to average \$77.95 per bbl from \$43.98 per bbl in 2020 (2019 – \$70.18 per bbl). 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, the 2021 crude oil and NGLs production expense <sup>(2)</sup> increased 18% to average \$14.71 per bbl from \$12.42 per bbl in 2020 (2019 – \$13.81 per bbl), and the natural gas production expense <sup>(2)</sup> averaged \$1.18 per Mcf in 2021 and 2020 (2019 – \$1.22 per Mcf). In the Oil Sands Mining and Upgrading segment, the Company's 2021 production cost <sup>(2)</sup> averaged \$20.91 per bbl and was comparable with \$20.46 per bbl in 2020 (2019 – \$22.56 per bbl). Crude oil and NGLs and natural gas production expense is discussed in detail in the "Exploration and Production" and the "Oil Sands Mining and Upgrading" sections of this MD&A.

## 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)

<b>2021</b>	<b>Total</b>	<b>Dec 31</b>	<b>Sep 30</b>	<b>Jun 30</b>	<b>Mar 31</b>
Product sales <sup>(1)</sup>	\$ 32,854	\$ 10,190	\$ 8,521	\$ 7,124	\$ 7,019
Crude oil and NGLs	\$ 29,256	\$ 8,979	\$ 7,607	\$ 6,382	\$ 6,288
Natural gas	\$ 2,716	\$ 958	\$ 694	\$ 509	\$ 555
Net earnings (loss)	\$ 7,664	\$ 2,534	\$ 2,202	\$ 1,551	\$ 1,377
Net earnings (loss) per common share					
– basic	\$ 6.49	\$ 2.16	\$ 1.87	\$ 1.31	\$ 1.16
– diluted	\$ 6.46	\$ 2.14	\$ 1.86	\$ 1.30	\$ 1.16

(\$ millions, except per common share amounts)

<b>2020</b>	<b>Total</b>	<b>Dec 31</b>	<b>Sep 30</b>	<b>Jun 30</b>	<b>Mar 31</b>
Product sales <sup>(1)</sup>	\$ 17,491	\$ 5,219	\$ 4,676	\$ 2,944	\$ 4,652
Crude oil and NGLs	\$ 15,579	\$ 4,592	\$ 4,202	\$ 2,462	\$ 4,323
Natural gas	\$ 1,478	\$ 496	\$ 338	\$ 307	\$ 337
Net earnings (loss)	\$ (435)	\$ 749	\$ 408	\$ (310)	\$ (1,282)
Net earnings (loss) per common share					
– basic	\$ (0.37)	\$ 0.63	\$ 0.35	\$ (0.26)	\$ (1.08)
– diluted	\$ (0.37)	\$ 0.63	\$ 0.35	\$ (0.26)	\$ (1.08)

(1) Further details related to product sales are disclosed in note 22 to the Company's audited consolidated financial statements.

(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.

Volatility in the quarterly net earnings (loss) 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, on worldwide benchmark pricing; the impact of shale oil production in North America; the impact of the WCS Heavy Differential from WTI in North America; the impact of the differential between WTI and Brent benchmark pricing in the North Sea and Offshore Africa; and the impact of production curtailments mandated by the Government of Alberta that came into effect on January 1, 2019 and were suspended effective December 1, 2020.
- **Natural gas pricing** – The impact of fluctuations in both the demand for natural gas and inventory storage levels, third-party pipeline maintenance and outages, 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, the impact of turnarounds and pitstops in the Oil Sands Mining and Upgrading segment, production curtailments mandated by the Government of Alberta that came into effect January 1, 2019 and were suspended effective December 1, 2020, 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 allocation of capital to high return projects, drilling results, natural decline rates, the temporary shut-down and subsequent reinstatement of the Pine River Gas Plant, and the impact and timing of acquisitions.
- **Production expense** – Fluctuations primarily due to the impact of the demand and cost for services, fluctuations in product mix and production volumes, the impact of seasonality, the impact of increased carbon tax and energy costs, cost optimizations across all segments, the impact and timing of acquisitions, the impact of turnarounds and pitstops in the Oil Sands Mining and Upgrading segment, and maintenance activities in the International segments.
- **Transportation, blending and feedstock expense** – Fluctuations due to the provision recognized relating to the cancellation of the Keystone XL pipeline project in 2020.
- **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, and the impact of turnarounds and pitstops in the Oil Sands Mining and Upgrading segment.
- **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.
- **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 cross currency swap hedges.
- **Gain on acquisitions, (gain) loss from investments and income from NWRP** – Fluctuations due to the recognition of gains on acquisitions, (gain) loss from the investments in PrairieSky Royalty Ltd. ("PrairieSky") and Inter Pipeline Ltd. ("IPL") shares, and the distribution from NWRP in 2021.
- **Income taxes** – Fluctuations due to statutory tax rate and other legislative changes substantively enacted in the various periods.

## Business Environment

Global benchmark crude oil prices increased significantly throughout 2021, partially in response to the OPEC+ decision to adhere to previously agreed upon production cut agreements. Additionally, global demand for crude oil increased due to improved economic conditions, as the effects of COVID-19 became less impactful to the global economy. Improved economic conditions continue to positively impact the outlook for crude oil prices, although market conditions remain uncertain.

During 2021, the Company continued to utilize federal and provincial government programs to support employment during the COVID-19 pandemic, including in Canada, the provincial well-site rehabilitation program.

### LIQUIDITY

As at December 31, 2021, the Company had undrawn bank credit facilities of \$6,098 million. Including cash and cash equivalents and short-term investments, the Company had approximately \$7,151 million in liquidity <sup>(1)</sup>. 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 January 11, 2022, the Company announced its 2022 base capital budget <sup>(2)</sup> targeted at approximately \$3,645 million. The budget also includes incremental strategic growth capital of approximately \$700 million that targets to add future production and capacity in the Company's long life low decline thermal in situ and Oil Sands Mining and Upgrading assets. Production for 2022 is targeted between 1,270,000 BOE/d and 1,320,000 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 2022 capital budget and production targets constitute forward-looking statements. Refer to the "Advisory" section of this MD&A for further details on forward-looking statements.

On December 9, 2020, the Company announced its 2021 capital budget targeted at approximately \$3,205 million, and on August 5, 2021, the 2021 capital budget was increased to approximately \$3,480 million, excluding acquisitions. Net capital expenditures for 2021 were \$4,908 million, including the impact of acquisitions. Refer to the "Net Capital Expenditures" section of this MD&A for further details on the 2021 net capital expenditures.

During 2021, the Company completed the acquisition of all the issued and outstanding common shares of Storm Resources Limited ("Storm") for total cash consideration of approximately \$771 million. At closing, the acquisition also included the assumption of long-term debt of approximately \$183 million. Storm is involved in the exploration for and development of natural gas and natural gas liquids in the Montney region of British Columbia.

During 2021, the Company also completed a number of other opportunistic acquisitions. Two acquisitions consisted of natural gas assets located in the Montney region of British Columbia, with aggregate production of approximately 11,100 BOE/d. A third acquisition consisted of a net carried interest on an existing oil sands lease held by the Company, from which all Horizon production volumes are derived. Total cash consideration paid for these acquisitions was approximately \$450 million.

During 2021, in accordance with a third-party offer to purchase, the Company elected to take total cash proceeds of \$128 million, or \$20.00 per common share, in exchange for its 6.4 million common share investment in IPL.

### 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 resulting from quarantines that affect the Company's labour pools in their local communities, workforce camps or operating sites or that are instituted by local health authorities as a precautionary measure, any of which may require the Company to temporarily reduce or shutdown its operations depending on their extent and severity.

(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.

## BENCHMARK COMMODITY PRICES

(Yearly average)	2021	2020	2019
WTI benchmark price (US\$/bbl)	\$ <b>67.96</b>	\$ 39.40	\$ 57.04
Dated Brent benchmark price (US\$/bbl)	\$ <b>70.49</b>	\$ 42.27	\$ 64.04
WCS Heavy Differential from WTI (US\$/bbl)	\$ <b>13.04</b>	\$ 12.57	\$ 12.79
SCO price (US\$/bbl)	\$ <b>66.36</b>	\$ 36.26	\$ 56.35
Condensate benchmark price (US\$/bbl)	\$ <b>68.24</b>	\$ 36.97	\$ 52.84
Condensate Differential from WTI (US\$/bbl)	\$ <b>(0.28)</b>	\$ 2.43	\$ 4.20
NYMEX benchmark price (US\$/MMBtu)	\$ <b>3.85</b>	\$ 2.08	\$ 2.63
AECO benchmark price (C\$/GJ)	\$ <b>3.38</b>	\$ 2.12	\$ 1.54
US/Canadian dollar average exchange rate (US\$)	\$ <b>0.7979</b>	\$ 0.7454	\$ 0.7536
US/Canadian dollar year end exchange rate (US\$)	\$ <b>0.7901</b>	\$ 0.7840	\$ 0.7713

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\$67.96 per bbl for 2021, an increase of 72% from US\$39.40 per bbl for 2020 (2019 – US\$57.04 per bbl).

Crude oil sales contracts for the Company's North Sea and Offshore Africa segments are typically based on Brent pricing, which is representative of international markets and overall world supply and demand. Brent averaged US\$70.49 per bbl for 2021, an increase of 67% from US\$42.27 per bbl for 2020 (2019 – US\$64.04 per bbl).

The increase in WTI and Brent pricing for 2021 from 2020 primarily reflected the OPEC+ decision to adhere to the previously agreed upon production cut agreements. Additionally, global demand for crude oil increased due to improved economic conditions as a result of the lessening of earlier COVID-19 restrictions.

The WCS Heavy Differential averaged US\$13.04 per bbl for 2021, a slight widening of 4% from US\$12.57 per bbl for 2020 (2019 – US\$12.79 per bbl). The widening of the WCS Heavy Differential for 2021 from 2020 primarily reflected the increase in WTI benchmark pricing and the widening of the US Gulf Coast heavy oil pricing.

The SCO price averaged US\$66.36 per bbl for 2021, an increase of 83% from US\$36.26 per bbl for 2020 (2019 – US\$56.35 per bbl). The increase in SCO pricing for 2021 from 2020 primarily reflected the increase in WTI benchmark pricing.

NYMEX natural gas prices averaged US\$3.85 per MMBtu for 2021, an increase of 85% from US\$2.08 per MMBtu for 2020 (2019 – US\$2.63 per MMBtu). The increase in NYMEX natural gas prices for 2021 from 2020 primarily reflected increased North American demand in 2021, following the impact of COVID-19 in 2020, as well as lower storage levels.

AECO natural gas prices averaged \$3.38 per GJ for 2021, an increase of 59% from \$2.12 per GJ for 2020 (2019 – \$1.54 per GJ). The increase in AECO natural gas prices for 2021 from 2020 primarily reflected lower storage levels and increased NYMEX benchmark pricing.

## Analysis of Changes in Product Sales

(\$ millions)	2019	Changes due to			2020	Changes due to			2021
		Volumes	Prices	Other		Volumes	Prices	Other	
<b>North America</b>									
Crude oil and NGLs	\$ 9,679	\$ 1,582	\$ (3,781)	\$ —	\$ 7,480	\$ 82	\$ 6,916	\$ —	\$ 14,478
Natural gas	1,150	8	84	—	1,242	193	1,049	—	2,484
Other <sup>(1)</sup>	6	—	—	35	41	—	—	78	119
	10,835	1,590	(3,697)	35	8,763	275	7,965	78	17,081
<b>North Sea</b>									
Crude oil and NGLs	860	(135)	(308)	—	417	(72)	262	—	607
Natural gas	57	(29)	(16)	—	12	(8)	1	—	5
Other <sup>(1)</sup>	5	—	—	(2)	3	—	—	(4)	(1)
	922	(164)	(324)	(2)	432	(80)	263	(4)	611
<b>Offshore Africa</b>									
Crude oil and NGLs	632	(116)	(198)	—	318	(68)	170	—	420
Natural gas	67	(27)	2	—	42	(9)	(2)	—	31
Other <sup>(1)</sup>	8	—	—	10	18	—	—	(11)	7
	707	(143)	(196)	10	378	(77)	168	(11)	458
<b>Oil Sands Mining and Upgrading</b>									
Crude oil and NGLs	11,340	470	(4,421)	—	7,389	560	6,084	—	14,033
Other <sup>(1)</sup>	6	—	—	133	139	—	—	(66)	73
	11,346	470	(4,421)	133	7,528	560	6,084	(66)	14,106
<b>Midstream and Refining</b>									
Midstream activities	88	—	—	(5)	83	—	—	(5)	78
Refined product sales and other <sup>(1)</sup>	—	—	—	202	202	—	—	479	681
	88	—	—	197	285	—	—	474	759
<b>Intersegment eliminations and other <sup>(2)</sup></b>									
Product sales	496	—	—	(422)	74	—	—	(238)	(164)
Other <sup>(1)</sup>	—	—	—	31	31	—	—	(28)	3
	496	—	—	(391)	105	—	—	(266)	(161)
<b>Total</b>	<b>\$24,394</b>	<b>\$ 1,753</b>	<b>\$ (8,638)</b>	<b>\$ (18)</b>	<b>\$ 17,491</b>	<b>\$ 678</b>	<b>\$ 14,480</b>	<b>\$ 205</b>	<b>\$ 32,854</b>

(1) Includes the sale of diesel and other refined products and other income, including government grants and recoveries associated with the joint operations partners' share of the costs of lease contracts.

(2) Eliminates internal transportation and electricity charges and includes production, processing and other purchasing and selling activities that are not included in the above segments.

Product sales increased 88% to \$32,854 million for 2021 from \$17,491 million for 2020 (2019 – \$24,394 million). The increase in product sales was primarily a result of increased WTI benchmark pricing due to increased demand for refined products as a result of improved economic conditions. Crude oil and NGLs and natural gas pricing are discussed in detail in the "Business Environment", "Exploration and Production" and the "Oil Sands Mining and Upgrading" sections of this MD&A. Crude oil and NGLs and natural gas production volumes are discussed in detail in the "Daily Production" section of this MD&A.

For 2021, 3% of the Company's crude oil and NGLs and natural gas product sales were generated outside of North America (2020 – 5%; 2019 – 7%). North Sea accounted for 2% of crude oil and NGLs and natural gas product sales for 2021 (2020 – 3%; 2019 – 4%), and Offshore Africa accounted for 1% of crude oil and NGLs and natural gas product sales for 2021 (2020 – 2%; 2019 – 3%).

# Daily Production

## DAILY PRODUCTION, BEFORE ROYALTIES

	2021	2020	2019
<b>Crude oil and NGLs</b> (bbl/d)			
North America – Exploration and Production	472,621	460,443	405,970
North America – Oil Sands Mining and Upgrading <sup>(1)</sup>	448,133	417,351	395,133
North Sea	17,633	23,142	27,919
Offshore Africa	14,017	17,022	21,371
	<b>952,404</b>	917,958	850,393
<b>Natural gas</b> (MMcf/d) <sup>(2)</sup>			
North America	1,680	1,450	1,443
North Sea	3	12	24
Offshore Africa	12	15	24
	<b>1,695</b>	1,477	1,491
Total barrels of oil equivalent (BOE/d)	<b>1,234,906</b>	1,164,136	1,098,957
<b>Product mix</b>			
Light and medium crude oil and NGLs	10%	11%	13%
Pelican Lake heavy crude oil	5%	5%	5%
Primary heavy crude oil	5%	6%	8%
Bitumen (thermal oil)	21%	21%	15%
Synthetic crude oil <sup>(1)</sup>	36%	36%	36%
Natural gas	23%	21%	23%
<b>Percentage of gross revenue</b> <sup>(1) (3)</sup>			
(excluding Midstream and Refining revenue)			
Crude oil and NGLs	91%	91%	94%
Natural gas	9%	9%	6%

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

(2) Natural gas production volumes approximate sales volumes.

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

## DAILY PRODUCTION, NET OF ROYALTIES

	2021	2020	2019
<b>Crude oil and NGLs</b> (bbl/d)			
North America – Exploration and Production	404,637	420,906	356,794
North America – Oil Sands Mining and Upgrading	410,385	413,363	375,048
North Sea	17,588	23,086	27,866
Offshore Africa	13,354	16,306	20,078
	<b>845,964</b>	873,661	779,786
<b>Natural gas</b> (MMcf/d)			
North America	1,593	1,406	1,400
North Sea	3	12	24
Offshore Africa	11	14	22
	<b>1,607</b>	1,432	1,446
Total barrels of oil equivalent (BOE/d)	<b>1,113,878</b>	1,112,364	1,020,749

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.

Total 2021 production before royalties averaged 1,234,906 BOE/d, an increase of 6% from 1,164,136 BOE/d in 2020 (2019 – 1,098,957 BOE/d).

Record crude oil and NGLs production before royalties for 2021 averaged 952,404 bbl/d, an increase of 4% from 917,958 bbl/d for 2020 (2019 – 850,393 bbl/d). The increase in crude oil and NGLs production for 2021 from 2020 primarily reflected strong operational performance in the Oil Sands Mining and Upgrading segment and increased thermal oil production. Crude oil and NGLs production in North America Exploration and Production and Oil Sands Mining and Upgrading segments for the comparable periods of 2020 reflected the impact of the Company's curtailment optimization strategy during mandatory Government of Alberta curtailment.

Annual crude oil and NGLs production for 2021 was within the Company's previously issued target of 940,000 bbl/d and 980,000 bbl/d. The Company targets production levels in 2022 to average between 940,000 bbl/d and 982,000 bbl/d of liquids production, including crude oil, SCO and NGLs. 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 accounted for 23% of the Company's total production in 2021 on a BOE basis. Natural gas production for 2021 of 1,695 MMcf/d increased 15% from 1,477 MMcf/d for 2020 (2019 – 1,491 MMcf/d). The increase in natural gas production for 2021 from 2020 primarily reflected strong drilling results and production volumes from acquisitions, partially offset by natural field declines.

Annual natural gas production for 2021 was within the Company's previously issued target of 1,680 MMcf/d and 1,720 MMcf/d. The Company targets production levels in 2022 to average between 1,980 MMcf/d and 2,030 MMcf/d of natural gas production. 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 2021 averaged 472,621 bbl/d, an increase of 3% from 460,443 bbl/d for 2020 (2019 – 405,970 bbl/d). The increase in crude oil and NGLs production for 2021 from 2020 primarily reflected increased thermal oil production and strong drilling results, partially offset by natural field declines.

Thermal oil production before royalties for 2021 averaged 259,284 bbl/d, an increase of 4% from 248,971 bbl/d for 2020 (2019 – 167,942 bbl/d). The increase in thermal oil production for 2021 from 2020 primarily reflected high utilization at Jackfish.

Pelican Lake heavy crude oil production before royalties averaged 54,390 bbl/d for 2021, a decrease of 4% from 56,535 bbl/d for 2020 (2019 – 58,855 bbl/d), demonstrating Pelican Lake's long life low decline production.

Natural gas production before royalties for 2021 averaged 1,680 MMcf/d, an increase of 16% from 1,450 MMcf/d for 2020 (2019 – 1,443 MMcf/d). The increase in natural gas production for 2021 from 2020 primarily reflected strong drilling results and production volumes from acquisitions, partially offset by natural field declines.

### **North America – Oil Sands Mining and Upgrading**

Record SCO production before royalties for 2021 of 448,133 bbl/d increased 7% from 417,351 bbl/d for 2020 (2019 – 395,133 bbl/d). The increase in SCO production for 2021 from 2020 primarily reflected strong operational performance at AOSP following the completion of expansion activities at Scotford in 2020.

### **North Sea**

North Sea crude oil production before royalties for 2021 of 17,633 bbl/d decreased 24% from 23,142 bbl/d for 2020 (2019 – 27,919 bbl/d). The decrease in production for 2021 from 2020 primarily reflected natural field declines and planned maintenance activities.

### **Offshore Africa**

Offshore Africa crude oil production before royalties for 2021 decreased 18% to 14,017 bbl/d from 17,022 bbl/d for 2020 (2019 – 21,371 bbl/d). The decrease in production for 2021 from 2020 primarily reflected maintenance activities and natural field declines.

## 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)	2021	2020	2019
North Sea	—	450,889	344,726
Offshore Africa	<b>727,439</b>	521,244	519,504
	<b>727,439</b>	972,133	864,230

## Exploration and Production

### OPERATING HIGHLIGHTS

	2021	2020	2019
<b>Crude oil and NGLs</b> (\$/bbl) <sup>(1)</sup>			
Realized price <sup>(2)</sup>	\$ <b>63.71</b>	\$ 31.90	\$ 55.08
Transportation <sup>(2)</sup>	<b>3.86</b>	3.85	3.48
Realized price, net of transportation <sup>(2)</sup>	<b>59.85</b>	28.05	51.60
Royalties <sup>(3)</sup>	<b>8.59</b>	2.59	6.08
Production expense <sup>(4)</sup>	<b>14.71</b>	12.42	13.81
Netback <sup>(2)</sup>	\$ <b>36.55</b>	\$ 13.04	\$ 31.71
<b>Natural gas</b> (\$/Mcf) <sup>(1)</sup>			
Realized price <sup>(5)</sup>	\$ <b>4.07</b>	\$ 2.40	\$ 2.34
Transportation <sup>(6)</sup>	<b>0.45</b>	0.43	0.42
Realized price, net of transportation	<b>3.62</b>	1.97	1.92
Royalties <sup>(3)</sup>	<b>0.22</b>	0.08	0.08
Production expense <sup>(4)</sup>	<b>1.18</b>	1.18	1.22
Netback <sup>(2)</sup>	\$ <b>2.22</b>	\$ 0.71	\$ 0.62
<b>Barrels of oil equivalent</b> (\$/BOE) <sup>(1)</sup>			
Realized price <sup>(2)</sup>	\$ <b>49.67</b>	\$ 26.15	\$ 40.50
Transportation <sup>(2)</sup>	<b>3.44</b>	3.44	3.14
Realized price, net of transportation <sup>(2)</sup>	<b>46.23</b>	22.71	37.36
Royalties <sup>(3)</sup>	<b>5.98</b>	1.89	4.09
Production expense <sup>(4)</sup>	<b>11.98</b>	10.67	11.49
Netback <sup>(2)</sup>	\$ <b>28.27</b>	\$ 10.15	\$ 21.78

(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

	2021	2020	2019
<b>Crude oil and NGLs</b> (\$/bbl) <sup>(1)</sup>			
North America <sup>(2)</sup>	\$ 62.10	\$ 30.31	\$ 51.43
North Sea <sup>(3)</sup>	\$ 87.98	\$ 50.09	\$ 86.76
Offshore Africa <sup>(3)</sup>	\$ 85.71	\$ 50.95	\$ 83.68
Average <sup>(2)</sup>	\$ 63.71	\$ 31.90	\$ 55.08
<b>Natural gas</b> (\$/Mcf) <sup>(1) (3)</sup>			
North America	\$ 4.05	\$ 2.34	\$ 2.18
North Sea	\$ 2.94	\$ 2.74	\$ 6.52
Offshore Africa	\$ 7.17	\$ 7.77	\$ 7.41
Average	\$ 4.07	\$ 2.40	\$ 2.34
Average (\$/BOE) <sup>(1) (2)</sup>	\$ 49.67	\$ 26.15	\$ 40.50

(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 by \$31.79 per bbl to average \$62.10 per bbl for 2021 from \$30.31 per bbl for 2020 (2019 – \$51.43 per bbl), primarily due to higher WTI benchmark pricing.

The Company continues to focus on its crude oil blending marketing strategy including a blending strategy that expands markets within current pipeline infrastructure, supporting pipeline projects that will provide capacity to transport crude oil to new markets, and working with refiners to add incremental heavy crude oil and bitumen (thermal oil) conversion capacity. During 2021, the Company contributed approximately 152,000 bbl/d of heavy crude oil blends to the WCS stream.

The Company has 20-year transportation agreements to ship 94,000 bbl/d of crude oil on the proposed Trans Mountain Pipeline Expansion that will provide waterborne access to international markets. The expansion is now under construction and Trans Mountain Corporation targets a completion date of late 2023.

North America realized natural gas prices increased 73% to average \$4.05 per Mcf for 2021 from \$2.34 per Mcf for 2020 (2019 – \$2.18 per Mcf). The increase in realized natural gas prices for 2021 from 2020 primarily reflected lower storage levels and increased benchmark pricing.

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

(Yearly average)	2021	2020	2019
<b>Wellhead Price</b> <sup>(1)</sup>			
Light and medium crude oil and NGLs (\$/bbl)	\$ 61.29	\$ 33.42	\$ 49.54
Pelican Lake heavy crude oil (\$/bbl)	\$ 68.05	\$ 33.57	\$ 57.82
Primary heavy crude oil (\$/bbl)	\$ 65.88	\$ 31.81	\$ 55.38
Bitumen (thermal oil) (\$/bbl)	\$ 60.20	\$ 28.11	\$ 48.27
Natural gas (\$/Mcf)	\$ 4.05	\$ 2.34	\$ 2.18

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

### North Sea

North Sea realized crude oil and NGLs prices increased 76% to average \$87.98 per bbl for 2021 from \$50.09 per bbl for 2020 (2019 – \$86.76 per bbl). Realized crude oil and NGLs prices per barrel in any particular year 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 2021 from 2020 reflected prevailing Brent benchmark pricing at the time of liftings, together with the impact of movements in the Canadian dollar.

## Offshore Africa

Offshore Africa realized crude oil and NGLs prices increased 68% to average \$85.71 per bbl for 2021 from \$50.95 per bbl for 2020 (2019 – \$83.68 per bbl). Realized crude oil and NGLs prices per barrel in any particular year 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 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

	2021	2020	2019
<b>Crude oil and NGLs (\$/bbl) <sup>(1)</sup></b>			
North America	\$ 9.06	\$ 2.72	\$ 6.56
North Sea	\$ 0.19	\$ 0.12	\$ 0.16
Offshore Africa	\$ 3.94	\$ 2.17	\$ 4.74
Average	\$ 8.59	\$ 2.59	\$ 6.08
<b>Natural gas (\$/Mcf) <sup>(1)</sup></b>			
North America	\$ 0.22	\$ 0.07	\$ 0.07
Offshore Africa	\$ 0.33	\$ 0.37	\$ 0.63
Average	\$ 0.22	\$ 0.08	\$ 0.08
Average (\$/BOE) <sup>(1)</sup>	\$ 5.98	\$ 1.89	\$ 4.09

(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

Government royalties on a significant portion of North America crude oil and NGLs production fall under the oil sands royalty regime and are calculated on a project by project basis as a percentage of gross revenue less operating, capital and abandonment costs incurred.

North America crude oil and NGLs and natural gas royalties for 2021 and the comparable periods reflected movements in benchmark commodity prices. North America crude oil royalties also reflected fluctuations in the WCS Heavy Differential and changes in the production mix between high and low royalty rate product types.

Crude oil and NGLs royalty rates <sup>(1)</sup> averaged approximately 15% of product sales for 2021 compared with 9% of product sales for 2020 (2019 – 13%). The increase in royalty rates for 2021 from 2020 was primarily due to higher benchmark prices together with fluctuations in the WCS Heavy Differential.

Natural gas royalty rates averaged approximately 5% of product sales for 2021, compared with 3% of product sales for 2020 (2019 – 3%). The increase in royalty rates for 2021 from 2020 was primarily due to higher benchmark prices.

## 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 5% for 2021 compared with 4% of product sales for 2020 (2019 – 6%). Royalty rates as a percentage of product sales reflected the timing of liftings and the status of payout in the various fields.

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

## PRODUCTION EXPENSE – EXPLORATION AND PRODUCTION

	2021	2020	2019
<b>Crude oil and NGLs</b> (\$/bbl) <sup>(1)</sup>			
North America	\$ 13.12	\$ 11.21	\$ 12.41
North Sea	\$ 54.13	\$ 36.51	\$ 36.39
Offshore Africa	\$ 14.73	\$ 13.29	\$ 11.21
Average	\$ 14.71	\$ 12.42	\$ 13.81
<b>Natural gas</b> (\$/Mcf) <sup>(1)</sup>			
North America	\$ 1.15	\$ 1.14	\$ 1.16
North Sea	\$ 7.31	\$ 3.72	\$ 3.40
Offshore Africa	\$ 4.41	\$ 3.58	\$ 2.60
Average	\$ 1.18	\$ 1.18	\$ 1.22
Average (\$/BOE) <sup>(1)</sup>	\$ 11.98	\$ 10.67	\$ 11.49

(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 2021 averaged \$13.12 per bbl, an increase of 17% from \$11.21 per bbl for 2020 (2019 – \$12.41 per bbl). The increase in crude oil and NGLs production expense per bbl for 2021 from 2020 reflected increased energy costs.

North America natural gas production expense for 2021 averaged \$1.15 per Mcf, comparable with \$1.14 per Mcf for 2020 (2019 – \$1.16 per Mcf). Natural gas production expense per Mcf for 2021 primarily reflected higher production volumes and the Company's strong focus on cost control.

### North Sea

North Sea crude oil production expense for 2021 averaged \$54.13 per bbl, an increase of 48% from \$36.51 per bbl for 2020 (2019 – \$36.39 per bbl). The increase in crude oil production expense per bbl for 2021 from 2020 primarily reflected lower volumes on a relatively fixed cost base, as well as higher natural gas and CO<sub>2</sub> costs. North Sea production expense also reflected fluctuations in the Canadian dollar.

### Offshore Africa

Offshore Africa crude oil production expense for 2021 averaged \$14.73 per bbl, an increase of 11% from \$13.29 per bbl for 2020 (2019 – \$11.21 per bbl). The increase in crude oil production expense per bbl for 2021 from 2020 primarily reflected timing of liftings from various fields that have different cost structures, together with lower volumes, on a relatively fixed cost base. Offshore Africa production expense also reflected fluctuations in the Canadian dollar.

## DEPLETION, DEPRECIATION AND AMORTIZATION – EXPLORATION AND PRODUCTION

(\$ millions, except per BOE amounts)	2021	2020	2019
North America	\$ 3,569	\$ 3,780	\$ 3,326
North Sea	160	277	308
Offshore Africa	142	190	242
Depletion, depreciation and amortization	\$ 3,871	\$ 4,247	\$ 3,876
\$/BOE <sup>(1)</sup>	\$ 13.49	\$ 15.45	\$ 15.22

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

Depletion, depreciation and amortization expense for 2021 of \$13.49 per BOE decreased 13% from \$15.45 per BOE for 2020 (2019 – \$15.22 per BOE). The decrease in depletion, depreciation and amortization expense per BOE for 2021 from 2020 primarily reflected lower depletion rates in the North America Exploration and Production segment and lower volumes in the North Sea, which has higher depletion rates.

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)	2021	2020	2019
North America	\$ 101	\$ 97	\$ 95
North Sea	21	30	28
Offshore Africa	6	6	6
Asset retirement obligation accretion	\$ 128	\$ 133	\$ 129
\$/BOE <sup>(1)</sup>	\$ 0.44	\$ 0.48	\$ 0.51

(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 2021 of \$0.44 per BOE decreased 8% from \$0.48 per BOE for 2020 (2019 – \$0.51 per BOE). Fluctuations in asset retirement obligation accretion expense on a per BOE basis primarily reflect fluctuating sales volumes.

## Oil Sands Mining and Upgrading

### OPERATING HIGHLIGHTS

The Company continues to focus on safe, reliable and efficient operations and leveraging its technical expertise across the Horizon and AOSP sites. Record SCO production in 2021 averaged 448,133 bbl/d, primarily reflecting strong operational performance.

The Company incurred production costs, excluding natural gas costs, of \$3,176 million (\$19.45 per bbl) for 2021, a 7% increase (comparable on a per bbl basis) from \$2,968 million (\$19.50 per bbl) for 2020, reflecting higher energy costs, offset by record production volumes, together with the Company's strong focus on cost control.

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

(\$/bbl)	2021	2020	2019
Realized SCO sales price <sup>(1)</sup>	\$ 77.95	\$ 43.98	\$ 70.18
Bitumen value for royalty purposes <sup>(2)</sup>	\$ 58.39	\$ 25.82	\$ 50.79
Bitumen royalties <sup>(3)</sup>	\$ 6.62	\$ 0.51	\$ 3.31
Transportation <sup>(1)</sup>	\$ 1.21	\$ 1.23	\$ 1.29

(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. For SCO sales volumes, refer to the "Non-GAAP and Other Financial Measures" section of this MD&A.

The realized SCO sales price averaged \$77.95 per bbl for 2021, an increase of 77% from \$43.98 per bbl for 2020 (2019 – \$70.18 per bbl). The increase in the realized SCO sales price for 2021 compared to 2020 primarily reflected the increase in WTI benchmark pricing.

The increase in bitumen royalties per bbl for 2021 from 2020 primarily reflected the impact of higher prevailing bitumen pricing and AOSP reaching full payout.

Transportation expense averaged \$1.21 per bbl for 2021, comparable with \$1.23 per bbl for 2020 (2019 – \$1.29 per bbl).

## PRODUCTION COSTS – OIL SANDS MINING AND UPGRADING

The following tables are reconciled to the Oil Sands Mining and Upgrading production costs disclosed in note 22 to the Company's audited consolidated financial statements.

(\$ millions)	2021	2020	2019
Production costs, excluding natural gas costs	\$ 3,176	\$ 2,968	\$ 3,151
Natural gas costs	238	146	125
Production costs	\$ 3,414	\$ 3,114	\$ 3,276

(\$/bbl)	2021	2020	2019
Production costs, excluding natural gas costs <sup>(1)</sup>	\$ 19.45	\$ 19.50	\$ 21.70
Natural gas costs <sup>(2)</sup>	1.46	0.96	0.86
Production costs <sup>(3)</sup>	\$ 20.91	\$ 20.46	\$ 22.56
Sales volumes (bbl/d)	447,230	415,741	397,735

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

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

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

Production costs for 2021 of \$20.91 per bbl, were comparable with \$20.46 per bbl for 2020 (2019 – \$22.56 per bbl). Production costs per bbl for 2021 as compared to 2020 primarily reflected the impact of higher energy costs, including natural gas and diesel, offset by the impact of record production volumes, together with the Company's strong focus on cost control.

## DEPLETION, DEPRECIATION AND AMORTIZATION – OIL SANDS MINING AND UPGRADING

(\$ millions, except per bbl amounts)	2021	2020	2019
Depletion, depreciation and amortization	\$ 1,838	\$ 1,784	\$ 1,656
\$/bbl <sup>(1)</sup>	\$ 11.26	\$ 11.73	\$ 11.41

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

Depletion, depreciation and amortization expense for 2021 of \$11.26 per bbl decreased 4% from \$11.73 per bbl for 2020 (2019 – \$11.41 per bbl). The decrease in depletion, depreciation and amortization on a per barrel basis primarily reflected the impact of fluctuating sales volumes from underlying operations.

## ASSET RETIREMENT OBLIGATION ACCRETION – OIL SANDS MINING AND UPGRADING

(\$ millions, except per bbl amounts)	2021	2020	2019
Asset retirement obligation accretion	\$ 57	\$ 72	\$ 61
\$/bbl <sup>(1)</sup>	\$ 0.35	\$ 0.47	\$ 0.42

(1) Calculated as asset retirement obligation accretion divided by sales volumes. For SCO 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 2021 of \$0.35 per bbl decreased 26% from \$0.47 per bbl for 2020 (2019 – \$0.42 per bbl). Fluctuations in asset retirement obligation accretion expense on a per barrel basis primarily reflect fluctuating sales volumes.

## Midstream and Refining

(\$ millions)	2021	2020	2019
Product sales			
Midstream activities	\$ 78	\$ 83	\$ 88
NWRP, refined product sales and other	681	202	—
Segmented revenue	759	285	88
Less:			
NWRP, refining toll	213	166	—
Midstream activities	21	18	20
Production expense	234	184	20
NWRP, transportation and feedstock costs	550	181	—
Depreciation	15	15	14
Income from NWRP	(400)	—	—
Equity loss from investment in NWRP	—	—	287
Segmented earnings (loss)	\$ 360	\$ (95)	\$ (233)

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. Approximately 27% of the Company's heavy crude oil production was transported to international mainline liquid pipelines via the 100% owned and operated ECHO and Pelican Lake pipelines. The Midstream pipeline asset ownership allows the Company to control transportation costs, earn third party revenue, and manage the marketing of heavy crude oils.

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. Sales of diesel and refined products and associated refining tolls are recognized in the Midstream and Refining segment. Production of ultra-low sulphur diesel and other refined products for 2021 averaged 69,713 BOE/d (17,428 BOE/d to the Company), reflecting the 25% toll payer commitment (2020 – 58,694 BOE/d; 14,673 BOE/d to the Company).

On June 30, 2021, the equity partners together with the toll payers, agreed to optimize the structure of NWRP to better align the commercial interests of the equity partners and the toll payers (the "Optimization Transaction"). As a result, North West Refining Inc. transferred its entire 50% partnership interest in NWRP to APMC. The Company's 50% equity interest remained unchanged.

Under the Optimization Transaction, the original term of the processing agreements was extended by 10 years from 2048 to 2058. NWRP retired higher cost subordinated debt, which carried interest rates of prime plus 6%, with lower cost senior secured bonds at an average rate of approximately 2.55%, reducing interest costs to NWRP and associated tolls to the toll payers. As such, NWRP repaid the Company's and APMC's subordinated debt advances of \$555 million each. In addition, the Company received a \$400 million distribution from NWRP during 2021.

To facilitate the Optimization Transaction, NWRP issued \$500 million of 1.20% series L senior secured bonds due December 2023, \$500 million of 2.00% series M senior secured bonds due December 2026, \$1,000 million of 2.80% series N senior secured bonds due June 2031, and \$600 million of 3.75% series O senior secured bonds due June 2051. Additionally, NWRP's existing \$3,500 million syndicated credit facility was amended. The \$2,000 million revolving credit facility was extended by three years to June 2024, and the \$1,500 million non-revolving credit facility was reduced by \$500 million to \$1,000 million and extended by two years to June 2023. As at December 31, 2021, NWRP had borrowings of \$1,981 million under the syndicated credit facility (December 31, 2020 – \$2,866 million).

As at December 31, 2021, the cumulative unrecognized share of the equity loss and partnership distributions from NWRP was \$562 million (2020 – \$153 million). The unrecognized share of the equity loss from NWRP for 2021 was \$9 million and partnership distributions were \$400 million (2020 – unrecognized equity loss of \$94 million; 2019 – recognized equity loss of \$287 million and unrecognized equity loss of \$59 million).

# Corporate and Other

## ADMINISTRATION EXPENSE

	2021	2020	2019
Expense (\$ millions)	\$ 366	\$ 391	\$ 344
\$/BOE <sup>(1)</sup>	\$ 0.81	\$ 0.92	\$ 0.86
Sales volumes (BOE/d) <sup>(2)</sup>	1,233,457	1,166,862	1,095,379

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

(2) Total Company sales volumes.

Administration expense for 2021 of \$0.81 per BOE decreased 12% from \$0.92 per BOE for 2020 (2019 – \$0.86 per BOE). Administration expense per BOE decreased for 2021 from 2020 primarily due to higher sales volumes and higher overhead recoveries.

## SHARE-BASED COMPENSATION

(\$ millions)	2021	2020	2019
Expense (recovery)	\$ 514	\$ (82)	\$ 223

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 a \$514 million share-based compensation expense for 2021, 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. An expense of \$79 million related to PSUs granted to certain executive employees was included in the share-based compensation expense for 2021 (2020 – \$21 million expense; 2019 – \$49 million expense).

## INTEREST AND OTHER FINANCING EXPENSE

(\$ millions, except effective interest rate)	2021	2020	2019
Interest and other financing expense	\$ 711	\$ 756	\$ 836
Interest income and other <sup>(1)</sup>	32	72	76
Capitalized interest <sup>(1)</sup>	—	24	53
Interest on long-term debt and lease liabilities <sup>(1)</sup>	\$ 743	\$ 852	\$ 965
Average current and long-term debt balance <sup>(2)</sup>	\$ 18,935	\$ 22,446	\$ 22,017
Average lease liabilities balance <sup>(2)</sup>	1,619	1,708	1,707
Average long-term debt and lease liabilities <sup>(2)</sup>	\$ 20,554	\$ 24,154	\$ 23,724
Average effective interest rate <sup>(3) (4)</sup>	3.5%	3.5%	4.0%
Interest and other financing expense per \$/BOE <sup>(5)</sup>	\$ 1.58	\$ 1.77	\$ 2.09
Sales volumes (BOE/d) <sup>(6)</sup>	1,233,457	1,166,862	1,095,379

(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 their most directly comparable financial measure presented in the Company's audited consolidated 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 2021 decreased 11% to \$1.58 per BOE from \$1.77 per BOE for 2020 (2019 – \$2.09 per BOE). The decrease in interest and other financing expense per BOE for 2021 from 2020 was primarily due to higher sales volumes and lower average debt levels in 2021, partially offset by lower interest income.

The Company's average effective interest rate of 3.5% for 2021 was consistent with 2020.

## 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)	2021	2020	2019
Natural gas financial instruments	\$ 17	\$ 16	\$ (1)
Crude oil and NGLs financial instruments	(1)	—	52
Foreign currency contracts	1	16	13
Net realized loss	17	32	64
Natural gas financial instruments	11	(36)	15
Crude oil and NGLs financial instruments	2	—	(17)
Foreign currency contracts	6	(3)	15
Net unrealized loss (gain)	19	(39)	13
Net loss (gain)	\$ 36	\$ (7)	\$ 77

During 2021, net realized risk management losses were related to the settlement of natural gas financial instruments, crude oil and NGLs financial instruments and foreign currency contracts. The Company recorded a net unrealized loss of \$19 million (\$16 million after-tax of \$3 million) on its risk management activities for 2021 (2020 – \$39 million unrealized gain, \$31 million after-tax of \$8 million; 2019 – \$13 million unrealized loss, \$14 million after-tax recovery of \$1 million).

Further details related to outstanding derivative financial instruments at December 31, 2021 are disclosed in note 19 to the Company's audited consolidated financial statements.

## FOREIGN EXCHANGE

(\$ millions)	2021	2020	2019
Net realized loss (gain)	\$ 78	\$ (159)	\$ (22)
Net unrealized gain	(205)	(116)	(548)
Net gain <sup>(1)</sup>	\$ (127)	\$ (275)	\$ (570)

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

The net realized foreign exchange loss for 2021 was primarily due to foreign exchange rate fluctuations on settlement of working capital items denominated in US dollars or UK pounds sterling and the repayment of US\$500 million of 3.45% debt securities. The net unrealized foreign exchange gain for 2021 was primarily related to the impact of a stronger Canadian dollar with respect to outstanding US dollar debt and the reversal of the net unrealized foreign exchange loss on the repayment of US\$500 million of 3.45% debt securities. The US/Canadian dollar exchange rate at December 31, 2021 was US\$0.7901 (December 31, 2020 – US\$0.7840, December 31, 2019 – US\$0.7713).

## INCOME TAXES

(\$ millions, except effective tax rates)	2021	2020	2019
North America <sup>(1)</sup>	\$ 1,841	\$ (245)	\$ 354
North Sea	7	(4)	112
Offshore Africa	21	17	44
PRT – North Sea	(34)	(31)	(89)
Other taxes	13	6	13
Current income tax	1,848	(257)	434
Deferred corporate income tax	399	(181)	(895)
Deferred PRT – North Sea	—	—	1
Deferred income tax	399	(181)	(894)
Income tax	\$ 2,247	\$ (438)	\$ (460)
Earnings (loss) before taxes	\$ 9,911	\$ (873)	\$ 4,956
Effective tax rate on net earnings (loss) <sup>(2)</sup>	23%	50%	(9)%
Income tax	\$ 2,247	\$ (438)	\$ (460)
Tax effect on non-operating items <sup>(3) (4)</sup>	5	29	1,630
Current PRT – North Sea	34	31	89
Other taxes	(13)	(6)	(13)
Effective tax on adjusted net earnings (loss)	\$ 2,273	\$ (384)	\$ 1,246
Adjusted net earnings (loss) from operations <sup>(5)</sup>	\$ 7,420	\$ (756)	\$ 3,795
Effective tax on adjusted net earnings (loss)	2,273	(384)	1,246
Adjusted net earnings (loss) from operations, before taxes	\$ 9,693	\$ (1,140)	\$ 5,041
Effective tax rate on adjusted net earnings (loss) from operations <sup>(6) (7)</sup>	23%	34%	25%

(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 (loss) before taxes.

(3) Includes the net tax effect of PSUs, unrealized risk management, abandonment expenditure recovery, the Keystone XL pipeline provision and legislative changes to tax rates in adjusted net earnings (loss) from operations.

(4) During 2019, the Government of Alberta enacted legislation that decreased the provincial corporate income tax rate from 12% to 11% effective July 1, 2019, with a further 1% rate reduction every year on January 1 until the provincial corporate income tax rate is 8% on January 1, 2022. As a result of this corporate income tax rate reduction, the Company's deferred corporate income tax liability decreased by \$1,618 million for 2019. During 2020, the Government of Alberta substantively enacted legislation to accelerate this reduction, lowering the corporate tax rate from 10% to 8%, effective July 1, 2020. This acceleration did not have a significant impact on the Company's deferred corporate income tax liability for 2020.

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

(6) 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 their most directly comparable financial measure presented in the Company's audited consolidated financial statements, as applicable, as an indication of the Company's performance.

(7) Calculated as effective tax on adjusted net earnings (loss) divided by adjusted net earnings (loss) from operations, before taxes. The Company presents its effective tax rate on adjusted net earnings (loss) 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 (loss) and adjusted net earnings (loss) from operations for 2021 and the comparable years 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 (loss).

The current corporate income tax and PRT in the North Sea in 2021 and the prior periods included the impact of carrybacks of abandonment expenditures related to decommissioning activities at the Company's platforms in the North Sea.

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.

During 2021, the Company filed Scientific Research and Experimental Development claims of approximately \$229 million (2020 – \$246 million; 2019 – \$250 million) relating to qualifying research and development expenditures for Canadian income tax purposes.

# Net Capital Expenditures <sup>(1) (2)</sup>

(\$ millions)	2021	2020	2019
<b>Exploration and Evaluation</b>			
Net property (dispositions) acquisitions <sup>(3)</sup>	\$ (11)	\$ (31)	\$ 90
Net expenditures	12	36	74
Total Exploration and Evaluation	1	5	164
<b>Property, Plant and Equipment</b>			
Net property acquisitions <sup>(3) (4) (5)</sup>	1,112	536	3,208
Well drilling, completion and equipping	918	429	775
Production and related facilities	802	580	1,028
Other	64	60	81
Total Property, Plant and Equipment	2,896	1,605	5,092
Total Exploration and Production	2,897	1,610	5,256
<b>Oil Sands Mining and Upgrading</b>			
Project costs	236	258	436
Sustaining capital	1,035	839	933
Turnaround costs	145	196	118
Other <sup>(6)</sup>	331	30	38
Total Oil Sands Mining and Upgrading	1,747	1,323	1,525
<b>Midstream and Refining</b>	9	5	10
<b>Head office</b>	23	19	34
<b>Abandonments expenditures, net <sup>(2)</sup></b>	232	249	296
Net capital expenditures	\$ 4,908	\$ 3,206	\$ 7,121
<b>By segment</b>			
North America <sup>(3) (4) (5)</sup>	\$ 2,662	\$ 1,389	\$ 4,831
North Sea	173	122	196
Offshore Africa	62	99	229
Oil Sands Mining and Upgrading	1,747	1,323	1,525
Midstream and Refining	9	5	10
Head office	23	19	34
Abandonments expenditures, net <sup>(2)</sup>	232	249	296
Net capital expenditures	\$ 4,908	\$ 3,206	\$ 7,121

(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 \$91 million for exploration and evaluation assets and \$3,126 million for property, plant and equipment acquired from Devon Canada Corporation ("Devon") in 2019.

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

(5) Includes cash consideration of \$111 million and the settlement of long-term debt of \$397 million assumed in the acquisition of Painted Pony Energy Ltd. ("Painted Pony") in 2020.

(6) Includes the acquisition of a 5% net carried interest on an existing oil sands lease in 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 2021 were \$4,908 million compared with \$3,206 million for 2020.

During 2021, the Company completed the acquisition of all the issued and outstanding common shares of Storm for total cash consideration of approximately \$771 million. At closing, the acquisition also included the assumption of long-term debt of approximately \$183 million. Storm is involved in the exploration for and development of natural gas and natural gas liquids in the Montney region of British Columbia.

During 2021, the Company also completed a number of other opportunistic acquisitions. Two acquisitions consisted of natural gas assets located in the Montney region of British Columbia. A third acquisition consisted of a net carried interest on an existing oil sands lease held by the Company, from which all Horizon production volumes are derived. Total cash consideration paid for these acquisitions was approximately \$450 million.

## 2022 CAPITAL BUDGET

On January 11, 2022, the Company announced its 2022 base capital budget targeted at approximately \$3,645 million. The budget also includes incremental strategic growth capital of approximately \$700 million that targets to add future production and capacity in the Company's long life low decline thermal in situ and Oil Sands Mining and Upgrading assets.

The 2022 capital budget constitutes forward-looking statements. Refer to the "Advisory" section of this MD&A for further details on forward-looking statements.

## DRILLING ACTIVITY <sup>(1)</sup>

(number of net wells)	2021	2020	2019
Net successful natural gas wells	49	30	19
Net successful crude oil wells <sup>(2)</sup>	149	42	86
Dry wells	1	—	3
Stratigraphic test / service wells	393	372	447
Total	592	444	555
Success rate (excluding stratigraphic test / service wells)	99%	100%	97%

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

(2) Includes bitumen wells.

## North America

During 2021, the Company drilled 49 net natural gas wells, 94 net primary heavy crude oil wells, 10 net Pelican Lake heavy crude oil wells, 8 net bitumen (thermal oil) wells and 32 net light crude oil wells.

## North Sea

During 2021, the Company drilled 5.9 net light crude oil wells.

## Liquidity and Capital Resources

(\$ millions, except ratios)	2021	2020	2019
Adjusted working capital <sup>(1)</sup>	\$ (480)	\$ 626	\$ 241
Long-term debt, net <sup>(2)</sup>	\$ 13,950	\$ 21,269	\$ 20,843
Shareholders' equity	\$ 36,945	\$ 32,380	\$ 34,991
Debt to book capitalization <sup>(2)</sup>	27%	40%	37%
After-tax return on average capital employed <sup>(3)</sup>	16%	—%	11%

(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, 2021, 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 and in the "Risks and Uncertainties" section of this MD&A. 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 2021, the Company extended both of its \$2,425 million revolving credit facilities originally maturing June 2022 and June 2023, to June 2024 and June 2025, respectively and increased each by \$70 million. In accordance with the terms of the extension, and by mutual agreement, \$70 million of the original revolving credit facilities were not extended and will mature upon the original maturity date of June 2022 and June 2023, respectively. The revolving syndicated credit facilities are extendible annually at the mutual agreement of the Company and the lenders. If the facilities are not extended, the full amount of the outstanding principal would be repayable on the maturity date. 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, US base rate or Canadian prime rate.
  - During 2021, the \$1,000 million non-revolving term credit facility originally due February 2022, was extended to February 2023. Additionally in 2021, the facility was fully repaid and amended to allow for a re-draw of the full \$1,000 million until March 31, 2022.
  - During 2021, the Company repaid \$1,500 million of the \$2,650 million non-revolving term credit facility due February 2023, reducing the outstanding balance to \$1,150 million.
  - During 2019, the Company entered into a \$3,250 million non-revolving term credit facility with an original maturity of June 2022, to finance the acquisition of assets from Devon. During 2021, the outstanding balance of \$3,088 million was repaid and the facility was cancelled.

- During 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 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.
- During 2021, the Company repaid US\$500 million of 3.45% debt securities.
- Borrowings under the Company's non-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.
- 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.

As at December 31, 2021, the Company had undrawn bank credit facilities of \$6,098 million. Including cash and cash equivalents and short-term investments, the Company had approximately \$7,151 million in liquidity. Additionally, the Company had in place fully drawn term credit facilities of \$1,150 million. The Company also has certain other dedicated credit facilities supporting letters of credit.

As at December 31, 2021, the Company had total US dollar denominated debt with a carrying amount of \$11,581 million (US \$9,151 million), before transaction costs and original issue discounts. This included \$1,836 million (US\$1,451 million) hedged by way of a cross currency swap (US\$550 million) and foreign currency forwards (US\$901 million). The fixed repayment amount of these hedging instruments is \$1,805 million, resulting in a notional reduction of the carrying amount of the Company's US dollar denominated debt by approximately \$31 million to \$11,550 million as at December 31, 2021.

Net long-term debt was \$13,950 million at December 31, 2021, resulting in a debt to book capitalization ratio of 27% (December 31, 2020 – 40%, December 31, 2019 – 37%); this ratio is within 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 at December 31, 2021 are discussed in note 11 to the Company's audited consolidated 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, 2021, 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 at December 31, 2021 are discussed in note 19 to the Company's audited consolidated financial statements.

As at December 31, 2021, 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 <sup>(1)</sup>	\$ 1,000	\$ 2,906	\$ 3,251	\$ 7,624
Other long-term liabilities <sup>(2)</sup>	\$ 282	\$ 181	\$ 430	\$ 824
Interest and other financing expense <sup>(3)</sup>	\$ 650	\$ 583	\$ 1,503	\$ 3,971

(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, \$185 million; one to less than two years, \$149 million; two to less than five years, \$426 million; and thereafter, \$824 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, 2021.

## SHARE CAPITAL

As at December 31, 2021, there were 1,168,369,000 common shares outstanding (December 31, 2020 – 1,183,866,000 common shares) and 38,327,000 stock options outstanding. As at March 1, 2022, the Company had 1,163,204,000 common shares outstanding and 37,112,000 stock options outstanding.

On March 2, 2022, the Board of Directors approved a 28% increase in the quarterly dividend to \$0.75 per common share, beginning with the dividend payable on April 5, 2022. On November 3, 2021, the Board of Directors approved a 25% increase in the quarterly dividend to \$0.5875 per common share, from \$0.47 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. On March 4, 2020, the Board of Directors approved a 13% increase in the quarterly dividend to \$0.425 per common share, from \$0.375 per common share. On March 6, 2019, the Board of Directors approved a 12% increase in the quarterly dividend to \$0.375 per common share, from \$0.335 per common share. The dividend policy undergoes periodic review by the Board of Directors and is subject to change.

On March 9, 2021, the Company's application was approved for a Normal Course Issuer Bid to purchase through the facilities of the TSX, alternative Canadian trading platforms, and the NYSE, up to 59,278,474 common shares, over a 12-month period commencing March 11, 2021 and ending March 10, 2022.

During 2021, the Company purchased 33,644,400 common shares at a weighted average price of \$46.98 per common share for a total cost of \$1,581 million. Retained earnings were reduced by \$1,297 million, representing the excess of the purchase price of common shares over their average carrying value. Subsequent to December 31, 2021, the Company purchased 10,500,000 common shares at a weighted average price of \$64.79 per common share for a total cost of \$680 million.

On March 2, 2022, the Board of Directors approved a resolution authorizing the Company to file a Notice of Intention with the TSX to purchase, by way of a 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, 2021:

(\$ millions)	2022	2023	2024	2025	2026	Thereafter
Product transportation and processing <sup>(1) (2)</sup>	\$ 967	\$ 1,107	\$ 914	\$ 870	\$ 816	\$ 10,028
North West Redwater Partnership service toll <sup>(3)</sup>	\$ 122	\$ 123	\$ 121	\$ 119	\$ 97	\$ 3,671
Offshore vessels and equipment	\$ 62	\$ —	\$ —	\$ —	\$ —	\$ —
Field equipment and power	\$ 25	\$ 21	\$ 21	\$ 21	\$ 21	\$ 225
Other	\$ 37	\$ 27	\$ 22	\$ 20	\$ 15	\$ —

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

(2) The acquisition of Storm in 2021 and Painted Pony in 2020 included approximately \$298 million and \$2,400 million of product transportation and processing commitments, respectively.

(3) 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 \$1,486 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.

## Reserves

For the years ended December 31, 2021 and 2020, the Company retained Independent Qualified Reserves Evaluators to evaluate and review all of the Company's total proved and total proved plus probable reserves. The evaluation and review was conducted and prepared in accordance with the standards contained in the Canadian Oil and Gas Evaluation Handbook ("COGE Handbook") and disclosed in accordance with National Instrument 51-101 – Standards of Disclosure for Oil and Gas Activities ("NI 51-101") requirements.

The following are reconciliation tables of the company gross total proved and total proved plus probable reserves using forecast prices and costs as at the effective date of December 31, 2021:

Total Proved	Light and Medium Crude Oil	Primary Heavy Crude Oil	Pelican Lake Heavy Crude Oil	Bitumen (Thermal Oil)	Synthetic Crude Oil	Natural Gas	Natural Gas Liquids	Barrels of Oil Equivalent
	(MMbbl)	(MMbbl)	(MMbbl)	(MMbbl)	(MMbbl)	(Bcf)	(MMbbl)	(MMBOE)
December 31, 2020	315	177	265	2,483	6,962	9,465	326	12,106
Discoveries	—	—	—	—	—	—	—	—
Extensions	1	7	—	119	—	598	15	243
Infill Drilling	3	4	—	—	—	170	13	47
Improved Recovery	—	—	1	19	—	3	—	21
Acquisitions	—	—	—	—	—	1,715	59	345
Dispositions	—	—	—	—	—	(1)	—	—
Economic Factors	14	13	22	—	—	309	10	110
Technical Revisions	(5)	(9)	2	105	199	528	13	392
Production	(28)	(23)	(20)	(95)	(164)	(619)	(18)	(451)
December 31, 2021 <sup>(1)</sup>	<b>300</b>	<b>169</b>	<b>270</b>	<b>2,631</b>	<b>6,998</b>	<b>12,168</b>	<b>418</b>	<b>12,813</b>

Total Proved Plus Probable	Light and Medium Crude Oil	Primary Heavy Crude Oil	Pelican Lake Heavy Crude Oil	Bitumen (Thermal Oil)	Synthetic Crude Oil	Natural Gas	Natural Gas Liquids	Barrels of Oil Equivalent
	(MMbbl)	(MMbbl)	(MMbbl)	(MMbbl)	(MMbbl)	(Bcf)	(MMbbl)	(MMBOE)
December 31, 2020	463	260	395	4,157	7,496	15,922	500	15,925
Discoveries	—	—	—	—	—	—	—	—
Extensions	2	10	—	158	—	1,004	30	368
Infill Drilling	4	6	—	—	—	687	21	146
Improved Recovery	—	—	2	23	—	4	—	26
Acquisitions	—	—	—	—	—	2,979	100	596
Dispositions	—	—	—	—	—	(1)	—	—
Economic Factors	18	18	7	2	—	368	11	116
Technical Revisions	(34)	(22)	5	91	202	(94)	(1)	224
Production	(28)	(23)	(20)	(95)	(164)	(619)	(18)	(451)
December 31, 2021 <sup>(1)</sup>	<b>424</b>	<b>249</b>	<b>388</b>	<b>4,337</b>	<b>7,535</b>	<b>20,249</b>	<b>643</b>	<b>16,950</b>

(1) Information in the reserves data tables may not add due to rounding. BOE values as presented may not calculate due to rounding.

At December 31, 2021, the total proved crude oil, bitumen (thermal oil) and NGLs reserves were 10,785 MMbbl, and total proved plus probable crude oil, bitumen (thermal oil) and NGLs reserves were 13,576 MMbbl. Total proved reserves additions and revisions replaced 174% of 2021 production. Additions to total proved reserves resulting from exploration and development activities, acquisitions, dispositions and future offset additions amounted to 241 MMbbl, and additions to total proved plus probable reserves amounted to 357 MMbbl. Net positive revisions amounted to 363 MMbbl for total proved reserves and 295 MMbbl for total proved plus probable reserves, primarily due to technical revisions.

At December 31, 2021, the total proved natural gas reserves were 12,168 Bcf, and total proved plus probable natural gas reserves were 20,249 Bcf. Total proved reserves additions and revisions replaced 537% of 2021 production. Additions to total proved reserves resulting from exploration and development activities, acquisitions, dispositions and future offset additions amounted to 2,485 Bcf, and additions to total proved plus probable reserves amounted to 4,673 Bcf. Net positive revisions amounted to 837 Bcf for total proved reserves, primarily due to technical revisions and economic factors. Net positive revisions amounted to 273 Bcf for total proved plus probable reserves, primarily due to economic factors.

The Reserves Committee of the Company's Board of Directors has met with and carried out independent due diligence procedures with each of the Company's Independent Qualified Reserves Evaluators to review the qualifications of and procedures used by each evaluator in determining the estimate of the Company's quantities and related net present value of future net revenue of the remaining reserves. Additional reserves information is annually disclosed in the AIF.

The Company annually discloses net proved reserves and the standardized measure of discounted future net cash flows using 12-month average prices and current costs in accordance with United States FASB Topic 932 "Extractive Activities - Oil and Gas" in the Company's annual report on Form 40-F filed with the SEC and in the "Supplementary Oil and Gas Information" section of the Company's Annual Report.

## Risks and Uncertainties

The Company is exposed to various operational risks inherent in the exploration, development, production and marketing of crude oil and NGLs and natural gas and the mining, extracting and upgrading of bitumen into SCO. These inherent risks include, but are not limited to, the following:

- Volatility in the prevailing prices of crude oil and NGLs, natural gas and refined products;
- The ability to find, produce and replace reserves, whether sourced from exploration, improved recovery or acquisitions, at a reasonable cost, including the risk of reserves revisions due to economic and technical factors. Reserves revisions can have a positive or negative impact on asset valuations, ARO and depletion rates;
- Reservoir quality and uncertainty of reserves estimates;
- Regulatory risk related to approval for exploration and development activities, which can add to costs or cause delays in projects;
- Labour risk associated with securing the manpower necessary to complete capital projects in a timely and cost effective manner;
- Operating hazards and other difficulties inherent in the exploration for and production and sale of crude oil and natural gas and in mining, extracting and upgrading the Company's bitumen products;
- Timing and success of integrating the business and operations of acquired companies and assets;
- Credit risk related to non-payment for sales contracts or non-performance by counterparties to contracts, including derivative financial instruments and physical sales contracts as part of a hedging program;
- Interest rate risk associated with the Company's ability to secure financing on commercially acceptable terms;
- Foreign exchange risk due to the effect of fluctuating exchange rates on the Company's US dollar denominated debt and revenue from sales predominantly based on US dollar denominated benchmarks;
- Environmental impact risk associated with exploration and development activities, including GHG;
- Future legislative and regulatory developments related to environmental regulation, including but not limited to GHG compliance costs and reduction targets;
- The timing and pace of change to a low carbon economy is uncertain and the ability to access insurance and capital may be adversely affected in the event that financial institutions, investors, insurers, rating agencies and/or lenders adopt more restrictive decarbonisation policies;
- Potential actions of governments, regulatory authorities and other stakeholders that may result in costs or restrictions in the jurisdictions where the Company has operations, including but not limited to restrictions on production and the certainty and timelines for regulatory processes;
- Geopolitical risks associated with changing governments or governmental policies, social instability and other political, economic or diplomatic developments in the regions where the Company has its operations;
- Changing royalty regimes;
- Business interruptions because of unexpected events such as fires or explosions whether caused by human error or nature, severe storms and other calamitous acts of nature, blowouts, freeze-ups, mechanical or equipment failures of facilities and infrastructure and other similar events affecting the Company or other parties whose operations or assets directly or indirectly impact the Company and that may or may not be financially recoverable;

- Epidemics or pandemics, such as COVID-19, have the potential to 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 resulting from quarantines that affect the Company's labour pools in the local communities, workforce camps or operating sites or that are instituted by local health authorities as a precautionary measure, any of which may require the Company to temporarily reduce or shutdown its operations depending on the extent and severity of a potential outbreak and the areas or operations impacted. Depending on the severity, a large scale epidemic or pandemic could impact international demand for commodities and have a corresponding impact on the prices realized by the Company, which could have a material adverse effect on the Company's financial condition;
- The ability to secure adequate transportation for products, which could be affected by pipeline constraints, the construction by third parties of new or expansion of existing pipeline capacity and other factors;
- The access to markets for the Company's products;
- The risk of significant interruption or failure of the Company's information technology systems and related data and control systems or a significant breach that could adversely affect the Company's operations;
- Liquidity risk related to the Company's ability to fulfill financial obligations as they become due or ability to liquidate assets in a timely manner at a reasonable price; and
- Other circumstances affecting revenue and expenses.

The Company uses a variety of means to seek to mitigate and/or minimize these risks. The Company maintains a comprehensive property loss and business interruption insurance program to reduce risk. Operational control is enhanced by focusing efforts on large core areas with high working interests and by assuming operatorship of key facilities. Product mix is diversified, consisting of the production of natural gas and the production of crude oil of various grades. The Company believes this diversification reduces price risk when compared with over-leverage to one commodity. Accounts receivable from the sale of crude oil and natural gas are mainly with customers in the crude oil and natural gas industry and are subject to normal industry credit risks. The Company seeks to manage these risks by 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. Derivative financial instruments are periodically utilized to help ensure targets are met and to manage commodity price, foreign currency and interest rate exposures. The Company is exposed to possible losses in the event of non-performance by counterparties to derivative financial instruments; however, the Company seeks to manage this credit risk by entering into agreements with counterparties that are substantially all investment grade financial institutions. The arrangements and policies concerning the Company's financial instruments are under constant review and may change depending upon the prevailing market conditions. Management of liquidity risk requires the Company to maintain sufficient cash and cash equivalents, along with other sources of capital, consisting primarily of cash flow from operating activities, available credit facilities, commercial paper and access to debt capital markets, to meet obligations as they become due. The Company has implemented cyber security protocols and procedures designed to reduce the risk of failure or a significant breach of the Company's information technology systems and related data and control systems.

The Company has safety, integrity and environmental management systems to recover and process crude oil and natural gas resources safely, efficiently, and in an environmentally sustainable manner and mitigate risk.

The Company's capital structure mix is also monitored on a continual basis to ensure that it optimizes flexibility, minimizes cost and offers the greatest opportunity for growth. This includes the determination of a reasonable level of debt and any interest rate exposure risk that may exist.

For additional details regarding the Company's risks and uncertainties, refer to the Company's AIF for the year ended December 31, 2021.

## Environment

The Company has a Corporate Statement on Environmental Management that affirms environmental stewardship as a fundamental value of the Company. The Company continues to invest in people, proven and new technologies, facilities and infrastructure to recover and process crude oil and natural gas resources efficiently and in an environmentally sustainable manner. Environmental, social, economic and health considerations are evaluated in new project designs and in operations to improve environmental performance. Processes are employed to avoid, mitigate, minimize or compensate for environmental effects. Working with local communities, the Company considers the interests and values of the people using the land in proximity to its operations, and where appropriate, adapts projects to recognize those matters.

The crude oil and natural gas industry is experiencing incremental increases in costs related to environmental regulation compliance, particularly in North America and the North Sea. Existing and expected legislation and regulations may require the Company to address and mitigate the effect of its activities on the environment. The Company believes it meets all existing environmental standards and regulations and has included appropriate amounts in its capital expenditure budget to continue to meet current environmental protection requirements. Increasingly stringent laws and regulations may have an adverse effect on the Company's future net earnings.

The Company's associated environmental risk management strategies incorporate working with legislators and regulators on any new or revised policies, legislation or regulations to reflect a balanced approach to sustainable development. Specific measures in response to existing or new legislation include a focus on the Company's energy efficiency, air emissions management, water management and land management to minimize disturbance impacts. The Company's environmental risk management strategies employ an Environmental Management Plan (the "Plan"). As part of risk management, the Company develops, assesses and implements technologies and innovative practices that will improve environmental performance, often through collaborative efforts with industry partners, governments and research institutions. Details of the Plan, along with performance results, are presented to, and reviewed by, the Board of Directors quarterly.

The Plan and the Company's operating guidelines focus on minimizing the impact of operations while meeting regulatory requirements, regional management frameworks for air quality and emissions, ground and surface water and biodiversity, industry operating standards and guidelines, and internal corporate standards. Training and due diligence for operators and contractors is key to the effectiveness of the Company's environmental management programs and the prevention of incidents to protect the environment. The Company, as part of this Plan, has implemented proactive programs that include:

- Environmental planning to assess impacts and implement avoidance and mitigation programs in order to maintain biodiversity for terrestrial and aquatic systems and high value ecosystems;
- Continued evaluation of new technologies to reduce environmental impacts, including support for Canada's Oil Sands Innovation Alliance ("COSIA"), Petroleum Technology Alliance Canada ("PTAC") and other research institutions;
- Mitigation of the Company's climate change impacts through implementation of various CO<sub>2</sub> emissions reduction and carbon capture projects including: CO<sub>2</sub> injection for EOR, CO<sub>2</sub> injection in tailings and the Quest Carbon Capture and Storage Facility; a methane emissions reduction program, including solution gas conservation to reduce methane venting, and an equipment retrofit program to reduce methane emissions from pneumatic equipment; and optimization of efficiencies at the Company's facilities;
- Water programs to improve efficiency of use and recycle rates as well as to reduce fresh water use;
- Groundwater monitoring for all thermal in situ and mine operations;
- Effective reclamation and decommissioning programs across the Company's operations, returning sites to their former state. In North America, well abandonment and progressive reclamation of large contiguous areas of land provides the foundation for the enhancement of biodiversity and functional wildlife habitats. In the Company's International operations, decommissioning activities were completed at Murchison and were advanced at Banff, Kyle, and Ninian North;
- Tailings management in Oil Sands Mining to minimize fine tailings and promote progressive reclamation;
- Monitoring programs to assess changes to biodiversity, wildlife and fisheries in order to manage construction and operation effects and to assess reclamation success;
- Participation and support for the Oil Sands Monitoring Program of regional important resources;
- An active spill prevention and management program; and
- An internal environmental management system for compliance audit and inspection programs of operating facilities.

The Company's asset retirement obligations are expected to be settled on an ongoing basis over a period of approximately 60 years and have been discounted using a weighted average discount rate of 4.0% (2020 – 3.7%; 2019 – 3.8%). For 2021, the Company's capital expenditures included \$307 million for abandonment expenditures (\$232 million – abandonment expenditures, net) (2020 – \$249 million; 2019 – \$296 million). Refer to the "Non-GAAP and Other Financial Measures" section of this MD&A for further details on abandonments expenditures, net. The Company's estimated discounted ARO at December 31, 2021 was as follows:

(\$ millions)	<b>2021</b>		2020	
Exploration and Production				
North America	<b>\$</b>	<b>4,021</b>	<b>\$</b>	2,899
North Sea		<b>821</b>		787
Offshore Africa		<b>170</b>		174
Oil Sands Mining and Upgrading		<b>1,793</b>		1,999
Midstream and Refining		<b>1</b>		2
	<b>\$</b>	<b>6,806</b>	<b>\$</b>	5,861

The discounted ARO was based on estimates of future costs to abandon and restore wells, production facilities, mine sites, upgrading facilities and tailings, and offshore production platforms. Factors that affect costs include number of wells drilled, well depth, facility size and the specific environmental legislation. The estimated future costs are based on engineering estimates of current costs in accordance with present legislation, industry operating practice and the expected timing of abandonment.

In 2021, the Alberta Energy Regulator announced a new Liability Management Framework, enforcing mandatory targets for companies for the closure of inactive wells and facilities. These targets became effective January 1, 2022. The Company has updated its forecasts of future expenditures to settle its ARO liability based on the set and forecasted annual targets. As a result, the Company's ARO liability as at December 31, 2021 has increased on an inflated and discounted basis due to earlier forecasted expenditures to settle liabilities associated with the closure of inactive well and facilities located in Alberta.

## **GREENHOUSE GAS AND OTHER EMISSIONS**

The Company has a large, diversified and balanced portfolio and a risk management strategy which incorporates an integrated GHG emissions reduction strategy and investments in technology and innovation to improve its GHG performance. The Company's integrated GHG emissions reduction strategy includes: 1) integrating emissions reduction in project planning and operations; 2) leveraging technology to create value and enhance performance; 3) investing in research and development and supporting collaboration with industry, entrepreneurs, academia and governments; 4) focusing on continuous improvement to drive long-term emissions reduction; 5) leading in carbon capture, sequestration and storage; 6) engaging in policy and regulatory development (including trading capacity and offsetting emissions); and, 7) reviewing and developing new business opportunities and trends.

The Company is participating in the Oil Sands Pathways to Net Zero initiative, an alliance of oil sands producers working collectively with federal and provincial governments, to achieve net zero GHG emissions from oil sands operations by 2050 to help Canada meet its climate goals, including its Paris Agreement commitments and 2050 net zero aspirations.

The Company, through industry associations, is working with Canadian legislators and regulators as they develop and implement new GHG emission laws and regulations to support emissions reductions and properly reflect a balanced approach to sustainable development. Internally, the Company is pursuing an integrated emissions reduction strategy, to ensure that it is able to comply with existing and future emissions reduction requirements, for both GHGs and air pollutants (such as sulphur dioxide and oxides of nitrogen). The Company continues to develop strategies that will enable it to deal with the risks and opportunities associated with new GHG and air emissions policies. In addition, the Company is working with relevant parties to ensure that new policies encourage technological innovation, energy efficiency, and targeted research and development while not impacting competitiveness.

Governments in jurisdictions in which the Company operates have developed or are developing GHG regulations as part of their national and international climate change commitments. The Company uses existing GHG regulations to determine the impact of compliance costs on current and future projects. The Company monitors the development of GHG regulations on an ongoing basis in the jurisdictions in which it operates to assess the impact of future regulatory developments on the Company's operations and planned projects. In Canada, the federal government has ratified the Paris climate change agreement, with a commitment to reduce GHG emissions by 40 - 45% from 2005 levels by 2030. The Canadian government has also committed to cap and cut emissions from the oil and gas sector, with further details to be developed in 2022. Canada has also committed to reduce methane emissions from the upstream oil and natural gas sector by 40 - 45% by 2025, and by 75% by 2030, as compared to 2012 levels for both the 2025 and 2030 targets. In December 2020, the federal government announced its intention to increase the carbon price to \$170/tonne in 2030. The federal government is also developing: (i) a comprehensive management system for air pollutants and has released regulations pertaining to certain boilers, heaters and compressor engines operated by the Company; and (ii) a Clean Fuel Standard, which may affect production and consumption of fuels in Canada. Draft regulations under the Clean Fuel Standard were released in 2020 and are planned to take effect in December 2022. Aspects of the Clean Fuel Standard could potentially increase the cost of liquid fuels consumed in the Company's operations while also providing a potential mechanism to generate offset credits. The final version of the Clean Fuel regulations are expected to be published in 2022.

Carbon pricing regulatory systems in all provinces are subject to annual review by the federal government to assess the adequacy of the provincial systems against the federal Greenhouse Gas Pollution Pricing Act. Such future reviews may affect the carbon price and/or the stringency of provincial systems.

Effective January 1, 2020, the GHG regulation (the Carbon Competitiveness Incentive Regulation) was replaced with the Technology Innovation and Emissions Reduction Regulation ("TIER"). The coverage of TIER has expanded to include all of the Company's assets in Alberta (as an alternative to the federal fuel charge). The carbon price in Alberta was \$40/tonne for emissions above the TIER-regulated limits in 2021 and is \$50/tonne in 2022, in alignment with the federal carbon pricing schedule. Facilities with emissions in previous years above 100,000 tonnes of CO<sub>2</sub>e/year, or that have voluntarily opted into TIER are required to comply with the regulation. The non-operated Scotford Upgrader and the North West Redwater bitumen upgrader and refinery are also subject to compliance under the regulations.

In British Columbia, carbon tax is currently being assessed at \$45/tonne of CO<sub>2</sub>e on fuel consumed and gas flared and vented in the province. In February 2021, the British Columbia government announced that the carbon tax rate would increase to \$50/tonne effective April 1, 2022. The British Columbia government has implemented a program (the CleanBC Plan) to partially mitigate the impact of the carbon tax increases on emissions intensive trade exposed (EITE) sectors.

As part of its Prairie Resilience Plan, the Saskatchewan government has a regulation ("The Management and Reduction of Greenhouse Gases (Standards and Compliance) Regulations") that applies to facilities emitting more than 25 kilotonnes of CO<sub>2</sub>e annually and required the North Tangleflags in situ heavy oil facility and the Senlac in situ heavy crude oil facility to meet reduction targets for GHG emissions in 2020. This regulation also enables facilities below the threshold to aggregate and opt into the Saskatchewan regulatory system as an alternative to the federal fuel charge.

In Manitoba, the federal output-based pricing system applies for facilities with emissions greater than or equal to 10 kilotonnes of CO<sub>2</sub>e annually, and the federal fuel charge applies for facilities with emissions of less than 10 kilotonnes of CO<sub>2</sub>e annually.

By 2025, the federal government has committed to reduce methane emissions from the oil and gas sector by 40% to 45% below 2012 levels. The federal government's methane regulation came into effect on January 1, 2020 and applies nationally unless provinces reach equivalency agreements with the federal government, under which the federal regulation would not be in effect for those jurisdictions. The provinces of British Columbia, Alberta and Saskatchewan have implemented provincial methane regulations, and have reached equivalency agreements with the federal government. Accordingly, the applicable provincial methane regulations govern in the three western provinces whereas the federal methane regulation applies to methane emissions in the province of Manitoba.

Air pollutant standards and guidelines are being developed federally and provincially and the Company is participating in these discussions. Ambient air quality and sector based reductions in air emissions are being reviewed. Through Company and industry participation with stakeholders, guidelines are being developed that adopt a structured process to emission reductions that is commensurate with technological development and operational requirements.

In the UK, GHG regulations have been in effect since 2005. In Phase 1 (2005 - 2007) of the UK National Allocation Plan, the Company operated below its CO<sub>2</sub> allocation. In Phase 2 (2008 - 2012) the Company's CO<sub>2</sub> allocation was decreased below the Company's operations emissions. In Phase 3 (2013 - 2020) the Company's CO<sub>2</sub> allocation was further reduced. Following the UK's withdrawal from the European Union ("EU") on January 31, 2020, a new UK Emissions Trading Scheme ("ETS") was launched on January 1, 2021. The new scheme is currently aligned with the EU ETS rules and applies to energy intensive industries, the power generation sector and aviation. The Company continues to focus on implementing CO<sub>2</sub> emission reduction program opportunities at its facilities and on trading mechanisms to ensure compliance with requirements now in effect.

# Accounting Policies and Standards

## REGULATORY DEVELOPMENTS

On May 27, 2021, the Canadian Securities Administrators ("CSA") announced the adoption of NI 52-112 and related amendments. This National Instrument replaces the previous CSA staff notice on Non-GAAP Measures. NI 52-112 governs how entities present non-GAAP and other financial measures and ratios. The requirements apply to the Company's MD&A and certain other disclosure documents for the year ended December 31, 2021.

## CHANGES IN ACCOUNTING POLICIES

In August 2020, the IASB issued Interest Rate Benchmark Reform (Phase 2) in response to the Financial Stability Board's mandated reforms to IBORs, with financial regulators proposing that current IBOR benchmark rates be replaced by a number of new local currency denominated alternative benchmark rates. The Company adopted the amendments on January 1, 2021. Adoption of these amendments did not have a significant impact on the Company's financial statements.

## 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. In 2021, COVID-19 continued to have an impact on the global economy, including the oil and gas industry. Business conditions in 2021 continued to reflect the market uncertainty associated with COVID-19. The Company has taken into account the impacts of COVID-19 and the unique circumstances it has created in making estimates, assumptions, and judgements in the preparation of the audited consolidated financial statements, and continues to monitor the developments in the business environment and commodity market. 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 this MD&A and the audited consolidated financial statements for the year ended December 31, 2021.

### A) Depletion, Depreciation and Amortization and Impairment

Exploration and evaluation ("E&E") costs relating to activities to explore and evaluate crude oil and natural gas properties are initially capitalized and include costs directly associated with the acquisition of licenses, technical services and studies, seismic acquisition, exploration drilling and evaluation, overhead and administration expenses, and the estimate of any asset retirement costs. E&E assets are carried forward until technical feasibility and commercial viability of extracting a mineral resource is determined. Technical feasibility and commercial viability of extracting a mineral resource is considered to be determined when an assessment of proved reserves is made. The judgements associated with the estimation of proved reserves are described below in "Crude Oil and Natural Gas Reserves".

An alternative acceptable accounting method for E&E costs under IFRS 6 "Exploration for and Evaluation of Mineral Resources" is to charge exploratory dry holes and geological and geophysical exploration costs incurred after having obtained the legal rights to explore an area against net earnings in the period incurred rather than capitalizing to E&E assets.

E&E assets are tested for impairment when facts and circumstances suggest that the carrying amount of E&E assets may exceed their recoverable amount, by comparing the relevant costs to the fair value of related Cash Generating Units ("CGUs"), aggregated at a segment level. Indications of impairment include leases approaching expiry, the existence of low benchmark commodity prices for an extended period of time, significant downward revisions in estimated probable reserves volumes, significant increases in estimated future exploration or development expenditures, or significant adverse changes in the applicable legislative or regulatory frameworks. The determination of the fair value of CGUs requires the use of assumptions and estimates including future commodity prices, expected production volumes, quantity of reserves, asset retirement obligations, future development and production costs, discount rates and income taxes. Changes in assumptions used in determining the recoverable amount could affect the carrying value of the related assets and CGUs.

Property, plant and equipment is measured at cost less accumulated depletion and depreciation and impairment provisions. Crude oil and natural gas properties in the Exploration and Production segments are depleted using the unit-of-production method over proved reserves, except for major components, which are depreciated using a straight-line method over their estimated useful lives. The unit-of-production depletion rate takes into account expenditures incurred to date, together with future estimated development expenditures required to develop proved reserves. Estimates of proved reserves have a significant impact on net earnings, as they are a key input to the calculation of depletion expense.

The Company assesses property, plant and equipment for impairment discounted at rates currently ranging from 10% to 12% whenever events or changes in circumstances indicate that the carrying value of an asset or group of assets may not be recoverable. Indications of impairment include the existence of low commodity prices for an extended period, significant downward revisions of estimated reserves volumes, significant increases in estimated future development expenditures, or significant adverse changes in the applicable legislative or regulatory frameworks. If an indication of impairment exists, the Company performs an impairment test related to the specific assets at the CGU level.

## **B) Crude Oil and Natural Gas Reserves**

Reserves estimates are based on engineering data, estimated future prices and production costs, expected future rates of production, and the timing and amount of future development expenditures, all of which are subject to many uncertainties, interpretations and judgements, including the potential impact of climate related matters and in accordance with related government regulations. The Company expects that, over time, its reserves estimates will be revised upward or downward based on updated information. Reserves estimates can have a significant impact on net earnings, as they are a key component in the calculation of depletion, depreciation and amortization and for determining potential asset impairment. For example, a revision to the proved reserves estimates would result in a higher or lower depletion, depreciation and amortization charge to net earnings. Downward revisions to reserves estimates may also result in an impairment of E&E and property, plant and equipment carrying amounts.

## **C) Asset Retirement Obligations**

The Company is required to recognize a liability for ARO associated with its property, plant and equipment. An ARO liability associated with the retirement of a tangible long-lived asset is recognized to the extent of a legal obligation resulting from an existing or enacted law, statute, ordinance or written or oral contract, or by legal construction of a contract under the doctrine of promissory estoppel. The ARO is based on estimated costs, taking into account the anticipated method and extent of restoration consistent with legal requirements, technological advances and the possible use of the site. Since these estimates are specific to the sites involved, there are many individual assumptions underlying the Company's total ARO amount, including the potential impact of climate related matters and in accordance with related government regulations. These individual assumptions may be subject to change.

The estimated present values of ARO related to long-term assets are recognized as a liability in the period in which they are incurred. The provision for the ARO is estimated by discounting the expected future cash flows to settle the ARO at the Company's weighted average credit-adjusted risk-free interest rate, which is currently 4.0%. Subsequent to initial measurement, the ARO is adjusted to reflect the passage of time, changes in credit adjusted interest rates, and changes in the estimated future cash flows underlying the obligation. The increase in the provision due to the passage of time is recognized as asset retirement obligation accretion expense whereas changes in discount rates or estimated future cash flows are capitalized to or derecognized from property, plant and equipment. Changes in estimates would impact accretion and depletion expense in net earnings. In addition, differences between actual and estimated costs to settle the ARO, timing of cash flows to settle the obligation and future inflation rates may result in gains or losses on the final settlement of the ARO.

## **D) Income Taxes**

The Company follows the liability method of accounting for income taxes. Under this method, deferred income tax assets and liabilities are recognized based on the estimated income tax effects of temporary differences in the carrying amount of assets and liabilities in the consolidated financial statements and their respective tax bases, using income tax rates substantively enacted that are expected to apply when the asset or liability is recovered. Accounting for income taxes requires the Company to interpret frequently changing laws and regulations, including changing income tax rates, and make certain judgements with respect to the application of tax law, estimating the timing of temporary difference reversals, and estimating the realizability of tax assets. There are many transactions and calculations for which the ultimate tax determination is uncertain. The Company recognizes a liability for a tax filing position based on its assessment of the probability that additional taxes may ultimately be due.

## **E) Risk Management Activities**

The Company periodically uses derivative financial instruments to manage its commodity price, foreign currency and interest rate exposures. These financial instruments are entered into solely for hedging purposes and are not used for speculative purposes. All derivative financial instruments are recognized in the consolidated balance sheets at their estimated fair value. The estimated fair value of derivative financial instruments has been determined based on appropriate internal valuation methodologies and/or third party indications. Fair values determined using valuation models require the use of assumptions concerning the amount and timing of future cash flows, discount rates and credit risk. In determining these assumptions, the Company primarily relied on external, readily-observable quoted market inputs including crude oil and natural gas forward benchmark commodity prices and volatility, Canadian and United States forward interest rate yield curves, and Canadian and United States foreign exchange rates, discounted to present value as appropriate. The carrying amount of a risk management liability is adjusted for the Company's own credit risk. The resulting fair value estimates may not necessarily be indicative of the amounts that could be realized or settled in a current market transaction and these differences may be material.

## **F) Purchase Price Allocations**

Purchase prices related to business combinations are allocated to the underlying acquired assets and liabilities based on their estimated fair value at the time of acquisition. The determination of fair value requires the Company to make estimates, assumptions and judgements regarding future events. The allocation process is inherently subjective and impacts the amounts assigned to individually identifiable assets and liabilities, including the fair value of crude oil and natural gas properties, together with deferred income tax effects. As a result, the purchase price allocation impacts the Company's reported assets and liabilities and future net earnings due to the impact on future depletion, depreciation and amortization expense and impairment tests.

The Company has made various assumptions in determining the fair values of acquired assets and liabilities. The most significant assumptions and judgements relate to the estimation of the fair value of crude oil and natural gas properties. To determine the fair value of these properties, the Company estimates crude oil and natural gas reserves. Reserves estimates are based on the work performed by the Company's internal engineers and outside consultants. The judgements associated with these estimated reserves are described above in "Crude Oil and Natural Gas Reserves". Estimates of future prices are based on prices derived from price forecasts among industry analysts and internal assessments. The Company applies estimated future prices to the estimated reserves quantities acquired, and estimates future operating and development costs, to arrive at estimated future net revenues for the properties acquired.

## **G) Share-Based Compensation**

The Company has made various assumptions in estimating the fair values of stock options granted including expected volatility, expected exercise timing and future forfeiture rates. At each period end, stock options outstanding are remeasured for changes in the estimated fair value of the liability.

## **H) Leases**

Purchase, extension and termination options are included in certain of the Company's leases to provide operational flexibility. To measure the lease liability, the Company uses judgement to assess the likelihood of exercising these options. These assessments are reviewed when significant events or circumstances indicate that the likelihood of exercising these options may have changed. The Company also uses estimates to determine its incremental borrowing costs if the interest rate implicit in the lease is not readily determinable.

## **I) Government Grants**

The Company receives or is eligible for government grants, including emissions credits and grants introduced in response to the impact of COVID-19. Government grants are recognized in net earnings when there is reasonable assurance that the Company will comply with the conditions attached to the grant and the grant will be received. Emissions performance and offset credits generated under the Alberta TIER regulation are initially recorded at fair value as determined by the prescribed Alberta TIER fund compliance rates in effect at the time the credits are recognized.

## **Control Environment**

The Company's management, including the President and the Chief Financial Officer and Vice-President, Finance and Principal Accounting Officer, evaluated the effectiveness of disclosure controls and procedures as at December 31, 2021, and concluded that disclosure controls and procedures are effective to ensure that information required to be disclosed by the Company in its annual filings and other reports filed with securities regulatory authorities in Canada and the United States is recorded, processed, summarized and reported within the time periods specified and such information is accumulated and communicated to the Company's management to allow timely decisions regarding required disclosures.

The Company's management, including the President and the Chief Financial Officer and Vice-President, Finance and Principal Accounting Officer, also evaluated the effectiveness of internal control over financial reporting as at December 31, 2021, and concluded that internal control over financial reporting is effective. Further, there were no changes in the Company's internal control over financial reporting during 2021 that have materially affected, or are reasonably likely to materially affect, internal control over financial reporting.

While the Company's management believes that the Company's disclosure controls and procedures and internal control over financial reporting provide a reasonable level of assurance they are effective, they recognize that all control systems have inherent limitations. Because of its inherent limitations, the Company's control systems may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

## 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 Company's audited consolidated 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 (LOSS) FROM OPERATIONS

Adjusted net earnings (loss) from operations is a non-GAAP financial measure that adjusts net earnings (loss) as presented in the Company's consolidated Statements of Earnings (Loss), for non-operating items (after-tax). The Company considers adjusted net earnings (loss) 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 (loss) from operations is presented below.

(\$ millions)	2021	2020	2019
Net earnings (loss)	\$ 7,664	\$ (435)	\$ 5,416
Share-based compensation, net of tax <sup>(1)</sup>	495	(86)	210
Unrealized risk management loss (gain), net of tax <sup>(2)</sup>	16	(31)	14
Unrealized foreign exchange gain, net of tax <sup>(3)</sup>	(205)	(116)	(548)
Realized foreign exchange loss (gain), net of tax <sup>(4)</sup>	118	(166)	—
Gain on acquisitions, net of tax <sup>(5)</sup>	(478)	(217)	—
(Gain) loss from investments, net of tax <sup>(6)</sup>	(132)	185	321
Other, net of tax <sup>(7)</sup>	(58)	110	—
Effect of statutory tax rate and other legislative changes on deferred income tax liabilities <sup>(8)</sup>	—	—	(1,618)
Non-operating items (after-tax)	(244)	(321)	(1,621)
Adjusted net earnings (loss) from operations	\$ 7,420	\$ (756)	\$ 3,795

(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 (loss). Pre-tax share-based compensation for 2021 was an expense of \$514 million (2020 – \$82 million recovery; 2019 – \$223 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 (loss). The amounts ultimately realized may be materially different than those amounts reflected in the Company's audited consolidated financial statements due to changes in prices of the underlying items hedged, primarily natural gas and foreign exchange. Pre-tax unrealized risk management loss for 2021 was \$19 million (2020 – \$39 million gain; 2019 – \$13 million loss).

(3) Unrealized foreign exchange gains and losses 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 (loss). Pre- and after-tax amounts for these unrealized foreign exchange gains are the same.

(4) During 2021, the Company repaid US\$500 million of 3.45% debt securities, resulting in a pre- and after-tax foreign exchange loss of \$118 million. During 2020, the Company settled the US\$500 million cross currency swaps designated as cash flow hedges of the US\$500 million 3.45% US dollar debt securities due November 2021. The Company realized cash proceeds of \$166 million on settlement. There was net zero tax impact on the settlement.

(5) During 2021, the Company completed two acquisitions resulting in a pre- and after-tax gain of \$478 million. During 2020, the Company recognized a pre- and after-tax gain of \$217 million related to the acquisition of Painted Pony.

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

(7) During 2021, the Company recognized the impact of government grant income under the provincial well-site rehabilitation programs of \$75 million (\$58 million after-tax). During 2020, the Company recognized a provision in transportation, blending and feedstock expense of \$143 million (\$110 million after-tax) relating to the Keystone XL pipeline project.

(8) All substantively enacted adjustments in applicable income tax rates and other legislative changes are applied to the underlying assets and liabilities on the Company's balance sheets in determining deferred income tax assets and liabilities. The impact of these tax rate and other legislative changes is recognized in net earnings (loss) during the period the legislation is substantively enacted. During 2019, the Company's deferred corporate income tax liability decreased by \$1,618 million, refer to "Income Taxes" section of this MD&A.

## 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)	2021	2020	2019
Cash flows from operating activities	\$ 14,478	\$ 4,714	\$ 8,829
Net change in non-cash working capital	(964)	166	1,033
Abandonment expenditures, net <sup>(1)</sup>	232	249	296
Movements in other long-term assets <sup>(2)</sup>	(13)	71	109
Adjusted funds flow	\$ 13,733	\$ 5,200	\$ 10,267

(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, accrued interest on subordinated debt advances to NWRP and prepaid cost of service tolls.

## ADJUSTED NET EARNINGS (LOSS) FROM OPERATIONS AND ADJUSTED FUNDS FLOW, PER SHARE (BASIC AND DILUTED)

Adjusted net earnings (loss) from operations and adjusted funds flow, per 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 17 to the Company's audited consolidated financial statements.

## 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 audited 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)	2021	2020	2019
Abandonment expenditures	\$ 307	\$ 249	\$ 296
Government grants for abandonment expenditures	(75)	—	—
Abandonment expenditures, net	\$ 232	\$ 249	\$ 296

## 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", "Per Unit Results – Exploration and Production", and "Per Unit Results – Oil Sands Mining and Upgrading" sections 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 22 to the Company's audited consolidated 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)	Q1	Q2	Q3	Q4	2021	2020	2019
<b>Crude oil and NGLs (bbl/d)</b>							
North America	477,768	468,265	448,948	490,448	471,331	465,073	400,853
North Sea	29,566	8,939	16,028	21,360	18,942	22,852	27,171
Offshore Africa	10,843	17,932	19,402	5,624	13,452	17,017	21,056
Sales volumes	518,177	495,136	484,378	517,432	503,725	504,942	449,080
Crude oil and NGLs sales <sup>(1) (2)</sup>	\$ 3,373	\$ 3,655	\$ 3,810	\$ 4,667	\$ 15,505	\$ 8,215	\$ 11,183
Less: Blending costs <sup>(3)</sup>	916	897	777	1,202	3,792	2,321	2,155
Realized crude oil and NGLs sales	\$ 2,457	\$ 2,758	\$ 3,033	\$ 3,465	\$ 11,713	\$ 5,894	\$ 9,028
Realized price (\$/bbl)	\$ 52.68	\$ 61.20	\$ 68.06	\$ 72.81	\$ 63.71	\$ 31.90	\$ 55.08

(1) Crude oil and NGLs sales in note 22 to the Company's audited consolidated financial statements.

(2) Includes other miscellaneous income in the segment.

(3) 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)	Q1	Q2	Q3	Q4	2021	2020	2019
<b>Barrels of oil equivalent (BOE/d)</b>							
North America	741,904	733,874	731,962	797,185	751,330	706,799	641,327
North Sea	30,180	9,624	16,427	21,940	19,512	24,805	31,167
Offshore Africa	12,444	20,659	20,652	7,781	15,385	19,517	25,151
Sales volumes	784,528	764,157	769,041	826,906	786,227	751,121	697,645
Barrels of oil equivalent sales <sup>(1) (2)</sup>	\$ 3,865	\$ 4,119	\$ 4,460	\$ 5,581	\$ 18,025	\$ 9,511	\$ 12,457
Less: Blending costs <sup>(3)</sup>	916	897	777	1,202	3,792	2,321	2,155
Less: Sulphur (income) expense	(2)	(4)	(3)	(12)	(21)	4	(12)
Realized barrels of oil equivalent sales	\$ 2,951	\$ 3,226	\$ 3,686	\$ 4,391	\$ 14,254	\$ 7,186	\$ 10,314
Realized price (\$/BOE)	\$ 41.80	\$ 46.40	\$ 52.09	\$ 57.72	\$ 49.67	\$ 26.15	\$ 40.50

(1) Barrels of oil equivalent sales includes crude oil and NGLs sales and natural gas sales in note 22 to the Company's audited consolidated financial statements.

(2) Includes other miscellaneous income in the segment.

(3) 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 are presented below.

(\$ millions, except \$ per unit amounts)	Q1	Q2	Q3	Q4	2021	2020	2019
Transportation, blending and feedstock <sup>(1)</sup>	\$ 1,148	\$ 1,146	\$ 1,025	\$ 1,461	\$ 4,780	\$ 3,409	\$ 2,956
Less: Blending costs	916	897	777	1,202	3,792	2,321	2,155
Less: Other <sup>(2)</sup>	—	—	—	—	—	143	—
Transportation	\$ 232	\$ 249	\$ 248	\$ 259	\$ 988	\$ 945	\$ 801
Transportation (\$/BOE)	\$ 3.29	\$ 3.58	\$ 3.50	\$ 3.40	\$ 3.44	\$ 3.44	\$ 3.14
Amounts attributed to crude oil and NGLs	\$ 166	\$ 179	\$ 178	\$ 187	\$ 710	\$ 711	\$ 571
Transportation (\$/bbl)	\$ 3.56	\$ 3.98	\$ 4.00	\$ 3.93	\$ 3.86	\$ 3.85	\$ 3.48
Amounts attributed to natural gas	\$ 66	\$ 70	\$ 70	\$ 72	\$ 278	\$ 234	\$ 230
Transportation (\$/Mcf)	\$ 0.46	\$ 0.48	\$ 0.44	\$ 0.42	\$ 0.45	\$ 0.43	\$ 0.42

(1) Transportation, blending and feedstock in note 22 to the Company's audited consolidated financial statements.

(2) Transportation excludes the impact of a \$143 million provision recognized in 2020, relating to the Keystone XL pipeline project.

## 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)	2021	2020	2019
Crude oil and NGLs sales <sup>(1)</sup>	\$ 14,478	\$ 7,480	\$ 9,679
Less: Blending costs <sup>(2)</sup>	3,792	2,321	2,155
Realized crude oil and NGLs sales	\$ 10,686	\$ 5,159	\$ 7,524
Realized crude oil and NGLs prices (\$/bbl)	\$ 62.10	\$ 30.31	\$ 51.43
Crude oil and NGLs royalties <sup>(3)</sup>	\$ 1,558	\$ 464	\$ 959
Crude oil and NGLs royalty rates	15%	9%	13%

(1) Crude oil and NGLs sales in note 22 to the Company's audited consolidated 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 22 to the Company's audited consolidated 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 are presented below.

(\$ millions, except for bbl/d and \$/bbl)	Q1	Q2	Q3	Q4	2021	2020	2019
SCO sales volumes (bbl/d)	<b>469,953</b>	<b>366,843</b>	<b>467,772</b>	<b>483,972</b>	<b>447,230</b>	415,741	397,735
Crude oil and NGLs sales <sup>(1) (2)</sup>	<b>\$ 2,983</b>	<b>\$ 2,794</b>	<b>\$ 3,848</b>	<b>\$ 4,408</b>	<b>\$ 14,033</b>	\$ 7,389	\$ 11,307
Less: Blending and feedstock costs	<b>251</b>	<b>251</b>	<b>339</b>	<b>468</b>	<b>1,309</b>	695	1,119
Realized SCO sales	<b>\$ 2,732</b>	<b>\$ 2,543</b>	<b>\$ 3,509</b>	<b>\$ 3,940</b>	<b>\$ 12,724</b>	\$ 6,694	\$ 10,188
Realized SCO sales price (\$/bbl)	<b>\$ 64.60</b>	<b>\$ 76.19</b>	<b>\$ 81.54</b>	<b>\$ 88.48</b>	<b>\$ 77.95</b>	\$ 43.98	\$ 70.18
Transportation, blending and feedstock <sup>(3)</sup>	<b>\$ 297</b>	<b>\$ 294</b>	<b>\$ 387</b>	<b>\$ 527</b>	<b>\$ 1,505</b>	\$ 881	\$ 1,306
Less: Blending and feedstock costs	<b>251</b>	<b>251</b>	<b>339</b>	<b>468</b>	<b>1,309</b>	695	1,119
Transportation	<b>\$ 46</b>	<b>\$ 43</b>	<b>\$ 48</b>	<b>\$ 59</b>	<b>\$ 196</b>	\$ 186	\$ 187
Transportation (\$/bbl)	<b>\$ 1.10</b>	<b>\$ 1.26</b>	<b>\$ 1.14</b>	<b>\$ 1.33</b>	<b>\$ 1.21</b>	\$ 1.23	\$ 1.29

(1) Crude oil and NGLs sales in note 22 to the Company's audited consolidated financial statements.

(2) Excludes other miscellaneous income not pertaining to crude oil and NGLs sales.

(3) Transportation, blending and feedstock in note 22 to the Company's audited consolidated 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 audited consolidated Statements of Cash Flows, adjusted for the net change in non-cash working capital, proceeds from investment, the repayment of NWRP subordinated debt advances, abandonment expenditures including the impact of government grant income under the provincial well-site rehabilitation programs, and the settlement of long-term debt assumed in acquisitions. 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)	2021	2020	2019
Cash flows used in investing activities	<b>\$ 3,703</b>	\$ 2,819	\$ 7,255
Net change in non-cash working capital <sup>(1)</sup>	<b>107</b>	(383)	(430)
Proceeds from investment	<b>128</b>	—	—
Repayment of NWRP subordinated debt advances	<b>555</b>	124	—
Capital expenditures	<b>4,493</b>	2,560	6,825
Abandonment expenditures, net <sup>(2)</sup>	<b>232</b>	249	296
Settlement of long-term debt acquired <sup>(3)</sup>	<b>183</b>	397	—
Net capital expenditures	<b>\$ 4,908</b>	\$ 3,206	\$ 7,121

(1) Includes net working capital and other long-term assets of \$195 million related to the acquisition of assets from Devon in 2019.

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

(3) Relates to the settlement of long-term debt assumed in the acquisition of Storm in 2021 and Painted Pony in 2020.

## 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 following is the Company's calculation of liquidity:

(\$ millions)	2021	2020	2019
Undrawn bank credit facilities	\$ 6,098	\$ 4,958	\$ 4,737
Cash and cash equivalents	744	184	139
Investments	309	305	490
Liquidity	\$ 7,151	\$ 5,447	\$ 5,366

## 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 16 to the Company's audited consolidated 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 16 to the Company's audited consolidated 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 (loss) 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)	2021	2020	2019
Interest adjusted after-tax return:			
Net earnings (loss), 12 months trailing	\$ 7,664	\$ (435)	\$ 5,416
Interest and other financing expense, net of tax, 12 months trailing <sup>(1)</sup>	547	571	612
Interest adjusted after-tax return	\$ 8,211	\$ 136	\$ 6,028
12 months average current portion long-term debt <sup>(2)</sup>	\$ 1,483	\$ 1,842	\$ 2,640
12 months average long-term debt <sup>(2)</sup>	16,769	20,162	19,078
12 months average common shareholders' equity <sup>(2)</sup>	34,458	33,026	33,660
12 months average capital employed	\$ 52,710	\$ 55,030	\$ 55,378
After-tax return on average capital employed	16%	—%	11%

(1) The blended tax rate on interest was 23% for December 31, 2021, 24% for December 31, 2020, and 27% for December 31, 2019.

(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.

## Outlook

The Company continues to implement its strategy of maintaining a large portfolio of varied projects, which the Company believes will enable it, over an extended period of time, to provide consistent growth in production and create shareholder value. Annual budgets are developed, scrutinized throughout the year and revised if necessary in the context of targeted financial ratios, project returns, product pricing expectations, and balance in project risk and time horizons. The Company maintains a high ownership level and operatorship level in all of its properties and can therefore control the nature, timing and extent of capital expenditures in each of its project areas.

### 2022 CAPITAL BUDGET

On January 11, 2022, the Company announced its 2022 base capital budget targeted at approximately \$3,645 million. The budget also includes incremental strategic growth capital of approximately \$700 million that targets to add future production and capacity in the Company's long life low decline thermal in situ and Oil Sands Mining and Upgrading assets.

The 2022 capital budget constitutes forward-looking statements. Refer to the "Advisory" section of this MD&A for further details on forward-looking statements.

## Other

### SENSITIVITY ANALYSIS

The following table is indicative of the annualized sensitivities of cash flows from operating activities and net earnings due to changes in certain key variables. The analysis is based on business conditions and sales volumes during the fourth quarter of 2021, excluding mark-to-market gains (losses) on risk management activities and is not necessarily indicative of future results. Each separate line item in the sensitivity analysis shows the effect of a change in that variable only with all other variables being held constant.

	Cash flows from Operating Activities (\$ millions)		Cash flows from Operating Activities (per common share, basic)		Net earnings (loss) (\$ millions)		Net earnings (loss) (per common share, basic)	
<b>Price changes</b>								
Crude oil – WTI US\$1.00/bbl								
Excluding financial derivatives	\$	311	\$	0.26	\$	311	\$	0.26
Including financial derivatives	\$	310	\$	0.26	\$	310	\$	0.26
Natural gas – AECO C\$0.10/Mcf								
Excluding financial derivatives	\$	31	\$	0.03	\$	31	\$	0.03
Including financial derivatives	\$	27	\$	0.02	\$	27	\$	0.02
<b>Volume changes</b>								
Crude oil – 10,000 bbl/d	\$	170	\$	0.14	\$	144	\$	0.12
Natural gas – 10 MMcf/d	\$	10	\$	0.01	\$	5	\$	—
<b>Foreign currency rate change</b>								
\$0.01 change in US\$ <sup>(1)</sup>								
Including financial derivatives	\$	268	\$	0.23	\$	142	\$	0.12
<b>Interest rate change – 1%</b>	\$	13	\$	0.01	\$	13	\$	0.01

(1) For details of financial instruments in place, refer to note 19 to the Company's audited consolidated financial statements as at December 31, 2021.

## DAILY PRODUCTION BY SEGMENT, BEFORE ROYALTIES

	Q1	Q2	Q3	Q4	2021	2020	2019
<b>Crude oil and NGLs</b> (bbl/d)							
North America – Exploration and Production	478,736	478,314	454,888	478,738	472,621	460,443	405,970
North America – Oil Sands Mining and Upgrading <sup>(1)</sup>	468,803	361,707	468,126	493,406	448,133	417,351	395,133
North Sea	19,959	16,458	16,294	17,860	17,633	23,142	27,919
Offshore Africa	11,854	16,239	13,531	14,421	14,017	17,022	21,371
<b>Total</b>	<b>979,352</b>	<b>872,718</b>	<b>952,839</b>	<b>1,004,425</b>	<b>952,404</b>	917,958	850,393
<b>Natural gas</b> (MMcf/d) <sup>(2)</sup>							
North America	1,585	1,594	1,698	1,841	1,680	1,450	1,443
North Sea	4	4	2	3	3	12	24
Offshore Africa	9	16	8	13	12	15	24
<b>Total</b>	<b>1,598</b>	<b>1,614</b>	<b>1,708</b>	<b>1,857</b>	<b>1,695</b>	1,477	1,491
<b>Barrels of oil equivalent</b> (BOE/d)							
North America – Exploration and Production	742,871	743,923	737,902	785,476	752,620	702,168	646,443
North America – Oil Sands Mining and Upgrading <sup>(1)</sup>	468,803	361,707	468,126	493,406	448,133	417,351	395,133
North Sea	20,574	17,143	16,694	18,441	18,203	25,095	31,915
Offshore Africa	13,455	18,966	14,781	16,577	15,950	19,522	25,466
<b>Total</b>	<b>1,245,703</b>	<b>1,141,739</b>	<b>1,237,503</b>	<b>1,313,900</b>	<b>1,234,906</b>	1,164,136	1,098,957

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

(2) Natural gas production volumes approximate sales volumes.

## PER UNIT RESULTS – EXPLORATION AND PRODUCTION

	Q1	Q2	Q3	Q4	2021	2020	2019
<b>Crude oil and NGLs</b> (\$/bbl) <sup>(1)</sup>							
Realized price <sup>(2)</sup>	\$ 52.68	\$ 61.20	\$ 68.06	\$ 72.81	\$ 63.71	\$ 31.90	\$ 55.08
Transportation <sup>(2)</sup>	3.56	3.98	4.00	3.93	3.86	3.85	3.48
Realized price, net of transportation <sup>(2)</sup>	49.12	57.22	64.06	68.88	59.85	28.05	51.60
Royalties <sup>(3)</sup>	5.69	8.50	9.46	10.67	8.59	2.59	6.08
Production expense <sup>(4)</sup>	14.56	13.75	14.78	15.70	14.71	12.42	13.81
Netback <sup>(2)</sup>	\$ 28.87	\$ 34.97	\$ 39.82	\$ 42.51	\$ 36.55	\$ 13.04	\$ 31.71
<b>Natural gas</b> (\$/Mcf) <sup>(1)</sup>							
Realized price <sup>(5)</sup>	\$ 3.42	\$ 3.17	\$ 4.13	\$ 5.35	\$ 4.07	\$ 2.40	\$ 2.34
Transportation <sup>(6)</sup>	0.46	0.48	0.44	0.42	0.45	0.43	0.42
Realized price, net of transportation	2.96	2.69	3.69	4.93	3.62	1.97	1.92
Royalties <sup>(3)</sup>	0.16	0.12	0.22	0.35	0.22	0.08	0.08
Production expense <sup>(4)</sup>	1.27	1.19	1.17	1.12	1.18	1.18	1.22
Netback <sup>(2)</sup>	\$ 1.53	\$ 1.38	\$ 2.30	\$ 3.46	\$ 2.22	\$ 0.71	\$ 0.62
<b>Barrels of oil equivalent</b> (\$/BOE) <sup>(1)</sup>							
Realized price <sup>(2)</sup>	\$ 41.80	\$ 46.40	\$ 52.09	\$ 57.72	\$ 49.67	\$ 26.15	\$ 40.50
Transportation <sup>(2)</sup>	3.29	3.58	3.50	3.40	3.44	3.44	3.14
Realized price, net of transportation <sup>(2)</sup>	38.51	42.82	48.59	54.32	46.23	22.71	37.36
Royalties <sup>(3)</sup>	4.10	5.77	6.45	7.48	5.98	1.89	4.09
Production expense <sup>(4)</sup>	12.20	11.42	11.91	12.33	11.98	10.67	11.49
Netback <sup>(2)</sup>	\$ 22.21	\$ 25.63	\$ 30.23	\$ 34.51	\$ 28.27	\$ 10.15	\$ 21.78

(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.

## PER UNIT RESULTS – OIL SANDS MINING AND UPGRADING

	Q1	Q2	Q3	Q4	2021	2020	2019
<b>Crude oil and NGLs</b> (\$/bbl) <sup>(1)</sup>							
Realized SCO sales price <sup>(2)</sup>	\$ 64.60	\$ 76.19	\$ 81.54	\$ 88.48	\$ 77.95	\$ 43.98	\$ 70.18
Bitumen royalties <sup>(3)</sup>	2.88	5.92	8.21	9.16	6.62	0.51	3.31
Transportation <sup>(2)</sup>	1.10	1.26	1.14	1.33	1.21	1.23	1.29
Production costs <sup>(4)</sup>	19.82	25.46	19.86	19.55	20.91	20.46	22.56
Netback <sup>(2)</sup>	\$ 40.80	\$ 43.55	\$ 52.33	\$ 58.44	\$ 49.21	\$ 21.78	\$ 43.02

(1) For SCO sales volumes, refer to the "Non-GAAP and Other Financial Measures" 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 sales volumes.

(4) Calculated as production costs divided by sales volumes.

## TRADING AND SHARE STATISTICS

	Q1	Q2	Q3	Q4	2021	2020
<b>TSX – C\$</b>						
Trading volume (thousands)	<b>439,840</b>	<b>401,283</b>	<b>364,136</b>	<b>363,613</b>	<b>1,568,872</b>	1,866,414
Share Price (\$/share)						
High	<b>\$ 41.05</b>	<b>\$ 46.36</b>	<b>\$ 46.99</b>	<b>\$ 55.59</b>	<b>\$ 55.59</b>	\$ 42.57
Low	<b>\$ 28.67</b>	<b>\$ 36.23</b>	<b>\$ 37.82</b>	<b>\$ 46.06</b>	<b>\$ 28.67</b>	\$ 9.80
Close	<b>\$ 38.85</b>	<b>\$ 45.00</b>	<b>\$ 46.31</b>	<b>\$ 53.45</b>	<b>\$ 53.45</b>	\$ 30.59
Market capitalization as at December 31 (\$ millions)					<b>\$ 62,449</b>	\$ 36,214
Shares outstanding (thousands)					<b>1,168,369</b>	1,183,866
<b>NYSE – US\$</b>						
Trading volume (thousands)	<b>243,664</b>	<b>177,553</b>	<b>188,674</b>	<b>185,714</b>	<b>795,605</b>	1,058,121
Share Price (\$/share)						
High	<b>\$ 32.64</b>	<b>\$ 38.10</b>	<b>\$ 37.39</b>	<b>\$ 44.33</b>	<b>\$ 44.33</b>	\$ 32.79
Low	<b>\$ 22.40</b>	<b>\$ 28.86</b>	<b>\$ 29.53</b>	<b>\$ 36.37</b>	<b>\$ 22.40</b>	\$ 6.71
Close	<b>\$ 30.87</b>	<b>\$ 36.28</b>	<b>\$ 36.54</b>	<b>\$ 42.25</b>	<b>\$ 42.25</b>	\$ 24.05
Market capitalization as at December 31 (\$ millions)					<b>\$ 49,364</b>	\$ 28,472
Shares outstanding (thousands)					<b>1,168,369</b>	1,183,866

# Consolidated Financial Statements

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# Management's Report

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The accompanying consolidated financial statements of Canadian Natural Resources Limited (the "Company") and all other information contained elsewhere in this Annual Report are the responsibility of management. The consolidated financial statements have been prepared by management in accordance with the accounting policies described in the accompanying notes. Where necessary, management has made informed judgements and estimates in accounting for transactions that were not complete at the balance sheet date. In the opinion of management, the financial statements have been prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board as appropriate in the circumstances. The financial information presented elsewhere in the Annual Report has been reviewed to ensure consistency with that in the consolidated financial statements.

Management maintains appropriate systems of internal control. Policies and procedures are designed to give reasonable assurance that transactions are appropriately authorized and recorded, assets are safeguarded from loss or unauthorized use and financial records are properly maintained to provide reliable information for preparation of financial statements.

PricewaterhouseCoopers LLP, an independent firm of Chartered Professional Accountants, has been engaged, as approved by a vote of the shareholders at the Company's most recent Annual General Meeting, to audit and provide their independent audit opinions on the following:

- the Company's consolidated financial statements as at and for the year ended December 31, 2021; and
- the effectiveness of the Company's internal control over financial reporting as at December 31, 2021.

Their report is presented with the consolidated financial statements.

The Board of Directors (the "Board") is responsible for ensuring that management fulfills its responsibilities for financial reporting and internal controls. The Board exercises this responsibility through the Audit Committee of the Board, which is comprised entirely of independent directors. The Audit Committee meets with management and the independent auditors to satisfy itself that management responsibilities are properly discharged and to review the consolidated financial statements before they are presented to the Board for approval. The consolidated financial statements have been approved by the Board on the recommendation of the Audit Committee.



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**TIM S. MCKAY**

President



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**MARK STAINTHORPE, CFA**

Chief Financial Officer and  
Senior Vice-President, Finance



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**VICTOR DAREL, CPA, CA**

Vice-President, Finance and  
Principal Accounting Officer

Calgary, Alberta, Canada

March 2, 2022

# Management's Assessment of Internal Control over Financial Reporting

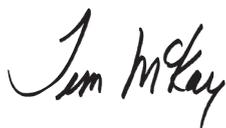
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Management of Canadian Natural Resources Limited (the "Company") is responsible for establishing and maintaining adequate internal control over financial reporting for the Company as defined in Rules 13a-15(f) and 15d-15(f) under the United States Securities Exchange Act of 1934, as amended.

Management, including the Company's President and the Company's Chief Financial Officer and Senior Vice-President, Finance, performed an assessment of the Company's internal control over financial reporting based on the criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO").

Based on the assessment, management has concluded that the Company's internal control over financial reporting is effective as at December 31, 2021. Management recognizes that all internal control systems have inherent limitations. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

PricewaterhouseCoopers LLP, an independent firm of Chartered Professional Accountants, has provided an opinion on the Company's internal control over financial reporting as at December 31, 2021, as stated in their accompanying Report of Independent Registered Public Accounting Firm.



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**TIM S. MCKAY**

President



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**MARK STAINTHORPE, CFA**

Chief Financial Officer and  
Senior Vice-President, Finance

Calgary, Alberta, Canada

March 2, 2022

# Report of Independent Registered Public Accounting Firm

## To the Shareholders and Board of Directors of Canadian Natural Resources Limited

### OPINIONS ON THE FINANCIAL STATEMENTS AND INTERNAL CONTROL OVER FINANCIAL REPORTING

We have audited the accompanying consolidated balance sheets of Canadian Natural Resources Limited and its subsidiaries (together, the “Company”) as of December 31, 2021 and 2020, and the related consolidated statements of earnings (loss), comprehensive income (loss), changes in equity and cash flows for each of the three years in the period ended December 31, 2021, including the related notes (collectively referred to as the “consolidated financial statements”). We also have audited the Company's internal control over financial reporting as of December 31, 2021, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2021 and 2020, and its financial performance and its cash flows for each of the three years in the period ended December 31, 2021 in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2021, based on criteria established in Internal Control – Integrated Framework (2013) issued by the COSO.

### BASIS FOR OPINIONS

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Assessment of Internal Control over Financial Reporting. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (“PCAOB”) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

### DEFINITION AND LIMITATIONS OF INTERNAL CONTROL OVER FINANCIAL REPORTING

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

## CRITICAL AUDIT MATTERS

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

### *The impact of crude oil and natural gas reserves on property, plant and equipment assets in the North America Exploration and Production segment*

As described in Notes 1, 4 and 7 to the Company's consolidated financial statements, the property, plant and equipment ("PP&E") balance in the North America Exploration and Production segment was \$25.1 billion as of December 31, 2021. Depletion, depreciation and amortization ("DD&A") expense for the North America Exploration and Production segment was \$3.5 billion for the year ended December 31, 2021. In accordance with the Company's accounting policies, crude oil and natural gas properties in the North America Exploration and Production segment, excluding certain major components, are depleted using the unit-of-production method based on proved reserves. Estimates of the Company's crude oil and natural gas reserves are based on engineering data, estimated future prices and production costs, expected future rates of production and the timing and amount of future development expenditures. Management utilizes third party specialists, specifically independent qualified reserve evaluators, to evaluate and review its estimates of crude oil and natural gas reserves. These estimates are utilized for the calculation of DD&A expense.

The principal considerations for our determination that performing procedures relating to the impact of crude oil and natural gas reserves on PP&E assets in the North America Exploration and Production segment is a critical audit matter are that there was a significant amount of judgment by management, including the use of specialists, when developing the estimates, specifically related to the estimates of crude oil and natural gas reserves in the North America Exploration and Production segment. This led to a high degree of auditor judgment, effort and subjectivity in performing procedures and evaluating evidence obtained related to the assumptions used in developing the estimates, including estimated future prices and production costs, expected future rates of production, and the timing and amount of future development expenditures.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of internal controls in the North America Exploration and Production segment relating to management's estimates of the Company's crude oil and natural gas reserves and the calculation of DD&A expense. The work of management's specialists was used in performing the procedures to evaluate the reasonableness of the estimates of crude oil and natural gas reserves used to determine DD&A expense for the North America Exploration and Production segment. As a basis for using this work, the specialists' qualifications were understood, and the Company's relationship with the specialists was assessed. The procedures performed also included evaluation of the methods and assumptions used by the specialists, tests of data used by the specialists and an evaluation of the specialists' findings. The procedures performed also included, among other, evaluating whether the assumptions used by management's specialists related to estimated future prices and production costs, expected future rates of production, and the timing and amount of future development expenditures were reasonable considering the current and past performance of the Company, consistency with industry pricing forecasts, and whether they were consistent with evidence obtained in other areas of the audit, as applicable. Additionally, these procedures also included testing the unit-of-production rates used to calculate DD&A expense.

*PricewaterhouseCoopers LLP*

Chartered Professional Accountants

Calgary, Canada

March 2, 2022

We have served as the Company's auditor since 1973.

# Consolidated Balance Sheets

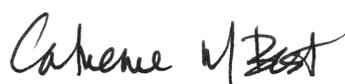
As at December 31,

(millions of Canadian dollars)

	Note	2021	2020
<b>ASSETS</b>			
<b>Current assets</b>			
Cash and cash equivalents		\$ 744	\$ 184
Accounts receivable		3,111	2,190
Current income taxes receivable		—	309
Inventory	5	1,548	1,060
Prepays and other		195	231
Investments	9	309	305
Current portion of other long-term assets	10	35	82
		<b>5,942</b>	4,361
<b>Exploration and evaluation assets</b>	6	<b>2,250</b>	2,436
<b>Property, plant and equipment</b>	7	<b>66,400</b>	65,752
<b>Lease assets</b>	8	<b>1,508</b>	1,645
<b>Other long-term assets</b>	10	<b>565</b>	1,082
		<b>\$ 76,665</b>	\$ 75,276
<b>LIABILITIES</b>			
<b>Current liabilities</b>			
Accounts payable		\$ 803	\$ 667
Accrued liabilities		3,064	2,346
Current income taxes payable		1,607	—
Current portion of long-term debt	11	1,000	1,343
Current portion of other long-term liabilities	8,12	948	722
		<b>7,422</b>	5,078
<b>Long-term debt</b>	11	<b>13,694</b>	20,110
<b>Other long-term liabilities</b>	8,12	<b>8,384</b>	7,564
<b>Deferred income taxes</b>	13	<b>10,220</b>	10,144
		<b>39,720</b>	42,896
<b>SHAREHOLDERS' EQUITY</b>			
<b>Share capital</b>	14	<b>10,168</b>	9,606
<b>Retained earnings</b>		<b>26,778</b>	22,766
<b>Accumulated other comprehensive (loss) income</b>	15	<b>(1)</b>	8
		<b>36,945</b>	32,380
		<b>\$ 76,665</b>	\$ 75,276

Commitments and contingencies (note 20).

Approved by the Board of Directors on March 2, 2022.



**CATHERINE M. BEST**

Chair of the Audit Committee  
and Director



**N. MURRAY EDWARDS**

Executive Chairman of the Board of Directors  
and Director

# Consolidated Statements of Earnings (Loss)

For the years ended December 31,					
(millions of Canadian dollars, except per common share amounts)		Note	2021	2020	2019
Product sales	22	\$	<b>32,854</b>	\$	17,491
Less: royalties			<b>(2,797)</b>		(598)
<b>Revenue</b>			<b>30,057</b>		16,893
<b>Expenses</b>					
Production			<b>7,152</b>		6,280
Transportation, blending and feedstock			<b>6,604</b>		4,498
Depletion, depreciation and amortization	7,8		<b>5,724</b>		6,046
Administration			<b>366</b>		391
Share-based compensation	12		<b>514</b>		(82)
Asset retirement obligation accretion	12		<b>185</b>		205
Interest and other financing expense	18		<b>711</b>		756
Risk management activities	19		<b>36</b>		(7)
Foreign exchange gain			<b>(127)</b>		(275)
Gain on acquisitions	7		<b>(478)</b>		(217)
Income from North West Redwater Partnership	10		<b>(400)</b>		—
(Gain) loss from investments	9,10		<b>(141)</b>		171
			<b>20,146</b>		17,766
<b>Earnings (loss) before taxes</b>			<b>9,911</b>		(873)
Current income tax expense (recovery)	13		<b>1,848</b>		(257)
Deferred income tax expense (recovery)	13		<b>399</b>		(181)
<b>Net earnings (loss)</b>		\$	<b>7,664</b>	\$	(435)
<b>Net earnings (loss) per common share</b>					
Basic	17	\$	<b>6.49</b>	\$	(0.37)
Diluted	17	\$	<b>6.46</b>	\$	(0.37)

# Consolidated Statements of Comprehensive Income (Loss)

For the years ended December 31,					
(millions of Canadian dollars)			2021	2020	2019
<b>Net earnings (loss)</b>		\$	<b>7,664</b>	\$	(435)
<b>Items that may be reclassified subsequently to net earnings</b>					
<b>Net change in derivative financial instruments designated as cash flow hedges</b>					
Unrealized income, net of taxes of \$2 million (2020 – \$2 million, 2019 – \$13 million)			<b>15</b>		13
Reclassification to net earnings (loss), net of taxes of \$1 million (2020 – \$2 million, 2019 – \$5 million)			<b>(7)</b>		(15)
			<b>8</b>		(2)
<b>Foreign currency translation adjustment</b>					
Translation of net investment			<b>(17)</b>		(24)
<b>Other comprehensive loss, net of taxes</b>			<b>(9)</b>		(26)
<b>Comprehensive income (loss)</b>		\$	<b>7,655</b>	\$	(461)

# Consolidated Statements of Changes in Equity

For the years ended December 31,

(millions of Canadian dollars)	Note	2021	2020	2019
<b>Share capital</b>	14			
Balance – beginning of year		\$ 9,606	\$ 9,533	\$ 9,323
Issued upon exercise of stock options		707	108	360
Previously recognized liability on stock options exercised for common shares		139	21	53
Purchase of common shares under Normal Course Issuer Bid		(284)	(56)	(203)
Balance – end of year		10,168	9,606	9,533
<b>Retained earnings</b>				
Balance – beginning of year		22,766	25,424	22,529
Net earnings (loss)		7,664	(435)	5,416
Dividends on common shares	14	(2,355)	(2,008)	(1,783)
Purchase of common shares under Normal Course Issuer Bid	14	(1,297)	(215)	(738)
Balance – end of year		26,778	22,766	25,424
<b>Accumulated other comprehensive (loss) income</b>	15			
Balance – beginning of year		8	34	122
Other comprehensive loss, net of taxes		(9)	(26)	(88)
Balance – end of year		(1)	8	34
<b>Shareholders' equity</b>		\$ 36,945	\$ 32,380	\$ 34,991

# Consolidated Statements of Cash Flows

For the years ended December 31,

(millions of Canadian dollars)	Note	2021	2020	2019
<b>Operating activities</b>				
Net earnings (loss)		\$ 7,664	\$ (435)	\$ 5,416
Non-cash items				
Depletion, depreciation and amortization		5,724	6,046	5,546
Share-based compensation		514	(82)	223
Asset retirement obligation accretion		185	205	190
Unrealized risk management loss (gain)		19	(39)	13
Unrealized foreign exchange gain		(205)	(116)	(548)
Gain on acquisitions		(478)	(217)	—
(Gain) loss from investments		(132)	185	321
Deferred income tax expense (recovery)		399	(181)	(894)
Realized foreign exchange loss (gain)		118	(166)	—
Other		13	(71)	(109)
Abandonment expenditures		(307)	(249)	(296)
Net change in non-cash working capital	21	964	(166)	(1,033)
Cash flows from operating activities		14,478	4,714	8,829
<b>Financing activities</b>				
(Repayment) issuance of bank credit facilities and commercial paper, net	11,21	(6,151)	338	2,025
Repayment of medium-term notes	11,21	—	(1,100)	(1,000)
(Repayment) issuance of US dollar debt securities	11,21	(628)	1,481	—
Settlement of long-term debt acquired	7	(183)	(397)	—
Proceeds on settlement of cross currency swaps		—	166	—
Payment of lease liabilities	8	(209)	(225)	(237)
Issue of common shares on exercise of stock options		707	108	360
Dividends on common shares		(2,170)	(1,950)	(1,743)
Purchase of common shares under Normal Course Issuer Bid		(1,581)	(271)	(941)
Cash flows used in financing activities		(10,215)	(1,850)	(1,536)
<b>Investing activities</b>				
Net expenditures on exploration and evaluation assets	6,21	(1)	(5)	(73)
Net expenditures on property, plant and equipment	7,22	(4,492)	(2,555)	(3,535)
Acquisition of Devon Canada Corporation assets	6,7	—	—	(3,412)
Proceeds from investment	9	128	—	—
Repayment of North West Redwater Partnership subordinated debt advances	10	555	124	—
Net change in non-cash working capital	21	107	(383)	(235)
Cash flows used in investing activities		(3,703)	(2,819)	(7,255)
<b>Increase in cash and cash equivalents</b>		<b>560</b>	<b>45</b>	<b>38</b>
<b>Cash and cash equivalents – beginning of year</b>		<b>184</b>	<b>139</b>	<b>101</b>
<b>Cash and cash equivalents – end of year</b>		<b>\$ 744</b>	<b>\$ 184</b>	<b>\$ 139</b>
<b>Interest paid on long-term debt, net</b>		<b>\$ 672</b>	<b>\$ 745</b>	<b>\$ 865</b>
<b>Income taxes (received) paid</b>		<b>\$ (62)</b>	<b>\$ (29)</b>	<b>\$ 445</b>

# Notes to the Consolidated Financial Statements

(tabular amounts in millions of Canadian dollars, unless otherwise stated)

## 1. Accounting Policies

Canadian Natural Resources Limited (the "Company") is a senior independent crude oil and natural gas exploration, development and production company. The Company's exploration and production operations are focused in North America, largely in Western Canada; the United Kingdom ("UK") portion of the North Sea; and Côte d'Ivoire and South Africa in Offshore Africa.

The "Oil Sands Mining and Upgrading" segment produces synthetic crude oil through bitumen mining and upgrading operations at Horizon Oil Sands ("Horizon") and through the Company's direct and indirect interest in the Athabasca Oil Sands Project ("AOSP").

Within Western Canada, in the "Midstream and Refining" segment, the Company maintains certain activities that include pipeline operations, an electricity co-generation system and an investment in the North West Redwater Partnership ("NWRP"), a general partnership formed to upgrade and refine bitumen in the Province of Alberta.

The Company was incorporated in Alberta, Canada. The address of its registered office is 2100, 855 - 2 Street S.W., Calgary, Alberta, Canada.

The Company's consolidated financial statements and the related notes have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"). The accounting policies adopted by the Company under IFRS are set out below. The Company has consistently applied the same accounting policies throughout all periods presented, except where IFRS permits new accounting standards to be adopted prospectively. Changes in the Company's accounting policies are discussed in note 2.

### (A) PRINCIPLES OF CONSOLIDATION

The consolidated financial statements have been prepared under the historical cost basis, unless otherwise required.

The consolidated financial statements include the accounts of the Company and all of its subsidiary companies and wholly owned partnerships. Subsidiaries include all entities over which the Company has control. Subsidiaries are consolidated from the date on which the Company obtains control. They are deconsolidated from the date that control ceases.

Certain of the Company's activities are conducted through joint arrangements in which two or more parties have joint control. Where the Company has determined that it has a direct ownership interest in jointly controlled assets and obligations for the liabilities (a "joint operation"), the assets, liabilities, revenue and expenses related to the joint operation are included in the consolidated financial statements in proportion to the Company's interest. Where the Company has determined that it has an interest in jointly controlled entities (a "joint venture"), it uses the equity method of accounting. Under the equity method, the Company's initial and subsequent investments are recognized at cost and subsequently adjusted for the Company's share of the joint venture's income or loss, less distributions received. If the Company's share of the joint venture's loss equals or exceeds its interest in the joint venture, the Company discontinues recognizing its share of further losses. The Company resumes recognizing profits when its share of profits exceeds the accumulated share of losses not recognized.

Joint ventures accounted for using the equity method of accounting are tested for impairment whenever objective evidence indicates that the carrying amount of the investment may not be recoverable. Indications of impairment include a history of losses, significant capital expenditure overruns, liquidity concerns, financial restructuring of the investee or significant adverse changes in the technological, economic or legal environment. The amount of the impairment is measured as the difference between the carrying amount of the investment and the higher of its fair value less costs of disposal and its value in use. Impairment losses are reversed in subsequent periods if the amount of the loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognized.

### (B) SEGMENTED INFORMATION

Operating segments have been determined based on the nature of the Company's activities and the geographic locations in which the Company operates, and are consistent with the level of information regularly provided to and reviewed by the Company's chief operating decision makers.

### (C) CASH AND CASH EQUIVALENTS

Cash comprises cash on hand and demand deposits. Other investments (term deposits and certificates of deposit) with an original term to maturity at purchase of three months or less are reported as cash equivalents in the consolidated balance sheets.

## **(D) INVENTORY**

Inventory is primarily comprised of product inventory, materials and supplies and other inventory, including emissions credits, and is carried at the lower of cost and net realizable value. Product inventory is comprised of crude oil held for sale, including pipeline linefill and crude oil stored in floating production, storage and offloading vessels ("FPSO"). Cost of product inventory consists of purchase costs, direct production costs, directly attributable overhead and depletion, depreciation and amortization and is determined on a first-in, first-out basis. Net realizable value for product inventory is determined by reference to forward prices. Cost for materials and supplies consists of purchase costs and is based on a first-in, first-out or an average cost basis. Net realizable value for materials and supplies and other inventory is determined by reference to current market prices. Emissions credit inventory generated in the normal course of business is initially measured in accordance with the Company's accounting policy for government grants.

## **(E) EXPLORATION AND EVALUATION ASSETS**

Exploration and evaluation ("E&E") assets consist of the Company's crude oil and natural gas exploration projects that are pending the determination of proved reserves.

E&E costs are initially capitalized and include costs directly associated with the acquisition of licenses, technical services and studies, seismic acquisition, exploration drilling and evaluation, overhead and administration expenses, and the estimate of any asset retirement costs. E&E costs do not include general prospecting or evaluation costs incurred prior to having obtained the legal rights to explore an area. These costs are recognized in net earnings.

Once the technical feasibility and commercial viability of E&E assets are determined and a development decision is made by management, the E&E assets are tested for impairment upon reclassification to property, plant and equipment. The technical feasibility and commercial viability of extracting a mineral resource is considered to be determined when an assessment of proved reserves is made. An E&E asset is derecognized upon disposal or when no future economic benefits are expected to arise from its use. Any gain or loss arising on derecognition of the asset is recognized in net earnings within depletion, depreciation and amortization.

E&E assets are also tested for impairment when facts and circumstances suggest that the carrying amount of E&E assets may exceed their recoverable amount, by comparing the relevant costs to the fair value of the related Cash Generating Units ("CGUs"), aggregated at a segment level. Indications of impairment include leases approaching expiry, the existence of low benchmark commodity prices for an extended period of time, significant downward revisions in estimated probable reserves volumes, significant increases in estimated future exploration or development expenditures, or significant adverse changes in the applicable legislative or regulatory frameworks.

## **(F) PROPERTY, PLANT AND EQUIPMENT**

Property, plant and equipment is measured at cost less accumulated depletion and depreciation and impairment provisions. Assets under construction are not depleted or depreciated until available for their intended use.

### **Exploration and Production**

The cost of an asset comprises its acquisition costs, construction and development costs, costs directly attributable to bringing the asset into operation, the estimate of any asset retirement costs, and applicable borrowing costs. Property acquisition costs are comprised of the aggregate amount paid and the fair value of any other consideration given to acquire the asset.

When significant components of an item of property, plant and equipment, including crude oil and natural gas interests, have different useful lives, they are accounted for separately.

Crude oil and natural gas properties are depleted using the unit-of-production method over proved reserves, except for certain major components, which are depreciated using a straight-line method over their estimated useful lives. The unit-of-production depletion rate takes into account expenditures incurred to date, together with future development expenditures required to develop proved reserves.

### **Oil Sands Mining and Upgrading**

Capitalized costs for the Oil Sands Mining and Upgrading segment are reported separately from the Company's North America Exploration and Production segment. Capitalized costs include acquisition costs, construction and development costs, costs directly attributable to bringing the asset into operation, the estimate of any asset retirement costs, and applicable borrowing costs.

Mine-related costs are depleted using the unit-of-production method based on proved reserves. Costs of the upgraders and related infrastructure located on the Horizon and AOSP sites are depreciated on the unit-of-production method based on the estimated productive capacity of the respective upgraders and related infrastructure. Other equipment is depreciated on a straight-line basis over its estimated useful life ranging from 2 to 20 years.

### **Midstream, Refining and Head Office**

The Company capitalizes all costs that expand the capacity or extend the useful life of the midstream, refining and head office assets. Midstream and Refining assets are depreciated on a straight-line basis over their estimated useful lives ranging from 5 to 30 years. Head office assets are depreciated on a declining balance basis.

## **Useful lives**

The depletion rates and expected useful lives of property, plant and equipment are reviewed on an annual basis, with changes in depletion rates and useful lives accounted for prospectively.

## **Derecognition**

A property, plant and equipment asset is derecognized upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is recognized in net earnings within depletion, depreciation and amortization.

## **Major maintenance expenditures**

Inspection costs associated with major maintenance turnarounds are capitalized and depreciated over the period to the next major maintenance turnaround. Maintenance costs are expensed as incurred.

## **Impairment**

The Company assesses property, plant and equipment for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset or group of assets may not be recoverable. Indications of impairment include the existence of low benchmark commodity prices for an extended period of time, significant downward revisions of estimated reserves volumes, significant increases in estimated future development expenditures, or significant adverse changes in the applicable legislative or regulatory frameworks. If an indication of impairment exists, the Company performs an impairment test related to the assets. Individual assets are grouped for impairment assessment purposes into CGUs, which are the lowest level at which there are identifiable cash inflows that are largely independent of the cash inflows of other groups of assets. A CGU's recoverable amount is the higher of its fair value less costs of disposal and its value in use. Where the carrying amount of a CGU exceeds its recoverable amount, the CGU is considered impaired and is written down to its recoverable amount through depletion, depreciation and amortization expense.

In subsequent periods, an assessment is made at each reporting date to determine whether there is any indication that previously recognized impairment losses may no longer exist or may have decreased. If such indication exists, the recoverable amount is re-estimated and the net carrying amount of the asset is increased to its revised recoverable amount. The revised recoverable amount cannot exceed the carrying amount that would have been determined, net of depletion, depreciation and amortization, had no impairment loss been recognized for the asset in prior periods. A reversal of impairment is recognized in net earnings. After a reversal, the depletion, depreciation and amortization charge is adjusted in future periods to allocate the asset's revised carrying amount over its remaining useful life.

## **(G) BUSINESS COMBINATIONS**

Business combinations are accounted for using the acquisition method. Assets acquired and liabilities assumed in a business combination are recognized at their fair value at the date of the acquisition. Any excess of the consideration paid over the fair value of the net assets acquired is recognized as an asset. Any excess of the fair value of the net assets acquired over the consideration paid is recognized in net earnings.

## **(H) OVERBURDEN REMOVAL COSTS**

Overburden removal costs incurred during the initial development of a mine at Horizon and AOSP are capitalized to property, plant and equipment. Overburden removal costs incurred during the production of a mine are included in the cost of inventory, unless the overburden removal activity has resulted in a probable inflow of future economic benefits to the Company, in which case the costs are capitalized to property, plant and equipment. Capitalized overburden removal costs are depleted over the life of the mining reserves that directly benefit from the overburden removal activity.

## **(I) CAPITALIZED BORROWING COSTS**

Borrowing costs attributable to the acquisition, construction or production of qualifying assets are capitalized to the cost of those assets until such time as the assets are substantially available for their intended use. Qualifying assets are comprised of those significant assets that require a period greater than one year to be available for their intended use. All other borrowing costs are recognized in net earnings.

## **(J) LEASES**

At inception of a contract, the Company assesses whether a contract is, or contains a lease. A contract is, or contains a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. To assess whether a contract conveys the right to control the use of an identified asset, the Company assesses whether: the contract involves the use of an identified asset; the Company has the right to obtain substantially all of the economic benefits from the use of the asset throughout the period of use; and, the Company has the right to direct the use of the asset.

The Company recognizes a lease asset and a lease liability at the commencement date of the lease contract, which is the date that the lease asset is available to the Company. The lease asset is initially measured at cost. The cost of a lease asset includes the amount of the initial measurement of the lease liability, lease payments made prior to the commencement date, initial direct costs and estimates of the asset retirement obligation, if any. Subsequent to initial recognition, the lease asset is depreciated using the straight-line method over the earlier of the end of the useful life of the lease asset or the lease term.

Lease liabilities are initially measured at the present value of lease payments discounted at the rate implicit in the lease, or if not readily determinable, the Company's incremental borrowing rate. Lease payments include fixed lease payments, variable lease payments based on indices or rates, residual value guarantees, and purchase options expected to be exercised. Subsequent to initial recognition, the lease liability is measured at amortized cost using the effective interest method. Lease liabilities are remeasured if there are changes in the lease term or if the Company changes its assessment of whether it is reasonably certain it will exercise a purchase, extension or termination option. Lease liabilities are also remeasured if there are changes in the estimate of the amounts payable under the lease due to changes in indices or rates, or residual value guarantees.

Lease assets are reported in a separate caption in the consolidated balance sheet. Lease liabilities are reported within other long-term liabilities in the consolidated balance sheet.

Depreciation on lease assets used in the construction of property, plant and equipment is capitalized to the cost of those assets over their period of use until such time as the property, plant and equipment is substantially available for its intended use.

Where the Company acts as the operator of a joint operation, the Company recognizes 100% of the related lease asset and lease liability. As the Company recovers its joint operation partners' share of the costs of the lease contract, these recoveries are recognized as other income in the consolidated statements of earnings.

## **(K) ASSET RETIREMENT OBLIGATIONS**

The Company provides for asset retirement obligations on all of its property, plant and equipment and certain exploration and evaluation assets based on current legislation and industry operating practices. Provisions for asset retirement obligations related to property, plant and equipment are recognized as a liability in the period in which they are incurred. Provisions are measured at the present value of management's best estimate of expenditures required to settle the obligation as at the date of the balance sheets. Subsequent to the initial measurement, the obligation is adjusted to reflect the passage of time, changes in credit adjusted interest rates, and changes in the estimated future cash flows underlying the obligation. The increase in the provision due to the passage of time is recognized as asset retirement obligation accretion expense, whereas changes due to discount rates or estimated future cash flows are capitalized to or derecognized from property, plant and equipment. Actual costs incurred upon settlement of the asset retirement obligation are charged against the provision.

## **(L) FOREIGN CURRENCY TRANSLATION**

### **Functional and presentation currency**

Items included in the financial statements of the Company's subsidiary companies and partnerships are measured using the currency of the primary economic environment in which the subsidiary operates (the "functional currency"). The consolidated financial statements are presented in Canadian dollars, which is the Company's functional currency.

The assets and liabilities of subsidiaries that have a functional currency different from that of the Company are translated into Canadian dollars at the closing rate at the date of the balance sheets, and revenue and expenses are translated at the average rate for the period. Cumulative foreign currency translation adjustments are recognized in other comprehensive income.

When the Company disposes of its entire interest in a foreign operation, or loses control, joint control, or significant influence over a foreign operation, the foreign currency gains or losses accumulated in other comprehensive income related to the foreign operation are recognized in net earnings.

### **Transactions and balances**

Foreign currency transactions are translated into the functional currency of the Company and its subsidiaries and partnerships using the exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of foreign currency transactions and from the translation at balance sheet date exchange rates of monetary assets and liabilities denominated in currencies other than the functional currency are recognized in net earnings.

## **(M) REVENUE RECOGNITION AND COSTS OF GOODS SOLD**

Revenue from the sale of crude oil and NGLs and natural gas products is recognized when performance obligations in the sales contract are satisfied and it is probable that the Company will collect the consideration to which it is entitled. Performance obligations are generally satisfied at the point in time when the product is delivered to a location specified in a contract and control passes to the customer. The Company assesses customer creditworthiness, both before entering into contracts and throughout the revenue recognition process.

Contracts for sale of the Company's products generally have terms of less than a year, with certain contracts extending beyond one year. Contracts in North America generally specify delivery of crude oil and NGLs and natural gas throughout the term of the contract. Contracts in the North Sea and Offshore Africa generally specify delivery of crude oil at a point in time.

Sales of the Company's crude oil and NGLs and natural gas products to customers are made pursuant to contracts based on prevailing commodity pricing at or near the time of delivery and volumes of product delivered. Revenues are typically collected in the month following delivery and accordingly, the Company has elected to apply the practical expedient to not adjust consideration for the effects of a financing component. Purchases and sales of crude oil and NGLs and natural gas with the same counterparty, made to facilitate sales to customers or potential customers, that are entered into in contemplation of one another, are combined and recorded as non-monetary exchanges and measured at the net settlement amount.

Revenue in the consolidated statement of earnings represents the Company's share of product sales net of royalty payments to governments and other mineral interest owners. The Company discloses the disaggregation of revenues from sales of crude oil and NGLs and natural gas in the segmented information in note 22. Related costs of goods sold are comprised of production, transportation, blending and feedstock, and depletion, depreciation and amortization expenses. These amounts have been separately presented in the consolidated statements of earnings.

## **(N) PRODUCTION SHARING CONTRACTS**

Production generated from Côte d'Ivoire in Offshore Africa is shared under the terms of various Production Sharing Contracts ("PSCs"). Product sales are divided into cost recovery oil and profit oil. Cost recovery oil allows the Company to recover its capital and production costs and the costs carried by the Company on behalf of the respective government state oil companies (the "Governments"). Profit oil is allocated to the joint venture partners in accordance with their respective equity interests, after a portion has been allocated to the Governments. The Governments' share of profit oil attributable to the Company's equity interest is allocated to royalty expense and current income tax expense in accordance with the terms of the respective PSCs.

## **(O) INCOME TAX**

The Company follows the liability method of accounting for income taxes. Under this method, deferred income tax assets and liabilities are recognized based on the estimated income tax effects of temporary differences in the carrying amount of assets and liabilities in the consolidated financial statements and their respective tax bases.

Deferred income tax assets and liabilities are calculated using the substantively enacted income tax rates that are expected to apply when the asset or liability is recovered. Deferred income tax assets or liabilities are not recognized when they arise on the initial recognition of an asset or liability in a transaction (other than in a business combination) that, at the time of the transaction, affects neither accounting nor taxable profit. Deferred income tax assets or liabilities are also not recognized on possible future distributions of retained earnings of subsidiaries where the timing of the distribution can be controlled by the Company and it is probable that a distribution will not be made in the foreseeable future, or when distributions can be made without incurring income taxes.

Deferred income tax assets for deductible temporary differences and tax loss carryforwards are recognized to the extent that it is probable that future taxable profits will be available against which the temporary differences or tax loss carryforwards can be utilized. The carrying amount of deferred income tax assets is reviewed at each reporting date, and is reduced if it is no longer probable that sufficient future taxable profits will be available against which the temporary differences or tax loss carryforwards can be utilized.

Current income tax is calculated based on net earnings for the period, adjusted for items that are non-taxable or taxed in different periods, using income tax rates that are substantively enacted at each reporting date. Income taxes are recognized in net earnings or other comprehensive income, consistent with the items to which they relate.

## **(P) SHARE-BASED COMPENSATION**

The Company's Stock Option Plan (the "Option Plan") provides current employees with the right to elect to receive common shares or a cash payment in exchange for stock options surrendered. The liability for awards granted to employees is initially measured based on the grant date fair value of the awards and the number of awards expected to vest. The awards are remeasured each reporting period for subsequent changes in the fair value of the liability. Fair value is determined using the Black-Scholes valuation model under a graded vesting method. Expected volatility is estimated based on historic results. When stock options are surrendered for cash, the cash settlement paid reduces the outstanding liability. When stock options are exercised for common shares under the Option Plan, consideration paid by the employee and any previously recognized liability associated with the stock options are recorded as share capital.

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. PSUs vest three years from original grant date. The liability for PSUs is initially measured in reference to the Company's stock price and the number of awards expected to vest and is remeasured at each reporting period for changes in the fair value of the liability.

The unamortized costs of employer contributions to the Company's share bonus program are included in other long-term assets.

## **(Q) FINANCIAL INSTRUMENTS**

The Company classifies its financial instruments into one of the following categories: financial assets at amortized cost; financial liabilities at amortized cost; and fair value through profit or loss. All financial instruments are measured at fair value on initial recognition. Measurement in subsequent periods is dependent on the classification of the respective financial instrument.

Fair value through profit or loss financial instruments are subsequently measured at fair value with changes in fair value recognized in net earnings. All other categories of financial instruments are measured at amortized cost using the effective interest method.

Cash and cash equivalents, accounts receivable and certain other long-term assets are classified as financial assets at amortized cost since it is the Company's intention to hold these assets to maturity and the related cash flows are solely comprised of payments of principal and interest. Investments in publicly traded shares are classified as fair value through profit or loss. Accounts payable, accrued liabilities, certain other long-term liabilities, and long-term debt are classified as financial liabilities at amortized cost. Risk management assets and liabilities are classified as fair value through profit or loss.

Financial assets and liabilities are also categorized using a three-level hierarchy that reflects the significance of the inputs used in making fair value measurements for these assets and liabilities. The fair values of financial assets and liabilities included in Level 1 are determined by reference to quoted prices in active markets for identical assets and liabilities. Fair values of financial assets and liabilities in Level 2 are based on inputs other than Level 1 quoted prices that are observable for the asset or liability either directly (as prices) or indirectly (derived from prices). The fair values of Level 3 financial assets and liabilities are not based on observable market data. The disclosure of the fair value hierarchy excludes financial assets and liabilities where book value approximates fair value due to the liquid nature of the asset or liability.

Transaction costs in respect of financial instruments at fair value through profit or loss are recognized in net earnings. Transaction costs in respect of other financial instruments are included in the initial measurement of the financial instrument.

### **Impairment of financial assets**

At each reporting date, on a forward looking basis, the Company assesses the expected credit losses associated with its financial assets carried at amortized cost. Expected credit losses are measured as the difference between the cash flows that are due to the Company and the cash flows that the Company expects to receive, discounted at the effective interest rate determined at initial recognition. For trade accounts receivable, the Company applies the simplified approach permitted by IFRS 9, which requires expected lifetime credit losses to be recognized from initial recognition of the receivables. To measure expected credit losses, accounts receivable are grouped based on the number of days the receivables have been outstanding and internal credit assessments of the customers. Credit risk for longer-term receivables is assessed based on an external credit rating of the counterparty. For longer-term receivables with credit risk that has not increased significantly since the date of recognition, the Company measures the expected credit loss as the 12-month expected credit loss.

Changes in the provision for expected credit loss are recognized in net earnings.

## **(R) RISK MANAGEMENT ACTIVITIES**

The Company periodically uses derivative financial instruments to manage its commodity price, foreign currency and interest rate exposures. These financial instruments are entered into solely for hedging purposes and are not used for speculative purposes. All derivative financial instruments are recognized in the consolidated balance sheets at their estimated fair value. The estimated fair value of derivative financial instruments has been determined based on appropriate internal valuation methodologies and/or third party indications. Fair values determined using valuation models require the use of assumptions concerning the amount and timing of future cash flows, discount rates and credit risk. In determining these assumptions, the Company primarily relied on external, readily-observable market inputs including quoted commodity prices and volatility, interest rate yield curves, and foreign exchange rates. The carrying amount of a risk management liability is adjusted for the Company's own credit risk.

The Company documents all derivative financial instruments that are formally designated as hedging transactions at the inception of the hedging relationship, in accordance with the Company's risk management policies. The effectiveness of the hedging relationship is evaluated, both at inception of the hedge and on an ongoing basis.

The Company periodically enters into commodity price contracts to manage anticipated sales and purchases of crude oil and natural gas in order to protect its cash flow for its capital expenditure programs. The effective portion of changes in the fair value of derivative commodity price contracts formally designated as cash flow hedges is initially recognized in other comprehensive income and is reclassified to risk management activities in net earnings in the same period or periods in which the commodity is sold or purchased. The ineffective portion of changes in the fair value of these designated contracts is recognized in risk management activities in net earnings. All changes in the fair value of non-designated crude oil and natural gas commodity price contracts are recognized in risk management activities in net earnings.

The Company periodically enters into interest rate swap contracts to manage its fixed to floating interest rate mix on certain long-term debt instruments. The interest rate swap contracts require the periodic exchange of payments without the exchange of the notional principal amounts on which the payments are based. Changes in the fair value of interest rate swap contracts designated as fair value hedges and corresponding changes in the fair value of the hedged long-term debt are recognized in interest expense in net earnings. Changes in the fair value of non-designated interest rate swap contracts are recognized in risk management activities in net earnings.

Upon termination of an interest rate swap designated as a fair value hedge, the interest rate swap is derecognized in the consolidated balance sheets and the related long-term debt hedged is no longer revalued for subsequent changes in fair value due to interest rates changes. The fair value adjustment due to interest rates on the long-term debt at the date of termination of the interest rate swap is amortized to interest expense over the remaining term of the long-term debt.

Cross currency swap contracts are periodically used to manage currency exposure on US dollar denominated long-term debt. The cross currency swap contracts require the periodic exchange of payments with the exchange at maturity of notional principal amounts on which the payments are based. Changes in the fair value of the foreign exchange component of cross currency swap contracts designated as cash flow hedges related to the notional principal amounts are recognized in foreign exchange gains and losses in net earnings. The effective portion of changes in the fair value of the interest rate component of cross currency swap contracts designated as cash flow hedges is initially recognized in other comprehensive income and is reclassified to interest expense when the hedged item is recognized in net earnings, with the ineffective portion recognized in risk management activities in net earnings. Changes in the fair value of non-designated cross currency swap contracts are recognized in risk management activities in net earnings.

Realized gains or losses on the termination of financial instruments that have been designated as cash flow hedges are deferred under accumulated other comprehensive income and amortized into net earnings in the periods in which the underlying hedged items are recognized. In the event a designated hedged item is sold, extinguished or matures prior to the termination of the related derivative instrument, any unrealized derivative gain or loss is recognized in net earnings. Realized gains or losses on the termination of financial instruments that have not been designated as hedges are recognized in net earnings.

Foreign currency forward contracts are periodically used to manage foreign currency cash requirements. The foreign currency forward contracts involve the purchase or sale of an agreed upon amount of US dollars at a specified future date at forward exchange rates. Changes in the fair value of foreign currency forward contracts designated as cash flow hedges are initially recorded in other comprehensive income and are reclassified to foreign exchange gains and losses when the hedged item is recognized in net earnings. Changes in the fair value of non-designated foreign currency forward contracts are recognized in risk management activities in net earnings.

Embedded derivatives are derivatives that are included in a non-derivative host contract. Embedded derivatives are recorded at fair value separately from the host contract when their economic characteristics and risks are not clearly and closely related to the host contract, except when the host contract is an asset.

## **(S) GOVERNMENT GRANTS**

The Company receives or is eligible for government grants, including emissions credits and grants introduced in response to the impact of the novel coronavirus ("COVID-19"). Government grants are recognized in net earnings when there is reasonable assurance that the Company will comply with the conditions attached to the grant and the grant will be received. Emissions performance and offset credits generated under the Alberta Technology Innovation and Emissions Reduction ("TIER") regulation are initially recorded at the value prescribed by the Alberta TIER fund compliance rates in effect at the time the credits are recognized.

## **(T) COMPREHENSIVE INCOME (LOSS)**

Comprehensive income (loss) is comprised of the Company's net earnings and other comprehensive income (loss). Other comprehensive income (loss) includes the effective portion of changes in the fair value of derivative financial instruments designated as cash flow hedges and foreign currency translation gains and losses arising from the net investment in foreign operations that do not have a Canadian dollar functional currency. Other comprehensive income (loss) is shown net of related income taxes.

## **(U) PER COMMON SHARE AMOUNTS**

The Company calculates basic earnings per common share by dividing net earnings by the weighted average number of common shares outstanding during the period. As the Company's Option Plan allows for the settlement of stock options in either cash or shares at the option of the holder, diluted earnings per common share is calculated using the more dilutive of cash settlement or share settlement under the treasury stock method.

## **(V) SHARE CAPITAL**

Common shares are classified as equity. Costs directly attributable to the issue of new shares or options are included in equity as a deduction from proceeds, net of tax. When the Company acquires its own common shares, share capital is reduced by the average carrying value of the shares purchased. The excess of the purchase price over the average carrying value is recognized as a reduction of retained earnings. Shares are cancelled upon purchase.

## **(W) DIVIDENDS**

Dividends on common shares are recognized in the Company's financial statements in the period in which the dividends are declared by the Board of Directors.

## 2. Changes in Accounting Policies

In August 2020, the IASB issued Interest Rate Benchmark Reform (Phase 2) in response to the Financial Stability Board's mandated reforms to InterBank Offered Rates ("IBORs"), with financial regulators proposing that current IBOR benchmark rates be replaced by a number of new local currency denominated alternative benchmark rates. The Company adopted the amendments on January 1, 2021. Adoption of these amendments did not have a significant impact on the Company's financial statements.

## 3. Accounting Standards Issued But Not Yet Applied

In May 2020, the IASB issued amendments to IAS 16 "Property, Plant and Equipment" to require proceeds received from selling items produced while the entity is preparing the asset for its intended use to be recognized in net earnings, rather than as a reduction in the cost of the asset. The amendments were adopted January 1, 2022 and did not have a significant impact on the Company's consolidated financial statements.

In January 2020, the IASB issued amendments to IAS 1 "Presentation of Financial Statements" to clarify that liabilities are classified as either current or non-current, depending on the existence of the substantive right at the end of the reporting period for an entity to defer settlement of the liability for at least twelve months after the reporting period. The amendments are effective January 1, 2023 with early adoption permitted. The amendments are required to be adopted retrospectively. The Company is assessing the impact of these amendments on its consolidated financial statements.

In February 2021 the IASB issued amendments to IAS 1 to require entities to disclose their material accounting policy information rather than their significant accounting policies. To support this amendment the IASB also amended IFRS Practice Statement 2 "Making Materiality Judgements". The amendments are effective January 1, 2023 with earlier adoption permitted. The Company is assessing the impact of this amendment on its accounting policy disclosure.

In May 2021, the IASB issued amendments to IAS 12 "Income Taxes" to require companies to recognize deferred tax on particular transactions that, on initial recognition, give rise to equal amounts of taxable and deductible temporary differences. The amendments are effective January 1, 2023 with early adoption permitted. The amendments are required to be adopted retrospectively. The Company is assessing the impact of these amendments on its consolidated financial statements.

## 4. Critical Accounting Estimates and Judgements

The Company has made estimates, assumptions and judgements regarding certain assets, liabilities, revenues and expenses in the preparation of the consolidated financial statements, primarily related to unsettled transactions and events as of the date of the consolidated financial statements. Accordingly, actual results may differ from estimated amounts. The estimates, assumptions and judgements that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are addressed below.

### (A) CRUDE OIL AND NATURAL GAS RESERVES

Purchase price allocations, depletion, depreciation and amortization, asset retirement obligations, and amounts used in impairment calculations are based on estimates of crude oil and natural gas reserves. Reserves estimates are based on engineering data, estimated future prices and production costs, expected future rates of production, and the timing and amount of future development expenditures, all of which are subject to many uncertainties, interpretations and judgements including the potential impact of climate related matters and in accordance with related government regulations. The Company expects that, over time, its reserves estimates will be revised upward or downward based on updated information.

### (B) ASSET RETIREMENT OBLIGATIONS

The Company provides for asset retirement obligations on its property, plant and equipment based on current legislation and operating practices. Estimated future costs include assumptions of dates of future abandonment and technological advances and estimates of future inflation rates and discount rates. Actual costs may vary from the estimated provision due to changes in environmental legislation, the impact of inflation, changes in technology, changes in operating practices, changes in the date of abandonment due to changes in reserves life, and the potential impact of climate related matters and in accordance with related government regulations. These differences may have a material impact on the estimated provision.

### (C) INCOME TAXES

The Company is subject to income taxes in numerous legal jurisdictions. Accounting for income taxes requires the Company to interpret frequently changing laws and regulations, including changing income tax rates, and make certain judgements with respect to the application of tax law, estimating the timing of temporary difference reversals, and estimating the realizability of tax assets. There are many transactions and calculations for which the ultimate tax determination is uncertain. The Company recognizes a liability for a tax filing position based on its assessment of the probability that additional taxes may ultimately be due.

## **(D) FAIR VALUE OF DERIVATIVES AND OTHER FINANCIAL INSTRUMENTS**

The fair value of financial instruments that are not traded in an active market is determined using valuation techniques. The Company uses its judgement to select a variety of methods and make assumptions that are primarily based on market conditions existing at the end of each reporting period. The Company uses directly and indirectly observable inputs in measuring the value of financial instruments that are not traded in active markets, including quoted commodity prices and volatility, interest rate yield curves and foreign exchange rates.

## **(E) PURCHASE PRICE ALLOCATIONS**

Purchase prices related to business combinations are allocated to the underlying acquired assets and liabilities based on their estimated fair value at the time of acquisition. The determination of fair value requires the Company to make estimates, assumptions and judgements regarding future events. The allocation process is inherently subjective and impacts the amounts assigned to individually identifiable assets and liabilities, including the fair value of crude oil and natural gas properties together with deferred income tax effects. As a result, the purchase price allocation impacts the Company's reported assets and liabilities and future net earnings due to the impact on future depletion, depreciation, and amortization expense and impairment tests.

## **(F) SHARE-BASED COMPENSATION**

The Company has made various assumptions in estimating the fair values of stock options granted under its Option Plan, including expected volatility, expected exercise timing and future forfeiture rates. At each period end, stock options outstanding are remeasured for changes in the estimated fair value of the liability.

## **(G) IDENTIFICATION OF CGUs**

CGUs are defined as the lowest grouping of integrated assets that generate identifiable cash inflows that are largely independent of the cash inflows of other assets or groups of assets. The classification of assets into CGUs requires significant judgement and interpretations with respect to the integration between assets, the existence of active markets, shared infrastructures, and the way in which management monitors the Company's operations.

## **(H) IMPAIRMENT OF ASSETS**

The recoverable amount of a CGU or an individual asset has been determined as the higher of the CGUs' or the assets' fair value less costs of disposal and its value in use. These calculations require the use of estimates and assumptions and are subject to change as new information becomes available, including information on future commodity prices, expected production volumes, quantity of reserves, asset retirement obligations, future development and operating costs, after-tax discount rates (currently ranging from 10% to 12%), and income taxes. Changes in assumptions used in determining the recoverable amount could affect the carrying value of the related assets and CGUs.

## **(I) LEASES**

Purchase, extension and termination options are included in certain of the Company's leases to provide operational flexibility. To measure the lease liability, the Company uses judgement to assess the likelihood of exercising these options. These assessments are reviewed when significant events or circumstances indicate that the likelihood of exercising these options may have changed. The Company also uses estimates to determine its incremental borrowing costs if the interest rate implicit in the lease is not readily determinable.

## **(J) CONTINGENCIES**

Contingencies are subject to measurement uncertainty as the related financial impact will only be confirmed by the outcome of a future event. The assessment of contingencies requires the application of judgements and estimates including the determination of whether a present obligation exists and the reliable estimation of the timing and amount of cash flows required to settle the contingency.

## **(K) IMPACT OF COVID-19**

For the year ended December 31, 2021, COVID-19 continued to have an impact on the global economy, including the oil and gas industry. Business conditions in 2021 continued to reflect the market uncertainty associated with COVID-19. The Company has taken into account the impacts of COVID-19 and the unique circumstances it has created in making estimates, assumptions and judgements in the preparation of these consolidated financial statements, and continues to monitor the developments in the business environment and commodity market. Actual results may differ from estimated amounts, and those differences may be material.

## 5. Inventory

	2021		2020	
Product inventory	\$	535	\$	390
Materials, supplies and other		1,013		670
	\$	1,548	\$	1,060

## 6. Exploration and Evaluation Assets

	Exploration and Production			Oil Sands Mining and Upgrading		Total				
	North America	North Sea	Offshore Africa							
<b>Cost</b>										
At December 31, 2019	\$	2,258	\$	—	\$	69	\$	252	\$	2,579
Additions/Acquisitions		40		—		15		—		55
Transfers to property, plant and equipment		(194)		—		—		—		(194)
Derecognitions and other		(3)		—		—		—		(3)
Foreign exchange adjustments		—		—		(1)		—		(1)
At December 31, 2020		2,101		—		83		252		2,436
Additions/Acquisitions		30		—		8		—		38
Transfers to property, plant and equipment		(73)		—		—		(150)		(223)
Derecognitions and other		(1)		—		—		—		(1)
At December 31, 2021	\$	2,057	\$	—	\$	91	\$	102	\$	2,250

On December 17, 2021, the Company completed the acquisition of all the issued and outstanding common shares of Storm Resources Ltd. ("Storm") for total cash consideration of \$771 million, including \$13 million of exploration and evaluation assets (note 7).

During 2020, the Company completed the acquisition of all the issued and outstanding shares of Painted Pony Energy Ltd. ("Painted Pony") for total cash consideration of \$111 million, including \$15 million of exploration and evaluation assets (note 7).

During 2019, the Company completed the acquisition of substantially all the assets of Devon Canada Corporation ("Devon") including thermal in situ and heavy crude oil assets, for total cash consideration of \$3,412 million, including \$91 million of exploration and evaluation assets (note 7).

## 7. Property, Plant and Equipment

	Exploration and Production			Oil Sands Mining and Upgrading	Midstream and Refining	Head Office	Total
	North America	North Sea	Offshore Africa				
<b>Cost</b>							
At December 31, 2019	\$ 72,627	\$ 7,296	\$ 3,933	\$ 45,016	\$ 451	\$ 466	\$ 129,789
Additions/Acquisitions	1,789	104	94	1,328	6	19	3,340
Transfers from E&E assets	194	—	—	—	—	—	194
Derecognitions and other <sup>(1)</sup>	(521)	(3)	—	(634)	—	—	(1,158)
Disposals	(92)	—	—	—	—	—	(92)
Foreign exchange adjustments and other	—	(114)	(64)	—	—	—	(178)
At December 31, 2020	73,997	7,283	3,963	45,710	457	485	131,895
Additions/Acquisitions	<b>4,146</b>	<b>208</b>	<b>48</b>	<b>1,526</b>	<b>9</b>	<b>23</b>	<b>5,960</b>
Transfers from E&E assets	<b>73</b>	—	—	<b>150</b>	—	—	<b>223</b>
Derecognitions and other <sup>(1)</sup>	<b>(382)</b>	<b>3</b>	—	<b>(530)</b>	—	—	<b>(909)</b>
Foreign exchange adjustments and other	—	<b>(56)</b>	<b>(31)</b>	—	—	—	<b>(87)</b>
At December 31, 2021	<b>\$ 77,834</b>	<b>\$ 7,438</b>	<b>\$ 3,980</b>	<b>\$ 46,856</b>	<b>\$ 466</b>	<b>\$ 508</b>	<b>\$ 137,082</b>
<b>Accumulated depletion and depreciation</b>							
At December 31, 2019	\$ 46,577	\$ 5,712	\$ 2,712	\$ 6,247	\$ 153	\$ 345	\$ 61,746
Expense	3,676	247	161	1,668	15	25	5,792
Derecognitions and other <sup>(1)</sup>	(521)	(3)	—	(634)	—	—	(1,158)
Disposals	(63)	—	—	—	—	—	(63)
Foreign exchange adjustments and other	(28)	(103)	(51)	8	—	—	(174)
At December 31, 2020	49,641	5,853	2,822	7,289	168	370	66,143
Expense	<b>3,468</b>	<b>149</b>	<b>118</b>	<b>1,733</b>	<b>15</b>	<b>25</b>	<b>5,508</b>
Derecognitions and other <sup>(1)</sup>	<b>(382)</b>	<b>3</b>	—	<b>(530)</b>	—	—	<b>(909)</b>
Foreign exchange adjustments and other	<b>5</b>	<b>(54)</b>	<b>(17)</b>	<b>7</b>	—	<b>(1)</b>	<b>(60)</b>
At December 31, 2021	<b>\$ 52,732</b>	<b>\$ 5,951</b>	<b>\$ 2,923</b>	<b>\$ 8,499</b>	<b>\$ 183</b>	<b>\$ 394</b>	<b>\$ 70,682</b>
<b>Net book value</b>							
- at December 31, 2021	<b>\$ 25,102</b>	<b>\$ 1,487</b>	<b>\$ 1,057</b>	<b>\$ 38,357</b>	<b>\$ 283</b>	<b>\$ 114</b>	<b>\$ 66,400</b>
- at December 31, 2020	\$ 24,356	\$ 1,430	\$ 1,141	\$ 38,421	\$ 289	\$ 115	\$ 65,752

(1) An asset is derecognized when no future economic benefits are expected to arise from its continued use or disposal.

As at December 31, 2021, the Company assessed the recoverability of its property, plant and equipment and its exploration and evaluation assets, and determined the carrying amounts of all of its cash generating units to be recoverable.

The Company capitalizes construction period interest for qualifying assets based on costs incurred and the Company's cost of borrowing. Interest capitalization to a qualifying asset ceases once the asset is substantially available for its intended use. During 2021, no interest was capitalized to property, plant and equipment (2020 – \$24 million at a weighted average capitalization rate of 3.5%; 2019 – \$53 million at a weighted average capitalization rate of 4.0%).

As at December 31, 2021, property, plant and equipment included project costs, not subject to depletion and depreciation, of \$118 million in the Oil Sands Mining and Upgrading segment (2020 – \$117 million in the Oil Sands Mining and Upgrading segment).

Acquisitions in the current and comparative years have been accounted for as business combinations using the acquisition method of accounting. Gains reported on the acquisitions represent the excess of the fair value of the net assets acquired compared to the total purchase consideration.

## ACQUISITIONS IN 2021

### Acquisition of Storm

On December 17, 2021, the Company completed the acquisition of all the issued and outstanding common shares of Storm for total cash consideration of \$771 million. Storm is involved in the exploration for and development of natural gas and natural gas liquids in the Montney region of British Columbia.

The acquisition has been accounted for using the acquisition method of accounting. The allocation of the purchase price was based on management's best estimates of the fair value of the assets acquired and liabilities assumed as of the acquisition date. The below amounts are estimates, and may be subject to change based on the receipt of new information.

The following provides a summary of the net assets acquired relating to the acquisition:

Property, plant and equipment	<b>\$</b>	<b>1,114</b>
Exploration and evaluation assets		<b>13</b>
Working capital		<b>20</b>
Long-term debt		<b>(183)</b>
Asset retirement obligations		<b>(18)</b>
Other long-term liabilities		<b>(35)</b>
Deferred tax liability		<b>(140)</b>
<b>Net assets acquired</b>	<b>\$</b>	<b>771</b>

In connection with the acquisition the Company assumed certain product transportation and processing commitments (note 20).

The impact of revenue and revenue, less production and transportation and blending expenses ("net operating income") generated by the acquisition from December 17, 2021 to December 31, 2021 was not significant. If the acquisition had been completed on January 1, 2021, the Company estimates that pro forma revenue would have increased by an additional \$294 million and pro forma net operating income would have increased by an additional \$205 million for the year ended December 31, 2021. Readers are cautioned that pro forma estimates are not necessarily indicative of the results of operations that would have resulted had the acquisition actually occurred on January 1, 2021, or of future results. Pro forma results are based on available historical information for the assets as provided to the Company and do not include any synergies that have or may arise subsequent to the acquisition date.

### Other Acquisitions in 2021

During 2021, the Company completed two acquisitions of gas producing assets and related processing infrastructure in the Montney region of British Columbia, including property, plant and equipment assets of \$257 million and exploration and evaluation assets of \$13 million, for cash consideration of \$131 million. In connection with the acquisitions, the Company assumed asset retirement obligations of \$58 million, other liabilities of \$65 million, and recognized a deferred tax asset of \$462 million. A gain of \$478 million was recognized as a result of the acquisitions, representing the excess of the fair value of the net assets acquired compared with the total purchase consideration.

## ACQUISITIONS IN 2020

### Acquisition of Painted Pony

On October 6, 2020, the Company completed the acquisition of all the issued and outstanding common shares of Painted Pony for total cash consideration of \$111 million.

The following provides a summary of the net assets acquired relating to the acquisition:

Property, plant and equipment	\$	750
Exploration and evaluation assets		15
Other long-term assets		204
Long-term debt		(397)
Asset retirement obligations		(13)
Other long-term liabilities		(442)
Deferred tax asset		211
Net assets acquired		328
Less: cash consideration		111
Gain on acquisition	\$	217

In connection with the acquisition the Company assumed certain product transportation and processing commitments (note 20).

## ACQUISITIONS IN 2019

### Acquisition of Thermal in Situ and Primary Heavy Crude Oil Assets

On June 27, 2019, the Company completed the acquisition of substantially all the assets of Devon including thermal in situ and heavy crude oil assets, for total cash consideration of \$3,412 million.

In connection with the acquisition, the Company arranged a \$3,250 million committed term facility (note 11) and assumed certain product transportation commitments (note 20).

The following provides a summary of the net assets acquired relating to the acquisition:

Property, plant and equipment	\$	3,325
Exploration and evaluation assets		91
Inventory, prepaids and other long-term assets		195
Accrued liabilities		(21)
Asset retirement obligations		(178)
Net assets acquired	\$	3,412

As a result of the acquisition, during the year ended December 31, 2019, revenue increased by approximately \$1,540 million and net operating income increased by approximately \$590 million.

### Other Acquisitions in 2019

During 2019, the Company acquired a number of producing crude oil and natural gas properties in the North America Exploration and Production segment for net cash consideration of \$80 million and assumed associated asset retirement obligations of \$20 million. No net deferred income tax liabilities were recognized and no pre-tax gains were recognized on these net transactions.

## 8. Leases

### LEASE ASSETS

	Product transportation and storage	Field equipment and power	Offshore vessels and equipment	Office leases and other	Total
At December 31, 2019	\$ 1,166	\$ 317	\$ 182	\$ 124	\$ 1,789
Additions <sup>(1)</sup>	17	121	7	3	148
Depreciation	(124)	(53)	(51)	(26)	(254)
Derecognitions	(20)	(5)	(10)	—	(35)
Foreign exchange adjustments and other	(1)	(1)	—	(1)	(3)
At December 31, 2020	\$ 1,038	\$ 379	\$ 128	\$ 100	\$ 1,645
Additions	<b>48</b>	<b>36</b>	<b>—</b>	<b>4</b>	<b>88</b>
Depreciation	<b>(110)</b>	<b>(57)</b>	<b>(27)</b>	<b>(22)</b>	<b>(216)</b>
Foreign exchange adjustments and other	<b>(2)</b>	<b>(4)</b>	<b>(2)</b>	<b>(1)</b>	<b>(9)</b>
At December 31, 2021	\$ <b>974</b>	\$ <b>354</b>	\$ <b>99</b>	\$ <b>81</b>	\$ <b>1,508</b>

(1) The acquisition of Painted Pony in 2020 included lease assets of \$93 million (note 7).

### LEASE ASSETS, BY SEGMENT

As at December 31, 2021 and 2020, the Company had the following lease assets by segment:

	2021	2020
Exploration and Production		
North America	\$ 308	\$ 345
North Sea	1	7
Offshore Africa	101	126
Oil Sands Mining and Upgrading	1,027	1,080
Head office	71	87
	\$ 1,508	\$ 1,645

### LEASE LIABILITIES

The Company measures its lease liabilities at the discounted value of its lease payments during the lease term. Lease liabilities at December 31, 2021 and 2020, were as follows:

	2021	2020
Lease liabilities	\$ 1,584	\$ 1,690
Less: current portion	185	189
	\$ 1,399	\$ 1,501

In addition to the lease assets disclosed above, on an ongoing basis the Company enters into short-term leases related to its Exploration and Production and Oil Sands Mining and Upgrading activities.

Other amounts included in net earnings and cash flows during 2021 and 2020 are provided below:

	2021	2020
Expenses relating to short-term leases <sup>(1)</sup>	\$ 450	\$ 409
Interest expense on lease liabilities	62	67
Variable lease payments not included in the measurement of lease liabilities	65	85
Total cash outflows for leases <sup>(2)</sup>	\$ 1,089	\$ 983

(1) During 2021, the Company capitalized \$303 million (2020 - \$197 million) of short-term leases as additions to property, plant and equipment.

(2) Comprised of cash outflows relating to lease liabilities, short-term leases, and variable lease payments.

## 9. Investments

As at December 31, 2021 and 2020, the Company had the following investments:

	2021	2020
Investment in PrairieSky Royalty Ltd.	\$ 309	\$ 228
Investment in Inter Pipeline Ltd.	—	77
	<b>\$ 309</b>	<b>\$ 305</b>

### INVESTMENT IN PRAIRIESKY ROYALTY LTD.

The Company's investment of 22.6 million common shares of PrairieSky Royalty Ltd. ("PrairieSky") does not constitute significant influence, and is accounted for at fair value through profit or loss, measured at each reporting date. As at December 31, 2021 the market price per common share was \$13.63 (December 31, 2020 – \$10.09; December 31, 2019 – \$15.23). As at December 31, 2021, the Company's investment in PrairieSky was classified as a current asset. PrairieSky is in the business of acquiring and managing oil and gas royalty income assets through indirect third-party oil and gas development.

The (gain) loss from the investment in PrairieSky was comprised as follows:

	2021	2020	2019
(Gain) loss from investment	\$ (81)	\$ 117	\$ 55
Dividend income	(7)	(9)	(17)
	<b>\$ (88)</b>	<b>\$ 108</b>	<b>\$ 38</b>

### INVESTMENT IN INTER PIPELINE LTD.

During 2021, in accordance with a third-party offer to purchase, the Company elected to take total cash proceeds of \$128 million, or \$20.00 per common share, in exchange for its 6.4 million common share investment in Inter Pipeline Ltd ("Inter Pipeline"). The Company's investment did not constitute significant influence, and was accounted for at fair value through profit or loss, measured at each reporting date. The market price per common share as at December 31, 2020 and December 31, 2019 was \$11.87 and \$22.54, respectively.

The (gain) loss from the investment in Inter Pipeline was comprised as follows:

	2021	2020	2019
(Gain) loss from investment	\$ (51)	\$ 68	\$ (21)
Dividend income	(2)	(5)	(11)
	<b>\$ (53)</b>	<b>\$ 63</b>	<b>\$ (32)</b>

## 10. Other Long-Term Assets

	2021	2020
North West Redwater Partnership	\$ —	\$ 555
Prepaid cost of service toll	157	162
Risk management (note 19)	140	136
Long-term inventory	126	121
Other <sup>(1)</sup>	177	190
	<b>600</b>	<b>1,164</b>
Less: current portion	35	82
	<b>\$ 565</b>	<b>\$ 1,082</b>

(1) The acquisition of Painted Pony in 2020 included physical sales contracts (note 7).

## INVESTMENT IN NORTH WEST REDWATER PARTNERSHIP

The Company has a 50% equity investment in NWRP. NWRP operates a 50,000 barrels per day bitumen upgrader and refinery that processes approximately 12,500 barrels per day (25% toll payer) of bitumen feedstock for the Company and 37,500 barrels per day (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 (note 20). Sales of diesel and refined products and associated refining tolls are recognized in the Midstream and Refining segment (note 22).

On June 30, 2021, the equity partners together with the toll payers, agreed to optimize the structure of NWRP to better align the commercial interests of the equity partners and the toll payers (the "Optimization Transaction"). As a result, North West Refining Inc. transferred its entire 50% partnership interest in NWRP to APMC. The Company's 50% equity interest remained unchanged.

Under the Optimization Transaction, the original term of the processing agreements was extended by 10 years from 2048 to 2058. NWRP retired higher cost subordinated debt, which carried interest rates of prime plus 6%, with lower cost senior secured bonds at an average rate of approximately 2.55%, reducing interest costs to NWRP and associated tolls to the toll payers. As such, NWRP repaid the Company's and APMC's subordinated debt advances of \$555 million each. In addition, the Company received a \$400 million distribution from NWRP during 2021.

To facilitate the Optimization Transaction, NWRP issued \$500 million of 1.20% series L senior secured bonds due December 2023, \$500 million of 2.00% series M senior secured bonds due December 2026, \$1,000 million of 2.80% series N senior secured bonds due June 2031, and \$600 million of 3.75% series O senior secured bonds due June 2051. Additionally, NWRP's existing \$3,500 million syndicated credit facility was amended. The \$2,000 million revolving credit facility was extended by three years to June 2024, and the \$1,500 million non-revolving credit facility was reduced by \$500 million to \$1,000 million and extended by two years to June 2023. As at December 31, 2021, NWRP had borrowings of \$1,981 million under the syndicated credit facility (December 31, 2020 – \$2,866 million).

The assets, liabilities, partners' equity, product sales and equity loss related to NWRP at December 31, 2021 and 2020 were comprised as follows:

	2021	2020
Current assets	\$ 280	\$ 230
Non-current assets	\$ 10,806	\$ 11,098
Current liabilities	\$ 798	\$ 3,146
Non-current liabilities	\$ 11,412	\$ 8,488
Partners' equity <sup>(1)</sup>	\$ (1,124)	\$ (306)
Partners' equity <sup>(1)</sup> at Company's 50% interest	\$ (562)	\$ (153)
Revenue <sup>(2)</sup>	\$ 1,168	\$ 1,348
Net loss <sup>(3)</sup>	\$ 18	\$ 188

(1) In 2021, NWRP paid partnership distributions at 100% interest of \$800 million.

(2) Included in NWRP's revenue for 2021 is \$294 million (2020 – \$174 million) paid by the Company for its 25% share of the refining toll.

(3) Included in the net loss for 2021 is the impact of depreciation and amortization expense of \$278 million (2020 – \$214 million) and interest and other financing expense of \$412 million (2020 – \$420 million).

The carrying value of the Company's interest in NWRP is \$nil, and as at December 31, 2021, the cumulative unrecognized share of the equity loss and partnership distributions from NWRP was \$562 million (2020 – \$153 million). The unrecognized share of the equity loss from NWRP for 2021 was \$9 million and partnership distributions were \$400 million (2020 – unrecognized equity loss of \$94 million; 2019 – recognized equity loss of \$287 million and unrecognized equity loss of \$59 million).

## 11. Long-Term Debt

	2021	2020
<b>Canadian dollar denominated debt, unsecured</b>		
Bank credit facilities	\$ —	\$ 1,614
Medium-term notes		
3.31% debentures due February 11, 2022	1,000	1,000
1.45% debentures due November 16, 2023	500	500
3.55% debentures due June 3, 2024	500	500
3.42% debentures due December 1, 2026	600	600
2.50% debentures due January 17, 2028	300	300
4.85% debentures due May 30, 2047	300	300
	<b>3,200</b>	4,814
<b>US dollar denominated debt, unsecured</b>		
Bank credit facilities (December 31, 2021 – US\$901 million; December 31, 2020 – US\$3,953 million)	1,140	5,041
Commercial paper (December 31, 2021 – US\$nil; December 31, 2020 – US\$426 million)	—	544
US dollar debt securities		
3.45% due November 15, 2021 (US\$500 million)	—	638
2.95% due January 15, 2023 (US\$1,000 million)	1,266	1,276
3.80% due April 15, 2024 (US\$500 million)	633	638
3.90% due February 1, 2025 (US\$600 million)	759	765
2.05% due July 15, 2025 (US\$600 million)	759	765
3.85% due June 1, 2027 (US\$1,250 million)	1,582	1,595
2.95% due July 15, 2030 (US\$500 million)	633	638
7.20% due January 15, 2032 (US\$400 million)	506	510
6.45% due June 30, 2033 (US\$350 million)	443	446
5.85% due February 1, 2035 (US\$350 million)	443	446
6.50% due February 15, 2037 (US\$450 million)	570	574
6.25% due March 15, 2038 (US\$1,100 million)	1,392	1,403
6.75% due February 1, 2039 (US\$400 million)	506	510
4.95% due June 1, 2047 (US\$750 million)	949	957
	<b>11,581</b>	16,746
Long-term debt before transaction costs and original issue discounts, net	<b>14,781</b>	21,560
Less: original issue discounts, net <sup>(1)</sup>	15	18
transaction costs <sup>(1) (2)</sup>	72	89
	<b>14,694</b>	21,453
Less: current portion of commercial paper	—	544
current portion of other long-term debt <sup>(1) (2)</sup>	1,000	799
	<b>\$ 13,694</b>	<b>\$ 20,110</b>

(1) The Company has included unamortized original issue discounts and premiums, and directly attributable transaction costs in the carrying amount of the outstanding debt.

(2) Transaction costs primarily represent underwriting commissions charged as a percentage of the related debt offerings, as well as legal, rating agency and other professional fees.

## **BANK CREDIT FACILITIES AND COMMERCIAL PAPER**

As at December 31, 2021, the Company had undrawn bank credit facilities of \$6,098 million. Additionally, the Company had in place fully drawn term credit facilities of \$1,150 million. Details of these facilities are described below. The Company also has certain other dedicated credit facilities supporting letters of credit.

- a \$100 million demand credit facility;
- a \$1,000 million term credit facility maturing February 2023;
- a \$1,150 million non-revolving term credit facility maturing February 2023;
- a \$2,495 million revolving syndicated credit facility, with \$70 million maturing June 2022, and \$2,425 million maturing June 2024;
- a \$2,495 million revolving syndicated credit facility, with \$70 million maturing June 2023, and \$2,425 million maturing June 2025; and
- a £5 million demand credit facility related to the Company's North Sea operations.

Borrowings under the Company's non-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 2021, the Company extended both of its \$2,425 million revolving credit facilities originally maturing June 2022 and June 2023, to June 2024 and June 2025, respectively and increased each by \$70 million. In accordance with the terms of the extension, and by mutual agreement, \$70 million of the original revolving credit facilities were not extended and will mature upon the original maturity date of June 2022 and June 2023, respectively. The revolving syndicated credit facilities are extendible annually at the mutual agreement of the Company and the lenders. If the facilities are not extended, the full amount of the outstanding principal would be repayable on the maturity date. 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, US base rate or Canadian prime rate.

During 2021, the \$1,000 million non-revolving term credit facility originally due February 2022, was extended to February 2023. Additionally in 2021, the facility was fully repaid and amended to allow for a re-draw of the full \$1,000 million until March 31, 2022.

During 2021, the Company repaid \$1,500 million of the \$2,650 million non-revolving term credit facility due February 2023, reducing the outstanding balance to \$1,150 million.

During 2019, the Company entered into a \$3,250 million non-revolving term credit facility with an original maturity of June 2022, to finance the acquisition of assets from Devon (note 7). During 2021, the outstanding balance of \$3,088 million was repaid and the facility was cancelled.

The Company's borrowings under its US commercial paper program are authorized up to a maximum US\$2,500 million. The Company reserves capacity under its revolving bank credit facilities for amounts outstanding under this program.

The Company's weighted average interest rate on bank credit facilities and commercial paper outstanding as at December 31, 2021 was 0.8% (December 31, 2020 – 1.1%), and on total long-term debt outstanding for the year ended December 31, 2021 was 3.5% (December 31, 2020 – 3.5%).

As at December 31, 2021, letters of credit and guarantees aggregating to \$513 million were outstanding (December 31, 2020 - \$489 million).

## **MEDIUM-TERM NOTES**

During 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 2020, the Company issued \$500 million of 1.45% medium-term notes due November 2023 and \$300 million of 2.50% medium-term notes due January 2028.

During 2020, the Company repaid \$1,000 million of 2.89% medium term notes and \$900 million of 2.05% medium term notes.

## **US DOLLAR DEBT SECURITIES**

During 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.

During 2021, the Company repaid US\$500 million of 3.45% debt securities.

During 2020, the Company issued US\$600 million of 2.05% notes due July 2025 and US\$500 million of 2.95% notes due July 2030.

## SCHEDULED DEBT REPAYMENTS

Scheduled debt repayments are as follows:

Year	Repayment
2022	\$ 1,000
2023	\$ 2,906
2024	\$ 1,133
2025	\$ 1,518
2026	\$ 600
Thereafter	\$ 7,624

## 12. Other Long-Term Liabilities

	2021	2020
Asset retirement obligations	\$ 6,806	\$ 5,861
Lease liabilities (note 8)	1,584	1,690
Share-based compensation	489	160
Risk management (note 19)	85	160
Transportation and processing contracts <sup>(1)</sup>	241	270
Other <sup>(2)</sup>	127	145
	<b>9,332</b>	8,286
Less: current portion	<b>948</b>	722
	<b>\$ 8,384</b>	\$ 7,564

(1) The acquisition of Painted Pony in 2020 included product transportation and processing obligations (note 7).

(2) Includes \$48 million (2020 – \$72 million) related to the acquisition of the Joslyn oil sands project in 2018, payable in annual installments of \$25 million.

## ASSET RETIREMENT OBLIGATIONS

The Company's asset retirement obligations are expected to be settled on an ongoing basis over a period of approximately 60 years and discounted using a weighted average discount rate of 4.0% (2020 – 3.7%; 2019 – 3.8%) and inflation rates of up to 2% (December 31, 2020 – up to 2%). Reconciliations of the discounted asset retirement obligations were as follows:

	2021	2020	2019
Balance – beginning of year	\$ 5,861	\$ 5,771	\$ 3,886
Liabilities incurred	5	5	15
Liabilities acquired, net	76	13	198
Liabilities settled	(307)	(249)	(296)
Asset retirement obligation accretion	185	205	190
Revision of cost and timing estimates	1,716	(134)	412
Change in discount rates	(723)	253	1,412
Foreign exchange adjustments	(7)	(3)	(46)
Balance – end of year	<b>6,806</b>	5,861	5,771
Less: current portion	<b>249</b>	184	208
	<b>\$ 6,557</b>	\$ 5,677	\$ 5,563

## Segmented Asset Retirement Obligations

	2021	2020
Exploration and Production		
North America	\$ 4,021	\$ 2,899
North Sea	821	787
Offshore Africa	170	174
Oil Sands Mining and Upgrading	1,793	1,999
Midstream and Refining	1	2
	<b>\$ 6,806</b>	<b>\$ 5,861</b>

## SHARE-BASED COMPENSATION

The liability for share-based compensation includes costs incurred under the Company's Option and PSU plans. The Company's Option Plan provides current employees with the right to elect to receive common shares or a cash payment in exchange for stock options surrendered. The 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 recognizes a liability for potential cash settlements under these plans. The current portion of the liability represents the maximum amount of the liability payable within the next twelve month period if all vested stock options and PSUs are settled in cash.

	2021	2020	2019
Balance – beginning of year	\$ 160	\$ 297	\$ 124
Share-based compensation expense (recovery)	514	(82)	223
Cash payment for stock options surrendered and PSUs vested	(48)	(39)	(2)
Transferred to common shares	(139)	(21)	(53)
Other	2	5	5
Balance – end of year	489	160	297
Less: current portion	329	119	227
	<b>\$ 160</b>	<b>\$ 41</b>	<b>\$ 70</b>

Included within share-based compensation liability as at December 31, 2021 was \$90 million (2020 – \$49 million; 2019 – \$62 million) related to PSUs granted to certain executive employees.

The fair value of stock options outstanding was estimated using the Black-Scholes valuation model with the following weighted average assumptions:

	2021	2020	2019
Fair value	\$ 16.98	\$ 3.47	\$ 7.88
Share price	\$ 53.45	\$ 30.59	\$ 42.00
Expected volatility	35.5%	39.8%	26.7%
Expected dividend yield	4.4%	5.6%	3.6%
Risk free interest rate	1.1%	0.3%	1.7%
Expected forfeiture rate	4.7%	4.3%	4.3%
Expected stock option life <sup>(1)</sup>	4.2 years	4.3 years	4.4 years

(1) At original time of grant.

The intrinsic value of vested stock options at December 31, 2021 was \$112 million (2020 – \$11 million; 2019 – \$75 million).

## 13. Income Taxes

The provision for income tax was as follows:

<b>Expense (recovery)</b>	<b>2021</b>	2020	2019
Current corporate income tax – North America	\$ 1,841	\$ (245)	\$ 354
Current corporate income tax – North Sea	7	(4)	112
Current corporate income tax – Offshore Africa	21	17	44
Current PRT <sup>(1)</sup> – North Sea	(34)	(31)	(89)
Other taxes	13	6	13
Current income tax	<b>1,848</b>	(257)	434
Deferred corporate income tax	<b>399</b>	(181)	(895)
Deferred PRT – North Sea	—	—	1
Deferred income tax	<b>399</b>	(181)	(894)
Income tax	\$ <b>2,247</b>	\$ (438)	\$ (460)

(1) Petroleum Revenue Tax.

The provision for income tax is different from the amount computed by applying the combined statutory Canadian federal and provincial income tax rates to earnings before taxes. The reasons for the difference are as follows:

	<b>2021</b>	2020	2019
Canadian statutory income tax rate	<b>23.2%</b>	24.1%	26.5%
Income tax provision at statutory rate	\$ <b>2,298</b>	\$ (211)	\$ 1,313
Effect on income taxes of:			
UK PRT and other taxes	<b>(21)</b>	(25)	(76)
Impact of deductible UK PRT and other taxes on corporate income tax	<b>11</b>	11	32
Foreign and domestic tax rate differentials	<b>(11)</b>	(52)	(48)
Non-taxable portion of capital gains	<b>(26)</b>	(10)	(65)
Stock options exercised for common shares	<b>98</b>	(25)	47
Income tax rate and other legislative changes	—	—	(1,618)
Non-taxable gain on corporate acquisitions	<b>(110)</b>	(52)	—
Revisions arising from prior year tax filings	<b>16</b>	(62)	(41)
Change in unrecognized capital loss carryforward asset	<b>(26)</b>	(10)	(65)
Other	<b>18</b>	(2)	61
Income tax	\$ <b>2,247</b>	\$ (438)	\$ (460)

The following table summarizes the temporary differences that give rise to the net deferred income tax liability:

	2021	2020
Deferred income tax liabilities		
Property, plant and equipment and exploration and evaluation assets	\$ 12,254	\$ 11,922
Lease assets	349	380
Investments	35	14
Investment in North West Redwater Partnership	850	767
Unrealized risk management activities	12	—
Unrealized foreign exchange gain on long-term debt	14	—
Other	78	8
	<b>13,592</b>	13,091
Deferred income tax assets		
Asset retirement obligations	(1,719)	(1,495)
Lease liabilities	(363)	(388)
Share-based compensation	(22)	(12)
Loss carryforwards	(1,268)	(1,032)
Unrealized foreign exchange loss on long-term debt	—	(20)
	<b>(3,372)</b>	(2,947)
Net deferred income tax liability	<b>\$ 10,220</b>	\$ 10,144

Movements in deferred tax assets and liabilities recognized in net earnings during the year were as follows:

	2021	2020	2019
Property, plant and equipment and exploration and evaluation assets	\$ 184	\$ (158)	\$ (775)
Lease assets	(30)	(11)	414
Unrealized foreign exchange on long-term debt	34	29	55
Unrealized risk management activities	19	(8)	(14)
Asset retirement obligations	(213)	(13)	(317)
Lease liabilities	25	6	(418)
Share-based compensation	(10)	4	(11)
Loss carryforwards	202	(182)	170
Investments	21	(22)	(10)
Investment in North West Redwater Partnership	83	174	179
Deferred PRT	—	—	1
Other	84	—	(168)
	<b>\$ 399</b>	\$ (181)	\$ (894)

The following table summarizes the movements of the net deferred income tax liability during the year:

	2021	2020	2019
Balance – beginning of year	\$ 10,144	\$ 10,539	\$ 11,451
Deferred income tax expense (recovery)	399	(181)	(894)
Deferred income tax expense included in other comprehensive loss	1	—	8
Foreign exchange adjustments	(2)	(3)	(26)
Business combinations (note 7)	(322)	(211)	—
Balance – end of year	<b>\$ 10,220</b>	\$ 10,144	\$ 10,539

Current income taxes recognized in each operating segment will vary depending upon available income tax deductions related to the nature, timing and amount of capital expenditures incurred in any particular year.

During 2019, the Government of Alberta enacted legislation that decreased the provincial corporate income tax rate from 12% to 11% effective July 2019, with a further 1% rate reduction every year on January 1 until the provincial corporate income tax rate is 8% on January 1, 2022. As a result of this corporate income tax rate reduction, the Company's deferred corporate income tax liability decreased by \$1,618 million for the year ended December 31, 2019. During 2020, the Government of Alberta substantively enacted legislation to accelerate this reduction, lowering the corporate tax rate from 10% to 8%, effective July 1, 2020. This acceleration did not have a significant impact on the Company's deferred corporate income tax liability at December 31, 2020.

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.

Deferred income tax assets are recognized for temporary differences to the extent that the realization of the related tax benefit through future taxable profits is probable. The Company has not recognized deferred income tax assets with respect to taxable capital loss carryforwards in excess of \$1,000 million in North America, which can be carried forward indefinitely and only applied against future taxable capital gains. In addition, the Company has not recognized deferred income tax assets related to North American tax pools of approximately \$1,050 million, which can only be claimed against income from certain oil and gas properties.

Deferred income tax liabilities have not been recognized on the unremitted net earnings of wholly controlled subsidiaries. The Company is able to control the timing and amount of distributions and no taxes are payable on distributions from these subsidiaries provided that the distributions remain within certain limits.

## 14. Share Capital

### AUTHORIZED

Preferred shares issuable in a series.

Unlimited number of common shares without par value.

	2021		2020	
	Number of shares (thousands)	Amount	Number of shares (thousands)	Amount
<b>Issued Common Shares</b>				
Balance – beginning of year	1,183,866	\$ 9,606	1,186,857	\$ 9,533
Issued upon exercise of stock options	18,147	707	3,979	108
Previously recognized liability on stock options exercised for common shares	—	139	—	21
Purchase of common shares under Normal Course Issuer Bid	(33,644)	(284)	(6,970)	(56)
Balance – end of year	1,168,369	\$ 10,168	1,183,866	\$ 9,606

### PREFERRED SHARES

Preferred shares are issuable in a series. If issued, the number of shares in each series, and the designation, rights, privileges, restrictions and conditions attached to the shares will be determined by the Board of Directors of the Company.

### DIVIDEND POLICY

The Company has paid regular quarterly dividends in each year since 2001. The dividend policy undergoes periodic review by the Board of Directors and is subject to change.

On March 2, 2022, the Board of Directors approved a 28% increase in the quarterly dividend to \$0.75 per common share, beginning with the dividend payable on April 5, 2022. On November 3, 2021, the Board of Directors approved a 25% increase in the quarterly dividend to \$0.5875 per common share, from \$0.47 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. On March 4, 2020, the Board of Directors approved a 13% increase in the quarterly dividend to \$0.425 per common share, from \$0.375 per common share. On March 6, 2019, the Board of Directors approved a 12% increase in the quarterly dividend to \$0.375 per common share, from \$0.335 per common share. The dividend policy undergoes periodic review by the Board of Directors and is subject to change.

## NORMAL COURSE ISSUER BID

On March 9, 2021, 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 59,278,474 common shares, over a 12-month period commencing March 11, 2021 and ending March 10, 2022.

For the year ended December 31, 2021, the Company purchased 33,644,400 common shares at a weighted average price of \$46.98 per common share for a total cost of \$1,581 million. Retained earnings were reduced by \$1,297 million, representing the excess of the purchase price of common shares over their average carrying value. Subsequent to December 31, 2021, the Company purchased 10,500,000 common shares at a weighted average price of \$64.79 per common share for a total cost of \$680 million.

On March 2, 2022, the Board of Directors approved a resolution authorizing the Company to file a Notice of Intention with the TSX to purchase, by way of a 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.

## SHARE-BASED COMPENSATION – STOCK OPTIONS

The Company's Option Plan provides for the granting of stock options to employees. Stock options granted under the Option Plan have terms ranging from five to six years to expiry and vest over a five-year period. The exercise price of each stock option granted is determined at the closing market price of the common shares on the TSX on the day prior to the grant. Each stock option granted provides the holder the choice to purchase one common share of the Company at the stated exercise price or receive a cash payment equal to the difference between the stated exercise price and the market price of the Company's common shares on the date of surrender of the stock option.

The Option Plan is a "rolling 7%" plan, whereby the aggregate number of common shares that may be reserved for issuance under the plan shall not exceed 7% of the common shares outstanding from time to time.

The following table summarizes information relating to stock options outstanding at December 31, 2021 and 2020:

	2021		2020	
	Stock options (thousands)	Weighted average exercise price	Stock options (thousands)	Weighted average exercise price
Outstanding – beginning of year	48,656	\$ 37.53	47,646	\$ 38.04
Granted	12,547	\$ 34.39	12,032	\$ 32.89
Exercised for common shares	(18,147)	\$ 38.97	(3,979)	\$ 27.24
Surrendered for cash settlement	(1,324)	\$ 40.54	(757)	\$ 29.34
Forfeited	(3,405)	\$ 35.73	(6,286)	\$ 39.65
Outstanding – end of year	38,327	\$ 35.88	48,656	\$ 37.53
Exercisable – end of year	7,841	\$ 39.19	17,970	\$ 39.59

The range of exercise prices of stock options outstanding and exercisable at December 31, 2021 was as follows:

Range of exercise prices	Stock options outstanding			Stock options exercisable		
	Stock options outstanding (thousands)	Weighted average remaining term (years)	Weighted average exercise price	Stock options exercisable (thousands)	Weighted average exercise price	
\$20.76 – \$24.99	2,697	3.31	\$ 20.95	566	\$ 20.76	
\$25.00 – \$29.99	7,526	4.21	\$ 29.21	1	\$ 28.63	
\$30.00 – \$34.99	2,726	3.58	\$ 32.37	219	\$ 32.56	
\$35.00 – \$39.99	15,227	2.59	\$ 37.46	3,148	\$ 37.34	
\$40.00 – \$44.99	7,679	2.74	\$ 42.04	2,894	\$ 43.23	
\$45.00 – \$49.99	1,839	1.42	\$ 45.19	1,013	\$ 45.14	
\$50.00 – \$54.24	633	5.83	\$ 54.24	—	\$ —	
	38,327	3.06	\$ 35.88	7,841	\$ 39.19	

## 15. Accumulated Other Comprehensive (Loss) Income

The components of accumulated other comprehensive (loss) income, net of taxes, were as follows:

	2021	2020
Derivative financial instruments designated as cash flow hedges	\$ 77	\$ 69
Foreign currency translation adjustment	(78)	(61)
	<b>\$ (1)</b>	<b>\$ 8</b>

## 16. Capital Disclosures

The Company has defined its capital to mean its long-term debt and consolidated shareholders' equity, as determined at each reporting date.

The Company's objectives when managing its capital structure are to maintain financial flexibility and balance to enable the Company to access capital markets to sustain its on-going operations and to support its growth strategies. The Company primarily monitors capital on the basis of an internally derived financial measure referred to as its "debt to book capitalization ratio", which is the arithmetic ratio of current long-term debt and long-term debt less cash and cash equivalents divided by the sum of the carrying value of shareholders' equity plus current long-term debt and long-term debt less cash and cash equivalents. The Company's internal targeted range for its debt to book capitalization ratio is 25% to 45%. 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 flow from operating activities is greater than current investment activities. At December 31, 2021, the ratio was within the target range at 27%.

Readers are cautioned that the debt to book capitalization ratio is not defined by IFRS and this financial measure may not be comparable to similar measures presented by other companies. Further, there are no assurances that the Company will continue to use this measure to monitor capital or will not alter the method of calculation of this measure in the future.

	2021	2020
Long-term debt	\$ 14,694	\$ 21,453
Less: cash and cash equivalents	744	184
Long-term debt, net	\$ 13,950	\$ 21,269
Total shareholders' equity	\$ 36,945	\$ 32,380
Debt to book capitalization	<b>27%</b>	40%

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%. At December 31, 2021, the Company was in compliance with this covenant.

## 17. Net Earnings Per Common Share

	2021	2020	2019
Weighted average common shares outstanding			
– basic (thousands of shares)	<b>1,181,250</b>	1,181,768	1,190,977
Effect of dilutive stock options (thousands of shares)	<b>5,307</b>	—	2,129
Weighted average common shares outstanding			
– diluted (thousands of shares)	<b>1,186,557</b>	1,181,768	1,193,106
Net earnings (loss)	<b>\$ 7,664</b>	\$ (435)	\$ 5,416
Net earnings (loss) per common share			
– basic	<b>\$ 6.49</b>	\$ (0.37)	\$ 4.55
– diluted	<b>\$ 6.46</b>	\$ (0.37)	\$ 4.54

In 2021, the Company excluded 3,496,000 potentially anti-dilutive stock options from the calculation of diluted earnings per common share (year ended December 31, 2020 – 44,117,000; 2019 – 36,834,000).

## 18. Interest and Other Financing Expense

	2021		2020		2019	
Interest and other financing expense:						
Long-term debt	\$	681	\$	785	\$	895
Lease liabilities		62		67		70
Less: amounts capitalized on qualifying assets		—		(24)		(53)
Total interest and other financing expense		743		828		912
Total interest income and other		(32)		(72)		(76)
Net interest and other financing expense	\$	711	\$	756	\$	836

## 19. Financial Instruments

The carrying amounts of the Company's financial instruments by category were as follows:

2021						
Asset (liability)	Financial assets at amortized cost	Fair value through profit or loss	Derivatives used for hedging	Financial liabilities at amortized cost	Total	
Cash and cash equivalents	\$ 744	\$ —	\$ —	\$ —	\$	744
Accounts receivable	3,111	—	—	—		3,111
Investments	—	309	—	—		309
Other long-term assets	—	—	140	—		140
Accounts payable	—	—	—	(803)		(803)
Accrued liabilities	—	—	—	(3,064)		(3,064)
Other long-term liabilities <sup>(1)</sup>	—	(64)	(21)	(1,632)		(1,717)
Long-term debt <sup>(2)</sup>	—	—	—	(14,694)		(14,694)
	\$ 3,855	\$ 245	\$ 119	\$ (20,193)	\$	(15,974)

2020						
Asset (liability)	Financial assets at amortized cost	Fair value through profit or loss	Derivatives used for hedging	Financial liabilities at amortized cost	Total	
Cash and cash equivalents	\$ 184	\$ —	\$ —	\$ —	\$	184
Accounts receivable	2,190	—	—	—		2,190
Investments	—	305	—	—		305
Other long-term assets	555	—	136	—		691
Accounts payable	—	—	—	(667)		(667)
Accrued liabilities	—	—	—	(2,346)		(2,346)
Other long-term liabilities <sup>(1)</sup>	—	(52)	(108)	(1,762)		(1,922)
Long-term debt <sup>(2)</sup>	—	—	—	(21,453)		(21,453)
	\$ 2,929	\$ 253	\$ 28	\$ (26,228)	\$	(23,018)

(1) Includes \$1,584 million of lease liabilities (December 31, 2020 – \$1,690 million) and \$48 million of deferred purchase consideration payable over the next two years (December 31, 2020 – \$72 million).

(2) Includes the current portion of long-term debt.

The carrying amounts of the Company's financial instruments approximated their fair value, except for fixed rate long-term debt. The fair values of the Company's investments, recurring other long-term assets (liabilities) and fixed rate long-term debt are outlined below:

2021					
Asset (liability) <sup>(1) (2)</sup>	Carrying amount		Fair value		
			Level 1	Level 2	Level 3 <sup>(4)</sup>
Investments <sup>(3)</sup>	\$	309	\$	309	\$ —
Other long-term assets	\$	140	\$	—	\$ 140
Other long-term liabilities	\$	(133)	\$	—	\$ (85)
Fixed rate long-term debt <sup>(6) (7)</sup>	\$	(13,554)	\$	(15,420)	\$ —

2020					
Asset (liability) <sup>(1) (2)</sup>	Carrying amount		Fair value		
			Level 1	Level 2	Level 3 <sup>(4) (5)</sup>
Investments <sup>(3)</sup>	\$	305	\$	305	\$ —
Other long-term assets	\$	691	\$	—	\$ 136
Other long-term liabilities	\$	(232)	\$	—	\$ (160)
Fixed rate long-term debt <sup>(6) (7)</sup>	\$	(14,254)	\$	(16,598)	\$ —

(1) Excludes financial assets and liabilities where the carrying amount approximates fair value due to the short-term nature of the asset or liability (cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities, and purchase consideration payable).

(2) There were no transfers between Level 1, 2 and 3 financial instruments.

(3) The fair values of the investments are based on quoted market prices.

(4) The fair value of the deferred purchase consideration included in other long-term liabilities is based on the present value of future cash payments.

(5) The fair value of NWRP subordinated debt was based on the present value of future cash receipts.

(6) The fair value of fixed rate long-term debt has been determined based on quoted market prices.

(7) Includes the current portion of fixed rate long-term debt.

## RISK MANAGEMENT

The Company periodically uses derivative financial instruments to manage its commodity price, interest rate and foreign currency exposures. These financial instruments are entered into solely for hedging purposes and are not used for speculative purposes.

The following provides a summary of the carrying amounts of derivative financial instruments held and a reconciliation to the Company's consolidated balance sheets.

<b>Asset (liability)</b>	<b>2021</b>		<b>2020</b>	
<b>Derivatives held for trading</b>				
Natural gas <sup>(1)</sup>	\$	(41)	\$	(45)
Crude oil <sup>(1)</sup>		(10)		—
Foreign currency forward contracts		(13)		(7)
<b>Cash flow hedges</b>				
Foreign currency forward contracts		(21)		(108)
Cross currency swaps		140		136
	\$	55	\$	(24)
Included within:				
Current portion of other long-term assets	\$	5	\$	5
Current portion of other long-term liabilities		(72)		(131)
Other long-term assets		135		131
Other long-term liabilities		(13)		(29)
	\$	55	\$	(24)

(1) Commodity financial instruments acquired from Storm and Painted Pony in 2021 and 2020, respectively.

During 2021, the Company's ineffectiveness from cash flow hedges was \$nil (2020 – loss of \$1 million, 2019 – gain of \$3 million).

The estimated fair values of derivative financial instruments in Level 2 at each measurement date have been determined based on appropriate internal valuation methodologies and/or third party indications. Level 2 fair values determined using valuation models require the use of assumptions concerning the amount and timing of future cash flows and discount rates. In determining these assumptions, the Company primarily relied on external, readily-observable quoted market inputs as applicable, including crude oil and natural gas forward benchmark commodity prices and volatility, Canadian and United States interest rate yield curves, and Canadian and United States forward foreign exchange rates, discounted to present value as appropriate. The resulting fair value estimates may not necessarily be indicative of the amounts that could be realized or settled in a current market transaction and these differences may be material.

The changes in estimated fair values of derivative financial instruments included in the risk management asset (liability) were recognized in the financial statements as follows:

<b>Asset (liability)</b>	<b>2021</b>		<b>2020</b>	
Balance – beginning of year	\$	(24)	\$	178
Net change in fair value of outstanding derivative financial instruments recognized in:				
Risk management activities <sup>(1)</sup>		(12)		(32)
Foreign exchange		82		(168)
Other comprehensive income (loss)		9		(2)
Balance – end of year		55		(24)
Less: current portion		(67)		(126)
	\$	122	\$	102

(1) Includes the fair value movement of commodity financial instruments included in acquisitions (note 7).

Net loss (gain) from risk management activities for the years ended December 31, were as follows:

	2021		2020		2019	
Net realized risk management loss	\$	17	\$	32	\$	64
Net unrealized risk management loss (gain)		19		(39)		13
	\$	36	\$	(7)	\$	77

## FINANCIAL RISK FACTORS

### a) Market risk

Market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices. The Company's market risk is comprised of commodity price risk, interest rate risk, and foreign currency exchange risk.

#### COMMODITY PRICE RISK MANAGEMENT

The Company periodically uses commodity derivative financial instruments to manage its exposure to commodity price risk associated with the sale of its future crude oil and natural gas production and with natural gas purchases.

The Company's outstanding commodity derivative financial instruments are expected to be settled monthly based on the applicable index pricing for the respective contract month.

#### INTEREST RATE RISK MANAGEMENT

The Company is exposed to interest rate price risk on its fixed rate long-term debt and to interest rate cash flow risk on its floating rate long-term debt. The Company periodically enters into interest rate swap contracts to manage its fixed to floating interest rate mix on long-term debt. Interest rate swap contracts require the periodic exchange of payments without the exchange of the notional principal amounts on which the payments are based. At December 31, 2021, the Company had no significant interest rate swap contracts outstanding.

#### FOREIGN CURRENCY EXCHANGE RATE RISK MANAGEMENT

The Company is exposed to foreign currency exchange rate risk in Canada primarily related to its US dollar denominated long-term debt, commercial paper and working capital. The Company is also exposed to foreign currency exchange rate risk on transactions conducted in other currencies and in the carrying value of its foreign subsidiaries. The Company periodically enters into cross currency swap contracts and foreign currency forward contracts to manage known currency exposure on US dollar denominated long-term debt, commercial paper and working capital. The cross currency swap contracts require the periodic exchange of payments with the exchange at maturity of notional principal amounts on which the payments are based.

At December 31, 2021 the Company had the following cross currency swap contract outstanding:

	Remaining term		Amount	Exchange rate (US\$/C\$)	Interest rate (US\$)	Interest rate (C\$)
<b>Cross Currency Swap</b>	Jan 2022	– Mar 2038	US\$550	1.170	6.25%	5.76%

The cross currency swap derivative financial instrument was designated as a hedge at December 31, 2021 and was classified as a cash flow hedge.

In addition to the cross currency swap contracts noted above, at December 31, 2021, the Company had US\$1,429 million of foreign currency forward contracts outstanding, with original terms of up to 90 days, including US\$901 million designated as cash flow hedges.

During 2020, the Company settled the US\$500 million cross currency swaps designated as cash flow hedges of the US\$500 million 3.45% US dollar debt securities due November 2021. The Company realized cash proceeds of \$166 million on settlement.

## FINANCIAL INSTRUMENT SENSITIVITIES

The following table summarizes the annualized sensitivities of the Company's 2021 net earnings and other comprehensive income to changes in the fair value of financial instruments outstanding as at December 31, 2021, resulting from changes in the specified variable, with all other variables held constant. These sensitivities are prepared on a different basis than those sensitivities disclosed in the Company's other continuous disclosure documents, are limited to the impact of changes in a specified variable applied to financial instruments only and do not represent the impact of a change in the variable on the operating results of the Company taken as a whole. Further, these sensitivities are theoretical, as changes in one variable may contribute to changes in another variable, which may magnify or counteract the sensitivities. In addition, changes in fair value generally cannot be extrapolated because the relationship of a change in an assumption to the change in fair value may not be linear.

	2021 <sup>(1)</sup>		2020 <sup>(1)</sup>	
	Increase (decrease) to net earnings	Increase (decrease) to other comprehensive income	Increase (decrease) to net earnings	Increase (decrease) to other comprehensive income
<b>Interest rate risk</b>				
Increase interest rate 1%	\$ (13)	\$ (29)	\$ (53)	\$ (17)
Decrease interest rate 1%	\$ 13	\$ 39	\$ 53	\$ 20
<b>Foreign currency exchange rate risk</b>				
Weakening of the Canadian dollar by US\$0.01	\$ (116)	\$ —	\$ (126)	\$ —
Strengthening of the Canadian dollar by US\$0.01	\$ 114	\$ —	\$ 123	\$ —

(1) Based on the Company's contracted natural gas and crude oil financial instruments at December 31, 2021 and December 31, 2020, a movement of \$0.10/MMBtu, \$0.10/Mcf or \$1.00/bbl would not have a significant impact on net earnings or other comprehensive income.

### b) Credit risk

Credit risk is the risk that a party to a financial instrument will cause a financial loss to the Company by failing to discharge an obligation.

## COUNTERPARTY CREDIT RISK MANAGEMENT

The Company's accounts receivable are mainly with customers in the crude oil and natural gas industry and are subject to normal industry credit risks. The Company manages these risks by reviewing its exposure to individual companies on a regular basis and where appropriate, ensures that parental guarantees or letters of credit are in place to minimize the impact in the event of default.

At December 31, 2021, substantially all of the Company's accounts receivable were due within normal trade terms and the average expected credit loss was approximately 1% of the Company's accounts receivable balance (December 31, 2020 – 1%).

The Company is also exposed to possible losses in the event of nonperformance by counterparties to derivative financial instruments; however, the Company manages this credit risk by entering into agreements with counterparties that are substantially all investment grade financial institutions. At December 31, 2021, the Company had net risk management assets of \$140 million with specific counterparties related to derivative financial instruments (December 31, 2020 – \$129 million). The carrying amount of financial assets approximates the maximum credit exposure.

### c) Liquidity risk

Liquidity risk is the risk that the Company will encounter difficulty in meeting obligations associated with financial liabilities.

Management of liquidity risk requires the Company to maintain sufficient cash and cash equivalents, along with other sources of capital, consisting primarily of cash flow from operating activities, available credit facilities, commercial paper and access to debt capital markets, to meet obligations as they become due. The Company believes it has adequate bank credit facilities to provide liquidity to manage fluctuations in the timing of the receipt and/or disbursement of operating cash flows.

The maturity dates of the Company's financial liabilities were as follows:

	Less than 1 year	1 to less than 2 years	2 to less than 5 years	Thereafter
Accounts payable	\$ 803	\$ —	\$ —	\$ —
Accrued liabilities	\$ 3,064	\$ —	\$ —	\$ —
Long-term debt <sup>(1)</sup>	\$ 1,000	\$ 2,906	\$ 3,251	\$ 7,624
Other long-term liabilities <sup>(2)</sup>	\$ 282	\$ 181	\$ 430	\$ 824
Interest and other financing expense <sup>(3)</sup>	\$ 650	\$ 583	\$ 1,503	\$ 3,971

(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, \$185 million; one to less than two years, \$149 million; two to less than five years, \$426 million; and thereafter, \$824 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 at December 31, 2021.

## 20. 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, 2021:

	2022	2023	2024	2025	2026	Thereafter
Product transportation and processing <sup>(1) (2)</sup>	\$ 967	\$ 1,107	\$ 914	\$ 870	\$ 816	\$ 10,028
North West Redwater Partnership service toll <sup>(3)</sup>	\$ 122	\$ 123	\$ 121	\$ 119	\$ 97	\$ 3,671
Offshore vessels and equipment	\$ 62	\$ —	\$ —	\$ —	\$ —	\$ —
Field equipment and power	\$ 25	\$ 21	\$ 21	\$ 21	\$ 21	\$ 225
Other	\$ 37	\$ 27	\$ 22	\$ 20	\$ 15	\$ —

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

(2) The acquisition of Storm in 2021 and Painted Pony in 2020 included approximately \$298 million and \$2,400 million of product transportation and processing commitments, respectively (note 7).

(3) 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 \$1,486 million of interest payable over the 40-year tolling period, ending in 2058 (note 10).

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.

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.

## 21. Supplemental Disclosure of Cash Flow Information

	2021		2020		2019
Changes in non-cash working capital:					
Accounts receivable	\$ (850)	\$	284	\$	(1,310)
Current income tax (liabilities) assets	1,918		(295)		(164)
Inventory	(487)		98		(194)
Prepays and other	39		(56)		2
Other long-term assets	—		(117)		117
Accounts payable	80		(147)		39
Accrued liabilities	525		(254)		265
Other long-term liabilities <sup>(1)</sup>	(154)		(62)		(23)
Net changes in non-cash working capital	\$ 1,071	\$	(549)	\$	(1,268)
Relating to:					
Operating activities	\$ 964	\$	(166)	\$	(1,033)
Investing activities	107		(383)		(235)
	\$ 1,071	\$	(549)	\$	(1,268)
	2021		2020		2019
Expenditures on exploration and evaluation assets	\$ 12	\$	36	\$	73
Net proceeds on sale of exploration and evaluation assets	(11)		(31)		—
Net expenditures on exploration and evaluation assets	\$ 1	\$	5	\$	73

(1) Included in Other long-term liabilities at December 31, 2021 is \$48 million of deferred purchase consideration payable over the next two years (December 31, 2020 – \$72 million; 2019 - \$95 million).

The following table summarizes movements in the Company's liabilities arising from financing activities for the years' ended December 31, 2021 and 2020:

	Long-term debt	Cash flow hedges on US dollar debt securities	Lease liabilities	Liabilities from financing activities
At December 31, 2019	\$ 20,982	\$ (199)	\$ 1,809	\$ 22,592
Changes from financing cash flows:				
Issue of long-term debt, net <sup>(1)</sup>	719	—	—	719
Repayment of Painted Pony long-term debt	(397)	—	—	(397)
Proceeds on settlement of cross currency swaps	—	166	—	166
Payment of lease liabilities	—	—	(225)	(225)
Non-cash changes:				
Assumption of Painted Pony long-term debt	397	—	—	397
Lease additions	—	—	148	148
Changes in foreign exchange and fair value <sup>(2)</sup>	(248)	5	(42)	(285)
At December 31, 2020	21,453	(28)	1,690	23,115
Changes from financing cash flows:				
Repayment of long-term debt, net <sup>(1)</sup>	<b>(6,779)</b>	—	—	<b>(6,779)</b>
Repayment of Storm long-term debt	<b>(183)</b>	—	—	<b>(183)</b>
Payment of lease liabilities	—	—	<b>(209)</b>	<b>(209)</b>
Non-cash changes:				
Assumption of Storm long-term debt	<b>183</b>	—	—	<b>183</b>
Lease additions	—	—	<b>88</b>	<b>88</b>
Changes in foreign exchange and fair value <sup>(2)</sup>	<b>20</b>	<b>(91)</b>	<b>15</b>	<b>(56)</b>
At December 31, 2021	<b>\$ 14,694</b>	<b>\$ (119)</b>	<b>\$ 1,584</b>	<b>\$ 16,159</b>

(1) Includes original issue discounts and premiums, and directly attributable transaction costs.

(2) Includes foreign exchange (gain) loss, changes in the fair value of cash flow hedges on US dollar debt securities, the amortization of original issue discounts and premiums and directly attributable transaction costs, and derecognition of lease liabilities.

## 22. Segmented Information

The Company's exploration and production activities are conducted in three geographic segments: North America, North Sea and Offshore Africa. These activities include the exploration, development, production and marketing of crude oil, natural gas liquids and natural gas. The Company's Oil Sands Mining and Upgrading activities are reported in a separate segment from exploration and production activities. Midstream and Refining activities include the Company's pipeline operations, an electricity co-generation system and NWRP.

Segmented revenue and segmented results include transactions between business segments. Sales between segments are made at prices that approximate market prices, taking into account the volumes involved. These transactions and any unrealized profits and losses are eliminated on consolidation, unless unrealized losses provide evidence of an impairment of the asset transferred. Sales to external customers are based on the location of the seller.

	North America			North Sea			Offshore Africa		
(millions of Canadian dollars)	2021	2020	2019	2021	2020	2019	2021	2020	2019
<b>Segmented product sales</b>									
Crude oil and NGLs <sup>(1)</sup>	\$ 14,478	\$ 7,480	\$ 9,679	\$ 607	\$ 417	\$ 860	\$ 420	\$ 318	\$ 632
Natural gas	2,484	1,242	1,150	5	12	57	31	42	67
Other income and revenue <sup>(2)</sup>	119	41	6	(1)	3	5	7	18	8
<b>Total segmented product sales</b>	<b>17,081</b>	<b>8,763</b>	<b>10,835</b>	<b>611</b>	<b>432</b>	<b>922</b>	<b>458</b>	<b>378</b>	<b>707</b>
Less: royalties	(1,694)	(503)	(998)	(1)	(1)	(2)	(21)	(16)	(42)
<b>Segmented revenue</b>	<b>15,387</b>	<b>8,260</b>	<b>9,837</b>	<b>610</b>	<b>431</b>	<b>920</b>	<b>437</b>	<b>362</b>	<b>665</b>
<b>Segmented expenses</b>									
Production	2,963	2,510	2,425	383	321	391	91	103	109
Transportation, blending and feedstock <sup>(1) (3)</sup>	4,772	3,393	2,935	7	15	19	1	1	2
Depletion, depreciation and amortization	3,569	3,780	3,326	160	277	308	142	190	242
Asset retirement obligation accretion	101	97	95	21	30	28	6	6	6
Risk management activities (commodity derivatives)	29	(20)	49	—	—	—	—	—	—
Gain on acquisitions	(478)	(217)	—	—	—	—	—	—	—
Income from NWRP	—	—	—	—	—	—	—	—	—
Equity loss from investments	—	—	—	—	—	—	—	—	—
<b>Total segmented expenses</b>	<b>10,956</b>	<b>9,543</b>	<b>8,830</b>	<b>571</b>	<b>643</b>	<b>746</b>	<b>240</b>	<b>300</b>	<b>359</b>
<b>Segmented earnings (loss)</b>	<b>\$ 4,431</b>	<b>\$ (1,283)</b>	<b>\$ 1,007</b>	<b>\$ 39</b>	<b>\$ (212)</b>	<b>\$ 174</b>	<b>\$ 197</b>	<b>\$ 62</b>	<b>\$ 306</b>
<b>Non-segmented expenses</b>									
Administration									
Share-based compensation									
Interest and other financing expense									
Risk management activities (other)									
Foreign exchange gain									
(Gain) loss from investments									
<b>Total non-segmented expenses</b>									
<b>Earnings (loss) before taxes</b>									
Current income tax									
Deferred income tax									
<b>Net earnings (loss)</b>									

(1) Includes blending and feedstock costs associated with the processing of third party bitumen and other purchased feedstock in the Oil Sands Mining and Upgrading segment.

(2) Includes the sale of diesel and other refined products and other income, including government grants and recoveries associated with the joint operations partners' share of the costs of lease contracts.

(3) Includes a provision of \$143 million relating to the Keystone XL pipeline project in the North America segment in 2020.

Inter-segment elimination and Other includes internal and corporate transportation and electricity charges. Production, processing and other purchasing and selling activities, that are not included in the preceding segments are also reported in the segmented information as Inter-segment eliminations and Other.

Operating segments are reported in a manner consistent with the internal reporting provided to the Company's chief operating decision makers.

Oil Sands Mining and Upgrading			Midstream and Refining			Inter-segment elimination and Other			Total		
2021	2020	2019	2021	2020	2019	2021	2020	2019	2021	2020	2019
\$ 14,033	\$ 7,389	\$ 11,340	\$ 78	\$ 83	\$ 88	\$ (360)	\$ (108)	\$ 351	\$ 29,256	\$ 15,579	\$ 22,950
—	—	—	—	—	—	196	182	145	2,716	1,478	1,419
73	139	6	681	202	—	3	31	—	882	434	25
14,106	7,528	11,346	759	285	88	(161)	105	496	32,854	17,491	24,394
(1,081)	(78)	(481)	—	—	—	—	—	—	(2,797)	(598)	(1,523)
13,025	7,450	10,865	759	285	88	(161)	105	496	30,057	16,893	22,871
3,414	3,114	3,276	234	184	20	67	48	56	7,152	6,280	6,277
1,505	881	1,306	550	181	—	(231)	27	437	6,604	4,498	4,699
1,838	1,784	1,656	15	15	14	—	—	—	5,724	6,046	5,546
57	72	61	—	—	—	—	—	—	185	205	190
—	—	—	—	—	—	—	—	—	29	(20)	49
—	—	—	—	—	—	—	—	—	(478)	(217)	—
—	—	—	(400)	—	—	—	—	—	(400)	—	—
—	—	—	—	—	287	—	—	—	—	—	287
6,814	5,851	6,299	399	380	321	(164)	75	493	18,816	16,792	17,048
\$ 6,211	\$ 1,599	\$ 4,566	\$ 360	\$ (95)	\$ (233)	\$ 3	\$ 30	\$ 3	\$ 11,241	\$ 101	\$ 5,823
									366	391	344
									514	(82)	223
									711	756	836
									7	13	28
									(127)	(275)	(570)
									(141)	171	6
									1,330	974	867
									9,911	(873)	4,956
									1,848	(257)	434
									399	(181)	(894)
									\$ 7,664	\$ (435)	\$ 5,416

## CAPITAL EXPENDITURES <sup>(1)</sup>

	2021			2020		
	Net expenditures	Non-cash and fair value changes <sup>(2)</sup>	Capitalized costs	Net expenditures	Non-cash and fair value changes <sup>(2)</sup>	Capitalized costs
<b>Exploration and evaluation assets</b>						
Exploration and Production						
North America	\$ (7)	\$ (36)	\$ (43)	\$ (7)	\$ (150)	\$ (157)
Offshore Africa	8	—	8	12	3	15
Oil Sands Mining and Upgrading	—	(150)	(150)	—	—	—
	<b>1</b>	<b>(186)</b>	<b>(185)</b>	<b>5</b>	<b>(147)</b>	<b>(142)</b>
<b>Property, plant and equipment</b>						
Exploration and Production						
North America <sup>(3) (4)</sup>	2,486	1,351	3,837	999	371	1,370
North Sea	173	38	211	122	(21)	101
Offshore Africa	54	(6)	48	87	7	94
	<b>2,713</b>	<b>1,383</b>	<b>4,096</b>	<b>1,208</b>	<b>357</b>	<b>1,565</b>
Oil Sands Mining and Upgrading <sup>(5)</sup>	1,747	(601)	1,146	1,323	(629)	694
Midstream and Refining	9	—	9	5	1	6
Head office	23	—	23	19	—	19
	<b>4,492</b>	<b>782</b>	<b>5,274</b>	<b>2,555</b>	<b>(271)</b>	<b>2,284</b>
	<b>\$ 4,493</b>	<b>\$ 596</b>	<b>\$ 5,089</b>	<b>\$ 2,560</b>	<b>\$ (418)</b>	<b>\$ 2,142</b>

(1) This table provides a reconciliation of capitalized costs, reported in note 6 and note 7, to net expenditures reported in the investing activities section of the statements of cash flows. The reconciliation excludes the impact of foreign exchange adjustments.

(2) Derecognitions, asset retirement obligations, transfer of exploration and evaluation assets, and other fair value adjustments.

(3) Includes cash consideration paid of \$771 million for the acquisition of Storm in 2021.

(4) Includes cash consideration paid of \$111 million for the acquisition of Painted Pony in 2020.

(5) Net expenditures includes the acquisition of a 5% net carried interest on an existing oil sands lease during 2021, capitalized interest and share-based compensation.

## SEGMENTED ASSETS

	2021	2020
Exploration and Production		
North America	\$ 30,645	\$ 29,094
North Sea	1,561	1,624
Offshore Africa	1,332	1,407
Other	40	81
Oil Sands Mining and Upgrading	42,016	41,567
Midstream and Refining	886	1,301
Head office	185	202
	<b>\$ 76,665</b>	<b>\$ 75,276</b>

## 23. Remuneration of Directors and Senior Management

### REMUNERATION OF NON-MANAGEMENT DIRECTORS

	2021	2020	2019
Fees earned	\$ 2	\$ 2	\$ 2

### REMUNERATION OF SENIOR MANAGEMENT <sup>(1)</sup>

	2021	2020	2019
Salary	\$ 2	\$ 2	\$ 2
Common stock option based awards	10	9	8
Annual incentive plans	6	4	6
Long-term incentive plans	19	14	20
	\$ 37	\$ 29	\$ 36

(1) Senior management identified above are consistent with the disclosure on Named Executive Officers provided in the Company's Information Circular to shareholders for the respective years.

# Supplementary Oil & Gas Information for the Fiscal Year Ended December 31, 2021 (Unaudited)

This supplementary crude oil and natural gas information is provided in accordance with the United States Financial Accounting Standards Board ("FASB") Topic 932 – "Extractive Activities – Oil and Gas" and where applicable, financial information is prepared in accordance with International Financial Reporting Standards ("IFRS").

For the years ended December 31, 2021, 2020, 2019 and 2018 the Company filed its reserves information under National Instrument 51-101 – "Standards of Disclosure of Oil and Gas Activities" ("NI 51-101"), which prescribes the standards for the preparation and disclosure of reserves and related information for companies listed in Canada.

There are significant differences in the type of volumes disclosed and the basis from which the volumes are economically determined under the United States Securities and Exchange Commission ("SEC") requirements and NI 51-101. The SEC requires disclosure of net reserves, after royalties, using 12-month average prices and current costs; whereas NI 51-101 requires gross reserves, before royalties, using forecast pricing and costs. Therefore the difference between the reported numbers under the two disclosure standards can be material.

For the purposes of determining proved crude oil and natural gas reserves for SEC requirements as at December 31, 2021, 2020, 2019 and 2018 the Company used the 12-month average price, defined by the SEC as the unweighted arithmetic average of the first-day-of-the-month price for each month within the 12-month period prior to the end of the reporting period. The Company has used the following 12-month average benchmark prices to determine its 2021 and 2020 reserves for SEC requirements.

Crude Oil and NGLs						Natural Gas		
WTI (US\$/bbl)	WCS (C\$/bbl)	Canadian Light Sweet (C\$/bbl)	Cromer LSB (C\$/bbl)	Brent (US\$/bbl)	Edmonton C5+ (C\$/bbl)	Henry Hub (US\$/MMBtu)	AECO (C\$/MMBtu)	BC Westcoast Station 2 (C\$/MMBtu)
<b>2021:</b>								
<b>66.34</b>	<b>67.68</b>	<b>77.87</b>	<b>78.17</b>	<b>68.92</b>	<b>83.05</b>	<b>3.68</b>	<b>3.39</b>	<b>2.90</b>
2020:								
39.77	34.84	45.02	45.55	43.43	50.41	2.16	2.17	2.10

A foreign exchange rate of US\$0.7972/C\$1.00 was used in the 2021 evaluation (2020 - US\$0.7462/C\$1.00), determined on the same basis as the 12-month average price.

## Net Proved Crude Oil and Natural Gas Reserves

The Company retains Independent Qualified Reserves Evaluators to evaluate and review the Company's proved crude oil, bitumen, synthetic crude oil ("SCO"), natural gas, and natural gas liquids ("NGLs") reserves.

- For the years ended December 31, 2021, 2020, 2019 and 2018, the reports by GLJ Ltd. covered 100% of the Company's SCO reserves. With the inclusion of non-traditional resources within the definition of "oil and gas producing activities" in the SEC's modernization of oil and gas reporting rules, effective January 1, 2010 these reserves volumes are included within the Company's crude oil and natural gas reserves totals.
- For the years ended December 31, 2021, 2020, 2019 and 2018, the reports by Sproule Associates Limited and Sproule International Limited covered 100% of the Company's crude oil, bitumen, natural gas and NGLs reserves.

Proved crude oil and natural gas reserves, as defined within the SEC's Regulation S-X, are the estimated quantities of oil and gas that by analysis of geoscience and engineering data demonstrate with reasonable certainty to be economically producible, from a given date forward, from known reservoirs under existing economic conditions, operating methods and government regulations. Developed crude oil and natural gas reserves are reserves of any category that can be expected to be recovered from existing wells with existing equipment and operating methods or in which the cost of the required equipment is relatively minor compared to the cost of drilling a new well; and through installed extraction equipment and infrastructure operational at the time of the reserves estimate if the extraction is by means not involving a well. Undeveloped crude oil and natural gas reserves are reserves of any category that are expected to be recovered from new wells on undrilled acreage, or from existing wells where a relatively major expenditure is required for recompletion.

Estimates of crude oil and natural gas reserves are subject to uncertainty and will change as additional information regarding producing fields and technology becomes available and as future economic and operating conditions change.

The following tables summarize the Company's proved and proved developed crude oil and natural gas reserves, net of royalties, as at December 31, 2021, 2020, 2019 and 2018:

Crude Oil and NGLs (MMbbl) <sup>(1)</sup>	North America						Total
	Synthetic Crude Oil	Bitumen <sup>(2)</sup>	Crude Oil & NGLs	North America Total	North Sea	Offshore Africa	
<b>Net Proved Reserves</b>							
Reserves, December 31, 2018	5,661	1,469	604	7,734	114	71	7,919
Extensions and discoveries	334	18	12	364	—	—	364
Improved recovery	—	169	12	181	—	—	181
Purchases of reserves in place	—	666	2	668	—	—	668
Sales of reserves in place	—	—	—	—	—	—	—
Production	(137)	(81)	(49)	(267)	(10)	(7)	(285)
Economic revisions due to prices <sup>(3)</sup>	(288)	3	—	(285)	(1)	1	(285)
Revisions of prior estimates	(17)	(27)	17	(28)	3	6	(19)
Reserves, December 31, 2019	5,554	2,216	598	8,368	105	70	8,544
Extensions and discoveries	708	8	10	726	—	—	726
Improved recovery	—	49	9	58	—	—	58
Purchases of reserves in place	—	—	28	28	—	—	28
Sales of reserves in place	—	—	—	—	—	—	—
Production	(151)	(109)	(45)	(305)	(8)	(6)	(320)
Economic revisions due to prices <sup>(4)</sup>	701	207	(94)	814	(12)	3	805
Revisions of prior estimates	36	41	20	97	3	4	103
Reserves, December 31, 2020	6,847	2,413	525	9,785	87	71	9,943
Extensions and discoveries	—	<b>101</b>	<b>14</b>	<b>115</b>	—	—	<b>115</b>
Improved recovery	—	<b>19</b>	<b>14</b>	<b>33</b>	—	—	<b>33</b>
Purchases of reserves in place	—	—	<b>52</b>	<b>52</b>	—	—	<b>52</b>
Sales of reserves in place	—	—	—	—	—	—	—
Production	<b>(150)</b>	<b>(103)</b>	<b>(45)</b>	<b>(297)</b>	<b>(6)</b>	<b>(5)</b>	<b>(309)</b>
Economic revisions due to prices <sup>(5)</sup>	<b>(927)</b>	<b>(296)</b>	<b>108</b>	<b>(1,115)</b>	<b>1</b>	<b>(4)</b>	<b>(1,118)</b>
Revisions of prior estimates	<b>174</b>	<b>155</b>	<b>40</b>	<b>369</b>	<b>(3)</b>	<b>2</b>	<b>368</b>
Reserves, December 31, 2021	<b>5,944</b>	<b>2,289</b>	<b>708</b>	<b>8,941</b>	<b>79</b>	<b>64</b>	<b>9,083</b>
<b>Net proved developed reserves</b>							
December 31, 2018	5,661	461	378	6,500	37	34	6,571
December 31, 2019	5,452	661	354	6,466	38	39	6,543
December 31, 2020	6,770	628	285	7,682	32	37	7,751
December 31, 2021	<b>5,929</b>	<b>584</b>	<b>370</b>	<b>6,883</b>	<b>39</b>	<b>38</b>	<b>6,960</b>

(1) Information in the reserves data tables may not add due to rounding.

(2) Bitumen as defined by the SEC, "is petroleum in a solid or semi-solid state in natural deposits with a viscosity greater than 10,000 centipoise measured at original temperature in the deposit and atmospheric pressure, on a gas free basis." Under this definition, all the Company's thermal and primary heavy crude oil reserves have been classified as bitumen.

(3) Reflects the impact of increased royalties at Oil Sands Mining and Upgrading (SCO) due to higher bitumen pricing resulting in higher royalties and lower net reserves.

(4) Reflects the impact of decreased royalties at Oil Sands Mining and Upgrading (SCO) and thermal Bitumen due to lower bitumen pricing resulting in lower royalties and higher net reserves.

(5) Reflects the impact of increased royalties at Oil Sands Mining and Upgrading (SCO) and thermal Bitumen due to higher bitumen pricing resulting in higher royalties and lower net reserves.

2021 total proved Crude Oil and NGLs reserves decreased by 860 MMbbl:

- Extensions and discoveries: Increase of 115 MMbbl primarily due to extension drilling/future offset additions at various Bitumen properties.
- Improved recovery: Increase of 33 MMbbl primarily due to increased recovery of thermal Bitumen at Jackfish and Kirby properties and infill drilling/future offset additions at various Crude Oil and natural gas (NGLs) properties.
- Purchases of reserves in place: Increase of 52 MMbbl primarily due to natural gas (NGLs) acquisitions in northeast British Columbia.
- Production: Decrease of 309 MMbbl.
- Economic revisions due to prices: Decrease of 1,118 MMbbl primarily at Oil Sands Mining and Upgrading (SCO) and thermal Bitumen properties due to higher bitumen pricing resulting in higher royalties and lower net reserves.
- Revisions of prior estimates: Increase of 368 MMbbl primarily due to transfers from beyond the 50-year reserves life cutoff at Oil Sands Mining and Upgrading (SCO) and improved performance at various North America and Offshore Africa Crude Oil, Bitumen and natural gas (NGLs) properties.

2020 total proved Crude Oil and NGLs reserves increased by 1,400 MMbbl:

- Extensions and discoveries: Increase of 726 MMbbl primarily due to the pit extension at Oil Sands Mining and Upgrading (SCO) and extension drilling/future offset additions at various Bitumen, Crude Oil and natural gas (NGLs) properties.
- Improved recovery: Increase of 58 MMbbl primarily due to increased steamflood recovery of Bitumen at Primrose and infill drilling/future offset additions at various Bitumen, Crude Oil and natural gas (NGLs) properties.
- Purchases of reserves in place: Increase of 28 MMbbl primarily of NGLs from the acquisition of Painted Pony Energy Ltd.
- Production: Decrease of 320 MMbbl.
- Economic revisions due to prices: Increase of 805 MMbbl primarily at Oil Sands Mining and Upgrading (SCO) and thermal Bitumen properties due to lower bitumen pricing resulting in lower royalties and higher net reserves, partially offset by uneconomic reserves at several North America Bitumen (primary heavy crude oil) and Crude Oil properties.
- Revisions of prior estimates: Increase of 103 MMbbl primarily due to improved mine performance and mine model changes at Oil Sands Mining and Upgrading (SCO) and improved performance at North America, North Sea and Offshore Africa Crude Oil, Bitumen and various natural gas (NGLs) properties.

2019 total proved Crude Oil and NGLs reserves increased by 625 MMbbl:

- Extensions and discoveries: Increase of 364 MMbbl primarily due to transfer of reserves from the probable category at Oil Sands Mining and Upgrading (SCO) and extension drilling/future offset additions at various Bitumen, Crude Oil and natural gas (NGLs) properties.
- Improved recovery: Increase of 181 MMbbl primarily due to increased steamflood recovery at the Primrose thermal oil (Bitumen) project.
- Purchases of reserves in place: Increase of 668 MMbbl primarily due to Bitumen property acquisitions from Devon Canada.
- Production: Decrease of 285 MMbbl.
- Economic revisions due to prices: Decrease of 285 MMbbl primarily at Oil Sands Mining and Upgrading (SCO) due to higher Bitumen pricing resulting in higher royalties and lower net reserves.
- Revisions of prior estimates: Decrease of 19 MMbbl primarily due to the 50-year reserves life cutoff at the Primrose thermal oil (Bitumen) project, increased royalties at Oil Sands Mining and Upgrading (SCO) as a result of lower operating costs, and the removal of future extension and infill undeveloped reserves in certain Crude Oil and Bitumen properties due to revised Company development plans, offset by improved performance at the Pelican Lake (Crude Oil) project and various natural gas (NGLs) properties.

Natural Gas (Bcf) <sup>(1)</sup>	North America	North Sea	Offshore Africa	Total
<b>Net Proved Reserves</b>				
Reserves, December 31, 2018	4,306	27	21	4,354
Extensions and discoveries	106	—	—	106
Improved recovery	202	—	—	202
Purchases of reserves in place	34	—	—	34
Sales of reserves in place	—	—	—	—
Production	(511)	(9)	(8)	(528)
Economic revisions due to prices	246	—	2	248
Revisions of prior estimates	346	(2)	23	367
Reserves, December 31, 2019	4,728	16	38	4,782
Extensions and discoveries	173	—	—	173
Improved recovery	159	—	—	159
Purchases of reserves in place	2,614	—	—	2,615
Sales of reserves in place	(4)	—	—	(4)
Production	(515)	(4)	(5)	(524)
Economic revisions due to prices	97	—	4	100
Revisions of prior estimates	402	—	(3)	399
Reserves, December 31, 2020	7,655	12	34	7,701
Extensions and discoveries	<b>545</b>	—	—	<b>545</b>
Improved recovery	<b>161</b>	—	—	<b>161</b>
Purchases of reserves in place	<b>1,654</b>	—	—	<b>1,654</b>
Sales of reserves in place	<b>(1)</b>	—	—	<b>(1)</b>
Production	<b>(581)</b>	<b>(1)</b>	<b>(4)</b>	<b>(587)</b>
Economic revisions due to prices	<b>712</b>	—	<b>(4)</b>	<b>708</b>
Revisions of prior estimates	<b>1,139</b>	<b>(3)</b>	—	<b>1,136</b>
Reserves, December 31, 2021	<b>11,285</b>	<b>8</b>	<b>25</b>	<b>11,318</b>
Net proved developed reserves				
December 31, 2018	2,382	23	12	2,417
December 31, 2019	2,342	11	28	2,381
December 31, 2020	3,116	6	22	3,144
December 31, 2021	<b>4,469</b>	<b>3</b>	<b>20</b>	<b>4,492</b>

(1) Information in the reserves data tables may not add due to rounding.

2021 total proved Natural Gas reserves increased by 3,617 Bcf primarily due to the following:

- Extensions and discoveries: Increase of 545 Bcf primarily due to extension drilling/future offsets additions in the Montney formation of northwest Alberta and northeast British Columbia.
- Improved recovery: Increase of 161 Bcf primarily due to infill drilling/future offsets additions in the Montney formation of northwest Alberta and northeast British Columbia.
- Purchases of reserves in place: Increase of 1,654 Bcf primarily due to the Storm Resources Ltd. and other acquisitions in northeast British Columbia.
- Sales of reserves in place: Decrease of 1 Bcf from Natural Gas properties in North America.
- Production: Decrease of 587 Bcf.
- Economic revisions due to prices: Increase of 708 Bcf primarily due to increased Natural Gas price in North America.
- Revisions of prior estimates: Increase of 1,136 Bcf primarily due to overall positive revisions in several North American core areas as a result of increased performance and category transfers from probable to proved.

2020 total proved Natural Gas reserves increased by 2,919 Bcf primarily due to the following:

- Extensions and discoveries: Increase of 173 Bcf primarily due to extension drilling/future offset additions in the Montney and other unconventional formations of northwest Alberta and northeast British Columbia.
- Improved recovery: Increase of 159 Bcf primarily due to infill drilling/future offset additions in the Montney and other unconventional formations of northwest Alberta and northeast British Columbia.
- Purchases of reserves in place: Increase of 2,615 Bcf primarily due to the acquisition of Painted Pony Energy Ltd.
- Sales of reserves in place: Decrease of 4 Bcf from Natural Gas properties in North America.
- Production: Decrease of 524 Bcf.
- Economic revisions due to prices: Increase of 100 Bcf primarily due to increased Natural Gas price in North America.
- Revisions of prior estimates: Increase of 399 Bcf primarily due to overall positive revisions in several North America core areas as a result of increased recovery and category transfers from probable to proved, partially offset by removal of future extension and infill undeveloped reserves in North America properties due to revised Company development plans.

2019 total proved Natural Gas reserves increased by 428 Bcf primarily due to the following:

- Extensions and discoveries: Increase of 106 Bcf primarily due to extension drilling/future offset additions in the Montney formation of northwest Alberta and northeast British Columbia.
- Improved recovery: Increase of 202 Bcf primarily due to infill drilling/future offset additions in the Montney formation of northwest Alberta and northeast British Columbia.
- Purchases of reserves in place: Increase of 34 Bcf primarily due to property acquisitions in several North America core areas.
- Production: Decrease of 528 Bcf.
- Economic revisions due to prices: Increase of 248 Bcf primarily due to increased Natural Gas price in North America.
- Revisions of prior estimates: Increase of 367 Bcf primarily due to overall positive revisions in several North America and Offshore Africa core areas as a result of increased recovery and category transfers from probable to proved. The increase is also due to improved economics on undeveloped reserves which, when combined with lower long term royalty rates, results in increased net, after royalties, reserves.

## Capitalized Costs Related to Crude Oil and Natural Gas Activities

2021				
(millions of Canadian dollars)	North America	North Sea	Offshore Africa	Total
Proved properties	\$ 124,690	\$ 7,438	\$ 3,980	\$ 136,108
Unproved properties	2,159	—	91	2,250
	<b>126,849</b>	<b>7,438</b>	<b>4,071</b>	<b>138,358</b>
Less: accumulated depletion and depreciation	(61,231)	(5,951)	(2,923)	(70,105)
Net capitalized costs	<b>\$ 65,618</b>	<b>\$ 1,487</b>	<b>\$ 1,148</b>	<b>\$ 68,253</b>
2020				
(millions of Canadian dollars)	North America	North Sea	Offshore Africa	Total
Proved properties	\$ 119,707	\$ 7,283	\$ 3,963	\$ 130,953
Unproved properties	2,353	—	83	2,436
	122,060	7,283	4,046	133,389
Less: accumulated depletion and depreciation	(56,930)	(5,853)	(2,822)	(65,605)
Net capitalized costs	<b>\$ 65,130</b>	<b>\$ 1,430</b>	<b>\$ 1,224</b>	<b>\$ 67,784</b>
2019				
(millions of Canadian dollars)	North America	North Sea	Offshore Africa	Total
Proved properties	\$ 117,643	\$ 7,296	\$ 3,933	\$ 128,872
Unproved properties	2,510	—	69	2,579
	120,153	7,296	4,002	131,451
Less: accumulated depletion and depreciation	(52,824)	(5,712)	(2,712)	(61,248)
Net capitalized costs	<b>\$ 67,329</b>	<b>\$ 1,584</b>	<b>\$ 1,290</b>	<b>\$ 70,203</b>

## Costs Incurred in Crude Oil and Natural Gas Activities

2021					
(millions of Canadian dollars)	North America	North Sea	Offshore Africa	Total	
Property acquisitions					
Proved	\$ 1,371	\$ —	\$ —	\$	1,371
Unproved	26	—	—		26
Exploration	4	—	8		12
Development	4,301	208	48		4,557
Costs incurred	\$ 5,702	\$ 208	\$ 56	\$	5,966

2020					
(millions of Canadian dollars)	North America	North Sea	Offshore Africa	Total	
Property acquisitions					
Proved	\$ 750	\$ —	\$ —	\$	750
Unproved	15	—	—		15
Exploration	22	—	15		37
Development	2,338	104	94		2,536
Costs incurred	\$ 3,125	\$ 104	\$ 109	\$	3,338

2019					
(millions of Canadian dollars)	North America	North Sea	Offshore Africa	Total	
Property acquisitions					
Proved	\$ 3,405	\$ —	\$ —	\$	3,405
Unproved	91	—	—		91
Exploration	38	—	33		71
Development	4,687	349	233		5,269
Costs incurred	\$ 8,221	\$ 349	\$ 266	\$	8,836

## Results of Operations from Crude Oil and Natural Gas Producing Activities

The Company's results of operations from crude oil and natural gas producing activities for the years ended December 31, 2021, 2020 and 2019 are summarized in the following tables:

2021					
(millions of Canadian dollars)	North America	North Sea	Offshore Africa	Total	
Crude oil and natural gas revenue, net of royalties, blending and feedstock costs	\$ 23,111	\$ 611	\$ 438	\$	24,160
Production	(6,377)	(383)	(91)		(6,851)
Transportation	(1,176)	(7)	(1)		(1,184)
Depletion, depreciation and amortization	(5,407)	(160)	(142)		(5,709)
Asset retirement obligation accretion	(158)	(21)	(6)		(185)
Petroleum revenue tax	—	33	—		33
Income tax	(2,317)	(29)	(50)		(2,396)
Results of operations	\$ 7,676	\$ 44	\$ 148	\$	7,868

(millions of Canadian dollars)	North America	North Sea	Offshore Africa	Total
Crude oil and natural gas revenue, net of royalties, blending and feedstock costs	\$ 12,520	\$ 432	\$ 354	\$ 13,306
Production	(5,624)	(321)	(103)	(6,048)
Transportation	(1,258)	(15)	(1)	(1,274)
Depletion, depreciation and amortization	(5,564)	(277)	(190)	(6,031)
Asset retirement obligation accretion	(169)	(30)	(6)	(205)
Petroleum revenue tax	—	31	—	31
Income tax	23	72	(13)	82
Results of operations	\$ (72)	\$ (108)	\$ 41	\$ (139)

## 2019

(millions of Canadian dollars)	North America	North Sea	Offshore Africa	Total
Crude oil and natural gas revenue, net of royalties, blending and feedstock costs	\$ 17,348	\$ 920	\$ 676	\$ 18,944
Production	(5,701)	(391)	(109)	(6,201)
Transportation	(968)	(19)	(2)	(989)
Depletion, depreciation and amortization	(4,982)	(308)	(242)	(5,532)
Asset retirement obligation accretion	(156)	(28)	(6)	(190)
Petroleum revenue tax	—	88	—	88
Income tax	(1,468)	(105)	(79)	(1,652)
Results of operations	\$ 4,073	\$ 157	\$ 238	\$ 4,468

## Standardized Measure of Discounted Future Net Cash Flows from Proved Crude Oil and Natural Gas Reserves and Changes Therein

The following standardized measure of discounted future net cash flows from proved crude oil and natural gas reserves has been computed using the 12-month average price, defined by the SEC as the unweighted arithmetic average of the first-day-of-the-month price for each month within the 12-month period prior to the end of the reporting period, costs as at the balance sheet date and year-end statutory income tax rates. A discount factor of 10% has been applied in determining the standardized measure of discounted future net cash flows. The Company does not believe that the standardized measure of discounted future net cash flows will be representative of actual future net cash flows and should not be considered to represent the fair value of the crude oil and natural gas properties. Actual net cash flows will differ from the presented estimated future net cash flows due to several factors including:

- Future production will include production not only from proved properties, but may also include production from probable and possible reserves;
- Future production of crude oil and natural gas from proved properties will differ from reserves estimated;
- Future production rates will vary from those estimated;
- Future prices and costs rather than 12-month average prices and costs as at the balance sheet date will apply;
- Economic factors such as interest rates, income tax rates, regulatory and fiscal environments and operating conditions will change;
- Future estimated income taxes do not take into account the effects of future exploration and evaluation expenditures; and
- Future development and asset retirement obligations will differ from those estimated.

Future net revenues, development, production and asset retirement obligation costs have been based upon the estimates referred to above. The following tables summarize the Company's future net cash flows relating to proved crude oil and natural gas reserves based on the standardized measure as prescribed in FASB Topic 932 - "Extractive Activities - Oil and Gas":

2021				
(millions of Canadian dollars)	North America	North Sea	Offshore Africa	Total
Future cash inflows	\$ 679,123	\$ 7,791	\$ 5,581	\$ 692,495
Future production costs	(238,144)	(4,074)	(1,818)	(244,036)
Future development costs and asset retirement obligations	(77,375)	(1,857)	(1,142)	(80,374)
Future income taxes	(81,860)	(719)	(565)	(83,144)
Future net cash flows	281,744	1,141	2,056	284,941
10% annual discount for timing of future cash flows	(201,227)	(142)	(788)	(202,157)
Standardized measure of future net cash flows	\$ 80,517	\$ 999	\$ 1,268	\$ 82,784

2020				
(millions of Canadian dollars)	North America	North Sea	Offshore Africa	Total
Future cash inflows	\$ 404,193	\$ 5,873	\$ 4,172	\$ 414,238
Future production costs	(203,599)	(3,259)	(1,746)	(208,604)
Future development costs and asset retirement obligations	(72,935)	(2,130)	(1,032)	(76,097)
Future income taxes	(27,178)	(141)	(217)	(27,536)
Future net cash flows	100,481	343	1,177	102,001
10% annual discount for timing of future cash flows <sup>(1)</sup>	(74,395)	278	(373)	(74,490)
Standardized measure of future net cash flows	\$ 26,086	\$ 621	\$ 804	\$ 27,511

(1) Includes the impact of abandonment expenditures timing.

2019				
(millions of Canadian dollars)	North America	North Sea	Offshore Africa	Total
Future cash inflows	\$ 515,864	\$ 10,030	\$ 5,858	\$ 531,752
Future production costs	(194,076)	(4,893)	(2,081)	(201,050)
Future development costs and asset retirement obligations	(70,879)	(2,648)	(1,076)	(74,603)
Future income taxes	(53,759)	(936)	(547)	(55,242)
Future net cash flows	197,150	1,553	2,154	200,857
10% annual discount for timing of future cash flows	(136,616)	(1)	(715)	(137,332)
Standardized measure of future net cash flows	\$ 60,534	\$ 1,552	\$ 1,439	\$ 63,525

The principal sources of change in the standardized measure of discounted future net cash flows are summarized in the following table:

(millions of Canadian dollars)	2021	2020	2019
Sales of crude oil and natural gas produced, net of production costs	\$ (16,149)	\$ (6,127)	\$ (11,807)
Net changes in sales prices and production costs	74,558	(46,055)	(3,515)
Extensions, discoveries and improved recovery	2,948	626	5,883
Changes in estimated future development costs	(2,773)	(153)	(1,889)
Purchases of proved reserves in place	4,010	947	7,418
Sales of proved reserves in place	(1)	(1)	—
Revisions of previous reserve estimates	(186)	5,295	(3,384)
Accretion of discount	3,460	7,718	8,062
Changes in production timing and other	6,638	(4,830)	447
Net change in income taxes	(17,232)	6,566	1,984
Net change	55,273	(36,014)	3,199
Balance - beginning of year	27,511	63,525	60,326
Balance - end of year	\$ 82,784	\$ 27,511	\$ 63,525

# Ten Year Review

Years ended December 31	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
<b>FINANCIAL INFORMATION</b> (C\$ millions, except per share amounts)										
Net earnings (loss)	<b>7,664</b>	(435)	5,416	2,591	2,397	(204)	(637)	3,929	2,270	1,892
Per share – basic (\$/share)	<b>6.49</b>	(0.37)	4.55	2.13	2.04	(0.19)	(0.58)	3.60	2.08	1.72
Per share – diluted (\$/share)	<b>6.46</b>	(0.37)	4.54	2.12	2.03	(0.19)	(0.58)	3.58	2.08	1.72
Cash flows from operating activities	<b>14,478</b>	4,714	8,829	10,121	7,262	3,452	5,632	8,459	7,218	6,209
Adjusted funds flow <sup>(1)</sup>	<b>13,733</b>	5,200	10,267	9,088	7,347	4,293	5,785	9,587	7,477	6,013
Per share – basic (\$/share)	<b>11.63</b>	4.40	8.62	7.46	6.25	3.90	5.29	8.78	6.87	5.48
Per share – diluted (\$/share)	<b>11.57</b>	4.40	8.61	7.43	6.21	3.89	5.28	8.74	6.86	5.47
Cash flows used in investing activities	<b>3,703</b>	2,819	7,255	4,814	13,102	3,811	5,465	11,177	7,006	5,927
Net capital expenditures <sup>(1)</sup>	<b>4,908</b>	3,206	7,121	4,731	17,129	3,794	3,853	11,744	7,274	6,308
<b>Balance sheet information</b> (C\$ millions)										
Adjusted working capital <sup>(2)</sup>	<b>(480)</b>	626	241	(601)	513	1,056	1,193	(673)	(1,574)	(1,264)
Exploration and evaluation assets	<b>2,250</b>	2,436	2,579	2,637	2,632	2,382	2,586	3,557	2,609	2,611
Property, plant and equipment, net	<b>66,400</b>	65,752	68,043	64,559	65,170	50,910	51,475	52,480	46,487	44,028
Total assets	<b>76,665</b>	75,276	78,121	71,559	73,867	58,648	59,275	60,200	51,754	48,980
Long-term debt <sup>(3)</sup>	<b>14,694</b>	21,453	20,982	20,623	22,458	16,805	16,794	14,002	9,661	8,736
Shareholders' equity	<b>36,945</b>	32,380	34,991	31,974	31,653	26,267	27,381	28,891	25,772	24,283
<b>SHARE INFORMATION</b>										
Common shares outstanding (thousands)	<b>1,168,369</b>	1,183,866	1,186,857	1,201,886	1,222,769	1,110,952	1,094,668	1,091,837	1,087,322	1,092,072
Weighted average shares outstanding - basic (thousands)	<b>1,181,250</b>	1,181,768	1,190,977	1,218,798	1,175,094	1,100,471	1,093,862	1,091,754	1,088,682	1,097,084
Weighted average shares outstanding - diluted (thousands)	<b>1,186,557</b>	1,181,768	1,193,106	1,223,758	1,182,823	1,100,471	1,093,862	1,096,822	1,090,541	1,099,519
Dividends declared (\$/share) <sup>(4)</sup>	<b>2.00</b>	1.70	1.50	1.34	1.10	0.94	0.92	0.90	0.58	0.42
<b>Trading statistics</b>										
TSX – C\$										
Trading volume (thousands)	<b>1,568,872</b>	1,866,414	904,013	806,254	588,422	653,727	728,033	717,580	683,003	729,700
Share Price (\$/share)										
High	<b>55.59</b>	42.57	42.56	49.08	47.00	46.74	42.46	49.57	36.04	41.12
Low	<b>28.67</b>	9.80	30.01	30.11	35.90	21.27	25.01	31.00	28.44	25.58
Close	<b>53.45</b>	30.59	42.00	32.94	44.92	42.79	30.22	35.92	35.94	28.64
NYSE – US\$										
Trading volume (thousands)	<b>795,605</b>	1,058,121	679,697	796,971	608,008	892,220	951,311	812,521	645,403	844,647
Share Price (\$/share)										
High	<b>44.33</b>	32.79	32.56	38.19	36.78	35.28	34.46	46.65	33.92	41.38
Low	<b>22.40</b>	6.71	22.58	21.85	27.53	14.60	18.94	26.53	26.98	25.01
Close	<b>42.25</b>	24.05	32.35	24.13	35.72	31.88	21.83	30.88	33.84	28.87
<b>RATIOS</b>										
Debt to book capitalization <sup>(5)</sup>	<b>27%</b>	40%	37%	39%	41%	39%	38%	33%	27%	26%
After-tax return on average capital employed <sup>(6)</sup>	<b>16%</b>	—%	11%	6%	6%	—%	(1)%	10%	7%	7%
Daily production before royalties per ten thousand common shares (BOE/d)	<b>10.6</b>	9.8	9.3	9.0	7.9	7.3	7.8	7.2	6.2	6.0
Total proved plus probable reserves per common share (BOE) <sup>(7)</sup>	<b>14.5</b>	13.5	12.0	11.1	9.7	8.3	8.3	8.1	7.3	7.2
Net asset value (\$/share) <sup>(8)</sup>	<b>119.36</b>	71.62	97.09	101.89	81.41	74.77	73.39	78.99	72.41	62.38

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

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

(3) Long-term debt includes current portion of long-term debt.

(4) On March 2, 2022, the Board of Directors approved a quarterly dividend of \$0.75 per common share, an increase from the previous quarterly dividend of \$0.5875 per common share. The dividend is payable on April 5, 2022.

(5) Capital Management Measure. Refer to the "Non-GAAP and Other Financial Measures" section of the Company's MD&A.

(6) Non-GAAP Ratio. Refer to the "Non-GAAP and Other Financial Measures" section of the Company's MD&A.

(7) Based upon company gross reserves (forecast price and costs, before royalties), using year end common shares outstanding.

(8) Company net reserves are company gross reserves after royalties. Reserves data may not add due to rounding and BOE values may not calculate exactly due to rounding.

Years ended December 31	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
<b>COMPANY NET RESERVES</b> <sup>(8)</sup>										
<b>Crude oil and NGLs</b> (MMbbl)										
Company net total proved reserves										
North America	8,740	8,980	8,129	7,163	6,423	3,909	3,645	3,380	3,290	3,268
North Sea	79	96	109	119	120	134	158	204	224	227
Offshore Africa	64	70	70	72	70	74	74	78	80	85
	<b>8,883</b>	9,147	8,307	7,354	6,613	4,117	3,877	3,662	3,594	3,580
Company net proved plus probable reserves (after royalties)										
North America	10,883	11,151	10,231	9,456	8,353	6,015	5,806	5,609	5,135	5,119
North Sea	117	160	175	186	180	252	284	308	325	332
Offshore Africa	85	94	93	98	102	108	113	119	122	127
	<b>11,085</b>	11,405	10,499	9,740	8,635	6,375	6,203	6,036	5,582	5,578
<b>Natural gas</b> (Bcf)										
Company net total proved reserves (after royalties)										
North America	11,076	8,373	5,795	6,005	6,032	5,845	5,383	5,054	3,684	3,540
North Sea	8	12	16	27	21	41	39	83	91	82
Offshore Africa	25	32	37	21	15	23	21	36	38	48
	<b>11,109</b>	8,417	5,849	6,053	6,068	5,909	5,443	5,173	3,813	3,670
Company net total proved plus probable reserves (after royalties)										
North America	18,315	13,884	8,556	8,681	8,454	7,888	7,361	6,791	5,138	4,907
North Sea	11	17	21	38	32	85	96	114	125	102
Offshore Africa	39	48	52	44	47	55	50	68	70	76
	<b>18,364</b>	13,949	8,630	8,763	8,533	8,028	7,507	6,973	5,333	5,085
Total company net proved reserves (after royalties) (MMBOE)	<b>10,734</b>	10,549	9,282	8,363	7,625	5,102	4,784	4,524	4,230	4,191
Total company net proved plus probable reserves (after royalties) (MMBOE)	<b>14,146</b>	13,730	11,938	11,202	10,057	7,713	7,454	7,198	6,471	6,426
<b>OPERATING INFORMATION</b>										
<b>Daily production</b> (before royalties) <sup>(10)</sup>										
Crude oil and NGLs (Mbb/d)										
North America – Exploration and Production	473	460	406	351	359	351	400	391	344	326
North America – Oil Sands Mining and Upgrading	448	417	395	426	282	123	123	111	100	86
North Sea	18	23	28	24	23	24	22	17	18	20
Offshore Africa	14	17	21	20	20	26	19	12	16	19
	<b>952</b>	918	850	821	685	524	564	531	478	451
Natural gas (MMcf/d)										
North America	1,680	1,450	1,443	1,490	1,601	1,622	1,663	1,527	1,130	1,198
North Sea	3	12	24	32	39	38	36	7	4	2
Offshore Africa	12	15	24	26	22	31	27	21	24	20
	<b>1,695</b>	1,477	1,491	1,548	1,662	1,691	1,726	1,555	1,158	1,220
Total production (before royalties) (MBOE/d)	<b>1,235</b>	1,164	1,099	1,079	962	806	852	790	671	655
<b>PRODUCT PRICING</b> <sup>(6)(11)</sup>										
Average crude oil and NGLs price (\$/bbl) <sup>(12)</sup>	63.71	31.90	55.08	46.92	48.57	36.93	41.13	77.04	73.81	72.44
Average natural gas price (\$/Mcf)	4.07	2.40	2.34	2.61	2.76	2.32	3.16	4.83	3.30	2.70
Average SCO price (\$/bbl) <sup>(13)</sup>	77.95	43.98	70.18	68.61	63.98	58.59	61.39	100.27	99.18	90.74

(9) Net present value, discounted at 10%, of the future net revenue (before income tax and excluding the ARO for existing development as at December 31, 2021) of the Company's total proved plus probable crude oil, natural gas and NGL reserves prepared using forecast prices and costs, as reported in the Company's AIF, plus the estimated market value of core unproved property at \$285/acre (2021 to 2015, \$300/acre from 2014 to 2012), less net debt divided by common shares outstanding. Net debt is long term debt plus/minus the working capital deficit/surplus. Future development costs and abandonment and reclamation costs attributable to future development activity have been applied against the future net revenue.

(10) Numbers may not add due to rounding.

(11) Product prices reflect realized product prices before blending costs, transportation costs and exclude risk management activities.

(12) Average crude oil and NGLs pricing excludes SCO.

(13) For years 2017 to 2021, average SCO product price includes AOSP realized product prices net of blending and feedstock costs.

# Corporate Information

## Board of Directors

**\*Catherine M. Best**, FCA, ICD.D <sup>(1)(2)</sup>

Corporate Director  
Calgary, Alberta

**\*M. Elizabeth Cannon**, O.C. <sup>(3)(4)(5)</sup>

Corporate Director  
Calgary, Alberta

**N. Murray Edwards**, O.C.

Corporate Director  
St. Moritz, Switzerland

**\*Dawn L. Farrell** <sup>(1)(3)(4)</sup>

Corporate Director  
Calgary, Alberta

**\*Christopher L. Fong** <sup>(3)(5)</sup>

Corporate Director  
Calgary, Alberta

**\*Ambassador Gordon D. Giffin** <sup>(1)(4)</sup>

Partner, Dentons US LLP  
Atlanta, Georgia

**\*Wilfred A. Gobert** <sup>(1)(2)(4)</sup>

Corporate Director  
Calgary, Alberta

**Steve W. Laut** <sup>(5)</sup>

Corporate Director  
Calgary, Alberta

**Tim S. McKay** <sup>(3)</sup>

President,  
Canadian Natural Resources Limited  
Calgary, Alberta

**\*Honourable Frank J. McKenna**, P.C., O.C., O.N.B., Q.C. <sup>(2)(4)</sup>

Deputy Chair, TD Bank Group  
Cap Pelé, New Brunswick

**\*David A. Tuer** <sup>(1)(5)</sup>

Corporate Director  
Calgary, Alberta

**\*Annette M. Verschuren**, O.C. <sup>(2)(3)</sup>

Chairman and Chief Executive Officer, NRSTOR Inc.  
Toronto, Ontario

(1) Audit Committee member

(2) Compensation Committee member

(3) Health, Safety, Asset Integrity and Environmental Committee member

(4) Nominating, Governance and Risk Committee member

(5) Reserves Committee member

\*Determined to be independent by the Nominating, Governance and Risk Committee of the Board of Directors and pursuant to the independent standards established under National Instrument 58-101 and the New York Stock Exchange Corporate Governance Listing Standards.

## Senior Officers

**N. Murray Edwards**

Executive Chairman

**Tim S. McKay**

President

**Darren M. Fichter**

Chief Operating Officer, Exploration and Production

**Scott G. Stauth**

Chief Operating Officer, Oil Sands

**Mark A. Stainthorpe**

Chief Financial Officer and Senior Vice-President, Finance

**Troy J.P. Andersen**

Senior Vice-President, Canadian Conventional  
Field Operations

**Calvin J. Bast**

Senior Vice-President, Production

**Bryan C. Bradley**

Senior Vice-President, Marketing

**Trevor J. Cassidy**

Senior Vice-President, Thermal

**Jay E. Froc**

Senior Vice-President, Oil Sands Mining and Upgrading

**Dwayne F. Giggs**

Senior Vice-President, Exploration

**Ron K. Laing**

Senior Vice-President, Corporate Development and Land

**Pamela A. McIntyre**

Senior Vice-President, Safety, Risk Management  
and Innovation

**Robin S. Zabek**

Senior Vice-President, Exploitation

**Erin L. Lunn**

Vice-President, Land

**Paul M. Mendes**

Vice-President, Legal, General Counsel and  
Corporate Secretary

**Kyle G. Pizio**

Vice-President, Drilling, Completions and Asset Retirement

**Roy D. Roth**

Vice-President, Facilities and Pipelines

# Corporate Offices

## HEAD OFFICE

### Canadian Natural Resources Limited

2100, 855 – 2 Street S. W.

Calgary, Alberta T2P 4J8

**Telephone:** (403) 517-6700

**Facsimile:** (403) 517-7350

**Website:** www.cnrl.com

## INVESTOR RELATIONS

**Telephone:** (403) 514-7777

**Email:** ir@cnrl.com

## INTERNATIONAL OFFICE

### CNR International (U.K.) Limited

St. Magnus House, Guild Street

Aberdeen AB11 6NJ Scotland

## REGISTRAR AND TRANSFER AGENT

### Computershare Trust Company of Canada

Calgary, Alberta

Toronto, Ontario

### Computershare Investor Services LLC

New York, New York

## AUDITORS

### PricewaterhouseCoopers LLP

Calgary, Alberta

## INDEPENDENT QUALIFIED RESERVES EVALUATORS

### GLJ Ltd.

Calgary, Alberta

### Sproule Associates Limited

Calgary, Alberta

### Sproule International Limited

Calgary, Alberta

## STOCK LISTING – CNQ

Toronto Stock Exchange

The New York Stock Exchange

## COMPANY DEFINITION

Throughout the annual report, Canadian Natural Resources Limited is referred to as “us”, “we”, “our”, “Canadian Natural”, or the “Company”.

## CURRENCY

All amounts are reported in Canadian currency unless otherwise stated.

## ABBREVIATIONS

Abbreviations can be found on page 10.

## METRIC CONVERSION CHART

To Convert	To	Multiply by
barrels	cubic metres	0.159
thousand cubic feet	cubic metres	28.174
feet	metres	0.305
miles	kilometres	1.609
acres	hectares	0.405
tonnes	tons	1.102

## COMMON SHARE DIVIDEND

The Company paid its first dividend on its common shares on April 1, 2001. Since then, dividends have been paid quarterly.

The following table shows the aggregate amount of the cash dividends declared per common share of the Company and accrued in each of its last three years ended December 31, 2021.

	2021	2020	2019
Cash dividends declared per common share	\$ 2.00	\$ 1.70	\$ 1.50

## NOTICE OF ANNUAL MEETING

In light of the unprecedented public health impact as a result of the outbreak of the novel coronavirus known as COVID-19, Canadian Natural's Annual and Special Meeting of the Shareholders will be held in a virtual online format via live webcast on Thursday, May 5, 2022 at 1:00 p.m. Mountain Daylight Time. Please see our website, www.cnrl.com, for any location information updates.

## CORPORATE GOVERNANCE

Canadian Natural's corporate governance practices and disclosure of those practices are in compliance with National Policy 58-201 Corporate Governance Guidelines and National Instrument 58-101 Disclosure of Corporate Governance Practices. Canadian Natural, as a “foreign private issuer” in the United States, may rely on home jurisdiction listing standards for compliance with most of the New York Stock Exchange (“NYSE”) Corporate Governance Listing Standards but must disclose any significant differences between its corporate governance practices and those required for U.S. companies listed on the NYSE.

Canadian Natural follows Toronto Stock Exchange (“TSX”) rules with respect to shareholder approval of equity compensation plans and material revisions to such plans. TSX rules provide that only the creation of or material amendments to equity compensation plans which provide for new issuance of securities are subject to shareholder approval. However, the NYSE requires shareholder approval of all equity compensation plans whether they provide for the delivery of newly issued securities, or rely on securities acquired in the open market by the issuing company for the purposes of redistribution to plan beneficiaries, and material revisions to such plans. Canadian Natural has a performance share unit plan pursuant to which common shares are purchased through the TSX. This is not a new issue of securities under the performance share unit plan and under TSX rules the plan is not subject to shareholder approval.

Canadian Natural has included as exhibits to its Annual Report on Form 40-F for the 2021 fiscal year filed with the United States Securities and Exchange Commission certificates of the Chief Executive Officer and Chief Financial Officer certifying as to disclosure controls and procedures and internal control over financial reporting.



**Canadian Natural**

2100, 855 – 2 Street S.W.

**Calgary, AB T2P 4J8**

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