

# **ARROW EXPLORATION CORP.**

**MANAGEMENT'S DISCUSSION AND ANALYSIS  
YEAR ENDED DECEMBER 31, 2019**





## MANAGEMENT'S DISCUSSION AND ANALYSIS

This Management's Discussion and Analysis ("MD&A") as provided by the management of Arrow Exploration Corp. ("Arrow" or the "Company"), is dated as of June 1, 2020 and should be read in conjunction with Arrow's annual consolidated financial statements and related notes for the year ended December 31, 2019. Additional information relating to Arrow is available under Arrow's profile on [www.sedar.com](http://www.sedar.com).

### Advisories

#### Basis of Presentation

*The condensed consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS"), and all amounts herein are expressed in United States dollars, unless otherwise noted, and all tabular amounts are expressed in United States dollars, unless otherwise noted. Additional information for the Company may be found on SEDAR at [www.sedar.com](http://www.sedar.com).*

#### Advisory Regarding Forward-Looking Statements

*This MD&A contains certain statements or disclosures relating to Arrow that are based on the expectations of its management as well as assumptions made by and information currently available to Arrow which may constitute forward-looking statements or information ("forward-looking statements") under applicable securities laws. All such statements and disclosures, other than those of historical fact, which address activities, events, outcomes, results or developments that Arrow anticipates or expects may, could or will occur in the future (in whole or in part) should be considered forward-looking statements. In some cases, forward-looking statements can be identified by the use of the words "believe", "continue", "could", "expect", "likely", "may", "outlook", "plan", "potential", "will", "would" and similar expressions. In particular, but without limiting the foregoing, this MD&A contains forward-looking statements pertaining to the following: the COVID-19 pandemic and its impact; tax liability; capital management strategy; capital structure; credit facilities and other debt; performance by Canacol (as defined herein) and the Company in connection with the Note (as defined herein) and letters of credit; Arrow's costless collar structure; Arrow's interest in the OBC Pipeline (as defined herein) and the consequences thereof; cost reduction initiatives; potential drilling on the Tapir block; capital requirements; expenditures associated with asset retirement obligations; future drilling activity and the development of the Rio Cravo Este structure on the Tapir Block. Statements relating to "reserves" and "resources" are deemed to be forward-looking information, as they involve the implied assessment, based on certain estimates and assumptions, that the reserves and resources described exist in the quantities predicted or estimated and can be profitably produced in the future.*

*The forward-looking statements contained in this MD&A reflect several material factors and expectations and assumptions of Arrow including, without limitation: current and anticipated commodity prices and royalty regimes; the impact and duration of the COVID-19 pandemic; the financial impact of Arrow's costless collar structure; availability of skilled labour; timing and amount of capital expenditures; future exchange rates; commodity prices; the impact of increasing competition; general economic conditions; availability of drilling and related equipment; receipt of partner, regulatory and community approvals; royalty rates; future operating costs; effects of regulation by governmental agencies; uninterrupted access to areas of Arrow's operations and infrastructure; recoverability of reserves; future production rates; timing of drilling and completion of wells; pipeline capacity; that Arrow will have sufficient cash flow, debt or equity sources or other financial resources required to fund its capital and operating expenditures and requirements as needed; that Arrow's conduct and results of operations will be consistent with its expectations; that Arrow will have the ability to develop its oil and gas properties in the manner currently contemplated; current or, where applicable, proposed industry conditions, laws and regulations will continue in effect or as anticipated; that the estimates of Arrow's reserves and production volumes and the*



*assumptions related thereto (including commodity prices and development costs) are accurate in all material respects; that Arrow will be able to obtain contract extensions or fulfil the contractual obligations required to retain its rights to explore, develop and exploit any of its undeveloped properties; and other matters.*

*Arrow believes the material factors, expectations and assumptions reflected in the forward-looking statements are reasonable at this time but no assurance can be given that these factors, expectations and assumptions will prove to be correct. The forward-looking statements included in this MD&A are not guarantees of future performance and should not be unduly relied upon.*

*Such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results or events to differ materially from those anticipated in such forward-looking statements including, without limitation: the impact and duration of the COVID-19 pandemic; the impact of general economic conditions; volatility in commodity prices; industry conditions including changes in laws and regulations including adoption of new environmental laws and regulations, and changes in how they are interpreted and enforced; competition; lack of availability of qualified personnel; the results of exploration and development drilling and related activities; obtaining required approvals of regulatory authorities; counterparty risk; risks associated with negotiating with foreign governments as well as country risk associated with conducting international activities; commodity price volatility; fluctuations in foreign exchange or interest rates; environmental risks; changes in income tax laws or changes in tax laws and incentive programs; changes to pipeline capacity; ability to secure a credit facility; ability to access sufficient capital from internal and external sources; risk that Arrow's evaluation of its existing portfolio of development and exploration opportunities is not consistent with future results; that production may not necessarily be indicative of long term performance or of ultimate recovery; and certain other risks detailed from time to time in Arrow's public disclosure documents including, without limitation, those risks identified in Arrow's 2018 AIF, a copy of which is available on Arrow's SEDAR profile at [www.sedar.com](http://www.sedar.com). Readers are cautioned that the foregoing list of factors is not exhaustive and are cautioned not to place undue reliance on these forward-looking statements.*

#### **Non-IFRS Measures**

*The Company uses non-IFRS measures to evaluate its performance which are measures not defined in IFRS. Working capital, funds flow from operations, realized prices, operating netback, adjusted EBITDA, and net debt as presented do not have any standardized meaning prescribed by IFRS and therefore may not be comparable with the calculation of similar measures for other entities. The Company considers these measures as key measures to demonstrate its ability to generate the cash flow necessary to fund future growth through capital investment, and to repay its debt, as the case may be. These measures should not be considered as an alternative to, or more meaningful than net income (loss) or cash provided by operating activities or net loss and comprehensive loss as determined in accordance with IFRS as an indicator of the Company's performance. The Company's determination of these measures may not be comparable to that reported by other companies.*

*Working capital is calculated as current assets minus current liabilities; funds from operations is calculated as cash flows from (used in) operating activities adjusted to exclude settlement of decommissioning obligations and changes in non-cash working capital balances; realized price is calculated by dividing gross revenue by gross production, by product, in the applicable period; operating netback is calculated as total natural gas and crude revenues minus royalties, transportation costs and operating expenditures; adjusted EBITDA is calculated as net loss adjusted for interest, income taxes, depreciation, depletion, amortization and other similar non-recurring or non-cash charges; and net debt is defined as the principal amount of its outstanding debt, less working capital items.*

*The Company also presents funds from operations per share, whereby per share amounts are calculated using weighted-average shares outstanding consistent with the calculation of net loss and comprehensive loss per share.*

*A reconciliation of the non-IFRS measures is included as follows:*



(in United States dollars)	Three months ended December 31, 2019	Year ended December 31, 2019	Three months ended December 31, 2018	Year ended December 31, 2018
<b>Net income (loss)</b>	<b>(2,089,036)</b>	<b>(5,976,895)</b>	1,167,936	(665,123)
<b>Add/(subtract):</b>				
Share based payments	11,614	803,001	256,987	256,987
Financing costs:				
Accretion on decommissioning obligations	92,686	379,064	85,521	86,621
Interest	297,964	968,162	248,398	252,508
Other	(68,107)	1,003,700	-	-
Depreciation and depletion	1,631,022	8,501,983	2,030,327	2,044,120
Risk management activities	502,837	-	(1,612,800)	(1,612,800)
Gain on disposition of oil and gas properties	-	(1,632,174)	(1,131,000)	(1,131,000)
Impairment of oil and gas properties	-	1,531,000	-	-
Income taxes, current and deferred	(505,873)	(371,275)	75,000	75,000
<b>Adjusted EBITDA <sup>(1)</sup></b>	<b>(126,893)</b>	<b>5,206,566</b>	1,120,369	(693,687)
<b>Cash flows provided by operating activities</b>	<b>5,844,706</b>	<b>3,857,450</b>	2,760,196	2,855,139
<b>Minus - Changes in non-cash working capital balances:</b>				
Trade and other receivables	(1,930,620)	769,786	1,036,553	1,277,750
Taxes receivable	30,897	2,125,945	(740,402)	(740,402)
Deposits and prepaid expenses	127,376	(1,613,135)	1,152,502	1,152,502
Inventory	64,470	(377,233)	419,860	419,860
Accounts payable and accrued liabilities	(4,302,708)	(1,481,597)	(5,484,030)	(7,636,835)
<b>Funds flow from (used in) operations <sup>(1)</sup></b>	<b>(165,879)</b>	<b>3,281,216</b>	(855,321)	(2,671,986)

<sup>(1)</sup>Non-IFRS measures

The term barrel of oil equivalent (“boe”) is used in this MD&A. Boe may be misleading, particularly if used in isolation. A boe conversion ratio of 6 thousand cubic feet (“Mcf”) of natural gas to one barrel of oil (“bbl”) is used in the MD&A. This conversion ratio of 6:1 is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead.



## FINANCIAL AND OPERATING HIGHLIGHTS

(in United States dollars, except as otherwise noted)	Three months ended December 31, 2019	Year ended December 31, 2019	Three months ended December 31, 2018	Year ended December 31, 2018
Total natural gas and crude oil revenues, net of royalties	5,585,531	25,440,370	5,911,425	6,077,423
Funds flow from (used in) operations <sup>(1)</sup>	(165,879)	3,281,216	(855,321)	(2,671,986)
Per share – basic (\$) and diluted (\$)	(0.00)	0.05	(0.01)	(0.04)
Net income (loss)	(2,089,036)	(5,976,895)	1,242,936	(665,123)
Per share – basic (\$) and diluted (\$)	(0.03)	(0.09)	\$0.02	(\$0.01)
Adjusted EBITDA <sup>(1)</sup>	(126,893)	5,206,566	1,120,369	(693,687)
Weighted average shares outstanding – basic and diluted	68,674,602	68,674,602	68,674,602	68,674,602
Common shares end of period	68,674,602	68,674,602	68,674,602	68,674,602
Capital expenditures	(171,138)	9,414,464	7,007,580	7,007,580
Cash and cash equivalents	1,085,655	1,085,655	1,994,233	1,994,233
Current Assets	7,811,889	7,811,889	8,599,160	8,599,160
Current liabilities	10,675,530	10,675,530	17,157,942	17,157,942
Working capital (deficit) <sup>(1)</sup>	(2,863,641)	(2,863,641)	(8,558,782)	(8,558,782)
Long-term portion of restricted cash <sup>(2)</sup>	449,288	449,288	3,154,839	3,154,839
Total assets	72,750,706	72,750,706	76,962,315	76,962,315
<b>Operating</b>				
<b>Natural gas and crude oil production, before royalties</b>				
Natural gas (Mcf/d)	531	623	733	734
Natural gas liquids (bbl/d)	6	6	7	7
Crude oil (bbl/d)	1,502	1,671	1,553	1,547
<b>Total (boe/d)</b>	<b>1,595</b>	<b>1,781</b>	<b>1,682</b>	<b>1,676</b>
<b>Operating netbacks (\$/boe) <sup>(1)</sup></b>				
Natural gas (\$/Mcf)	\$0.25	(\$0.43)	(\$1.97)	(\$ 1.92)
Crude oil (\$/bbl)	\$13.95	\$21.22	\$19.15	\$19.22
<b>Total (\$/boe)</b>	<b>\$13.14</b>	<b>\$19.86</b>	<b>\$16.88</b>	<b>\$16.96</b>

<sup>(1)</sup>Non-IFRS measures – see “Non-IFRS Measures” section within this MD&A

<sup>(2)</sup>Long term restricted cash not included in working capital



## The Company

Arrow (formerly Front Range Resources Ltd. ("Front Range")) is a junior oil and gas company engaged in the acquisition, exploration and development of oil and gas properties in Colombia and Western Canada. The Company's shares trade on the TSX Venture Exchange under the symbol AXL.

The Company and Arrow Exploration Ltd. entered into an arrangement agreement dated June 1, 2018, as amended, whereby the parties completed a business combination pursuant to a plan of arrangement under the *Business Corporations Act (Alberta)* ("ABCA") on September 28, 2018. Arrow Exploration Ltd. was incorporated under the ABCA on December 12, 2016 as 2010461 Alberta Ltd. and on January 24, 2018, 2010461 Alberta Ltd. changed its name to Arrow Exploration Ltd. by way of a certificate of amendment. Arrow Exploration Ltd. and Front Range's then wholly-owned subsidiary, 2118295 Alberta Ltd., were amalgamated on September 28, 2018 pursuant to the arrangement agreement to form Arrow Holdings Ltd., a wholly-owned subsidiary of the Company (the "Arrangement").

On May 31, 2018, Arrow Exploration Ltd. entered in a share purchase agreement, as amended, with Canacol Energy Ltd. ("Canacol"), to acquire Canacol's Colombian oil properties held by its wholly-owned subsidiary Carrao Energy S.A. ("Carrao"). On September 27, 2018, Arrow Exploration Ltd. closed the agreement with Canacol.

On May 31, 2018, Arrow Exploration Ltd., entered into a purchase and sale agreement to acquire a 50% beneficial interest in a contract entered into with Ecopetrol S.A. pertaining to the exploration and production of hydrocarbons in the Tapir block from Samaria Exploration & Production S.A. ("Samaria"). On September 27, 2018, Arrow Exploration Ltd. closed the agreement with Samaria.

For accounting and presentation purposes, this MD&A reflects the results of operations of Arrow Exploration Ltd., the accounting acquirer, with the exception of the number of shares which were adjusted to reflect the legal capital of the Company.

The head office of Arrow is located at 920, 150 – 9th Avenue SW, Calgary, Alberta, Canada, T2P 3H9 and the registered office is located at Suite 1600, 421 – 7th Avenue SW, Calgary, Alberta, Canada, T2P 4K9.



As at December 31, 2019 the Company held an interest in seven oil blocks in Colombia and oil and natural gas leases in seven areas in Canada as follows:

		Gross Acres	Working Interest	Net Acres
<b>COLOMBIA</b>				
LLA-23	Operated	115,102	100%	115,102
Tapir	Operated	65,125	50%	32,563
Oso Pardo	Operated	672	100%	672
Ombu	Non-operated	56,482	10%	5,648
COR-39	Operated	95,111	100%	95,111
Los Picachos	Non-operated	52,772	37.5%	19,790
Macaya	Non-operated	195,255	37.5%	73,221
<b>Total Colombia</b>		<b>580,519</b>		<b>342,107</b>
<b>CANADA</b>				
Ansell	Operated	8,960	100%	8,960
Chicken	Non-operated	3,840	30%	1,152
Fir	Non-operated	7,680	32%	2,457
Harley	Operated	5,760	100%	5,760
Penhold	Non-operated	480	13%	61
Pepper	Operated	36,480	99%	36,160
Wapiti	Non-operated	21,760	24%	5,280
<b>Total Canada</b>		<b>84,960</b>		<b>59,830</b>
<b>TOTAL</b>		<b>665,479</b>		<b>401,937</b>

On April 29, 2019 the Company closed the sale of its 20% interest in the VMM-2 (as defined herein) block for cash proceeds of \$3.5 million and sold the right to earn the 40% interest in the Coati block for \$1.5 million per a purchase and sale agreement effective May 1, 2019, subject to regulatory approval. The impact was to reduce net acreage in Colombia by 39,859 acres.

The Company's primary producing assets are located in Colombia in the LLA-23, Tapir, Oso Pardo and Ombu blocks, with minor production in Canada at Fir, Alberta.

#### **Llanos Basin**

Within the Llanos Basin, the Company is engaged in the exploration, development and production of oil within two operated blocks: LLA-23 and Tapir. The LLA-23 block contains the Labrador, Leono, Pantro, Tigro and Danes producing fields.



On June 10, 2019, the Company announced a discovery at its Rio Cravo Este-1 (“RCE-1”) exploration well on the Tapir block.

In the Llanos Basin most oil accumulations are associated with three-way dip closure against NNE-SSW trending normal faults and can have pay within multiple reservoirs. Effective exploration for this play requires good quality 3D seismic data. Both the LLA-23 and Tapir blocks contain large areas not yet covered by 3D seismic, and in Management’s opinion offer substantial exploration upside.

#### ***Middle Magdalena Valley (“MMV”) Basin***

Arrow’s Oso Pardo field is located in the MMV Basin. In general, fields within the basin are more structurally complex than in the Llanos basin but have the potential for thicker oil columns and significant oil in place.

#### ***Oso Pardo Field***

The Oso Pardo Field is located in the Santa Isabel Block in the MMV Basin. It is a 100% owned property operated by the Company. The Oso Pardo field is located within a Production Licence covering 672 acres. Three wells have been drilled to date within the License area.

#### ***Ombu E&P Contract – Capella Conventional Heavy Oil Discovery***

The Caguan Basin covers an area of approximately 60,000 km<sup>2</sup> and lies between the Putumayo and Llanos Basins. The primary reservoir target is the Upper Eocene aged Mirador formation. The Capella structure is a large, elongated northeast-southwest fault-related anticline, with approximately 17,500 acres in closure at the Mirador level. The field is located approximately 250 km away from the nearest offloading station at Neiva, where production from Capella is trucked.

The Capella No. 1 discovery well was drilled in July 2008 and was followed by a series of development wells. The Company earned a 10% working interest in the Ombu E&P Contract by paying 100% of all activities associated with the drilling, completion, and testing of the Capella No. 1 well.

#### ***Fir, Alberta***

The Company has an average non-operated 32% WI in 12 gross (4.1 net) sections of oil and natural gas rights and 12 gross (3.64 net) producing natural gas wells at Fir. The wells produce raw natural gas into the Cecilia natural gas plant where it is processed.

### **Three Months Ended December 31, 2019 Financial and Operational Highlights**

- For the three months ended December 31, 2019, Arrow recorded \$5,585,531 in revenues (net of royalties on crude oil sales of 153,576 bbls, 415 bbls of natural gas liquids (“NGL’s”) and 48,020 Mcf of natural gas sales.
- Funds used in operations of \$165,879.
- Adjusted EBITDA for the three months ended December 31, 2019 was (\$126,893).
- The Company recorded a net loss of \$2,089,036 for the three months ended December 31, 2019.

### **Annual 2019 Reserve Highlights**

- 4.095 MMboe of Proved Reserves, net decrease of 873 Mboe compared to 2018
- 10.32 MMboe of Proved plus Probable Reserves, net decrease of 249Mboe
- Proved Reserves estimated net present value before income taxes of \$35 million at a 10% discount rate





- Proved plus Probable Reserves estimated net present value before income taxes of \$87 million at a 10% discount rate
- Reserve Life Index of 7.0 for Proved Reserves and 17.7 for Proved plus Probable Reserves based on average fourth quarter 2019 corporate production of 1,595 boe/d

## RESULTS OF OPERATIONS

The Company closed the Arrangement on September 28, 2018 and, as a result, there are no meaningful comparatives between the current year and prior year operations. As a result, and in the interest of providing more meaningful commentary to readers, some operational and financial indicators for the current quarter ending December 31, 2019 have been compared against the prior 2019 quarters, where deemed appropriate. In addition, all annual results disclosed herein for the year ending December 31, 2018 only reflect 3 months and 2 days of operations.

The Company announced a commercial discovery at its RCE-1 exploration well on the Tapir block on June 2019. RCE-1 was spud on April 25, 2019 and reached a total depth of 10,000 ft md within the Ubaque Formation. The RCE-1 exploration well was perforated and tested over a 12-foot interval (true vertical depth) in the 'C7 A' Sand. Oil production over the test period averaged 613 bbl/d of 28.3° API oil at a 46.5% water cut over a range of choke sizes. A peak oil rate of 1,172 bbl/d was recorded and the well did not produce any natural gas during the production test.

During 2019, the Company closed the sale of its remaining 20% interest in the VMM-2 Block located in the Middle Magdalena Basin in Colombia for gross proceeds of \$3.5 million (the "VMM-2 Transaction") and the sale of its Coati farm-in commitment for gross proceeds of \$1.5 million, both subject to regulatory approval.

### Average Production by Property

Average Production Boe/d	2019	Q4 2019	Q3 2019	Q2 2019	Q1 2019
LLA-23	1,084	934	1,114	1,208	1,082
Oso Pardo	159	129	146	171	191
Ombu (Capella)	254	221	243	282	272
Mono Araña (VMM-2)	11	-	-	-	43
Rio Cravo Este (Tapir)	163	218	190	80	-
<b>Total Colombia</b>	<b>1,671</b>	<b>1,502</b>	1,693	1,741	1,588
Fir, Alberta	109	93	106	118	122
<b>TOTAL (Boe/d)</b>	<b>1,780</b>	<b>1,595</b>	1,799	1,859	1,710

For the three months ended December 31, 2019, the Company's average production was 1,595 boe/d which consisted of crude oil production in Colombia at 1,502 bbl/d, and natural gas production of 531 Mcf/d and minor amounts of natural gas liquids from the Company's Canadian properties. During the three months ended December 31, 2019, production decreased in the LLA-23 block due to a watercut increase in the Agueda and Labrador fields. The decrease in Oso Pardo block was related to a fall in pressure, and Ombu's production decreased due to intermittent power outages during Q4 2019, whereas Rio Cravo Este had an increase in production due to improvements made to water handling.



### Average Daily Natural Gas and Oil Production and Sales Volumes

	Three months ended December 31		Year ended December 31	
	2019	2018	2019	2018
<b>Natural Gas (Mcf/d)</b>				
Natural gas production	531	733	623	734
Natural gas sales	531	733	623	734
<b>Realized Contractual Natural Gas Sales</b>	<b>531</b>	<b>733</b>	<b>623</b>	<b>734</b>
<b>Crude Oil (bbl/d)</b>				
Crude oil production	1,502	1,553	1,671	1,547
Inventory movements and other	(30)	(92)	(50)	(90)
<b>Crude Oil Sales</b>	<b>1,472</b>	<b>1,461</b>	<b>1,621</b>	<b>1,457</b>
<b>Corporate</b>				
Natural gas production (boe/d)	88	122	104	122
Natural Gas Liquids(bbl/d)	6	7	6	7
Crude oil production (bbl/d)	1,502	1,553	1,671	1,547
Total production (boe/d)	1,595	1,682	1,781	1,676
Inventory movements and other (boe/d)	(30)	(92)	(50)	(90)
<b>Total Corporate Sales (boe/d)</b>	<b>1,565</b>	<b>1,590</b>	<b>1,731</b>	<b>1,586</b>

During the three months and year ended December 31, 2019 the majority of production was attributed to Colombia where the Company operates three producing properties: LLA-23, Oso Pardo and Rio Cravo Este, and one non-operated property, Ombu. In Canada, the Company has two operated and two non-operated properties located in the province of Alberta at Fir, Pepper, Harley and Wapiti. During Q4 2019, Fir produced 531 Mcf/d of natural gas and 6 bbl/d of natural gas liquids.

### Natural Gas and Oil Revenues

	Three months ended December 31		Year ended December 31	
	2019	2018	2019	2018 <sup>(1)</sup>
<b>Natural Gas</b>				
Natural gas revenues	\$101,096	\$ 88,417	\$321,265	\$ 120,988
NGL revenues	\$14,136	28,341	85,651	1,232
Royalties	(10,312)	(4,064)	(31,026)	(5,934)
<b>Revenues, net of royalties</b>	<b>104,920</b>	<b>112,693</b>	<b>375,890</b>	<b>116,286</b>
<b>Oil</b>				
Oil revenues	\$5,965,475	6,499,829	27,773,161	6,669,791
Royalties	(484,863)	(704,570)	(2,708,681)	(719,298)
<b>Revenues, net of royalties</b>	<b>5,480,612</b>	<b>5,796,596</b>	<b>25,064,480</b>	<b>5,950,259</b>



	Three months ended December 31		Year ended December 31	
	2019	2018	2019	2018 <sup>(1)</sup>
<b>Corporate</b>				
Natural gas revenues	\$101,096	88,417	321,265	120,988
NGL revenues	\$14,136	28,341	85,651	1,232
Oil revenues	5,965,475	6,500,166	27,773,161	6,669,558
Total revenues	6,080,707	6,616,923	28,180,077	6,791,778
Royalties	(495,175)	(708,634)	(2,739,707)	(725,232)
<b>Natural gas and crude oil revenues, net of royalties, as reported</b>	<b>5,585,532</b>	<b>5,908,289</b>	<b>25,440,370</b>	<b>6,066,546</b>

<sup>(1)</sup>Only three months and two days of operations were recognized in the comparable 2018 annual period.

Revenue for the three months and the year ended December 31, 2019 was \$5.6 and \$25.4 million, respectively, net of royalties, which represents a decrease of 11% compared to Q3 2019. This decrease is mainly due to reduced realized prices of crude oil combined with lower production. The majority of the Company's production is of crude oil and the Company receives Brent referenced pricing for its crude oil.

#### Average Benchmark and Realized Prices

	Three months ended December 31			Years ended December 31		
	2019	2018	Change	2019	2018	Change
<b>Benchmark Prices</b>						
AECO (\$/Mcf)	\$1.93	\$1.21	59%	\$1.32	\$1.18	12%
Brent (\$/bbl)	\$62.62	\$67.52	-7%	\$64.24	\$71.13	-10%
West Texas Intermediate (\$/bbl)	\$57.00	\$58.79	-3%	\$57.02	\$64.85	-12%
<b>Realized Prices</b>						
Natural gas, net of transportation (\$/Mcf)	\$2.11	\$1.31	61%	\$1.41	\$1.33	6%
Natural gas liquids (\$/bbl)	\$34.04	\$44.01	-23%	\$42.07	\$44.67	-6%
Crude oil, net of transportation (\$/bbl)	\$38.84	\$48.36	-20%	\$46.66	\$48.19	-3%
<b>Corporate average, net of transport (\$/boe)<sup>(1)</sup></b>	<b>\$38.72</b>	<b>\$45.23</b>	<b>-14%</b>	<b>\$44.36</b>	<b>\$45.08</b>	<b>-2%</b>

The Company realized a price of \$38.72 and \$44.36 per boe during the three months and year ended December 31, 2019, respectively, as world oil prices decreased during Q4 2019. In Canada, natural gas prices remained at depressed levels.

#### Operating Expenses

	Three months ended December 31		Years ended December 31	
	2019	2018	2019	2018
Natural gas & NGL's	78,701	217,492	386,939	220,409
Crude oil	3,338,367	3,222,939	12,434,912	3,290,348
<b>Total operating expenses</b>	<b>3,417,068</b>	<b>3,440,431</b>	<b>12,821,851</b>	<b>3,510,757</b>
Natural gas (\$/Mcf)	\$1.64	\$3.22	\$1.70	\$3.27
Crude oil (\$/bbl)	\$21.74	\$23.98	\$20.89	\$20.80
<b>Corporate (\$/boe)<sup>(1)</sup></b>	<b>\$22.45</b>	<b>\$22.23</b>	<b>\$20.19</b>	<b>\$3.74</b>



(1) Non-IFRS measure

(2) Only three months and two days of operations were recognized in the comparable 2018 periods.

During the three months and year ended December 31, 2019, Arrow incurred operating expenses of \$3,417,068 and \$12,821,851 respectively, at an average cost of \$22.45 and \$20.19 per boe. Operating expenses for the three months ended December 31, 2019 increased \$588.483 or 21% compared with Q3 2019, the result of a decrease in the LLA-23 block and stabilization of operations of the RCE-1 well.

## Operating Netbacks

	Three months ended December 31		Years ended December 31	
	2019	2018	2019	2018
<b>\$/Mcf</b>				
<b>Natural Gas</b>				
Revenue, net of transportation expense	\$2.11	1.31	\$1.41	1.33
Royalties	(0.21)	(0.06)	(0.14)	(0.9)
Operating expenses	(1.64)	(3.22)	(1.70)	(3.16)
<b>Operating netback<sup>(1)</sup></b>	<b>\$0.25</b>	<b>(\$1.97)</b>	<b>(\$0.43)</b>	<b>(\$1.92)</b>

	Three months ended December 31		Years ended December 31	
	2019	2018	2019	2018
<b>\$/bbl</b>				
<b>Crude oil</b>				
Revenue, net of transportation expense	\$38.84	48.36	\$46.66	\$48.19
Royalties	(3.16)	(5.23)	(4.55)	(5.2)
Operating expenses	(21.74)	(23.98)	(20.89)	(23.77)
<b>Operating netback<sup>(1)</sup></b>	<b>\$13.95</b>	<b>\$19.15</b>	<b>\$21.22</b>	<b>\$19.22</b>

	Three months ended December 31		Years ended December 31	
	2019	2018	2019	2019
<b>\$/boe</b>				
<b>Corporate</b>				
Revenue, net of transportation expense	\$38.72	\$45.23	\$44.36	\$45.08
Royalties	(3.13)	(4.83)	(4.31)	(4.82)
Operating expenses	(22.45)	(23.52)	(20.19)	(23.30)
<b>Operating netback<sup>(1)</sup></b>	<b>\$13.14</b>	<b>\$16.88</b>	<b>\$19.86</b>	<b>\$16.96</b>

(1) Non-IFRS measure

## General and Administrative Expenses (G&A)

	Three months ended December 31		Years ended December 31	
	2019	2018	2019	2018
General & administrative expenses	2,321,796	2,996,358	8,058,994	3,832,430
Transaction costs	-	-	-	1,073,656



Less: G&A capitalized	-	-	(423,750)	-
G&A recovered from 3 <sup>rd</sup> parties	-	-	(480,614)	-
<b>Total operating overhead recovery</b>	-	-	<b>(904,364)</b>	-
<b>Total G&amp;A</b>	<b>2,321,796</b>	<b>2,996,358</b>	<b>7,154,630</b>	<b>4,906,086</b>
<b>G&amp;A per boe</b>	<b>14.19</b>	22.94	<b>11.26</b>	<b>35.87</b>

For the three months and year ended December 31, 2019, G&A expenses, before capitalization totaled \$2,321,796 and \$8,058,994, respectively. An increase of \$340,484 over the previous quarter, mainly represented by higher legal fees related to activities to attempt securing a credit facility and severance payments made to a former executive of the Company during Q4 2019. The Company has also capitalized \$423,750 to its exploration and evaluation assets related with its exploration efforts in the Tapir block and had G&A recoverable from its partner in the Tapir block for \$480,614. Transaction costs incurred in 2018 were primarily legal costs associated with the acquisitions and reverse takeover that occurred in 2018.

### Financing Costs

	Three months ended December 31		Years ended December 31	
	2019	2018	2019	2018
Financing expense paid or payable	229,857	248,398	1,971,862	252,508
Non-cash financing costs	92,686	86,621	379,064	86,621
<b>Net financing costs</b>	<b>322,543</b>	335,019	<b>2,350,926</b>	339,129

The finance expense paid or payable represents interest on the \$5 million promissory note due to Canacol, as partial payment for the acquisition of Carrao which bears interest at 15% per annum. In addition, financing expense includes fees and interest associated with financing standby letters of credit on certain of the Company's Colombian blocks. The non-cash finance cost represents an increase in the present value of the decommissioning obligation for the current periods. The amount of this expense will fluctuate commensurate with the asset retirement obligation as new wells are drilled or properties are acquired or disposed.

### Risk Management Contracts

	Three months ended December 31		Years ended December 31	
	2019	2018	2019	2018
Realized derivative gain on commodity risk management contracts	99,443	-	192,420	-
Unrealized derivative gain (loss) on commodity risk management contracts	(409,860)	-	-	-
<b>Total (loss) income on risk management activities</b>	<b>(310,417)</b>	-	<b>192,420</b>	-

During 2019, the Company entered into a 'costless collar' commodity hedging agreement for a total of 18,000 barrels of oil per month from June 1 to December 31, 2019. This agreement provides a Brent-based floor price of \$65 per barrel and a ceiling price of \$71 per barrel on 18,000 barrels of oil per month over the aforementioned time period.



### Share-based Payments Expense

	Three months ended December 31		Years ended December 31	
	2019	2018	2019	2018
<b>Share-based Payments expense</b>	<b>11,614</b>	256,987	<b>803,001</b>	256,987

Share-based payments expense for the three months and year ended December 31, 2019 totalled \$11,614 and \$803,001, respectively, compared to \$303,816 in the previous quarter. This expense is the result of the progressive vesting of the options granted to the Company's employees and consultants, net of cancellations and forfeitures, according to the company's stock-based compensation plan.

### Depletion and Depreciation

	Three months ended December 31		Years ended December 31	
	2019	2018	2019	2018
<b>Depletion and depreciation</b>	<b>1,631,022</b>	2,030,327	<b>8,501,983</b>	2,044,120

Depletion and depreciation expense in the three months and year ended December 31, 2019 totalled \$1,631,022 and \$8,501,983, respectively, compared with \$2,280,963 in the previous quarter. The Company uses the unit of production method and proved plus probable reserves to calculate depletion expense.

### Impairment of Oil and Gas Properties

	Three months ended December 31		Years ended December 31	
	2019	2018	2019	2018
<b>Impairment of Oil and Gas Properties</b>	-	-	<b>\$1,531,000</b>	-

As at December 31, 2019, the Company reviewed its cash-generating unit's ("CGU") property and equipment and determined that there were indicators of impairment present related to the decline in reserves. The company prepared estimates of both the value in use and fair value less costs of disposal of its CGUs and it was determined that carrying value of each CGU did not exceed its recoverable amount and, therefore, no additional impairment provisions were required. As of December 31, 2019, the Company reviewed its June 30, 2019 impairment test and estimates used in the calculation and determined that the recoverable amount should have been \$3,281,000 as at June 2019 for its Canadian CGU (previously recorded at \$2,316,000 as at June 30, 2019).

### Income Taxes

	Three months ended December 31		Years ended December 31	
	2019	2018	2019	2018
Current income tax (recovery) expense	<b>(314,873)</b>	1,126,307	<b>130,725</b>	1,126,307
Deferred income tax recovery	<b>(191,000)</b>	(1,051,307)	<b>(502,000)</b>	(1,051,307)
<b>Total income tax expense (recovery)</b>	<b>(505,873)</b>	<b>75,000</b>	<b>(371,275)</b>	<b>75,000</b>



At December 31, 2019, the carrying value of the deferred income tax liability was \$1,824,000, using the asset and liability method of accounting for income taxes related to the operations of Carrao. The Company recognizes deferred income tax assets to the extent it believes that these assets will more likely than not be realized. The Company offsets the deferred income tax assets against the deferred income tax liability when it has the legal right to do so. In making this determination, the Company considers all available positive and negative evidence, including the reversal of all existing temporary differences, projected future taxable income, tax-planning strategies, and results of recent operations. As a result, the Company determined it was not appropriate to recognize a deferred tax asset with respect to its Canadian operations.

While the Company incurred a loss for tax purposes, under the tax code in Colombia, the Company is liable for a capital or presumptive tax which for 2019 assumes that 1.5% of the net tax equity at the previous year end is the presumptive income in the current year and is taxed at the corporate tax rate in Colombia of 33% (the “Presumptive Tax”). While the Company does not expect to pay corporate taxes in the foreseeable future based on existing tax pools, planned capital activities and current forecasts of taxable income, it will be subject to the Presumptive Tax. Ultimately, the current tax horizon will depend on several factors including commodity prices, future production, corporate expenses, and both the type and amount of capital expenditures incurred in future reporting periods.

## LIQUIDITY AND CAPITAL RESOURCES

### Capital Management

The Company’s objective is to maintain a capital base sufficient to provide flexibility in the future development of the business and maintain investor, creditor and market confidence. The Company manages its capital structure and makes adjustments in response to changes in economic conditions and the risk characteristics of the underlying assets. The Company considers its capital structure to include share capital, debt and working capital, excluding non-cash items. In order to maintain or adjust the capital structure, from time to time the Company may issue common shares or other securities, sell assets or adjust its capital spending to manage current and projected debt levels.

The Company had a net loss of \$5,976,895 for the year ended December 31, 2019 and had a working capital deficit of \$2,863,641 as at December 31, 2019. Subsequent to December 31, 2019, oil and gas prices have been significantly depressed and the global impact of the COVID-19 pandemic has fostered a great deal of uncertainty for the future operations of the Company. The Company’s ability to continue as a going concern is dependent on management’s ability to identify additional sources of capital and to raise sufficient resources to fund ongoing operating expenses and commitments. There is no assurance these initiatives will be successful in the future. These conditions indicate the existence of material uncertainties that may cast significant doubt regarding the applicability of the going concern assumption. The consolidated financial statements of the Company do not give effect to adjustments that would be necessary to the carrying values and classification of assets and liabilities should the Company be unable to continue as a going concern. These adjustments could be material.

During 2019, the Company entered into a definitive agreement to sell two non-core property interests for \$5 million, subject to adjustments. The two interests consisted of the Company’s remaining working interest in the VMM-2 Block as well as an exploration commitment to earn a 40% working interest in the Coati Block, subject to regulatory approval. The VMM-2 sale closed on April 29, 2019 for gross proceeds of \$3.5 million, and the Coati sale closed May 22, 2019 (effective May 1, 2019) for gross proceeds of \$1.5 million. As at December 31, 2019 the Company’s net debt was calculated as follows:

	<b>December 31, 2019</b>
Current assets	\$ 7,811,889
Other long-term receivables	784,056
<b>Less:</b>	
Accounts payable and accrued liabilities	10,675,530
Promissory Note – principal	5,714,076
<b>Net debt <sup>(1)</sup></b>	<b>\$ 7,793,661</b>

<sup>(1)</sup>Non-IFRS measure



## Working Capital

As at December 31, 2019 the Company's working capital was calculated as follows:

	December 31, 2019
<b>Current assets:</b>	
Cash and restricted cash	\$ 1,085,655
Trade and other receivables	3,927,724
Taxes receivable	2,349,543
Other current assets	448,967
<b>Less:</b>	
Accounts payable and accrued liabilities	10,614,821
Lease obligation	60,709
<b>Working capital (deficit) <sup>(1)</sup></b>	<b>\$ (2,863,641)</b>

<sup>(1)</sup>Non-IFRS measure

## Debt Capital

The Company currently has \$5.7 million in outstanding debt in the form of a promissory note payable to Canacol.

On April 29, 2019, Arrow and Canacol entered into an amended and restated promissory note (the "Amended Note") to revise the terms of the original \$5 million promissory note issued to Canacol upon Arrow's acquisition of Carrao Energy S.A. from Canacol in September 2018 (the "Original Note"). The amendments provided for repayment of the obligation commencing on July 1, 2019 at \$500,000 per month until payout. The Amended Note, which bore interest at 15%, also contained an accelerated payment feature whereby Canacol would have received 50% of Arrow's working interest cash flow from the RCE-1 well, calculated on a two-month trailing basis, up to a maximum of \$500,000, such that the monthly payment to Canacol would not exceed \$1 million. The balance of the obligation would also have been accelerated under the Amended Note in the event Arrow closes a credit facility or other financing structure, or closes a sale of assets pursuant to a definitive agreement entered into after April 29, 2019, in either case for net proceeds to Arrow in a minimum amount of \$5 million.

On July 31, 2019, Arrow and Canacol entered into a second amended and restated promissory note (the "Note") to revise the terms of the Original Note and Amended Note. The amendments provide a deferral of principal payments to commence on October 1, 2020 and which shall be paid in six monthly instalments such that all Note obligations are paid in full on or before March 1, 2021. The amendments also provide that the Company will repay all interest accrued to July 31, 2019 (totaling \$628,767) by December 31, 2019 and, on September 1, 2019, the Company commenced making monthly interest-only payments on the principal sum then outstanding plus the outstanding accrued interest balance. The interest payable on the Note remains unchanged at 15% per annum, and the Note continues to be repayable at any time without penalty. The Company has now granted a general security interest to Canacol for the obligations under the Note which will be subordinated to second position in the event the Company secures additional financing.

On December 31, 2019, Arrow and Canacol entered into a Third Amended and Restated Promissory note to revise the terms of the July 31, 2019, Amended and Restated Promissory Note. The principal amendments are the following:

- On or before April 1, 2021, the Company shall pay in full all accrued and outstanding interest owed until July 31, 2019 of \$628,767 (the "Interim Interest") plus interest on such sum at a rate of 15% from December 31, 2019 until the date of payment;
- Commencing September 1, 2019, and on the first day of each month thereafter, the Company shall make interest-only monthly payments equal to the total amount of interest on the principal sum plus interest on the interim interest sum, until paid in full; and
- Commencing April 1, 2021, and on the first day of each of the following six months thereafter, the Company shall make equal monthly payments of the balance of the principal sum outstanding as of April 1, 2021 such that all remaining obligations are paid in full on or before September 1, 2021.





The amendments also provide that all obligation related to the restated and amended promissory note shall be due immediately in case of a change in control, as defined therein, and the Arrow shall arrange to appoint two Canacol employees to sit in the Company's Board of Directors. Subsequently, on March 19, 2020, a fourth amended and restated promissory note was agreed by the parties removing the two Canacol Directors requirement and temporarily waiving the change in control provision set forth in the third amendment, leaving all other amendments unchanged. The Company has granted a general security interest to Canacol for the obligations under the Note which will be subordinated to second position in the event the Company secures additional financing.

The Company has been working to secure a development drilling loan that, if successful, will provide funding to develop prospects initially in the Tapir block. Additionally, Arrow continues to engage in discussions with various potential lenders to provide alternative debt solutions.

### Letters of Credit

As at December 31, 2019, the Company had obligations under Letters of Credit ("LC's") outstanding totaling \$12.3 million to guarantee work commitments on exploration blocks and other contractual commitments. Of the total, approximately \$11.3 million has been guaranteed by Canacol. Under an agreement with Canacol, Canacol will continue to provide security for the LC's providing that Arrow uses all reasonable efforts to replace the LC's. In the case of the abandonment LC's on LLA-23, if the LC's have not been replaced by December 31, 2020, then Arrow will pay a 1% per annum fee, payable monthly until the LC's have been replaced. In the event the Company fails to secure the renewal of the LC's underlying the Company's Agencia Nacional de Hidrocarburos ("ANH") guarantees, or any of them, the ANH could decide to cancel the underlying E&P contract for a particular block, as applicable. In this instance, the Company could risk losing its entire interest in the applicable block, including all capital expended to date, and could possibly also incur additional abandonment and reclamation costs if applied by the ANH.

#### Current Outstanding Letters of Credit

Contract	Beneficiary	Issuer	Type	Amount (US \$)	Renewal Date
LLA - 23	ANH	Canacol	Abandonment	\$3,489,495	January 31, 2020
	ANH	Canacol and Carrao	Abandonment	\$3,176,625	January 31, 2020
	ANH	Canacol and Carrao	Compliance	\$600,000	January 31, 2020
Tapir	ECP	Samaria Llanos	Abandonment	\$53,000	December 26, 2020
SANTA ISABEL	ANH	Carrao Energy SA Suc Col	Abandonment	\$482,451	April 14, 2020
	ANH	Canacol and Carrao	Financial Capacity	\$1,672,162	January 31, 2020
CORE - 39	ANH	Canacol	Compliance	\$2,400,000	January 31, 2020
OMBU	ANH	Carrao Energy SA Suc Col	Financial Capacity	\$436,300	April 14, 2020
<b>Total</b>				<b>\$12,310,033</b>	

### Share Capital

As at December 31, 2019, the Company had 68,674,602 common shares, 5,470,000 stock options, and 18,957,398 warrants outstanding.

### Subsequent Events

Subsequent to the year-end, on March 11 2020, the World Health Organization characterized the outbreak of a strain of the novel coronavirus ("COVID-19") as a pandemic which has resulted in a series of public health and emergency measures that have been put in place to combat the spread of the virus. See "Outlook" and "Risks and Uncertainties". The duration



and impact of COVID-19 is unknown at this time and it is not possible to reliably estimate the impact that the length and severity of these developments will have on the financial results and condition of the Company in future periods. See “Outlook”.

Subsequent to December 31, 2019, the Company reviewed its property and equipment Cash-Generating Unit’s (“CGU”) for indicators of impairment and determined that an indicator related to the decrease in future commodity prices due to the COVID-19 pandemic was present. The future price deck to be used for the March 31, 2020 balance sheet is 50% lower in 2020, 36% lower in 2021 and 20% to 25% lower in remaining years than the future price deck used for the December 31, 2020 balance sheet. The Company has prepared some preliminary estimates of both the value in use of its CGUs and has determined that it is likely that impairment charges will be recorded in the first quarter 2020.

On May 23, 2020, the Company announced the completion of a proposed non-brokered private placement of 13,000,000 common shares of the Company at a price of CAD\$0.025 per share for gross proceeds of CAD\$325,000. The private placement will be subscribed for by certain insiders of the Company in an amount of \$100,000 each, and a consultant to the Company in an amount of \$25,000. The Company has agreed to provide a loan of \$100,000 to each of the insiders and a loan of \$25,000 to the consultant, pursuant to promissory notes secured by the shares issued in this private placement. The Company has also issued an aggregate 4,875,000 stock options to a director, officers and a consultant of the Company as part of Arrow’s compensation arrangements.

## CONTRACTUAL OBLIGATIONS

The following table provides a summary of the Company’s cash requirements to meet its financial liabilities and contractual obligations existing at May 28, 2020:

	Less than 1 year	1-3 years	Thereafter	Total
Promissory Note	\$ -	\$ 5,714,076	\$ -	\$ 5,714,076
Exploration and production contracts	-	23,790,000	-	23,790,000
	\$ -	\$ 29,504,076	\$ -	\$ 29,504,076

## Exploration and Production Contracts

The Company has entered into a number of exploration contracts in Colombia which require the Company to fulfill work program commitments and issue financial guarantees related thereto. In aggregate, the Company has outstanding exploration commitments at December 31, 2019 of \$23.8 million. During 2019, the Company completed its earning commitment on the Tapir block by drilling the RCE-1 well and, with the sale of non-core assets (see Note 9 of the Company’s annual consolidated financial statements as at December 31, 2019), the Company transferred to the purchaser \$6.95 million in commitments on the Coati block that were scheduled for 2020. During 2019, the Company, in conjunction with its partners, made application to cancel a further \$15.5 million in commitments on the Macaya and Los Picachos blocks. This request was subsequently denied by the ANH. The remaining commitments are expected to be satisfied by means of seismic work, exploration drilling and farm-outs.

## Oleoducto Bicentenario de Colombia (“OBC”) Pipeline

The Company is party to an agreement with Canacol that entitles it to a 0.5% interest in OBC, which owns a pipeline system intended to link Llanos basin oil production to the Caño Limon oil pipeline system in Colombia. This agreement was part of Arrow’s acquisition of Carrao from Canacol. Recently, the Company in conjunction with Canacol, notified OBC to transfer title of the shares currently in the name of Canacol to Arrow. The transfer requires approval by OBC which at the date of this MD&A had not been received.

Canacol is currently in litigation with OBC in relation to ship or pay obligations that were terminated by Canacol in July 2018 under force majeure. Under terms of the agreement, if the pipeline has not been operational for a period greater than six months then the ship or pay obligation may be cancelled. The pipeline remains non-operational as of the date of this MD&A.



On March 27, 2019, the court in charge of the case ruled in favor of the OBC and opined that the obligations under the ship or pay contract remains in force. Subsequently, on May 13, 2019, Canacol filed an appeal at the State Council, a higher-level court in the Colombian judiciary system, requesting annulment of this ruling. Likewise, in July 2019, OBC has also started litigation against Canacol for not honouring its ship or pay obligations under the contract.

Depending on the final outcome of this dispute, Arrow may be required to satisfy past and future ship or pay obligations.

Upon official transfer of ownership to Arrow and under the terms of the OBC agreement, Arrow may be required to provide financial support or guarantees for its proportionate equity interest in any future debt financings or cash calls undertaken by OBC. At the same time, Arrow would be entitled to dividends declared and paid by OBC based on its 0.5% ownership interest.

### SUMMARY OF THREE MONTHS RESULTS

	2019				2018			
	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
Oil and natural gas sales, net of royalties	5,585,531	6,320,471	7,525,728	6,008,460	5,911,425	158,257	-	-
Net income (loss)	(2,089,036)	(1,325,939)	(857,740)	(1,704,180)	1,242,936	(1,265,672)	(359,560)	(312,107)
Income (loss) per share – basic and diluted	(0.02)	(0.02)	(0.01)	(0.02)	0.02	(0.02)	-	-
Working capital (deficit)	(2,863,641)	(3,231,242)	(8,074,697)	(7,799,848)	(8,558,782)	(4,546,878)	(671,359)	(308,534)
Total assets	72,750,706	74,789,261	77,252,739	77,066,582	76,962,315	76,448,190	26,131	20,542
Net capital expenditures	(171,138)	2,012,557	4,171,680	3,401,365	7,007,580	62,624,775	-	-
Average daily production (boe/d)	1,595	1,799	1,859	1,710	1,682	1,481	-	-

Over the past five quarters, the Company's oil and natural gas sales have fluctuated due to changes in production, movements in the Brent benchmark oil price and fluctuations in realized oil price differentials. The Company's production levels in Colombia have been variable, with increases driven by operational improvements and additional crude oil from the RCE-1 well, partially offset by the sale of the Company's interest in the VMM-2 block and natural declines on mature blocks. Prior to the third quarter 2018, Arrow had no oil and gas operations. Trends in the Company's net income (loss) are also impacted most significantly by financing costs, income taxes, depletion, depreciation and impairment of oil and gas properties, gains and losses from risk management activities. As of December 31, 2019, the Company reviewed its June 30, 2019 impairment test and estimates used in the calculation and determined that the recoverable amount should have been \$3,281,000 as at June 2019 for its Canadian CGU (previously recorded at \$2,316,000 as at June 30, 2019). This change has been applied to the rolling 8 quarters of data above.

### OUTSTANDING SHARE DATA

At June 2, 2020, the Company had the following securities issued and outstanding:

	Number	Exercise Price	Expiry Date
Common shares	81,674,602	n/a	n/a
Stock options	2,050,000	CAD\$ 1.15	October 22, 2028
Stock options	490,000	CAD\$ 0.31	May 3, 2029
Stock options	1,500,000	CAD\$ 0.03	March 20, 2030
Stock options	3,375,000	CAD\$ 0.03	April 13, 2030
Warrants	18,957,398	USD\$ 1.30	September 24, 2020

Subsequent to December 31, 2019, the Company granted 1,500,000 options on March 20, 2020 and 3,375,000 options on April 13, 2020 to some of its Directors and Officers. Both grants have a purchase price of CDN\$ 0.03 per share and have an expiry date of 10 years from their grant date.



The warrants include 18,327,398 warrants issued upon the September 27, 2018 conversion of the subscription receipts subscribed for under the private placement financing and have an expiry date of September 27, 2020. The other 630,000 warrants have an expiry date of September 24, 2020 and remain outstanding following the September 24, 2018 closing of a private placement financing of units completed by Front Range, comprised of shares and warrants.

## OUTLOOK

On January 30, 2020, the World Health Organization declared the Coronavirus disease (COVID-19) outbreak a Public Health Emergency of International Concern and, on March 10, 2020, declared it to be a pandemic. Actions taken around the world to mitigate the spread of COVID-19, combined with OPEC's initial plan to increase global supply resulted in significant weakness and volatility in commodity prices. The simultaneous demand and supply shocks have resulted in significant declines in product demand and pricing in the latter part of the first quarter and throughout the second quarter of 2020, as compared to 2019. Although it is impossible to reliably estimate the impact of COVID-19, the pandemic is anticipated to have a material and adverse effect on the Corporation's 2020 financial results relative to 2019; however, thus far the impact has been mitigated to a certain extent by Arrow's costless collar to hedge approximately 15,000 barrels a month of Brent oil for the period January 1, 2020 to June 30, 2020. The costless collar has a floor price of \$62 per barrel and a ceiling price of \$66.50 per barrel.

Due to the current economic circumstances caused by the Covid-19 global pandemic, the Company is currently focusing on improving its free cash flow by optimizing its sources of funds and reducing operating and administrative costs. During Q1 2020, salaries, personnel benefits and office costs have been reduced, and the Company has made a significant improvement in operating costs with the recent implementation of an improved water handling solution at RCE-1 on the Tapir Block in the Llanos Basin.

The Company has also deferred its plans for drilling a follow-up appraisal well in Rio Cravo Este until current oil crude prices improve, and is also pending on securing financing, rig availability, and partner approval. A second contingent well is planned pending the results of Rio Cravo Este-2. Other workovers in Llanos-23 and Oso Pardo are currently planned and expected to be performed once conditions improve and financing is available.

On December 31, 2019, the Company extended and amended the terms of the Note with Canacol such that all principal and interim interest repayments are deferred until April 2021 and then the outstanding balance at that time is amortized over six months. These revised terms were necessary for the Company to continue negotiations to finalize financing.

The COVID-19 pandemic is an evolving situation that will continue to have widespread implications for our business environment, operations and financial condition. The pace of an economic recovery and the ultimate impact of the pandemic on the Company and its financial results over the short and long term is challenging to determine with the overall outlook for hydrocarbon demand dependent on how successful nations are at combating the pandemic and loosening social restrictions. See "Risk and Uncertainties" and "Advisory Regarding Forward-Looking Statements".

The Company and its advisor remain committed to the strategic alternatives process announced in December 2019 and intend to provide updates as determined to be appropriate by the Board of Directors. There can be no guarantees as to whether the strategic alternatives process will result in a transaction or the terms or timing of any resulting transaction.

## CRITICAL ACCOUNTING ESTIMATES

A summary of the Company's significant accounting policies is contained in Note 3 Annual Financial Statements. These accounting policies are subject to estimates and key judgements about future events, many of which are beyond Arrow's control. The following is a discussion of the accounting estimates that are critical to the consolidated financial statements.

**Crude oil and natural gas assets - reserves estimates** – Arrow retained independent third-party petroleum engineers to evaluate its crude oil and natural gas reserves, prepare an evaluation report, and report to the Reserves Committee of the



Board of Directors. The process of estimating crude oil and natural gas reserves is subjective and involves a significant number of decisions and assumptions in evaluating available geological, geophysical, engineering and economic data. These estimates will change over time as additional data from ongoing development and production activities becomes available and as economic conditions affecting crude oil and natural gas prices and costs change. Reserves can be classified as proved, probable or possible with decreasing levels of likelihood that the reserves will be ultimately produced.

Reserve estimates are a key input to the Company's depletion calculations and impairment tests. Property, plant and equipment within each area are depleted using the unit-of-production method based on proved and probable reserves using estimated future prices and costs. In addition, the costs subject to depletion include an estimate of future costs to be incurred in developing proved and probable reserves. A revision in reserve estimates or future development costs could result in the recognition of higher depletion charged to net income.

Under the IFRS, the carrying amounts of property, plant and equipment are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, the estimated recoverable amount is calculated. For the purpose of impairment testing, assets are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets or groups of assets (the "cash-generating unit" or "CGU"). The recoverable amount of an asset or a CGU is the greater of its value in use and its fair value less costs to sell. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. Value in use is generally computed by reference to the present value of the future cash flows expected to be derived from production of proven and probable reserves. Exploration and evaluation ("E&E") assets will be allocated to the related CGU's to assess for impairment, both at the time of any triggering facts and circumstances as well as upon their eventual reclassification to producing assets (oil and natural gas interests in property, plant and equipment). An impairment loss is recognized in income if the carrying amount of an asset or its CGU exceeds its estimated recoverable amount. Reserve, revenue, royalty and operating cost estimates and the timing of future cash flows are all critical components of the impairment test. Revisions of these estimates could result in a write-down of the carrying amount of crude oil and natural gas properties.

**Decommissioning obligations** – The Company recognizes the estimated fair value of the decommission liability in the period in which it is incurred and records a corresponding increase in the carrying value of the related asset. The future asset retirement obligation is an estimate based on the Company's ownership interest in wells and facilities and reflects estimated costs to complete the abandonment and reclamation as well as the estimated timing of the costs to be incurred in future periods. Estimates of the costs associated with abandonment and reclamation activities require judgement concerning the method, timing and extent of future retirement activities. The capitalized amount is depleted on a unit-of-production method over the life of the proved and probable reserves. The liability amount is increased each reporting period due to the passage of time and this accretion amount is charged to earnings in the period, which is included as a financing expense. Actual costs incurred on settlement of the decommissioning liability are charged against the liability. Judgements affecting current and annual expense are subject to future revisions based on changes in technology, abandonment timing, costs, discount rates and the regulatory environment.

**Share based payments** – Stock options issued to employees and directors under the Company's stock option plan are accounted for using the fair value method of accounting for stock-based compensation. The fair value of the option is recognized as a share-based payment and contributed surplus over the vesting period of the option. Share based payment is determined on the date of an option grant using the Black-Scholes option pricing model. The Black-Scholes pricing model requires the estimation of several variables including estimated volatility of Arrow's stock price over the life of the option, estimated option forfeitures, estimated life of the option, estimated risk-free rate and estimated dividend rate. A change to these estimates would alter the valuation of the option and would result in a different related share-based payment.

**Income taxes** – Arrow follows the balance sheet method, providing for temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Current tax is the expect tax payable on the taxable income for the year, using tax rates enacted or substantially enacted at the reporting



period, and any adjustment to tax payable in respect to previous periods. Tax interpretations and legislation in which the Company operates are subject to change. As such, income taxes are subject to measurement uncertainty and interpretations can impact net income through current tax arising from the changes in the deferred income tax asset and liabilities.

**Provisions and contingencies** - The Company recognizes provisions based on an assessment of its obligations and available information. Any matters not included as provisions are uncertain in nature and cannot be reasonably estimated. The Company makes assumptions to determine whether obligations exist and to estimate the amount of obligations that we believe exist. In estimating the final outcome of litigation, assumptions are made about factors including experience with similar matters, past history, precedents, relevant financial, scientific, and other evidence and facts specific to the matter. This determines whether a provision or disclosure in the financial statements is needed.

## SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A summary of the Company's significant accounting policies is included in Note 3 Annual Financial Statements. These accounting policies are consistent with those of the previous financial year as described in Note 3 of the Annual Financial Statements, except for the following adoption of new accounting standards effective January 1, 2019:

### Accounting Pronouncements Adopted

On January 1, 2019, Arrow adopted IFRS 16: Leases ("IFRS 16") to replace IAS 17: Leases and IFRIC 4: Determining whether an Arrangement contains a Lease. IFRS 16 requires the recognition of a right-of-use asset and a lease obligation on the statements of financial position for all leases, where Arrow is acting as a lessee. For lessees applying IFRS 16, the dual classification model of leases as either operating leases or finance leases no longer exists, effectively treating all leases as finance leases. IFRS 16 allows lessors to continue with the dual classification model for recognized leases as either a finance or an operating lease. Arrow is the lessee in all of its lease arrangements effective January 1, 2019. The Company adopted IFRS 16 using the modified retrospective approach, which does not require restatement of prior period financial information and applies the standard prospectively.

On initial adoption, Arrow had the following optional practical expedients available under IFRS 16: certain short-term leases and leases of low value assets that have been identified as a lease under IFRS 16 at January 1, 2019 have been excluded from recognition on the statements of financial position. Arrow has excluded certain low value leases such as information technology, office equipment and other minor operating and capital assets used in its operations. Short-term and low value leases are expensed in profit or loss in the period incurred. Certain classes of lease arrangements that transfer a separate good or service under the same contract that have been identified for recognition at January 1, 2019 can be recognized as a single lease component rather than separating between their lease and non-lease components. Arrow did not apply this practical expedient on initial adoption of IFRS 16. Non-lease components such as operating costs and payment for services were separated from their lease component under the same contract and expensed in profit or loss in the period incurred. For leases having similar characteristics, a portfolio approach can be used by applying a single discount rate. Arrow has applied this practical expedient for leases having similar characteristic on recognition.

On initial adoption of IFRS 16, Arrow recognized a lease liability, herein referred to as a "lease obligation", and corresponding right-of-use asset, herein referred to as a "lease asset", for each identified lease effective January 1, 2019. The effect of initially applying the standard was recognized as a \$45,377 increase to right-of-use assets (included in "Property and Equipment") with a corresponding increase to lease obligations (the non-current portion of \$15,885 is recorded in "Lease Obligation" and the current portion of the lease obligation is \$29,492). The lease obligation was determined by discounting the remaining lease term payments using the interest rate implicit in the lease, or the Company's incremental borrowing rate. The lease obligation is reduced by actual cash lease payments made during the period. Lease obligations are presented on the statements of financial position and the lease assets are included in "Property and Equipment" on the statements of financial position. Lease assets are depreciated over the remaining term of the lease and included in depreciation expense the statement of operations and comprehensive income. The unwinding of the present value of the lease obligation is recorded as accretion (interest) and included in finance expense in the statement of operations. Cash lease payments are





classified as a financing activity and accretion expense classified as an operating activity in the statements of cash flows. Any remeasurements based on changes in lease term, payment or discount rate will increase or decrease the present value of the lease obligation and corresponding lease asset. Such changes will be accounted for through statement of operations. See Note 11 to these Financial Statements for further details on the financial effects of IFRS 16 on initial adoption.

Management applies judgment in reviewing each of its contractual arrangements to determine whether the arrangement contains a lease within the scope of IFRS 16 and the application incremental borrowing rate. Leases that are recognized are subject to further management judgment and estimation in various areas specific to the arrangement. In determining the lease term to be recognized, management considers all facts and circumstances that create an economic incentive to exercise an extension option or not to exercise a termination option. Lease obligations that are recognized have been estimated using a discount rate equal to Arrow's incremental borrowing rate. This rate represents the rate that Arrow would incur to obtain the funds necessary to purchase an asset of a similar value, with similar payment terms and security in a similar economic environment.

## **DERIVATIVE COMMODITY CONTRACTS**

The Company holds various forms of financial instruments. The nature of these instruments and the Company's operations expose the Company to commodity price, credit and foreign exchange risks. The Company manages its exposure to these risks by operating in a manner that minimizes its exposure to the extent practical. During 2019, the Company had one financial derivative contract in order to manage commodity price risk. This instrument is not used for trading or speculative purposes. Arrow has not designated its financial derivative contract as effective accounting hedge, even though the Company considers the commodity contract to be an effective economic hedge. As a result, the financial derivative contract has been recorded on the statements of financial position at fair value, with the changes in fair value being recognized as an unrealized gain or loss in the statement of operations and comprehensive loss.

## **RISKS AND UNCERTAINTIES**

The Company is subject to financial, business and other risks, many of which are beyond its control and which could have a material adverse effect on the business and operations of the Company. A summary of certain risk factors relating to our business are disclosed below.

### **Impact of the COVID-19 Pandemic**

Arrow's business, financial condition and results of operations could be materially and adversely affected by the outbreak of epidemics, pandemics and other public health crises in geographic areas in which we have operations, suppliers, customers or employees, including the recent global outbreak of COVID-19. The recent COVID-19 pandemic, and actions that may be taken by governmental authorities in response thereto, has resulted, and may continue to result in, among other things: increased volatility in financial markets and foreign currency exchange rates; disruptions to global supply chains; labour shortages; reductions in trade volumes; temporary operational restrictions and restrictions on gatherings greater than a certain number of individuals, shelter-in-place declarations and quarantine orders, business closures and travel bans; an overall slowdown in the global economy; political and economic instability; and civil unrest. In particular, the COVID-19 pandemic has resulted in, and may continue to result in, a reduction in the demand for, and prices of, hydrocarbon and other commodities that are closely linked to Arrow's financial performance, and also increases the risk that storage for crude oil and refined petroleum products could reach capacity in geographic locations in which we operate. A prolonged period of decreased demand for, and prices of, these commodities, and any applicable storage constraints, could also result in us voluntarily curtailing or shutting in production and a decrease in our refined product volumes and refinery utilization rates, which could adversely impact our business, financial condition and results of operations. Arrow is also subject to risks relating to the health and safety of our people, as well as the potential for a slowdown or temporary suspension of our operations in locations impacted by an outbreak, increased labour and fuel costs, and regulatory changes. Such a suspension in operations could also be mandated by governmental authorities in response to the COVID-19 pandemic. This could



negatively impact Arrow's production volumes and revenues for a sustained period of time, which would adversely impact our business, financial condition and results of operations.

### **Weakness in the Oil and Gas Industry**

Recent market events and conditions, including demand destruction resulting from the COVID-19 pandemic, global excess oil and natural gas supply, actions taken by the Organization of Petroleum Exporting Countries (OPEC), slowing growth in China and other emerging economies, market volatility and disruptions in Asia, and sovereign debt levels in various countries, have caused significant weakness and volatility in commodity prices. These events and conditions have caused a significant decrease in the valuation of oil and gas companies and a decrease in confidence in the oil and gas industry. Lower commodity prices may also affect the volume and value of the Company's reserves especially as certain reserves become uneconomic. In addition, lower commodity prices have restricted, and are anticipated to continue to restrict, the Company's cash flow. As a result, the Company may not be able to replace its production with additional reserves and both the Company's production and reserves could be reduced on a year over year basis. Given the current market conditions and the lack of confidence in the Canadian oil and gas industry, the Company may have difficulty raising additional funds or if it is able to do so, it may be on unfavourable and highly dilutive terms.

### **Prices, Markets and Marketing of Crude Oil and Natural Gas**

Oil and natural gas are commodities whose prices are determined based on world demand, supply and other factors, all of which are beyond the control of Arrow. World prices for oil and natural gas have fluctuated widely in recent years. Any material decline in prices could result in a reduction of net production revenue. Certain wells or other projects may become uneconomic as a result of a decline in world oil prices and natural gas prices, leading to a reduction in the volume of Arrow's oil and gas reserves. Arrow might also elect not to produce from certain wells at lower prices. All of these factors could result in a material decrease in Arrow's future net production revenue, causing a reduction in its oil and gas acquisition and development activities.

In addition to establishing markets for its oil and natural gas, Arrow must also successfully market its oil and natural gas to prospective buyers. The marketability and price of oil and natural gas which may be acquired or discovered by Arrow will be affected by numerous factors beyond its control. Arrow will be affected by the differential between the price paid by refiners for light quality oil and the grades of oil produced by Arrow. The ability of Arrow to market its natural gas may depend upon its ability to acquire space on pipelines which deliver natural gas to commercial markets. Arrow will also likely be affected by deliverability uncertainties related to the proximity of its reserves to pipelines and processing facilities and related to operational problems with such pipelines and facilities and extensive government regulation relating to price, taxes, royalties, land tenure, allowable production, the export of oil and natural gas and many other aspects of the oil and natural gas business.

### **Substantial Capital Requirements; Liquidity**

Arrow's cash flow from its production and sales of petroleum and natural gas may not, at all times be sufficient to fund its ongoing activities. From time to time, Arrow may require additional financing in order to carry out its oil and gas acquisition, exploration and development activities. Failure to obtain such financing on a timely basis could cause Arrow to forfeit its interest in certain properties, miss certain acquisition opportunities and reduce or terminate its operations. If Arrow's revenues from its production of petroleum and natural gas decrease as a result of lower oil and natural gas prices or otherwise, it may affect Arrow's ability to expend the necessary capital to replace its reserves or to maintain its production. If Arrow's funds from operations are not sufficient to satisfy its capital expenditure requirements, there can be no assurance that additional debt or equity financing will be available to meet these requirements or available on terms acceptable to Arrow.

Arrow's lenders will be provided with security over substantially all of the assets of Arrow. If Arrow becomes unable to pay its debt service charges or otherwise commits an event of default, such as bankruptcy, these lenders may foreclose on or sell Arrow's properties. The proceeds of any such sale would be applied to satisfy amounts owed to Arrow's lenders and other creditors and only the remainder, if any, would be available to Arrow shareholders.





Arrow monitors and updates its cash projection models on a regular basis which assists in the timing decision of capital expenditures. Farm-outs of projects may be arranged if capital constraints are an issue or if the risk profile dictates that the Company wishes to hold a lesser working interest position. Equity, if available and if on reasonable terms, may be utilized to help fund Arrow's capital program.

### **Access to Capital**

Access to capital has become limited during these times of economic uncertainty. To the extent the external sources of capital become limited or unavailable. Arrow's ability to make the necessary capital investments to maintain or expand oil and gas reserves may be impaired.

### **Risks of Foreign Operations Generally**

Most of Arrow's oil and gas properties and operations are located in a foreign jurisdiction. As such, Arrow's operations may be adversely affected by changes in foreign government policies and legislation or social instability and other factors which are not within the control of Arrow, including, but not limited to, nationalization, expropriation of property without fair compensation, renegotiation or nullification of existing concessions and contracts, the imposition of specific drilling obligations and the development and abandonment of fields, changes in energy policies or the personnel administering them, changes in oil and natural gas pricing policies, the actions of national labour unions, currency fluctuations and devaluations, exchange controls, economic sanctions and royalty and tax increases and other risks arising out of foreign governmental sovereignty over the areas in which Arrow's operations are conducted, as well as risks of loss due to civil strife, acts of war, terrorism, guerrilla activities and insurrections. Arrow's operations may also be adversely affected by laws and policies of Colombia and Canada affecting foreign trade, taxation and investment. If Arrow's operations are disrupted and/or the economic integrity of its projects is threatened for unexpected reasons, its business may be harmed. Prolonged problems may threaten the commercial viability of its operations. In addition, there can be no assurance that contracts, licenses, license applications or other legal arrangements will not be adversely affected by changes in governments in foreign jurisdictions, the actions of government authorities or others, or the effectiveness and enforcement of such arrangements. In the event of a dispute arising in connection with Arrow's operations in Colombia, Arrow may be subject to the exclusive jurisdiction of foreign courts or may not be successful in subjecting foreign persons to the jurisdictions of the courts of Canada or enforcing Canadian judgments in such other jurisdictions. Arrow may also be hindered or prevented from enforcing its rights with respect to a governmental instrumentality because of the doctrine of sovereign immunity. Accordingly, Arrow's exploration, development and production activities in Colombia could be substantially affected by factors beyond the Company's control, any of which could have a material adverse effect on Arrow. Acquiring interests and conducting exploration and development operations in foreign jurisdictions often require compliance with numerous and extensive procedures and formalities. These procedures and formalities may result in unexpected or lengthy delays in commencing important business activities. In some cases, failure to follow such formalities or obtain relevant evidence may call into question the validity of the entity or the actions taken. Management is unable to predict the effect of additional corporate and regulatory formalities which may be adopted in the future including whether any such laws or regulations would materially increase Arrow's cost of doing business or affect its operations in any area. Arrow believes that management's experience operating both in Colombia and in other international jurisdictions helps reduce these risks. In Colombia, the government has a long history of democracy and an established legal framework that, in Arrow's opinion, minimizes political risks.

### **Exploration, Development and Production Risks**

Oil and natural gas exploration involves a high degree of risk, for which even a combination of experience, knowledge and careful evaluation may not be able to overcome. There is no assurance that expenditures made on future exploration by Arrow will result in new discoveries of oil or natural gas in commercial quantities. It is difficult to project the costs of implementing an exploratory drilling program due to the inherent uncertainties of drilling in unknown formations, the costs associated with encountering various drilling conditions such as over-pressured zones, tools lost in the hole and changes in drilling plans and locations as a result of prior exploratory wells or additional seismic data and interpretations thereof.

The long-term commercial success of Arrow will depend on its ability to find, acquire, develop and commercially produce oil and natural gas reserves. No assurance can be given that Arrow will be able to locate satisfactory properties for



acquisition or participation. Moreover, if such acquisitions or participations are identified, Arrow may determine that current markets, terms of acquisition and participation or pricing conditions make such acquisitions or participations uneconomic.

Future oil and gas exploration may involve unprofitable efforts, not only from dry wells, but from wells that are productive but do not produce sufficient net revenues to return a profit after drilling, operating and other costs. Completion of a well does not assure a profit on the investment or recovery of drilling, completion and operating costs. In addition, drilling hazards or environmental damage could greatly increase the cost of operations, and various field operating conditions may adversely affect the production from successful wells. These conditions include delays in obtaining governmental approvals or consents, shut-ins of connected wells resulting from extreme weather conditions, insufficient storage or transportation capacity or other geological and mechanical conditions. While diligent well supervision and effective maintenance operations can contribute to maximizing production rates over time, production delays and natural reservoir performance declines cannot be eliminated and can be expected to adversely affect revenue and cash flow levels to varying degrees.

In addition, oil and gas operations are subject to the risks of exploration, development and production of oil and natural gas properties, including encountering unexpected formations or pressures, premature declines of reservoirs, blow-outs, sour gas releases, fires and spills. Losses resulting from the occurrence of any of these risks could have a materially adverse effect on future results of operations, liquidity and financial condition. Arrow attempts to minimize exploration, development and production risks by utilizing a technical team with extensive experience to assure the highest probability of success in its drilling efforts. The collaboration of a team of seasoned veterans in the oil and gas business, each with a unique expertise in the various upstream to downstream technical disciplines of prospect generation to operations, provides the best assurance of competency, risk management and drilling success. A full cycle economic model is utilized to evaluate all hydrocarbon prospects. Detailed geological and geophysical techniques are regularly employed including 3D seismic, petrography, sedimentology, petrophysical log analysis and regional geological evaluation.

#### **Credit Exposure**

Recent economic conditions have increased the risk that certain counterparties for the Company's oil and gas sales and our joint venture partners may fail to pay. Arrow mitigates these increased risks through diversification and a review process of the credit worthiness of our counterparties. Arrow's policy to mitigate credit risk associated with product sales is to maintain marketing relationships with large, established and reputable purchasers that are considered creditworthy. Arrow has not experienced any collection issues with its petroleum and natural gas marketers. Joint venture receivables are typically collected within two to three months of the joint venture bill being issued to the partner. Arrow attempts to mitigate the risk from joint venture receivables by obtaining partner approval of significant capital and operating expenditures prior to expenditure and in certain circumstances may require cash deposits in advance of incurring financial obligations on behalf of joint venture partners.

Joint venture receivables are from partners in the petroleum and natural gas industry who are subject to the risks and conditions of the industry. Significant changes in industry conditions and risks that negatively impact partners' ability to generate cash flow will increase the risk of not collecting receivables. Arrow does not typically obtain collateral from petroleum and natural gas marketers or joint venture partners; however the Company does have the ability to withhold production from joint venture partners in the event of non-payment or may be able to register security on the assets of joint venture partners.

#### **Health, Safety and Environment**

All phases of the oil and natural gas business present environmental risks and hazards and are subject to environmental regulation pursuant to a variety of federal, provincial/state and local laws and regulations. Environmental legislation provides for, among other things, restrictions and prohibitions on spills, releases or emissions of various substances produced in association with oil and natural gas operations. The legislation also requires that wells and facility sites be operated, maintained, abandoned and reclaimed to the satisfaction of applicable regulatory authorities. Compliance with such legislation can require significant expenditures and a breach of applicable environmental legislation may result in the imposition of fines and penalties, some of which may be material. Environmental legislation is evolving in a manner expected



to result in stricter standards and enforcement, larger fines and liability and potentially increased capital expenditures and operating costs. The discharge of oil, natural gas or other pollutants into the air, soil or water may give rise to liabilities to governments and third parties and may require the Company to incur costs to remedy such discharge.

There are potential risks to the environment inherent in the business activities of the Company. Arrow has developed and implemented policies and procedures to mitigate health, safety and environment (HS&E) risks. Arrow mitigates HS&E risks by maintaining its wells and complying with all regulations. Regular field inspections are also carried out to ensure that all field personnel and third party contractors comply with all company and regulatory guidelines. An action plan has been developed to ensure inactive wells are suspended properly and abandoned in a timely fashion. The above noted policies and procedures are designed to protect and maintain the environment and to ensure that the employees, contractors, subcontractors and the public at large are kept safe at all times.

#### **Foreign Exchange and Currency Risks**

The Company is exposed to foreign exchange and currency risk as a result of fluctuations in exchange rates between Colombian peso and the Canadian dollar. Most of the Corporation's revenues and funds from financing activities are expected to be received in reference to US dollar denominated prices while a portion of its operating, capital, and general and administrative costs are denominated in the Colombian peso and the Canadian dollar.

#### **Widespread Pandemic**

The Company's foreign operations are located in areas relatively remote from local towns and villages and represent a concentration of personnel working and residing in close proximity to one another. Should an employee or visitor become infected with a serious illness that has the potential to spread rapidly, this could place Arrow's workforce at risk. The 2020 outbreak of the novel coronavirus (COVID-19) in China and other countries around the world is one example of such an illness. The Corporation takes every precaution to strictly follow industrial hygiene and occupational health guidelines. There can be no assurance that this virus or another infectious illness will not impact the Corporation's personnel and ultimately its operations.

#### **Competition**

Arrow actively competes for reserve acquisitions, exploration leases, licenses and concessions and skilled industry personnel with a substantial number of other oil and gas companies, many of which have significantly greater financial and personnel resources than Arrow. Arrow's competitors include major integrated oil and natural gas companies and numerous other independent oil and natural gas companies and individual producers and operators.

Certain of Arrow's customers and potential customers are themselves exploring for oil and natural gas, and the results of such exploration efforts could affect Arrow's ability to sell or supply oil or gas to these customers in the future. Arrow's ability to successfully bid on and acquire additional property rights, to discover reserves, to participate in drilling opportunities and to identify and enter into commercial arrangements with customers will be dependent upon developing and maintaining close working relationships with its future industry partners and joint operators and its ability to select and evaluate suitable properties and to consummate transactions in a highly competitive environment.

#### **Social License to Operate**

Heightened public monitoring and regulation of hydrocarbon resource producers, refiners, distributors and commercial/retail sellers, especially where their activities carry the potential for having negative impacts on communities and the environment, involves varying degrees of risk to the Company's reputation, relations with landowners and regulators, and in extreme cases even the ability to operate. Arrow maintains an active website that complies with Exchange requirements for timely disclosure and together with its press releases and other SEDAR filings, is the primary means of communicating to the general public. While media attention and public perception remains largely beyond the control of Arrow's executive, employees, contractors and directors, the Company makes every effort in its corporate and field operations to engage all stakeholders in a respectful and transparent manner.



## **INTERNAL CONTROLS OVER FINANCIAL REPORTING**

The CEO and CFO, along with participation from other members of management, are responsible for establishing and maintaining adequate Internal Control over Financial Reporting (“ICFR”) to provide reasonable assurance regarding the reliability of financial statements prepared in accordance with IFRS. The Company’s CEO and CFO, with support of management have assessed the design and operating effectiveness of the Corporation’s ICFR as at December 31, 2019 based on criteria described in “Internal Control - Integrated Framework” issued in 2013 by the Committee of Sponsoring Organization of the Treadway Commission. Based on this assessment, it was concluded that the design and operation of the Corporation’s ICFR are effective as at December 31, 2019. During the three months ended December 31, 2019, there has been no change in the Corporation’s ICFR that has materially affected, or is reasonably likely to materially affect, the Corporation’s ICFR.