



Management's Discussion and Analysis

For the Year Ended: **December 31, 2018**

Date of Report: **February 27, 2019**

This management's discussion and analysis of the financial condition and results of operation ("MD&A") of Pinetree Capital Ltd. ("Pinetree" or the "Company") should be read in conjunction with Pinetree's consolidated financial statements and notes thereto as at and for the year ended December 31, 2018.

Except as otherwise indicated (see "Use of Non-GAAP Financial Measures" elsewhere in this MD&A), all financial data in this MD&A has been prepared, in accordance with International Financial Reporting Standards ("IFRS") issued by the International Accounting Standards Board ("IASB") and interpretations of the International Financial Reporting Interpretations Committee ("IFRIC").

All dollar amounts in this MD&A are reported in thousands of Canadian dollars except per share amounts.

Cautionary Note Regarding Forward-Looking Information:

This MD&A contains certain forward-looking information and forward-looking statements, as defined in applicable securities laws (collectively referred to herein as "forward-looking statements"). These statements relate to future events or courses of action or the Company's future performance. All statements other than statements of historical fact are forward-looking statements. Often, but not always, forward-looking statements can be identified by the use of words such as "anticipate", "plan", "estimate", "expect", "forecast", "may", "will", "project", "predict", "potential", "intend", "could", "might", "should", "believe" and other similar terminology (including negative variations) suggesting future outcomes or statements regarding an outlook.

By their nature, forward-looking statements are subject to known and unknown risks, uncertainties and other factors that may cause actual results to differ materially from those anticipated in such forward-looking statements. The assumptions that were made in support of the forward-looking statements in this MD&A, while considered reasonable by management at the time, are inherently subject to uncertainties and no assurance can be given that these assumptions will prove to be correct. Readers are cautioned not to place undue reliance on forward-looking statements contained in this MD&A.

Some of the risks, uncertainties and other factors which could cause results to differ materially from those expressed in the forward-looking statements contained in this MD&A include, but are not limited to: the nature of the Company's investments; the concentration of its investments in certain industries and sectors; the Company's dependence on its management team; risks affecting the Company's investments; Global, political and economic conditions; investments by the Company in private issuers which have illiquid securities; issuer-specific events that affect a company's market value; and other risks and factors discussed elsewhere in this MD&A under the heading "Risk Factors" and in the Company's current annual information form and other public disclosure documents filed with certain Canadian securities regulatory authorities and

available under Pinetree's profile at www.sedar.com. These risk factors are unpredictable and outside the Company's control, and may affect the future value of the Company's investment portfolio as well as the prices at which investments may be disposed of. Adverse changes in these conditions would negatively impact the Company's ability to remain in compliance with its contractual obligations and generate working capital to fund its ongoing requirements.

The forward-looking statements contained in this MD&A are provided as of the date hereof and, except as may be required by law, the Company assumes no obligation to update or revise them to reflect new events or circumstances. All the forward-looking statements contained in this MD&A are expressly qualified by this cautionary statement.

About Pinetree:

Pinetree was incorporated in 1962 under the laws of the Province of Ontario and its shares are publicly traded on the Toronto Stock Exchange (the "TSX") under the symbol "PNP". The Company is domiciled in the Province of Ontario, Canada and its registered office address is at Suite 200, 1965 Queen Street East, Toronto, ON, M4L 1H9.

Pinetree is a value-oriented investment and merchant banking company focused on the technology sector.

Overall Performance:

During the year ended December 31, 2018, the Company continued to take a disciplined approach to capital management in order to fund ongoing operations of the Company. The Company has reduced its total expenses for the year ended December 31, 2018 by 49% to \$471 from \$917 for the year ended December 31, 2017.

The following is Pinetree's NAV per share and Operating Expenses per NAV for the eight most recently completed interim financial periods:

	Shares Outstanding	Net Asset Value (NAV) \$'000s	Operating Expenses² (excluding F/X g(I)) (OpEx) \$'000s	NAV per share – basic¹ \$	Quarterly OpEx per NAV¹ %
Dec-31-18	9,045,198	15,980	103	1.77	0.6
Sept-30-18	9,045,198	16,326	171	1.80	1.0
Jun-30-18	9,045,198	18,925	121	2.09	0.6
Mar-31-18	9,045,198	18,639	139	2.06	0.7
Dec-31-17	9,045,198	18,305	195	2.02	1.1
Sep-30-17	9,045,198	18,867	209	2.09	1.1
Jun-30-17	9,045,198	18,839	130	2.08	0.7
Mar-31-17	4,522,599	10,154	246	2.25	2.4

¹ Refer to "Use of Non-GAAP Financial Measures"
Shares Outstanding and Net Asset Value amounts are as at the Quarter End date

Operating Expenses amounts are for the Three months ending the Quarter End date

² Operating Expenses do not include Foreign Exchange gain (loss) on financial assets other than investments

Investments and Operating Results

As at December 31, 2018, the Company held investments at fair value totaling \$8,969 as compared to \$9,268 as at December 31, 2017, a 3% decrease, attributable to net investment losses during the year ended December 31, 2018.

Basic net loss per share for the year ended December 31, 2018 was \$0.26 as compared to basic net loss per share of \$0.25 for the year ended December 31, 2017.

As at December 31, 2018, net asset value per share ("NAV per share") was \$1.77 as compared to \$2.02 as at December 31, 2017. See "Use of Non-GAAP Financial Measures" elsewhere in this MD&A.

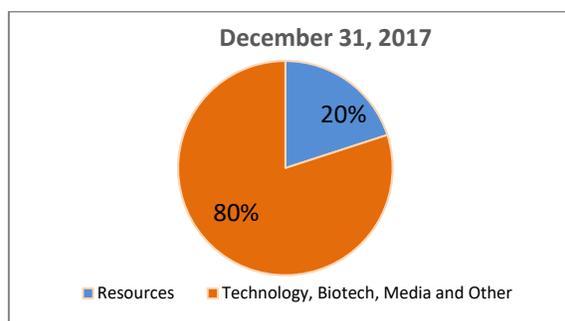
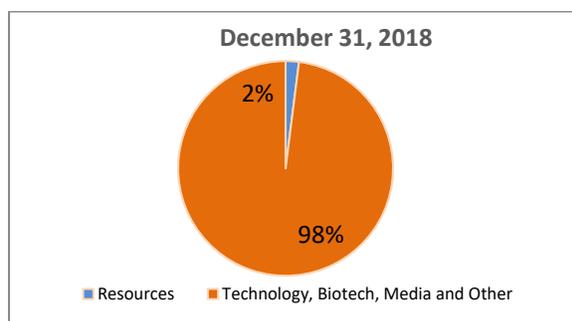
Summary of Investment Portfolio:

Investments consist of the following as at December 31, 2018:

Investments by Security Type	December 31, 2018		December 31, 2017	
	Cost	Total fair value	Cost	Total fair value
Equities	\$ 45,387	\$ 6,402	\$ 47,774	\$ 6,898
Warrants	-	-	200	20
Debentures	2,495	2,567	3,391	2,350
Total investments	\$ 47,882	\$ 8,969	\$ 51,365	\$ 9,268
Investments denominated in foreign currencies		\$ 4,139		\$ 2,328
% of investments denominated in foreign currencies		46%		25%

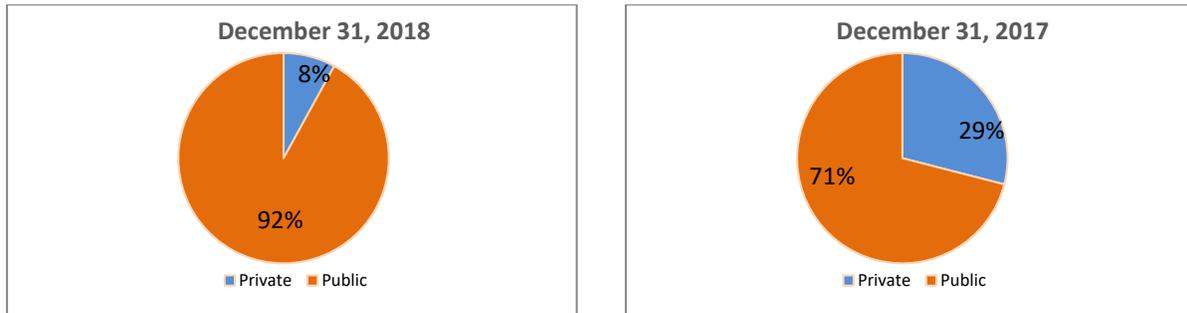
The following information regarding our portfolio is historical as at the dates indicated and may change due to the ongoing investment activities of the Company, in addition to fluctuations in the fair values of investments.

Industry Allocation*



*As a percentage of the aggregate fair value of our investment portfolio

Public/Private Company Allocation*



*As a percentage of the aggregate fair value of our investment portfolio

The fair value of Pinetree’s publicly-traded investments is determined in accordance with the Company’s accounting policy. The amounts at which the Company’s publicly-traded investments could be disposed of currently may differ from their carrying values based on market quotes, as the value at which significant ownership positions are sold is often different than the quoted market price due to a variety of factors such as premiums paid for large blocks or discounts due to illiquidity. Additionally, current market prices may differ significantly from the historical prices used to calculate fair value for the purposes of the Company’s consolidated financial statements.

On April 29, 2016, Pinetree underwent a complete management and board change. As at December 31, 2018, Pinetree held investments made by current management plus cash and equivalents with a combined fair value of \$15,128 (December 31, 2017 – fair value of 14,406). These securities and cash represent 95% of the company’s current Net Asset Value⁽ⁱ⁾ (“NAV”) (79% as at December 31, 2017), as follows:

	December 31, 2018	December 31, 2017
Investments made after April 29, 2016	\$ 7,802	\$ 4,999
Cash and cash equivalents and due from brokers	7,326	9,407
	\$ 15,128	\$ 14,406
Percentage of NAV ⁽ⁱ⁾	95%	79%

⁽ⁱ⁾ See Use of Non-GAAP Financial Measures elsewhere in this MD&A

As at December 31, 2018, included in total investments were securities of private companies with a fair value totaling \$714 (cost of \$18,611) (December 31, 2017 – fair value of \$2,661 (cost of \$21,034)) measured in accordance with the Company’s accounting policy for private company investments. The fair value was determined in accordance with the Company’s accounting policy for private company investments. The amounts at which the Company’s private company investments could be disposed of currently may differ from their carrying values since there is no active market to dispose of these investments.

The majority of the decline in the fair value of our private company investments during the year ended December 31, 2018, was due to the write down of one legacy investment to \$0 as at December 31, 2018 (December 31, 2017 - fair value of \$1,323). While the investee company completed a merger and a financing in 2017, it is the opinion of management that the investment has since become materially impaired.

Refer to note 4 of the Notes to the consolidated financial statements as at and for the year ended December 31, 2018 for other details about the Company's investments.

Results of Operations:

Selected financial information for the Company for its three most recently completed financial years as at and for the years ended December 31 are as follows:

(\$ in thousands except per share amount)	2018	2017	2016
Net investment losses	\$ (2,164)	\$ (1,482)	\$ (11,728)
Net loss for the year	(2,360)	(1,734)	(15,107)
Comprehensive loss for the year	(2,325)	(1,734)	(15,107)
Loss per share based on net loss for the year – basic and diluted	(0.26)	(0.25)	(4.00)
Cash and cash equivalents	\$ 7,250	\$ 7,510	\$ 3,482
Investments, at fair value	8,969	9,268	6,695
Total assets	16,375	18,697	11,024
Total liabilities	395	392	375
Total equity	15,980	18,305	10,649

No cash dividends were declared by the Company during any of the years indicated.

The Company's selected quarterly results for the eight most recently completed interim financial periods are as follows:

Quarter ended (unaudited)

(\$ in thousands except per share amount)	Dec 31, 2018	Sept 30, 2018	June 30, 2018	Mar 31, 2018	Dec 31, 2017	Sept 30, 2017	June 30, 2017	Mar 31, 2017
Net investment (losses) gains	(330)	(2,503)	303	366	(392)	285	(552)	(823)
Net (loss) income for the period	(381)	(2,599)	286	334	(562)	28	(698)	(502)
Comprehensive (loss) income	(346)	(2,599)	286	334	(562)	28	(698)	(502)
Income (loss) per share basic and diluted	(0.04)	(0.29)	0.03	0.04	(0.06)	0.00	(0.15)	(0.11)

Three Months Ended December 31, 2018 and 2017

The net investment losses for the three months ended December 31, 2018 was \$330 (three months ended December 31, 2017 –\$392) as a result of a net change in unrealized losses and realized losses on investments as described below.

For the three months ended December 31, 2018, the Company had \$163 net realized gains on disposal of investments as compared to net realized losses of \$15,230 for the three months ended December 31, 2017.

For the three months ended December 31, 2018, the Company had a net change in unrealized losses on investments of \$493 as compared to a net change in unrealized gains of \$14,838 for the three months ended December 31, 2017.

For the three months ended December 31, 2018, other income totalled \$74 as compared to other income of \$46 for the three months ended December 31, 2017. Other income is comprised of interest and dividend income.

Operating, general and administrative expenses for the three months ended December 31, 2018 decreased to \$121 from \$212 for the three months ended December 31, 2017. A breakdown of operating, general and administrative expenses for the indicated three month periods ended December 31 is set out below. Details of the changes between periods follow the table:

	2018	2017
Professional fees (a)	\$ 10	\$ 32
Other office and general (b)	76	109
Transaction costs	14	13
Consulting and directors' fees (c)	(16)	33
Employee benefits	1	1
Foreign exchange loss	18	17
Transfer agent, filing fees and other information systems	18	7
	\$ 121	\$ 212

- (a) Professional fees decreased by \$22 as compared to the three months ended December 31, 2017 primarily due to an decrease in use of external legal and other professional services.
- (b) Other office and general decreased by \$33 as compared to the three months ended December 31, 2017 primarily due to an overall reduction in expenses such as rent and occupancy costs.
- (c) Consulting and directors' fees decreased by \$49 as compared to the three months ended December 31, 2017, due to a reversal of consulting fees accrual during current period.

Year Ended December 31, 2018 and 2017

The net investment losses for the year ended December 31, 2018 was \$2,164 (2017 – \$1,482) primarily as a result of a net realized losses on investments as described below.

For the year ended December 31, 2018, the Company had \$5,350 net realized losses on disposal of investments as compared to \$17,697 for the year ended December 31, 2017.

For the year ended December 31, 2018, the Company had a net change in unrealized gains on investments of \$3,186 as compared to \$16,215 for the year ended December 31, 2017.

For the year ended December 31, 2018, other income totalled \$275 as compared to \$665 for the year ended December 31, 2017. Other income is comprised of interest and dividend income. In the prior year other income included \$594 of funds received from the settlement of a successful class action law suit by a company whose shares used to be in Pinetree's investment portfolio.

Operating, general and administrative expenses for the year ended December 31, 2018 decreased to \$454 from \$900 for the year ended December 31, 2017. A breakdown of operating, general and administrative expenses for the indicated year ended December 31 is set out below. Details of the changes between periods follow the table:

	2018	2017
Professional fees (d)	\$ 146	\$ 163
Other office and general (e)	184	344
Transfer agent, filing fees and other information systems	113	90
Consulting and directors' fees (f)	58	147
Transaction costs (g)	28	19
Travel and other	3	5
Other employee benefits	2	3
Stock-based compensation expense (h)	-	9
Foreign exchange loss (i)	(80)	120
	\$ 454	\$ 900

- (d) Professional fees decreased by \$17 as compared to the year ended December 31, 2017 primarily due to a decrease in the use of external legal and other professional services.
- (e) Other office and general expenses decreased by \$160 as compared to the year ended December 31, 2017, due to continued improvement in cost control.
- (f) Consulting and directors' fees decreased by \$89 as compared to the year ended December 31, 2017, due to decreased use of consulting services during current period. The Company expects an increase in consulting expenses in 2019.
- (g) Transactions costs increased by \$9 for the year ended December 31, 2018 as compared to the year ended December 31, 2017, due to an increase in the volume of trading conducted by the Company. Transaction costs arise from the purchase and disposition of investments through brokers, which are expensed immediately in accordance with the Company's accounting policy.
- (h) Stock-based compensation expense decreased by \$9 as compared to the year ended December 31, 2017. Stock-based compensation expense will vary from period to period depending upon the number of options granted and vested during a period and the fair value of the options calculated as at the grant date. The Company does not have a current stock option plan and does not anticipate any additional stock option grants in the near future.
- (i) Foreign exchange loss decreased by \$200 to a gain of \$80 in the year ended December 31, 2018 as compared to a loss of \$120 in the year ended December 31, 2017. The Company had a foreign exchange gain during the year primarily due to the decrease in the value of the Canadian dollar versus the U.S. dollar during the year, which increased the Canadian dollar value of the Company's U.S. dollar denominated monetary assets.

For the year ended December 31, 2018, the Company recorded a gain from the exchange differences on translation of foreign operations of \$35 resulting in total comprehensive loss for the year of \$2,325. For the year ended December 31, 2017, the Company had no exchange differences on translation of foreign operations. The Company expects the exchange differences on translation of foreign operations to be minimal going forward since its foreign subsidiaries are no longer active and may be wound-up.

Cash Flow:

Net cash used in operating activities was \$295 during the year ended December 31, 2018 as compared to \$5,353 during the year ended December 31, 2017. During the year ended December 31, 2018, the Company had proceeds from disposition of investments of \$2,344; an increase of \$1,743, when compared to \$601 during the year ended December 31, 2017. During the year ended December 31, 2018, the Company purchased \$4,209 of investments; a decrease of \$469 as compared to \$4,678 of investments purchased during the year ended December 31, 2017.

During the year ended December 31, 2018, net cash provided by financing activities was \$nil as compared to \$9,381 cash provided in financing activities during the year ended December 31, 2017. The cash generated in the year ended December 31, 2017 was from the issue of common shares from the exercise of a rights offering.

For the year ended December 31, 2018, the Company had a net decrease in cash and cash equivalents of \$295 as compared to a net increase in cash and cash equivalents of \$4,028 for the year ended December 31, 2017. For the year ended December 31, 2018, the Company also had a gain from the exchange rate changes on its foreign operations of \$35, leaving a cash balance of \$7,250 as at December 31, 2018 as compared to nil, leaving a cash balance of \$7,510 as at December 31, 2017.

Liquidity and Capital Resources:

Consolidated Statements of Financial Position Highlights	December 31, 2018	December 31, 2017
Cash and cash equivalents	\$ 7,250	\$ 7,510
Investments at fair value	8,969	9,268
Total assets	16,375	18,697
Total liabilities	395	392
Share capital, warrants, contributed surplus and foreign currency translation reserve	432,587	432,552
Deficit	(416,607)	(414,247)
NAV per share – Basic ⁽¹⁾	\$ 1.77	\$ 2.02

⁽¹⁾ See Use of Non-GAAP Financial Measures elsewhere in this MD&A

Pinetree relies upon various sources of funds for its ongoing operating and investing activities. These sources include proceeds from dispositions of investments, interest and dividend income from investments and capital raising activities such as equity financings.

In order for the Company to complete additional portfolio investments, it will require additional equity and/or debt capital. Accordingly, the Company may complete one or more equity and/or debt financing transactions during the next 12 to 24 months. Such financing transactions, if consummated, are most likely to be completed on a prospectus-exempt basis.

Liabilities:

As at December 31, 2018, the carrying value of total liabilities was \$395 as compared to \$392 as at December 31, 2017. The Company continues to have no long-term debt and its cash and investments as at December 31, 2018 would be sufficient to meet the Company's current liabilities.

As at December 31, 2018, accounts payable and accrued liabilities include Class C preferred share liabilities of \$213 (December 31, 2017 - \$213). The Class C preferred shares ("Class C Shares") which are part of the share capital of Pinetree Capital Investment Corp. ("PCIC"), one of the Company's subsidiaries, are non-voting, redeemable and retractable at any time, and entitle the holders thereof to receive cumulative dividends at a rate of 8% per annum, payable semi-annually.

The Class C Shares' redemption and retraction prices are linked to the market price of the Company's common shares subject to a minimum redemption price of \$10 per share. As at December 31, 2018, the redemption price was \$10 per share and the retraction price in effect was \$0.07 per share (2017 - \$0.13 per share). During the year ended December 31, 2018, no Class C shares were cancelled by PCIC. As at December 31, 2018, 21,300 Class C Shares (2017 - 21,300 Class C Shares) were issued and outstanding.

Commitments:

As at December 31, 2018, the Company had material commitments for cash resources of \$395 (2017 - \$392), an increase of \$3, which are detailed below. The Company's cash and cash equivalents balance is sufficient to pay these material commitments.

A breakdown of the Company's liabilities and obligations as at December 31, 2018 is as follows:

Liabilities and obligations	Payments due by period				
	Total	Less than 1 year	1 – 3 years	4 – 5 years	After 5 years
Accounts payable and accrued liabilities	\$ 395	\$ 395	\$ -	\$ -	\$ -

A breakdown of the Company's liabilities and obligations as at December 31, 2017 is as follows:

Liabilities and obligations	Payments due by period				
	Total	Less than 1 year	1 – 3 years	4 – 5 years	After 5 years
Accounts payable and accrued liabilities	\$ 392	\$ 392	\$ -	\$ -	\$ -

As at December 31, 2018, included in accounts payable and accrued liabilities are \$213 of Class C Shares (2017 - \$213). The Class C Shares are redeemable and retractable at any time.

Under the terms of commercial occupancy lease, the Company is committed to pay \$21 in 2018, which can be renewed annually.

Related Party Transactions:

All transactions with related parties have occurred in the normal course of operations. Related party transactions included in the statement of comprehensive loss were as follows during the year ended December 31:

Type of expense	Nature of relationship	Year ended December 31,	
		2018	2017
Salaries, consulting fees and other benefits	Officers	\$ 26	\$ 109
Director fees (i)	Directors	34	34
		\$ 60	\$ 143

(i) Non-management directors of the Company are entitled to remuneration for their services at rates approved by the board of directors. In addition, directors are reimbursed for reasonable travelling, hotel and other incidental expenses in respect of attending meetings of the directors.

No stock options were granted to directors or officers during the year ended December 31, 2018 or 2017.

Segmented information:

The management of the Company is responsible for the Company's entire portfolio and considers the business to have a single operating segment. The management's investment decisions are based on a single, integrated investment strategy and the performance is evaluated on an overall basis.

The Company has a single reportable geographic segment, Canada, and all of the Company's equipment is located in Canada.

The internal reporting provided to management of the Company's assets, liabilities, and performance is prepared on a consistent basis with the measurement and recognition principles of IFRS. There were no changes in the reportable segments during the year ended December 31, 2018.

Off-Balance Sheet Arrangements:

As of the date of this MD&A, the Company does not have any off-balance sheet arrangements that have, or are reasonably likely to have, a current or future effect on the results of operations or financial condition of Pinetree.

Internal Controls over Financial Reporting:

Disclosure Controls and Procedures

The Company is required to review and report on the effectiveness of its disclosure controls and procedures ("DC&P") in accordance with National Instrument 52-109, "Certification of Disclosure in Issuers' Annual and Interim Filings", ("NI 52-109") issued by the Canadian Securities Administrators. NI 52-109 requires a Chief Executive Officer ("CEO") and a Chief Financial Officer ("CFO") to certify that they are responsible for establishing and maintaining DC&P for the issuer, that DC&P have been designed and are effective in providing reasonable assurance that material information relating to the issuer is made known to them, that they have evaluated the effectiveness of the issuer's DC&P, and that their conclusions about the effectiveness of those DC&P at the end of the period covered by the relevant annual filings have been disclosed by the issuer.

The CEO and CFO have evaluated the design of the Company's DC&P as at December 31, 2018 and have concluded that the DC&P were effective in ensuring that information required to be disclosed by the Company in its corporate filings is recorded, processed, summarized and reported within the required time period for the year then ended.

A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that its objectives are met. Due to inherent limitations in all such systems, no evaluations of controls can provide absolute assurance that all control issues, if any, within a company have been detected. In addition, the design of any system of control is based upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all future events, no matter how remote, or that the degree of compliance with the policies or procedures may not deteriorate. Accordingly, the Company's DC&P are effective in providing reasonable, not absolute, assurance that the objectives of our disclosure control system have been met.

Internal Controls over Financial Reporting

NI 52-109 also requires CEOs and CFOs to certify that they are responsible for establishing and maintaining internal controls over financial reporting ("ICFR") for the issuer, that the ICFR have been designed and are effective in providing reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with IFRS, and that the issuer has disclosed any changes in its internal controls during its most recent interim period that has materially affected, or is reasonably likely to materially affect, its ICFR.

The design and operating effectiveness of the Company's ICFR were evaluated by the CEO and CFO in accordance with criteria established in the Internal Control Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) and NI 52-109, as at December 31, 2017. The CEO and CFO have evaluated the ICFR as at December 31, 2018. The CEO and CFO have not identified in their review any weaknesses that have materially affected or are reasonably likely to materially affect Pinetree's ICFR. Based on this evaluation, the CEO and CFO have concluded that the Company's ICFR were effective in providing reasonable assurance that its financial reporting is reliable and its consolidated financial statements were prepared in accordance with IFRS.

There were no changes in the Company's ICFR that occurred during the year ended December 31, 2018, that have materially affected, or are reasonably likely to materially affect the Company's ICFR.

Management of Capital:

There were no changes in the Company's approach to capital management during the three months ended December 31, 2018. The Company's capital includes all components of equity which amounts to \$15,980 as at December 31, 2018 (2017 - \$18,305). To date, the Company has not declared any cash dividends on its common shares to its shareholders as part of its capital management program.

The Company's objectives when managing capital are:

- (a) to allow the Company to respond to changes in economic and/or marketplace conditions by maintaining its ability to purchase new investments;
- (b) to give shareholders sustained growth in shareholder value by increasing shareholders' equity; and

(c) to maintain a flexible capital structure that optimizes the cost of capital at acceptable levels of risk. The Company is meeting its objective of managing capital through detailed review and performance of due diligence on all potential investments and acquisitions. Management reviews its capital management approach on an on-going basis and believes that this approach, given the size of the Company, is reasonable. The Company's current capital resources are sufficient to discharge its outstanding liabilities as at December 31, 2018. The Company is not subject to any capital requirements imposed by a regulator or otherwise.

Risk Management:

Financial Instrument Risks:

The Company's financial instruments primarily consist of investments, refer to the "Investments" section of this MD&A.

The investment operations of Pinetree's business involve the purchase and sale of securities and, accordingly, the majority of the Company's assets and liabilities currently comprised of financial instruments. The use of financial instruments can expose the Company to the following risks. A discussion of the Company's use of financial instruments and their associated risks is provided below.

(a) Liquidity risk:

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they become due. The Company's objective in managing risk is to maintain sufficient readily available reserves in order to meet its liquidity requirements at any point in time. The Company achieves this by maintaining sufficient cash and investments. As at December 31, 2018, the Company was holding cash and monies at deposit in brokers accounts of \$7,326 and investments of \$8,969 (2017 - \$9,407 and \$9,268, respectively).

There were no changes to the way that the Company manages liquidity risk since December 31, 2017. The Company's liquidity risk is limited to exposure to trade payables.

The following table shows the Company's contractual undiscounted cash flows which are payable under financial liabilities on the consolidated statement of financial position as at December 31, 2018.

Liabilities and obligations	Payments due by period				
	Total	Less than 1 year	1 – 3 years	4 – 5 years	After 5 years
Accounts payable and accrued liabilities (i)	\$ 395	\$ 395	\$ -	\$ -	\$ -

The following table shows the Company's contractual undiscounted cash flows which are payable under financial liabilities on the consolidated statement of financial position as at December 31, 2017.

Liabilities and obligations	Payments due by period				
	Total	Less than 1 year	1 – 3 years	4 – 5 years	After 5 years
Accounts payable and accrued liabilities (i)	\$ 392	\$ 392	\$ -	\$ -	\$ -

- (i) Included in accounts payable and accrued liabilities are Class C preferred share liabilities of \$213 (December 31, 2017 - \$213) which are non-voting, redeemable and retractable at any time, and entitle the holders thereof to receive cumulative dividends at a rate of 8% per annum.

(b) Market risk:

Market risk is the risk that the fair value of, or future cash flows from, the Company's financial instruments will significantly fluctuate due to changes in market prices. The value of the financial instruments can be affected by changes in interest rates, foreign exchange rates, and equity and commodity prices. The Company is exposed to market risk in trading its investments and unfavourable market conditions could result in dispositions of investments at less than favourable prices. A 10% change in closing trade price of the Company's investments would impact net loss by \$716 based upon balances as at December 31, 2018.

(c) Interest rate risk:

Interest rate risk is the risk that the fair value of future cash flows from a financial instrument will fluctuate because of changes in market interest rates. The Company's exposure to interest rate risk relates to its ability to earn interest income on cash at variable rates. The fair value of the Company's cash and investments affected by changes in short term interest rates will be minimal. A 1% change in interest rates impacts net income by \$73 (2017 - \$75) based upon balances at December 31, 2018. There were no changes to the way that the Company manages interest rate risk since December 31, 2017. Pinetree does not hedge against any interest rate risk.

(d) Currency risk:

Currency risk is the risk that the fair value or future cash flows of the Company's financial instruments will fluctuate because of changes in foreign exchange rates. The Company's operations are exposed to foreign exchange fluctuations, which could have a significant adverse effect on its consolidated results of operations from time to time.

The Company may have financial instruments denominated in foreign currencies such as U.S. dollars, Euros, Great British pounds, Swedish krona, and Australian dollars. A change in the foreign exchange rate of the Canadian dollar versus another currency may increase or decrease the Company's obligations due to brokers and increase or decrease the value of its financial instruments.

There were no changes to the way that the Company manages currency risk since December 31, 2017. The Company believes that it is exposed to foreign exchange risk (U.S. dollar) but does not actively hedge its foreign currency exposure although Pinetree's foreign exchange risk is, to a certain extent, mitigated by the Company's foreign exchange denominated investments. A 1% change in the US dollar exchange rate impacts net income by \$46 (2017 - \$44) at December 31, 2018.

The following assets and liabilities were denominated in foreign currencies as at the following as at December 31:

	2018	2017
Net assets denominated in U.S. dollars	\$ 4,594	\$ 4,364
Net assets denominated in GBP	529	-
Net assets denominated in Australian dollars	139	196
Net assets denominated in Swedish krona	204	
	\$ 5,466	\$ 4,560

(e) Credit risk:

Credit risk is the risk of loss associated with the inability of a third party to fulfill its payment obligations. The Company is exposed to the risk that third parties owing it money or securities will not perform their underlying obligations and for funds held with banks or brokers for cash. The Company may, from time to time, invest in debt obligations.

As at December 31, 2018 and 2017, the Company did not hold any debt obligations. All funds in cash are held in financial institutions that have a credit rating above AA and the Company believes it is not exposed to any significant credit risk.

There were no changes to the way the Company manages credit risk during the year ended December 31, 2018. The Company is also exposed in the normal course of business to credit risk from the sale of its investments.

The following is the Company's maximum exposure to credit risk as at December 31:

	2018	2017
Cash and cash equivalents	\$ 7,250	\$ 7,510
Due from brokers	76	1,897
	\$ 7,326	\$ 9,407

(f) Concentration risk in the Company's investment portfolio:

Concentration risk is the risk that any single investment or group of investments will have the potential to materially affect the operating results of the Company. As at December 31, 2018, the Company's top five investments had a fair value of \$6,191 in the technology and resources sectors, representing 69% and 8% respectively of the fair value of the Company's total portfolio, of which all are public companies. As at December 31, 2017, the Company's top five investments had a fair value of \$5,506 in the technology and resources sectors, representing 54%, and 5% respectively of the fair value of the Company's total portfolio, of which four were public companies and one was private company.

Risk Factors:

The Company's investing activities are, by their nature, subject to a number of inherent risks, including liquidity, market, interest rate, currency and credit risks associated with financial instruments, and certain other risks that are described in our annual information form for our most recently completed financial year,

all of which can have, and have had over recent reporting periods, a significant impact on the Company's financial condition and results of operations. Stock market volatility has resulted in and may continue to result in increased market risk and losses within our investment portfolio.

Some risks are described below. Additional risks not currently known to the Company, or that the Company currently believe to be immaterial, may also affect and negatively impact the Company's business.

(a) Portfolio exposure:

Given the nature of the Company's activities, its results of operations and financial condition are dependent upon the market value of the securities that comprise the Company's portfolio. Market value can be reflective of the actual or anticipated operating results of our portfolio companies and/or the general market conditions that affect the sectors in which Pinetree invests. The Company's investment activities are currently concentrated primarily in the technology industry. There are various factors that could have a negative impact on Pinetree's portfolio companies and thereby have an adverse effect on our business. Additionally, a portion of Pinetree's investments are in small-cap businesses which the Company believes exhibit potential for growth and sustainable cash flows but which may not ever mature or generate the returns the Company expects or may require a number of years to do so. These companies may never achieve success. This may create an irregular pattern in the Company's revenues (if any). Macro factors such as global political, economic and market conditions could have an adverse effect on one or more sectors to which the Company is exposed, thereby negatively impacting one or more of the portfolio companies concurrently. Company-specific risks could have an adverse effect on one or more of the Company's portfolio companies at any point in time. Company-specific and industry-specific risks which materially adversely affect Pinetree's portfolio investments may have a materially adverse impact on our operating results.

(b) Cash Flows/Revenue:

Pinetree generates revenue and cash flows primarily from its proceeds from the disposition of its investments, in addition to interest and dividend income earned on the Company's investments and fees generated from securities lending and other activities. The availability of these sources of funds and the amount of funds generated from these sources are dependent upon various factors, most of which are outside of the Company's direct control.

(c) Private Issuers and Illiquid Securities:

Pinetree invests in securities of private issuers. Investments in private issuers cannot be resold without a prospectus, an available exemption or an appropriate ruling under relevant securities legislation and there may not be any market for such securities. These limitations may impair Pinetree's ability to react quickly to market conditions or negotiate the most favourable terms for exiting such investments. Investments in private issuers may offer relatively high potential returns, but will also be subject to a relatively high degree of risk. There can be no assurance that a public market will develop for any of Pinetree's private company investments or that the Company will otherwise be able to realize a return on such investments. Pinetree also invests in illiquid securities of public issuers. A considerable period of time may elapse between the time a decision is made to sell such securities and the time the Company is able to do so, and the value of such securities could decline during such period. Illiquid investments are subject to various risks, particularly the risk that the Company will be unable to realize the Company's investment objectives by sale or other disposition at attractive prices or otherwise be unable to complete any exit strategy. In some cases, the Company may be prohibited by contract or by law from selling such securities for a period of time or otherwise be restricted from disposing of such securities. Furthermore, the types of investments made may require a substantial length of time to liquidate.

(d) Share Prices of Investments:

Pinetree's investments in securities of public companies are subject to volatility in the share prices of the companies. There can be no assurance that an active trading market for any of the subject shares is sustainable. The trading prices of the subject securities could be subject to wide fluctuations in response to various factors beyond the control of Pinetree, including quarterly variations in the subject entities' results of operations, changes in earnings (if any), estimates by analysts, conditions in the industry of the subject companies and general market or economic conditions. In recent years equity markets have experienced extreme price and volume fluctuations. These fluctuations have had a substantial effect on market prices, often unrelated to the operating performance of the specific companies. Such market fluctuations could adversely affect the market price of the Company's investments and significantly negatively impact upon the Company's operating results.

(e) Dependence on Management:

Pinetree is dependent upon the efforts, skill and business contacts of key members of management, for among other things, the information and deal flow they generate during the normal course of their activities and their various fields of expertise and knowledge. Accordingly, the Company's continued success will depend upon the continued service of these individuals, who are not obligated to remain employed with Pinetree. A loss of key personnel could have a material adverse effect on the revenues, net income and cash flows of the Company, and could harm its ability to maintain or grow its existing assets and raise additional funds in the future.

(f) Access to Capital/Liquidity:

Pinetree anticipates ongoing requirements for funds to support the Company's growth and may seek to obtain additional funds for these purposes through public or private equity shares financing. There are no assurances that additional funding will be available to the Company at all, on acceptable terms or at an acceptable level. Any additional equity financing may cause shareholders to experience dilution, and any additional debt financing may result in increased interest expense or restrictions on our operations or ability to incur additional debt. Any limitations on the Company's ability to access the capital markets for additional funds could have a material adverse effect on the Company's ability to grow its investment portfolio. The Company will need to finance our ongoing working capital requirements through portfolio dispositions and external sources of capital, both of which are dependent upon certain factors outside of our control. There can be no assurance that we will be able to generate sufficient cash to fund our operations and satisfy our commitments, and the failure to do so will have a material adverse effect on our operations.

(g) Non-controlling Interests:

Our investments include debt instruments and equity securities of companies that we do not control. These instruments and securities may be acquired by us in the secondary market or through purchases of securities from the issuer. Any such investment is subject to the risk that the company in which the investment is made may make business, financial or management decisions with which we do not agree or that the majority stakeholders or the management of the company may take risks or otherwise act in a manner that does not serve our interests. If any of the foregoing were to occur, the values of our investments could decrease and our financial condition, results of operations and cash flow could suffer as a result.

(h) Exchange Rate Fluctuations:

A portion of Pinetree's portfolio is invested in U.S. dollar denominated investments, as well as investments denominated in other foreign currencies. Changes in the value of the foreign currencies in which the Company investments are denominated could have a negative impact on the ultimate return on the Company's investments and overall financial performance.

(i) Tax Matters:

The Company's tax returns for the period 2013 to 2014 are currently being audited by the Canada Revenue Agency ("CRA"). Certain tax positions taken by the Company previously, if successfully challenged by the CRA, could result in a reduction in capital and non-capital losses available for carry forward or additional expenses. At this time, the amount of tax exposure cannot be determined with any level of assurance.

The Company believes that the tax positions taken in the past are in compliance with the applicable tax law and will vigorously contest any reassessment. As a result, the Company has not recorded an accrual for additional tax liabilities related to the CRA audit.

Outstanding Share Data:

The Company is authorized to issue an unlimited number of common shares (no par value).

At the date of this MD&A, the number of common shares of the Company outstanding and the number of common shares issuable pursuant to other outstanding securities of Pinetree are as follows:

Common shares outstanding	9,045,198
Stock options outstanding to purchase common shares	126,650
Fully diluted common shares outstanding	9,171,848

Additional information about the Company's share capital can be found in note 8 of the Notes to the consolidated financial statements as at and for the year ended December 31, 2018.

Critical Accounting Estimates:

The preparation of the Company's consolidated financial statements in conformity with IFRS requires management to make estimates and assumptions about future events that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the end of the reporting period and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates and assumptions.

Critical accounting estimates used in the preparation of the Company's consolidated financial statements are the fair value of its investments in securities not quoted in an active market (its privately-held investments), the recognition of the Company's deferred tax assets ("DTA"), the Company's estimate of inputs for the calculation of the value of stock-based compensation expense, the valuation of unlisted warrants of public companies, and the fair value of the Company's own warrants and broker warrants.

Fair Value of Investment in Securities Not Quoted in an Active Market:

The valuation of privately-held investments ("private investments") requires management to assess the current financial status and prospects of private investments based upon potentially incomplete or unaudited financial information provided by the investee company, on management's general knowledge of the private investment's activities, and on any political, economic or other events that may impact upon the private investment specifically, and to attempt to quantify the impact of such events on the fair value of the investment. In addition to any events or circumstances that may affect the fair value of a particular private investment, management can consider trends in general market conditions and the share performance of comparable publicly-traded companies that may affect the fair value of either a particular private investment or a group, segment or complete portfolio of private investments.

Within Level 3 of the financial instruments hierarchy, the valuation of the Company's private company investments and other investment instruments such as loans to investees and convertible debentures, which are not quoted on an exchange, involve the key assumptions including the value at which a recent financing was done by the investee, company-specific information, trends in general market conditions, the share performance of comparable publicly-traded companies and strategic reviews of the investments in conjunction with the Company's investment strategy. Changes in the fair value of our private investments for company-specific reasons have tended to be infrequent. Changes as a result of trends in comparable publicly-traded companies and general market conditions may be more frequent from period to period during times of significant volatility; however, given the size of our private investment portfolio, such changes may have a significant impact on our financial condition or operating results.

The following table presents the fair value, categorized by key valuation techniques and the unobservable inputs used within Level 3:

Valuation technique	December 31, 2018		December 31, 2017	
	Fair Value	Unobservable inputs	Fair Value	Unobservable inputs
Recent financing and strategic review	\$ -	Transaction price and adjustments	\$ 1,415	Transaction price and adjustments
Trends in comparable publicly-traded companies, general market conditions and strategic review	714	Adjustment range (-80% to -12.5%)	1,407	Adjustment range (-80% to -12.5%)
	\$ 714		\$ 2,822	

For these Level 3 investments, the inputs used can be highly judgmental. A +/- 25% change on the fair value of these investments will result in a corresponding +/- \$178 (2017: +/- \$665) change to the total fair value of the investments.

The sensitivity analysis is intended to reflect the uncertainty inherent in the valuation of these investments under current market conditions, and its results cannot be extrapolated due to non-linear effects that changes in valuation assumptions may have on the fair value of these investments. Furthermore, the analysis does not indicate a probability of such changes occurring and it does not necessarily represent the Company's view of expected future changes in the fair value of these investments. Any management actions that may be taken to mitigate the inherent risks are not reflected in this analysis.

Recognition of Deferred Tax Assets:

The Company follows the liability method of tax allocation in accounting for income taxes. Under this method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the consolidated financial statement carrying amounts of existing assets and liabilities and their respective tax bases. As at December 31, 2018, management determined, based upon the Company's historical level of profit and historical market trends of a comparable market index, it is not probable that the Company will generate sufficient profit to realize the tax benefits of these deductible differences during the next several years. As such, the Company has recorded deferred tax assets of \$nil as at December 31, 2018 (December 31, 2017 - \$nil).

Stock-based Compensation Expense and Warrants:

The Company uses the Black-Scholes option pricing model ("B-S") to calculate stock-based compensation expense and the value of warrants issued as part of the Company's private placements. The Black-Scholes requires six key inputs to determine a value for an option, warrant or broker warrant: risk free interest rate, exercise price, market price at date of issue, expected dividend yield, expected life and expected volatility. Certain of the inputs are estimates which involve considerable judgment and are, or could be, affected by significant factors that are out of the Company's control. For example, a longer expected life of the option or a higher volatility number used would result in an increase in stock-based compensation expense. The Company is also required to estimate the future forfeiture rate of options based on historical information in its calculation of stock-based compensation expense.

No stock options were granted during the year ended December 31, 2018 and 2017.

The expected volatility is based on the historical volatility over the life of the option at Pinetree's share price. The Company has not paid any cash dividends historically and has no plans to pay cash dividends in the foreseeable future. The risk-free interest rate is based on the yield of Canadian Benchmark Bonds with equivalent terms. The expected option life in years represents the period of time that options granted are expected to be outstanding based on historical options granted.

Valuation of Unlisted Warrants of Public Companies:

For options and warrants which are not traded on a recognized securities exchange, no market data is readily available. When there are sufficient and reliable observable market inputs, an option pricing model is used; if no such market inputs are available, the warrants and options are valued using alternative methods representing fair value.

As at December 31, 2018, the Company has valued all non-tradable warrants for a total fair value of \$nil (2017 - \$20), which is consistent with prior periods and with the Company's accounting policy for valuing non-tradable warrants.

Use of Non-GAAP Financial Measures:

This MD&A contains references to "net asset value" ("NAV") and "net asset value per share" (basic and diluted), which is a non-GAAP financial measure. NAV is calculated as the value of total assets less the value of total liabilities. NAV is divided by the total number of common shares outstanding as at a specific date to

give NAV per share (basic). NAV per share (diluted) is calculated as total assets less total liabilities divided by the total number of common shares of the Company outstanding as at a specific date, calculated based upon the assumption that all outstanding securities of the Company that are convertible into or exercisable for common shares have been converted or exercised. The term NAV does not have any standardized meaning according to GAAP and therefore may not be comparable to similar measures presented by other companies. There is no comparable GAAP financial measure presented in Pinetree's consolidated financial statements and thus no applicable quantitative reconciliation for such non-GAAP financial measure. The Company has calculated NAV consistently for many years and believes that the measure provides information useful to its shareholders in understanding our performance, and may assist in the evaluation of the Company's business relative to that of its peers.

Additional Information:

Additional information relating to Pinetree Capital Ltd., including its annual information form for the Company's most recently completed financial year, is available under the Company's profile on SEDAR at (www.sedar.com).