



Management's Discussion and Analysis

For the Year Ended: **December 31, 2016**

Date of Report: **February 16, 2017**

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 annual audited consolidated financial statements and notes thereto as at and for the year ended December 31, 2016.

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 1100, 34 King Street East, Toronto, ON, M5C 2X8.

Pinetree is an investment and merchant banking firm focused on the small-cap market, with early-stage investments in resource, biotechnology and technology companies.

On April 29, 2016, the previous Officers and Directors of the Company resigned and new Officers and Directors were appointed.

Overall Performance:

During the year ended December 31, 2016, the Company continued to take a disciplined approach to capital management, disposing of certain underperforming assets and monetizing other investments in order to repay the Debentures on May 31, 2016 and to fund ongoing operations of the Company.

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

	NAV per share*
	\$
December 31, 2016	2.35
September 30, 2016	2.54
June 30, 2016	2.73
March 31, 2016	8.37
December 31, 2015	9.66
September 30, 2015	12.57
June 30, 2015	19.65
March 31, 2015	21.89

*See "Use of Non-GAAP Financial Measures".

Debentures

On January 8, 2016, the Company reduced its outstanding debt, which was comprised solely of its 10% convertible secured debentures due May 31, 2016 (the "Debentures"), from \$9,716 principal amount to \$6,688 principal amount during the period with a cash payment of \$2,000, normal course issuer bid ("NCIB") cash payment of \$27, gain on purchase of convertible debentures under the NCIB of \$1 and the issuance of 242,014 common shares for the remaining balance.

On May 31, 2016, the Company repaid the remaining principal amount and the accrued interest payable of the Debentures for a total amount of \$7,022. As at December 31, 2016, \$nil principal amount of the Debentures was outstanding and all accrued interest had been paid.

Rights Offering & Share Consolidation

During March 2016, the Company undertook an offering of rights to holders of its common shares at the close of business on the record date of March 23, 2016, on the basis of one right for each common share held. Each right entitled the holder to subscribe for one common share of Pinetree upon payment of the subscription price of \$2.50 per common share. The rights traded on the TSX under the symbol PNP.RT from March 21, 2016 until noon on April 26, 2016 and expired at 4:00 p.m. (Toronto time) on April 26, 2016 (the "Expiry Time"), after which time unexercised rights were void and of no value. Shareholders who fully exercised their rights were entitled to subscribe pro rata for additional common shares, if available as a result of unexercised rights prior to the Expiry Time.

Contemporaneously, the Company entered into a purchase agreement (the "Tolnai Purchase Agreement") with 2507492 Ontario Ltd. ("TolnaiCo"), a corporation controlled by Peter Tolnai, whereby TolnaiCo would subscribe for common shares offered under the rights offering under certain conditions.

On April 29, 2016, the Company's shareholders exercised 849,103 rights to purchase 849,103 common shares of Pinetree under the rights offering with gross proceeds of \$2,121. In addition, in accordance with the terms of the Tolnai Purchase Agreement, TolnaiCo purchased 1,412,202 common shares of Pinetree at the same subscription price of \$2.50 per common share for gross proceeds to Pinetree of \$3,531. In connection with the rights offering, Pinetree paid a standby fee of \$250 in cash to TolnaiCo. The Company incurred \$162 transaction costs in connection with the rights offering.

At a special meeting of the Company's shareholders held on April 22, 2016, shareholders approved a 1-for-100 share consolidation and the waiver of the application of Pinetree's shareholder rights plan. On July 20, 2016, the Company completed a share consolidation of its common shares of one (1) post-consolidation common share for every one hundred (100) pre-consolidation common shares (the "Share Consolidation"). As part of the Share Consolidation, the stock options and warrants were also consolidated and the exercise price adjusted to reflect the consolidation. The 1-100 share consolidation has been reflected in this MD&A and all applicable references to the number of shares, warrants and stock options and their strike price and per share information has been adjusted. The actual number of shares issued and outstanding post consolidation on July 20, 2016 will be slightly different due to rounding.

Investments and Operating Results

As at December 31, 2016, the Company held investments at fair value totaling \$6,695 as compared to \$27,864 as at December 31, 2015, a 76% decrease, attributable to two factors: (a) in order to generate cash to fund operations and repay the Debentures, the Company undertook dispositions of investments which generated cash proceeds of \$11,241 during the year ended December 31, 2016; and (b) management's estimates of the fair values of the remaining investments in private companies based on the facts and circumstances which existed at December 31, 2016.

Basic net loss per share for the year ended December 31, 2016 was \$4.00 as compared to basic net loss per share of \$15.95 for the year ended December 31, 2015.

As at December 31, 2016, net asset value per share ("NAV per share") was \$2.35 as compared to \$9.66 as at December 31, 2015, a 76% decrease. See "Use of Non-GAAP Financial Measures" elsewhere in this MD&A.

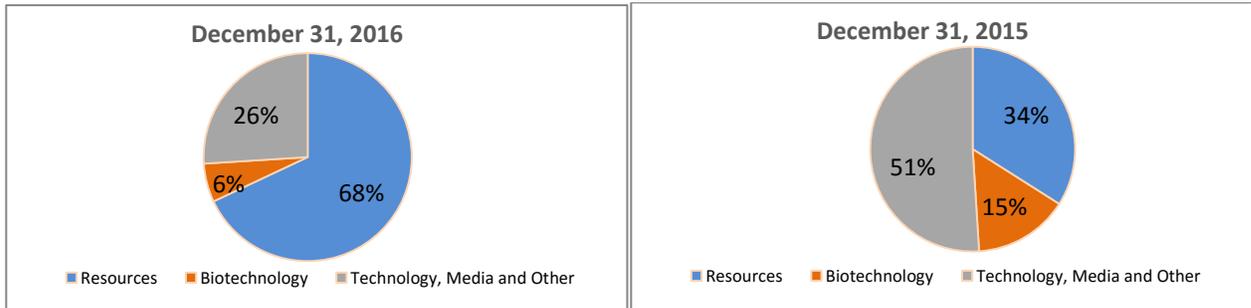
Summary of Investment Portfolio:

Investments consist of the following as at December 31, 2016:

Investments by Security Type	December 31, 2016		December 31, 2015	
	Cost	Total fair value	Cost	Total fair value
Equities	\$ 63,676	\$ 6,634	\$ 90,142	\$ 26,104
Warrants	200	61	200	704
Promissory notes and convertible debentures	1,131	-	1,626	1,056
Total investments	\$ 65,007	\$ 6,695	\$ 91,968	\$ 27,864
Investments denominated in foreign currencies		\$ 1,547		\$ 11,496
% of investments denominated in foreign currencies		23%		41%

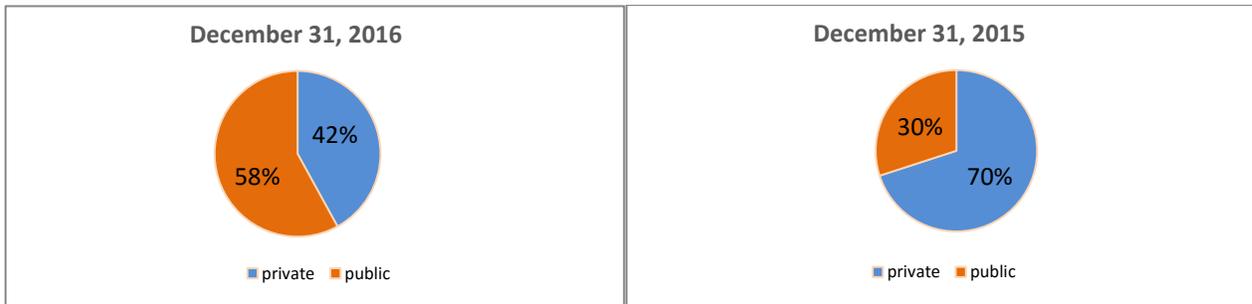
The following information regarding our portfolio is historical as at the dates indicated and may change due to the ongoing investment activities of the Company, in addition to fluctuations in the fair values of investments.

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.

As at December 31, 2016, total investments included securities of private companies with a fair value totalling \$2,822 (42% of total fair value of the Company's investments; cost of \$28,399). As at December 31, 2015, total investments included securities of private companies with a fair value totalling \$19,525 (70% of total fair value of the Company's investments; cost of \$35,662). The fair value of the private company securities decreased by \$16,703 mainly due to new management's estimates of the fair values of the remaining investments in private companies based on the facts and circumstances which existed at December 31, 2016, as well as dispositions during the year ended December 31, 2016. 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.

Refer to note 4 of the Notes to the consolidated financial statements as at and for the year ended December 31, 2016 for other details about the Company's investments.

Results of Operations:

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

	Quarter ended (unaudited)			
	December 31, 2016	September 30, 2016	June 30, 2016	March 31, 2016
Net investment losses	\$ (554)	\$ (856)	\$ (9,864)	\$ (454)
Net loss for the period	(844)	(865)	(11,916)	(1,482)
Total comprehensive loss for the period	(844)	(865)	(11,916)	(1,482)
Loss per share based on net loss for the period – basic	(0.22)	(0.19)	(3.13)	(0.66)
Loss per share based on net loss for the period – diluted	(0.22)	(0.19)	(3.13)	(0.66)

	Quarter ended (unaudited)			
	December 31, 2015	September 30, 2015	June 30, 2015	March 31, 2015
Net investment losses	\$ (4,532)	\$ (12,337)	\$ (2,108)	\$ (3,549)
Net loss for the period	(5,922)	(14,419)	(4,719)	(7,155)
Total comprehensive loss for the period	(5,922)	(14,419)	(4,730)	(7,144)
Loss per share based on net loss for the period – basic	(2.93)	(7.14)	(2.34)	(3.54)
Loss per share based on net loss for the period – diluted	(2.93)	(7.14)	(2.34)	(3.54)

Three Months Ended December 30, 2016 and 2015

The net investment losses for the three months ended December 31, 2016 was \$554 (three months ended December 31, 2015 – net investment losses of \$4,532) as a result of net realized losses plus a net change in unrealized (losses) gains on investments as described below.

For the three months ended December 31, 2016, the Company generated net realized losses on disposal of investments of \$2,560, as compared to \$12,826 for the three months ended December 31, 2015.

For the three months ended December 31, 2016, the Company had a net change in unrealized gains on investments of \$2,006 as compared to a net change in unrealized gains of \$8,294 for the three months ended December 31, 2015.

For the three months ended December 31, 2016, other income totalled \$nil as compared to other income of (\$239) for the three months ended December 31, 2015. Other income is comprised of dividend income of \$nil (three months ended December 31, 2015 – (\$252)), loss on NCIB of \$nil (three months ended December 31, 2015 - \$1) and consulting fees, rental income, and other fees of \$nil (three months ended December 31, 2015 – \$14).

Operating, general and administrative expenses for the three months ended December 31, 2016 decreased to \$286 from \$734 for the three months ended December 31, 2015. 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:

	2016	2015
Salaries (a)	\$ -	\$ 355
Professional fees (b)	193	(305)
Transaction costs (c)	5	50
Stock-based compensation expense (d)	12	49
Operating lease payments	-	90
Consulting and directors' fees (e)	11	160
Transfer agent, filing fees and other information systems	13	9
Travel and other	3	3
Employee benefits	2	10
Other office and general	72	345
Foreign exchange loss	(25)	(32)
	\$ 286	\$ 734

- (a) Salaries decreased by \$355 as compared to the three months ended December 31, 2015 primarily due to both a reduction in the number of employees and current employees not currently drawing a salary or any other form of compensation.
- (b) Professional fees increased by \$498 as compared to the three months ended December 31, 2015 primarily due to increased use of external legal and other professional services.
- (c) Transaction costs decreased by \$45 as compared to the three months ended December 31, 2015, due to a decrease in the volume of trading conducted by the Company. Transaction costs arise from purchases and dispositions of investments through brokers, which are expensed immediately in accordance with the Company's accounting policy for investments. The Company evaluates its commission structure with its brokers on an on-going basis to minimize its transaction costs.
- (d) Stock-based compensation expense decreased by \$37 as compared to the three months ended December 31, 2015. 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.
- (e) Consulting and directors' fees decreased by \$149 as compared to the three months ended December 31, 2015, due to the termination of consulting services provided by certain officers.

Finance expense decreased to \$4 in the three months ended December 31, 2016 as compared to \$417 in the three months ended December 31, 2015. The decrease was primarily attributable to a decrease in the accretion of discount on the outstanding Debentures.

Net loss for the three months ended December 31, 2016 was \$844 (\$0.22 basic loss per share) as compared to net loss of \$5,922 (\$2.93 basic loss per share) for the three months ended December 31, 2015.

Year Ended December 31, 2016 and 2015

The net investment losses for the year ended December 31, 2016 was \$11,728 (year ended December 31, 2015 – net investment losses of \$22,526) as a result of net realized losses plus a net change in unrealized gains on investments as described below.

For the year ended December 31, 2016, the Company generated net realized losses on disposal of investments of \$17,519, as compared to \$53,059 for the year ended December 31, 2015.

For the year ended December 31, 2016, the Company had a net change in unrealized gain on investments of \$5,791 as compared to a net change in unrealized gain of \$30,533 for the year ended December 31, 2015.

For the year ended December 31, 2016, other income totalled \$431 as compared to other income of \$275 for the year ended December 31, 2015. Other income is comprised of interest income of \$14 (year ended September 30, 2015 – income of \$55), \$nil (year ended December 31, 2015 – \$135) from consulting fees, rental income, and other fees, \$1 (year ended December 31, 2015 - \$nil) gain on purchase of Debentures under normal course issuer bid, dividend income of \$264 (year ended December 31, 2015 - \$82) and \$152 (year ended December 31, 2015 - \$3) gain on redemption of convertible debentures.

Operating, general and administrative expenses for the year ended December 31, 2016 decreased to \$3,504 from \$6,762 for the year ended December 31, 2015. A breakdown of operating, general and administrative expenses for the indicated years ended December 31 is set out below. Details of the changes between periods follow the table:

	2016	2015
Salaries (a)	\$ 88	\$ 675
Professional fees (b)	312	373
Transaction costs (c)	79	478
Stock-based compensation expense (d)	166	556
Operating lease payments	17	529
Consulting and directors' fees (e)	1,770	1,216
Transfer agent, filing fees and other information systems	261	288
Travel and other	19	23
Employee benefits	23	119
Charge for assignment of lease (f)	-	1,549
Impairment of fixed assets (g)	-	212
Other office and general	784	895
Amortization	-	16
Foreign exchange loss	(15)	(167)
	\$ 3,504	\$ 6,762

(a) Salaries decreased by \$587 as compared to the year ended December 31, 2015 primarily due to both, a reduction in the number of employees and current employees not currently drawing a salary or any other form of compensation.

(b) Professional fees decreased by \$61 as compared to the year ended December 31, 2015 primarily due to reduced use of external legal and other professional services.

- (c) Transaction costs decreased by \$399 as compared to the year ended December 31, 2015, due to a decrease in the volume of trading conducted by the Company. Transaction costs arise from purchases and dispositions of investments through brokers, which are expensed immediately in accordance with the Company's accounting policy for investments. The Company evaluates its commission structure with its brokers on an on-going basis to minimize its transaction costs.
- (d) Stock-based compensation expense decreased by \$390 as compared to the year ended December 31, 2015. 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.
- (e) Consulting and directors' fees increased by \$554 as compared to the year ended December 31, 2015, due to the severance fees paid to certain officers.
- (f) During the year ended December 31, 2015, the Company entered into the Lease Assignment with the Assignee effective as of February 1, 2016. In accordance with the Lease Assignment, the Company is required to pay an aggregate of \$1,549 to the Assignee, which had been paid by December 31, 2016.
- (g) During the year ended December 31, 2015, the Company wrote off all of its property, plant and equipment for an amount of \$212 as they were determined to be not recoverable.

Finance expense decreased to \$306 in the year ended December 31, 2016 as compared to \$4,225 in the year ended December 31, 2015. The decrease was primarily attributable to a decrease in the accretion of discount on the outstanding Debentures.

Net loss for the year ended December 31, 2016 was \$15,107 (\$4.00 basic loss per share) as compared to net loss of \$32,215 (\$15.95 basic loss per share) for the year ended December 31, 2015.

Cash Flow:

Net cash provided by operating activities was \$4,621 during the year ended December 31, 2016 as compared to net cash provided by operating activities of \$47,782 during the year ended December 31, 2015. During the year ended December 31, 2016, the Company had proceeds from disposition of investments of \$11,241; a decrease of \$49,904, when compared to \$61,145 of proceeds from dispositions during the year ended December 31, 2015. During the year ended December 31, 2016, the Company purchased \$1,800 of investments; a decrease of \$2,971 as compared to \$4,771 of investments purchased during the year ended December 31, 2015.

During the year ended December 31, 2016, net cash used in financing activities was \$3,475 as compared to \$45,659 cash used in financing activities during the year ended December 31, 2015. During the year ended December 31, 2016, the financing activities related to the \$2,000 for the partial redemption of its Debentures, \$27 used to purchase \$28 principal of its Debentures under its 2016 normal course issuer bid, repayment of convertible debentures of \$6,688 and net proceeds from the issue of common shares pursuant to rights offering of \$5,240. During the year ended December 31, 2015, the Company had \$103 used to purchase \$106 principal of its Debentures under its 2015 normal course issuer bid, \$45,000 for the

partial redemption of its Debentures, \$555 transaction costs incurred for the Debentures and \$1 cash paid for retraction of Class C shares.

For the year ended December 31, 2016, the Company had a net increase in cash and cash equivalents of \$1,146 as compared to a net increase in cash and cash equivalents of \$2,123 for the year ended December 31, 2015.

Liquidity and Capital Resources:

Consolidated Statements of Financial Position Highlights	December 31, 2016	December 31, 2015
Investments at fair value	\$ 6,695	\$ 27,864
Total assets	11,024	30,468
Total liabilities	375	10,966
Share capital, warrants, contributed surplus, equity component of convertible debentures and foreign currency translation reserve	423,162	416,908
Deficit	(412,513)	(397,406)
NAV per share – Basic and Diluted⁽ⁱ⁾	\$ 2.35	\$ 9.66

(i) 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, consulting fees, and capital raising activities such as equity financings.

Liabilities:

As at December 31, 2016, the carrying value of total liabilities was \$375 as compared to \$10,966 as at December 31, 2015, a 96.58% decrease mainly attributable to repayment of the Debentures upon maturity.

As at December 31, 2016, accounts payable and accrued liabilities include Class C preferred share liabilities of \$217 (December 31, 2015 - \$217). 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, 2016, the redemption price was \$10 per share and the retraction price in effect was \$0.13 per share (December 31, 2015 - \$0.31 per share). During the year ended December 31, 2016, no Class C shares were cancelled. During the year ended December 31, 2015, 2,200 Class C Shares were cancelled by PCIC following their retraction by the holders at \$0.62 per share plus accrued and unpaid dividends. As at December 31, 2016, 21,700 Class C Shares (December 31, 2015 – 21,700 Class C Shares) were issued and outstanding.

As at December 31, 2016, also included in accounts payable and accrued liabilities is accrued interest payable of \$nil (December 31, 2015 - \$78) on the Debentures as the principal amount and the accrued interest payable of the Debentures have been fully repaid.

On May 31, 2016, the Company repaid the remaining principal amount and the accrued interest payable of the Debentures for a total amount of \$7,022.

Commitments:

As at December 31, 2016, the Company had material commitments for cash resources of \$375 (December 31, 2015 - \$11,015), a decrease of \$10,640, which are detailed below. In management's opinion under normal economic conditions, the disposition of the Company's investments in the normal course would be sufficient to pay these material commitments.

A breakdown of the Company's liabilities and obligations as at December 31, 2016 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	\$ 375	\$ 375	\$ -	\$ -	\$ -

A breakdown of the Company's liabilities and obligations as at December 31, 2015 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	\$ 1,172	\$ 1,172	\$ -	\$ -	\$ -
Debentures (principal amount)	9,716	9,716	-	-	-
Interest on Debentures (a)	78	78	-	-	-
Lease commitments	49	49	-	-	-
	\$ 11,015	\$ 11,015	\$ -	\$ -	\$ -

(a) Composed of \$32 interest on the \$3,000 principal amount redeemed on January 8, 2016 and \$46 interest on the remaining \$6,716 principal amount.

As at December 31, 2016, included in accounts payable and accrued liabilities are \$217 of Class C Shares (December 31, 2015 - \$217). The Class C Shares are redeemable and retractable at any time.

Related Party Transactions:

All transactions with related parties have occurred in the normal course of operations.

(a) Related party transactions included in the statement of comprehensive loss were as follows during the year ended December 31:

Type of service	Nature of relationship	2016	2015
Salaries, consulting fees and other benefits	Officers	\$ 870	\$ 810
Director fees (i)	Directors	76	264

- (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, 2016.

During the year ended December 31, 2015, the Company granted to directors and officers the following options:

Date Granted	Options Granted	Exercise Price	Expiry
March 31, 2015	16,500	\$ 16.00	March 30, 2020
May 29, 2015	5,500	\$ 8.00	May 28, 2020
August 31, 2015	1,500	\$ 8.00	August 30, 2020
November 30, 2015	41,200	\$ 5.00	November 29, 2020

- (b) Investments in associates:

The total amounts included in the consolidated statements of financial position for investments in associates are as follows as at December 31, 2016 and December 31, 2015:

	December 31, 2016	December 31, 2015
Investments at fair value	\$ -	\$ 9,742
Cost of investments	-	21,851

The total amounts included in the consolidated statements of comprehensive loss for investments in associates are as follows for the year ended December 31:

	2016	2015
Net change in unrealized losses on investments	\$ -	\$ (5,465)
Interest earned on promissory notes	-	1

From time to time transactions occur between the Company and investee companies that are related parties to facilitate the reorganization or capitalization of the companies. These transactions are made on an arm's-length basis. No related party transactions were conducted with investee companies during the years ended December 31, 2016 and December 31, 2015.

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, 2016 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, 2016. The CEO and CFO have evaluated the ICFR as at December 31, 2016. 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, 2016, that have materially affected, or are reasonably likely to materially affect the Company's ICFR.

Management of Capital:

The Company includes the following items in its managed capital as at December 31, 2016 and December 31, 2015:

	December 31, 2016	December 31, 2015
Convertible debentures	\$ -	\$ 9,716
Equity comprises of:		
Share capital	315,029	306,103
Warrants	1,607	1,607
Contributed surplus	106,561	106,395
Equity component of convertible debentures	-	2,838
Foreign currency translation reserve	(35)	(35)
Deficit	(412,513)	(397,406)
	\$ 10,649	\$ 29,218

The Company manages its capital structure and makes adjustments to it in light of changes in economic conditions and the risk characteristics of its underlying assets. During the year ended December 31, 2016, the Company repaid the Debentures.

There were no changes to the Company's objectives in managing and maintaining capital during the year ended December 31, 2016. The Company is not subject to any capital requirements imposed by a regulator.

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 maintains or adjusts its capital level to enable it to meet its objectives by:

- (a) realizing proceeds from the disposition of its investments; and
- (b) raising capital through equity financings.

The payment of cash dividends does not form part of Pinetree's current capital management program and, to date, the Company has not declared any cash dividends on its common shares.

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 have sufficient cash resources to meet its financial obligations as they become due.

The Company's management is responsible for reviewing liquidity resources to ensure funds are readily available to meet financial obligations as they become due, as well as ensuring funds exist to support business strategies and operating growth.

The Company generates cash flow primarily from its financing activities and proceeds from the disposition of its investments in addition to interest and dividend income earned on its investments. Pinetree invests significantly in securities of "junior" issuers, which can at times be relatively illiquid, and if the Company decides to dispose of securities of a particular issuer it may not be able to do so at the time at favourable prices, or at all. In addition, 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.

There were no changes to the way that the Company manages liquidity risk since December 31, 2015. 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, 2016.

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	\$ 375	\$ 375	\$ -	\$ -	\$ -

The following table shows the Company's contractual undiscounted cash flows, including expected interest payments, which are payable under financial liabilities on the consolidated statement of financial position as at December 31, 2015.

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	\$ 1,172	\$ 1,172	\$ -	\$ -	\$ -
Convertible debentures	9,716	9,716	-	-	-
Interest on convertible debentures	78	78	-	-	-
	\$ 10,966	\$ 10,966	\$ -	\$ -	\$ -

(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.

Additionally, in accordance with IFRS 9, Financial Instruments ("IFRS 9"), Pinetree is required to fair value its investments at the end of each reporting period. This process could result in significant write-downs of the Company's investments over one or more reporting periods, particularly during periods of overall market instability, which would have a significant unfavourable effect on Pinetree's financial position.

There were no changes to the way that the Company manages market risk since December 31, 2015. The Company manages market risk by having a portfolio that is not singularly exposed to any one issuer or class of issuers, although Pinetree's investment activities are currently concentrated primarily across several sectors in the junior resource industry, early stage technology sector and biotechnology sector.

The Company also has set a (cost) threshold on purchases of investments over which the approval of the Board of Directors is required. During periods of significantly broader market volatility or volatility experienced by the resource/commodity markets, the value of the Company's investment portfolio can be quite vulnerable to market fluctuations.

The following table shows the estimated sensitivity of the Company's after-tax loss for the year ended December 31, 2016 from a change in the closing trade price of the Company's investments with all other variables held constant as at December 31, 2016:

Percentage of change in closing trade price	Decrease in loss from % increase in closing trade price	Increase in loss from % decrease in closing trade price
	\$	\$
2%	104	(104)
4%	209	(209)
6%	313	(313)
8%	417	(417)
10%	522	(522)

The following table shows the estimated sensitivity of the Company's after-tax loss for the year ended December 31, 2015 from a change in the closing trade price of the Company's investments with all other variables held constant as at December 31, 2015:

Percentage of change in closing trade price	Increase in loss from % increase in closing trade price \$	Decrease in loss from % decrease in closing trade price \$
2%	306	(306)
4%	612	(612)
6%	917	(917)
8%	1,223	(1,223)
10%	1,529	(1,529)

(c) Interest rate risk:

Interest rate risk is the impact that changes in interest rates could have on the Company's profit and losses. As at December 31, 2016, the Company did not have any significant interest rate risk. There were no changes to the way that the Company manages interest rate risk since December 31, 2015. 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 U.S. dollars, Australian dollars and British pounds. 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, 2015. 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.

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

	December 31, 2016	December 31, 2015
Denominated in U.S. dollars:		
Investments	\$ 1,504	\$ 11,248
Cash and cash equivalents	3,012	178
Due from brokers	1	36
Accounts payable and accrued liabilities	(17)	-
Net assets denominated in U.S. dollars	\$ 4,500	\$ 11,462
Denominated in British pounds:		
Investments	\$ -	\$ 248
Net assets denominated in British pound:	\$ -	\$ 248

The following table shows the estimated sensitivity of the Company's after-tax loss for the year ended December 31, 2016 from a change in the U.S. dollar exchange rate in which the Company has exposure with all other variables held constant as at December 31, 2016:

Percentage of change in U.S. dollar	Decrease in loss from an increase in % in the U.S. dollar exchange rate	Increase in loss from a decrease in % in the U.S. dollar exchange rate
2%	\$ 89	\$ (89)
4%	180	(180)
6%	270	(270)
8%	360	(360)
10%	450	(450)

The following table shows the estimated sensitivity of the Company's after-tax loss for the year ended December 31, 2015 from a change in the U.S. dollar exchange rate in which the Company has exposure with all other variables held constant as at December 31, 2015:

Percentage of change in U.S. dollar	Decrease in loss from an increase in % in the U.S. dollar exchange rate	Increase in loss from a decrease in % in the U.S. dollar exchange rate
2%	\$ 229	\$ (229)
4%	458	(458)
6%	687	(687)
8%	916	(916)
10%	1,145	(1,145)

(e) Credit risk:

Credit risk is the risk associated with the inability of a third party to fulfill its payment obligations. The Company is exposed to the risk that third parties that owe it money or securities (convertible or debt

securities, for example) will not perform their underlying obligations. There were no changes to the way that the Company manages credit risk since December 31, 2015.

As at December 31, 2016, the total fair value of the Company's investments in convertible debentures, convertible notes, and promissory notes was \$nil (December 31, 2015 - \$1,056). The Company believes that it is not significantly exposed to credit risk, as these investments comprise 0.0% (December 31, 2015 - 4.0%) of the Company's total investments.

(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.

Subject to board approval for investments in excess of a pre-determined threshold, there are no restrictions on the proportion of Pinetree's funds and no limit on the amount of funds that may be allocated to any particular investment, industry or sector. Accordingly, the Company's investment activities may be highly concentrated in a limited number of investments or industry sectors and the Company's financial results may be substantially adversely affected by the unfavourable performance in those investments or industry sectors.

As at December 31, 2016, the Company's top five investments had a fair value of \$5,352 in the technology and resources sectors, representing 55% (technology sector) and 25% (resource sector) of the fair value of the Company's total portfolio, of which three are public companies and two are private companies. As at December 31, 2015, the Company's top five investments had a fair value of \$13,800 in the technology, biotechnology and resources sectors, representing 35% (technology sector), 10% (biotechnology sector) and 4% (resource sector) of the fair value of the Company's total portfolio, of which three were public companies and two were private companies.

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 us, or that we currently believe to be immaterial, may also affect and negatively impact our 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 and natural resource industries. 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, Pinetree's investments are mostly 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. Technology and resource companies may never achieve success. This may create an irregular pattern in the Company's revenues (if any). Macro factors such as fluctuations in commodity prices and 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.

We 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.

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	4,522,599
Stock options outstanding to purchase common shares	167,500
Warrants to purchase common shares (i)	123,325
Fully diluted common shares outstanding	4,813,424

- (i) Warrants expire on May 26, 2017 and upon completion of the rights offering, each warrant is exercisable into 1.07 common share at \$70 per warrant.

Additional information about the Company's share capital can be found in note 10 of the Notes to the consolidated financial statements as at and for the year ended December 31, 2016.

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 effective interest rate of convertible debentures, 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, 2016		December 31, 2015	
	Fair Value	Unobservable inputs	Fair Value	Unobservable inputs
Recent financing and strategic review	\$ 1,415	Transaction price and adjustments	\$ 9,889	Transaction price
Trends in comparable publicly-traded companies, general market conditions and strategic review	1,407	Adjustment range (-80% to -12.5%)	8,580	Adjustment range (-80% to 12.5%)
Discounted cash flows	-	Discount rate (15%-19%)	1,056	Discount rate (15%-19%)
	\$ 2,822		\$ 19,525	

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 +/- \$706 (December 31, 2015: +/- \$4,881) change to the total fair value of the investments. While this illustrates the overall effect of changing the values of the unobservable inputs by a set percentage, the significance of the impact and the range of reasonably possible alternative assumptions may differ significantly between investments, given their different terms and circumstances.

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, 2016, 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, 2016 (December 31, 2015 - \$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, 2016.

The following table summarizes stock options granted during the year ended December 31, 2015:

Date Granted	Options Granted	Exercise Price	Expiry
March 31, 2015	22,350	\$ 16.00	March 30, 2020
May 29, 2015	9,500	8.00	May 28, 2020
August 31, 2015	1,500	8.00	August 30, 2020
November 30, 2015	41,200	5.00	November 29, 2020

The fair value of the options granted during the year ended December 31, 2015 was estimated at the date of grant using the following assumptions:

Black-Scholes option valuation model assumptions used	
Expected volatility	75.36% - 76.8%
Expected dividend yield	0.0%
Risk-free interest rate	0.58% - 0.79%
Expected option life in years	3.4 - 5
Expected forfeiture rate	0% - 3.3%
Fair value per stock option granted on March 31, 2015	\$ 0.07
Fair value per stock option granted on May 29, 2015	\$ 0.05
Fair value per stock option granted on August 31, 2015	\$ 0.05
Fair value per stock option granted on November 30, 2015	\$ 0.03

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.

Effective Interest Rate of Convertible Debentures

Convertible debentures are separated into their liability and equity components on the consolidated statement of financial position. The liability component is initially recognized at fair value, calculated as the net present value of the liability, discounted at the interest rate of non-convertible debt issued by comparable issuers, and accounted for at amortized cost using the effective interest rate method.

The fair value of the liability component of Debentures issued or repurchased was calculated using an effective interest rate, which was the interest rate estimated by management for comparable debentures without the conversion feature. The effective interest rate used by management will affect the amount of the liability reported on the consolidated statement of financial position, in so far as a higher rate will result in a lower recorded liability. Additionally, a higher interest rate will result in a higher interest expense recorded in consolidated statement of comprehensive loss.

Valuation of Unlisted Warrants of Public Companies:

The Company uses the Black Sholes to calculate the fair value of unlisted warrants of public companies if there are sufficient and reliable observable market inputs. If there are no reliable observable and no sufficient market inputs available, the warrants are valued using their intrinsic value. Black Sholes requires six key inputs: risk free interest rate, exercise price, market price at date of issue, expected dividend yield, expected life and expected volatility. The first four inputs are facts not estimates, while the expected life and expected volatility are based on the Company's estimates. For example, a longer expected life of the warrant or a higher volatility number used would result in an increase in fair value of the warrant. These estimates involve considerable judgment and are, or could be, affected by significant factors that are out of the Company's control.

As at December 31, 2016, the Company has valued all non-tradable warrants using intrinsic value for a total fair value of \$61 (December 31, 2015 - \$676), 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 per share" (basic and diluted) ("NAV"), which is a non-GAAP financial measure. NAV is calculated as the value of total assets less the value of total liabilities divided by the total number of common shares outstanding as at a specific date. NAV (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).