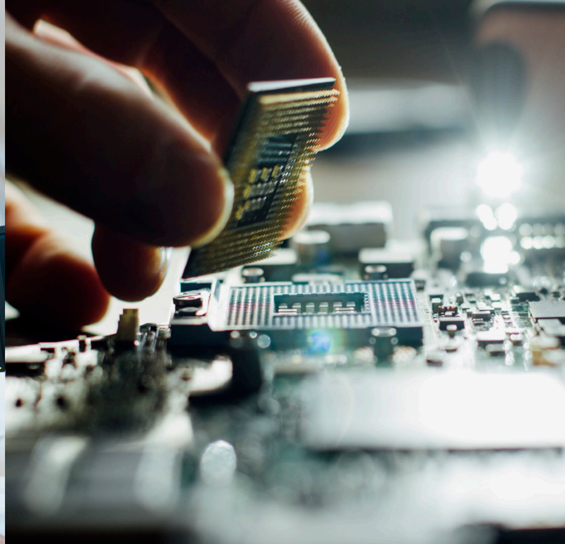
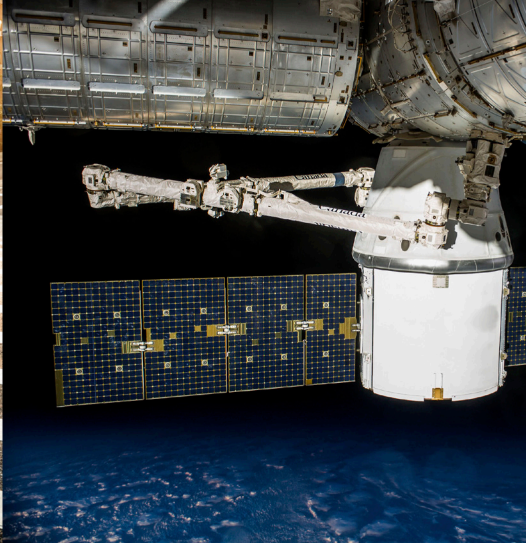




Management Report

Quarter Ended March 31, 2019

5N PLUS

Enabling Performance

Management's Discussion and Analysis

This Management's Discussion and Analysis ("MD&A") of the financial condition and results of operations is intended to assist readers in understanding 5N Plus Inc. (the "Company" or "5N Plus"), its business environment, strategies, performance and risk factors. This MD&A should be read in conjunction with the unaudited condensed interim consolidated financial statements of Q1 2019 and the audited consolidated financial statements and the accompanying notes for the year ended December 31, 2018. This MD&A has been prepared in accordance with the requirements of the Canadian Securities Administrators.

Information contained herein includes any significant developments to April 30, 2019, the date on which the MD&A was approved by the Company's board of directors. Unless otherwise indicated, the terms "we", "us" "our" and "the group" as used herein refer to the Company together with its subsidiaries.

"Q1 2019" and "Q1 2018" refer to the three-month periods ended March 31, 2019 and 2018 respectively. All amounts in this MD&A are expressed in U.S. dollars, and all amounts in the tables are in thousands of U.S. dollars, unless otherwise indicated. All quarterly information disclosed in this MD&A is based on unaudited figures.

Non-IFRS Measures

This MD&A also includes certain figures that are not performance measures consistent with IFRS. These measures are defined at the end of this MD&A under the heading Non-IFRS Measures.

Notice Regarding Forward-Looking Statements

Certain statements in this MD&A may be forward-looking within the meaning of applicable securities laws. Forward-looking information and statements are based on the best estimates available to the Company at the time and involve known and unknown risks, uncertainties or other factors that may cause the Company's actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. A description of the risks affecting the Company's business and activities appears under the heading "Risk and Uncertainties" of the 5N Plus' 2018 MD&A dated February 26, 2019 and note 12 of the unaudited condensed interim consolidated financial statements for the three-month periods ended March 31, 2019 and 2018 available on www.sedar.com. Forward-looking statements can generally be identified by the use of terms such as "may", "should", "would", "believe", "expect", the negative of these terms, variations of them or any similar terms. No assurance can be given that any events anticipated by the forward-looking information in this MD&A will transpire or occur, or if any of them do so, what benefits that 5N Plus will derive therefrom. In particular, no assurance can be given as to the future financial performance of 5N Plus. The forward-looking information contained in this MD&A is made as of the date hereof and the Company has no obligation to publicly update such forward-looking information to reflect new information, subsequent or otherwise, unless required by applicable securities laws. The reader is warned against placing undue reliance on these forward-looking statements.

Management's Discussion and Analysis

Overview

5N Plus is a leading global producer of engineered materials and specialty chemicals with integrated recycling and refining assets to manage the sustainability of its business model. The Company is headquartered in Montreal, Québec, Canada and operates R&D, manufacturing and commercial centers in several locations in Europe, the Americas and Asia. 5N Plus deploys a range of proprietary and proven technologies to produce products which are used as enabling precursors by its customers in a number of advanced electronics, optoelectronics, pharmaceutical, health, renewable energy and industrial applications. Many of the materials produced by 5N Plus are critical for the functionality and performance of the products and systems produced by its customers, many of whom are leaders within their industry.

Reporting Segments

The Company has two reportable segments, namely Electronic Materials and Eco-Friendly Materials. Corresponding operations and activities are managed accordingly by the Company's key decision makers. Segmented operating, financial information and labelled key performance indicators are available and used to manage these business segments, review performance and allocate resources. Financial performance of any given segment is evaluated primarily in terms of revenues and Adjusted EBITDA[1] which is reconciled to consolidated numbers by taking into account corporate income and expenses.

The Electronic Materials segment operates in North America, Europe and Asia. The Electronic Materials segment manufactures and sells products which are used in a number of applications such as security, aerospace, sensing, imaging, renewable energy and various technical industries. Typical end markets include photovoltaics (terrestrial and spatial solar energy), advance electronics, optoelectronics, electronic packaging, medical imaging and thermoelectric. These are sold either in elemental or alloyed form as well as in the form of chemicals, compounds and wafers. Revenues and earnings associated with recycling services and activities provided to customers of the Electronic Materials segment are also included in the Electronic Materials segment.

The Eco-Friendly Materials segment is so labelled because it is mainly associated with bismuth, one of the very few heavy metals which has no detrimental effect on either human health or in the environment. The Eco-Friendly Materials segment operates in North America, Europe and Asia. The Eco-Friendly Materials segment manufactures and sells products which are used in a number of applications such as pharmaceutical, healthcare, animal feed additive, catalytic and extractive, as well as various industrial materials. Main products are sold either in elemental or alloyed form but mostly in the form of specialized chemicals. Revenues and earnings associated with recycling services and activities provided to customers of the Eco-Friendly Materials segment are also included in the Eco-Friendly Materials segment.

Corporate expenses associated with the head office and unallocated selling, general and administrative expenses (SG&A) together with financial expenses (revenues) have been regrouped under the heading Corporate.

Vision and Strategy

As a leading global materials technology company with employees and assets throughout the world, we are determined to enable and empower our people in a manner which inspires them to perform collectively at their best and optimize resource utilization to deliver competitive financial returns.

The Company unveiled its Strategic Plan 5N21 ("5N21") designed to enhance profitability while reducing earnings volatility on September 12, 2016. 5N21 focuses on three major pillars:

1. Extracting more value from core businesses and global assets;
2. Optimizing balance of contribution from upstream and downstream activities; and
3. Delivering quality growth from both existing growth initiatives and future M&A opportunities.

[1] See Non-IFRS Measures

Management's Discussion and Analysis

Highlights of Q1 2019 – Staging year …working through production challenges to serve a full orderbook

5N Plus entered 2019 with strong demand for products across core and growth businesses and maintained a strong backlog and booking levels throughout the first quarter of the year. During this period, the Company faced production challenges negatively impacting overall sales. Within the core business of 5N Plus, these challenges were largely associated with equipment downtime as the demand for certain products increased dramatically. In the case of growth initiatives, the major challenges stemmed from production processes associated with new materials, for which the increased demand resulted in mass-scaling production challenges.

- Adjusted EBITDA[1] and EBITDA[1] for the first quarter of 2019 reached $5.6 million and $4.2 million compared to $7.9 million and $7.8 million during the same quarter of 2018.
- Revenue for Q1 2019 reached $51.4 million compared to $58.5 million for Q1 2018, in large part reflecting the impact of production challenges and to a lesser extent the impact of lower metal notations.
- Net loss for the first quarter of 2019 was $1.1 million or $0.01 per share compared to net earnings of $3.0 million or $0.04 per share for the same period last year.
- Annualized Return on Capital Employed (ROCE)[1] reached 8.6% for the first quarter of 2019, largely influenced by the lower Adjusted EBIT[1] performance impacted by production challenges.
- Net debt[1] stood at $33.0 million as of March 31, 2019 from $20.8 million for the same period last year, impacted by additional working capital.
- As at March 31, 2019, the Backlog[1] reached a level of 202 days of sales outstanding, slightly lower than last quarter ending at 217 days, however much higher than Q1 2018 ending at a level of 172 days. Bookings[1] in Q1 2019 reached 92 days compared to 105 days in Q4 2018 and 96 days in Q1 2018.
- On February 18, 2019, 5N Plus confirmed that its U.S. based subsidiary, 5N Plus Semiconductors, had been awarded a multi-year program to supply opto-electronic semiconductor substrates to Albuquerque, New Mexico based SolAero Technologies. The substrates are intended for use in satellite solar arrays for a number of applications, including powering a constellation of several hundreds low-orbit broadband satellites being manufactured by Airbus OneWeb Satellites. This network of satellites will provide global, persistent, low latency internet access that promises to bridge the digital divide.
- On February 27, 2019, 5N Plus announced that the Toronto Stock Exchange approved 5N Plus' normal course issuer bid ("NCIB"). Under the NCIB, 5N Plus has the right to purchase for cancellation, from March 1, 2019 to February 29, 2020, a maximum of 3,515,926 common shares.
- From March 1, 2019 to March 31, 2019, 5N Plus purchased and cancelled 384,379 of the Company's shares under the NCIB plan.

As we look to 2019, management focus will be placed on significantly enhancing the Company's ability to economically mass produce new materials associated with the growth initiatives and bolster existing assets to enable larger production campaigns for the core business in a cost-effective manner. Based on current production challenges along with higher production volumes but contracted margins within the Renewable Energy Sector as per the long-term contracts, Adjusted EBITDA is expected to land between $26 million to $30 million with the second half performing better than the first half of the year. The range of variance for the Adjusted EBITDA is largely dictated by the speed at which the Company moves along the learning curve and addresses challenges associated with the transformation 5N Plus is undergoing.

[1] See Non-IFRS Measures

Summary of Results

	Q1 2019	Q1 2018
	$	$
Revenue	**51,413**	58,547
Adjusted operating expenses[1] *	**(45,801)**	(50,662)
Adjusted EBITDA[1]	**5,612**	7,885
Impairment of inventory	**-**	-
Share-based compensation expense	**(1,137)**	(654)
Litigation and restructuring income	**-**	588
Gain on disposal of property, plant and equipment (PPE)	**-**	185
Foreign exchange and derivative loss	**(287)**	(204)
EBITDA[1]	**4,188**	7,800
Interest on long-term debt, imputed interest and other interest expense	**1,403**	1,502
Depreciation and amortization	**3,178**	2,248
(Loss) earnings before income taxes	**(393)**	4,050
Income tax expense (recovery)		
Current	**1,240**	1,397
Deferred	**(484)**	(395)
	756	1,002
Net (loss) earnings	**(1,149)**	3,048
Basic earnings per share	**($0.01)**	$0.04
Diluted earnings per share	**($0.01)**	$0.04

**Excluding share-based compensation expense, litigation and restructuring income, gain on disposal of property, plant and equipment, impairment of non-current assets and depreciation and amortization.*

Revenue by Segment and Gross Margin

	Q1 2019	Q1 2018	Change
	$	$	
Electronic Materials	**20,294**	20,623	(2%)
Eco-Friendly Materials	**31,119**	37,924	(18%)
Total revenue	**51,413**	58,547	(12%)
Cost of sales	**(42,800)**	(45,894)	(7%)
Depreciation included in cost of sales	**2,922**	2,036	44%
Gross margin[1]	**11,535**	14,689	(21%)
Gross margin percentage[1]	**22.4%**	25.1%	

During Q1 2019, revenue decreased by 12% compared to the same period of 2018. Gross margin reached 22.4% in Q1 2019 compared to 25.1% in Q1 2018. Both revenue and gross margin were negatively impacted by production challenges and to a lesser extent by adverse movements in the underlying metal notations.

[1] See Non-IFRS Measures

Operating earnings, EBITDA and Adjusted EBITDA

	Q1 2019	Q1 2018	Change
	$	$	
Electronic Materials	**4,126**	6,854	(40%)
Eco-Friendly Materials	**3,141**	3,784	(17%)
Corporate	**(1,655)**	(2,753)	(40%)
Adjusted EBITDA[1]	**5,612**	7,885	(29%)
EBITDA[1]	**4,188**	7,800	(46%)
Operating earnings	**1,297**	5,756	(77%)

In Q1 2019, Adjusted EBITDA[1] was $5.6 million compared to $7.9 million in Q1 2018, negatively impacted by realized shipments due to production challenges, to a lesser extent adverse movements in the underlying metal notations, along with the application of the most recent commercial terms from the multi-year supply and services contracts renewal within the Renewable Energy Sector.

In Q1 2019, EBITDA[1] was $4.2 million compared to $7.8 million in Q1 2018. The decrease is mainly explained by the lower Adjusted EBITDA this period combined with a higher shared-based compensation expense reflecting the important rise in the Company's share price at the end of the first quarter of 2019 when compared to March 31, 2018. In addition, no significant non-recurrent items were recorded in the current period while in Q1 2018, the Company recorded two non-recurrent items totalling $0.8 million recognized as income.

Operating earnings in Q1 2019 were $1.3 million compared to $5.8 million in Q1 2018.

Electronic Materials Segment
Adjusted EBITDA in Q1 2019 decreased by $2.7 million to $4.1 million representing an Adjusted EBITDA margin[1] of 20% compared to 33% in Q1 2018.

Eco-Friendly Materials Segment
Adjusted EBITDA decreased by $0.6 million representing an Adjusted EBITDA margin of 10% in Q1 2019 and in Q1 2018.

Net Earnings and Adjusted Net Earnings

	Q1 2019	Q1 2018
	$	$
Net (loss) earnings	**(1,149)**	3,048
Basic (loss) earnings per share	**($0.01)**	$0.04
Reconciling items:		
Share-based compensation expense	**1,137**	654
Accelerated imputed interest	**267**	-
Litigation and restructuring income	**-**	(588)
Gain on disposal of PPE	**-**	(185)
Income tax expense on taxable items above	**(375)**	(115)
Adjusted net (loss) earnings [1]	**(120)**	2,814
Basic adjusted net (loss) earnings per share[1]	**$-**	$0.03

[1] See Non-IFRS Measures

Net loss reached $1.1 million or $0.01 per share in Q1 2019 compared to net earnings of $3.0 million or $0.04 per share in Q1 2018. Adjusted net earnings[1] decreased by $2.9 million and reached an Adjusted net loss[1] of $0.1 million in Q1 2019, compared to an adjusted net earnings of $2.8 million in Q1 2018. Excluding the income tax expense, the main items reconciling the Adjusted net loss in Q1 2019 are the share-based compensation expense and the accelerated imputed interest recognized as an expense following the early redemption of the CA$26.0 million convertible debentures in March 2019.

Bookings and Backlog

	BACKLOG[1]			BOOKINGS[1]		
	Q1 2019	Q4 2018	Q1 2018	**Q1 2019**	Q4 2018	Q1 2018
	$	$	$	**$**	$	$
Electronic Materials	**62,730**	61,771	61,558	**21,253**	18,964	22,476
Eco-Friendly Materials	**51,077**	51,493	48,726	**30,703**	36,005	38,969
Total	**113,807**	113,264	110,284	**51,956**	54,969	61,445

	BACKLOG[1]			BOOKINGS[1]		
(number of days based on annualized revenues) *	**Q1 2019**	Q4 2018	Q1 2018	**Q1 2019**	Q4 2018	Q1 2018
Electronic Materials	**282**	291	272	**96**	89	99
Eco-Friendly Materials	**150**	166	117	**90**	116	94
Weighted average	**202**	217	172	**92**	105	96

**Bookings and backlog are also presented in number of days to normalize the impact of commodity prices.*

Q1 2019 vs Q4 2018

Backlog[1] as at March 31, 2019 reached a level of 202 days of annualized revenue, representing a decrease of 15 days compared to 217 days for the previous quarter.

Backlog as at March 31, 2019 for the Electronic Materials segment represented 282 days of annualized segment revenue, a decrease of 9 days or 3% over the backlog ended December 31, 2018. The backlog for the Eco-Friendly Materials segment represented 150 days of annualized segment revenue, a decrease of 16 days or 10% over the backlog ended December 31, 2018.

Bookings[1] for the Electronic Materials segment increased by 7 days, from 89 days in Q4 2018 to 96 days in Q1 2019. Bookings for the Eco-Friendly Materials segment decreased by 26 days, from 116 days in Q4 2018 to 90 days in Q1 2019.

Q1 2019 vs Q1 2018

Backlog as at March 31, 2019 for the Electronic Materials segment increased by 10 days and by 33 days for the Eco-Friendly Materials segment compared to March 31, 2018, reaching 202 days on a consolidated basis versus 172 days.

Bookings decreased by 3 days for the Electronic Materials segment and by 4 days for the Eco-Friendly Materials segment compared to the previous year quarter.

[1] See Non-IFRS Measures

Expenses

	Q1 2019	Q1 2018
	$	$
Depreciation and amortization	**3,178**	2,248
SG&A	**5,516**	6,819
Share-based compensation expense	**1,137**	654
Litigation and restructuring income	**-**	(588)
Financial expense	**1,690**	1,706
Income taxes	**756**	1,002
Total expenses	**12,277**	11,841

Depreciation and Amortization

Depreciation and amortization expenses in Q1 2019 amounted to $3.2 million compared to $2.2 million for the same period of 2018. The expenses in Q1 2019 included the depreciation of right of use assets of $0.4 million following the adoption of the new standard, IFRS 16 – Leases, as at January 1, 2019.

SG&A

In Q1 2019, SG&A expenses were $5.5 million compared to $6.8 million for the same period of 2018. In Q1 2019, the expenses were positively impacted by favorable exchange rates across most local currency denominated expenses when compared to Q1 2018, as well as timing of certain expenses, the full year is not expected to be materially different than 2018.

Share-Based Compensation Expense

Share-based compensation expense in Q1 2019 amounted to $1.1 million compared to $0.7 million for the same period in 2018. The increase in Q1 2019 is mainly due to the important rise in the Company's share price at the end of the first quarter of 2019 when compared to March 31, 2018.

Litigation and Restructuring Income

No expenses or income from litigation and restructuring activity were recognized in Q1 2019, while In Q1 2018, the Company recorded an income from litigation and restructuring of $0.6 million representing a non-recurring income relating to an amount receivable from an inactive legal entity for which no receivable had been recorded given the uncertainty.

Financial Expense

Financial expense amounted to $1.7 million in Q1 2019 and Q1 2018 with unfavorable impact of foreign exchange and derivatives mitigated by the decrease in interest on long-term debt.

Income Taxes

The Company reported loss before income taxes of $0.4 million in Q1 2019. Income tax expense in Q1 2019 was $0.8 million compared to $1.0 million in the same period last year. Both periods were favorably impacted by deferred tax assets applicable in certain jurisdictions.

Liquidity and Capital Resources

	Q1 2019	Q1 2018
	$	$
Funds from operations[1]	**2,945**	6,226
Net changes in non-cash working capital items	**(9,530)**	(12,816)
Operating activities	**(6,585)**	(6,590)
Investing activities	**(2,840)**	(2,624)
Financing activities	**4,849**	167
Effect of foreign exchange rate changes on cash and cash equivalents	**15**	166
Net decrease in cash and cash equivalents	**(4,561)**	(8,881)

[1] See Non-IFRS Measures

Cash used in operating activities amounted to $6.6 million in Q1 2019 similar to Q1 2018. The decrease in funds from operations[1] was not as much impacted by a negative change in non-cash working capital when compared to last year resulting mainly from a decrease in trade and accrued liabilities of $4.9 million combined with an increase of $5.2 million in accounts receivable.

In Q1 2019, cash used in investing activities totaled $2.8 million compared to $2.6 million in Q1 2018. This increase is mainly explained by higher investment in PPE during Q1 2018 reduced on a net basis by the proceeds from the disposal of redundant PPE of $0.8 million in the same period.

In Q1 2019, cash from financing activities amounted to $4.8 million compared to $0.2 million in Q1 2018. The increase is associated with the new five-year unsecured subordinated term loan of $25.0 million announced in Q1 2019 for which only $19.3 million were used to redeem the Company's outstanding convertible unsecured subordinated debentures of CA$26.0 million.

Working Capital

	As at March 31, 2019	As at December 31, 2018
	$	$
Inventories	**95,320**	96,889
Other current assets	**64,896**	62,396
Current liabilities	**(44,820)**	(65,924)
Working capital[1]	**115,396**	93,361
Working capital current ratio[1]	**3.57**	2.42

The increase in working capital[1] compared to December 31, 2018 was mainly attributable to decrease in current liabilities following the early redemption of the CA$26.0 million convertible debentures in March 2019 which were replaced by a five-year unsecured subordinated term loan.

Net Debt

	As at March 31, 2019	As at December 31, 2018
	$	$
Bank indebtedness	**-**	-
Long-term debt including current portion	**55,179**	30,175
Convertible debentures	**-**	18,571
Cross-currency swap	**-**	197
Total Debt[1]	**55,179**	48,943
Cash and cash equivalents	**(22,163)**	(26,724)
Net Debt[1]	**33,016**	22,219

Total debt[1], including the cross-currency swap, increased by $6.2 million to $55.2 million as at March 31, 2019 compared to $48.9 million as at December 31, 2018, which is mainly due to the replacement of the convertible debentures by a five-year unsecured subordinated term loan at a higher face value.

Net debt[1], after considering cash and cash equivalents, increased by $10.8 million, from $22.2 million as at December 31, 2018 to $33.0 million as at March 31, 2019, mostly impacted by non-cash working capital requirements.

On March 28, 2019, the Company redeemed all its outstanding 5.75% convertible unsecured subordinated debentures maturing on June 30, 2019 for an aggregate principal amount of CA$26.0 million. On March 22, 2019 the Company completed the withdrawal of the second tranche of its new term loan in the amount of $20.0 million to redeem the outstanding debentures. As at March 31, 2019, there were no outstanding convertible debentures.

[1] See Non-IFRS Measures

Consequently, the Company de-designated the remaining nominal amount of the associated cross-currency swap of CA$26.0 million and reclassified the net loss of $0.1 million, representing the accumulated net changes in cash flow hedges, from accumulated other comprehensive loss to realized loss on de-designation within the interim consolidated statement of (loss) earnings.

Following the redemption of the CA$26.0 million convertible debentures, an accelerated imputed interest of $0.3 million was recognized as an expense in the interim consolidated statement of (loss) earnings.

Share Information

	As at April 30, 2019	As at March 31, 2019
Issued and outstanding shares	**84,244,959**	84,540,412
Stock options potentially issuable	**1,271,057**	1,298,557

On February 27, 2019, the TSX has approved the Company's normal course issuer bid. Under this normal course issuer bid, the Company has the right to purchase for cancellation, from March 1, 2019 to February 29, 2020, a maximum of 3,515,926 common shares. For the three-month period ended March 31, 2019, the Company had repurchased and cancelled 384,379 common shares at an average price of $2.49 (CA$3.33) for a total amount of $1.0 million that has been applied against the equity.

Off-Balance Sheet Arrangements

The Company is exposed to currency risk on sales in Euro and other currencies and therefore periodically enters into foreign currency forward contracts to protect itself against currency fluctuation. The reader will find more details related to these contracts in Notes 16 and 24 of the audited consolidated financial statements for the year ended December 31, 2018.

Commitments

As at March 31, 2019 and December 31, 2018, in the normal course of business, the Company contracted letters of credit for an amount of $0.4 million.

Contingencies

In the normal course of operations, the Company is exposed to events that could give rise to contingent liabilities or assets. As at the date of issue of the consolidated financial statements, the Company was not aware of any significant events that would have a material effect on its consolidated financial statements.

Governance

As required by Multilateral Instrument 52-109 of the Canadian Securities Administrators («MI 52-109 »), 5N Plus has filed certificates signed by the Chief Executive Officer and the Chief Financial Officer that, among other things, attest to the design of the disclosure controls and procedures and the design and effectiveness of internal controls over financial reporting.

Disclosure Controls and Procedures

The Chief Executive Officer and the Chief Financial Officer have designed disclosure controls and procedures, or have caused them to be designed under their supervision, in order to provide reasonable assurance that:

- material information relating to the Company has been made known to them; and
- information required to be disclosed in the Company's filings is recorded, processed, summarized and reported within the time periods specified in securities legislation.

An evaluation was carried out, under the supervision of the Chief Executive Officer and Chief Financial Officer, of the effectiveness of the Company's disclosure controls and procedures. Based on this evaluation, the Chief Executive Officer and the Chief Financial Officer concluded that the disclosure controls and procedures are effective.

Internal Control over Financial Reporting

The Chief Executive Officer and the Chief Financial Officer have also designed internal controls over financial reporting (ICFR) or have caused them to be designed under their supervision, in order to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS.

Based on their evaluation carried out to assess the effectiveness of the Company's ICFR, the Chief Executive Officer and the Chief Financial Officer have concluded that the ICFR were designed and operated effectively using the Internal Control – Integrated Framework (2013 Framework) issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO 2013 Framework").

Changes in Internal Control over Financial Reporting

No changes were made to our ICFR during the three-month period ended March 31, 2019 that have materially affected, or are reasonably likely to materially affect, our internal controls over financial reporting.

Accounting Policies and Changes

The Company established its accounting policies and methods used in the preparation of its audited consolidated financial statements for the fiscal year 2018 in accordance with IFRS. The Company's significant accounting policies are described in Note 2 of the audited consolidated financial statements for the year ended December 31, 2018.

Adoption of new accounting standards

IFRS 16 - Leases

On January 1, 2019, the Company adopted the new accounting standard IFRS 16 using the modified retrospective approach.

Adjustments recognized on adoption of IFRS 16

On adoption of IFRS 16, the Company recognized lease liabilities in relation to leases which had previously been classified as operating leases under the principles of IAS 17 Leases. These liabilities were measured at the present value of the remaining lease payments, discounted using the Company's incremental borrowing rate as at January 1, 2019 of 4.45%.

	January 1, 2019
	$
Operating lease commitments disclosed as at December 31, 2018	4,294
Effect of discounting those lease commitments	(260)
Effect of electing to account for short-term and low value leases off balance sheet	(80)
Adjustment as a result of a different treatment of extension options	3,198
Lease liability recognized as at January 1, 2019	**7,152**
Of which are:	
Current lease liabilities	1,554
Non-current lease liabilities	5,598

The associated right-of-use assets were measured at the amount equal to the lease liability and they relate to the following types of assets:

	March 31, 2019	January 1, 2019
	$	$
Land and buildings	6,066	6,342
Production equipment	480	454
Office equipment and rolling stock	370	356
Total right-of-use assets	**6,916**	**7,152**

As noted above, the change in accounting policy resulted in the increase of right-of-use assets and lease liabilities by $7.2 million in the balance sheet on January 1, 2019.

Practical expedients applied
In applying IFRS 16 for the first time, the Company has used the following practical expedients permitted by the standard:

- the use of a single discount rate to a portfolio of leases with reasonably similar characteristics;
- the accounting for operating leases with a remaining lease term of less than 12 months as at January 1, 2019 as short-term leases; and
- the use of hindsight in determining the lease term where the contract contains options to extend or terminate the lease.

The Company has also elected not to reassess whether a contract is or contains a lease at the date of initial application. Instead, for contracts entered into before the transition date, the Company relied on its assessment made applying IAS 17 and IFRIC 4 Determining whether an Arrangement contains a Lease.

The Company's leasing activities and how these are accounted for
The Company leases various production and warehouse locations, production equipment and furniture, office equipment and rolling stock. Rental contracts are typically made for fixed periods of 2 to 5 years but may have extension options as described below. Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. The lease agreements do not impose any covenants, but leased assets may not be used as security for borrowing purposes.

Until the 2018 financial year, leases of property, plant and equipment were classified as either finance or operating leases. Payments made under operating leases (net of any incentives received from the lessor) were charged to profit or loss on a straight-line basis over the period of the lease.

From January 1, 2019, leases are recognized as a right-of-use asset and a corresponding liability at the date at which the leased asset is available for use by the Company. Each lease payment is allocated between the liability and finance cost. The finance cost is charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period. The right-of-use asset is depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis.

Assets and liabilities arising from a lease are initially measured on a present value basis. Lease liabilities include the net present value of the following lease payments:

- fixed payments (including in-substance fixed payments), less any lease incentives receivable;
- variable lease payments that are based on an index or a rate;
- amounts expected to be payable by the lessee under residual value guarantees;
- the exercise price of a purchase option if the lessee is reasonably certain to exercise that option; and
- payments of penalties for terminating the lease, if the lease term reflects the lessee exercising that option.

The lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be determined, the lessee's incremental borrowing rate is used, being the rate that the lessee would have to pay to borrow the funds necessary to obtain an asset of similar value in a similar economic environment with similar terms and conditions.

Right-of-use assets are measured at cost comprising the following:

- the amount of the initial measurement of lease liability;
- any lease payments made at or before the commencement date less any lease incentives received;
- any initial direct costs; and
- restoration costs.

Payments associated with short-term leases and leases of low-value assets are recognized on a straight-line basis as an expense in profit or loss. Short-term leases are leases with a lease term of 12 months or less. Low-value assets comprise IT-equipment and small items of office furniture.

Extension options

Extension options are included in a number of property and equipment leases across the Company. These terms are used to maximise operational flexibility in terms of managing contracts. The majority of extension options held are exercisable only by the Company and not by the respective lessor.

IFRIC 23 – Uncertainty over Income Tax Treatments

On January 1, 2019, the Company also adopted the new accounting standard IFRIC 23.

The interpretation provides guidance on the accounting for current and deferred tax liabilities and assets in circumstances in which there is uncertainty over income tax treatments. The Company has concluded that there is no significant impact resulting from the application of this new standard on its consolidated financial statements.

Financial Instruments and Risk Management

Fair Value of financial instruments

A detailed description of the methods and assumptions used to measure the fair value of the Company financial instruments and their fair value are discussed in Note 16 – Fair Value of Financial Instruments in the 2018 audited consolidated financial statements of the Company.

Financial Risk Management

For a detailed description of the nature and extent of risks arising from financial instruments, and their related risk management, refer to Note 24 of the 2018 audited consolidated financial statements. The Company is not aware of any significant changes to its risk factors from those disclosed at that time.

Risk and Uncertainties

For a detailed description of risk factors associated with 5N Plus and its business, refer to "Risk and Uncertainties" of 5N Plus' 2018 MD&A dated February 26, 2019. Factors of uncertainty and risk that might result in such differences include the risks associated with our growth strategy, credit, liquidity, interest rate, litigation, inventory pricing, commodity pricing, currency fluctuation, fair value, source of supply, environmental regulations, competition, dependence on key personnel, business interruptions, protection of intellectual property, international operations including China, international trade regulations, collective agreements and being a public issuer. The company is not aware of any significant changes to its risk factors disclosed at that time.

Non-IFRS Measures

In this Management's Report, the Company's management uses certain measures which are not in accordance with IFRS. Non-IFRS measures are useful supplemental information but may not have a standardized meaning according to IFRS.

Backlog represents the expected orders we have received but have not yet executed and that are expected to translate into sales within the next twelve months expressed in number of days. Bookings represent orders received during the period considered, expressed in days, and is calculated by adding revenues to the increase or decrease in backlog for the period considered divided by annualized year revenues. We use backlog to provide an indication of expected future revenues in days, and bookings to determine our ability to sustain and increase our revenues.

EBITDA means net (loss) earnings before interest expenses, income taxes, depreciation and amortization. We use EBITDA because we believe it is a meaningful measure of the operating performance of our ongoing business without the effects of certain expenses. The definition of this non-IFRS measure used by the Company may differ from that used by other companies.

EBITDA margin is defined as EBITDA divided by revenues.

Adjusted EBITDA means EBITDA as defined above before impairment of inventories, share-based compensation expense, impairment of non-current assets, litigation and restructuring costs (income), gain on disposal of property, plant and equipment, change in fair value of debenture conversion option, foreign exchange and derivatives loss (gain). We use adjusted EBITDA because we believe it is a meaningful measure of the operating performance of our ongoing business without the effects of certain expenses. The definition of this non-IFRS measure used by the Company may differ from that used by other companies.

Adjusted EBITDA margin is defined as Adjusted EBITDA divided by revenues.

Adjusted operating expenses means operating charges before shared-based compensation expense, impairment of non-current assets, litigation and restructuring costs (income), gain on disposal on property, plant and equipment and depreciation and amortization. We use adjusted operating expenses to calculate the Adjusted EBITDA. We believe it is a meaningful measure of the operating performance of our ongoing business. The definition of this non-IFRS measure used by the Company may differ from that used by other companies.

Adjusted net earnings means the net (loss) earnings before the effect of charge of impairment related to inventory, PPE and intangible assets, share-based compensation expense, litigation and restructuring costs (income), gain on disposal of property, plant and equipment, change in fair value of debenture conversion option net of the related income tax. We use adjusted net earnings (loss) because we believe it is a meaningful measure of the operating performance of our ongoing business without the effects of unusual inventory write-downs and property plant and equipment, intangible asset impairment charges, share-based compensation expense, litigation and restructuring costs (income), gain on disposal of property, plant and equipment and change in fair value of debenture conversion option. The definition of this non-IFRS measure used by the Company may differ from that used by other companies.

Basic adjusted net earnings (loss) per share means adjusted net earnings (loss) divided by the weighted average number of outstanding shares. We use basic adjusted net earnings (loss) per share because we believe it is a meaningful measure of the operating performance of our ongoing business without the effects of unusual inventory write-downs and property plant and equipment and intangible asset impairment charges, share-based compensation expense, litigation and restructuring costs (income), gain on disposal of property, plant and equipment and change in fair value of debenture conversion option per share. The definition of this non-IFRS measure used by the Company may differ from that used by other companies.

Funds (used in) from operations means the amount of cash generated from operating activities before changes in non-cash working capital balances related to operations. This amount appears directly in the consolidated statements of cash flows of the Company. We consider funds (used in) from operations to be a key measure as it demonstrates the Company's ability to generate cash necessary for future growth and debt repayment.

Gross margin is a measure we use to monitor the sales contribution after paying cost of sales excluding depreciation and impairment inventory charge. We also expressed this measure in percentage of revenues by dividing the gross margin value by the total revenue.

Net debt or net cash is a measure we use to monitor how much debt we have after taking into account cash and cash equivalents. We use it as an indicator of our overall financial position, and calculate it by taking our total debt, subtracting cash and cash equivalents, included as debt is the current portion and the cross-currency swap related to the convertible debentures, any newly introduced IFRS 16 reporting measures in reference to lease liabilities is excluded from the calculation.

Return on Capital Employed (ROCE) is a non-IFRS financial measure, calculated by dividing the annualized Adjusted EBIT by capital employed at the end of the period. Adjusted EBIT is calculated as the Adjusted EBITDA less depreciation of PPE and amortization of intangible assets (adjusted for accelerated depreciation charge, if any). Capital employed is the sum of the accounts receivable, the inventory, the PPE, the goodwill and intangibles less trade and accrued liabilities (adjusted for exceptional items). We use ROCE to measure the return on capital employed, whether the financing is through equity or debt. In our view, this measure provides useful information to determine if capital invested in the Company yields competitive returns. The usefulness of ROCE is limited by the fact that it is a ratio and not providing information as to the absolute amount of our net income, debt or equity. It also excludes certain items from the calculation and other companies may use a similar measure but calculate it differently.

Working capital is a measure of liquid assets that is calculated by taking current assets and subtracting current liabilities. Given that the Company is currently indebted, we use it as an indicator of our financial efficiency and aim to maintain it at the lowest possible level.

Working capital ratio is calculated by dividing current assets by current liabilities.

Additional Information

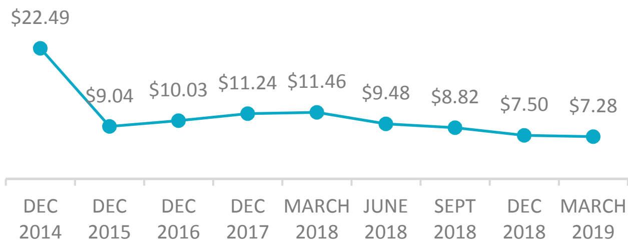
Our common shares trade on the Toronto Stock Exchange (TSX) under the ticker symbol VNP. Additional information relating to the Company, including the Company's annual information form is available under the Company's profile on SEDAR at www.sedar.com.

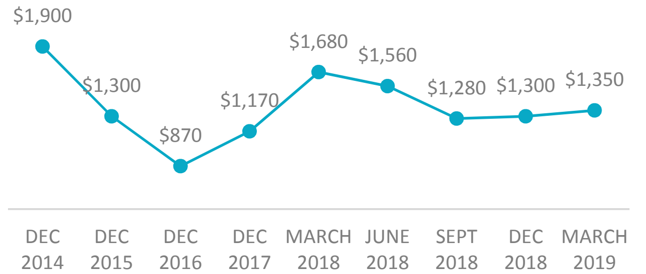
Selected Quarterly Financial Information

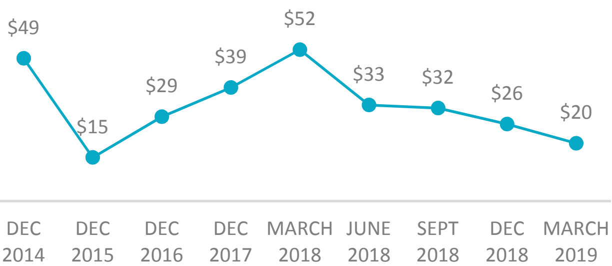
(in thousands of United States dollars except per share amounts)	**March. 31, 2019**	**Dec. 31, 2018**	Sept. 30, 2018	June 30, 2018	March 31, 2018	Dec. 31, 2017	Sept. 30, 2017	June 30, 2017
	$	**$**	$	$	$	$	$	$
Revenue	**51,413**	**47,710**	53,379	58,359	58,547	52,492	50,325	56,229
EBITDA[1]	**4,188**	**5,589**	7,772	7,860	7,800	4,420	6,427	6,341
Adjusted EBITDA[1]	**5,612**	**6,912**	8,581	8,972	7,885	6,763	6,942	9,236
Net (loss) earnings attributable to equity holders of 5N Plus	**(1,149)**	**4,046**	3,457	3,417	3,051	2,229	2,224	3,416
Basic (loss) earnings per share attributable to equity holders of 5N Plus	**($0.01)**	**$0.05**	$0.04	$0.04	$0.04	$0.03	$0.03	$0.04
Net (loss) earnings	**(1,149)**	**4,046**	3,458	3,420	3,048	2,222	2,223	3,415
Basic (loss) earnings per share	**($0.01)**	**$0.05**	$0.04	$0.04	$0.04	$0.03	$0.03	$0.04
Diluted (loss) earnings per share	**($0.01)**	**$0.05**	$0.04	$0.04	$0.04	$0.03	$0.03	$0.04
Adjusted net (loss) earnings[1]	**(120)**	**5,407**	3,919	5,344	2,814	3,884	2,572	5,409
Basic adjusted net (loss) earnings per share[1]	**$-**	**$0.06**	$0.05	$0.06	$0.03	$0.05	$0.03	$0.06
Funds from operations[1]	**2,945**	**8,641**	6,582	7,194	6,226	5,398	4,263	7,945
Backlog[1]	**202 days**	**217 days**	181 days	170 days	172 days	187 days	178 days	135 days

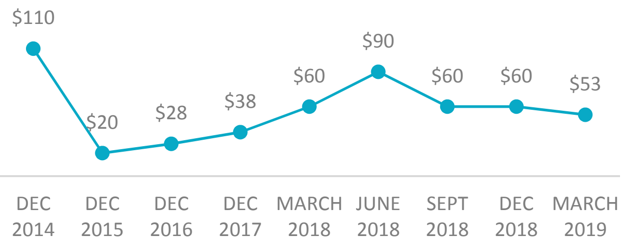
[1] See Non-IFRS Measures

Metal Prices
(in U.S. dollars per kilo)









Source : Low Metal Bulletin