Management Report

Quarter Ended September 30, 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 Q3 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 November 5, 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.

"Q3 2019" and "Q3 2018" refer to the three-month periods ended September 30, 2019 and 2018 respectively, and "YTD 2019" and "YTD 2018" refer to the nine-month periods ended September 30, 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 and nine-month periods ended September 30, 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[1,2] 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.

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[1] See Non-IFRS Measures

[2] On January 1, 2019, the Company applied IFRS 16 Leases retrospectively with no restatement of comparative information, including non-IFRS measures and tables, as allowed by the Standard. This positively impacted the current year's Adjusted EBITDA and EBITDA when comparing them to the prior year's amounts (see Accounting Policies and Changes section for more details).

Management's Discussion and Analysis

Highlights of Q3 2019 & YTD 2019 – Positioning the Company for 2020 & Beyond the Current Headwinds in the Metal Markets

5N Plus focused much of its attention on operating activities during Q3 2019, supported by a portfolio of investments initiated in Q2 2019 totaling more than $10 million and aimed at enhancing process technologies. The Company has made notable progress with respect to mass-scaling certain products, especially those requiring more value-added transformation fostered by the Company's new business model.

During the quarter, the Company reached important commercial milestones, securing a number of competitive supply agreements linked with its growth initiatives in Advanced Micro Powders and Security, Aerospace, Sensing & Imaging. These supply awards, some of which include new customers who are considered industry leaders, confirm the uniqueness of the products and technologies provided by 5N Plus and supports the Company's entry into these new markets.

With Bismuth metal notations declining to levels not seen in decades, 5N Plus continues to face significant headwinds impacting its financial performance. This being said, under the Company's new business model such impact is less significant and is transitory in nature.

In Q2 2019, the Company announced it had significantly reduced refining and recycling activities caused by production suspension of complex metal-containing materials at its suppliers' facilities which serve as input material for the Company's refining and recycling plants. In Q3 2019, the Company's recycling and refining activities operated sub-optimally resulting in notably lower contribution to the Company's performance.

For the third quarter of 2019 and year-to-date, the Company reported the following:

- Adjusted EBITDA[1,2] and EBITDA[1,2] for the third quarter of 2019 reached $6.0 million and $5.9 million compared to $8.6 million and $7.8 million during the same quarter of 2018, negatively impacted by adverse movements in the underlying metal notations, recent deterioration of the contribution from our upstream activities due to current metal market conditions, along with the application of the most recent commercial terms from the multi-year supply and services contracts renewal within the Renewable Energy sector.

- Adjusted EBITDA and EBITDA for the nine-month period ended September 30, 2019 reached $17.4 million and $15.4 million compared to $25.4 million and $23.4 million during the same period in 2018, impacted by factors mentioned above and production challenges associated with the new business activities.

- Revenue for Q3 2019 reached $49.6 million compared to $53.4 million for Q3 2018, mostly impacted by adverse movements in the underlying metal notations.

- Net earnings for the third quarter of 2019 were $1.0 million or $0.01 per share compared to $3.5 million or $0.04 per share for the same period last year.

- Annualized Return on Capital Employed (ROCE)[1] reached 8.7% for the third quarter of 2019, largely influenced by the lower Adjusted EBIT[1,2] performance.

- Net debt[1] stood at $36.9 million as of September 30, 2019 from $21.9 million for the same period last year, impacted by additional working capital and to a lesser degree participation in the normal course issuer bid ("NCIB") plan.

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[1] See Non-IFRS Measures

[2] On January 1, 2019, the Company applied IFRS 16 *Leases* retrospectively with no restatement of comparative information, including non-IFRS measures and tables, as allowed by the Standard. This positively impacted the current year's Adjusted EBITDA and EBITDA when comparing them to the prior year's amounts (see Accounting Policies and Changes section for more details).

- As of September 30, 2019, 5N Plus has purchased and cancelled 1,696,733 of the Company's common shares under the NCIB plan.

- As of September 30, 2019, the Backlog[1] increased to a level of 215 days of annualized revenue compared to 201 days in Q2 2019 and 181 days in Q3 2018. Bookings in Q3 2019 reached 102 days compared to 86 days in Q2 2019 and Q3 2018.

- Considering the continued adverse impact from the metal markets and despite addressing much of the production related challenges which impeded the Company's progress over the past few quarters, Adjusted EBITDA[1,2] for fiscal year 2019 is expected to close between $22 to $24 million.

Adverse movements in metal markets is a key reason for the decrease in 5N Plus' earnings in 2019. This said, the new business model ushered by the 5N21 strategic plan has significantly muted the negative impact of metal movements on the Company's performance. The historically low metal notations have also resulted in opportunity losses driven by reduced contribution from the Company's upstream activities mainly as it relates to recycling and refining operations. Nevertheless, under the new business model any impact from the movement in the metal markets to the downstream businesses is expected to be transitory in nature and mitigated in magnitude as the Company's downstream businesses do not rely on metal prices to sustainably support their growth and performance.

[1] See Non-IFRS Measures
[2] On January 1, 2019, the Company applied IFRS 16 *Leases* retrospectively with no restatement of comparative information, including non-IFRS measures and tables, as allowed by the Standard. This positively impacted the current year's Adjusted EBITDA and EBITDA when comparing them to the prior year's amounts (see Accounting Policies and Changes section for more details).

Summary of Results

	Q3 2019	Q3 2018	YTD 2019	YTD 2018
	$	$	**$**	$
Revenue	**49,554**	53,379	**151,257**	170,285
Adjusted operating expenses[1,2] *	**(43,580)**	(44,798)	**(133,809)**	(144,847)
Adjusted EBITDA[1,2]	**5,974**	8,581	**17,448**	25,438
Impairment of inventory	**-**	-	**-**	-
Share-based compensation expense	**(586)**	(788)	**(2,128)**	(2,577)
Litigation and restructuring (costs) income	**-**	(138)	**-**	450
Gain on disposal of property, plant and equipment (PPE)	**-**	325	**-**	510
Foreign exchange and derivative gain (loss)	**472**	(208)	**49**	(389)
EBITDA[1,2]	**5,860**	7,772	**15,369**	23,432
Interest on long-term debt, imputed interest and other interest expense	**942**	901	**3,290**	5,409
Depreciation and amortization	**2,493**	1,874	**8,252**	6,341
Earnings before income taxes	**2,425**	4,997	**3,827**	11,682
Income tax expense (recovery)				
Current	**854**	1,330	**2,001**	3,803
Deferred	**541**	209	**187**	(2,047)
	1,395	1,539	**2,188**	1,756
Net earnings	**1,030**	3,458	**1,639**	9,926
Basic earnings per share	**$0.01**	$0.04	**$0.02**	$0.12
Diluted earnings per share	**$0.01**	$0.04	**$0.02**	$0.12

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

Revenue by Segment and Gross Margin

	Q3 2019	Q3 2018	Change	YTD 2019	YTD 2018	Change
	$	$		**$**	$	
Electronic Materials	**21,603**	19,605	10%	**60,764**	61,646	(1%)
Eco-Friendly Materials	**27,951**	33,774	(17%)	**90,493**	108,639	(17%)
Total revenue	**49,554**	53,379	(7%)	**151,257**	170,285	(11%)
Cost of sales	**(40,141)**	(40,335)	-%	**(123,992)**	(131,145)	(5%)
Depreciation included in cost of sales	**2,227**	1,666	34%	**7,474**	5,706	31%
Gross margin[1]	**11,640**	14,710	(21%)	**34,739**	44,846	(23%)
Gross margin percentage[1]	**23.5%**	27.6%		**23.0%**	26.3%	

While overall realized volume is higher when compared to the corresponding periods of 2018, both revenue and gross margin were negatively impacted by adverse movements in the underlying metal notations and the application of the most recent commercial terms from the multi-year supply and services contracts renewal within the Renewable Energy sector.

During Q3 2019, revenue decreased by 7% compared to the prior year third quarter. Gross margin reached 23.5% in Q3 2019 compared to 27.6% in Q3 2018, tracking an average gross margin of 23.0%, or $34.7 million after nine months compared to 26.3% or $44.8 million last year.

[1] See Non-IFRS Measures

[2] On January 1, 2019, the Company applied IFRS 16 *Leases* retrospectively with no restatement of comparative information, including non-IFRS measures and tables, as allowed by the Standard. This positively impacted the current year's Adjusted EBITDA and EBITDA when comparing them to the prior year's amounts (see Accounting Policies and Changes section for more details).

Operating earnings, EBITDA and Adjusted EBITDA

	Q3 2019	Q3 2018	Change	YTD 2019	YTD 2018	Change
	$	$		**$**	$	
Electronic Materials	**6,373**	8,677	(27%)	**15,194**	22,084	(31%)
Eco-Friendly Materials	**2,290**	2,214	3%	**8,946**	11,402	(22%)
Corporate	**(2,689)**	(2,310)	16%	**(6,692)**	(8,048)	(17%)
Adjusted EBITDA[1,2]	**5,974**	8,581	(30%)	**17,448**	25,438	(31%)
EBITDA[1,2]	**5,860**	7,772	(25%)	**15,369**	23,432	(34%)
Operating earnings	**2,895**	6,106	(53%)	**7,068**	17,480	(60%)

In Q3 2019, Adjusted EBITDA[1,2] was $6.0 million compared to $8.6 million in Q3 2018, negatively impacted by adverse movements in the underlying metal notations, recent deterioration of the contribution from our upstream activities due to the current metal market conditions, 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 YTD 2019, Adjusted EBITDA decreased by $8.0 million, from $25.4 million in YTD 2018 to $17.4 million, impacted by factors mentioned above, and production challenges associated with new business activities.

In Q3 2019, EBITDA[1,2] was $5.9 million compared to $7.8 million in Q3 2018. The decrease is mainly explained by the lower Adjusted EBITDA mitigated by the favorable variation in foreign exchange and derivatives gain (loss) in Q3 2019 when compared to Q3 2018.

In YTD 2019, EBITDA reached $15.4 million compared to $23.4 million in YTD 2018. The decrease is mainly explained by the lower Adjusted EBITDA. In addition, no significant non-recurrent items were recorded in 2019 while in 2018, the Company recorded non-recurrent items totalling $1.0 million recognized as income, which were mitigated by lower shared-based compensation expense reflecting the decline in the Company's share price at the end of Q3 2019 when compared to Q3 2018 as well as the favorable variation in foreign exchange and derivatives gain (loss) in 2019 when compared to 2018.

In Q3 2019, operating earnings reached $2.9 million compared to $6.1 million in Q3 2018 and $7.1 million in YTD 2019 compared to $17.5 million in YTD 2018.

Electronic Materials Segment

Adjusted EBITDA in Q3 2019 decreased by $2.3 million to $6.4 million representing an Adjusted EBITDA margin[1,2] of 30% compared to 44% in Q3 2018. Adjusted EBITDA decreased by $6.9 million to $15.2 million in YTD 2019 representing an Adjusted EBITDA margin of 25% compared to 36% in YTD 2018.

Eco-Friendly Materials Segment

Adjusted EBITDA increased by $0.1 million to $2.3 million representing an Adjusted EBITDA margin of 8% in Q3 2019 and 7% in Q3 2018. Adjusted EBITDA decreased by $2.5 million to $8.9 million representing an Adjusted EBITDA margin of 10% in YTD 2019, which is similar to YTD 2018.

[1] See Non-IFRS Measures

[2] On January 1, 2019, the Company applied IFRS 16 *Leases* retrospectively with no restatement of comparative information, including non-IFRS measures and tables, as allowed by the Standard. This positively impacted the current year's Adjusted EBITDA and EBITDA when comparing them to the prior year's amounts (see Accounting Policies and Changes section for more details).

Net Earnings and Adjusted Net Earnings

	Q3 2019	Q3 2018	**YTD 2019**	YTD 2018
	$	$	**$**	$
Net earnings	**1,030**	3,458	**1,639**	9,926
Basic earnings per share	**$0.01**	$0.04	**$0.02**	$0.12
Reconciling items:				
Share-based compensation expense	**586**	788	**2,128**	2,577
Accelerated imputed interest	**-**	-	**267**	1,490
Litigation and restructuring costs (income)	**-**	138	**-**	(450)
Gain on disposal of PPE	**-**	(325)	**-**	(510)
Income tax recovery on taxable items above	**(156)**	(140)	**(639)**	(956)
Adjusted net earnings [1]	**1,460**	3,919	**3,395**	12,077
Basic adjusted net earnings per share[1]	**$0.02**	$0.05	**$0.04**	$0.14

Net earnings were $1.0 million or $0.01 per share in Q3 2019 compared to $3.5 million or $0.04 per share in Q3 2018. Adjusted net earnings[1] decreased by $2.4 million and were $1.5 million in Q3 2019, compared to $3.9 million in Q3 2018. Excluding the income tax recovery, the main item reconciling the Adjusted net earnings in Q3 2019 is the share-based compensation expense.

In YTD 2019, net earnings were $1.6 million or $0.02 per share compared to $9.9 million or $0.12 per share in YTD 2018. Adjusted net earnings were $3.4 million in YTD 2019, compared to $12.1 million in YTD 2018. Excluding the income tax recovery, the main items reconciling the Adjusted net earnings in YTD 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]**		
	Q3 2019	Q2 2019	Q3 2018	**Q3 2019**	Q2 2019	Q3 2018
	$	$	$	**$**	$	$
Electronic Materials	**69,380**	63,802	62,175	**27,181**	19,939	22,409
Eco-Friendly Materials	**47,387**	47,142	43,830	**28,196**	27,488	28,060
Total	**116,767**	110,944	106,005	**55,377**	47,427	50,469

	BACKLOG[1]			**BOOKINGS[1]**		
*(number of days based on annualized revenues) **	**Q3 2019**	Q2 2019	Q3 2018	**Q3 2019**	**Q2 2019**	Q3 2018
Electronic Materials	**293**	309	289	**115**	**96**	104
Eco-Friendly Materials	**155**	137	118	**92**	**80**	76
Weighted average	**215**	201	181	**102**	**86**	86

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

Q3 2019 vs Q2 2019

Backlog[1] as at September 30, 2019 reached a level of 215 days of annualized revenue, an increase of 14 days or 7% over the backlog ended June 30,2019.

Backlog as at September 30, 2019 for the Electronic Materials segment represented 293 days of annualized segment revenue, a decrease of 16 days or 5% over the backlog ended June 30, 2019. The backlog for the Eco-Friendly Materials segment represented 155 days of annualized segment revenue, an increase of 18 days or 13% over the backlog ended June 30, 2019.

[1] See Non-IFRS Measures

Bookings[1] for the Electronic Materials segment increased by 19 days, from 96 days in Q2 2019 to 115 days in Q3 2019. Bookings for the Eco-Friendly Materials segment increased by 12 days, from 80 days in Q2 2019 to 92 days in Q3 2019.

Q3 2019 vs Q3 2018

Backlog[1] as at September 30, 2019 for the Electronic Materials segment increased by 4 days and by 37 days for the Eco-Friendly Materials segment compared to September 30, 2018, reaching 215 days on a consolidated basis compared to 181 days.

Bookings[1] increased by 11 days for the Electronic Materials segment and by 16 days for the Eco-Friendly Materials segment compared to the previous year quarter.

Expenses

	Q3 2019	Q3 2018	**YTD 2019**	YTD 2018
	$	$	**$**	$
Depreciation and amortization	**2,493**	1,874	**8,252**	6,341
SG&A	**5,242**	5,723	**16,234**	19,227
Share-based compensation expense	**586**	788	**2,128**	2,577
Litigation and restructuring costs (income)	**-**	138	**-**	(450)
Financial expense	**470**	1,109	**3,241**	5,798
Income taxes expense	**1,395**	1,539	**2,188**	1,756
Total expenses	**10,186**	11,171	**32,043**	35,249

Depreciation and Amortization

Depreciation and amortization expenses in Q3 2019 and YTD 2019 amounted to $2.5 million and $8.3 million respectively, compared to $1.9 million and $6.3 million for the same periods of 2018. The expenses in Q3 2019 and YTD 2019 included the depreciation of right of use assets of $0.4 million and $1.1 million respectively, following the adoption of the new standard, IFRS 16 – Leases, as at January 1, 2019.

SG&A

In Q3 2019 and YTD 2019, SG&A expenses were $5.2 million and $16.2 million respectively compared to $5.7 million and $19.2 million for the same periods of 2018. In 2019, the expenses were positively impacted by favorable exchange rates across most local currency denominated expenses when compared to 2018, as well as timing of certain expenses.

Share-Based Compensation Expense

Share-based compensation expense in Q3 2019 and YTD 2019 amounted to $0.6 million and $2.1 million respectively, compared to $0.8 million and $2.6 million for the same periods in 2018. These decreases are mainly due to the decline in the Company's share price at the end of the third quarter of 2019 when compared to September 30, 2018.

Litigation and Restructuring Costs (Income)

No expenses or income from litigation and restructuring activity were recognized in YTD 2019. In Q3 2018, the Company sold its participation in the joint venture, Zhuhai Gallium Industry Co. for an amount of $0.4 million and recognized a loss of $0.3 million which was partially mitigated by an amount received of $0.2 million following the liquidation of its other joint venture, Ingal Stade GmbH which had closed its manufacturing activities in 2016. Also, 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.

[1] See Non-IFRS Measures

Financial Expense

Financial expense in Q3 2019 amounted to $0.5 million compared to $1.1 million in Q3 2018. The decrease in financial expense of $0.6 million is mainly due to a gain in foreign exchange and derivative recorded in Q3 2019 while the Company recorded a loss of foreign exchange in derivatives in Q3 2018. In YTD 2019, financial expense amounted to $3.2 million compared to $5.8 million in YTD 2018. The decrease in financial expenses of $2.6 million is mainly due to less accelerated imputed interest recognized as a non-cash expense following the early redemption of the CA$26.0 million convertible debentures in March 2019 compared to those following the early redemption CA$40.0 million convertible debentures in June 2018.

Income Taxes

The Company reported earnings before income taxes of $2.4 million in Q3 2019 and $3.8 million in YTD 2019. Income tax expense in Q3 2019 and YTD 2019 were $1.4 million and $2.2 million respectively. Both periods were impacted by deferred tax assets applicable in certain jurisdictions.

Liquidity and Capital Resources

	Q3 2019	Q3 2018	**YTD 2019**	YTD 2018
	$	$	**$**	$
Funds from operations[1]	**4,570**	6,582	**12,381**	20,002
Net changes in non-cash working capital items	**145**	(7,172)	**(14,860)**	(21,074)
Operating activities	**4,715**	(590)	**(2,479)**	(1,072)
Investing activities	**(3,166)**	(2,046)	**(7,106)**	(6,669)
Financing activities	**(332)**	360	**1,211**	719
Effect of foreign exchange rate changes on cash and cash equivalents	**(211)**	43	**(168)**	(203)
Net increase (decrease) in cash and cash equivalents	**1,006**	(2,233)	**(8,542)**	(7,225)

Cash generated by operating activities amounted to $4.7 million in Q3 2019 compared to cash used in operating activities of $0.6 million in Q3 2018. In YTD 2019, cash used in operating activities amounted to $2.5 million compared to $1.1 million in YTD 2018. The decrease in funds from operations[1] is mainly explained by the lower Adjusted EBITDA[1,2]. The negative change in non-cash working capital in YTD 2019 is mainly due to a decrease in trade and accrued liabilities of $14.1 million, a decrease in net position of income tax payable of $4.1 million combined with an increase of $7.1 million in accounts receivable mitigated by a decrease of inventory of $11.0 million.

In Q3 2019, cash used in investing activities totaled $3.2 million compared to $2.0 million in Q3 2018. This increase is mainly explained by higher investment in PPE during Q3 2019 when compared to Q3 2018. In addition, in Q3 2018, the investment in PPE was mitigated by proceeds from disposal of redundant PPE and investment in joint venture. In YTD 2019, cash used by investing activities totaled $7.1 million compared to $6.7 million in YTD 2018. This higher use of cash is explained by higher investment in PPE net of lower proceeds from disposal of redundant PPE in YTD 2019 compared to the same period in 2018.

In Q3 2019, cash used in financing activities amounted to $0.3 million compared to cash generated from financing activities of $0.4 million in Q3 2018. The decrease is mainly due to principal elements of lease payments following the adoption of the new standard, IFRS 16 – Leases, as at January 1, 2019 while in Q3 2018, the Company received $0.4 million from the issuance of common share. In YTD 2019, cash generated from financing activities amounted $1.2 million compared to $0.7 million in YTD 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, while in Q2 2018, the Company completed a drawdown on its senior credit facility of $30 million for which $29.7 million were used to partially redeem the debentures of CA$40 million. Since the beginning of 2019, the Company has repurchased and cancelled 1,696,733 common shares under the NCIB plan for an amount of $4.0 million and paid principal elements of lease payments of $1.2 million following the adoption of the new standard, IFRS 16 – Leases, as at January 1, 2019.

[1] See Non-IRFS Measures

[2] On January 1, 2019, the Company applied IFRS 16 *Leases* retrospectively with no restatement of comparative information, including non-IFRS measures and tables, as allowed by the Standard. This positively impacted the current year's Adjusted EBITDA and EBITDA when comparing them to the prior year's amounts (see Accounting Policies and Changes section for more details).

Working Capital

	As at September 30, 2019	As at December 31, 2018
	$	$
Inventories	**85,931**	96,889
Other current assets	**60,501**	62,396
Current liabilities	**(38,754)**	(65,924)
Working capital[1]	**107,678**	93,361
Working capital current ratio[1]	**3.78**	2.42

The increase in working capital[1] compared to December 31, 2018 was mainly attributable to the 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, as well as less payable following lower inventories when compared with December 31, 2018. The decrease in inventories is mainly due to lower refining and recycling activities announced in Q2 2019 combined with the adverse movements in the underlying metal notations.

Net Debt

	As at September 30, 2019	As at December 31, 2018
	$	$
Bank indebtedness	**-**	-
Long-term debt including current portion	**55,105**	30,175
Convertible debentures	**-**	18,571
Cross-currency swap	**-**	197
Total Debt[1]	**55,105**	48,943
Cash and cash equivalents	**(18,182)**	(26,724)
Net Debt[1]	**36,923**	22,219

Total debt[1], including the cross-currency swap, increased by $6.2 million to $55.1 million as at September 30, 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 $14.7 million, from $22.2 million as at December 31, 2018 to $36.9 million as at September 30, 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 September 30, 2019, there were no outstanding convertible debentures.

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 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 earnings.

[1] See Non-IFRS Measures

Share Information

	As at November 5, 2019	As at September 30, 2019
Issued and outstanding shares	**83,401,558**	83,401,558
Stock options potentially issuable	**1,044,534**	1,044,534

On February 27, 2019, the TSX approved the Company's NCIB plan under which, 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 nine-month period ended September 30, 2019, the Company has repurchased and cancelled 1,696,733 common shares at an average price of $2.35 (CA$3.16) for a total amount of $4.0 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 September 30, 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 nine-month period ended September 30, 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 except for those below:

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:

	September 30, 2019	January 1, 2019
	$	$
Land and buildings	**5,517**	6,342
Production equipment	**421**	454
Office equipment and rolling stock	**392**	356
Total right-of-use assets	**6,330**	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.

The impact of adoption of IFRS 16 *Leases* on the three and nine-month periods ended September 30, 2019 is as follows:

	Q3 2019	YTD 2019
	$	$
Increase in Adjusted EBITDA[1]/ EBITDA[1]	**475**	1,425
Increase in Financial expense	**74**	226
Increase in depreciation and amortization expense	**368**	1,078

[1] See Non-IFRS Measures

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 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 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 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 per share means adjusted net earnings divided by the weighted average number of outstanding shares. We use basic adjusted net earnings 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.

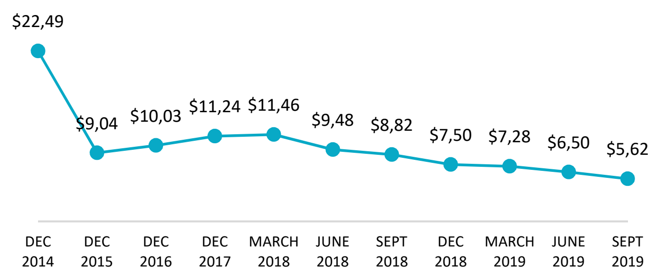
Additional Information

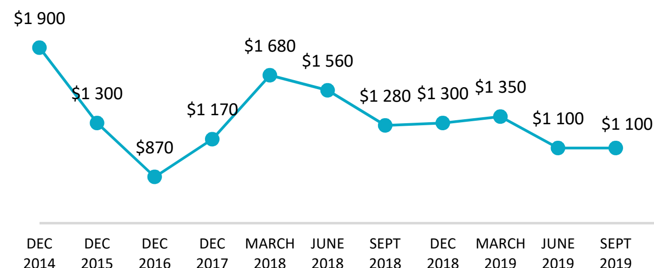
Our common shares trade on the Toronto Stock Exchange (TSX) under the ticker symbol VNP. Additional information relating to the Company, including the Company's annual information form is available under the Company's profile on SEDAR at www.sedar.com.

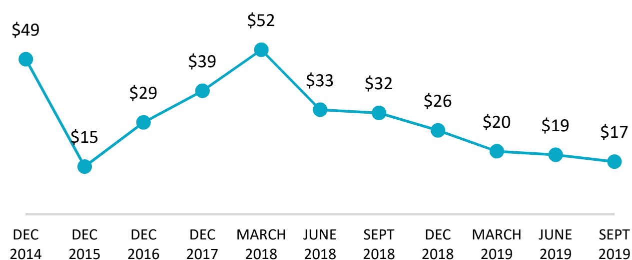
Selected Quarterly Financial Information

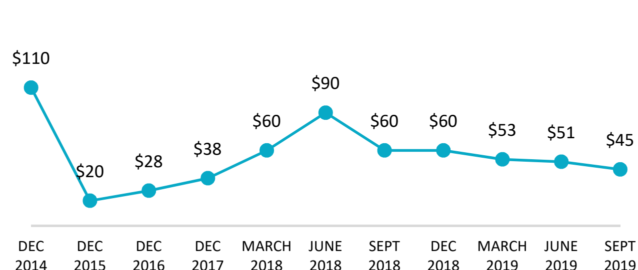
(in thousands of United States dollars except per share amounts)	**Sept. 30, 2019**	June 30, 2019	March. 31, 2019	Dec. 31, 2018	Sept. 30, 2018	June 30, 2018	March 31, 2018	Dec. 31, 2017
	$	$	$	$	$	$	$	$
Revenue	**49,554**	50,290	51,413	47,710	53,379	58,359	58,547	52,492
EBITDA[1,2]	**5,860**	5,321	4,188	5,589	7,772	7,860	7,800	4,420
Adjusted EBITDA[1,2]	**5,974**	5,862	5,612	6,912	8,581	8,972	7,885	6,763
Net earnings (loss) attributable to equity holders of 5N Plus	**1,030**	1,758	(1,149)	4,046	3,457	3,417	3,051	2,229
Basic earnings (loss) per share attributable to equity holders of 5N Plus	**$0.01**	$0.02	($0.01)	$0.05	$0.04	$0.04	$0.04	$0.03
Net earnings (loss)	**1,030**	1,758	(1,149)	4,046	3,458	3,420	3,048	2,222
Basic earnings (loss) per share	**$0.01**	$0.02	($0.01)	$0.05	$0.04	$0.04	$0.04	$0.03
Diluted earnings (loss) per share	**$0.01**	$0.02	($0.01)	$0.05	$0.04	$0.04	$0.04	$0.03
Adjusted net earnings[1] (loss)	**1,460**	2,055	(120)	5,407	3,919	5,344	2,814	3,884
Basic adjusted net earnings per share[1]	**$0.02**	$0.02	$-	$0.06	$0.05	$0.06	$0.03	$0.05
Funds from operations[1]	**4,570**	4,866	2,945	8,641	6,582	7,194	6,226	5,398
Backlog[1]	**215 days**	201 days	202 days	217 days	181 days	170 days	172 days	187 days

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









Source: Low Metal Bulletin

[1] See Non-IFRS Measures

[2] On January 1, 2019, the Company applied IFRS 16 *Leases* retrospectively with no restatement of comparative information, including non-IFRS measures and tables, as allowed by the Standard. This positively impacted the current year's Adjusted EBITDA and EBITDA when comparing them to the prior year's amounts (see Accounting Policies and Changes section for more details).