

NATCORE TECHNOLOGY INC.

FORM 20-F

(Annual and Transition Report (foreign private issuer))

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**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

FORM 20-F

ANNUAL REPORT

☐ REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934

OR

☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2016

OR

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

OR

☐ SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of event requiring this shell company report.....

For the transition period from..... to

Commission file number:

NATCORE TECHNOLOGY, INC.

(Exact name of Registrant as specified in its charter)

British Columbia, Canada

(Jurisdiction of incorporation or organization)

Natcore Technology Inc

189 N. Water Street, Suite 700

Rochester, NY 14604-1163

(Address of principal executive offices)

Thomas Scarpa

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Rochester, NY 14604-1163

(585) 286-9180

scarpa@natcoresolar.com

(Name, telephone, email and/or facsimile number and address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act: None

Securities registered or to be registered pursuant to Section 12(g) of the Act:

Common Shares, without par value: **18,386,111**

(Title of Class)

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: None

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the closing of the period covered by the annual report:
68,738,602

Indicate by check mark if the registration is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

☐ Yes ☒ No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

☐ Yes ☒ No

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days

☒ Yes ☐ No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

☒ Yes ☐ No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of “accelerated filer and large accelerated filer” in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ☐

Non-accelerated filer ☒

Accelerated filer ☐

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP ☐

International Financial Reporting Standards as issued by the International Accounting Standards Board ☒

Other ☐

If “Other” has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow

Item 17 ☐

Item 18 ☐

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

☐ Yes ☐ No

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Sections 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court: **N/A**

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 20-F (“Annual Report”) and the exhibits attached hereto contain “forward-looking statements” within the meaning of the United States Private Securities Litigation Reform Act of 1995 and applicable Canadian securities legislation that involve risks and uncertainties relating, but not limited to, Natcore’s current expectations, intentions, plans, and beliefs. Forward-looking information can often be identified by forward-looking words such as “anticipate”, “believe”, “expect”, “goal”, “plan”, “target”, “intend”, “estimate”, “could”, “should”, “may” and “will” or the negative of these terms or similar words suggesting future outcomes, or other expectations, beliefs, plans, objectives, assumptions, intentions or statements about future events or performance. Examples of forward-looking information in this Annual Report include: the Company’s anticipated future business strategies, the Company’s plans and expectations for its technologies, the timing and amount of estimated future revenues and sales, costs of goods and services sold, capital expenditures, costs and timing of the development of new technologies, future sales of products and technologies produced by the Company, success of the Company’s research and development activities, patenting time lines and availability, the Company’s ability to meet its working capital needs in the next twelve months and thereafter, requirements for and availability of additional capital; and growth in the solar industry.

Certain of the Company’s expectations concerning the use of and applications for its technologies, as well as the success of its research and development programs described herein also contains statements concerning the Company’s proposed use of funds and timing for expenditures as well as general expectations regarding revenues and the growth of the solar cell market. Forward-looking statements are subject to a variety of known and unknown risks, uncertainties and other factors which could cause actual events, results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by such forward looking statements. Such factors include, among others: risks related to product and technology development, including product obsolescence and the experimental nature of the Company’s business, limited protections of patents and proprietary rights, changes in national and local government, legislation, taxation, controls, regulations and political or economic developments in the Canada and the United States or other countries in which the Company may carry on business in the future, including changes in the regulatory environment for the oil and gas industry, delays in obtaining patents, economic factors including competition, foreign exchange rate fluctuations, fluctuation of securities prices and prices of commodities; as well as those factors described in the section entitled “Risk Factors” herein below.

Shareholders are cautioned not to place undue reliance on forward-looking information. By its nature, forward-looking information involves numerous assumptions, inherent risks and uncertainties, both general and specific, that contribute to the possibility that the predictions, forecasts, projections and various future events will not occur. Natcore reviews forward-looking information for the purposes of preparing each Annual Report, however Natcore undertakes no obligation to update publicly or otherwise revise any forward-looking information whether as a result of new information, future events or other such factors which affect this information, except as required by law. For the reasons set forth above, investors should not place undue reliance on forward-looking statements.

STATUS AS AN EMERGING GROWTH COMPANY

Natcore is an “emerging growth company” as defined in Section 3(a) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”) by the Jumpstart Our Business Startups Act of 2012 (the “JOBS Act”) and is subject to reduced public reporting requirements. Natcore has chosen not to take advantage of the extended transition period for new accounting standards. While the decision to opt out of the extended period to comply with new or revised accounting standards is irrevocable, the Company may in the future elect to avail itself of other reduced reporting obligations available as an emerging growth company. Natcore will continue to qualify as an “emerging growth company” until the earliest to occur of: (a) the last day of the fiscal year during which the Company had total annual gross revenues of US\$1,000,000,000 (as such amount is indexed for inflation every five years by the SEC) or more; (b) the last day of the Company’s fiscal year following the fifth anniversary of the date of the first sale of common equity securities pursuant to an effective registration statement under the Securities Act; (c) the date on which the Company has, during the previous 3-year period, issued more than US\$1,000,000,000 in non-convertible debt; or (d) the date on which the Company is deemed to be a “large accelerated filer”, as defined in Exchange Act Rule 12b-2. Natcore expects to continue to be an emerging growth company for the foreseeable future.

Generally, a registrant that registers any class of its securities under section 12 of the Exchange Act is required to include in the second and all subsequent annual reports filed by it under the Exchange Act, a management report on internal control over financial reporting and, subject to an exemption available to registrants that are neither an “accelerated filer” or a “larger accelerated filer” (as those terms are defined in Exchange Act Rule 12b-2), an auditor attestation report on management’s assessment of internal control over financial reporting. However, for so long as the Company continues to qualify as an emerging growth company, the Company will be exempt from the requirement to include an auditor attestation report on management’s assessment of internal controls over financial reporting in its annual reports filed under the Exchange Act, even if the Company were to qualify as an “accelerated filer” or a “larger accelerated filer”. In addition, Section 103(a)(3) of the Sarbanes-Oxley Act of 2002 (the “Sarbanes-Oxley Act”) has been amended by the JOBS Act to provide that, among other things, auditors of an emerging growth company are exempt from any rules of the Public Company Accounting Oversight Board requiring mandatory audit firm rotation or a supplement

to the auditor’s report in which the auditor would be required to provide additional information about the audit and the financial statements of the company.

CURRENCY

Unless otherwise indicated, all references to (\$) dollar amounts are expressed in the lawful currency of the United States of America.

FOREIGN PRIVATE ISSUER FILINGS

Natcore is considered a “foreign private issuer” pursuant to Rule 405 promulgated under the Securities Act of 1933, as amended (the “Securities Act”). In its capacity as a foreign private issuer, Natcore is exempt from certain rules under the Exchange Act that impose certain disclosure obligations and procedural requirements for proxy solicitations under Section 14 of the Exchange Act. In addition, Natcore’s officers, directors and principal shareholders are exempt from the reporting and “short-swing” profit recovery provisions of Section 16 of the Exchange Act and the rules under the Exchange Act with respect to their purchases and sales of the Company’s common shares. Moreover, Natcore is not required to file periodic reports and financial statements with the SEC as frequently or as promptly as United States companies whose securities are registered under the Exchange Act. In addition, Natcore is not required to comply with Regulation FD, which restricts the selective disclosure of material information.

For as long as Natcore is a “foreign private issuer” it intends to file its annual financial statements on Form 20-F and furnish its quarterly financial statements on Form 6-K to the SEC for so long as it is subject to the reporting requirements of Section 13(g) or 15(d) of the Exchange Act. However, the information Natcore files or furnishes may not be the same as the information that is required in annual and quarterly reports on Form 10-K or Form 10-Q for U.S. domestic issuers. Accordingly, there may be less information publicly available concerning Natcore than there is for a company that files as a domestic issuer.

Natcore may take advantage of these exemptions until such time as it is no longer a foreign private issuer. Natcore is required to determine its status as a foreign private issuer on an annual basis at the end of its second fiscal quarter. Natcore would cease to be a foreign private issuer at such time as more than fifty percent (50%) of its outstanding voting securities are held by United States residents and any of the following three circumstances applies: (1) the majority of its executive officers or directors are United States citizens or residents; (2) more than fifty percent (50%) of its assets are located in the United States; or (3) its business is administered principally in the United States. If Natcore loses its “foreign private issuer status” it would be required to comply with Exchange Act reporting and other requirements applicable to U.S. domestic issuers, which are more detailed and extensive than the requirement for “foreign private issuers.”

ITEM 1- IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS

Not Applicable.

ITEM 2 - OFFER STATISTICS AND EXPECTED TIMETABLE

Not Applicable.

ITEM 3 - KEY INFORMATION**A. Selected Financial Data**

The following tables set forth the Company's selected consolidated financial data. Investors should read the following selected consolidated financial data in conjunction with the Company's audited consolidated financial statements and accompanying notes in Item 18 of this Annual Report and "Operating and Financial Review and Prospects" included in Item 5 of this Annual Report.

Natcore's consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") issued by the International Accounting Standards Board ("IASB") and interpreted by the International Financial Reporting Interpretations Committee ("IFRIC"). As a result of the Accounting Standards Board of Canada's decision to adopt IFRS for publicly accountable entities for financial reporting periods beginning on or after January 1, 2011, the Company adopted IFRS for the 2011 and 2010 annual financial statements.

Since Natcore began preparing its financial statements in accordance with IFRS, having reviewed significant transactions and compared them to United States generally accepted accounting principles ("GAAP"), Natcore concluded that there are no material differences that would impact the users of the accompanying financial statements other than terminology and headings.

The Company has derived the summary consolidated statements of comprehensive income data for each of the years ended December 31, 2016, 2015, 2014, 2013 and 2012 from its audited consolidated financial statements (included elsewhere in this prospectus).

As of December 31,	2016	2015	2014	2013	2012
Expenses					
Consulting	124,652	181,589	229,792	108,657	70,410
Depreciation and amortization	146,946	279,527	412,492	359,178	325,648
Filing fees	45,172	25,016	34,090	32,082	26,743
Foreign exchange (gain) loss	16,457	5,159	41,344	90,060	(62,086)
Interest and bank charges	2,698	2,383	1,581	1,269	2,056
Marketing	341,104	268,853	81,401	96,641	56,553
Office and miscellaneous	201,736	216,811	273,264	267,532	500,322
Professional fees	219,016	335,762	213,888	129,499	204,442
Research and development	1,137,422	1,203,716	1,634,864	1,480,058	781,042
Stock-based compensation	869,130	387,648	301,732	325,686	609,400
Travel	37,472	45,858	73,922	126,668	216,725
Wages and salaries	763,223	778,339	770,105	855,853	821,365
	(3,905,028)	(3,730,661)	(4,068,475)	(3,873,183)	(3,552,620)
Other Income (Expense)					
Fair value adjustment on warrants	1,880,587	226,827	1,842,317	(79,353)	1,690,715
Other income	1,932	14,124	—	—	—
Interest income	809	1,581	32,626	13,708	23,550
Net and comprehensive income (loss)	(2,021,700)	(3,488,129)	(2,193,532)	(3,938,828)	(1,838,355)
Loss per share - basic and diluted	(0.03)	(0.07)	(0.05)	(0.10)	(0.05)
Weighted average number of shares outstanding - basic and diluted	60,007,618	51,329,138	42,294,310	41,097,726	36,014,144

As of December 31,	2016	2015	2014
Assets			
Current Assets			
Cash and cash equivalents	23,252	521,521	548,387
Receivables	12,071	29,057	5,939
Prepaid expenses	55,187	148,076	60,395
	90,510	698,654	614,721
Non-Current Assets			
Equipment	223,325	366,729	582,503
Intangibles	—	—	36,568
	223,325	366,729	619,071
	313,835	1,065,383	1,233,792
Liabilities and Equity			
Current Liabilities			
Trade payables and accrued liabilities	1,192,636	749,985	289,688
Derivative liability	367,346	1,135,157	124,823
	1,559,982	1,885,142	414,511
Equity			
Share capital	16,417,322	15,690,371	13,977,256
Share-based payment reserve	4,275,173	3,375,710	2,956,964
Share subscriptions receivable	—	31,102	313,874
Deficit	(21,938,642)	(19,916,942)	(16,428,813)
	(1,246,147)	(819,759)	819,281
	313,835	1,065,383	1,233,792

B. Capitalization and Indebtedness

Not Applicable.

C. Reasons for the Offer and Use of Proceeds

Not Applicable.

D. Risk Factors

An investment in Natcore common shares involves a high degree of risk. Shareholders should consider carefully the risks described below, together with the financial and other information contained in this annual report. The occurrence of the risks described below could have a material adverse impact on Natcore's business, financial condition or results of operations. In any such case, the trading price of Natcore common stock could decline and investors may lose part or all of his or her investment. Various statements in this annual report, including the following risk factors, contain forward-looking statements.

Risks Related to Natcore's Business

There is no assurance that the Company will turn a profit.

The Company is currently not profitable. There is no assurance as to whether the Company will be profitable, earn revenues or whether the Company will be able to return any investment funds, to make cash distributions or to meet its operating expenses and debt service, if any.

The Company's independent auditor's reports on its financial statements for the years ended December 31, 2016 and 2015 includes a "going concern" explanatory paragraph.

The Company's independent auditor has presented the Company's financial statements on the basis that it is a going concern, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business over a reasonable length of time. However, the Company's independent auditor has expressed some doubt as to the Company's ability to continue as a going concern. This means that the Company may not generate enough funds to pay its general operating expenses and bills from professionals and other advisors that it is obligated to pay. Since the Company has not generated any revenues from operations, management intends to finance operating costs over the next twelve months with existing cash resources and the private placement of common stock. There may be situations where all sources of revenue described (or any revenue at all) may not be available given market conditions and customer requirements. The Company has had net losses in each of the last three fiscal years and as of December 31, 2016; the Company has had recurring losses from operations and a cumulative deficit of approximately \$21,938,642.

There is no assurance that the Company will generate immediate revenues; the Company projects cash on hand sufficient to fund operations for approximately twelve months.

The Company anticipates that it will incur substantial expenses relating to the implementation of its business plan and cost overruns may be incurred. The Company currently expects the initial expenses it incurs to result in operating losses for the Company for the foreseeable future. Furthermore, no assurance can be made that a shareholder will realize any return on his or her investment, or that such shareholder will not lose his or her entire investment. In 2016 the Company completed non-brokered private placements issuing 8,095,055 units for gross proceeds of \$1,937,107. As of December 31, 2016, the Company had \$23,252 in cash. The Company anticipates its current cash and cash equivalents will be sufficient to fund operations for approximately twelve months. Additionally, the company may pursue additional financing alternatives, including completing another private placement.

Financial projections provided may prove inaccurate.

The Company's Management may prepare financial projections concerning the estimated operating results of the Company. These projections would be based on certain assumptions that may prove to be inaccurate and that are subject to future conditions beyond the control of the Company, such as changes in the condition of the national and international financial markets, fluctuations in interest rates, changes in rules and regulations pertaining to the securities markets and market participants, variations in the local and national economy, acts of terrorism and occurrences of natural disasters or other such disasters. The Company may experience unanticipated costs, or anticipated agreements or contracts may not materialize, resulting in lower revenues than forecasted. There is no assurance that the results that may be illustrated in financial projections would in fact be realized by the Company. The financial projections would be prepared by Management of the Company and would not be examined or compiled by independent certified public accountants. Accordingly, neither independent certified public accountants nor counsel to the Company could provide any level of assurance on them.

The Company is in research and development stage.

Substantial corporate resources are currently being expended on the development of the Company's technologies. These technologies remain in the development stages and have not yet been commercialized. There can be no guarantee that the Company's technologies will achieve the objectives which Natcore believes are necessary for successful products in the market. In addition, there are risks associated with commercializing any product, including the risk that full-scale production may not be achieved at an acceptable cost level. In addition, since the Company's technologies are in the development stage, there can be no guarantee that technical milestones can be achieved. Failure to successfully commercialize the Company's technologies may materially and adversely affect the Company's financial condition and results of operations.

The Company is entirely dependent on its Management team.

The Company's Management makes all decisions with respect to the Company's assets, including investment decisions and the day-to-day operations of the Company. Other than as specified in the Company's notice of articles and articles, the shareholders have no right or power to take part in the management of the Company. As a result, the success of the Company for the foreseeable future will depend largely upon the ability of Management.

SHAREHOLDERSS ARE HEREBY ADVISED THAT THE SUCCESS OF PREVIOUS VENTURES OR PROJECTS UNDERTAKEN BY THE COMPANY'S MANAGEMENT OR THE MANAGEMENT OF ANY ACQUIRED COMPANY CANNOT BE CONSTRUED AS A GUARANTEE OF THE SUCCESS OF THE COMPANY.

The Company's Management may be subject to conflicts of interest.

The Company's Management may in the future become associated with or employed by other companies, which are engaged, or may become engaged, in operations similar to the operations engaged in by the Company. Conflicts of interest between the Company's officers and/or directors and the Company may arise by reason of such relationships. Management intends to resolve any conflicts with respect to such operations in a manner equitable to the shareholders of the Company, its management, and any of the Company's affiliates. Officers and all employees are required to sign a proprietary inventions agreement which means that anything that is invented while employed at Natcore is owned by Natcore. Additionally all employees are required annually to complete an outside employment disclosure which allows the registrant to better control if there are any outside interests. Directors are not required to do either and may pursue opportunities independently of the registrant.

The Company may not achieve its goals and objectives.

All investments in the Company risk the loss of capital. While the Company's Management believes that its experience and relationships will moderate this risk to some degree, no representation is made that the Company's projects will be successful.

The Company is subject to the possibility of future litigation that may have a significant adverse effect on the Company's financial condition, operations and plans for expansion.

There are many risks incident to providing the types of services provided by the Company that may give rise to future litigation. Under such circumstances, the Company may be named as a defendant in a lawsuit or regulatory action. The Company may also incur uninsured losses for liabilities which arise in the ordinary course of business, or which are unforeseen. There is no assurance that the Company's shareholders will not lose their entire investment in the Company as a result of unforeseen litigation.

The Company will indemnify its officers and directors.

The Company's articles, as amended, provide that the Company will, within the limits of capital contributions and retained assets, hold its directors and officers harmless against certain claims arising from Company activities, other than losses or damages incurred by it as a result of its gross negligence, fraud or bad faith. If the Company were called upon to perform under its indemnification agreements, then the portion of its assets expended for such purpose would reduce the amount otherwise available for the implementation of its business plan, or for distributions to its shareholders, if any.

The enforcement of civil liabilities against the Company and its officers and directors may be difficult to obtain.

The Company incorporated under the laws of the Province of British Columbia, Canada. Service of process upon the Company and upon the Company's directors and officers, who may reside outside the United States, may be difficult to obtain within the United States. Furthermore, some of the Company's assets and some of the Company's directors and officers are located outside the United States, any judgment obtained in the United States against the Company or any of the Company's directors and officers, including one predicated on the civil liability provisions of the U.S. federal securities laws, may not be collectible within the United States.

The Company is subject to certain institutional risks.

The institutions with which the Company (directly or indirectly) does business may encounter financial difficulties that impair or would impair the operational capabilities or the capital position of the Company.

There may be changes in laws applicable to the Company.

The Company must comply with various legal requirements, including requirements imposed by the state and federal securities laws and pension laws. Should any of those laws change over the scheduled term of the Company, the legal requirements to which the Company and its shareholders may be subject could differ materially from current requirements.

The Company may face adverse tax consequences and may be audited by the Internal Revenue Service or the Canada Revenue Agency.

While the Company is advised in tax matters by its accountants, the Internal Revenue Service (the “IRS”) or the Canada Revenue Agency (“CRA”) may not accept the tax positions taken by the Company. As a result, the IRS or CRA could audit the Company’s information and adjustments to the Company’s tax returns may result. Any such adjustment could subject the shareholders to additional tax, interest and penalties, as well as incremental accounting and legal expenses. In addition, an audit of the Company’s tax returns could lead to audits of the individual tax returns of the shareholders, resulting in adjustments and additional tax with respect to non-Company items.

Government Regulation – General.

The Company may be subject to regulation by county, state and federal governments, governmental agencies, and regulatory authorities from several different countries. Failure to obtain regulatory approvals or delays in obtaining regulatory approvals by the Company, its collaborators, customers, vendors or service providers would adversely affect the marketing of products and services developed by the Company, and the Company’s ability to generate product and service revenues. Further, there can be no assurance that the Company, its customers, vendors, or service providers will be able to obtain necessary regulatory approvals. Although the Company does not anticipate problems satisfying any of the regulations involved, the Company cannot foresee the possibility of new regulations, which could adversely affect the business of the Company. While the Company anticipates that all regulatory approvals required will be granted, violations by the Company and/or its customers of, and/or non-compliance with, such regulations and approvals may adversely affect the Company’s ability to acquire capital, or adversely affect the Company’s ability to conduct its business as intended.

The Company is subject to various economic risks.

Local, national and international economic conditions may have a substantial adverse effect on the efforts of the Company. The Company cannot guarantee its anticipated results of operations against the possible eventuality of any of these potential adverse conditions.

The Company is subject to foreign exchange risk

The Company operates in the United States but raises funds in Canadian dollars which creates exposure to changes in exchange rates, primarily as between the US dollar and the Canadian dollar. Changes in the exchange rates faced by the Company may have a material adverse impact on its future financial performance. In recent years, the Canadian dollar has dropped in value as against the U.S. dollar and has performed with increased volatility relating to general economic conditions.

The Company may suffer uninsured losses.

The Company plans to obtain comprehensive insurance coverage, including liability, fire and extended coverage, as is customarily obtained for businesses similar to the Company. Certain types of losses of a catastrophic nature, such as losses resulting from floods, tornadoes, thunderstorms and earthquakes, are uninsurable or not economically insurable to the full extent of potential loss. Such Acts of God, work stoppages, regulatory actions or other causes, could interrupt or delay the Company’s development or expansion, and would adversely affect the Company’s business, results of operations, and profitability.

Dependence on Management and absence of Key Man Insurance.

The Company’s business, to date, and for the foreseeable future, will be significantly dependent on the Company’s management team, directors and key consultants, including but not limited to Charles Provini, John C. Calhoun, and Dennis J. Flood. Each of the foregoing has other engagements that compete for their time.

The loss of any one of these officers could have a material adverse effect on the Company. If the Company lost the services of one or more of its executive officers or key employees, it would need to devote substantial resources to finding replacements, and until replacements were found, the Company would be operating without the skills or leadership of such personnel, any of which could have a significant adverse effect on the Company’s business. The Company currently does not carry key-man life insurance policies covering any of these officers.

Risks associated with expansion.

Any expansion plans undertaken by the Company to increase or expand its operations entail risks, which may negatively impact the profitability of the Company. Consequently, shareholders must assume the risk that (i) such expansion may ultimately involve expenditures of funds beyond the resources available to the Company at that time, and (ii) management of such expanded operations may divert Management's attention and resources away from its existing operations, all of which factors may have a material adverse effect on the Company's present and prospective business activities. The Company cannot assure its shareholders that its products, procedures or controls will be adequate to support the anticipated growth of its operations.

Inability to protect proprietary and technology rights.

The Company's success will depend in part on its ability to protect its proprietary rights and technologies, including, but not limited to, *U.S. Patent 7,718,550*, *U.S. Patent 7,253,014*, *U.S. Patent 7,682,527*, *U.S. Patent 7,491,376*, *U.S. Patent 7,692,218*, *U.S. Patent 8,431,818*, *U.S. Patent 7,999,172*, *U.S. Patent 8,433,417*, *U.S. Patent 8,716,152* and *U.S. Patent 9,093,267*. The Company relies on a combination of patents, trademark laws, trade secrets, confidentiality provisions and other contractual provisions to protect its proprietary rights. However, not all of these measures may apply or may afford only limited protection. The Company's failure to adequately protect its proprietary rights may adversely affect the Company. Despite the Company's efforts to protect its proprietary rights, unauthorized parties may attempt to copy aspects of the Company's services or to obtain and use trade secrets or other information that it regards as proprietary. Based on the nature of its business, it may or may not be able to adequately protect its rights through patent, copyright and trademark laws. The Company's means of protecting its proprietary rights abroad may not be adequate, and competitors may independently develop similar technologies. The Company may become involved in litigation over proprietary rights. In the event of an adverse result in any future litigation with third parties relating to proprietary rights, the Company could be required to pay substantial damages, including treble damages if the Company is held to have willfully infringed or to expend significant resources to develop non-infringing technology. In addition, litigation frequently involves substantial expenditures and can require significant management attention, even if the Company ultimately prevails. However, there can be no assurance that the Company would be able to successfully resolve such disputes in the future.

No assurance of profitability.

The Company may experience operating losses as it develops, produces and distributes its products and services. As a result, the Company may not be able to achieve profitability in a commercially acceptable time frame, if ever.

Natcore is an "emerging growth company" with reduced reporting requirements.

Natcore is an "emerging growth company," as defined in the JOBS Act. Although the Company has elected not to take advantage of certain reporting exemptions available it, for so long as Natcore remains an "emerging growth company," it will not be subject to the provision of Section 404(b) of the Sarbanes-Oxley Act, applicable to non-emerging growth companies, that requires that an independent registered public accounting firm provide an attestation report on the effectiveness of the Company's internal control over financial reporting. This may increase the risk that the Company will fail to detect and remedy any weaknesses or deficiencies in its internal control over financial reporting. In general, these reduced reporting requirements may allow the Company to refrain from disclosing information that investors may find important. It is also possible that shareholders may generally find Natcore's common shares less attractive due to its status as an "emerging growth company" and its limited disclosures. Any of the foregoing could adversely affect the price and liquidity of the Company's common shares.

Natcore may take advantage of these disclosure exemptions until it is no longer an "emerging growth company" however it may still take advantage of certain reduced reporting requirements if it remains a small company. The Company will cease to be an "emerging growth company" upon the earliest of:

- the last day of the fiscal year in which the fifth anniversary of the offering filed pursuant to the F-1 Registration Statement deemed effective on May 26, 2015;
- the last day of the fiscal year in which the Company's annual gross revenues are \$1 billion or more;
- the date on which the Company, during the previous three-year period, issued more than \$1 billion in non-convertible debt securities; or
- the last day of any fiscal year in which the market value of the Company's common shares held by non-affiliates exceeds \$700 million as of the end of the second quarter of that fiscal year.

Risk Factors Associated with the Industry in which the Company Operates

The demand for solar power products is dependent on volatile market and industry trends that can affect demand for Natcore's products and negatively impact its revenue.

The global economic downturn that began in the fourth quarter of 2008 highlighted the volatility associated with the solar power industry. The capital-intensive nature of implementation requiring access to capital sources caused an overall reduction in demand for solar power technology. While global markets have stabilized and access to capital has returned the demand for solar power products, the potential for soft demand and the trend of reduced cost of production could again have the effect of an over-supplied market place. The effects of a supply driven market place due to soft demand would be adverse to the Company's margins and in turn revenues.

In addition, macroeconomic and geopolitical events influence the demand for solar power products. Specifically, currency exchange rates and governmental regulation affect the price of other energy resources like oil, natural gas and coal. A reduction in the price of these traditional energy resources, such as the recent significant decrease in the oil and natural gas markets, could result in a reduction in the demand for alternative energy sources such as solar power; which in turn could reduce the margins of the Company's products and result in a decrease in revenue.

Unforeseen technological failings that increase the cost of adoption of solar products may inhibit widespread implementation of solar solutions that would result in reduced revenue or the inability for us to maintain Natcore's profitability.

The recent discovery of hardware failure and technical issues related to solar power equipment that occurred earlier in product life that had been expected could alter the associated cost of implementation of solar power products that could in turn lead to a drop in demand. Historical data is not as readily available for the solar industry as it is for the traditional sources of energy limiting the ability to determine a reliable trend upon which to base future results. Increased costs associated with implementation could lead to the failure of solar power technology being widely adopted resulting in Natcore's inability to sustain revenue growth and profitability.

If third parties claim that the Company's products infringe their intellectual property rights, the Company may be forced to expend significant financial resources and management time, and operating results would suffer.

The Company's portfolio of intellectual property is significant to its financial condition and operations. Third parties may claim that the Company's products and systems infringe their patents or other intellectual property rights. Identifying third-party patent rights can be particularly difficult, especially since patent applications are not published until 18 months after their filing dates. If a competitor were to challenge the Company's patents, or assert that its products or processes infringe its patent or other intellectual property rights, the Company could incur substantial litigation costs, be forced to design around their patents, pay substantial damages or even be forced to cease operations, any of which could be expensive and/or have an adverse effect on the Company's operating results. Third-party infringement claims, regardless of their outcome, would not only drain financial resources, but also would divert the time and effort of management, and could result in customers or potential customers deferring or limiting their purchase or use of the affected products or services until resolution of the litigation.

The Company is subject to certification requirements and other regulations. Future more stringent regulations may impair the Company's ability to market its products.

The Company must obtain product certification from governmental agencies, such as the EPA, to sell certain products in the United States, and must comply with other product certification requirements in other countries. A portion of the Company's future sales will depend upon sales of solar power products and technologies that are certified to meet existing and future air quality and energy standards. The Company cannot assure that its products will meet these standards. The failure to comply with these certification requirements could result in the recall of the Company's products, or civil or criminal penalties.

Any new government regulation that affects solar power products and technologies, whether at the foreign, federal, state, or local level, including any regulations relating to installation and service of these systems, may increase the Company's costs and the price of its systems. As a result, these regulations may have a negative impact on the Company's revenue and profitability and thereby harm its business, prospects, results of operations, or financial condition.

Changes in tax policies may reduce or eliminate the economic benefits that make the Company's products attractive to consumers .

In some jurisdictions, such as the United States, governments provide tax benefits for solar cell technologies, including tax credits, rebates and reductions in applicable tax rates. In certain markets of the Company these benefits extend to users of the Company's products. From time to time, governments change tax policies in ways that create benefits such as those for the Company's customers. Reductions or eliminations in these benefits may adversely affect the Company's revenue.

New technologies could render the Company's existing products obsolete.

New developments in technology may negatively affect the development or sale of some or all of the Company's products or make its products obsolete. The Company's inability to enhance existing products in a timely manner or to develop and introduce new products that incorporate new technologies, conform to increasingly stringent emission standards and performance requirements, and achieve market acceptance in a timely manner could negatively impact the Company's competitive position. New product development or modification is costly, involves significant research, development, time and expense, and may not necessarily result in the successful commercialization of any new products.

If the Company misses a required performance standard, fails to timely complete, or otherwise fails to adequately perform on a project, the Company may incur a loss on that project which may reduce or eliminate its overall profitability.

The Company may commit to a client that the Company will complete a project by a scheduled date. The Company may also commit that a project, when completed, will achieve specified performance standards. If the project is not completed by the scheduled date or fails to meet required performance standards, the Company may incur additional costs or be held responsible for damages due to late completion or failure to achieve the required performance standards. The uncertainty of the timing of a project can present difficulties in planning the amount of personnel and resources needed for the project. If the project is delayed or canceled, the Company may bear the cost of an underutilized workforce. In addition, performance on projects can be affected by a number of factors beyond its control, including unavoidable delays from the weather conditions, changes in the project scope, unanticipated site conditions or other disruptions. In some cases, should the Company fail to meet the required schedule or performance standards, the Company may also be subject to agreed upon financial damages which are determined by the contract. To the extent that these events occur, the total costs of the project could exceed its estimates or, in some cases, cause a loss which may reduce or eliminate its overall profitability or cause a financial loss.

The Company conducts a portion of its operations through joint venture entities, over which the Company may have limited control.

The Company may partner with its Best of Breed clients or conduct its operations through joint venture entities. As with most joint venture arrangements, differences in views among the joint venture participants may result in delayed decisions or disputes. The Company cannot control the actions of its joint venture partners, and the Company typically has joint and several liability with its joint venture partners under the applicable contracts for joint venture projects. These factors could potentially harm the business and operations of a joint venture and, in turn, the Company's business and operations.

In conducting the Best of Breed Program, the Company depends on other contractors and subcontractors. If these parties fail to satisfy their obligations to Natcore or other parties, or if Natcore is unable to maintain these relationships, the Company's revenue, profitability and growth prospects could be adversely affected.

The Company depends on contractors and subcontractors in conducting the Best of Breed Program. There is a risk that the Company may have disputes with its subcontractors arising from, among other things, the quality and timeliness of work performed by the subcontractor, customer concerns about the subcontractor, or the Company's failure to extend existing task orders or issue new task orders under a subcontract. In addition, if any of the subcontractors fail to deliver on a timely basis the agreed-upon supplies and/or perform the agreed-upon services, Natcore's ability to fulfill its obligations may be jeopardized.

The Company also relies on relationships with other contractors when it acts as their subcontractor or joint venture partner. The Company's future revenue and growth prospects could be adversely affected if other contractors eliminate or reduce their subcontracts or joint venture relationships with the Company, or refuses to pay under a contract.

The Company business and operating results could be adversely affected by its inability to accurately estimate the overall risks, revenue or costs on a contract.

The Company may engage in a fixed-price contract which requires the Company to either perform all work under the contract for a specified lump-sum or to perform an estimated number of units of work at an agreed price per unit, with the total payment determined by the actual number of units performed. Fixed-price contracts expose the Company to a number of risks not inherent in cost-plus and time and material contracts, including underestimation of costs, ambiguities in specifications, unforeseen costs or difficulties, problems with new technologies, delays beyond the Company's control, failures of subcontractors to perform and economic or other changes that may occur during the contract period. Losses under fixed-price construction contracts could be substantial and harm the Company's results of operations. Under the Company's cost-plus contracts, some of which are subject to contract ceiling amounts, the Company is reimbursed for allowable costs and fees which may be fixed or performance based. If the Company's costs exceed the contract ceiling or are not allowable, the Company may not be able to obtain reimbursement for all such costs. Accounting for a fixed-price contract requires judgments relative to assessing the contract's estimated risks, revenue and costs as well as technical issues. The uncertainties inherent in the estimating process make it possible for actual costs to vary from estimates, or estimates to change, resulting in reductions or reversals of previously recorded revenue and profit. Such variances could be material. Finally, the Company may receive equity or a portion of the revenues generated from a power purchase agreement. The lack of success of the underlying venture or the failure of the client to generate revenue may adversely affect the Company's business and operating results.

The Company's services expose it to significant risks of liability, and it may be difficult or more costly to obtain or maintain adequate insurance coverage.

The Company's services involve significant risks that may substantially exceed the fees the Company derive from its services. The Company's business activities expose it to potential liability for professional negligence, personal injury and property damage among other things. The Company cannot always predict the magnitude of such potential liabilities. In addition, its ability to perform certain services is dependent on the availability of adequate insurance. The Company may obtain insurance from insurance companies to cover a portion of its potential risks and liabilities subject to specified policy limits, deductibles or coinsurance. It is possible that the Company may not be able to obtain adequate insurance to meet its needs or may have to pay an excessive amount for the insurance coverage the Company desires. In addition, the Company may not be able to acquire any insurance for certain types of business risks.

Risks Related to the Company's Common Shares

Authorized capital consists of an unlimited number of shares of one class designated as common shares

The Company's authorized capital consists of an unlimited number of shares of one class designated as common shares. The directors may create any class or series of shares by resolution but may not make any modification to the provisions attaching to the Company's common shares without the affirmative vote of two-thirds of the votes cast by the holders of the common shares. Natcore's common shares do not have pre-emptive rights to purchase additional shares. Shareholders should be aware that the exercise of warrants described herein will dilute the value of current holdings.

Volatility of the market price of the Company's common shares could adversely affect its shareholders and Natcore.

The market price of the Company's common shares could be highly volatile and could be subject to wide fluctuations in response to numerous factors, including the following:

- actual or anticipated variations in Natcore's operating results or those of Natcore's competitors,
- technological enhancements or developments by Natcore or its competitors,
- regulatory changes effecting Natcore's industry,
- changes in the roles of key personnel,
- geopolitical events effecting Natcore's industry, and
- disputes concerning proprietary rights concerning patents that Natcore holds.

Natcore has not paid dividends in the past and does not expect to pay dividends in the future. Any return on an investment could be limited to the value of the common stock.

Natcore has never paid cash dividends on its common shares and do not anticipate paying cash dividends in the foreseeable future. The payment of dividends depends on the financial condition of the Company, with other business and economic factors influencing the decision by the board of directors in determining the issuance of a dividend. If dividends are not issued, the Company's common shares may be considered less valuable because a return on an investment will only occur if the Company's stock price appreciates.

Stockholder ownership interest in Natcore may be diluted as a result of future financings or additional acquisitions.

Natcore may seek to raise funds from time to time in public or private issuances of equity in the near future or over the longer term. Sales of the Company's securities offered through future equity offerings may result in substantial dilution to the interests of the Company's current shareholders. The sale of a substantial number of securities to investors, or anticipation of such sales, could make it more difficult for the Company to sell equity or equity-related securities in the future at a time and at a price that the Company might otherwise wish to effect sales. In addition, the Company has issued shares of its common stock for various acquisitions in the past and may do so in the future, which may also result in substantial dilution to the interests of the Company's current shareholders.

Shareholders may experience dilution as a result of future purchases exercised on outstanding options and warrants.

As of December 31, 2016, the Company had 7,511,500 options outstanding. Each option entitles the holder to purchase one additional common share at exercise prices ranging from CDN\$0.18 to CDN\$1.11 and expiring on dates ranging from April 17, 2017 to December 30, 2021, some of which have expired unexercised as of the date hereof.

As of December 31, 2016, the Company had 26,679,670 warrants outstanding. Each warrant entitles the holder to purchase one additional common share at an exercise prices ranging from CDN\$0.25 to CDN\$0.95 and US\$0.62 and with expiration dates ranging from July 20, 2017 to December 14, 2019.

To the extent these options or warrants are ultimately exercised, shareholders will sustain future dilution.

THE COMPANY CANNOT PREDICT WHETHER IT WILL SUCCESSFULLY EFFECTUATE ITS CURRENT BUSINESS PLAN. EACH SHAREHOLDER IS ENCOURAGED TO CAREFULLY ANALYZE THE RISKS AND MERITS OF AN INVESTMENT IN THE COMPANY'S COMMON STOCK AND SHOULD TAKE INTO CONSIDERATION WHEN MAKING SUCH ANALYSIS, AMONG OTHERS, THE RISK FACTORS DISCUSSED ABOVE.

ITEM 4 - INFORMATION ON THE COMPANY

A. History and Development of the Company

Natcore Technology, Inc. ("Natcore" or "the Company"), is a corporation organized under the laws of British Columbia, Canada organized on August 9, 2007, is a research and development company pioneering solar cells with improved efficiency and reduced cost. By combining expertise of the Company's scientists with a well-equipped research facility, the Company is developing approaches that will define the next generation of solar cells. Natcore's intellectual property is currently protected by 65 patents granted or pending. Natcore does not plan to manufacture solar cells, but rather to have the technology manufactured through partnerships with third parties that will ultimately yield licensing and royalty revenues.

Natcore was a capital pool company ¹ until it completed a Qualifying Transaction on May 8, 2009. The Qualified Transaction involved a reverse take-over of Syracuse Capital Corp. by Natcore Technology Inc., a Delaware company, which is now a wholly owned subsidiary of the Company. Syracuse Capital Corp. was a company incorporated under the British Columbia *Business Corporations Act* and a Capital Pool Company, having its common shares listed on the TSX Venture Exchange under the trading symbol "SYU.P."

Natcore completed its Qualifying Transaction by acquiring all of the issued and outstanding securities of Natcore Technology, Inc. a private Delaware company in consideration of the issuance of 12,960,686 common shares of the Company having a deemed price of CDN\$0.40 per share and the issuance of 2,145,000 share purchase warrants, each warrant exercisable into one additional common share at a price of CDN\$0.40 per share for a period of five years expiring May 9, 2014. The common shares of the Company are listed for trading on the TSX Venture Exchange under the symbol "NXT".

Natcore is currently focused on using its proprietary nanotechnology discoveries to enable a variety of compelling applications including laser processing, tandem quantum-dot solar cells and its Natcore Foil Cell™ structure, the development of which eliminates the need to use high-cost silver in mass-manufactured silicon solar cells. Natcore's laser and all-back-contact cell technologies are also aimed at replacing traditional high cost processes, while also allowing for cell efficiencies well above today's standard products. This technology combines two traditional steps in the manufacturing process thus reducing cost.

To protect the Company's exclusive rights in such technologies, as of December 31, 2016, Natcore had licensed or owns 31 granted and 34 pending patents

¹ The Capital Pool Company program is a two-step listing process offered by the TSX Venture Exchange. In step one, a new company (a "Capital Pool Company") is listed on the TSX Venture Exchange as an initial public offering. In step two (the "Qualifying Transaction"), the Capital Pool Company acquires an asset or completes a transaction with a private business which results in the listing of the acquired business on the TSX Venture Exchange. If the acquired business can meet the minimum listing requirements of the Toronto Stock Exchange (the "TSX"); it can be directly listed on the TSX at the closing of the Qualifying Transaction. The listing of a business via the Capital Pool Company program can be more cost and time efficient than a listing through a traditional initial public offering.

The addresses (and telephone number) of Natcore's principal offices are:

New York Office
189 N. Water Street, Suite 700
Rochester, New York 14604-1163
(545) 286-9180

Background

Natcore is a research and development company pioneering solar cells with improved efficiency and reduced cost. Natcore's intellectual property is currently protected by 65 patents granted or pending. More specifically, Natcore has technologies which (i) enable the controlled deposition of silicon dioxide and mixed silicon oxides from an aqueous solution at ambient temperatures and pressures; (ii) create a nanostructured, porous surface called black silicon on a silicon wafer; (iii) will enable low temperature manufacturing of silicon solar cells at low cost by means of laser processing; and (iv) eliminate high-cost silver from mass-manufactured silicon solar cells through the creation of the Natcore Foil Cell™. Natcore does not plan to manufacture solar cells, but rather to have the technology manufactured through partnerships with third parties that will ultimately yield licensing and royalty revenue.

Four Year History

R&D Milestones

On October 25, 2012, the Company announced that its scientists created the world's first black silicon solar cell using processes amenable to low-cost mass production. After having previously treated a wafer to make it the "blackest" silicon solar cell surface ever recorded, Natcore's technicians used their scalable LPD process to create the black silicon solar cell, from wafer to finished cell.

On January 27, 2015, Natcore announced that it had used its proprietary advances in laser technology to produce an all-low-temperature laser-doped solar cell with all of its electrical contacts on the back of the cell. Eliminating the contacts from the cell increases output by a similar amount. While other all-back-contact cells have been produced, those cells use high-temperature diffusion in their doping steps and highly complex multi-step patterning processes to apply the electrical contacts. Natcore's all-back-contact cell, on the other hand, uses only high-speed, inexpensive laser processing to define the doping regions and the contacts.

On February 17, 2015, the Company announced that it had formed a heterojunction solar cell using germanium quantum dots on an ordinary n-type silicon wafer. Quantum-dot solar cells have the potential to be transformational for terrestrial solar energy, with efficiencies far above anything available commercially as of the date of their formation. One month later, Natcore produced an all-back-contact silicon "SHJ-structure" (heterojunction with intrinsic thin layer) solar cell using their proprietary laser technology. On July 9, 2015, Natcore developed a new solar cell structure that was expected to completely eliminate high-cost silver from mass-manufactured silicon solar cells. By August 2015 the Company was able to build an all-back-contact silicon heterojunction cell structure in which the use of silver was eliminated. This substitution was accomplished with no loss of performance and a substantial decrease in the metallization cost of a solar cell and total raw material cost of a solar module. In March 2016, the Company announced that it had reached an efficiency level of 17.5% for its laser processed cells through further refinement of the Natcore Foil Cell™.

On March 29, 2016, Natcore announced it had achieved commercial level efficiencies for its laser-processed solar cells. Refinement of Natcore's revolutionary Natcore Foil Cell™, which utilizes low-cost aluminum instead of high-cost silver, has progressed rapidly; less than 11 months prior, early proof-of-concept cells were delivering 4% efficiencies. As of this announcement, the Company's cells reached efficiencies of 17.5% (roughly the equivalent of typical commercial cells being sold). Natcore's new cell design, which builds upon the basic concept of a silicon heterojunction (SHJ) solar cell, is producing short-circuit currents above 40 mA/cm² and open-circuit voltages above 0.65V. Anticipated improvements in these measurements, as well as fill factor, project to efficiencies well above 20%. To quantify the cost advantages of its process and design for potential partners, Natcore has retained an independent laboratory to prepare an analysis comparing the cost of producing solar cells using Natcore's breakthrough process with that of making cells using existing manufacturing methods.

On November 15, 2016, the Company announced it had achieved an efficiency of 19.4% in its latest demonstration solar cell by reducing resistance from laser-formed contacts. The laser-formed base contact is critical to the Natcore Foil Cell™, which is an all-back-contact cell that eliminates the need for high-cost silver in the production process by replacing it with low-cost aluminum. Higher resistance at this contact, as well as damage from the laser process, had been limiting the performance of the Company's demonstration cells. Natcore scientists discovered a new laser-based contacting process that overcomes these issues. As a result, device efficiency increased by nearly 2% since June 2016 when the Company announced an efficiency of 17.5% (17.5% being roughly equivalent to typical commercial cells available as of that date). In 2015, the Company's early proof-of-concept cells were delivering 4% efficiencies. Solar cells using Natcore's new approach have an open-circuit voltage (Voc) of nearly 0.7V, pointing to the potential of significantly higher efficiencies.

On May 2, 2017, Natcore announced that it had achieved an efficiency of 20.7% in its latest demonstration of the solar cell.

To protect the Company's exclusive rights in such technologies, as of the date hereof, Natcore had licensed or owns 31 granted and 34 pending patents.

Recent Financings

In January 2015, the Company completed a non-brokered private placement and issued 1,352,062 units at a price of CDN\$0.43 per unit for gross proceeds of \$471,479 (CDN\$581,387). Each unit comprised one common share and one share purchase warrant, with each warrant exercisable at a price of CDN\$0.70 per share for a period of three years from the date of closing. The Company also issued 4,250 finders' warrants with a fair value of \$885 in connection with this private placement exercisable at a price of CDN\$0.43 per share for a period of three years from the date of closing.

In April 2015, the Company completed a non-brokered private placement and issued 1,200,050 units at a price of CDN\$0.70 per unit for gross proceeds of \$672,028 (CDN\$840,035). Each unit comprised one common share and one share purchase warrant, with each warrant exercisable at a price of \$0.70 per share for a period of three years from the date of closing. The Company also issued 9,250 finders' warrants in connection with this private placement exercisable at a price of CDN\$0.95 per share for a period of three years from the date of closing.

In July 2015, the Company completed a non-brokered private placement and issued 1,822,000 units at a price of CDN\$0.54 per unit for gross proceeds of \$982,227 (CDN\$1,275,400). Each unit comprised one common share and one purchase warrant, with each warrant exercisable at a price of CDN\$0.74 per share for a period of three years from the date of closing. The Company also issued 73,500 finders' warrants in connection with this private placement exercisable at a price of CDN\$0.74 per share for a period of three years from the date of closing.

On July 15, 2015, the Company entered into an investment agreement, as amended on August 21, 2015, for the provision of an up to \$5 million investment facility by Dutchess Opportunity Fund II. During the 36-month term of the agreement, Dutchess will be required, at the option of Natcore, to purchase up to \$5 million of Natcore common stock. Natcore will control the timing and amount of any share sales to Dutchess and a minimum price of the common stock to be issued. Under the agreement, Dutchess is required to purchase Natcore shares at a discount of 5% from the market price of the shares on the OTCQB at the time of each transaction. No commissions or compensation is to be paid by Natcore as a result of signing the agreement. As of the date hereof, the Company has not drawn upon the investment. Due to regulatory restraints resulting from the Company's Canadian registration, the Company has not, and does not intend to, utilize this investment facility.

In November 2015, the Company completed a non-brokered private placement and issued 1,694,444 units at a price of CDN\$0.36 per unit for gross proceeds of \$456,018 (CDN\$610,000). Each unit comprised one common share and one purchase warrant, with each warrant exercisable at a price of CDN\$0.55 per share for a period of three years from the date of closing. The Company also issued 70,000 finders' warrants in connection with this private placement exercisable at a price of CDN\$0.55 per share for a period of three years from the date of closing.

In December 2015, the Company completed a non-brokered private placement and issued 1,681,189 units at a price of CDN\$0.36 per unit for gross proceeds of \$437,096 (CDN\$605,228). Each unit comprised one common share and one purchase warrant, with each warrant exercisable at a price of CDN\$0.55 per share for a period of three years from the date of closing. The Company also issued 26,600 finders' warrants in connection with this private placement exercisable at a price of CDN\$0.55 per share for a period of three years from the date of closing. In connection with the private placements completed during the year ended December 31, 2015, the Company incurred share issued costs of \$147,680 consisting of cash finders' fees, exchange and regulatory fees and legal fees.

In February 2016, the Company completed a non-brokered private placement and issued 273,058 units at a price of CDN\$0.36 per unit for gross proceeds of \$70,908 (CDN\$98,301). Each unit comprised one common share and one purchase warrant, with each warrant exercisable at a price of CDN\$0.55 per share for a period of three years from the date of closing. The Company had received subscriptions of \$31,102 at December 31, 2015 that related to this private placement. On issue the fair value of the warrants was determined to be \$26,464 and included in derivative liability (Note 8).

In March 2016, the Company completed a non-brokered private placement and issued 2,244,497 units at a price of CDN\$0.36 per unit for gross proceeds of \$622,166 (CDN\$808,019). Each unit comprised one common share and one purchase warrant, with each warrant exercisable at a price of CDN\$0.55 per share for a period of three years from the date of closing. On issue the fair value of the warrants was determined to be \$507,562 and included in derivative liability (Note 8). The Company also issued 23,450 finders' warrants with a fair value of \$5,248 in connection with this private placement exercisable at a price of CAD\$0.55 per share for a period of three years from the date of closing.

In June 2016, the Company completed a non-brokered private placement and issued 1,000,000 units at a price of CDN\$0.40 per unit for gross proceeds of \$311,988 (CDN\$400,000). Each unit comprised one common share and one purchase warrant, with each warrant exercisable at a price of CDN\$0.55 per share for a period of three years from the date of closing. On issue the fair value of the warrants was determined to be \$133,402 and included in derivative liability (Note 8). The Company also issued 70,000 finders' warrants with a fair value of \$9,338 in connection with this private placement exercisable at a price of CAD\$0.55 per share for a period of three years from the date of closing.

In July 2016, the Company completed a non-brokered private placement and issued 1,000,000 units at a price of CDN\$0.40 per unit for gross proceeds of \$303,630 (CDN\$400,000). Each unit comprised one common share and one purchase warrant, with each warrant exercisable at a price of CDN\$0.55 per share for a period of three years from the date of closing. On issue the fair value of the warrants was determined to be \$121,943 and included in derivative liability (Note 8). The Company also issued 70,000 finders' warrants with a fair value of \$8,536 in connection with this private placement exercisable at a price of CAD\$0.55 per share for a period of three years from the date of closing.

In September 2016, the Company completed a non-brokered private placement and issued 650,000 units at a price of CDN\$0.36 per unit for gross proceeds of \$177,048 (CDN\$234,000). Each unit comprised one common share and one purchase warrant, with each warrant exercisable at a price of CDN\$0.55 per share for a period of three years from the date of closing. On issue the fair value of the warrants was determined to be \$64,853 and included in derivative liability (Note 8). The Company also issued 45,500 finders' warrants with a fair value of \$4,540 in connection with this private placement exercisable at a price of CAD\$0.55 per share for a period of three years from the date of closing.

In November 2016, the Company completed a non-brokered private placement and issued 1,427,500 units at a price of CDN\$0.23 per unit for gross proceeds of \$244,966 (CDN\$328,325). Each unit comprised one common share and one purchase warrant, with each warrant exercisable at a price of CDN\$0.30 per share for a period of three years from the date of closing. On issue the fair value of the warrants was determined to be \$145,612 and included in derivative liability (Note 8). The Company also issued 72,100 finders' warrants with a fair value of \$7,801 in connection with this private placement exercisable at a price of CAD\$0.30 per share for a period of three years from the date of closing.

In December 2016, the Company completed a non-brokered private placement and issued 1,500,000 units at a price of CDN\$0.21 per unit for gross proceeds of \$238,373 (CDN\$315,000). Each unit comprised one common share and one purchase warrant, with each warrant exercisable at a price of CDN\$0.30 per share for a period of three years from the date of closing. On issue the fair value of the warrants was determined to be \$112,940 and included in derivative liability (Note 8). The Company also issued 70,000 finders' warrants with a fair value of \$5,569 in connection with this private placement exercisable at a price of CAD\$0.30 per share for a period of three years from the date of closing.

In connection with the private placements completed during the year ended December 31, 2016, the Company incurred share issued costs of \$235,830 consisting of cash finders' fees, exchange and regulatory fees and legal fees.

In January 2017, the Company completed a non-brokered private placement and issued 1,021,800 units at a price of CDN\$0.21 per unit for gross proceeds of \$162,252 (CDN\$214,578). Each unit comprised one common share and one purchase warrant, with each warrant exercisable at a price of CDN\$0.25 per share for a period of three years from the date of closing.

In January 2017, the Company received \$39,635 (CDN\$52,000) from the exercise of 130,000 options.

In February 2017, the Company completed a non-brokered private placement and issued 650,000 units at a price of CDN\$0.34 per unit for gross proceeds of \$168,955 (CDN\$221,000). Each unit comprised one common share and one purchase warrant, with each warrant exercisable at a price of CDN\$0.40 per share for a period of three years from the date of closing. The Company also issued 45,500 finders warrants with an exercise price of CDN\$0.40.

In March 2017, the Company completed a non-brokered private placement and issued 900,000 units at a price of CDN\$0.19 per unit for gross proceeds of \$127,860 (CDN\$171,000). Each unit comprised one common share and one purchase warrant, each warrant exercisable at a price of CDN\$0.25 per share for a period of three years from the date of closing.

In April 2017, the Company completed a non-brokered private placement and issued 1,030,000 units at a price of CDN\$0.19 per unit for gross proceeds of \$146,790 (CDN\$195,700). Each unit comprised one common share and one purchase warrant, each warrant exercisable at a price of CDN\$0.25 for a period of three years from the date of closing.

On June 2, 2015, the Company became a fully reporting company with the Securities and Exchange Commission (the “SEC”) in the United States following the filing of an SEC Form F-1 Registration Statement effective as of May 26, 2015.

On July 22, 2015, the Company commenced trading on the OTCQB, an over the counter marketplace organized for venture-stage or early-stage companies

On May 26, 2016, Natcore reached its first anniversary as a fully reporting SEC issuer and continues to be current with all required SEC filings. Upon the occurrence of the anniversary, for the first time, Natcore shareholders were entitled to avail themselves of Rule 144 of the Securities Act of 1933, as amended to have their “Restricted” legend removed from their Natcore stock certificate. On November 17, 2016, the SEC declared effective the Company’s post-effective amendment deregistering the securities registered pursuant to the May 26, 2016 registration statement.

On June 22, 2016, the SEC declared effective the Company’s Form F-1 Registration Statement relating to the registration of up to 5,000,000 newly issued shares of the Company’s common stock; the resale of up to 2,661,111 common shares by shareholders which shares were previously issued in private placement transactions and/or part of executive compensation; and 400,000 shares of common stock by LoPresti Law Group (“LLG”) to be paid to LLG in exchange for the provision of legal services rendered.

Employees

As of the date of this annual report, the Company has 13 full-time employees all of which are located in the United States.

Significant Acquisitions or Developments

No significant acquisitions or significant dispositions have been completed by Natcore during the most recently completed financial year or are contemplated.

B. Business Overview

Natcore is a research and development company pioneering solar cells with improved efficiency and reduced cost. Natcore’s intellectual property is currently protected by 65 patents granted or pending. Natcore does not plan to manufacture solar cells, but rather to license its technology to manufacturers through partnerships that will ultimately yield licensing and royalty revenue.

Natcore’s primary technology is Natcore Foil Cell™. The vast majority of solar cells produced today limit cell efficiency to about 19%. This is due to the use of front contact and thermally diffused emitters. Many front contact cells have a grid of thin metal lines that block light and thus reduce efficiency. In addition, standard solar cells are made using a thermally diffused emitter, which requires very high process temperatures (>800C). The combination of front contact and thermally diffused emitters limits current cell efficiency.

Recently, a company reported 25.6% efficiency – the highest efficiency ever reached for a silicon solar cell – using only back contact and a silicon heterojunction (SHJ) emitter, eliminating the high-temperature diffusion steps. While this achievement showed the value of these approaches, the cell was produced using a complicated, high-cost process.

Natcore’s process uses highly defined regions of heavily doped silicon to form a base contact of the solar cell. Natcore then uses a powerful, focused laser beam to melt small regions of the silicon surface, which allows a specially applied dopant to penetrate the silicon matrix. Natcore has also discovered a method to laser-form the dopant regions without disturbing the high-quality emitter already present on the solar cell. This process is rapid, and thus can be performed with low-capital equipment at atmospheric conditions.

In addition, Natcore has developed technology which eliminates the need for high-cost silver from mass-manufactured silicon solar cells. Currently, silver is used in the metallization process as it is highly conductive and easy to process. However, silver can represent 30% to 50% of the fabrication cost of a solar cell. Natcore’s unique approach to metallization relies on a simple multilayer structure, which uses inexpensive aluminum as its main conductor, and thus results in lower production costs. This cell technology may also result in cost savings when incorporated into other modules. Generally, cell-to-module loss is 8%-10%. However, when Natcore’s cells have been incorporated into the production of photovoltaic modules the cell-to-module loss was 0%, resulting in cost savings.

Natcore is, first and foremost, a research and development company. The Company believes that its technology is recognized throughout the solar industry as being among some of the most advanced in photovoltaics. In addition to the Company's technological advances, members of its Scientific Advisory Board have extensive experience in designing and building turnkey solar cell and module fabrication facilities. Natcore's work on a line of black silicon products, in conjunction with its patents (a total of 65, granted and pending), is essential to building the next generation solar cell. As that technology has moved ever closer to commercialization and Natcore has gained a higher profile in the industry worldwide, it has received an increasing number of requests from solar cell and panel manufacturers, as well as solar plant developers, who are anxious to have access to Natcore's technology and to acquire some form of exclusive rights thereto. These cell and module manufacturers are willing to give Natcore preferential treatment with regard to purchasing components and equipment, in exchange for access to its technology and applications when they become available. In addition, Natcore has received numerous requests from companies and countries/regions to assist in developing their solar projects, including building cell and/or panel manufacturing facilities, as well as solar plants.

In response to these requests, Natcore developed a "Best of Breed" Program through which it serves as a business and technical consultant on the design and construction of solar cell/solar panel fabrication facilities, and solar power plants. Natcore has several Memoranda of Understanding and other agreements in place in furtherance of these efforts, with more to follow. Current projects are located in Australia, Belize and Vietnam. By leveraging its status and industry relationships, Natcore can guide its Best of Breed customers in procuring components and equipment of the highest quality and at highly competitive prices. Natcore is not itself a manufacturer of any equipment or components, and therefore it has no inherent biases or conflicts as to which components to buy or which vendors to select or recommend. Thus, each project can be optimized as to quality and cost.

The Company continues to be in the research and development stage and its potential products are not yet at the stage of commercial production. The Company anticipates generation of initial revenues within the fiscal year 2017, but plans to continue its research and development programs for the purposes of developing additional applications for its technologies. The Company is currently conducting its own research and development but does anticipate subcontracting certain work with joint venture partners, as described below. The Company's long-term objective is to commercialize its technologies in order to generate commercial revenues. In order for the Company to meet this long-term objective, the following events must occur:

Event	Target Date	Cost
Research and development for the Company's technologies, including identifying additional applications	Ongoing	Not known
Additional patent and other intellectual property applications	Ongoing	Not known

The short-term objectives of the Company over the next twelve months are to improve the efficiencies of the Company's technologies and commence licensing of the Company's technologies. In order to the complete same, the Company anticipates spending between \$300,000 and \$500,000 outsourcing certain work with joint developer partners, including use of equipment. At this stage, it is not anticipated that the Company must expend further funds to commence licensing, but may consider allocating funds towards marketing in the future.

A significant shift is underway in the world-wide silicon solar cell industry, driven by the rising prices of silicon feedstock material. Cell producers are now moving to produce thinner solar cells to reduce their requirements for silicon feedstock. Technologies that reduce or eliminate high temperatures will be required and will be in demand. Making this long-term shift will enable the silicon solar cell industry to sustain its historic annual growth rates well into the future.

New developments in technology may negatively affect the development or sale of the Company's products or make the Company's technologies obsolete. Natcore intends to maintain its competitive position and prevent the impacts of obsolescence by continuing to develop and perfect its technologies and find additional commercial usages for its technologies.

Natcore is not aware of any material market controls or regulations within the technology sector which might affect the marketing of its technologies.

Natcore is not aware of any material regulatory approvals necessary for its research and development work, other than approval of appropriate patent applications in the jurisdictions the Company intends to do business.

Production and Services

Natcore does not plan to manufacture solar cells. Instead, Natcore plans to license its technologies to manufacturers, receive royalties from cells manufactured using its technologies and from equipment and chemical sales. Customers will be required to execute non-exclusive license agreements or exclusive license agreements unique to specified jurisdictions. Royalty rights will entitle the Company to benefit from residual income on each product that utilizes the Company's technology. In addition, Natcore intends to sub-contract the manufacturing of the equipment necessary for the black silicon process and the lasers. There will be a mark-up, to Natcore's benefit, on each piece of equipment. Finally, Natcore intends to produce recurring revenue by engaging third-parties to mix and ship the patented chemical mixture for the various applications.

Specialized Skill and Knowledge

Certain aspects of Natcore's business, relating to the development and discovery process, require specialized skills and knowledge, including chemical, electrical and mechanical engineering. Increased activity in the technology and research and development industry may make it more difficult to locate competent employees and consultants in such fields, and may affect Natcore's ability to grow at the pace it desires. However, Natcore does not anticipate any significant difficulties in locating appropriate personnel as the employees and consultants it needs to conduct appropriate studies on its technologies are available.

Competitive Conditions

Given the complex nature and cost of the systems now in use by the solar cell industry, Natcore expects to offer value to its customers. Natcore's black silicon technology is expected to replace an expensive, energy and manpower intensive, thermal vacuum process with a simple wet chemistry process that will make an improved anti-reflection surface on silicon solar cells. In addition, the Natcore Foil Cell™ will increase efficiency and power output without an increase in manufacturing cost.

An independent engineering study comparing Natcore's technology to that now used by the solar cell industry shows conclusively that solar cell manufacturing costs can be reduced by up to 23.5%. The study included both capital and lifecycle costs when making the comparison. Other studies completed by the Company have shown that Natcore's LPD technology can be tailored to solar cell technologies other than silicon, and while costs savings have not been quantified, preliminary results indicate they will result in at least single digit percentage cost reductions.

The Company expects to see growing demand for low-temperature, non-vacuum, anti-reflective coating systems for the emerging solar cell market. The Company is unaware of any competing room temperature anti-reflective coating technology in development or commercial use. While current thermal and vacuum systems are adequate, Natcore's technology will enable cell producers to improve their profit margins by offering lower cost and higher throughput rates. In addition, while there are some companies that manufacture high-efficiency HIT cells, those companies use a very complicated and costly process to produce such cells. Typically, the production costs of such companies are twice as expensive as the standard commercial cells currently available.

Independent industry studies also confirm substantial global growth in the production of monocrystalline silicon ("mono-silicon") and the oversupply in the market. This is particularly important since Natcore's technologies are particularly suited to maximize the efficiencies of mono-silicon, n-type solar cells. In particular, industry studies project global mono-silicon demand will top out at less than 10GW in 2015, but global mono-silicon wafer capacity has already reached 14GW. This oversupply has led to a substantial price drop in the mono-silicon wafer market. In 2016, wafer manufacturers have been expanding their mono-silicon capacity as they are optimistic about the market prospects. In sum, industry analysts project that the global mono-silicon capacity will surpass 17GW in 2016, with the annual growth rate exceeding 20%. Nonetheless, oversupply will persist in the mono-silicon wafer market next year unless end-market demand increases substantially. Therefore, Natcore will be able to maximize the efficiencies of mono-silicon, n-type solar cells at a lower cost.

Given the increasing demand for solar cell technology, competition can be expected to increase substantially.

The Company believes that it is well positioned to provide its Best of Breed Program in a competitive market. Natcore believes it has a significant competitive advantage in offering its Best of Breed Program, components and equipment, including specifically the ability to offer some level of exclusivity to the Company's technologies once commercially available. The Company's technology is recognized as being among the most advanced, giving the Company an advantage in the consulting services market. In addition, such technology would become part of the project as it is in process, and/or would be incorporated as an upgrade to existing facilities on an ongoing basis. Natcore's main competition for revenues generated through its Best of Breed Program may come from vertically integrated companies, especially if customers prefer such an approach. However, no such company can offer the technology, and limited exclusivity to that technology, that Natcore offers.

Accordingly, there can be no assurances that the Company will compete successfully with existing or new competitors, or that the competition will not have a material adverse effect on the business, operating results or financial condition of the Company. At the same time, this increased competition could also benefit Natcore since manufacturers would be anxious to access a technology that would give them cost or efficiency advantages.

Components

Over the past several years, increased solar cell activity on a global scale has made some services and materials, such as silicon, difficult to procure. It is possible that delays or increased costs may be experienced in order to proceed with Natcore's proposed activities during the current period. Such delays could significantly affect Natcore if the delay reduces the opportunity Natcore may have had to develop a particular project had such tests been completed in a timely manner before the fall of such prices. The balance of the raw materials Natcore requires to carry on its business are available through normal supply or business contracting channels in North America. Natcore has secured personnel and/or consultants to conduct its currently contemplated programs.

Cycles

Natcore does not expect its business to be cyclical or seasonal.

Economic Dependence and Changes to Contracts

It is not expected that Natcore's business will be affected in the current financial year by the renegotiation or termination of contracts or sub-contracts.

Natcore's success will depend in part on its ability to protect its proprietary rights and technologies. Natcore relies on a combination of patents, trademark laws, trade secrets, confidentiality provisions and other contractual provisions to protect its proprietary rights.

However, not all of these measures may apply or may afford only limited protection. Natcore's failure to adequately protect its proprietary rights may adversely affect Natcore.

Environmental Protections

The materials used in the Company's processes have no extraordinary environmental protection requirements. As a result, Natcore does not currently anticipate that any environmental regulations or controls will materially affect the Company or its processes under development.

Foreign Operations

Natcore currently conducts business and maintains its offices in the United States. Natcore markets its technologies on a world-wide basis, subjecting the Company to the risk that it may not be able to enforce its intellectual property rights in certain jurisdictions. In jurisdictions in which there is a history of intellectual property infringement, Natcore would seek to obtain a strategic joint venture partner prior to accessing such markets to assist in the protection of its technologies.

Lending

Natcore does not currently hold any investments or owe any material liabilities.

Natcore has not adopted any specific policies or restrictions regarding investments or lending, but will ensure any investment or debt activities incurred are in the best interests of Natcore and its shareholders. Natcore expects that in the future in order to develop its technologies it will need to raise additional capital through a combination of debt and equity.

Bankruptcy and Similar Procedures

There are no bankruptcies, receivership or similar proceedings against Natcore or any of its subsidiaries, nor is Natcore aware of any such pending or threatened proceedings. There has not been any voluntary bankruptcy, receivership or similar proceedings by Natcore or its subsidiaries since its incorporation.

Reorganization

Since the Company's Qualifying Transaction, Natcore has not completed any reorganization since its incorporation.

Natcore has not adopted any specific social or environmental policies that are fundamental to its operations (such as policies regarding its relationship with the environment, with the communities in the vicinity of its facilities or human rights policies). However, Natcore's management, with the assistance of its contractors and advisors, ensures its ongoing compliance with local environmental laws in the jurisdictions in which it does business.

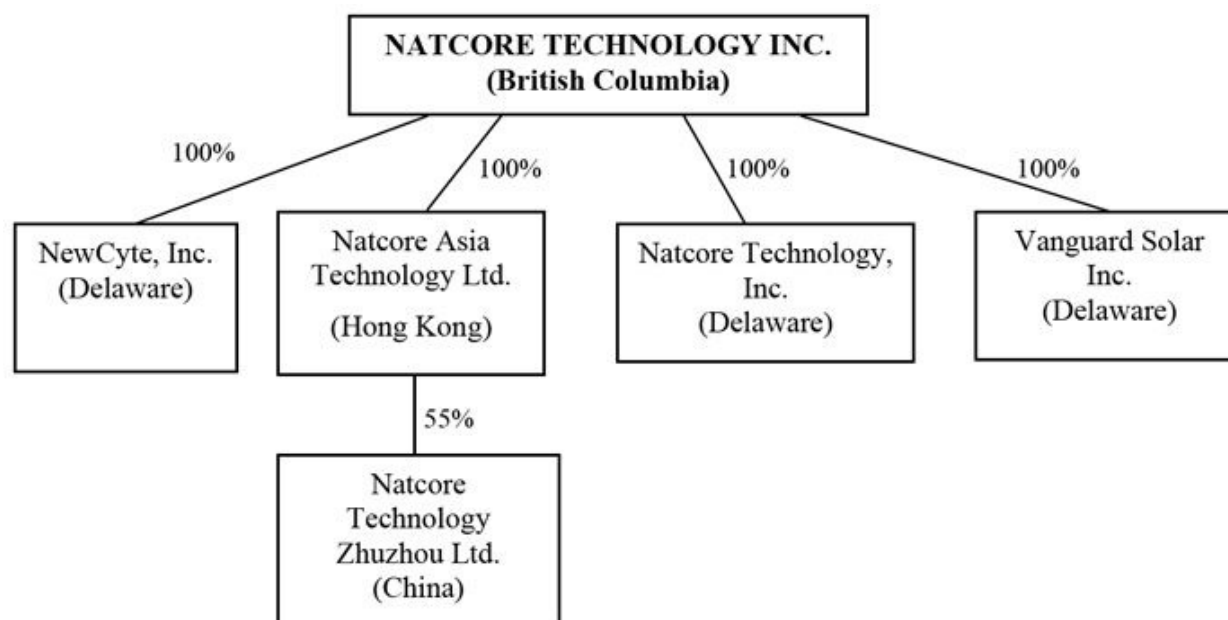
Natcore believes that its operations comply in all material respects with applicable laws and regulations concerning the environment. While it is impossible to predict accurately the future costs associated with environmental compliance and potential remediation activities, compliance with environmental laws is not expected to require significant capital expenditures and has not had, and is not expected to have, a material adverse effect on the Company's earnings or competitive position.

C. Organizational Structure

The consolidated financial statements include the accounts of the Company and its controlled entities. Details of controlled entities are as follows:

	Jurisdiction of Incorporation	Percentage owned*		
		December 31, 2016	December 31, 2015	December 31, 2014
Natcore Technology, Inc.	United States	100%	100%	100%
Newcyte, Incorporated	United States	100%	100%	100%
Vanguard Solar, Inc.	United States	100%	100%	100%
Natcore Asia Technology, Limited	Hong Kong	100%	100%	100%

*Percentage of voting power is in proportion to ownership.



Natcore Technology, Inc. is the entity holding a large portion of the Company's licensing and intellectual property rights and through which the Company conducts the majority of its active operations.

NewCyte, Inc., holds a portfolio of intellectual property including issued and pending patents covering the coating of fullerenes (including carbon nanotubes) with silica, dielectric and semiconducting films for a variety of potential applications, including photon, chemical and biomolecule sensing.

Vanguard Solar, Inc. holds intellectual property in the field of solar energy relating to the development of a flexible, thin-film photovoltaic material believed to be capable of silicon solar cell-like efficiency performance.

Natcore Asia Technology Ltd. holds the Company's fifty-five percent (55%) share of Natcore Technology (Zhuzhou) Ltd., a joint venture formed with the Zhuzhou Hi-Tech Industrial Development Zone, a government-supported zone in Hunan province, and Chuangke Silicon Ltd., a polycrystalline silicon producer.

ITEM 4A - UNRESOLVED STAFF COMMENTS

Not Applicable.

ITEM 5 - OPERATING AND FINANCIAL REVIEW AND PROSPECTS

The following discussion and analysis of the Company's financial condition and results of operations should be read in conjunction with the Company's consolidated financial statements and the related notes thereto included elsewhere in this annual report on Form 20-F. This discussion may contain forward-looking statements based upon current expectations that involve risks and uncertainties. The Company's actual results may differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth under "Item 3. Key Information—D. Risk Factors" or in other parts of this annual report on Form 20-F.

A. Operational Results

Year Ended December 31, 2016 Compared to the Year Ended December 31, 2015

As the Company is in the development stage, it is expected the Company will continue to generate losses for the upcoming fiscal year.

During the year ended December 31, 2016, the Company did not generate any revenue. The principal activity of the Company during the year ended 2016 and the year ended 2015 was that of research giving rise to normal recurring costs.

The Company reported a net loss of \$2,021,700 for the year ended December 31, 2016 compared to a net loss of \$3,488,129 for the year ended December 31, 2015. The primary reasons for the change were income resulting from non-cash revaluations of the Company's derivative liabilities resulting from a decrease in its stock price at the December 31, 2016 compared to December 31, 2015 offset by an increase in operating expenses.

The Company's operational expenses for the year ended December 31, 2016 were \$3,905,028 compared to \$3,730,661 for the prior year ended December 31, 2015. Significant expense changes in the year ended December 31, 2016 compared to prior year ended December 31, 2015 are in the table below:

	Year Ended December 31,		Variance
	2016	2015	
Expenses			
Consulting	124,652	181,589	(56,937)
Depreciation and amortization	146,946	279,527	(132,581)
Filing fees	45,172	25,016	20,156
Foreign exchange (gain loss)	16,457	5,159	11,298
Interest and bank charges	2,698	2,383	315
Marketing	341,104	268,853	72,251
Office and miscellaneous	201,736	216,811	(15,075)
Professional fees	219,016	335,762	(116,746)
Research and development	1,137,422	1,203,716	(66,294)
Stock-based compensation	869,130	387,648	481,482
Travel	37,472	45,858	(8,386)
Wages and salaries	763,223	778,339	(15,116)
	(3,905,028)	(3,730,661)	174,367
Other Income (Expense)			
Fair value adjustment on warrants	1,880,587	226,827	1,653,760
Other income	1,932	14,124	(12,192)
Interest income	809	1,581	(772)
	1,883,328	242,532	1,640,796
Net income (loss)	(2,021,700)	(3,488,129)	1,466,429

As a result of the acquisitions of Natcore US and the Company's operations in the United States, the Company and its financial results are exposed to fluctuations between the Canadian and United States dollars. The foreign exchange (gains) or loss present for the periods above, results from certain monetary items, primarily cash equivalents, being denominated in Canadian dollars.

Stock-based compensation relates to options granted under the Company's stock option plan to directors, officers, employees and consultants. Compensation expense is recorded using the fair value method over the vesting periods of the options. The fair value of each option granted is estimated as at the date of grant using the Black-Scholes Option Pricing Model.

Selling and Marketing Expenses

The Company did not recognize any revenue, as it was still in the development stage for many of its applications. The Company plans to have its black silicon technology available to the solar industry in the following 18-24 months; Natcore does not believe it would require a direct sales force in the foreseeable future. Natcore markets its technology through the industry with its management staff at the time. As the Company has moved through the proof of concept phase and closer to commercialization for its applications, it began making more presentations to manufacturers and potential customers as well as equipment builders who would adapt existing machinery to accommodate Natcore's process.

General and Administrative Expenses

Natcore's general and administrative expenses consisted primarily of costs associated with marketing activities, outside professional fees, travel costs, facilities costs and other corporate expenses. Its professional and consulting fees for the year ended December 31, 2016 decreased approximately \$56,937 over the prior year ended resulting from increased costs relating to patents and accounting, legal fees relating to this filing and the Company using additional consultants for marketing purposes. For the year ended December 31, 2016 Natcore's office and other operational expenses decreased approximately \$15,075. Travel expenses decreased approximately \$8,386 for the year ended December 31, 2016 compared to prior year.

Wages and Salaries Expenses

Natcore's wages and salaries expenses consisted of compensation costs for management, finance and other administrative personnel, these costs also included payroll taxes and benefits associated with its personnel functions. For the year ended December 31, 2016 compared to the prior year, the changes in wages and salaries expense versus the prior year decreased approximately \$15,116.

Research and Development Expenses

Natcore's research and development expenses consisted of all expenses incurred in research and development activities, including compensation associated with its research staff. The Company's decrease in R&D expense of approximately \$66,294 over the year ended was primarily due to performing more work internally and less outsourcing.

Stock Based Compensation Expense

Natcore's stock based compensation expense consisted of fair value costs associated with the issuance of stock, stock options and warrants for services that were preformed or to be performed. The stock based compensation for the year ended December 31, 2016 increased approximately \$481,482 over the prior year.

Depreciation and Amortization Expenses

Natcore's depreciation and amortization expenses were costs for the depreciation and amortization of its equipment and intangible assets. Natcore computed depreciation using the straight-line method over the useful lives of the related assets, which ranged from three to seven years. Intangible assets with finite useful lives were amortized on a straight-line basis over their estimated useful lives. The estimated useful life and amortization method were reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis. For the year ended December 31, 2016 depreciation and amortization expense decreased approximately \$132,581 over the prior year because of intangible assets becoming fully amortized in the prior year.

Other Income (Expense)

Other income (expense) primarily consisted of gains and losses related to Natcore's investment activities from its cash equivalent investments and other non-recurring items.

Operating (Loss)

Natcore did not have any sales revenue, consequently it generated only operating losses. Natcore's operating expenses consisted of general and administrative expenses, wages and salaries expenses, research and development expenses, depreciation and amortization costs and stock-based compensation expenses discussed above.

Year Ended December 31, 2015 Compared to the Year Ended December 31, 2014

During the year ended December 31, 2015, the Company did not generate any revenue. The principal activity of the Company during the year ended 2015 and the year ended 2014 was that of research giving rise to normal recurring costs.

The Company reported a net loss of \$3,488,129 for the year ended December 31, 2015 compared to a net loss of \$2,193,532 for the year ended December 31, 2014. The primary reason for the change was a result of non-cash revaluations of the Company's derivative liabilities (income of \$226,827 in the year ended December 31, 2015 compared to income of \$1,842,317 in the prior year ended December 31, 2014). The change in expense and income from the expiration and addition of warrants being valued in the derivative liability during the year.

The Company's operational expenses for the year ended December 31, 2015 were \$3,730,661 compared to \$4,068,475 for the prior year ended December 31, 2014. Significant expense changes in the year ended December 31, 2015 compared to prior year ended December 31, 2014 are in the table below:

	Year Ended December 31,		
	2015	2014	Variance
Expenses			
Consulting	181,589	229,792	(48,203)
Depreciation and amortization	279,527	412,492	(132,965)
Filing fees	25,016	34,090	(9,074)
Foreign exchange (gain) loss	5,159	41,344	(36,185)
Interest and bank charges	2,383	1,581	802
Marketing	268,853	81,401	187,452
Office and miscellaneous	216,811	273,264	(56,453)
Professional fees	335,762	213,888	121,874
Research and development	1,203,716	1,634,864	(431,148)
Stock-based compensation	387,648	301,732	85,916
Travel	45,858	73,922	(28,064)
Wages and salaries	778,339	770,105	8,234
	(3,730,661)	(4,068,475)	(337,814)
Other Income (Expense)			
Fair value adjustment on warrants	226,827	1,842,317	(1,615,490)
Other income	14,124	—	14,124
Interest income	1,581	32,626	(31,045)
	242,532	1,874,943	(1,632,411)
Net income (loss)			
	(3,488,129)	(2,193,532)	(1,294,597)

As a result of the acquisitions of Natcore US and the Company's operations in the United States, the Company and its financial results are exposed to fluctuations between the Canadian and United States dollars. The foreign exchange (gains) or loss present for the periods above, results from certain monetary items, primarily cash equivalents, being denominated in Canadian dollars.

Stock-based compensation relates to options granted under the Company's stock option plan to directors, officers, employees and consultants. Compensation expense is recorded using the fair value method over the vesting periods of the options. The fair value of each option granted is estimated as at the date of grant using the Black-Scholes Option Pricing Model.

Selling and Marketing Expenses

The Company did not recognize any revenue, as it was still in the development stage for many of its applications. The Company planned to have its black silicon technology available to the solar industry in the following 30-36 months; Natcore did not believe it would require a direct sales force in the foreseeable future. Natcore chose to market its technology through the industry with its management staff at the time. As the company moved through the proof of concept phase and closer to commercialization for its applications, it began making more presentations to manufacturers and potential customers as well as equipment builders who would adapt existing machinery to accommodate Natcore's process.

General and Administrative Expenses

Natcore's general and administrative expenses consisted primarily of costs associated with marketing activities, outside professional fees, travel costs, facilities costs and other corporate expenses. Its professional and consulting fees for the year ended December 31, 2015 increased approximately \$74,000 over the prior year ended resulting from increased costs relating to patents and accounting, legal fees relating to this filing and the Company using additional consultants for marketing purposes. For the year ended December 31, 2015 Natcore's office and other operational expenses decreased approximately \$56,000. Travel expenses decreased approximately \$28,000 for the year ended December 31, 2015 compared to prior year ended as a result of the Company consolidating laboratories in Rochester in 2014. In 2014, Natcore closed a facility in Ohio which reduced the need for travel between several locations. Additionally there was no overseas travel to China and Europe since the infrastructure in those locations was already established and precluded the need for several visits.

Wages and Salaries Expenses

Natcore's wages and salaries expenses consisted of compensation costs for management, finance and other administrative personnel, these costs also included payroll taxes and benefits associated with its personnel functions. For the year ended December 31, 2015 compared to the prior year, the changes in wages and salaries expense versus the prior year increased approximately \$8,000. This increase was a result wage increases.

Research and Development Expenses

Natcore's research and development expenses consisted of all expenses incurred in research and development activities, including compensation associated with its research staff. The Company's decreases in R&D expense of approximately \$431,000 over the year ended were primarily due to additional staff hired to expand its R&D studies in 2014, all of which did not continue in 2015.

Stock Based Compensation Expense

Natcore's stock based compensation expense consisted of fair value costs associated with the issuance of stock, stock options and warrants for services that were performed or to be performed. The stock based compensation for the year ended December 31, 2015 increased approximately \$86,000 over the prior year.

Depreciation and Amortization Expenses

Natcore's depreciation and amortization expenses were costs for the depreciation and amortization of its equipment and intangible assets. Natcore computed depreciation using the straight-line method over the useful lives of the related assets, which ranged from three to seven years. Intangible assets with finite useful lives were amortized on a straight-line basis over their estimated useful lives. The estimated useful life and amortization method were reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis. For the year ended December 31, 2015 depreciation and amortization expense decreased approximately \$133,000 over the prior year because of intangible assets becoming fully amortized in the prior year.

Other Income (Expense)

Other income (expense) primarily consisted of gains and losses related to Natcore's investment activities from its cash equivalent investments and other non-recurring items.

Operating (Loss)

Natcore did not have any sales revenue, consequently it generated only operating losses. Natcore's operating expenses consisted of general and administrative expenses, wages and salaries expenses, research and development expenses, depreciation and amortization costs and stock-based compensation expenses discussed above.

B. Liquidity and Capital Resources

The following table summarizes the Company's cash flows by activity and cash on hand for the years ended December 31, 2016 and 2015:

Activity	Year Ended December 31,	
	2016 (Audited)	2015 (Audited)
Net cash used in operating activities	(2,346,474)	(2,588,345)
Net cash used in investing activities	(3,542)	(27,185)
Net cash provided by financing activities	1,851,747	2,588,664
Net decrease in cash	(498,269)	(26,866)
Cash at the beginning of the period	521,521	548,387
Cash at the end of the period	23,252	521,521

The Company reported working capital (deficit) of (\$1,469,472) as of December 31, 2016 and (\$1,186,488) as of December 31, 2015. As of December 31, 2016, the Company had cash of \$23,252 compared to cash of \$521,521 as of December 31, 2015. The decrease is the result of a net loss for operational expenses which is offset by proceeds of issuances of common stock shares in 2016. The Company is currently pursuing additional financing alternatives, including completing another private placement, to fund operations.

Current assets excluding cash and cash equivalents at December 31, 2016 consisted of receivables of \$12,071 and prepaid expenses of \$55,187.

Current liabilities at December 31, 2016 consisted of accounts payable and accrued liabilities of \$1,192,637 and the derivative financial liability of \$367,345.

The following table summarizes the Company's cash flows by activity and cash on hand for the years ended December 31, 2015 and 2014:

Activity	Year Ended December 31,	
	2015 (Audited)	2014 (Audited)
Net cash used in operating activities	(2,588,345)	(3,179,776)
Net cash used in investing activities	(27,185)	(179,587)
Net cash provided by financing activities	2,588,664	1,058,728
Net decrease in cash	(26,866)	(2,300,635)
Cash at the beginning of the period	548,387	2,849,022
Cash at the end of the period	521,521	548,387

The Company reported working capital (deficit) of (\$1,186,488) as of December 31, 2015 and \$200,210 at December 31, 2014. As of December 31, 2015, the Company had cash of \$521,521 compared to cash of \$548,387 as of December 31, 2014. The decrease of \$26,866 for the year ended December 31, 2015 is the result of a net loss for operational expenses and cash paid for equipment which are offset by proceeds of \$2,588,664 from private placements. The Company anticipates its current cash and cash equivalents will be sufficient to fund operations for the next six months and is currently pursuing additional financing alternatives, including completing another private placement, to fund operations beyond one year.

Current assets excluding cash and cash equivalents at December 31, 2015 consisted of receivables of \$29,057 and prepaid expenses of \$148,076.

Current liabilities at December 31, 2015 consisted of accounts payable and accrued liabilities of \$749,985 and the derivative financial liability of \$1,135,157.

The Company may continue to have capital requirements in excess of its currently available resources. In the event the Company's plans change, its assumptions change or prove inaccurate, or its capital resources in addition to projected cash flow, if any, prove to be insufficient to fund operations, the Company may be required to seek additional financing. There can be no assurance that the Company will have sufficient financing to meet its future capital requirements or that additional financing will be available on terms acceptable to the Company in the future.

In the event the Company's plans change, its assumptions change or prove inaccurate, or its capital resources in addition to projected cash flow, if any, prove to be insufficient to fund operations, the Company may be required to seek additional financing. There can be no assurance that the Company will have sufficient financing to meet its future capital requirements or that additional financing will be available on terms acceptable to the Company in the future.

C. Research and development, patents and licenses

In 2004, the Company entered into a License Agreement with a university under which the university is entitled to receive: (i) 2% of the Company's adjusted gross sales as defined in the License Agreement, and (ii) 2% of the adjusted gross sales of any sublicensee as defined in the License Agreement. The License Agreement gives the Company an exclusive license to a certain United States patent and the related technology for low temperature growth of inorganic materials from solution using catalyzed growth and re-growth.

On September 1, 2009, the Company entered into a sponsored research agreement with Rice University to develop thin films incorporating silicon quantum dots. The initial term of the agreement is one year and the proposed budget is \$100,000. Both the term and the funding could be extended by mutual agreement. As of the date of this filing the agreement has not been extended and no money has been paid to Rice University beyond the original \$100,000.

On December 12, 2011 the Company entered into a Patent License Agreement with the National Renewable Energy Laboratory ("NREL") to use certain licensed patents for technologies for creating a black silicon antireflection layer integrated into high efficiency solar cells. The Company agreed to pay a running royalty of two and one half percent (2.5%) on all Net Sales of Licensed Products (excluding Licensed Chemicals) sold by or on behalf of Licensee. The Company also agreed to pay an annual running royalty of ten percent (10%) of Net Sales of Licensed Chemicals sold by or on behalf of Licensee. Should the running royalty not achieve \$25,000, then the Company would have to pay the difference up to \$25,000. The License Agreement estimates that the Company's estimated contribution is \$100,000 a year. NREL's estimated in-kind contribution is \$50,000, conditioned on available funding. While neither party has an obligation to continue performance of its work at a contribution in excess of the estimated amount, each party shall provide at least thirty days' notice if complete performance will exceed the estimated costs. The License Agreement was amended on July 27, 2012 in order to modify a section of the License pertaining to Licensed Intellectual Property. The modification entailed the specific titles and application numbers of the licensed patents. The License Agreement was further amended on January 30, 2014 to delete and replace Exhibit C, 2) Market Milestones.

The License Agreement gives the Company an exclusive license to the aforementioned patents for the development of a commercial manufacturing process for both multicrystalline and monocrystalline solar cells that combines the Company's passivation technology. All patent license agreements are for the duration of the life of the patent as established by the USPTO when the patent is granted.

The License Agreement is subject to early termination. Either the Company or NREL has the right to terminate the License Agreement with cause and without judicial resolution upon written notice to the other in the case of a breach of the License Agreement. The Company shall provide NREL will sufficient advance funds to maintain approximately 90-day advance of funds during the entire period of work. No work shall begin before the receipt of a sufficient cash-advance. If the Company fails to provide the necessary advance funds is cause for termination by NREL. Further, the License Agreement shall terminate automatically upon a final adjudication of invalidity,

unenforceability, or the extinguishment of all Licensed Patents, for any reason. In addition, NREL may terminate the License Agreement if the Company fails to satisfy the requirements set forth in Exhibit B and C of the License Agreement, attempts to transfer the Company's rights under the License Agreement or the Company becomes a party to a Bankruptcy proceeding. Exhibit B outlines the financial considerations of the License Agreement: specifically concerning the Fields of Use, the Upfront Fee of \$20,000, the Continuous Royalty Rate Structure due by the Company, the Subleasing Royalties due by potential Sub-Licensees, and states the minimum annual payment must be at least \$25,000. Exhibit C outlines the technical and marketing milestones pursuant to this agreement. Specifically, the agreement also outlines certain market milestones for the parties. The first milestone stipulates the achievement of cumulative Net Sales of Licensed Products in excess of \$1 million on or before December 1, 2014. This milestone has not been met by the company. Milestones for cumulative Net Sales of Licensed Products in excess of \$2 million and \$3 million are set for December 1, 2015 and December 1, 2016, respectively. The Company believes, based on conversation with representatives from NREL, that all such milestones are eligible for renegotiation as desired by the Company. The License Agreement shall automatically terminate if the Company attempts to pledge its rights under the License Agreement as collateral to a third party. The Company may terminate the License Agreement upon sixty days prior notice to NREL provided that all outstanding fees, reimbursements and royalties (as detailed in the License Agreement) are satisfied.

In March 2012, the Company opened its Research and Development Center (the "R&D Center") in Rochester, NY. The R&D Center enables Natcore to develop applications based on the company's proprietary liquid phase deposition technology. On June 1, 2013, the Company entered into a new two year lease for its research and development facility in Rochester, New York. The Company will pay a base rent of \$103,596 per year in monthly installments of \$8,633. The lease was set to expire on June 30, 2015. On June 26, 2015, the Company extended the lease from July 1, 2015 to June 30, 2017 at a base rent of \$105,212 per year in monthly installments of \$8,768.

On January 27, 2015, Natcore announced that it had successfully used its proprietary advances in laser technology to produce an all-low-temperature laser-doped solar cell with all of its electrical contacts on the back of the cell. Eliminating the contacts from the cell increases output by a comparable amount. While other all-back-contact cells had been produced, those cells use high-temperature diffusion in their doping steps and highly complex multi-step patterning processes to apply the electrical contacts. The Natcore Foil Cell™, on the other hand, uses only high-speed, inexpensive laser processing to define the doping regions and the contacts.

On February 17, 2015, the Company announced that it had successfully formed a heterojunction solar cell using germanium quantum dots on an ordinary n-type silicon wafer. Quantum-dot solar cells have the potential to be transformational for terrestrial solar energy, with efficiencies far above anything available commercially as of the date of their formation. One month later, Natcore produced an all-back-contact silicon "HIT-structure" (heterojunction with intrinsic thin layer) solar cell using their proprietary laser technology (the "Natcore Foil Cell™"). Silicon HIT-structure cells have been shown to yield record efficiencies. In addition to further increasing cell efficiency relative to industry standards, Natcore's all-back-contact technique could allow production of these high efficiency cells at a low cost.

On July 9, 2015, Natcore developed a new solar cell structure that proposed to simplify the production process, significantly lower costs, and accelerating the path toward ultra high-efficiency cells. Importantly, the new cell structure was expected to completely eliminate high-cost silver from mass-manufactured silicon solar cells. By August 2015 the Company was able to build the Natcore Foil Cell™ in which the use of silver was eliminated. This substitution was accomplished with no loss of performance and a substantial decrease in the metallization cost of a solar cell and total raw material cost of a solar module.

On March 29, 2016, Natcore announced it had achieved commercial level efficiencies for its laser-processed solar cells. Refinement of Natcore's revolutionary Natcore Foil Cell™, which utilizes low-cost aluminum instead of high-cost silver, has progressed rapidly; less than 11 months prior, early proof-of-concept cells were delivering 4% efficiencies. At the time of the announcement, the Company's cells reached efficiencies of 17.5% (roughly the equivalent of typical commercial cells being sold). Natcore's new cell design, which builds upon the basic concept of a silicon heterojunction (SHJ) solar cell, is producing short-circuit currents above 40 mA/cm² and open-circuit voltages above 0.65V. Anticipated improvements in these measurements, as well as fill factor, project to efficiencies well above 20%. To quantify the cost advantages of its process and design for potential partners, Natcore has retained an independent laboratory to prepare an analysis comparing the cost of producing solar cells using Natcore's breakthrough process with that of making cells using existing manufacturing methods.

On November 15, 2016, the Company announced it had achieved an efficiency of 19.4% in its latest demonstration solar cell by reducing resistance from laser-formed contacts. The laser-formed base contact is critical to the Natcore Foil Cell™, which is an all-back-contact cell that eliminates the need for high-cost silver in the production process by replacing it with low-cost aluminum. Higher resistance at this contact, as well as damage from the laser process, had been limiting the performance of the Company's demonstration cells. Natcore scientists discovered a new laser-based contacting process that overcomes these issues. As a result, device efficiency increased by nearly 2% since June 2016 when the Company announced an efficiency of 17.5% (17.5% being roughly equivalent to typical commercial cells available as of that date). In 2015, the Company's early proof-of-concept cells were delivering 4% efficiencies. Solar cells using Natcore's new approach have an open-circuit voltage (Voc) of nearly 0.7V, pointing to the potential of significantly higher efficiencies.

On May 2, 2017, Natcore announced that it had achieved an efficiency of 20.7% in their latest demonstration solar cell.

As of December 31, 2016, the Company had 31 granted patents and 34 patents pending, including but not limited to the following:

Patent 7,999,176 - Expiration date: 5/18/2029

Nanostructured solar cells

Improved photovoltaic devices and methods are disclosed. In one embodiment, an exemplary photovoltaic device includes a semiconductor layer and a light-responsive layer (which can be made, for example, of a semiconductor material) which form a junction, such as a p-n junction. The light-responsive layer can include a plurality of carbon nanostructures, such as carbon nanotubes, located therein. In many cases, the carbon nanostructures can provide a conductive pathway within the light-responsive layer. In other embodiments, exemplary photovoltaic devices include semiconductor nanostructures, which can take a variety of forms, in addition to the carbon nanostructures. Further embodiments include a wide variety of other configurations and features. Methods of fabricating photovoltaic devices are also disclosed.

Patent 8,431,818 - Expiration date: 5/5/2030

Solar cells and photodetectors with semiconducting nanostructures

Improved photovoltaic devices and methods are disclosed. In one embodiment, an exemplary photovoltaic device includes a semiconductor layer and a light-responsive layer (which can be made, for example, of a semiconductor material) which form a junction, such as a p-n junction. The light-responsive layer can include a plurality of carbon nanostructures, such as carbon nanotubes, located therein. In many cases, the carbon nanostructures can provide a conductive pathway within the light-responsive layer. In another embodiment, an exemplary photovoltaic device can include a light-responsive layer made of a semiconductor material in which is embedded a plurality of semiconducting carbon nanostructures (such as p-type single-wall carbon nanotubes). The interfaces between the semiconductor material and the semiconducting carbon nanostructures can form p-n junctions. In yet other embodiments, exemplary photovoltaic devices include semiconductor nanostructures, which can take a variety of forms, in addition to the carbon nanostructures. Further embodiments include a wide variety of other configurations and features. Methods of fabricating photovoltaic devices, as well as nanostructured photodetectors, as also disclosed.

Patent 8,433,417 - Expiration date: 12/12/2029

Carbon nanostructure artificial retinal implant

A retinal implant can include an array of photoreceptors adapted for positioning in the eye. Each photoreceptor can include a core, for example a carbon nanostructure, and a shell. The shell can include a light-responsive layer, and in many cases, the light-responsive layer can be formed of two semiconductor layers forming a heterojunction. The photoreceptors can be adapted to generate an electric field in response to incident light so as to stimulate a retinal neuron in its vicinity. The photoreceptors can be micron-sized or nano-sized, and can be arranged in densities similar to the density of rods and cones in the human eye. In one embodiment, an exemplary sensor for an imaging device can include a plurality of photosensors disposed on a substrate. Each photosensor can include a carbon nanostructure, a light-responsive layer coating at least a portion of the carbon nanostructure.

Patent 7,718,550 - Expiration date: 1/16/2026

Method for Low Temperature Growth of Inorganic Materials from Solution Using Catalytic Growth and Re-growth

The present invention involves a method and apparatus for depositing a silicon oxide onto a substrate from solution at low temperatures in a manner that produces homogeneous growth of the silicon oxide. The method generally comprises the following steps: (a) chemically treating a substrate to activate it for growth of the silicon oxide, (b) immersing the treated substrate into a bath with a reactive solution, (c) regenerating the reactive solution to allow for continued growth of the silicon oxide. In another embodiment of the present invention, the apparatus includes a first container holding a reactive solution, a substrate on which the silicon oxide is deposited, a second container holding silica, and a means for adding silica to the reactive solution

Patent 7,253,014 - Expiration date: 11/19/2023

Fabrication of light emitting film coated fullerenes and their application for in-vivo light emission

A nanoparticle coated with a semiconducting material and a method for making the same. In one embodiment, the method comprises making a semiconductor coated nanoparticle comprising a layer of at least one semiconducting material covering at least a portion of at least one surface of a nanoparticle, comprising: (A) dispersing the nanoparticle under suitable conditions to provide a dispersed nanoparticle; and (B) depositing at least one semiconducting material under suitable conditions onto at least one surface of the dispersed nanoparticle to produce the semiconductor coated nanoparticle. In other embodiments, the nanoparticle comprises a fullerene. Further embodiments include the semiconducting material comprising Cadmium Sulfide (CdS) or Cadmium Selenide (CdSe).

Patent 7,682,527 - Expiration date: 11/19/2023

Fabrication of light emitting film coated fullerenes and their application for in-vivo light emission

A nanoparticle coated with a semiconducting material and a method for making the same. In one embodiment, the method comprises making a semiconductor coated nanoparticle comprising a layer of at least one semiconducting material covering at least a portion of at least one surface of a nanoparticle, comprising: (A) dispersing the nanoparticle under suitable conditions to provide a dispersed nanoparticle; and (B) depositing at least one semiconducting material under suitable conditions onto at least one surface of the dispersed nanoparticle to produce the semiconductor coated nanoparticle. In other embodiments, the nanoparticle comprises a fullerene. Further embodiments include the semiconducting material comprising Cadmium Sulfide (CdS) or Cadmium Selenide (CdSe).

Patent 7,491,376 - Expiration date: 3/5/2027

Chemical derivatization of silica coated fullerenes and use of derivatized silica coated fullerenes

This invention is directed to a new composition of matter in the form of chemically derivatized silica coated fullerenes, including silica coated C.sub.60 molecules and silica coated carbon nanotubes, processes for making the same and to uses for the derivatized silica coated fullerenes. (Derivatization of silica coated fullerenes refers to chemically modifying surface of the silica to have a similar chemical structure but different chemical reactions with specifically chosen reagents.) Included among many uses in chemical, physical or biological fields of use, but not limited thereto, are high speed, low loss electrical interconnects for nanoscale electronic devices, components and circuits. In one embodiment, this invention also provides a method for preparing silica coated fullerenes having substituents attached to the surface of silica coated fullerenes by reacting silica coated fullerenes with a wide range of organic or inorganic chemical species in a gaseous or liquid state. Preferred substituents include but are not limited to organic groups and organic groups containing heteroatoms (i.e. non-carbon atoms) such as oxygen, nitrogen, sulfur, and halogens. The identity of the surface functional group is chosen to provide desirable properties to the silica coated fullerenes including but not limited to solubility, miscibility, stickiness, and melting point. The present invention also describes the application of surface functionalized silica coated fullerenes as components of polymer blends and composites (i.e. the surface is treated with certain substances that allow the silica to react to certain other specific materials).

Patent 7,692,218 - Expiration date: 8/21/2025

Method for creating a functional interface between a nanoparticle, nanotube or nanowire, and a biological molecule or system

A field effect transistor and a method for making the same. In one embodiment, the field effect transistor comprises a source; a drain; a gate; at least one carbon nanotube on the gate; and a dielectric layer that coats the gate and a portion of the at least one carbon nanotube, wherein the at least one carbon nanotube has an exposed portion that is not coated with the dielectric layer, and wherein the exposed portion is functionalized with at least one indicator molecule (i.e. has a specific molecule attached to the nanoparticle that will attach only to certain desired molecules out of a broad mixture of molecules). In other embodiments, the field effect transistor is a biochem-FET.

D. Trend Information

Other than as disclosed elsewhere in this annual report on Form 20-F, the Company is not aware of any trends, uncertainties, demands, commitments or events that are reasonably likely to have a material adverse effect on the Company's net revenues, income, profitability, liquidity or capital resources, or that caused the disclosed financial information to be not necessarily indicative of future operating results or financial conditions.

E. Off-Balance Sheet Arrangements

As at December 31, 2016, the Company had not entered into any off-balance sheet arrangements.

F. Tabular Disclosure of Contractual Obligations

	Payments by periods as of December 31, 2016				
	Total	less than 1 year	1 - 3 years	3 - 5 years	> 5 years
Contractual Obligations:					
Operating lease	\$ 52,608	\$ 52,608			
Contract payments obligations	175,000	50,000	50,000	50,000	25,000
Total	\$ 227,608	\$ 102,608	\$ 50,000	\$ 50,000	\$ 25,000

ITEM 6 - DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

A. Directors and Senior Management

The following is a list of the Company's directors and officers as of December 31, 2016. There are no family relationships between the directors and officers.

Name and Jurisdiction of Residence ⁽¹⁾	Current Positions and Offices Held	Principal Occupations During Last Five Years ⁽¹⁾	Date of Appointment as a Director or Officer	Number of Common Shares ⁽¹⁾
Charles Provini ⁽²⁾ , Florida, USA	Chief Executive Officer, President, Director	President and Chief Executive Officer of the Company and its predecessors from January 2003 to present; President of C.R. Provini & Co. Inc., a private consulting firm from July 1996 to present.	May 8, 2009	1,300,000
Brien Lundin ⁽²⁾ , Louisiana, USA,	Director and Chairman	President of Jefferson Direct, Inc. (private consulting company) from November 2003 to present.	May 8, 2009, as a director and September 30, 2013 as chairman	3,006,223 ⁽³⁾
John Calhoun ⁽²⁾ , Louisiana, USA,	Director	President of Fort Hill Resources LLC (private consulting company) from December 1997 to present.	May 8, 2009	640,900
John Meekison , British Columbia, Canada	Former Director ⁽³⁾	Chief Financial Officer, iCo Therapeutics Inc., a biotech company developing drugs for eye diseases, March 2005 to present;	August 9, 2007	10,000 ⁽⁴⁾
Richard Childs , New Jersey, USA	Chief Financial Officer	Self-employed (forensic accounting practice) from 2001 to present;	November 5, 2015	Nil
Dennis Flood , Ohio, USA	Chief Technology Officer	Chief Technology Officer for the Company from August 2010 to Present; President and CEO of North Coast Initiatives, Ltd. from May 2001 to Present (a private consulting firm providing management and technical services to the photovoltaic (PV) energy conversion industry)	August 17, 2010	985,500 ⁽⁵⁾
Sauna Hartman , British Columbia, Canada	Former Corporate Secretary ⁽⁶⁾	Solicitor at Armstrong Simpson from September 2003 to present.	May 8, 2009	Nil

(1) Does not include options or warrants held by directors and officers of the Company.

(2) Of which 1,906,223 shares are held directly and 1,100,000 shares are held through Jefferson Financial Inc.

(3) Mr. Meekison resigned on May 5, 2017.

(4) All of which shares are indirectly held by Mr. Meekison's spouse.

(5) Of which 15,500 shares are held directly and 970,000 shares are held through North Coast Initiatives Ltd.

(6) Ms. Hartman resigned on March 1, 2017.

There are no loans or debentures due to or from the directors, management, promoters and principal holders of the Company.

As of the date of this annual report, the Company's directors and officers, as a group, owned or had control or direction over, directly or indirectly, 6,711,723 of the Common Shares representing approximately 9.9% of the outstanding Common Shares.

A brief profile of each of the Directors and the senior management is given below:

Charles Provini, *Director, President & Chief Executive Officer*

Mr. Provini holds an Engineering degree from The U.S. Naval Academy in Annapolis, Maryland and a Masters from the University of Oklahoma. Previously, he was the President of Ladenburg Thalmann Asset Management and a Director of Ladenburg Thalmann, Inc., one of the oldest members of the New York Stock Exchange from 11/1997- 10/2000. He served as President of Laidlaw Asset Management as well as Chairman and Chief Investment Officer of Howe & Rusling, Laidlaw's Portfolio Management Advisory Group from 11/1995- 09/1997. Prior to this, he served as President of Rodman & Renshaw's Advisory Services from 02/1994- 08/1995 and President of LaSalle Street Corporation, a wholly-owned subsidiary of Donaldson, Lufkin & Jenrette from 01/1983-04/1985. Mr. Provini has been a leadership instructor at the U.S. Naval Academy, Chairman of the U.S. Naval Academy's Honor Board, and is a former Marine Corp. officer. Mr. Provini has been a director, President and Chief Executive officer of the Company since May 8, 2009.

Brien F. Lundin, *Chairman of the Board*

Brien Lundin has been a director of the Company since May 8, 2009. He was appointed as Chairman of the Board on September 30, 2013. The president/CEO of Jefferson Financial, Inc. since 2003, Mr. Lundin is a marketer, investor and investment banker with experience in financing and advising early-stage technology and natural resource enterprises. Mr. Lundin has been the operator of the New Orleans Investment Conference since 2003. Mr. Lundin is also a director and member of the audit committee for Thunderstruck Resources Ltd. and Sojourn Ventures, Inc

John C. Calhoun, *Director*

Mr. Calhoun has over 20 years of experience in corporate finance. Mr. Calhoun has served as managing director of Fort Hill Resources since 1997, president/director of North American Water from 1998-2004, president/director of Grammercy Investments from 2000-present, president/director of Vignette Publications, treasurer/director of Computer Wholesale Corporation from 1995-2001, and managing director of the Shadows Bend Court long-term care facility from 2001-present. He is the founder/director of FNBC Bank (2005-present), the largest, *De Novo* bank in Louisiana and the founder and managing director of the Suites at Sugar Mill Point and Oak Grove Senior Living (2002-present), long term care facilities. Mr. Calhoun has been a director of the Company since May 8, 2009.

Richard Childs, *Chief Financial Officer*

Mr. Childs has a forensic accounting practice that serves more than 100 lawyers across the United States. He is a member of the American Institute of Certified Public Accountants and the Society of Certified Fraud Examiners, as well as a member of the New Jersey State Society of CPAs. In the private sector, he served for six years as Vice President, Director of Finance and Internal Security for Deak-Perera, the foreign exchange, Swiss banking and precious metals company. In the government sector, he has served as a fraud investigator for the Office of the (NJ) Attorney General; the Supervising Accountant for the Essex County (NJ) Division of Accounts and Control; and, most recently, as the Chief of the Union County (NJ) Sheriff's Department Economic Crime/Inspection Bureau. He has frequently provided expert testimony in economic crime cases in Federal and New Jersey state courts and the New Jersey grand jury. Mr. Childs holds a Bachelor of Science degree in accounting from Rutgers University.

Dennis J. Flood, *Chief Technology Officer*

Dennis Flood, PhD, is a co-founder of and technical consultant to Natcore. He is also President and CEO of North Coast Initiatives, Ltd. (05/2001-present), a consulting firm providing management and technical services to the photovoltaic (PV) energy conversion industry. Dr. Flood has more than 30 years of experience in developing solar cell and array technology. Prior, Dr. Flood was Chief of the Photovoltaic and Space Environments Branch at the NASA Glenn Research Center in Cleveland, Ohio (from 06/1985-06/2000), where he lead Agency programs in advanced photovoltaic systems development. He served as Chair of the Institute of Electrical and Electronics Engineers (IEEE) Photovoltaic Devices Technical Committee from 1998-2005. And he currently serves on the International Advisory Committees of the European, the U.S., the Japan/Asia and the World Photovoltaic Conference organizing committees (from 1992-present).

Arrangements, Understandings, etc.

The Company has no arrangements or understanding with any major shareholders, customers, suppliers or others, pursuant to which any person referred to above, was selected as a director or member of senior management.

B. Compensation

Summary Compensation Table

Years Ended December 31, 2016, 2015, 2014, 2013 and 2012

Name and Principal Position	Period Ended Dec. 31	Non-equity incentive plan compensation							
		Salary (\$) ⁽¹⁾	Share-based awards (\$)	Option-based awards (\$) ⁽²⁾	Annual incentive plans (\$)	Long term incentive plans (\$)	Pension value (\$)	All other compensation (\$)	Total compensation (\$)
Provini Charles	2016	\$ 275,000	Nil	\$ 65,588	Nil	Nil	Nil	\$ 60,000	\$ 400,588
President/Chief Executive Officer ⁽⁶⁾	2015	\$ 275,000	Nil	\$ 102,000	Nil	Nil	Nil	\$ 60,000	\$ 437,000
	2014	\$ 275,000	Nil	Nil	Nil	Nil	Nil	\$ 60,000	\$ 335,000
	2013	\$ 275,000	Nil	Nil	Nil	Nil	Nil	\$ 60,000	\$ 335,000
	2012	\$ 275,000	Nil	Nil	Nil	Nil	Nil	\$ 60,000	\$ 335,000
Richard Childs Chief Financial Officer ⁽⁴⁾	2016	Nil	Nil	Nil	Nil	Nil	Nil	\$ 48,000	\$ 48,000
	2015	Nil	Nil	Nil	Nil	Nil	Nil	\$ 6,000	\$ 6,000
	2014	Nil	Nil	Nil	Nil	Nil	Nil	\$ 3,000	\$ 3,000
	2013	Nil	Nil	Nil	Nil	Nil	Nil	\$ 10,000	\$ 10,000
	2012	\$ 16,000	Nil	Nil	Nil	Nil	Nil	\$ 8,200	\$ 24,200
Brian Zucker ⁽³⁾ Former Chief Financial Officer	2016	\$ 48,000	Nil	\$ 9,404	Nil	Nil	Nil	Nil	\$ 57,404
	2015	\$ 48,000	Nil	Nil	Nil	Nil	Nil	Nil	\$ 48,000
	2014	\$ 48,000	Nil	\$ 18,300	Nil	Nil	Nil	Nil	\$ 66,300
	2013	\$ 48,000	\$ 12,450	Nil	Nil	Nil	Nil	Nil	\$ 60,450
	2012	\$ 48,000	Nil	Nil	Nil	Nil	Nil	Nil	\$ 48,000
John Meekiso ⁽⁵⁾ Former Director ⁽⁷⁾	2016	Nil	Nil	\$ 65,588	Nil	Nil	Nil	Nil	\$ 65,588
	2015	Nil	Nil	\$ 102,000	Nil	Nil	Nil	\$ 40,000	\$ 142,000
	2014	Nil	Nil	Nil	Nil	Nil	Nil	\$ 48,000	\$ 48,000
	2013	Nil	Nil	Nil	Nil	Nil	Nil	\$ 28,000	\$ 28,000
Dennis Flood Chief Technology Officer	2016	\$ 82,500	Nil	Nil	Nil	Nil	Nil	Nil	\$ 90,823
	2015	\$ 82,500	Nil	Nil	Nil	Nil	Nil	Nil	\$ 82,500
	2014	\$ 165,000	Nil	Nil	Nil	Nil	Nil	Nil	\$ 165,000
	2013	\$ 165,000	Nil	Nil	Nil	Nil	Nil	Nil	\$ 165,000
	2012	\$ 123,750	Nil	Nil	Nil	Nil	Nil	Nil	\$ 123,750

- (1) The value of perquisites and benefits, if any, for each Named Executive Officer was less than the lesser of \$50,000 and 10% of the total annual salary and bonus.
- (2) The value of the option-based award was determined using the Black-Scholes option-pricing model.
- (3) Appointed as Chief Financial Officer on April 27, 2012; Resigned as Chief Financial Officer on June 7, 2013. After resignation as CFO, Mr. Zucker continues to perform tax and administrative functions for which he is compensated \$4,000 per month.
- (4) Resigned as Chief Financial Officer on April 27, 2012. After resignation as CFO, Mr. Childs has continued to perform consulting services for the Company, on an as needed basis, specifically in the area of performing due diligence. Mr. Childs was re-appointed as Chief Financial Officer on November 5, 2015.
- (5) Appointed as Chief Financial Officer on June 7, 2013, Resigned as Chief Financial Officer on November 5, 2015. Chief Financial Officer on Certain payments were requested by Mr. Meekison to go to Tanum Holdings of which he is an owner, instead of directly to him.
- (6) Mr. Provini has an employment agreement for \$275,000 per year. He also receives \$60,000 in other compensation for administrative functions performed for NewCyte, which is a subsidiary that gets consolidated in the financial statements.
- (7) Mr. Meekison resigned on May 5, 2017.

The Company has calculated the “grant date fair value” amounts in the ‘Option-based Awards’ column using the Black-Scholes model, a mathematical valuation model that ascribes a value to a stock option based on a number of factors in valuing the option-based awards, including the exercise price of the options, the price of the underlying security on the date the option was granted, and assumptions with respect to the volatility of the price of the underlying security and the risk-free rate of return. Calculating the value of stock options using this methodology is very different from simple “in-the-money” value calculation. Stock options that are well out-of-the-money can still have a significant “grant date fair value” based on a Black-Scholes valuation. Accordingly, caution must be exercised in comparing grant date fair value amounts with cash compensation or an in-the-money option value calculation. The total compensation shown in the last column is total compensation of each NEO reported in the other columns. The value of the in-the-money options currently held by each director (based on share price less option exercise price) is set forth in the ‘Value of Unexercised in-the-money Options’ column of the “Outstanding Share- Based and Option-Based Awards” table below.

Incentive Plan Awards

Outstanding share-based awards and option-based awards

The Plan has been established to attract and retain employees, consultants, officers or directors to the Company and to motivate them to advance the interests of the Company by affording them with the opportunity to acquire an equity interest in the Company. The directors and Compensation Committee of the Company administer the Plan. The Plan provides that the number of Shares issuable under the Plan, together with all of the Company’s other previously established or proposed share compensation arrangements may not exceed 10% of the total number of issued and outstanding shares of the Company. All options expire on a date not later than five years after the date of grant of such option.

The following table sets forth the details of all awards outstanding as at December 31, 2016 including awards granted prior to the most recently completed financial year to the Named Executive Officers (“NEOs”). Values expressed in Canadian (CDN\$).

Name	Option-Based Awards			Share-Based Awards		
	Number of Securities Underlying Unexercised Options (#)	Option Exercise Price (CDNS)	Option Expiration Date	Value of Unexercised In-the-Money Options ¹ (CDNS)	Number of Shares or Units of Shares That Have Not Vested (#)	Market or Payout Value of Share-Based Awards That Have Not Vested (CDNS)
Charles Provini President and CEO	300,000	0.20	December 9, 2021	Nil	Nil	Nil
	350,000	0.40	January 13, 2021	Nil	Nil	Nil
	300,000	0.58	April 30, 2020	Nil	200,000	Nil
Brian Zucker Former CFO	90,000	0.20	December 9, 2021			
	20,000	0.80	January 4, 2018			
	10,000	1.08	January 10, 2019	Nil	Nil	Nil
	10,000	0.75	December 17, 2019			
	10,000	0.40	January 13, 2021			
John Meekison Former Director ⁽²⁾	300,000	0.20	December 9, 2021	Nil	Nil	Nil
	286,500	0.58	April 30, 2020	Nil	Nil	Nil
	325,000	0.40	January 13, 2021			
Dennis Flood Chief Technology Officer	90,000	0.20	December 9, 2021	Nil	Nil	Nil

1. This amount is based on the difference between the market value of the Company's common shares underlying the options as at December 31, 2016, which was \$0.175 and the exercise price of the option.

2. Mr. Meekison resigned as of May 5, 2017.

Value Vested or Earned During the Twelve Months Ended December 31, 2016

Name	Option-based awards – Value vested during the year(1) (\$)	Share-based awards – Value vested during the year (\$)	Non-equity incentive plan compensation – Value earned during the year (\$)
Charles Provini President and CEO	Nil	Nil	Nil
Richard Childs Chief Financial Officer	Nil	Nil	Nil
John Meekison Former Director	Nil	Nil	Nil
Dennis Flood Chief Technology Officer	Nil	Nil	Nil

1. Dollar value that would have been realized if calculated by determining the difference between the market price of the underlying securities at exercise and the exercise or base price of the options under the option-based award on the vesting date.

Option-based Awards Exercised During the Twelve Months Ended December 31, 2016

Name	Securities Acquired on Exercise (#)	Exercise Price \$	Date of Exercise (m/d/y)	Aggregate Value Realized(1) (\$)
Charles Provini President and CEO	Nil	N/A	N/A	0
Richard Childs Chief Financial Officer	Nil	N/A	N/A	0
John Meekison Former Director	13,500 25,000	0.58 0.40	3/30/16 5/17/16	\$945 \$2,500
Dennis Flood Chief Technology Officer	Nil	N/A	N/A	0

1. Calculated using the closing market price of the common shares on the date(s) of exercise less the exercise price of the stock options multiplied by the number of shares acquired.

Option-based Awards Granted During the Twelve Months Ended December 31, 2016

Name	Date of Grant	Number of Option- Based Awards Granted	Exercise Price	Expiry Date (m/d/y)
Charles Provini President and CEO	1/13/16 12/9/16	350,000 300,000	0.40 0.20	01/13/21 12/9/21
Richard Childs Chief Financial Officer	N/A	Nil	Nil	N/A
John Meekison Former Director	01/13/16 12/9/16	350,000 300,000	0.40 0.20	01/13/21 12/9/21
Dennis Flood Chief Technology Officer	12/9/16	90,000	0.20	12/9/21

Pension Plan Benefits

The Company does not have a pension plan that provides for payments or benefits to the Named Executive Officers at, following or in connection with retirement.

Termination of Employment, Change in Responsibilities and Employment Contracts

Other than disclosed below, the Company does not have an employment contract with any of its Named Executive Officers. Each Named Executive Officer devotes a portion of his or her time to the Company and a portion of his or her time to other companies where he or she is a director and/or officer. Accordingly, the Named Executive Officers invoice the Company based on the percentage of time devoted to the Company.

Other than as disclosed below, neither the Company nor any of its subsidiaries have any plan or arrangement with respect to compensation to its executive officers which would result from the resignation, retirement or any other termination of the executive officers' employment with the Company and its subsidiaries or from a change of control of the Company or any subsidiary of the Company or a change in the executive officers' responsibilities following a change in control.

The Company entered into an employment agreement dated April 5, 2012 with Charles Provini ("Employment Agreement") for his services as President and Chief Executive Officer and such other capacities as the board of directors of the Company may designate from time to time. Pursuant to the Employment Agreement, Mr. Provini is paid a base salary of US \$275,000 per year. After the first anniversary of the date of the Employment Agreement, the base salary of US \$275,000 per year may be reviewed periodically and increases in such base salary may be granted at the sole discretion of the Company's board of directors. The Employment Agreement ends on the earliest of two years from the date of the Employment Agreement or any extension thereafter. On April 5, 2014, the employment agreement was extended for an additional three years. Mr. Provini is entitled to certain option grants upon the achievement of certain revenue milestones by the Company. Mr. Provini shall also be entitled to receive options to purchase up to Five Hundred Thousand (500,000) shares of the Company's common stock (the "Stock Options") as follows: He shall receive Stock Options to purchase One Hundred Thousand (100,000) shares of the Company's common stock upon the Company's receipt of One Million Dollars (\$1,000,000) of net revenue during the Term of his employment, and he shall receive Stock Options to purchase One Hundred Thousand (100,000) shares of the Company's common stock for each additional One Million Dollars (\$1,000,000) of net revenue received by the Company during the Term of his employment (up to a maximum of Five Hundred Thousand (500,000) shares of the Company's common stock). Options granted under this incentive plan will be priced at the lowest possible strike price approved by the TSX Venture Exchange at the time of the grant. Mr. Provini may terminate the Employment Agreement at any time upon 30 days' written notice to the Company or immediately for cause. Should the Company terminate the Employment Agreement without cause, it is obligated to pay to Mr. Provini a lump sum payment of an amount equal to three month's base salary, plus one year's benefits. The Employment Agreement contains certain non-competition and non-solicitation provisions during the employment term. For a period of one year following the employment term, Mr. Provini cannot solicit business from current or potential clients or customers of Natcore or induce employees, consultants, etc. of the Company to terminate or not renew with the Company and may not directly or indirectly, engage in any business in the state of New Jersey or any other location in which the Company is then doing business, for the development, sale, service or distribution of process or equipment for the manufacture of solar panels (or any component thereof) or other alternative energy technology products or any similar business that is competitive with the business of the Company or its affiliates, including as a proprietor, principal, agent, partner, officer, director, shareholder, employee, member, consultant or otherwise.

Compensation of Directors

The following table sets forth all amounts of compensation provided to directors who were not NEOs of the Company during the twelve months ended December 31, 2016.

Name	Fees Earned (\$)	Share- Based Awards (\$)	Option- Based Awards (\$)	Non-Equity Incentive Plan Compensation (\$)	Pension Value (\$)	All Other Compensation (\$)	Total Compensation (\$)
John Calhoun	Nil	Nil	\$ 65,588	Nil	Nil	Nil	Nil
Brien Lundin ¹	Nil	Nil	\$ 65,588	Nil	Nil	Nil	Nil

(1) Chairman of the Board

Directors are also eligible to participate in the Plan. Directors are entitled to be reimbursed for expenses incurred by them in their capacity as directors.

Outstanding share-based awards and option-based awards

The following table sets forth information concerning all awards outstanding under share-based or option-based incentive plans of the Company as of December 31, 2016 including awards granted prior to the most recently completed financial year to each of the Directors of the Company who were not Named Executive Officers.

Name	Option-Based Awards				Share-Based Awards	
	Number of Securities Underlying Unexercised Options (#)	Option Exercise Price ¹ (CDN\$)	Option Expiration Date	Value(1) of Unexercised In- The- Money Options ¹ (\$)	Number of Shares or Units of Shares That Have Not Vested (#)	Market or Payout Value ¹ of Share-Based Awards That Have Not Vested (\$)
Brien Lundin	300,000	\$ 0.58	04/30/20	Nil	200,000	Nil
	350,000	\$ 0.40	01/13/21	Nil	Nil	Nil
	300,000	\$ 0.20	12/09/21	Nil	Nil	Nil
John Calhoun	300,000	\$ 0.58	04/30/20	Nil	200,000	Nil
	350,000	\$ 0.40	01/13/21	Nil	Nil	Nil
	300,000	\$ 0.20	12/09/21	Nil	Nil	Nil

1. This amount is based on the difference between the market value of the Company's common shares underlying the options as at December 31, 2016, which was \$0.175, and the exercise price of the option.

Value Vested or Earned During the Twelve Months Ended December 31, 2016

Name	Option-based awards – Value vested during the year ¹ (\$)	Share-based awards – Value vested during the year (\$)	Non-equity incentive plan compensation – Value earned during the year (\$)
Brien Lundin	Nil	Nil	Nil
John Calhoun	Nil	Nil	Nil

- Dollar value that would have been realized if calculated by determining the difference between the market price of the underlying securities at exercise and the exercise or base price of the options under the option-based award on the vesting date.

Option-based Awards Exercised During the Twelve Months Ended December 31, 2016

Name	Securities Acquired on Exercise (#)	Exercise Price	Date of Exercise (m/d/y)	Aggregate Value Realized ¹ (\$)
John Calhoun	Nil	N/A	N/A	0
Brien Lundin	Nil	N/A	N/A	0

- Calculated using the closing market price of the common shares on the date(s) of exercise less the exercise price of the stock options multiplied by the number of shares acquired.

Option-based Awards Granted During the Twelve Months Ended December 31, 2016

Name	Date of Grant	Number of Option-Based Awards Granted	Exercise Price	Expiry Date (m/d/y)
Brien Lundin	01/13/16	350,000	CDN\$0.40	01/13/21
	12/9/21	300,000	CDN\$0.20	12/9/16
John Calhoun	01/13/16	350,000	CDN\$0.40	01/13/21
	12/9/16	300,000	CDN\$0.20	12/9/21

Securities Authorized for Issuance Under Equity Compensation Plans

The only equity compensation plan that the Company has in place is its stock option plan (the “Plan”), which was previously adopted by the Company. As of December 31, 2016 the Stock Option Plan reserves a maximum of 10,520,000 Common Shares for issuance upon the exercise of options. Options granted under the Stock Option Plan will comply with the rules and regulations of the Exchange regarding share incentive arrangements.

The purpose of the Stock Option Plan is to attract and retain employees, consultants, officers and directors to the Company and to motivate them to advance the interests of the Company by affording them with the opportunity, through share options, to acquire an equity interest in the Company and benefit from its growth. The Stock Option Plan authorizes the Board to grant, in its absolute discretion, stock options to directors, officers, employees or consultants on such terms, limitations, conditions and restrictions, as it deems necessary and advisable, subject to terms of the Plan and regulatory and TSX Venture Exchange approval.

E equity Compensation Plan Information as of December 31, 2016

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by security holders	7,460,000 common shares	CDN\$0.46	3,060,000 common shares
Equity compensation plans not approved by security holders	N/A	N/A	N/A
Total	7,460,000 common shares	CDN\$0.46	3,060,000 common shares

C. Board Practices

Terms of Directors and Executive Officers

The Company's officers are appointed by and serve at the discretion of the board of directors. The current directors have not been elected to serve for a specific term and, unless re-elected, hold office until the close of the Company's next annual meeting of shareholders or until such time as their successors are elected or appointed.

Committees of the Board of Directors

Audit Committee

Item 306 of Regulation S-K requires the Company's audit committee (in this section the "Audit Committee") to meet certain requirements. It also requires the Company to disclose in this Management section certain information regarding the Audit Committee. That information is disclosed below.

Overview

The Audit Committee is principally responsible for:

- i. recommending to the Board the external audit or to be nominated for election by the shareholders at each annual general meeting and negotiating the compensation of such external auditor,
- ii. overseeing the work of the external auditor,
- iii. reviewing the Company's annual and interim financial statements, MD&A and press releases regarding earnings before they are reviewed and approved by the Board and publicly disseminated by the Company, and
- iv. reviewing the Company's financial reporting procedures and internal controls to ensure adequate procedures are in place for the Company's public disclosure of financial information extracted or derived from its financial statements, other than disclosure described in the previous paragraph.

The Audit Committee's Charter

The Audit Committee has various responsibilities as set forth in Item 306 of Regulation S-K. The Board has adopted a Charter for the Audit Committee which sets out the Audit Committee's mandate, organization, powers and responsibilities. The complete Charter is below:

Purpose of the Committee

The Audit Committee represents the Board in discharging its responsibility relating to the accounting, reporting and financial practices of the Company and its subsidiaries, and has general responsibility for oversight of internal controls, accounting and auditing activities, and legal compliance of the Company and its subsidiaries.

Members of the Committee

The Audit Committee shall consist of no less than three Directors a majority of whom shall be "independent" as defined under Exchange Act Rule 10A-3, while the Company is in the developmental stage of its business. The members of the Committee shall be selected annually by the Board and shall serve at the pleasure of the Board.

At least one Member of the Audit Committee must be "financially literate" as defined under Canadian private placement law, National Instrument 52-110, having sufficient accounting or related financial management expertise to read and understand a set of financial statements, including the related notes, that present a breadth and level of complexity of the accounting issues that are generally comparable to the breadth and complexity of the issues that can reasonably be expected to be raised by the Company's financial statements.

Meeting Requirements/Quorum

The Committee will, where possible, meet on a regular basis at least once every quarter, and will hold special meetings as it deems necessary or appropriate. Meetings may be held in person or telephonically, and shall be at such times and places as the Committee determines. Without meeting, the Committee may act by unanimous written consent of all members, which shall constitute a meeting for the purposes of this charter.

A majority of the members of the Committee shall constitute a quorum.

Duties and Responsibilities

The Audit Committee's function is one of oversight only and shall not relieve the Company's management of its responsibilities for preparing financial statements that accurately and fairly present the Company's financial results and conditions or the responsibilities of the external auditors relating to the auditor review of financial statements. Specifically, the Audit Committee will:

- (a) have the authority with respect to the appointment, retention or discharge of the independent public accountants as auditors of the Company (the "Auditors") who perform the annual audit in accordance with applicable securities laws, and who shall be ultimately accountable to the Board through the Audit Committee;
- (b) review with the Auditors the scope of the audit and the results of the annual audit examination by the auditors, including any reports of the auditors prepared in connection with the annual audit;
- (c) review information, including written statements from the Auditors, concerning any relationships between the Auditors and the Company, or any other relationships that may adversely affect the independence of the Auditors and assess the independence of the Auditors;
- (d) review and discuss with management and the Auditors the Company's audited financial statements and accompanying Management's Discussion and Analysis of Financial Conditions ("MD&A"), including a discussion with the Auditors of their judgments as to the quality of the Company's accounting principles and report on them to the Board;
- (e) review and discuss with management the Company's interim financial statements and interim MD&A and report on them to the Board;
- (f) pre-approve all auditing services and non-audit services provided to the Company by the Auditors to the extent and in the manner required by applicable law or regulation. In no circumstances shall the Auditors provide any non-audit services to the Company that are prohibited by applicable law or regulation;

- (g) evaluate the external Auditor's performance for the preceding fiscal year, reviewing their fees and making recommendations to the Board;
- (h) periodically review the adequacy of the Company's internal controls and ensure that such internal controls are effective;
- (i) review changes in the accounting policies of the Company and accounting and financial reporting proposals that are provided by the Auditors that may have a significant impact on the Company's financial reports, and report on them to the Board;
- (j) oversee and annually review the Company's Code of Business Conduct and Ethics;
- (k) approve material contracts where the Board of Directors determines that it has a conflict;
- (l) establish procedures for the receipt, retention and treatment of complaints received by the Company regarding the audit or other accounting matters;
- (m) where unanimously considered necessary by the Audit Committee, engage independent counsel and/or other advisors at the Company's expense to advise on material issues affecting the Company which the Audit Committee considers are not appropriate for the full Board;
- (n) satisfy itself that management has put into place procedures that facilitate compliance with the provisions of applicable securities laws and regulation relating to insider trading, continuous disclosure and financial reporting;
- (o) review and monitor all related party transactions which may be entered into by the Company; and
- (p) periodically review the adequacy of its charter and recommending any changes thereto to the Board.

Miscellaneous

Nothing contained in the Charter is intended to extend applicable standards of liability under statutory or regulatory requirements for the directors of the Company or members of the Committee. The purposes and responsibilities outlined in the Charter are meant to serve as guidelines rather than as in flexible rules and the Committee is encouraged to adopt such additional procedures and standards as it deems necessary from time to time to fulfill its responsibilities.

Composition of the Audit Committee

The Audit Committee consists of three directors. Unless a company is a 'venture issuer' (an issuer the securities of which are not listed or quoted on any of the TSX Venture Exchange, a market in the United States of America other than the over-the-counter market, or a market outside of Canada and the U.S.A.) as of the end of its last financial year, Exchange Act Rule 10A-3 requires each of the members of the Committee to be independent and financially literate. Since the Company is a 'venture issuer' (its securities are listed on the TSX Venture Exchange, but are not listed or quoted on any other exchange or market) it is exempt from this requirement. In addition, the Company's governing corporate legislation requires the Company to have an Audit Committee composed of a minimum of three directors, a majority of whom are not officers or employees of the Company.

As noted above, the members of the audit committee are Charles Provini, John Calhoun and Brien Lundin. All of the members of the Audit Committee are considered independent, with the exception of Mr. Provini, who is a member of management. All members are considered financially literate.

A member of the audit committee is *independent* if the member has no direct or indirect material relationship with the Company. A material relationship means a relationship that could, in the view of the Company's board of directors, reasonably interfere with the exercise of a member's independent judgment.

A member of the audit committee is considered *financially literate* if he or she has the ability to read and understand a set of financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of the issues that can reasonably be expected to be raised by the Company.

There are no other management functions of the Company, which are to any substantial degree performed by a person or company other than the directors or senior officers of the Company.

Pursuant to the provisions of the *Business Corporations Act* of British Columbia, the Company is required to have an audit committee, which at the present time, is comprised of Charles Provini, John Calhoun and Brien Lundin. For additional information regarding the Company's Audit Committee, please see below. The Company does not have an executive committee.

As at the date of this Information Management section and within the ten years before the date of this Information Management section, no proposed director:

(a) is or has been a director or executive officer of any company (including the Company), that while that person was acting in that capacity:

- was the subject of a cease trade order or similar order or an order that denied the relevant company access to any exemption under securities legislation, for a period of more than 30 consecutive days;
- was subject to an event that resulted, after the director or executive officer ceased to be a director or executive officer, in the company being the subject of a cease trade or similar order or an order that denied the relevant company access to any exemption under securities legislation, for a period of more than 30 consecutive days;
- within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets; or

(b) has within 10 years before the date of the Information Management section became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold the assets of the director, officers or shareholders.

D. Employees

The number of full-time employees as of each of last three fiscal years is as follows:

	December 31, 2016	December 31, 2015	December 31, 2014
Research Employees	6	5	6
Administrative Employees	7	7	8

The Company's employees are not governed by a collective agreement. The Company has not experienced a work stoppage and believe the Company's employee relations are satisfactory.

The nature of the Company's business requires the recruitment and retention of a highly educated and skilled workforce, including highly qualified management, scientific and manufacturing personnel for innovation, research and development. Typically a high proportion of the Company's employees have a Bachelor's degree or higher. For each of the last three fiscal years, most of the employees of the Company were employed at the Company's office in New York.

E. Share Ownership

(a) The direct and indirect shareholdings of the Company's Directors and Officers as at March 31, 2017 were as follows:

Name and Municipality of Principal Residence	Positions held with the Issuer	Number of Common Shares, Options and Warrants
Charles Provini , Delray Beach, Florida, USA	Director, President and CEO	1,300,000 ⁽¹⁾ common shares, 950,000 options
John Meekison , Vancouver, B.C., Canada	Former Director ⁽²⁾	10,000 ⁽³⁾ common shares, 950,000 options
Brien Lundin , Metairie, LA, USA	Director	3,006,223 ⁽⁴⁾ common shares, 950,000 options
John Calhoun , New Orleans, LA, USA	Director	640,900 common shares, and 911,500 options
Dennis Flood , Columbus, OH, USA	Chief Technology Officer	985,500 common shares, 90,000 options

- (1) All of the shares held by the Directors are voting common shares and do not have any different voting or other rights than the other outstanding common shares of the Company.
- (2) Mr. Meekison resigned on May 5, 2017.
- (3) As of the date of this annual report, the Company's directors and officers, as a group, owned or had control or direction over, directly or indirectly, 5,942,623 of the Common Shares representing approximately 10.09% of the outstanding Common Shares.
- (4) The information as to shares beneficially owned or controlled or directed, not being within the knowledge of the Company, has been furnished by the respective directors and officers individually.

(b) Share purchase options outstanding as of March 31, 2017

See Item 6.B of this annual report.

ITEM 7 - MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

A. Major Shareholders

Please refer to "Item 6. Directors, Senior Management and Employees—E. Share Ownership."

B. Related Party Transactions

The Company has an agreement (the "Employment Agreement") dated October 1, 2007, and amended July 31, 2008, with Mr. Charles Provini under which the Company pays a fee for employee services at a base salary of \$220,000 per annum. On April 30, 2010, the Board of Directors passed a resolution to increase this to \$250,000 per annum and on May 13, 2011 the Board of Directors passed a resolution to increase this to \$275,000 per annum. The Company was not obligated to commence payments until the Company raised at least \$1,000,000, which occurred during the year ended December 31, 2009. Mr. Provini is entitled to receive options under the terms and conditions of the Company's stock option plan. Mr. Provini will serve as the President and Chief Executive Officer of the Company. On April 5, 2012, the employment agreement was extended for an additional two years under the same terms. On April 5, 2014, the agreement was extended for an additional three years under the same terms.

Mr. Provini has the right, upon 30 days' notice, to terminate the Employment Agreement. The Company may terminate the Employment Agreement on 10 days' notice if for cause or on 30 days' notice if without cause. Should the Company terminate the contract without cause, it is obligated to pay Mr. Provini an amount equal to three months base salary.

In addition to his employment agreement, Mr. Provini, receives \$60,000 per year for various administrative functions performed for the NewCyte subsidiary which is consolidated in the financial statements.

On November 5, 2015, the Company entered into a consulting agreement with Mr. Richard Childs under which the Company pays a fee for consulting services in relation to Mr. Child's appointment as Chief Financial Officer of the Company at a rate of \$4,000 per month. The consulting agreement has a three-month term, extendable by the parties. Either party has the right to terminate the agreement on 30 days' notice unless there is a material breach, in which case the agreement is able to be terminated on seven days' notice.

Mr. Brian Zucker personally received a salary of \$48,000 for the year 2012 and 2013. On May 8, 2009, Mr. Zucker bought 50,000 shares of common stock at CDN\$0.40 through the exercise of stock options. After his resignation as CFO, Mr. Zucker continues to perform tax and administrative functions for which he receives annual compensation of \$48,000.

Finally, each of Charles Provini, President, Chief Executive Officer and a director of the Company and Brien Lundin and John Calhoun, directors of the Company participated in the acquisition of shareholders of Natcore US and Brien Lundin participated in the concurrent as well as the recent private financing as a subscriber for units. Natcore (Canadian parent company) used to be called Syracuse Capital Corp. and was a capital pool company on the TSX Venture Exchange.

On May 8, 2009, Syracuse Capital Corp. acquired all of the shares of Natcore Technology, Inc. (the Delaware now subsidiary company). At the time, each of John Calhoun, Brien Lundin and Charles Provini were shareholders, either directly or indirectly, of the Delaware Company and received consideration from Natcore parent.

John Calhoun (as the controlling shareholder of Fort Hill Resources Inc.) held 1,000,000 shares of the Delaware company and received in consideration therefore 1,100,000 Natcore parent shares (at a deemed price of CDN\$0.40 per share). Mr. Calhoun had also held at the time warrants to acquire shares in the Delaware company (225,000 to be specific) which were exchanged for 247,500 warrants of Natcore parent. The warrants were exercisable at CDN\$0.40 per share and were all exercised on May 5, 2014.

Brien Lundin held 926,112 shares of the Delaware company directly and a further 1,000,000 shares through Jefferson Direct, LLC. As a result, he received 1,018,723 common shares of Natcore parent directly and 1,100,000 common shares of Natcore parent indirectly through Jefferson (at a deemed price of CDN\$0.40 per share). Mr. Lundin had also held at the time warrants to acquire shares in the Delaware company (225,000 to be specific) which were exchanged for 247,500 warrants of Natcore parent. The warrants were exercisable at CDN\$0.40 per share and were all exercised on May 2, 2014.

Charles Provini (as the controlling shareholder of Hawk Partnership LP) held 1,050,000 shares of the Delaware company which were exchanged for 1,155,000 common shares of Natcore parent (at a deemed price of CDN\$0.40 per share). Mr. Provini had also held at the time warrants to acquire shares in the Delaware company (225,000 to be specific) which were exchanged for 247,500 warrants of Natcore parent. The warrants were exercisable at CDN\$0.40 per share and were all exercised on May 7, 2014. Since that time, neither Mr. Provini nor Mr. Calhoun have subscribed for shares in a Natcore placement. Mr. Lundin, however, has bought in Natcore private placements as follows:

On May 9, 2009 – as part of a financing completed in conjunction with the ‘Qualifying Transaction’ noted above – Mr. Lundin, in his individual capacity, purchased 300,000 units of Natcore parent at a price of CDN\$0.40 per unit. This entitled him to 300,000 shares and 300,000 warrants exercisable until May 9, 2011 at a price of CDN\$0.75 per share. The warrants were exercised on April 11, 2014.

On December 22, 2010, Mr. Lundin, in his individual capacity, bought 40,000 units of Natcore (at a price of CDN\$0.75 per unit). This entitled him to 40,000 shares and 20,000 warrants (exercisable until December 22, 2015 at a price of \$1.00 per share – originally the expiry date was December 22, 2013, but the Company extended the term of all the then outstanding warrants in that batch to December 22, 2015). The warrants are still outstanding as of the date of this filing.

Pursuant to the Company’s Form F-1 registration statement filed with the SEC on August 31, 2015, the Company registered 325,000 shares of Common Stock issued to LoPresti Law Group, P.C. (“LLG”) in exchange for the provision of legal services rendered in preparation of the aforementioned registration statement. On June 22, 2016, pursuant to a Form F-1 registration statement filed with the SEC the Company registered 400,000 shares of Common Stock to LLG in exchange for legal services rendered.

Related Party Balances

As of December 31, 2016 and 2015 there was \$318,685 and \$204,060, respectively, owed to directors, officers, and companies controlled by directors that has been included in trade payables and accrued liabilities.

Key Management Personnel Compensation

	Year Ended December 31, 2016	Year Ended December 31, 2015	Year Ended December 31, 2014
Administrative fees	\$ 60,000	\$ 60,000	\$ 60,000
Consulting	48,000	100,200	108,000
Wages and benefits	587,041	558,230	558,500
Stock-based compensation	933,616	239,875	38,222
	1,628,657	\$ 958,305	\$ 764,722

C. Interests of Experts and Counsel

Not Applicable.

ITEM 8 - FINANCIAL INFORMATION

A. Consolidated Statements and Other Financial Information

This annual report contains the audited Consolidated Financial Statements which comprise the consolidated statements of: financial position as at December 31, 2016, December 31, 2015 and December 31, 2014, the consolidated statements of profit or loss and other comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the years ended December 31, 2016, December 31, 2015 and December 31, 2014.

Reference is made to the financial statements filed as part of this annual report on pages F1–F26.

Dividend Policy

Natcore has never paid cash dividends on its common shares and does not anticipate paying cash dividends in the foreseeable future.

Legal Proceedings and Regulatory Actions

The Company is not currently involved in any litigation believed to be material to the development of the Company's business objectives. To the best of the Company's knowledge, no litigation is pending or threatened.

During the twelve-month period ended December 31, 2016, there were no (i) penalties or sanctions imposed against the Company by a court relating to securities legislation or by a securities regulatory authority; (ii) penalties or sanctions imposed by a court or regulatory body against the Company that would likely be considered important to a reasonable investor in making an investment decision, or (iii) settlement agreements the Company entered into before a court relating to securities legislation or with a securities regulatory authority.

B. Significant Changes

The Company has not experienced any significant changes since the date of the financial statements included with this annual report except as disclosed in this annual report.

ITEM 9 - THE OFFERING AND LISTING

A. Offering and Listing Details

The Company's common stock is quoted on the TSX Venture Exchange under the ticker symbol "NXT" and on the OTCQB® marketplace under symbol "NTCXF."

Trading Price and Volume

The high and low market prices expressed in Canadian dollar on the TSX Venture Exchange for the Company's common shares for the last five financial years, for the last six months, and each quarter for the last three fiscal years:

TSX Venture Exchange
(Canadian Dollars)

Last Six Months	High	Low
April 2017	0.26	0.19
March 2017	0.26	0.19
February 2017	0.37	0.19
January 2017	0.47	0.17
December 2016	0.24	0.15
November 2016	0.32	0.19
2016	High	Low
Fourth Quarter ended December 31, 2016	0.34	0.14
Third Quarter ended September 30, 2016	0.54	0.24
Second Quarter ended June 30, 2016	0.66	0.39
First Quarter ended March 31, 2016	0.69	0.36
2015	High	Low
Fourth Quarter ended December 31, 2015	0.6	0.3
Third Quarter ended September 30, 2015	0.8	0.44
Second Quarter ended June 30, 2015	0.83	0.48
First Quarter ended March 31, 2015	0.91	0.43
2014	High	Low
Fourth Quarter ended December 31, 2014	0.74	0.43
Third Quarter ended September 30, 2014	0.96	0.56
Second Quarter ended June 30, 2014	1.03	0.72
First Quarter ended March 31, 2014	1.21	0.84
2013	High	Low
Fourth Quarter ended December 31, 2013	1.39	0.71
Third Quarter ended September 30, 2013	0.85	0.55
Second Quarter ended June 30, 2013	0.95	0.6
First Quarter ended March 31, 2013	1.16	0.77
Last Five Fiscal Years	High	Low
2016	0.69	0.14
2015	0.91	0.30
2014	1.21	0.43
2013	1.39	0.55
2012	1.63	0.36

ITEM 10 - ADDITIONAL INFORMATION

A. Share Capital

Not Applicable.

B. Articles and By-laws

The Company incorporates by reference into this annual report the description of its Articles and By-laws, contained in its F-1 registration statement (File No. 333-206666), as amended, initially filed with the SEC on August 31, 2015.

C. Material Contracts

Below is a description of material contracts the Company entered into in the two years preceding the date of this annual report other than contracts entered into in the ordinary course of business and other than contracts described in “Item 4. Information on the Company,” “Item 5. Operating and Financial Review and Prospects” or elsewhere in this annual report on Form 20-F:

(a) Cooperative Joint Venture Contract between Zhuzhou Hexing Industrial Company and Natcore Asia Technology, Limited dated September 21, 2010 providing the terms of and conditions of the joint venture.

(b) Registration Rights Agreement between Natcore and Dutchess dated August 21, 2015 providing Dutchess with registration rights for the shares of common stock sold pursuant to the Investment Agreement.

D. Exchange Controls

Canada has no system of currency exchange controls. There are no governmental laws, decrees or regulations in Canada that restrict the export or import of capital, including but not limited to, foreign exchange controls, or that affect the remittance of dividends, interest or other payments to non-resident holders of the Company’s securities.

E. Taxation

The following description is not intended to constitute a complete analysis of all tax consequences relating to the acquisition, ownership and disposition of Natcore common shares. Investors should consult his or her own tax advisor concerning the tax consequences of the investor’s particular situation, as well as any tax consequences that may arise under the laws of any state, local, foreign or other taxing jurisdiction.

Canadian Income Taxation

The following is a general discussion of all material Canadian federal income tax consequences under current law, generally applicable to U.S. Holders (as defined below) in respect of purchasing, owning and disposition of Natcore common shares. This discussion is not a complete analysis or listing of all of the possible Canadian federal income tax consequences and does not address all tax considerations that may be relevant to investors in light of their particular circumstances.

This summary applies only to U.S. Holders who at all times for the purposes of the Income Tax Act (Canada) (the “Tax Act”) is a non-resident of Canada, does not hold his shares in the course of carrying on a business in Canada, holds his common shares as capital property and deals at arm’s length with the Company and is restricted to such circumstances. In addition, the summary does not describe all of the Canadian federal income tax consequences that may be relevant to U.S. Holders subject to special rules, such as:

- Bank and other financial institutions,
- Insurance companies,
- Traders and dealers in securities, or
- Tax-exempt organizations or entities.

This summary is based on the current provisions of the Tax Act and the regulations there under, all specific proposals to amend the Tax Act and the regulations there under publicly announced by or on behalf of the Minister of Finance (Canada) prior to the date hereof (the “Proposed Amendments”), and the current published administrative practices and assessing policies of the Canada Revenue Agency.

This summary assumes that the Proposed Amendments will be enacted as currently proposed, although no assurance can be given that the Proposed Amendments will be enacted in the form proposed or at all. Except for the Proposed Amendments, this summary does not take into account nor anticipate any changes in law or administrative practice, whether by judicial, legislative, governmental or administrative decisions or action, nor does it take into account any provincial, territorial or foreign tax considerations, which may differ significantly from the Canadian federal income tax considerations discussed herein.

This summary is not and is not intended to be, nor should it be construed to be, legal or tax advice to any particular U.S. Holder. Prospective U.S. Holders should consult their own tax advisors regarding the Canadian tax consequences to them of purchasing, owning and disposing of common shares in their particular circumstances.

Dividends

A U.S. Holder will be subject to Canadian withholding tax (“Part XIII Tax”) equal to 25%, or such lower rate as may be available under a tax treaty, of the gross amount of any dividend paid or deemed to be paid on the common shares. Under the Canada-U.S. Income Tax Convention (1980) (the “Treaty”) the rate of Part XIII Tax applicable to a dividend on common shares paid to a U.S. Holder who is a resident of the United States and a “qualifying person” for purposes of the Treaty is reduced from the 25% rate. Under the Treaty, the Company will be required to withhold Part XIII Tax at a rate of 15% from each dividend so paid and will be required to remit the amount withheld directly to the Receiver General of Canada on behalf of the U.S. Holder. The 15% rate is further reduced to 5% if the Holder is a company owning at least 10% of the voting shares of the Company.

Disposition of Common Shares

A U.S. Holder who disposes of a common share, including a deemed disposition on death, will not be subject to Canadian tax on any capital gain (or capital loss) thereby realized unless the common share constitutes “taxable Canadian property” as defined by the Act. Generally, a common share will not constitute taxable Canadian property of a U.S. Holder unless the U.S. Holder held the common shares as property used by the U.S. Holder in carrying on a business in Canada, or at any time within 60 months preceding the disposition, 25% or more of the issued shares of any class of stock of the Company were owned by or belonged to the U.S. Holder, persons with whom the U.S. Holder did not deal at arm’s length and/or partnerships in which the U.S. Holder and non-arm’s length persons held a membership interest, and more than 50% of the value of the common share is derived from real property situated in Canada, Canadian resource properties, timber resource properties or any option or interest in respect of such property.

A U.S. Holder who is a resident of the United States and realizes a capital gain on the disposition of a common share that is taxable Canadian property will nevertheless, by virtue of the Treaty, generally be exempt from Canadian tax thereon unless (a) more than 50% of the value of the common share is derived from real property situated in Canada (including any option or similar right in respect thereof), rights to explore for or exploit Canadian mineral deposits, sources and other natural resources and rights to amounts computed by reference to the amount or value of production from such resources, (b) the common share formed part of the business property of a permanent establishment that the U.S. Holder has or had in Canada within the 12 months preceding the disposition, or (c) the Holder (i) is an individual who was a resident of Canada at any time within the ten years immediately preceding, and for a total of 120 months during the 20 years preceding the disposition, (ii) owned the common share when the individual ceased to be resident in Canada, and (iii) was not a property that the individual was deemed to have disposed of when the individual ceased to be a resident of Canada and became a resident of the United States.

A Holder who is subject to Canadian tax in respect of a capital gain realized on disposition of a common share must include one half of the capital gain (taxable capital gain) in computing the Holder’s taxable income earned in Canada. This Holder may, subject to certain limitations, deduct one half of any capital loss (allowable capital loss) arising on the disposition of other taxable Canadian property (other than treaty protected property) realized in the year of disposition and may deduct the capital loss (after taking into account any difference in inclusion rates between the particular year and year of disposition) realized in any preceding year or any of the three subsequent years from dispositions of other taxable Canadian property (other than treaty protected property) to the extent the capital loss was not deducted in any other year.

United States Federal Income Taxation

The following discussion sets forth the material U.S. federal income tax consequences to U.S. Holders (as defined below) of purchasing, owning, and disposing of common shares as of the date hereof. This discussion is not a complete analysis or listing of all of the possible tax consequences and does not address all tax considerations that may be relevant to investors in light of their particular circumstances. This summary applies only to U.S. Holders that hold common shares as capital assets for U.S. federal income tax purposes (generally, property held for investment), and it does not describe all of the U.S. federal income tax consequences that may be relevant to U.S. Holders subject to special rules, such as:

1. banks and other financial institutions;
2. insurance companies;
3. regulated investment companies;
4. real estate investment trusts;
5. dealers and traders in securities that use mark-to-market accounting for U.S. federal income tax purposes;
6. U.S. Holders holding common shares as part of a hedging transaction, straddle, conversion transaction or other integrated transaction;

7. U.S. Holders whose functional currency for U.S. federal income tax purposes is not the U.S. dollar;
8. U.S. Holders liable for the alternative minimum tax;
9. tax-exempt organizations or entities, including an “individual retirement account” or “Roth IRA” as defined in Section 408 or 408A of the Code, respectively;
10. U.S. Holders that received the common shares as compensation for the performance of services;
11. U.S. Holders holding common shares that own or are deemed to own 10% or more of the voting shares of the Company; or
12. former citizens and residents of the United States subject to tax as expatriates.

This summary is based on the Internal Revenue Code of 1986, as amended (the “Code”), administrative pronouncements, judicial decisions and final, temporary and proposed Treasury regulations, all as currently in effect and available. These authorities are subject to change, possibly with retroactive effect. U.S. Holders should consult their own tax advisers concerning the U.S. federal, state, local, and foreign tax consequences of purchasing, owning and disposing of common shares in their particular circumstances.

For purposes of this summary, a “U.S. Holder” is a beneficial owner of common shares who is, for U.S. federal income tax purposes:

1. a citizen or individual resident of the United States;
2. a corporation, or other entity taxable as a corporation for U.S. federal income tax purposes, created or organized in or under the laws of the United States, any state thereof or the District of Columbia;
3. an estate, the income of which is subject to U.S. federal income taxation regardless of its source; or
4. a trust that (1) is subject to the primary supervision of a U.S. court and one or more U.S. persons that have the authority to control all substantial decisions of the trust or (2) has a valid election in effect under applicable Treasury regulations to be treated as a U.S. person.

If a partnership (or other entity treated as a partnership for U.S. federal income tax purposes) holds the common shares, the tax treatment of a partner in such partnership generally will depend upon the status of the partner and upon the activities of the partnership. Prospective investors who are partners in a partnership should consult their tax advisers as to the particular U.S. federal income tax consequences of purchasing, owning and disposing of common shares in their particular circumstances.

This summary does not address the U.S. federal estate and gift, state, local or non-U.S. tax consequences to U.S. Holders of purchasing, owning, and disposing of common shares. Prospective investors should consult their own tax advisors regarding the U.S. federal, state and local, as well as non-U.S. income and other tax consequences of purchasing, owning and disposing of common shares in their particular circumstances.

Taxation of distributions

Distributions paid on common shares will be treated as dividends to the extent paid out of the Company’s current or accumulated earnings and profits (as determined under U.S. federal income tax principles). Such dividends paid to a U.S. Holder with respect to common shares generally will be taxable as ordinary income at the time of receipt by a U.S. Holder. Distributions in excess of the Company’s current and accumulated earnings and profits will be treated first as a non-taxable return of capital, thereby reducing such U.S. Holder’s adjusted tax basis in common shares (but not below zero), and thereafter as either long-term or short-term capital gain depending upon whether the U.S. Holder has held common shares for more than one year as of the time such distribution is received. Because the Company does not maintain calculations of its earnings and profits under U.S. federal income tax principles, it is expected that distributions generally will be reported to U.S. Holders as dividends. Distributions of additional common shares to U.S. Holders that are part of a pro rata distribution to all of the Company’s shareholders generally will not be subject to U.S. federal income tax. The amount of any distribution of property other than cash will be the fair market value of such property on the date of distribution. As used below, the term “dividend” means a distribution that constitutes a dividend for U.S. federal income tax purposes.

With respect to non-corporate U.S. Holders, dividends received may be subject to reduced rates of taxation provided that the Company’s common shares are readily tradable on a qualifying U.S. securities market and that (i) such U.S. Holder holds such common shares for 61 days or more during the 121-day period beginning on the date which is 60 days before the date on which such shares become ex-dividend with respect to such dividends and (ii) the U.S. Holder is not under an obligation (whether pursuant to a short sale or otherwise) to make related payments with respect to existing or substantially similar or related property. The Company’s common shares are expected to be readily tradable 12 months after this registration.

Dividends received on the common shares will be treated as foreign source income and will not be eligible for the dividends-received deduction generally allowed to U.S. corporations under the Code.

Sale or other taxable disposition of shares

For U.S. federal income tax purposes, gain or loss realized on the sale or other taxable disposition of common shares will be capital gain or loss, and will be long-term capital gain or loss if a U.S. Holder held common shares for more than one year. Non-corporate U.S. Holders may be eligible for preferential rates of U.S. federal income tax in respect of long-term capital gains. The deductibility of capital losses is subject to limitations under the Code.

The amount of the gain or loss realized will be equal to the difference between a U.S. Holder's adjusted tax basis in the common shares disposed of and the amount realized on the disposition. Such gain or loss generally will be U.S.-source gain or loss for U.S. foreign tax credit purposes. A U.S. Holder's initial tax basis in its common shares will be the amount paid for the common shares.

Medicare tax

Certain U.S. Holders that are individuals, estates or trusts are subject to a 3.8% tax on all or a portion of their "net investment income," which may include all or a portion of their dividend income and net gains from the disposition of common shares. Each U.S. Holder that is an individual, estate or trust is urged to consult its tax advisors regarding the applicability of the Medicare tax to its income and gains in respect of its investment in the common shares.

Information reporting and backup withholding

Payments of dividends and proceeds from the sale or other taxable disposition that are made within the United States or through certain U.S.-related financial intermediaries generally are subject to information reporting, and may be subject to backup withholding, unless (1) the U.S. Holder is a corporation or other exempt recipient or (2) in the case of backup withholding, the U.S. Holder provides a correct taxpayer identification number and certifies that it is not subject to backup withholding.

The amount of any backup withholding from a payment to a U.S. Holder will be allowed as a credit against a U.S. Holder's U.S. federal income tax liability and may entitle such holder to a refund, provided that the required information is timely furnished to the United States Internal Revenue Service.

Foreign asset reporting

Certain U.S. Holders who are individuals are required to report information relating to an interest in common shares, subject to certain exceptions (including an exception for common shares held in accounts maintained by U.S. financial institutions). U.S. Holders are urged to consult their tax advisors regarding their information reporting obligations, if any, with respect to their ownership and disposition of common shares.

F. Dividends and Paying Agents

Not Applicable.

G. Statement by Experts

Not Applicable.

H. Documents on Display

The Company is subject to the periodic reporting and other informational requirements of the Exchange Act. Under the Exchange Act, the Company is required to file reports and other information with the SEC. Specifically, the Company is required to file annually a Form 20-F within four months after the end of each fiscal year for fiscal years ending on or after December 15, 2011. Copies of reports and other information, when so filed, may be inspected without charge and may be obtained at prescribed rates at the public reference facilities maintained by the Securities and Exchange Commission at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. The public may obtain information regarding the Washington, D.C. Public Reference Room by calling the Commission at 1-800-SEC-0330. The SEC also maintains a website at www.sec.gov that contains reports, proxy and information statements, and other information regarding registrants that make electronic filings with the SEC using its EDGAR system. As a foreign private issuer, the Company is exempt from the rules under the Exchange Act prescribing the furnishing and content of quarterly reports and proxy statements, and officers, directors and principal shareholders are exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act.

I. Subsidiary Information

For a listing of the Company's subsidiaries, see "Item 4. Information on the Company—C. Organizational Structure."

ITEM 11 - QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Credit Risk

Credit risk is the risk that one party to a financial instrument will fail to discharge an obligation and cause the other party to incur a financial loss. The Company's primary exposure to credit risk is on its cash, and cash equivalents. The majority of cash is deposited in bank accounts held with major banks in Canada and the United States. As most of the Company's cash is held by two banks there is a concentration of credit risk. This risk is managed by using major banks that are high credit quality financial institutions as determined by rating agencies. The Company's secondary exposure to risk is on its receivables. The risk is considered to be minimal.

Liquidity Risk

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they fall due. The Company has a planning and budgeting process in place to help determine the funds required to support the Company's normal operating requirements on an ongoing basis. The Company ensures that there are sufficient funds to meet its short-term business requirements, taking into account its anticipated cash flows from operations and its holdings of cash and cash equivalents.

Historically, the Company's sole source of funding has been the issuance of equity securities for cash, primarily through private placements. The Company's access to financing is always uncertain. There can be no assurance of continued access to significant equity funding.

The following is an analysis of the contractual maturities of the Company's non-derivative financial liabilities as at December 31, 2016:

	Within One Year	Between One and Five Years	More Than Five Years
Trade Payables and Accrued Liabilities	\$ 1,192,636	\$ —	\$ —

Foreign Exchange Risk

Foreign exchange risk is the risk that the fair values of future cash flows of a financial instrument will fluctuate because they are denominated in currencies that differ from the respective functional currency. The Company does not hedge its exposure to fluctuations in foreign exchange rates.

The following is an analysis of the United States dollar equivalent of financial assets and liabilities that are denominated in Canadian dollars:

	December 31, 2016	December 31, 2015
Cash and cash equivalents	\$ 21,933	\$ 295,019

Based on the above net exposures, a 1% change in the Canadian dollar to United States dollar exchange rate would impact the Company's net loss by \$1,188 and \$1,969 at December 31, 2016 and 2015, respectively.

Interest Rate Risk

Interest rate risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Company is exposed to interest rate risk on its cash equivalents as these instruments have original maturities of three months or less and are therefore exposed to interest rate fluctuations on renewal. A 1% change in market interest rates would have an impact on the Company's net loss of approximately \$1,000.

ITEM 12 - DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES

Not Applicable.

ITEM 13 - DEFAULTS, DIVIDEND ARREARS AND DELINQUENCIES

Not Applicable.

ITEM 14 - MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS

Not Applicable.

ITEM 15 - CONTROLS AND PROCEDURES

A. Disclosure Controls and Procedures

The Company's Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO") have evaluated the effectiveness of the design and operation of the Company's disclosure controls and procedures, and assessed the design of the Company's internal control over financial reporting as of December 31, 2016. As required by Rule 13(a)-15 under the Exchange Act, in connection with this Annual Report on Form 20-F, under the direction of the Company's CEO the Company has evaluated its disclosure controls and procedures as of December 31, 2016, and has concluded its disclosure controls and procedures were effective as at December 31, 2016.

B. Management's annual report on internal control over financial reporting ("ICOFR")

Management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Internal control over financial reporting has been designed to provide reasonable assurance with respect to the reliability of financial reporting and the presentation of financial statements for external purposes in accordance with IFRS. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Further, the design of a control system must reflect the fact that there are resource constraints. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company's Company have been detected.

As of the date of this filing, the Company has in place controls and procedures to maintain appropriate segregation of duties in its manual and computer based business processes that the Company believes are appropriate for a company of its size and extent of business transactions. Under the supervision and with the participation of the CEO and CFO, Management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2016. In making their assessment, Management used the control objectives established in the 1992 Committee of Sponsoring Organizations of the Treadway Commission ("COSO") framework over Financial Reporting. Based upon that assessment, Management concluded that the Company's internal control over financial reporting was effective at the reasonable assurance level as of December 31, 2016.

C. Attestation Report of registered public accounting firm

This annual report does not include an attestation report of the Company's registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by the Company's registered public accounting firm pursuant to (i) the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, which permits the Company to provide only management's report in this Annual Report; the Dodd-Frank Act permits a "non-accelerated filer" to provide only management's report on internal control over financial reporting in an Annual Report and omit an attestation report of the issuer's registered public accounting firm regarding management's report on internal control over financial reporting and (ii) as the Company qualifies as an "emerging growth company" under section 3(a) of the Exchange Act (as amended by the JOBS Act, enacted on April 5, 2012), and is therefore exempt from the attestation requirement.

D. Changes in internal controls over financial reporting

There were no changes in the Company's internal controls over financial reporting identified in connection with the evaluation required by paragraph (d) of 17 CFR 240.13a-15 or 240.15d-15 that occurred during the period covered by this annual report that has materially affected, or is reasonably likely to materially affect, the issuer's internal control over financial reporting.

ITEM 16A - AUDIT COMMITTEE FINANCIAL EXPERT

The Audit Committee has various responsibilities as set forth in National Instrument 52-110 ("NI 52-110"). The Board has adopted a Charter for the Audit Committee which sets out the Audit Committee's mandate, organization, powers and responsibilities.

The Audit Committee consists of three directors. Unless a company is a 'venture issuer' (an issuer the securities of which are not listed or quoted on any of the Toronto Stock Exchange, a market in the United States of America other than the over-the-counter market, or a market outside of Canada and the U.S.A.) as of the end of its last financial year, NI 52-110 requires each of the members of the Committee to be independent and financially literate. Since the Company is a 'venture issuer' (its securities are listed on the TSX Venture Exchange, but are not listed or quoted on any other exchange or market) it is exempt from this requirement. In addition, the Company's governing corporate legislation requires the Company to have an Audit Committee composed of a minimum of three directors, a majority of whom are not officers or employees of the Company.

The members of the audit committee are Charles Provini, John Calhoun and Brien Lundin. Mr. Provini is not considered an independent member of the audit committee given his role as the Company's CEO. All other members of the audit committee are considered independent. All members are considered financially literate.

ITEM 16B - CODE OF ETHICS

The Company has adopted a code of ethics that applies to the Company's directors, officers and employees. A copy of the Company's code of ethics is posted in the "Corporate Governance" section of the Natcore Technology, Inc. website, and may be viewed at <http://www.natcoresolar.com/corporate/corporate-governance/>. The Company will also provide a hard copy of its code of ethics free of charge upon written request of a shareholder. Shareholders may direct their requests to the attention of Investor Relations, Natcore Technology, Inc., 189 N. West Street, Rochester, NY 14604-1163. No waivers of the Company's code of ethics were granted to the Company's principal executive officer, principal financial officer, principal accounting officer or controller or persons performing similar functions during the fiscal year ended December 2016.

ITEM 16C - PRINCIPAL ACCOUNTANT FEES AND SERVICES

The audit committee has reviewed the nature and amount of the services provided by Dale Matheson Carr-Hilton LaBonte LLP, Chartered Accountants, to the Company to ensure auditor independence. Fees incurred with Dale Matheson Carr-Hilton LaBonte LLP for audit services in the last two fiscal years are outlined below:

Financial Year Ended	Audit Fees ⁽¹⁾	Audit Related Fees ⁽²⁾	Tax Fees ⁽³⁾	All Other Fees ⁽⁴⁾
2016	\$28,500	Nil	\$2,000	Nil
2015	\$30,975	Nil	\$3,150	Nil

(1) "Audit Fees" include fees necessary to perform the annual audit and quarterly reviews of the Company's consolidated financial statements. Audit Fees include fees for review of tax provisions and for accounting consultations on matters reflected in the financial statements. Audit Fees also include audit or other attest services required by legislation or regulation, such as comfort letters, consents, reviews of securities filings and statutory audits.

(2) "Audit-Related Fees" include services that are traditionally performed by the auditor. These audit-related services include employee benefit audits, due diligence assistance, accounting consultations on proposed transactions, internal control reviews and audit or attest services not required by legislation or regulation.

(3) "Tax Fees" include fees for all tax services other than those included in "Audit Fees" and "Audit-Related Fees". This category includes fees for tax compliance, tax planning and tax advice. Tax planning and tax advice includes assistance with tax audits and appeals, tax advice related to mergers and acquisitions, and requests for rulings or technical advice from tax authorities.

(4) "All Other Fees" includes all other non-audit services".

ITEM 16D - EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES

The Company is relying on the exemptions provided for in Section 6.1 of NI 52-110 in respect of the composition of its audit committee and in respect of certain of its reporting obligations under NI 52-110.

ITEM 16E - PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS

Neither the Company nor, to the Company's knowledge, any affiliated purchaser has made any purchases of the Company's registered shares during the last financial year.

ITEM 16F - CHANGE IN REGISTRANT'S CERTIFYING ACCOUNTANT

Not applicable.

ITEM 16G - CORPORATE GOVERNANCE

Not Applicable

ITEM 16H - MINE SAFETY DISCLOSURE

Not Applicable.

ITEM 17 - FINANCIAL STATEMENTS

See Item 18.

ITEM 18 - FINANCIAL STATEMENTS

The financial statements and schedules appear on pages F-1 through F-24 of this Annual Report and are incorporated herein by reference.

ITEM 19 - EXHIBITS

Financial Statements

Description	Page
Financial Statements and Notes	F1 – F26

Exhibit List

#	Description
1.1	Articles of Syracuse Capital Corp. (incorporated herein by reference to Exhibit 3.1 to the Registrant's Registration Statement on Form F-1 (file No. 333-20666), as amended, filed with the Securities and Exchange Commission on September 25, 2015)
4.1	Employment contracts/executive employment agreements (incorporated herein by reference to Exhibit 10.1 to the Registrant's Registration Statement on Form F-1 (file No. 333-20666), as amended, filed with the Securities and Exchange Commission on September 25, 2015)
4.2	March 31, 2004 License Agreement Between Natcore and William Marsh Rice University (incorporated herein by reference to Exhibit 10.2 to the Registrant's Registration Statement on Form F-1 (file No. 333-20666), as amended, filed with the Securities and Exchange Commission on September 25, 2015)
4.3	July 29, 2008 Amendment to License Agreement Between Natcore and William Marsh Rice University (incorporated herein by reference to Exhibit 10.3 to the Registrant's Registration Statement on Form F-1 (file No. 333-20666), as amended, filed with the Securities and Exchange Commission on September 25, 2015)
4.4	September 1, 2009 Sponsored Research Agreement Between Natcore and William Marsh Rice University (incorporated herein by reference to Exhibit 10.4 to the Registrant's Registration Statement on Form F-1 (file No. 333-20666), as amended, filed with the Securities and Exchange Commission on September 25, 2015)
4.5	May 10, 2012 Amendment to License Agreement Between Natcore and William Marsh Rice University (incorporated herein by reference to Exhibit 10.5 to the Registrant's Registration Statement on Form F-1 (file No. 333-20666), as amended, filed with the Securities and Exchange Commission on September 25, 2015)
4.6	January 5, 2012 License Agreement Between Alliance for Sustainable Energy, LLC and Natcore (incorporated herein by reference to Exhibit 10.8 to the Registrant's Registration Statement on Form F-1 (file No. 333-20666), as amended, filed with the Securities and Exchange Commission on September 25, 2015)
4.7	July 27, 2012 Amendment to License Agreement Between Alliance for Sustainable Energy, LLC and Natcore (incorporated herein by reference to Exhibit 10.9 to the Registrant's Registration Statement on Form F-1 (file No. 333-20666), as amended, filed with the Securities and Exchange Commission on September 25, 2015)
4.8	January 22, 2014 Amendment to License Agreement Between Alliance for Sustainable Energy, LLC and Natcore (incorporated herein by reference to Exhibit 10.10 to the Registrant's Registration Statement on Form F-1 (file No. 333-20666), as amended, filed with the Securities and Exchange Commission on September 25, 2015)
4.9	September 21, 2010 Cooperative Joint Venture Contract Between Zhuzhou Hexing Industrial Company and Natcore Asia Technology, Limited (Chinese Version) (incorporated herein by reference to Exhibit 10.12 to the Registrant's Registration Statement on Form F-1 (file No. 333-20666), as amended, filed with the Securities and Exchange Commission on September 25, 2015)
4.10	September 21, 2010 Cooperative Joint Venture Contract Between Zhuzhou Hexing Industrial Company and Natcore Asia Technology, Limited (American Version) (incorporated herein by reference to Exhibit 10.13 to the Registrant's Registration Statement on Form F-1 (file No. 333-20666), as amended, filed with the Securities and Exchange Commission on September 25, 2015)
4.11	Investment Agreement dated August 21, 2015 between Natcore Technology, Inc. and Dutchess Opportunity Fund, II, LP (incorporated herein by reference to Exhibit 10.16 to the Registrant's Registration Statement on Form F-1 (file No. 333-20666), as amended, filed with the Securities and Exchange Commission on September 25, 2015)
4.12	Registration Rights Agreement dated August 21, 2015 between Natcore Technology, Inc. and Dutchess Opportunity Fund, II, LP (incorporated herein by reference to Exhibit 10.17 to the Registrant's Registration Statement on Form F-1 (file No. 333-20666), as amended, filed with the Securities and Exchange Commission on September 25, 2015)
12.1	Rule 13a-14(a)/15d-14(a) Certification of Principal Executive Officer
12.2	Rule 13a-14(a)/15d-14(a) Certification of Principal Financial Officer
13.1	Certification of Principal Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
13.2	Certification of Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

NATCORE TECHNOLOGY INC.
Consolidated Financial Statements
For Years Ended December 31, 2016 and 2015

Expressed in United States Dollars



DALE MATHESON CARR-HILTON LABONTE LLP
CHARTERED ACCOUNTANTS & BUSINESS ADVISORS

INDEPENDENT AUDITOR'S REPORT

To the Shareholders of Natcore Technology Inc.

We have audited the accompanying consolidated financial statements of Natcore Technology Inc., which comprise of the consolidated statements of financial position as at December 31, 2016 and 2015, and the consolidated statements of comprehensive loss, changes in equity (deficit) and cash flows for the years ended December 31, 2016, 2015 and 2014, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with Canadian generally accepted auditing standards and the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained in our audits is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of Natcore Technology Inc. as at December 31, 2016 and 2015, and its financial performance and its cash flows for the years ended December 31, 2016, 2015 and 2014 in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board.

Emphasis of Matter

Without qualifying our opinion, we draw attention to Note 1 in the consolidated financial statements which describes certain conditions that indicate the existence of a material uncertainty that casts substantial doubt about the Natcore Technology Inc.'s ability to continue as a going concern.

/s/ DMCL

DALE MATHESON CARR-HILTON LABONTE LLP
CHARTERED PROFESSIONAL ACCOUNTANTS

Vancouver, Canada
May 1, 2017

An independent firm associated with
Moore Stephens International Limited

MOORE STEPHENS

Natcore Technology Inc.
Consolidated Statements of Financial Position
(Expressed in United States Dollars)

	Notes	2016	2015
ASSETS			
Current assets			
Cash and cash equivalents	4	\$ 23,252	\$ 521,521
Receivables	5	12,071	29,057
Prepaid expenses		55,187	148,076
		90,510	698,654
Non-current assets			
Equipment	6	223,325	366,729
TOTAL ASSETS		\$ 313,835	\$ 1,065,383
LIABILITIES			
Current liabilities			
Trade payables and accrued liabilities	7	\$ 1,192,636	\$ 749,985
Derivative liability	8	367,346	1,135,157
TOTAL LIABILITIES		1,559,982	1,885,142
DEFICIT			
Share capital	9	16,417,322	15,690,371
Share-based payment reserve	9,10	4,275,173	3,375,710
Share subscriptions received	9	—	31,102
Accumulated deficit		(21,938,642)	(19,916,942)
TOTAL DEFICIT		(1,246,147)	(819,759)
TOTAL LIABILITIES AND DEFICIT		\$ 313,835	\$ 1,065,383
Nature and continuance of operations			
	1		
Commitments			
	14		
Subsequent events			
	17		

Approved on behalf of the Board:

“John Calhoun”

— Director

“Brien Lundin”

— Director

The accompanying notes are an integral part of these consolidated financial statements.

Natcore Technology Inc.
Consolidated Statements of Comprehensive Loss
(Expressed in United States Dollars)

		For the Years Ended December 31,		
	Notes	2016	2015	2014
Expenses				
Consulting		\$ 124,652	\$ 181,589	\$ 229,792
Depreciation and amortization	6	146,946	279,527	412,492
Filing Fees		45,172	25,016	34,090
Foreign exchange loss		16,457	5,159	41,344
Interest and bank charges		2,698	2,383	1,581
Marketing		341,104	268,853	81,401
Office and other operational expenses		201,736	216,811	273,264
Professional fees		219,016	335,762	213,888
Research and development	16	1,137,422	1,203,716	1,634,864
Stock-based compensation	9	869,130	387,648	301,732
Travel		37,472	45,858	73,922
Wages and salaries		763,223	778,339	770,105
		(3,905,028)	(3,730,661)	(4,068,475)
Other income (expense)				
Fair value adjustment on warrants	9	1,880,587	226,827	1,842,317
Other income		1,932	14,124	—
Interest income		809	1,581	32,626
Net and comprehensive loss for the year		\$ (2,021,700)	\$ (3,488,129)	\$ (2,193,532)
Loss per share – basic and diluted		\$ (0.03)	\$ (0.07)	\$ (0.05)
Weighted average number of shares outstanding – basic and diluted		60,007,618	51,329,138	42,294,310

The accompanying notes are an integral part of these consolidated financial statements.

Natcore Technology Inc.
Consolidated Statement of Changes in Equity (Deficit)
(Expressed in United States Dollars)

	Notes	Share capital		Share-based payment reserve	Share subscriptions received	Deficit	Total
		Number of shares	Amount				
Balance at December 31, 2013		46,095,119	\$ 13,030,362	\$ 2,857,272	\$ —	\$ (14,235,281)	\$ 1,652,353
Comprehensive loss for the year		—	—	—	—	(2,193,532)	(2,193,532)
Stock-based compensation	9	—	—	301,732	—	—	301,732
Transactions with owners, in their capacity as owners, and other transfers:							
Shares issued for cash – options exercise		100,000	62,624	(25,898)	—	—	36,726
Shares issued for cash – warrants exercise		1,666,383	884,270	(176,142)	—	—	708,128
Subscriptions received		—	—	—	313,874	—	313,874
Balance at December 31, 2014		47,861,502	13,977,256	2,956,964	313,874	(16,428,813)	819,281
Comprehensive loss for the year		—	—	—	—	(3,488,129)	(3,488,129)
Shares issued for services	9	325,000	111,764	—	—	—	111,764
Stock-based compensation	9	—	—	387,648	—	—	387,648
Transactions with owners, in their capacity as owners, and other transfers:							
Shares issued for cash – private placement	9	8,146,745	3,017,290	—	(313,874)	—	2,703,416
Derivative liability – warrants issued	9	—	(1,237,161)	—	(1,237,161)	—	—
Issuance costs – finders' warrants	9	—	(31,098)	31,098	—	—	—
Issuance costs – cash	9	—	(147,680)	—	—	—	(147,680)
Subscriptions received		—	—	—	31,102	—	31,102
Balance at December 31, 2015		56,333,247	15,690,371	3,375,710	31,102	(19,916,942)	(819,759)
Comprehensive loss for the year		—	—	—	—	(2,021,700)	(2,021,700)
Stock-based compensation	9	—	—	869,130	—	—	869,130
Transactions with owners, in their capacity as owners, and other transfers:							
Shares issued for cash – private placements	9	8,095,055	1,968,209	—	(31,102)	—	1,937,107
Shares issued for services	9	400,000	124,000	—	—	—	124,000
Shares issued for cash – options exercise	9	38,500	24,381	(10,699)	—	—	13,682
Derivative liability – warrants issued	9	—	(1,112,776)	—	—	—	(1,112,776)
Issuance costs – finder's warrants	9	—	(41,032)	41,032	—	—	—
Issuance cost – cash	9	—	(235,831)	—	—	—	(235,831)
Balance at December 31, 2016		64,866,802	\$ 16,417,322	\$ 4,275,173	\$ —	\$ (21,938,642)	\$ (1,246,147)

The accompanying notes are an integral part of these consolidated financial statements.

Natcore Technology Inc.
Consolidated Statements of Cash Flows
(Expressed in United States Dollars)

	For the Years Ended		
	2016	2015	2014
Operating Activities			
Net loss	\$ (2,021,700)	\$ (3,488,129)	\$ (2,193,532)
Adjustments for non-cash items:			
Depreciation and amortization	146,946	279,527	412,492
Fair value adjustment on warrants	(1,880,588)	(226,827)	(1,842,317)
Stock-based compensation	869,130	387,648	301,732
Shares issued for services	—	111,764	—
Changes in non-cash working capital items:			
Receivables	(1,188)	(4,944)	20,077
Prepaid expenses	92,889	(87,681)	33,605
Trade payables and accrued liabilities	448,037	440,297	88,167
Net cash flows used in operating activities	(2,346,474)	(2,588,345)	(3,179,776)
Investing Activities			
Expenditures on equipment	(3,542)	(27,185)	(179,587)
Net cash flows used in investing activities	(3,542)	(27,185)	(179,587)
Financing Activities			
Subscriptions received for pending private placement	—	31,102	—
Proceeds on issuance of common shares – exercise of options	13,682	—	313,874
Proceeds on issuance of common shares – net of issuance costs	1,838,065	2,557,562	744,854
Net cash flows provided by financing activities	1,851,747	2,588,664	1,058,728
Decrease in cash and cash equivalents	(498,269)	(26,866)	(2,300,635)
Cash and cash equivalents, beginning	521,521	548,387	2,849,022
Cash and cash equivalents, ending	\$ 23,252	\$ 521,521	\$ 548,387

The accompanying notes are an integral part of these consolidated financial statements.

Natcore Technology Inc.
Notes to the Consolidated Financial Statements
(Expressed in United States Dollars)
For Years Ended December 31, 2016 and 2015

1. Nature and Continuance of Operations

Natcore Technology Inc. (the “Company”) was incorporated under the British Columbia Business Corporations Act on August 9, 2007. The Company’s common shares are listed on the TSX Venture Exchange (the “Exchange”) under the symbol NXT. Effective May 26, 2015, the Company became a fully-reporting issuer in the United States. The Company develops and owns technology for the manufacturing of solar cells.

The Company’s head office address is 189 N. Water Street, Suite 700, Rochester, New York, 14604. The Company’s registered office is 2080 - 777 Hornby Street, Vancouver British Columbia V6Z 1S4.

These consolidated financial statements have been prepared on the assumption that the Company will continue as a going concern, meaning it will continue in operation for the foreseeable future and will be able to realize assets and discharge liabilities in the ordinary course of operations. Different bases of measurement may be appropriate if the Company is not expected to continue operations for the foreseeable future. As at December 31, 2016 the Company has had recurring losses from operations and a cumulative deficit of \$21,938,642. The Company’s continuation as a going concern is dependent upon its ability to attain profitable operations and generate funds there from and/or raise equity capital or borrowings sufficient to meet current and future obligations. These conditions indicate the existence of a material uncertainty that may cast significant doubt about the Company’s ability to continue as a going concern. Management intends to finance operating costs over the next twelve months with existing cash resources and the private placement of common shares.

2. Significant Accounting Policies and Basis of Preparation

Statement of Compliance with International Financial Reporting Standards

These consolidated financial statements of the Company have been prepared in accordance with International Financial Reporting Standards (“IFRB”) issued by the International Accounting Standards Board (“IASB”) and interpretations of the International Financial Reporting Interpretations Committee (“IFRIC”).

The condensed consolidated interim financial statements were authorized for issue by the Board of Directors on May 1, 2017.

Basis of Preparation

The consolidated financial statements of the Company have been prepared on an accrual basis and are based on historical costs, modified where applicable. The consolidated financial statements are presented in United States dollars unless otherwise noted.

Consolidation

The consolidated financial statements include the accounts of the Company and its controlled entities. Details of controlled entities are as follows:

	Jurisdiction of Incorporation	Percentage Owned	
		December 31, 2016	December 31, 2015
Natcore Technology, Inc.	United States	100%	100%
Newcyte, Incorporated	United States	100%	100%
Vanguard Solar, Inc.	United States	100%	100%
Natcore Asia Technology, Limited	Hong Kong	100%	100%

*Percentage of voting power is in proportion to ownership.

Inter-company balances are eliminated on consolidation.

2. Significant Accounting Policies and Basis of Preparation

Significant Accounting Judgments, Estimates and Assumptions

The preparation of consolidated financial statements in accordance with IFRS requires the Company to make estimates and assumptions concerning the future. The Company's management reviews these estimates and underlying assumptions on an ongoing basis, based on experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Revisions to estimates are adjusted for prospectively in the period in which the estimates are revised.

Estimates and assumptions where there is significant risk of material adjustments to assets and liabilities in future accounting periods include the useful lives of equipment, impairment considerations for equipment and intangible assets, determination of fair value for stock-based compensation and other share-based payments, valuations and assumptions used to determine deferred income taxes and the fair value of financial instruments.

Foreign Currency Translation

The functional currency of each of the Company's entities is measured using the currency of the primary economic environment in which that entity operates. The consolidated financial statements are presented in United States dollars which is the functional currency of the Company and its subsidiaries.

Transactions and Balances:

Foreign currency transactions are translated into functional currency using the exchange rates prevailing at the date of the transaction. Foreign currency monetary items are translated at the period-end exchange rate. Non-monetary items measured at historical cost continue to be carried at the exchange rate at the date of the transaction. Non-monetary items measured at fair value are reported at the exchange rate at the date when fair values were determined.

Exchange differences arising on the translation of monetary items or on settlement of monetary items are recognized in profit or loss in the statement of comprehensive loss in the period in which they arise, except where deferred in equity as a qualifying cash flow or net investment hedge.

Exchange differences arising on the translation of non-monetary items are recognized in other comprehensive loss in the statement of comprehensive loss to the extent that gains and losses arising on those non-monetary items are also recognized in other comprehensive loss. Where the non-monetary gain or loss is recognized in profit or loss, the exchange component is also recognized in profit or loss.

Intangible Assets

Intangible Assets Acquired Separately

Intangible assets with finite useful lives that are acquired separately are carried at cost less accumulated amortization and accumulated impairment losses. Amortization is recognized on a straight-line basis over their estimated useful lives. The estimated useful life and amortization method are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis. Intangible assets with indefinite useful lives that are acquired separately are carried at cost less accumulated impairment losses.

2. Significant Accounting Policies and Basis of Preparation (continued)

Internally-Generated Intangible Assets - Research and Development Expenditure

Expenditure on research activities is recognized as an expense in the period in which it is incurred.

An internally-generated intangible asset arising from development (or from the development phase of an internal project) is recognized if, and only if, all of the following have been demonstrated:

- The technical feasibility of completing the intangible asset so that it will be available for use or sale;
- The intention to complete the intangible asset and use or sell it;
- The ability to use or sell the intangible asset;
- How the intangible asset will generate probable future economic benefits;
- The availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and
- The ability to measure reliably the expenditure attributable to the intangible asset during its development.

The amount initially recognized for internally-generated intangible assets is the sum of the expenditure incurred from the date when the intangible asset first meets the recognition criteria listed above. Where no internally-generated intangible asset can be recognized, development expenditure is recognized in loss in the period in which it is incurred.

Subsequent to initial recognition, internally-generated intangible assets are reported at cost less accumulated amortization and accumulated impairment losses, on the same basis as intangible assets that are acquired separately.

At December 31, 2016 and December 31, 2015, the Company has not recognized any internally-generated intangible assets.

Share-Based Payments

The Company operates a stock option plan. Share-based payments to employees are measured at the fair value of the instruments issued and amortized over the vesting periods. Share-based payments to non-employees are measured at the fair value of goods or services received or the fair value of the equity instruments issued, if it is determined the fair value of the goods or services cannot be reliably measured, and are recorded at the date the goods or services are received. The corresponding amount is recorded to the share-based payment reserve. The fair value of options is determined using the Black-Scholes Option Pricing Model. The number of shares and options expected to vest is reviewed and adjusted at the end of each reporting period such that the amount recognized for services received as consideration for the equity instruments granted shall be based on the number of equity instruments that eventually vest.

Financial Instruments

The Company classifies its financial instruments in the following categories: at fair value through profit or loss, loans and receivables, held-to-maturity investments, available-for-sale and financial liabilities. The classification depends on the purpose for which the financial instruments were acquired. Management determines the classification of its financial instruments at initial recognition.

Financial assets are classified at fair value through profit or loss when they are either held for trading for the purpose of short-term profit taking, derivatives not held for hedging purposes, or when they are designated as such to avoid an accounting mismatch or to enable performance evaluation where a group of financial assets is managed by key management personnel on a fair value basis in accordance with a documented risk management or investment strategy. Such assets are subsequently measured at fair value with changes in carrying value being included in profit or loss.

2. Significant Accounting Policies and Basis of Preparation (continued)

Financial Instruments (continued)

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market and are subsequently measured at amortized cost. They are included in current assets, except for maturities greater than 12 months after the end of the reporting period. These are classified as non-current assets.

Held-to-maturity investments are non-derivative financial assets that have fixed maturities and fixed or determinable payments, and it is the Company's intention to hold these investments to maturity. They are subsequently measured at amortized cost. Held-to-maturity investments are included in non-current assets, except for those which are expected to mature within 12 months after the end of the reporting period.

Available-for-sale financial assets are non-derivative financial assets that are designated as available-for-sale or are not suitable to be classified as financial assets at fair value through profit or loss, loans and receivables or held-to-maturity investments and are subsequently measured at fair value. These are included in current assets. Unrealized gains and losses are recognized in other comprehensive loss, except for impairment losses and foreign exchange gains and losses.

Non-derivative financial liabilities (excluding financial guarantees) are subsequently measured at amortized cost. Derivative financial liabilities are classified at fair value through profit and loss and are subsequently measured at fair value with changes in carrying value being included in profit or loss.

Regular purchases and sales of financial assets are recognized on the trade-date – the date on which the Company commits to purchase the asset.

Financial assets are derecognized when the rights to receive cash flows from the investments have expired or have been transferred and the Company has transferred substantially all risks and rewards of ownership.

At each reporting date, the Company assesses whether there is objective evidence that a financial instrument has been impaired. In the case of available-for-sale financial instruments, a significant and prolonged decline in the value of the instrument is considered to determine whether impairment has arisen.

Impairment of Long-Lived Assets

The carrying amount of the Company's long-lived assets (which include equipment and intangible assets) is reviewed at each reporting date to determine whether there is any indication of impairment. If such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss. An impairment loss is recognized whenever the carrying amount of an asset or its cash generating unit exceeds its recoverable amount. Impairment losses are recognized in the statement of comprehensive loss.

The recoverable amount of assets is the greater of an asset's fair value less cost to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects the current market assessments of the time value of money and the risks specific to the asset. For an asset that does not generate cash inflows largely independent of those from other assets, the recoverable amount is determined for the cash-generating unit to which the asset belongs.

An impairment loss is only reversed if there is an indication that the impairment loss may no longer exist and there has been a change in the estimates used to determine the recoverable amount, however, not to an amount higher than the carrying amount that would have been determined had no impairment loss been recognized in previous years.

Assets that have an indefinite useful life are not subject to amortization and are tested annually for impairment.

Cash and Cash Equivalents

Cash and cash equivalents include cash on hand, deposits held at call with banks and other short-term highly liquid investments, such as guaranteed investment certificates with original maturities of three months or less. Guaranteed investment certificates are investments with Canadian banks that are the equivalent of a certificate of deposit.

2. Significant Accounting Policies and Basis of Preparation (continued)

Income Taxes

Current Income Tax:

Current income tax assets and liabilities for the current period are measured at the amount expected to be recovered from or paid to the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted, at the reporting date, in the countries where the Company operates and generates taxable income.

Current income tax relating to items recognized directly in other comprehensive loss or equity is recognized in other comprehensive loss or equity and not in profit or loss. Management periodically evaluates positions taken in the tax returns with respect to situations in which applicable tax regulations are subject to interpretation and establishes provisions where appropriate.

Deferred Income Tax:

Deferred income tax is provided using the asset and liability method on temporary differences at the reporting date between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes.

The carrying amount of deferred income tax assets is reviewed at the end of each reporting period and recognized only to the extent that it is probable that sufficient taxable profit will be available to allow all or part of the deferred income tax asset to be utilized.

Deferred income tax assets and liabilities are measured at the tax rates that are expected to apply to the year when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

Deferred income tax assets and deferred income tax liabilities are offset, if a legally enforceable right exists to set off current tax assets against current income tax liabilities and the deferred income taxes relate to the same taxable entity and the same taxation authority.

Equipment

Equipment is stated at historical cost less accumulated depreciation and accumulated impairment losses.

Subsequent costs are included in the asset's carrying amount or recognized as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Company and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognized. All other repairs and maintenance are charged to the statement of comprehensive loss during the financial period in which they are incurred.

Gains and losses on disposals are determined by comparing the proceeds with the carrying amount and are recognized in profit or loss.

Depreciation and amortization are calculated on a straight-line method to write off the cost of the assets to their residual values over their estimated useful lives.

Comparative Information

Certain expenses have been reclassified to conform to the presentation in the current year.

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3. Accounting Standards Issued but Not Yet Effective

New Standard IFRS 16 “Leases”

This new standard replaces IAS 17 “Leases” and the related interpretative guidance. IFRS 16 applies a control model to the identification of leases, distinguishing between a lease and a service contract on the basis of whether the customer controls the asset being leased. For those assets determined to meet the definition of a lease, IFRS 16 introduces significant changes to the accounting by lessees, introducing a single, on-balance sheet accounting model that is similar to current finance lease accounting, with limited exceptions for short-term leases or leases of low value assets. Lessor accounting is not substantially changed. The standard is effective for annual periods beginning on or after January 1, 2019, with early adoption permitted for entities that have adopted IFRS 15.

The Company has not early adopted this new standard and is currently assessing the impact that these standards will have on its consolidated financial statements.

Other accounting standards or amendments to existing accounting standards that have been issued but have future effective dates are either not applicable or are not expected to have a significant impact on the Company’s consolidated financial statements.

4. Cash and Cash Equivalents

	December 31, 2016	December 31, 2015
Cash at Bank	\$ 23,252	\$ 391,421
Savings Certificates in Banks	—	130,100
	\$ 23,252	\$ 521,521

5. Receivables

	December 31, 2016	December 31, 2015
GST receivable	\$ 12,071	\$ 10,883
Subscription receivable on share issuance	—	18,174
	\$ 12,071	\$ 29,057

6 Equipment

	Furniture and Office Equipment	Production Equipment	Total
Cost:			
At December 31, 2014	\$ 355,018	\$ 911,347	\$ 1,266,365
Additions	5,724	21,461	27,185
At December 31, 2015	360,742	932,808	1,293,550
Depreciation:			
At December 31, 2014	283,692	400,484	684,176
Charge for the Period	58,820	183,825	242,645
At December 31, 2015	342,512	584,309	926,821
Net Book Value:			
At December 31, 2015	\$ 18,230	\$ 348,499	\$ 366,729
Cost:			
At December 31, 2015	\$ 360,742	\$ 932,808	\$ 1,293,550
Additions	2,708	834	3,542
At December 31, 2016	363,450	933,642	1,297,092
Depreciation:			
At December 31, 2015	342,512	584,309	926,821
Charge for the Period	6,988	139,958	146,946
At December 31, 2016	349,500	724,267	1,073,767
Net Book Value:			
At December 31, 2016	\$ 13,950	\$ 209,375	\$ 223,325

7. Trade Payables and Accrued Liabilities

	December 31, 2016	December 31, 2015
Trade Payables and Accrued Liabilities	\$ 1,192,636	\$ 749,985

8. Derivative Financial Liability

	Year Ended December 31, 2016	Year Ended December 31, 2015	Year Ended December 31, 2014
Balance, Beginning	\$ 1,135,157	\$ 124,823	\$ 1,967,140
Fair value of warrants issued during the year	1,112,776	1,237,161	—
Change in fair value of warrants outstanding	(1,880,587)	(226,827)	(1,842,317)
Balance, Ending	\$ 367,346	\$ 1,135,157	\$ 124,823

The derivative financial liability consists of the fair value of share purchase warrants that have exercise prices that differ from the functional currency of the Company and are within the scope of IAS 32 “Financial Instruments: Presentation”. Details of these warrants and their fair values are as follows:

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8. Derivative Financial Liability (continued)

Expiration Date	Exercise Price CDN \$	Number of Warrants Outstanding at December 31, 2016	Fair Value at December 31, 2016 US \$	Number of Warrants Outstanding at December 31, 2015	Fair Value at December 31, 2015 US \$
January 4, 2016	1.00	—	—	429,867	—
July 20, 2017	0.90	3,840,700	574	3,840,700	233,201
January 21, 2018	0.70	1,352,062	3,497	1,352,062	133,002
April 14, 2018	0.95	1,200,050	4,028	1,200,050	92,959
April 27, 2018	0.95	397,000	1,506	397,000	31,577
July 23, 2018	0.74	1,000,000	8,052	1,000,000	101,545
July 31, 2018	0.74	822,000	6,650	822,000	84,296
November 30, 2018	0.55	1,694,444	26,938	1,694,444	228,926
December 18, 2018	0.55	1,681,189	27,987	1,681,189	229,651
February 2, 2019	0.55	273,058	6,144	—	—
March 17, 2019	0.55	2,244,497	53,241	—	—
June 28, 2019	0.55	1,000,000	26,377	—	—
July 28, 2019	0.55	1,000,000	29,049	—	—
September 16, 2019	0.55	650,000	23,768	—	—
November 2, 2019	0.30	1,000,000	49,316	—	—
November 22, 2019	0.30	427,500	20,328	—	—
December 5, 2019	0.25	1,000,000	53,205	—	—
December 14, 2019	0.25	500,000	26,686	—	—
		20,082,500	367,346	12,417,312	1,135,157

The fair values of these warrants were estimated using the Black-Scholes Option Pricing Model using the following assumptions.

- The stock price was based upon the publicly traded price at the time of issuance;
- The risk-free interest rate assumption is based on the government of Canada marketable bonds for a period consistent with the expected term of the option in effect at the time of the grant;
- The Company does not pay dividends on common stock and does not anticipate paying dividends on its common stock in the foreseeable future. Therefore, the expected dividend rate was 0%;
- The expected life of the warrants was estimated to be 75% of the remaining contractual term which is based on the historical exercise patterns of warrant holders; and
- The expected volatility was based off of the historical trading prices of the Company's common stock price over a period equivalent to the expected life of the warrants.

The fair values of these warrants as of December 31, 2016 were estimated using the Black-Scholes Option Pricing Model using the following inputs:

Expiration Date	July 20, 2017	January 21, 2018
Exercise price	CDN\$0.90	CDN\$0.70
Share price	CDN\$0.18	CDN\$0.18
Expected volatility	93%	86%
Expected life	0.41 years	0.79 years
Dividends	0.00%	0.00%
Risk-free interest rate	0.74%	0.74

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8. Derivative Financial Liability (continued)

Expiration Date	April 14, 2018	April 27, 2018	July 23, 2018
Exercise price	CDN\$0.95	CDN\$0.95	CDN\$0.74
Share price	CDN\$0.18	CDN\$0.18	CDN\$0.18
Expected volatility	95%	94%	92%
Expected life	0.94 years	0.99 years	1.17 years
Dividends	0.00%	0.00%	0.00%
Risk-free interest rate	0.74%	0.74%	0.74%

Expiration Date	July 31, 2018	November 30, 2018	December 18, 2018
Exercise price	CDN\$0.74	CDN\$0.55	CDN\$0.55
Share price	CDN\$0.18	CDN\$0.18	CDN\$0.18
Expected volatility	91%	88%	88%
Expected life	1.18 years	1.44 years	1.47 years
Dividends	0.00%	0.00%	0.00%
Risk-free interest rate	0.74%	0.74%	0.74%

Expiration Date	February 2, 2019	March 17, 2019	June 28, 2019
Exercise price	CDN\$0.55	CDN\$0.55	CDN\$0.55
Share price	CDN\$0.18	CDN\$0.18	CDN\$0.18
Expected volatility	95%	95%	93%
Expected life	1.57 years	1.66 years	1.87 years
Dividends	0.00%	0.00%	0.00%
Risk-free interest rate	0.74%	0.74%	0.74%

Expiration Date	July 28, 2019	September 16, 2019	November 2, 2019
Exercise price	CDN\$0.55	CDN\$0.43	CDN\$0.30
Share price	CDN\$0.18	CDN\$0.18	CDN\$0.18
Expected volatility	95%	94%	94%
Expected life	1.93 years	2.03 years	2.13 years
Dividends	0.00%	0.00%	0.00%
Risk-free interest rate	0.74%	0.74%	0.74%

Expiration Date	November 22, 2019	December 5, 2019	December 14, 2019
Exercise price	CDN\$0.30	CDN\$0.25	CDN\$0.25
Share price	CDN\$0.18	CDN\$0.18	CDN\$0.18
Expected volatility	90%	90%	90%
Expected life	2.17 years	2.20 years	2.22 years
Dividends	0.00%	0.00%	0.00%
Risk-free interest rate	0.74%	0.74%	0.74%

Natcore Technology Inc.
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9. Share Capital

Authorized Share Capital

Unlimited number of common shares without par value.

Issued Share Capital

At December 31, 2016, there were 64,866,802 issued and fully paid common shares (December 31, 2015 – 56,333,247).

Private Placements

In January 2015, the Company completed a non-brokered private placement and issued 1,352,062 units at a price of CDN\$0.43 per unit for gross proceeds of \$471,479 (CDN\$581,387). Each unit comprised one common share and one share purchase warrant, with each warrant exercisable at a price of CDN\$0.70 per share for a period of three years from the date of closing. The Company also issued 4,250 finders' warrants with a fair value of \$885 in connection with this private placement exercisable at a price of CDN\$0.43 per share for a period of three years from the date of closing.

In April 2015, the Company completed a non-brokered private placement and issued 1,200,050 units at a price of CDN\$0.70 per unit for gross proceeds of \$672,028 (CDN\$840,035). Each unit comprised one common share and one share purchase warrant, with each warrant exercisable at a price of \$0.70 per share for a period of three years from the date of closing. The Company also issued 9,250 finders' warrants in connection with this private placement exercisable at a price of CDN\$0.95 per share for a period of three years from the date of closing.

In July 2015, the Company completed a non-brokered private placement and issued 1,822,000 units at a price of CDN\$0.54 per unit for gross proceeds of \$982,227 (CDN\$1,275,400). Each unit comprised one common share and one purchase warrant, with each warrant exercisable at a price of CDN\$0.74 per share for a period of three years from the date of closing. The Company also issued 73,500 finders' warrants in connection with this private placement exercisable at a price of CDN\$0.74 per share for a period of three years from the date of closing.

In November 2015, the Company completed a non-brokered private placement and issued 1,694,444 units at a price of CDN\$0.36 per unit for gross proceeds of \$456,018 (CDN\$610,000). Each unit comprised one common share and one purchase warrant, with each warrant exercisable at a price of CDN\$0.55 per share for a period of three years from the date of closing. The Company also issued 70,000 finders' warrants in connection with this private placement exercisable at a price of CDN\$0.55 per share for a period of three years from the date of closing.

In December 2015, the Company completed a non-brokered private placement and issued 1,681,189 units at a price of CDN\$0.36 per unit for gross proceeds of \$437,096 (CDN\$605,228). Each unit comprised one common share and one purchase warrant, with each warrant exercisable at a price of CDN\$0.55 per share for a period of three years from the date of closing. The Company also issued 26,600 finders' warrants in connection with this private placement exercisable at a price of CDN\$0.55 per share for a period of three years from the date of closing.

In connection with the private placements completed during the year ended December 31, 2015, the Company incurred share issued costs of \$147,680 consisting of cash finders' fees, exchange and regulatory fees and legal fees.

For the year ended December 31, 2015, the Company determined the fair value at the time of issuance of the warrants included in the derivative liability and the finders' warrants using the Black-Scholes Option Pricing Model using the following inputs:

Input	Range
Expected volatility	84% - 87%
Expected life	2.25 years
Dividends	0.00%
Risk-free interest rate	0.55% - 0.63%

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9. Share Capital (continued)

Private Placements (continued)

In February 2016, the Company completed a non-brokered private placement and issued 273,058 units at a price of CDN\$0.36 per unit for gross proceeds of \$70,037 (CDN\$98,301). Each unit comprised one common share and one purchase warrant, with each warrant exercisable at a price of CDN\$0.55 per share for a period of three years from the date of closing. The Company had received subscriptions of \$31,102 at December 31, 2015 that related to this private placement. On issue the fair value of the warrants was determined to be \$26,464 and included in derivative liability (Note 8).

In March 2016, the Company completed a non-brokered private placement and issued 2,244,497 units at a price of CDN\$0.36 per unit for gross proceeds of \$622,166 (CDN\$808,019). Each unit comprised one common share and one purchase warrant, with each warrant exercisable at a price of CDN\$0.55 per share for a period of three years from the date of closing. On issue the fair value of the warrants was determined to be \$507,562 and included in derivative liability (Note 8). The Company also issued 23,450 finders' warrants with a fair value of \$5,248 in connection with this private placement exercisable at a price of CAD\$0.55 per share for a period of three years from the date of closing.

In June 2016, the Company completed a non-brokered private placement and issued 1,000,000 units at a price of CDN\$0.40 per unit for gross proceeds of \$311,988 (CDN\$400,000). Each unit comprised one common share and one purchase warrant, with each warrant exercisable at a price of CDN\$0.55 per share for a period of three years from the date of closing. On issue the fair value of the warrants was determined to be \$133,402 and included in derivative liability (Note 8). The Company also issued 70,000 finders' warrants with a fair value of \$9,338 in connection with this private placement exercisable at a price of CAD\$0.55 per share for a period of three years from the date of closing.

In July 2016, the Company completed a non-brokered private placement and issued 1,000,000 units at a price of CDN\$0.40 per unit for gross proceeds of \$303,630 (CDN\$400,000). Each unit comprised one common share and one purchase warrant, with each warrant exercisable at a price of CDN\$0.55 per share for a period of three years from the date of closing. On issue the fair value of the warrants was determined to be \$121,943 and included in derivative liability (Note 8). The Company also issued 70,000 finders' warrants with a fair value of \$8,536 in connection with this private placement exercisable at a price of CAD\$0.55 per share for a period of three years from the date of closing.

In September 2016, the Company completed a non-brokered private placement and issued 650,000 units at a price of CDN\$0.36 per unit for gross proceeds of \$177,048 (CDN\$234,000). Each unit comprised one common share and one purchase warrant, with each warrant exercisable at a price of CDN\$0.55 per share for a period of three years from the date of closing. On issue the fair value of the warrants was determined to be \$64,853 and included in derivative liability (Note 8). The Company also issued 45,500 finders' warrants with a fair value of \$4,540 in connection with this private placement exercisable at a price of CAD\$0.55 per share for a period of three years from the date of closing.

In November 2016, the Company completed a non-brokered private placement and issued 1,427,500 units at a price of CDN\$0.23 per unit for gross proceeds of \$244,966 (CDN\$328,325). Each unit comprised one common share and one purchase warrant, with each warrant exercisable at a price of CDN\$0.30 per share for a period of three years from the date of closing. On issue the fair value of the warrants was determined to be \$145,612 and included in derivative liability (Note 8). The Company also issued 72,100 finders' warrants with a fair value of \$7,801 in connection with this private placement exercisable at a price of CAD\$0.30 per share for a period of three years from the date of closing.

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9. Share Capital (continued)

Private Placements (continued)

In December 2016, the Company completed a non-brokered private placement and issued 1,500,000 units at a price of CDN\$0.21 per unit for gross proceeds of \$238,373 (CDN\$315,000). Each unit comprised one common share and one purchase warrant, with each warrant exercisable at a price of CDN\$0.30 per share for a period of three years from the date of closing. On issue the fair value of the warrants was determined to be \$112,940 and included in derivative liability (Note 8). The Company also issued 70,000 finders' warrants with a fair value of \$5,569 in connection with this private placement exercisable at a price of CAD\$0.30 per share for a period of three years from the date of closing.

In connection with the private placements completed during the year ended December 31, 2016, the Company incurred share issued costs of \$235,830 consisting of cash finders' fees, exchange and regulatory fees and legal fees.

For the year ended December 31, 2016, the Company determined the fair value at the time of issuance of the warrants included in the derivative liability and the finders' warrants using the Black-Scholes Option Pricing Model using the following inputs:

Input	Range
Expected volatility	86% - 95%
Expected life	2.25 years
Dividends	0.00%
Risk-free interest rate	0.45% - 0.80%

Shares Issued For Services

In October 2015, the Company issued 325,000 shares of common stock for professional services. The fair value of the shares issued was \$111,764

In July 2016, the Company issued 400,000 shares of common stock for professional services. The fair value of the shares was \$124,000 which was recorded as a reduction to accounts payable.

Basic and Diluted Loss Per Share

Diluted loss per share did not include the effect of stock options and warrants as the effect would be anti-dilutive.

Stock Options

The Company has adopted an incentive stock option plan, which provides that the Board of Directors of the Company may from time to time, at its discretion, and in accordance with the Exchange requirements, grant to directors, officers, employees and technical consultants to the Company, non-transferable options to purchase common shares, provided that the number of common shares reserved for issuance will not exceed 6,779,255 common shares. Such options will be exercisable for a period of up to 10 years from the date of grant. In connection with the foregoing, the number of common shares reserved for issuance to any one optionee will not exceed five percent (5%) of the issued and outstanding common shares and the number of common shares reserved for issuance to all technical consultants will not exceed two percent (2%) of the issued and outstanding common shares. Options may be exercised no later than 90 days following cessation of the optionee's position with the Company or 30 days following cessation of an optionee conducting investor relations activities' position.

Stock-based compensation expense has been calculated using the Black-Scholes option pricing model. The expected life of the options has been estimated to be the contractual term of the option given the limited history of early exercise. Future volatility has been determined based on historical volatility for a period equivalent to the expected life of the option.

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9. Share Capital (continued)

Stock Options (continued)

During the years ended December 31, 2016 and 2015, the Company recorded stock-based compensation expense of \$869,130 and \$387,648, respectively.

On April 30, 2015, the Company granted 1,250,000 stock options to directors. The options vest 1/3 each calendar year from the grant date. The options are exercisable at CDN\$0.58 and expire April 30, 2020. The options had a grant date fair value of \$427,310 (CDN\$513,742) determined using the Black-Scholes Option Pricing Model with the following assumptions: Risk free rate of 0.98%; Expected life of 5 years; Volatility of 93%; and a Dividend yield of 0%.

On June 15, 2015, the Company granted 15,000 stock options to employees. 50% of the options on September 15, 2015 and the remaining options vest eighteen months from the grant date. The options are exercisable at CDN\$0.54 and expire June 15, 2020. The options had a grant date fair value of \$4,621 (CDN\$5,691) determined using the Black-Scholes Option Pricing Model with the following assumptions: Risk free rate of 0.98%; Expected life of 5 years; Volatility of 92%; and a Dividend yield of 0%.

On July 13, 2015, the Company granted 80,000 stock options to a consultant. The options vested immediately. The options are exercisable at CDN\$0.65 and expire December 20, 2019. The options had a grant date fair value of \$27,780 (CDN\$35,193) determined using the Black-Scholes Option Pricing Model with the following assumptions: Risk free rate of 0.76%; Expected life of 4.44 years; Volatility of 93%; and a Dividend yield of 0%.

On January 31, 2016, the Company granted 1,975,000 stock options to employees. The options vested immediately. The options are exercisable at CDN\$0.40 and expire January 13, 2021. The options had a grant date fair value of \$395,116 (CDN\$562,580) determined using the Black-Scholes Option Pricing Model with the following assumptions: Risk free rate of 0.92%; Expected life of 5.00 years; Volatility of 94%; and a Dividend yield of 0%.

On February 15, 2016, the Company granted 120,000 stock options to an employee. The options vest accordingly: 80,000 after 6 months, and 40,000 after 1 year. The options are exercisable at CDN\$0.51 and expire February 15, 2021. The options had a grant date fair value of \$31,489 (CDN\$43,622) determined using the Black-Scholes Option Pricing Model with the following assumptions: Risk free rate of 0.92%; Expected life of 5.00 years; Volatility of 94%; and a Dividend yield of 0%.

On December 9, 2016, the Company granted 1,830,000 stock options to employees. The options vested immediately. The options are exercisable at CDN\$0.20 and expire December 9, 2021. The options had a grant date fair value of \$197,874 (CDN\$260,531) determined using the Black-Scholes Option Pricing Model with the following assumptions: Risk free rate of 1.08%; Expected life of 5.00 years; Volatility of 93%; and a Dividend yield of 0%.

On December 30, 2016, the Company granted 680,000 stock options to employees. The options vested immediately. The options are exercisable at CDN\$0.18 and expire December 30, 2021. The options had a grant date fair value of \$62,884 (CDN\$84,424) determined using the Black-Scholes Option Pricing Model with the following assumptions: Risk free rate of 1.11%; Expected life of 5.00 years; Volatility of 94%; and a Dividend yield of 0%.

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9. Share Capital (continued)

Stock Options (continued)

The changes in options during the years ended December 31, 2016 and 2015 are as follows:

	Number of options	Weighted average exercise price	Number of options	Weighted average exercise price
Options outstanding, beginning	5,275,000	CDN \$0.65	4,182,000	CDN \$0.90
Options granted	4,605,000	CDN \$0.24	1,345,000	CDN \$0.86
Options exercised	(38,500)	CDN \$0.46	—	CDN \$0.40
Options expired	(2,330,000)	CDN \$0.90	(252,000)	CDN \$1.20
Options outstanding, ending	7,511,500	CDN \$0.46	5,275,000	CDN \$0.80
Options exercisable, ending	6,070,000	CDN \$0.45	3,775,000	CDN \$0.89

Details of options outstanding as of December 31, 2016 are as follows:

Exercise Price	Expiration Date	Number of Options Outstanding
CDN\$ 0.51	April 17, 2017	120,000
CDN\$ 1.11	September 4, 2017	200,000
CDN\$ 0.80	December 20, 2017	295,000
CDN\$ 0.57	December 20, 2017	80,000
CDN\$ 0.80	January 4, 2018	20,000
CDN\$ 0.71	April 5, 2018	40,000
CDN\$ 0.83	June 3, 2018	25,000
CDN\$ 0.58	July 31, 2018	100,000
CDN\$ 1.08	January 10, 2019	315,000
CDN\$ 0.75	December 17, 2019	405,000
CDN\$ 0.65	December 20, 2019	80,000
CDN\$ 0.58	April 30, 2020	1,236,500
CDN\$ 0.54	June 15, 2020	15,000
CDN\$ 0.40	January 13, 2021	1,950,000
CDN\$ 0.51	February 15, 2021	120,000
CDN\$ 0.20	December 9, 2021	1,830,000
CDN\$ 0.18	December 30, 2021	680,000
		7,511,500

Each option entitles the holder to purchase one common share of the Company.

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9. Share Capital (continued)

Warrants

The changes in warrants during the years ended December 31, 2016 and 2015 are as follows:

	December 31, 2016		December 31, 2015	
	Number of Warrants	Weighted Average Exercise Price	Number of Warrants	Weighted Average Exercise Price
Warrants outstanding, beginning	18,708,432	CDN \$0.72	11,488,474	CDN \$0.77
Warrants issued	8,446,105	CDN \$0.44	8,354,625	CDN \$0.70
Warrants expired	(474,867)	CDN \$0.96	(1,562,034)	CDN \$1.00
Warrants outstanding, ending	26,679,670	CDN \$0.63	18,708,432	CDN \$0.72

The weighted average remaining life of the warrants outstanding as at December 31, 2016 is 1.76 years.

Details of warrants outstanding as December 31, 2016 are as follows:

Exercise Price	Expiration Date	Number of Warrants Outstanding and Exercisable
CDN\$ 0.90	July 20, 2017	3,840,700
CDN\$ 0.70	January 21, 2018	1,356,312
CDN\$ 0.95	April 14, 2018	1,209,080
CDN\$ 0.95	April 27, 2018	421,500
CDN\$ 0.74	July 23, 2018	1,070,000
CDN\$ 0.74	July 31, 2018	825,500
US\$ 0.62	August 20, 2018	6,038,240
CDN\$ 0.74	November 30, 2018	1,764,444
CDN\$ 0.74	December 18, 2018	1,707,789
CDN\$ 0.55	February 2, 2019	273,058
CDN\$ 0.55	March 17, 2019	2,267,947
CDN\$ 0.55	June 28, 2019	1,070,000
CDN\$ 0.55	July 28, 2019	1,070,000
CDN\$ 0.43	September 16, 2019	695,500
CDN\$ 0.30	November 2, 2019	1,070,000
CDN\$ 0.30	November 22, 2019	429,600
CDN\$ 0.25	December 5, 2019	1,070,000
CDN\$ 0.25	December 14, 2019	500,000
		26,679,670

9. Share Capital (continued)

Other

On August 21, 2015, the Company entered into an Investment Agreement (the “Investment Agreement”) and Registration Rights Agreement (the “Registration Rights Agreement”) with Dutchess Opportunity Fund, II, LP (“Dutchess”). Pursuant to the Investment Agreement, Dutchess committed to purchase, subject to certain restrictions and conditions, up to \$5 million of the Company’s Common Stock upon issuance by the company of a Put to Dutchess at a price equal to ninety five percent (95%) of the lowest daily VWAP (volume weighted average price) of the Company’s Common Stock during the five (5) consecutive Trading Days beginning on the Put Notice Date and ending on and including the date that is four (4) Trading Days after such Put Notice Date. Pursuant to the terms of the Registration Rights Agreement, the Company is obligated to file one or more registration statements with the SEC to register the resale by Dutchess of shares of Common Stock issued or issuable under the Investment Agreement. To date the Company has not utilized this facility.

10. Reserves

Share-Based Payment Reserve

The share-based payment reserve records the fair value of options and warrants recorded in accordance with IFRS 2 “Share-based payments” until such time that the stock options or warrants are exercised, at which time the corresponding amount will be transferred to share capital.

11. Financial Instrument Fair Values

The fair value of the Company’s financial assets and liabilities approximates the carrying amount.

Financial instruments measured at fair value are classified into one of three levels in the fair value hierarchy according to the relative reliability of the inputs used to estimate the fair values. The three levels of the fair value hierarchy are:

- Level 1 – Unadjusted quoted prices in active markets for identical assets or liabilities;
- Level 2 – Inputs other than quoted prices that are observable for the asset or liability either directly or indirectly; and
- Level 3 – Inputs that are not based on observable market data.

Financial liabilities measured at fair value at December 31, 2016 and 2015 consisted of the derivative financial liability, which is measured using level 3 inputs.

The fair value of the derivative liability is determined by the Black-Scholes option pricing model using the historical volatility as an estimate of future volatility. At December 31, 2016, if the volatility used was increased by 10% the impact would be an increase to the derivative liability of \$60,520, with a corresponding decrease to comprehensive loss.

12. Related Party Transactions and Balances

Related Party Balances

As of December 31, 2016 and 2015 there was \$318,685 (2015 - \$204,060) owed to directors, officers, and companies controlled by directors that has been included in trade payables and accrued liabilities.

Natcore Technology Inc.
Notes to the Consolidated Financial Statements
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12. Related Party Transactions and Balances (continued)

Key Management Personnel Compensation

	Year Ended December 31, 2016	Year Ended December 31, 2015	Year Ended December 31, 2014
Administrative fees	\$ 60,000	\$ 60,000	\$ 60,000
Consulting	48,000	100,200	108,000
Wages and benefits	587,041	558,320	558,500
Stock-based compensation	933,616	239,875	38,222
	\$ 1,628,657	\$ 958,395	\$ 764,722

13. Financial Risk and Capital Management

The Company is exposed in varying degrees to a variety of financial instrument related risks. The Board of Directors approves and monitors the risk management processes, inclusive of documented investment policies, counterparty limits, and controlling and reporting structures. The type of risk exposure and the way in which such exposure is managed is provided as follows:

Credit Risk

Credit risk is the risk that one party to a financial instrument will fail to discharge an obligation and cause the other party to incur a financial loss. The Company's primary exposure to credit risk is on its cash, and cash equivalents. The majority of cash is deposited in bank accounts held with major banks in Canada and the United States. As most of the Company's cash is held by two banks there is a concentration of credit risk. This risk is managed by using major banks that are high credit quality financial institutions as determined by rating agencies. The Company's secondary exposure to risk is on its receivables. The risk is considered to be minimal.

Liquidity Risk

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they fall due. The Company has a planning and budgeting process in place to help determine the funds required to support the Company's normal operating requirements on an ongoing basis. The Company ensures that there are sufficient funds to meet its short-term business requirements, taking into account its anticipated cash flows from operations and its holdings of cash and cash equivalents.

Historically, the Company's sole source of funding has been the issuance of equity securities for cash, primarily through private placements. The Company's access to financing is always uncertain. There can be no assurance of continued access to significant equity funding.

The following is an analysis of the contractual maturities of the Company's non-derivative financial liabilities as at December 31, 2016:

	Within One Year	Between One and Five Years	More Than Five Years
Trade Payables and Accrued Liabilities	\$ 1,192,636	\$ —	\$ —

Foreign Exchange Risk

Foreign exchange risk is the risk that the fair values of future cash flows of a financial instrument will fluctuate because they are denominated in currencies that differ from the respective functional currency. The Company does not hedge its exposure to fluctuations in foreign exchange rates.

Natcore Technology Inc.
Notes to the Consolidated Financial Statements
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13. Financial Risk and Capital Management (continued)

Foreign Exchange Risk (continued)

The following is an analysis of the United States dollar equivalent of financial assets and liabilities that are denominated in Canadian dollars:

	December 31, 2016	December 31, 2015
Cash and cash equivalents	\$ 21,933	\$ 295,019
Trade payables and accrued liabilities	(140,756)	(98,154)
Net	\$ (118,823)	\$ 196,865

Based on the above net exposures, a 1% change in the Canadian dollar to United States dollar exchange rate would impact the Company's net loss by 1,188 and \$1,969 at December 31, 2016 and 2015, respectively.

Interest Rate Risk

Interest rate risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Company is exposed to interest rate risk on its cash equivalents as these instruments have original maturities of three months or less and are therefore exposed to interest rate fluctuations on renewal. A 1% change in market interest rates would have an impact on the Company's net loss of approximately \$1,000.

Fair Value

The fair value of the Company's financial assets and liabilities approximates the carrying amount.

Financial instruments measured at fair value are classified into one of three levels in the fair value hierarchy according to the relative reliability of the inputs used to estimate the fair values. The three levels of the fair value hierarchy are:

- Level 1 – Unadjusted quoted prices in active markets for identical assets or liabilities;
- Level 2 – Inputs other than quoted prices that are observable for the asset or liability either directly or indirectly; and
- Level 3 – Inputs that are not based on observable market data.

Financial liabilities measured at fair value at December 31, 2015 and 2014 consisted of the derivative financial liability, which is measured using level 3 inputs.

The fair value of the derivative liability is determined by the Black-Scholes option pricing model using the historical volatility as an estimate of future volatility. At December 31, 2015, if the volatility used was increased by 10% the impact would be an increase to the derivative liability of \$53,766, with a corresponding decrease to comprehensive loss.

14. Commitments

Employment Agreement

The Company has an agreement (the "Employment Agreement") dated October 1, 2007, and amended July 31, 2008, with an officer of the Company under which the Company pays a fee for employee services at a base salary of \$220,000 per annum. On April 30, 2010, the Board of Directors passed a resolution to increase this to \$250,000 per annum and on May 13, 2011 passed a resolution to increase this to \$275,000 per annum. The employee is entitled to receive options under the terms and conditions of the Company's stock option plan. The employee will serve as the President and Chief Executive Officer of the Company. On April 5, 2012, the employment agreement was extended for an additional two years under the same terms. On April 5, 2014, the employment agreement was extended for an additional three years under the same terms.

Natcore Technology Inc.
Notes to the Consolidated Financial Statements
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14. Commitments (continued)

Employment Agreement (continued)

Pursuant to the Employment Agreement, the Company has committed to granting 500,000 stock options based on the Company achieving certain consolidated net revenue targets. The exercise price and term of the options will be set at time the targets are met.

The employee has the right, upon 30-days notice, to terminate the Employment Agreement. The Company may terminate the Employment Agreement on 10-days notice if for cause or on 60 days notice if without cause. Should the Company terminate the contract without cause, it is obligated to pay the employee an amount equal to three month's base salary.

License Agreement

In 2004, the Company entered into a License Agreement with a university under which the university is entitled to receive: (i) 2% of the Company's adjusted gross sales as defined in the License Agreement, and (ii) 2% of the adjusted gross sales of any sub licensee as defined in the License Agreement. The License Agreement gives the Company an exclusive license to a certain United States patent and the related technology for low temperature growth of inorganic materials from solution using catalyzed growth and re-growth.

Research and Development Facility Lease

On June 1, 2013, the Company entered into a new two-year lease for its research and development facility in Rochester, New York. The Company will pay a base rent of \$103,596 per year in monthly installments of \$8,633. The lease was set to expire on June 30, 2015. On June 26, 2015, the Company extended the lease from July 1, 2015 to June 30, 2017 at a base rent of \$105,212 per year in monthly installments of \$8,768.

Patent License Agreement

On December 9, 2011, the Company entered into a Patent License Agreement to use certain licensed patents. The Company is required to pay an annual fee of \$25,000 for as long as the Company uses the patents.

15. Income Taxes

A reconciliation of the expected income tax recovery to the actual income tax recovery is as follows:

	Year Ended December 31, 2016	Year Ended December 31, 2015	Year Ended December 31, 2014
Net loss	\$ (2,021,700)	\$ (3,488,129)	\$ (2,193,532)
Tax rate	34%	34%	34%
Expected income tax recovery	(687,378)	(1,185,964)	(745,801)
Derivative liability	(607,888)	(38,927)	(646,622)
Non-deductible items and other	275,973	83,288	(572,181)
Share issuance costs not recognized	(58,233)	—	—
Effect of different foreign tax rates	19,251	30,448	(2,399)
Temporary differences not recognized	1,058,275	1,111,155	1,967,003
	\$ —	\$ —	\$ —

The Company has the following deductible temporary difference for which no deferred tax asset has been recognized and that can be carried forward indefinitely.

	December 31, 2016	December 31, 2015
Non-capital losses – Canada	\$ 1,934,799	\$ 1,506,002
Tax losses – United States	20,420,145	17,842,058
Equipment tax pools	1,102,969	956,023
Share issuance costs	247,194	156,111
	\$ 23,705,107	\$ 20,460,194

Natcore Technology Inc.
Notes to the Consolidated Financial Statements
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The Canadian and US non-capital losses expire between 2022 and 2036.

16. Research and Development Expense

Details of this expense account by nature are as follows:

	Year Ended December 31, 2016	Year Ended December 31, 2015	Year Ended December 31, 2014
Consulting	\$ 10,754	\$ 18,676	\$ 136,753
Equipment rental, rent and facility costs	286,323	284,533	352,809
Professional fees	103,011	123,313	257,856
Royalty and other	39,102	71,239	103,562
Wages and salaries	698,232	705,953	783,884
	\$ 1,137,422	\$ 1,203,714	\$ 1,634,864

17. Subsequent Events

In January 2017, the Company completed a non-brokered private placement and issued 1,021,800 units at a price of CDN\$0.21 per unit for gross proceeds of \$162,252 (CDN\$214,578). Each unit comprised one common share and one purchase warrant, with each warrant exercisable at a price of CDN\$0.25 per share for a period of three years from the date of closing.

In January 2017, the Company received \$39,635 (CDN\$52,000) from the exercise of 130,000 options.

In February 2017, the Company issued 140,000 common shares for legal services.

In February 2017, the Company completed a non-brokered private placement and issued 650,000 units at a price of CDN\$0.34 per unit for gross proceeds of \$168,955 (CDN\$221,000). Each unit comprised one common share and one purchase warrant, with each warrant exercisable at a price of CDN\$0.40 per share for a period of three years from the date of closing. The Company also issued 45,500 finders warrants with an exercise price of CDN\$0.40.

In March 2017, the Company completed a non-brokered private placement and issued 900,000 units at a price of CDN\$0.19 per unit for gross proceeds of \$127,860 (CDN\$171,000). Each unit comprised one common share and one purchase warrant, each warrant exercisable at a price of CDN\$0.25 per share for a period of three years from the date of closing.

In April 2017, the Company completed a non-brokered private placement and issued 1,030,000 units at a price of CDN\$0.19 per unit for gross proceeds of \$146,790 (CDN\$195,700). Each unit comprised one common share and one purchase warrant, each warrant exercisable at a price of CDN\$0.25 for a period of three years from the date of closing.

SIGNATURE

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this Annual Report on its behalf.

Date: May 16, 2017

NATCORE TECHNOLOGY, INC.

By: /S/ CHARLES R. PROVINI

Name: Charles R. Provini

Title: President & CEO

Authorized Representative in the United States

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT TO SECTION 302 OF THE
SARBANES-OXLEY ACT OF 2002**

I, Charles R. Provini, certify that:

1. I have reviewed this annual report on Form 20-F of Natcore Technology, Inc. (the "Company").
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in this report;
4. The Company's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e)) and 15d-15(e) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f) for the Company, and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the Company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the Company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is likely to materially affect, the company's internal control over financial reporting; and
5. The Company's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the Audit Committee of the Company's Board of Directors (or persons performing the equivalent function);
 - a. All significant deficiencies and material weaknesses in the design or operation of internal controls over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information; and
 - b. Any, fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting.

Date: May 16, 2017



Charles R. Provini
President and Chief Executive Officer

**CERTIFICATION OF CHIEF FINANCIAL OFFICER PURSUANT TO SECTION 302 OF THE
SARBANES-OXLEY ACT OF 2002**

I, Richard Childs, certify that:

1. I have reviewed this annual report on Form 20-F of Natcore Technology, Inc. (the "Company").
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in this report;
4. The Company's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e)) and 15d-15(e) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f) for the Company, and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the Company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the Company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is likely to materially affect, the company's internal control over financial reporting; and
5. The Company's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the Audit Committee of the Company's Board of Directors (or persons performing the equivalent function);
 - a. All significant deficiencies and material weaknesses in the design or operation of internal controls over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information; and
 - b. Any, fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting.

Date: May 16, 2017



Richard Childs
Chief Financial Officer
(Principal Financial Office)

**CERTIFICATION BY THE PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report on Form 20-F of Natcore Technology, Inc. (the "Company") for the period ending December 31, 2016 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Charles R. Provini, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Rule 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of, and for, the periods presented in the Report.

The foregoing certification is provided solely for purposes of complying with the provisions of Section 906 of the Sarbanes-Oxley Act of 2002 and is not intended to be used or relied upon for any other purpose.

Date: May 16, 2017

By: _____



Name: Charles R. Provini

Title: President and Chief Executive Officer

**CERTIFICATION BY THE PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report on Form 20-F of Natcore Technology, Inc. (the "Company") for the period ending December 31, 2016 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Richard Childs, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Rule 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of, and for, the periods presented in the Report.

The foregoing certification is provided solely for purposes of complying with the provisions of Section 906 of the Sarbanes-Oxley Act of 2002 and is not intended to be used or relied upon for any other purpose.

Date: May 16, 2017

By: 

Name: Richard Childs

Title: Chief Financial Officer
