# **Dundee Sustainable Technologies Inc.**

Management's Discussion and Analysis

For the three and nine months ended September 30, 2018

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# **MANAGEMENT'S DISCUSSION AND ANALYSIS**

FOR THE THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2018

### **BACKGROUND**

This Management's Discussion and Analysis ("MD&A") of Dundee Sustainable Technologies Inc. ("DST" or the "Corporation") constitutes management's review of the factors that affected the Corporation's financial and operating performance for the nine months ended September 30, 2018.

This MD&A should be read in conjunction with the Corporation's audited consolidated financial statements, including the notes thereto, as at and for the year ended December 31, 2017 (the "2017 Audited Consolidated Financial Statements"), together with the accompanying MD&A for the year then ended, and with the unaudited condensed interim consolidated financial statements of the Corporation as at and for the nine months ended September 30, 2018 (the "September 2018 Interim Consolidated Financial Statements"), all of which have been prepared using International Financial Reporting Standards ("IFRS").

This MD&A takes into account all material events that took place up until November 26, 2018, the date on which the Corporation's Board of Directors approved this MD&A. Unless otherwise noted, all figures are in Canadian dollars, the presentation and functional currency.

Additional information regarding the Corporation is available on Sedar (<u>www.sedar.com</u>) and on the Corporation's website at <u>www.dundeetechnologies.com</u>.

### INCORPORATION AND NATURE OF OPERATION

### Incorporation

The Corporation was incorporated under the Canada Business Corporations Act on July 22, 1997. The Corporation's head office is located at 1002 Sherbrooke West, Suite 2060, Montréal, Quebec, Canada, H3A 3L6.

The authorized capital of the Corporation consists of an unlimited number of subordinate voting shares and multiple voting shares, each multiple voting share having 10 votes.

Dundee Corporation ("Dundee") retains multiple voting shares of the Corporation, which are convertible, at the option of Dundee, into subordinate voting shares of the Corporation for no additional consideration. The multiple voting shares of the Corporation are not listed on a stock exchange.

At September 30, 2018, Dundee owned 178.1 million subordinate voting shares and 50.0 million multiple voting shares of the Corporation giving Dundee a 63% equity interest and an 83% voting interest in the Corporation. In addition, Dundee is owed \$14.7 million in short term debt.

### Overview

The Corporation is a leader in the development and commercialization of innovative environmentally responsible technologies for the treatment of complex materials in the mining industry. Through the development of patented, proprietary processes, DST extracts precious and base metals from ores, concentrates and tailings, while permanently stabilizing contaminants such as arsenic, antimony and bismuth. These minerals resources could not otherwise be extracted or stabilized with conventional processes because of metallurgical issues, cost or environmental considerations. The Corporation's main focus is on the commercialization of its two innovative and patented processes (the "Technologies").

# Arsenic Stabilization by Vitrification

DST has designed, built and patented a method for the permanent stabilization of arsenic from numerous sources, including, but not limited to arsenopyrite, cobaltite, enargite, flue dusts and environmental remediation. This process is an attractive technique to permanently stabilize arsenic and does so at a lower cost than current alternatives. This presents the Corporation with opportunities to process materials considered too toxic or uneconomic to be exploited or stabilized using conventional mining and processing methods.

# **MANAGEMENT'S DISCUSSION AND ANALYSIS**

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### Gold Extraction by Chlorination

DST has also developed an advanced proprietary process is associated with the extraction of precious and base metals using sodium hypochlorite to provide a cyanide-free alternative for the exploitation of gold deposits. The primary benefit of this innovative technology is a significantly shorter processing time (1-2 hours) than in the carbon in leach process (24-48 hours) and operates in a closed-loop operation. This closed loop operation eliminates the need for a costly tailing pond and the accompanying risk. It also provides a reduction of the environmental footprint and produces inert and stable cyanide-free tailings.

The chlorination process developed by DST is a recognized "green technology" for which it was awarded a \$5 million grant by the Government of Canada, through its Sustainable Development Technology Fund ("SDTC"), for the construction and operation of a demonstration plant. The plant serves as a demonstration platform for the chlorination process on an industrial scale and under continuous operating conditions.

The environmental nature of the gold technology has been confirmed by Environment Canada through the Canadian Environmental Technology Verification Program ("ETV"). The ETV is an independent certification of the performance of its cyanide-free gold extraction process.

The Corporation has protected its intellectual property by filing patents during the development of its technologies. To date, the Corporation has patents granted or published on 13 different processes, and it has 57 patents granted, published, pending or filed in 16 different countries. These patents expire between 2022 and 2034. The Corporation is in the process of expanding its patent portfolio for both processes and jurisdictions.

Inherent in the commercialization of these processes is significant technology development risk. Each of these processes may require significant additional development, testing and investment prior to final commercialization. There can be no assurance that such technologies will be successfully developed, or that output from any use of the Corporation's processes could be produced at a commercial level at reasonable costs or successfully marketed.

### **Technical Services**

The Corporation also uses its state-of-the-art laboratory and processing facility in Thetford Mines, Quebec to assist other companies with services designed to help them with minerology for their deposits.

### **OPERATIONS DURING THE FIRST NINE MONTHS OF 2018**

### Arsenic Stabilization Technology

The small industrial scale vitrification plant (the "Plant") has been delivered to the customer and DST has staff on site completing the assembly. DST staff will begin commissioning which expected to be completed in the first quarter of 2019. The Plant is financed through a collaboration arrangement with a third party and will provide proof of the arsenic technology in an operating industrial environment. The Corporation also announced that SDTC has awarded a grant of \$1.25 million to offset some of the costs associated with this plant.

### Gold Chlorination Technology

In 2017, the Corporation completed the second of two demonstration programs to prove the efficacy of the chlorination technology with the assistance of Sustainable Technology Development Canada. The current intention of the Corporation is to initiate an independent technical-economic study, designed with the objective of building the first commercial plant in partnership with a strategic partner. DST is experiencing an increased interest in using this technology and has recently been engaged to do some high-level testing for several customers for the application of the chlorination technology on deposits under development. Testing of these samples is on-going.

# **MANAGEMENT'S DISCUSSION AND ANALYSIS**

FOR THE THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2018

### **Cobaltite Process**

In December 2017, DST entered into a lab scale technical services contract with eCobalt Solutions Inc. (TSX: ECS) ("eCobalt") to assist in conducting detailed metallurgical testing and flow sheet design for the creation of a clean cobalt concentrate using pyrolysis plus DST' vitrification on arsenic contaminated cobaltite concentrates. The lab scale testing reduced the arsenic in the concentrate from 18% to 0.15%. In January 2018, DST announced a pilot scale program with eCobalt on an eight-tonne bulk sample, the purpose of which is to confirm the successful removal of arsenic as demonstrated in the lab scale testing. eCobalt has made significant progress in removing the arsenic using a kiln and has reported that it will move ahead with pilot scale testing in the third quarter of 2018. The results of this will provide eCobalt with feasibility level detailed engineering data to assist in costing and sizing of equipment to produce a clean cobalt concentrate and an arsenic by-product that will be vitrified using Dundee Technologies arsenic vitrification process.

#### Technical Services

Dundee Technologies continues to build its technical services business and under the terms of these contracts, the Corporation will provide technical services in markets such as lithium, cobalt, nickel, magnesium, graphite and gold. Proceeds from these contracts will help to offset developmental and operating costs related to its primary technologies.

# **BUSINESS STRATEGY**

The growing pressure from communities and government authorities over the use of cyanide in various jurisdictions around the world is forcing developing gold projects to seek alternative processes that can extract the gold without the environmental liabilities associated with cyanide, while maintaining control over the deleterious elements such as arsenic, mercury and antimony.

DST offers a competitive alternative to the cyanidation process. The technology is at the forefront of the mining industry's innovative extraction processes and caters to the worldwide growing need for extractive technologies capable of processing refractory and arsenic bearing material. This alternative provides DST leverage to access quality material including material from metallurgical or environmentally constrained deposits.

DST's business plan is focused on controlling both of its technologies and leveraging them to become a major player in the industry. The Corporation has a unique opportunity to emerge as a major stakeholder in multiple mining projects. In the immediate term, DST is focused on advancing its discussions with major gold and copper producing companies on building alternative processing and stabilization processes. The Corporation is currently processing test material for a number of customers. Assuming successful results, the next step is to negotiate the business terms with those customers for commercializing its technologies.

The technology that the Corporation has developed with respect to complex deposits will allow for the development and or advancement of mining projects that would not be viable without its patented technology. DST has identified over 100 gold projects that could face significant concerns due to cyanide use, environmental and/or metallurgical constraints. These include some of the largest gold projects on the planet. The commercialization of the Corporation's technology would enable mining companies to advance those projects which are currently constrained because of the toxic nature of their deposits and discussions have commenced with a number of mining companies to help advance these otherwise stranded deposits.

### INFORMATION ON EQUITY

The authorized capital of the Corporation consists of an unlimited number of subordinate voting shares and multiple voting shares, without nominal or par value. The holders of subordinate voting shares are entitled to one vote for each subordinate voting share and the holders of multiple voting shares are entitled to ten votes for each multiple voting share. The holders of subordinate voting shares and multiple voting shares shall be entitled to receive and to participate equally as to dividends, share for share, in an equal amount on all the subordinate voting shares and multiple voting shares at the time outstanding. The holder of multiple voting shares shall be entitled at any time and from time-to-time to have any or all of the multiple voting shares converted into subordinate voting shares based on one subordinate voting share for each multiple voting

# MANAGEMENT'S DISCUSSION AND ANALYSIS

FOR THE THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2018

share. In all other respects, the holders of subordinate voting shares and multiple voting shares shall rank equally and the same rights and restrictions.

	November 26, 2018
Subordinate voting shares issued	312,926,530
Options	29,290,000
Warrants	14,285,714
Total – fully diluted subordinate voting shares	356,502,244
Multiple voting shares issued (each multiple voting share has 10 votes)	50,000,000

<sup>(1)</sup> At November 26, 2018, Dundee owned 178,068,497 subordinate voting shares of the Corporation (63%) and all of the outstanding multiple voting shares.

### STOCK OPTION PLAN

The Board of Directors of the Corporation has full and final discretion to designate the persons who are to be granted options and to determine such number of options as well as their exercise price and vesting period. The exercise price shall not be less than that permitted under the rules of any stock exchange on which the subordinate voting shares are listed. The purpose of the stock option plan is to serve as an incentive for the directors, officers, employees and service providers who will be motivated by the Corporation's success as well as to promote ownership of common shares of the Corporation by these people. There is no performance indicator relating to profitability or risk attached to the plan.

On April 18, 2018, the Corporation granted a total of 7,250,000 stock options to its directors, officers, employees and one consultant. These options are exercisable at \$0.10 per share, vested at the grant date and expire on the fifth anniversary of their date of issuance. The fair value of options awarded is \$0.08 per share for a total based payment expenses of \$558,250.

On April 26, 2018, the Corporation granted a total of 500,000 stock options to a director. These options are exercisable at \$0.10 per share, vested at the grant date and expire on the fifth anniversary of their date of issuance. The fair value of options awarded is \$0.06 per share for a total based payment expenses of \$32,000.

On June 18, 2018, the Corporation granted a total of 500,000 stock options to an employee. These options are exercisable at \$0.10 per share, vested at the grant date and expire on the fifth anniversary of their date of issuance. The fair value of options awarded is \$0.05 per share for a total based payment expenses of \$23,000.

# **MANAGEMENT'S DISCUSSION AND ANALYSIS**

FOR THE THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2018

### FINANCING ACTIVITIES

# Nine months ended September 30, 2018

### Options Exercise

During the nine months ended September 30, 2018, 1,550,000 options were exercised for an equal number of subordinate voting shares at an average price of \$0.05 per option, for aggregate proceeds to the Corporation of \$77,500.

### Promissory note from a Related Party

In February 2018, the Corporation signed a promissory note in the principal amount of \$400,000 payable on demand to a wholly-owned subsidiary of Dundee along with interest at a rate of 18% per annum.

In May 2018, the Corporation signed a promissory note in the principal amount of \$500,000 payable on demand to a wholly-owned subsidiary of Dundee along with interest at a rate of 18% per annum.

In August 2018, the Corporation signed a promissory note in the principal amount of \$650,000 payable on demand to a wholly-owned subsidiary of Dundee along with interest at a rate of 18% per annum.

As at September 30, 2018, the aggregate principal amount of the promissory notes totalled \$2,050,000 and the finance cost accrued during the nine-month period amounted to \$153,986.

# Nine months ended September 30, 2017

### Short-term Loan from a Related Party

In 2014, Dundee Resources Limited, a wholly owned subsidiary of Dundee, agreed to loan (the "Short-term Loan") up to \$6,000,000 to the Corporation. During 2015 and 2016, the aggregate amount of the loan facility was increased by \$1,650,000 and \$500,000 respectively for a total of \$8,150,000.

During the nine months ended September 30, 2017, an amount of \$360,000 was advanced bringing the total advance to \$8,310,000 as at September 30, 2017.

The secured loans bear interest at the rate of 12.68% per annum and mature on the earlier of November 30, 2017 and the date at which the Corporation raises the sum of \$10 million or greater by way of debt or equity.

#### Contribution Agreement

Under an amended agreement dated October 12, 2016, the Corporation received from CED a \$397,000 repayable contribution (the "CED Contribution"). The CED Contribution was used by the Corporation for the acquisition of equipment for its demonstration plant (the "Project") in Thetford Mines. The CED Contribution is non-interest bearing, secured and repayable in equal monthly installments over seven years starting three years after the end of the Project. CED advanced \$324,575 in December 2016, and the balance of \$72,425 in May 2017.

The CED Contribution is secured by a hypothec, pari passu with Dundee's and IQ's loans, over all of the Corporation's property other than its intellectual property.

### Bridge Loan

In August 2017, an unsecured bridge loan, payable on demand, of \$250,000 was advanced to the Corporation. The loan was repaid with interest of \$7,500 in October 2017.

In October 2016, an unsecured bridge loan, payable on demand, of \$300,000 was advanced to the Corporation. The loan was partially reimbursed in December 2016 for a total amount of \$160,000. The outstanding bridge loan of \$140,000 and accrued interest of \$4,613 was reimbursed in January 2017.

# **MANAGEMENT'S DISCUSSION AND ANALYSIS**

FOR THE THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2018

### **INVESTING ACTIVITIES**

# **Shining Tree properties**

The Shining Tree properties consist of 14 mining leases and 37 mining claims. In early 2017, the Corporation agreed to sell the mining claims for an amount of \$400,000. In March 2017, the Corporation received \$200,000 and the remaining \$200,000 on the closing of the sale of the mining leases in the second quarter of 2017.

### LIQUIDITY AND WORKING CAPITAL

On September 30, 2018, the working capital position of the Corporation was negative \$15,220,055 (negative \$12,680,020 as at December 31, 2017). This working capital deficiency includes a \$14,713,068 (\$12,220,965 as at December 31, 2017) short-term loan (principal and accrued interest) from Dundee. Management estimates that the Corporation will not have sufficient funds to meet its obligations and budgeted expenditures through the twelve months ended September 30, 2019. The Corporation will periodically have to raise additional funds to continue operations. The Corporation is pursuing financing alternatives to fund its operations and working towards developing its activities to operate as a going concern. Although there is no assurance that the Corporation will be successful in these actions, management believes, based on previous fund-raising experience and commercial activities, that it will be able to secure the necessary financing. Financings could be completed through the issuance of debt or new equity in public or privately negotiated equity offering. While it has been successful in doing so in the past, there can be no assurance that it will be able to do so in the future.

### **DISCUSSION AND ANALYSIS OF OPERATIONS**

#### Revenues

During the first nine months of 2018, the Corporation processed material for a number of customers including major gold producers for testing of ores and concentrates using the Corporation's technologies. As well, exploration and development companies in other commodities including cobalt, nickel, graphite and lithium utilized the Corporation's facilities and highly skilled personnel for advancement of their projects.

DST provided its technical expertise and its facilities to these companies to evaluate the development of their projects using the Corporation's Thetford Mines facility including its chlorination process for precious metal extraction and/or its arsenic stabilization process. The technical services may serve to demonstrate the efficiency of the Corporation's facilities and technical staff at the laboratory and/or pilot scales on specific projects in need of viable processing alternative and initiate engineering studies required for an industrial implementation.

Revenues totalled \$1,396,536 during the nine months ended September 30, 2018 with related cost of \$1,095,160 recorded under operating expenses related to services. The Corporation reported revenues of \$1,554,552, with related cost of \$1,730,095 in the same period of the prior year. Revenues by line of business were as below:

	Three months ended September 30,				
	2018	2017	2018	2017	
	\$	\$	\$	\$	
Arsenic stabilization process	192,840	43,206	563,470	304,474	
Chlorination process	53,342	10,864	87,992	35,464	
Other service revenues	51,449	627,091	745,074	1,214,614	
	297,631	681,161	1,396,536	1,554,552	

# MANAGEMENT'S DISCUSSION AND ANALYSIS

FOR THE THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2018

### Operating expenses

The major components of the operating expenses are as follows:

	Three months ended September 30,			
	2018	2017	2018	2017
	\$	\$	\$	\$
Labour	163,626	239,591	514,286	639,524
Consultants	59,292	199,444	173,000	226,547
Consumables	4,779	96,144	32,877	106,703
Plant overhead	123,427	363,810	374,997	757,321
	351,124	898,989	1,095,160	1,730,095

### Technology development

During the first nine months of 2018, the Corporation incurred net technology development costs of \$944,282 (\$767,386 in the same period of 2017) of its chlorination and arsenic stabilization processes. These costs relate to the construction of the arsenic demonstration plant, research activities conducted in the arsenic technology pilot plant and the laboratory. The remaining expenses relate to the operation of the demonstration plant, other technology development, patent maintenance and plant overhead.

The Corporation periodically receives reimbursements of project expenses generated under collaboration agreement with a third party and financial assistance under government incentive programs. These compensates DST for expenses incurred are normally recognized as a reduction to research and development expense on a systematic basis in the same periods in which the expenses are incurred. On a net-of-assistance basis, research and development costs represented \$944,282 (\$767,386 during the same period in 2017).

	Three months ended September 30,		Nine mon	
	2018	2017	2018	2017
	\$	\$	\$	\$
Arsenic plant	780,998	-	2,765,449	-
Plant expenses	352,993	257,176	1,044186	984,728
Patent maintenance	21,354	44,251	99,390	90,766
Technology development	1,155,345	301,427	3,909,025	1,075,494
Net contribution	(819,703)	-	(2,402,243)	-
Government grants	-	(26,856)	(562,500)	(308,108)
Technology development expenses, net	335,642	274.571	944.282	767,386

### MANAGEMENT'S DISCUSSION AND ANALYSIS

FOR THE THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2018

Professional and consulting fees

	Three months ended September 30,				
	2018	2017	2018	2017	
	\$	\$	\$	\$	
Legal	4,563	4,297	25,417	32,467	
Audit, audit related work and tax compliance	8,400	12,405	108,540	141,173	
Accounting	7,500	-	9,640	53,883	
	20,463	16,702	143,597	227,523	

The audit related work of 2017 includes \$25,000 fees for work to the SDTC file review for the chlorination project completed that year.

Accounting includes the remuneration of the former Chief Financial Officer that was recorded as an accounting expense and beginning in June 2017, the Controller of the Corporation took the position as Chief Financial Officer and his remuneration is now recorded under Wages and Compensation.

Administrative expenses

	Three months ended September 30,			
	2018	2017	2018	2017
	\$	\$	\$	\$
Insurance	53,792	63,792	139,437	173,340
Rent	25,758	27,068	106,215	101,666
Website and technical support	7,642	21,404	25,720	60,570
Travel and accommodations	6,822	6,075	46,249	39,792
Telecommunications and others	13,485	27,586	46,495	61,220
	107,499	145,925	364,116	436,588

The decrease in insurance expense was due to a review of our policy to cover the current level of operations during this period. The decrease in website and technical support is mainly due to improvements on information technology processes implemented by the Corporation.

### Wages and compensation

	Three months ended September 30,				
	2018	2017	2018	2017	
	\$	\$	\$	\$	
Employees	61,504	76,952	325,933	272,984	
Officer compensation	43,541	47,499	138,539	132,206	
Director fees	7,000	6,000	24,000	23,000	
	112,045	130,451	488,472	428,190	

Officer compensation relates to the President and Chief Executive Officer's (CEO) compensation. The remuneration of the President and CEO is based on a monthly rate of \$15,833.

### Other Gains and Losses

During the nine months ended September 30, 2018, finance costs relates to interest expenses capitalized on the Dundee short-term loan (\$942,102), the IQ Loan (\$285,735 capitalized and \$109,698 accretion expense), the CED contribution agreement (\$18,710 accretion expense), other interest expense (\$9,093) and gain on investment (\$51,350). During the same period of 2017, finance costs relates to interest expenses capitalized on the Dundee short-term loan (\$781,880), the IQ Loan (\$249,065 capitalized and \$90,399 accretion expense), the CED contribution agreement (\$14,684 accretion expense), the bridge loan (\$8,378) and other (\$6,267).

# **MANAGEMENT'S DISCUSSION AND ANALYSIS**

FOR THE THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2018

### SELECTED QUARTERLY INFORMATION

The following table sets forth selected historical financial information for the Corporation from the last eight quarters. Such information is derived from the Corporation's interim unaudited financial statements prepared in accordance with IFRS.

	Q3-18	Q2-18	Q1-17	Q4-17
	\$	\$	\$	\$
Total revenue	297,631	579,980	518,925	869,034
Operating loss	641,940	963,635	697,594	328,063
Net loss and comprehensive loss	1,086,284	1,389,127	1,125,218	742,163
Basic and diluted net loss per share	0.003	0.004	0.003	0.002

	Q3-17	Q2-17	Q1-16	Q4-16
	\$	\$	\$	\$
Total revenue	681,161	662,196	211,195	34,499
Operating loss (income)	792,372	518,258	1,303,359	(131,059)
Net loss and comprehensive loss	1,142,908	884,541	1,678,010	237,461
Basic and diluted net loss per share	0.003	0.003	0.005	0.001

### **OUTLOOK FOR 2018/2019**

The Company continues to move towards the commercialization of its Technologies and seeking to maximize the value of all of its assets to accelerate this growth. The Corporation has five initiatives that it will execute to ensure success.

### Arsenic Stabilization Process

The Corporation completed the delivery to the customer's mineral processing facility. Assembly is expected to be completed by the end of 2018 and hot commissioning scheduled to be completed early in 2019. Operation of the plant is expected to begin early 2019. The Corporation will use data from this program to position the technology for adoption by customers around the world.

### **Chlorination Process**

The Corporation completed the second of two gold chlorination campaigns through the processing of a complex concentrate from Chile in December 2016 and the Corporation finalized the Demonstration Campaign Report during the first quarter of 2017. The processing of these materials continued to establish the proof of concept of the Corporation's chlorination process for different ore and concentrate streams. The intention is to initiate an independent technical-economic study, designed with the objective of building DST's first commercial plant in partnership with a strategic partner. The Company is working with several companies properties in Asia, Africa and Canada to test their ores and concentrates using the chlorination technology.

# Cobaltite

The Corporation completed processing of a eight (8) tonne sample of concentrate from eCobalt Solutions Inc. eCobalt is currently testing a kiln as a method to remove the arsenic from the concentrate and implementing the vitrification on the arsenic removed. The Corporations' approach to the processing of arsenic contaminated cobaltite is expected to make a significant improvement to the economics of the processing of the concentrate. The Corporation continues to work with other cobalt companies to test the amenability of its technologies to solving the metallurgical problems associated with these ores.

### **Technical Services:**

With the completion of the two gold chlorination demonstration campaigns, the Corporation owns a state-of-the-art crushing, grinding, mineral processing (hydrometallurgy and pyrometallurgy) facility which is being made available for test programs from the lab scale up to the thousands of tonnes scale. Management is in discussions with numerous parties with respect to specific projects that will maximize the value of our Thetford facility.

# **MANAGEMENT'S DISCUSSION AND ANALYSIS**

FOR THE THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2018

Management estimates that the Corporation will have to raise funds for its operations and to continue its activities. Although there is no assurance that the Corporation will be successful in these actions, management believes, based on previous fund-raising experience, that it will be able to secure the necessary financing through the issuance of debt or new equity in public or privately negotiated equity offering. While it has been successful in doing so in the past, there can be no assurance that it will be able to do so in the future.

### OFF BALANCE SHEET ARRANGEMENTS

The Corporation did not enter into any off-balance sheet arrangements during the three and nine months ended September 30, 2018 and 2017

# **CONTRACTUAL OBLIGATIONS AND COMMITMENTS**

The contractual obligations of the Corporation include lease payments for the Thetford Mines facilities and the head office in Montreal (Refer to Note 14 to the financial statements for the nine months ended September 30, 2018).

# **ACCOUNTING POLICY CHANGES, CRITICAL ESTIMATES, JUDGMENTS AND ASSUMPTIONS**

The preparation of financial statements in conformity with IFRS requires management to make estimates and assumptions that affect amounts reported in the financial statements and accompanying notes. There is a full disclosure and description of the Corporation's critical accounting policies, estimates, judgments, assumptions in the financial statements as at December 31, 2017 in notes 1, 2 and 3.

### Changes in accounting policies

Effective January 1, 2018, the following new standards have been applied when preparing the June 2018 Interim Consolidated Financial Statements. The Corporation adopted IFRS 9, Financial Instruments, and IFRS 15, Revenue from Contracts with Customers. The Corporation adopted these new standards retrospectively without restating comparatives. The impact of applying the standards is described below.

### a) IFRS 9, "Financial Instruments"

In July 2014, the IASB issued final amendments to IFRS 9, replacing International Accounting Standard ("IAS") 39, Financial Instruments: Recognition and Measurement, already adopted by the Corporation. IFRS 9 introduces new requirements for the classification, measurement and impairment of financial assets and hedge accounting. It establishes two primary measurement categories for financial assets: amortized cost and fair value; establishes criteria for classification of financial assets within the measurement category based on business model and cash flow characteristics; and eliminates existing held for trading, held to maturity, available for sale, loans and receivable and other financial liabilities categories. IFRS 9 also introduces a new model for the impairment of financial assets and requires an economic relationship between the hedged item and hedging instrument.

Based on the Corporation's detailed assessment of the classification and measurement of financial assets, its financial instrument currently measured at fair value with any resulting gains or losses recognized through profit or loss would continue to be measured on the same basis under IFRS 9. Accordingly, the new standard do not have a significant impact on the classification and measurement of its financial assets.

There is no impact on the Corporation's accounting for financial liabilities, as the Corporation does not have financial liabilities designated at fair value through profit or loss and does not have any material debt modifications.

The Corporation does not have any hedging instrument at the time of the transition.

The Corporation's new accounting policies for financial instruments under IFRS 9 are as follow:

# **MANAGEMENT'S DISCUSSION AND ANALYSIS**

FOR THE THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2018

#### Financial instruments

Financial assets and financial liabilities are recognized when the Corporation becomes a party to the contractual provisions of the financial instrument.

Financial assets are derecognized when the contractual rights to the cash flows from the financial asset expire, or when the financial asset and all substantial risks and rewards are transferred. A financial liability is derecognized when it is extinguished, discharged, cancelled or when it expires.

Financial assets and liabilities are initially measured and recognized at their fair value. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and liabilities at fair value through profit or loss ("FVTPL") are added to or deducted from the fair value of the financial assets and financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at FVTPL are recognized immediately in net loss.

Classification of financial instruments in the Corporation's consolidated financial statements depends on the purpose for which the financial instruments were acquired or incurred. Management determines the classification of financial instruments at initial recognition.

### a) Financial assets

Financial assets are subsequently measured at amortized cost when the asset is held within a business model whose objective is to hold assets in order to collect contractual cash flows and when the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets are subsequently measured at fair value unless they are measured at amortized cost. Financial instruments subsequently measured at fair value can be carried at fair value with changes in fair value recorded in profit or loss, or in other comprehensive income if they are not held for trading and are designated as such on initial recognition.

The impairment model requires the recognition of impairment provisions based on expected credit losses rather than only incurred credit losses and applies to financial assets measured at amortized cost. The financial asset of the Corporation measured at amortized cost are cash and accounts receivable. The Corporation elected to apply the simplified approach of impairment under IFRS 9 which accounts for the expected lifetime loss at the initial recognition of financial asset. The impairment loss is reversed in subsequent periods if the amount of the expected loss decreases and it can be verified.

### b) Financial liabilities

Financial liabilities are subsequently measured at amortized cost using the effective interest method, except for:

- Financial liabilities at FVTPL. Such liabilities, including derivatives that are liabilities, shall be subsequently measured at fair value.
- Financial liabilities that arise when a transfer of a financial asset does not qualify for derecognizing or when the continuing involvement approach applies.

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FOR THE THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2018

b) IFRS 15, "Revenue from Contracts with Customers"

In May 2014, the IASB issued IFRS 15, which supersedes IAS 18, "Revenue", IAS 11, "Construction Contracts," and other interpretive guidance associated with revenue recognition. IFRS 15 establishes the principles that an entity shall apply to report the nature, amount, timing, and uncertainty of revenue and cash flows arising from a contract with a customer.

IFRS 15 is based on the general principle that revenue is recognized when control of a good or service transfers to a customer rather than when the significant risks and rewards of ownership are transferred as is the case under IAS 18.

The implementation of IFRS 15 did not have a material impact on the Corporation's revenue recognition policy.

#### **ACCOUNTING STANDARDS ISSUED BUT NOT YET APPLIED**

IFRS 16. "Leases"

IFRS 16, issued in January 2016, replaces IAS 17, "Leases". IFRS 16 results in most leases being reported on the balance sheet for lessees, eliminating the distinction between a finance lease and an operating lease. IFRS 16 is effective for annual periods beginning on or after January 1, 2019. The Corporation is currently assessing the impact of this standard on its consolidated financial statements. The Corporation has reviewed all existing operating leases to determine and document expected changes in lease accounting. The Corporation has completed its preliminary assessment and does not expect the new standard to have a material impact. The Corporation will finalize its assessment in the fourth quarter of 2018 with implementation commencing on January 1, 2019.

### FINANCIAL INSTRUMENTS AND OTHER INSTRUMENTS

The Corporation is exposed to various financial risks resulting from both its operations and its investments activities. The Corporation does not enter into financial instrument agreements including derivative financial instruments for speculative purposes. The Corporation's main financial risk exposure and its financial risk management policies are disclosed in Note 20 to the annual consolidated financial statements for the years ended December 31, 2017 and 2016.

# **RISKS AND UNCERTAINTIES**

Except as otherwise disclosed in this MD&A, there have been no significant changes to the nature and scope of the risks faced by the Corporation from those described in the 2017 MD&A of the Corporation. These business risks should be considered by interested parties when evaluating the Corporation's performance and its outlook.

# FORWARD LOOKING STATEMENTS

DST's public communications may include written or oral forward-looking statements. Statements of this type are included in this MD&A and may be included in other filings with the Canadian regulators, stock exchanges or in other communications. All such statements constitute forward looking information within the meaning of securities law and are made pursuant to the "safe harbour" provisions of applicable securities laws. Forward looking statements may include, but are not limited to, statements about anticipated future events or results including comments with respect to the Corporation's objectives and priorities for 2018 and beyond, and strategies or further actions with respect to the Corporation, its products and services, business operations, financial performance and condition. Forward looking statements are statements that are predictive in nature, depend upon or refer to future events or conditions or include words such as "expects", "anticipates", "intends", "plans", "believes", "estimates" or similar expressions concerning matters that are not historical facts. Such statements are based on current expectations of the Corporation's management and inherently involve numerous risks and uncertainties, known and unknown, including economic factors and those affecting the technology and resources industries generally. The forward-looking information contained in this MD&A is

# MANAGEMENT'S DISCUSSION AND ANALYSIS

FOR THE THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2018

presented for the purpose of assisting shareholders in understanding business and strategic priorities and objectives as at the periods indicated and may not be appropriate for other purposes.

A number of risks, uncertainties and other factors may cause actual results to differ materially from the forward-looking statements contained in this MD&A, including, among other factors and without limitation, those referenced in the section above entitled "Risks and Uncertainties". The preceding list is not exhaustive of all possible risk factors that may influence actual results and is compiled based upon information available as of the issuance date of this MDA.

Forward looking statements contained in this MD&A are not guarantees of future performance and, while forward looking statements are based on certain assumptions that the Corporation considers reasonable, actual events and results could differ materially from those expressed or implied by forward looking statements made by the Corporation. Prospective investors are cautioned to consider these and other factors carefully when making decisions with respect to the Corporation and not place undue reliance on forward looking statements. Circumstances affecting the Corporation may change rapidly. Except as may be required by applicable law, the Corporation does not undertake any obligation to update publicly or revise any such forward looking statements, whether as a result of new information, future events or otherwise.

### ADDITIONAL INFORMATION CONCERNING DST

Additional information relating to Dundee Sustainable Technologies may be found on SEDAR at www.sedar.com and the Corporation's website at www.dundeetechnologies.com.

November 26, 2018	
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(s) Brian Howlett	(s) Arved Marin
Brian Howlett	Arved Marin
President and CEO	CFO