MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS of Plaintree Systems Inc.

For the three and six months ending September 30, 2022 and September 30,2021

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

PLAINTREE SYSTEMS INC.

For the three and six months ended September 30, 2022 and September 30, 2021

Date: November 21, 2022

The following discussion and analysis is the responsibility of management and has been reviewed by the Audit Committee of Plaintree Systems Inc ("Plaintree" or the "Company") and approved by the Board of Directors of Plaintree. The Board of Directors carries out its responsibilities for the financial statements and management's discussion and analysis principally through the Audit Committee, which is comprised exclusively of independent directors.

The following discussion of the financial condition, changes in financial condition and results of operations of Plaintree is for the three and six months ended September 30, 2022 and 2021. Historical results of operations, percentage relationships and any trends that may be inferred there from are not necessarily indicative of the operating results of any future periods. Unless otherwise stated all amounts are in Canadian dollars following the requirements of the International Financial Reporting Standards ("IFRS"). The information contained herein is dated as of November 21, 2022, and is current to that date, unless otherwise stated. Management is responsible for ensuring that processes are in place to provide sufficient knowledge to support the representations made in the annual filings. Our Audit Committee and Board of Directors provide an oversight role with respect to all public financial disclosures by the Company and have reviewed this MD&A and the accompanying financial statements.

W. David Watson II, President and Chief Executive Officer, and Lynn E. Saunders, Chief Financial Officer, in accordance with National Instrument 52-109 ("NI52-109"), have both certified that they have reviewed the annual financial statements and this MD&A ("the annual Filings") and that, based on their knowledge having exercised reasonable diligence, (a) the annual Filings do not contain any untrue statement of a material fact or omit to state a material fact required to be stated or that is necessary to make a statement not misleading in light of the circumstances under which it was made with respect to the period covered by the annual Filings; and (b) the annual financial statements together with the other financial information included in the annual Filings fairly present in all material respects the financial condition, financial performance and cash flows of the Company, as of the dates and for the periods presented in the annual Filings.

Investors should be aware that the inherent limitations on the ability of certifying officers of a venture issuer to design and implement, on a cost-effective basis, Disclosure Controls and Procedures and Internal Controls over Financial Reporting as defined in NI 52-109 may result in additional risks to the quality, reliability, transparency and timeliness of interim and annual filings and other reports provided under securities legislation.

Caution Regarding Forward Looking Information

This MD&A of the Company contains certain statements that, to the extent not based on historical events, are forward-looking statements based on certain assumptions and reflect Plaintree's current expectations. Forward-looking statements include, without limitation, statements evaluating market and general economic conditions, and statements regarding growth strategy and future-oriented project revenue, costs and expenditures. Actual results could differ materially from those projected and should not be relied upon as a prediction of future events. A variety of inherent risks, uncertainties and factors, many of which are beyond Plaintree's control, affect the operations, performance and results of Plaintree and its business, and could cause actual results to differ materially from current expectations of estimated or anticipated events or results. Some of these risks, uncertainties and factors include the impact or unanticipated impact of: companies evaluating Plaintree's products delaying purchase decisions; current, pending and proposed legislative or regulatory developments in the

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

jurisdictions where Plaintree operates; change in tax laws; political conditions and developments; intensifying competition from established competitors and new entrants in the industry; technological change; currency value fluctuation; general economic conditions worldwide, including in China; Plaintree's success in developing and introducing new products and services, expanding existing distribution channels, developing new distribution channels and realizing increased revenue from these channels; supply and/or staffing issues in relation to ongoing COVID concerns; and Plaintree's success in integrating acquired businesses. This list is not exhaustive of the factors that may affect any of Plaintree's forward-looking statements. Plaintree undertakes no obligation to update any forward-looking statement to reflect events or circumstances after the date on which such statement is made, or to reflect the occurrence of unanticipated events, whether as a result of new information, future events or results otherwise. Readers are cautioned not to put undue reliance on forward-looking statements. Readers should also carefully review the risks concerning the business of the Company and the industries in which it operates generally described in the documents filed from time to time with Canadian securities regulatory authorities.

Overview

Plaintree Systems Inc. ("Plaintree" or the "Company") was incorporated in Canada under the Canada Business Corporation Act and is publicly traded on the Canadian Securities Exchange ("CSE") under "NPT". Plaintree is a diversified company with proprietary technologies and manufacturing capabilities in structural design and aerospace. The Company operates an Applied Electronics division, consisting of the Hypernetics division and Summit Aerospace USA Inc. ("Summit Aerospace"), and a Specialty Structures division consisting of the Triodetic business, Spotton Corporation and the Elmira Stove Works business. The Hypernetics business manufactures avionic components for various applications including aircraft antiskid braking, aircraft indicators, solenoids and permanent magnet alternators. The Triodetic business is a design/build manufacturer of steel, aluminum, and stainless steel specialty structures such as commercial domes, free form structures, barrel vaults, space frames, and industrial dome coverings. Summit Aerospace specializes in the high-end machining of super-alloys for the aircraft and helicopter markets. Spotton's business involves the design and manufacture of high-end custom hydraulic and pneumatic cylinders for the industrial, automation and oil and gas markets. The Elmira Stove Works business manufactures custom vintage-inspired kitchen appliances for the North American consumer market.

Acquisition of Elmira Stove Works

On March 30, 2022, Plaintree, through a wholly-owned subsidiary, purchased the Elmira Stove Works business by acquiring all the issued and outstanding share capital of Hendrick Energy Systems Inc. ("HES") and Elmira Direct Limited ("Elmira") for an estimated total purchase price of \$3.1 million assuming full earnout payment and all closing date inventory being sold within 24 months of closing. To assist funding the Elmira Stove Works acquisition, Plaintree increased its bank facility by a \$1.5 million term loan with its banker, of which \$500,000 was advanced on the closing of the Elmira Stove Works transaction, All the proceeds from the advances will be used to fund the payment of the purchase price to the vendors of Elmira Stove Works.

In April 2022, the Elmira Stove business was moved to the Company's Arnprior, Ontario facilities to continue its operations from there. On April 14, 2022 Elmira Stove Works completed a short-form amalgamation within the Plaintree subsidiaries and is continuing under the corporate name Elmira Stove Works Inc., a wholly-owned subsidiary of Plaintree Systems Inc.

The address of the Company's registered office and principal place of business is 10 Didak Drive, Arnprior, Ontario.

Control Activities

The Company's Chief Executive Officer and Chief Financial Officer exercise reasonable diligence around the controls and procedures designed to provide reasonable assurance that financial information disclosed is recorded, processed and disclosed reliability.

Selected Annual Financial Information

Company's consolidated financial statements are stated in Canadian dollars and are prepared in accordance with International Financial Reporting Standards ("IFRS"). The following table sets forth selected financial information from the Company's interim financial statements:

(\$000s, except per share amounts)

	Three month	ns ending	Six months ending		
	September 30, 2022	September 30, 2021	September 30, 2022	September 30, 2021	
	(unaudited)	(unaudited)	(unaudited)	(unaudited)	
	\$	\$			
Revenue	4,861	4,271	10,308	7,915	
Net earnings (loss) and					
comprehensive earnings (loss)	220	462	559	724	
Net earnings (loss) attributed to					
common shareholders	(147)	95	(174)	(9)	
Basic and diluted (loss)					
per share	(0.01)	0.01	(0.01)	0.00	

(\$000s, except per share amounts)

	September 30, 2022	March 31, 2022
	(unaudited)	(audited)
	\$	\$
Total assets	18,176	15,008
Total liabilities	15,849	12,315
Long-term liabilities	9,553	8,742
Cash dividends declared per share	nil	nil

Results from Operations

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(\$000s)
Revenue
Cost of sales
Gross margin
Operating expenses: Research and development Finance and administration Sales and marketing Interest expense (Gain) loss on foreign exchange
Net earnings and comprehensive earnings

Inree month			
September 30, 2022	September 30, 2021	Change from	
(unaudited)	(unaudited)		
\$	\$	\$	
4,860	4,272	588	
3,310	2,965	345	
1,550	1,307	243	
32%	31%		
382	404	(22)	

276

152

61

(4<u>9)</u>

844

463

223 317

(29)

(3)

486

(243)

Three months ending

499

469

32

(52)

1,330

220

earnings		

(\$000s)	Six months end
(30005)	SIX IIIOIILIIS EIIU

Revenue
Cost of sales
Gross margin
Operating expenses: Research and development Finance and administration Sales and marketing Interest expense (Gain) loss on foreign exchange
Net earnings and comprehensive earnings

Six months			
September 30, 2022	September 30, 2021	Change from	
(unaudited)	(unaudited)		
\$	\$	\$	
10,307	7,915	2,392	
7,300	5,546	1,754	
3,007	2,369	638	
29%	30%		
785	748	37	
851	578	273	
810	270	540	
120	107	13	
(118)	(58)	(60)	
2,448	1,645	803	
559	724	(165)	

Business segment information

The Company's chief decision maker, the CEO, tracks the Company's operations as two business segments - the design, development, manufacture, marketing and support of applied electronic products, and the specialty structural products. The Company determines the geographical location of revenue based on the location of its customers. Of the total balance of \$5,261,822 (September 30, 2021 - \$5,946,616) in property, plant and equipment and Right of Use Asset, building \$4,141,393 (September 30, 2021 - \$4,349,920) is located in Canada and \$1,120,429 (September 30, 2021 - \$1,596,696) in the United States. All the Company's intangible assets are primarily located in Canada.

Revenue by division					
	Three mon	ths ending	Six months ending		
	September 30, 2022	September 30, 2021	September 30, 2022	September 30, 2021	
	(unaudited)	(unaudited)	(unaudited)	(unaudited)	
	\$		\$		
Applied Electronics	2,091,098	1,214,638	3,658,917	2,553,958	
Specialty Structures	2,769,699	3,056,767	6,648,380	5,360,817	
	4,860,797	4,271,405	10,307,297	7,914,775	
Revenue by geographical location	Three mon	ths ending	Six montl	ns ending	
	September 30, 2022	September 30, 2021	September 30, 2022	September 30, 2021	
	(unaudited)	(unaudited)	(unaudited)	(unaudited)	
	\$		\$		
Canada	2,544,327	2,872,469	4,721,364	4,698,125	
United States	2,234,134	1,398,936	5,106,400	3,141,250	
Other	82,336	-	479,533	75,400	
	4,860,797	4,271,405	10,307,297	7,914,775	
Net earnings (loss) before taxes by division	Three mon	ths ending	Six months ending		
	September 30, 2022	September 30, 2021	September 30, 2022	September 30, 2021	
	(unaudited)	(unaudited)	(unaudited)	(unaudited)	
	\$		\$		
Applied Electronics	490,485	(56,393)	233,134	(140,043)	
Specialty Structures	(269,996)	518,026	325,998	863,822	
	220,489	461,633	559,132	723,779	

Product revenue concentration (customers with revenue in excess of 10%)

	September 30, 2022	September 30, 2021 September 30, 202		September 30, 2021		
	(unaudited)	(unaudited)	(unaudited)	(unaudited)		
Number of customers	3	1	2	2		
% of total revenue	11%, 15%, 18%	21%	12%, 14%	10%, 15%		
Assets by division	September 30, 2022 (unaudited)		September 30, 2021 (unaudited)			
Applied Electronics Specialty Structures	9,601,211 7,721,182		7,844,076 7,163,635			

Three months ending

Six months ending

Revenues

Total product revenue from ongoing operations for the first six months of fiscal 2023 was \$10,307,297 compared to \$7,914,775 for the first six months of fiscal 2022.

Plaintree has two diversified business divisions: Specialty Structures and Electronics.

Plaintree's Applied Electronics Division revenues from operations increased in first half of fiscal 2023 to \$3,658,917 compared to \$2,553,958 in first half of fiscal 2022.

Plaintree's Specialty Structures Division revenues from operations increased to \$6,648,380 in first half of fiscal 2023 from \$5,360,817 in first half of fiscal 2022.

Gross Margin

Total gross margin remained relatively constant during the first six months of fiscal 2023, at 29% compared to 30% for fiscal 2021 which included \$NIL, (\$383,541 – September 30, 2021) in Government wage and rent subsidies. Included in cost of goods sold are expenses related to operations to relocate and establish the production processes of the Elmira Stove Works business.

Operating Expenses

Research and development expenses

Research and development expenses were \$785,529 and \$748,054 for the first six months of fiscals 2023 and 2022, respectively. Included are Government wage and rent subsidies of \$NIL, (\$112,805 – September 30, 2022) related to COVID-19 assistance received. Research and development expenditures consist primarily of development engineering and personnel expenses.

Finance and administration expenses

Finance and administration expenses were \$851,058 and \$578,023 for the first six months of fiscals 2023 and 2022, respectively. Included are Government wage and rent subsidies of \$NIL, (\$42,284 – September 30, 2021) related to COVID-19 assistance received. Finance and administration expenses consist primarily of costs associated with managing the Company's finances, which included financial staff, legal and audit activities.

Sales and marketing expenses

Sales and marketing expenses were \$809,850 and \$270,350 for the first six months of fiscals 2023 and 2022, respectively. Included are Government wage and rent subsidies of \$NIL, (\$19,586 – September 30, 2021) related to COVID-19 assistance received. These expenses consisted primarily of personnel and related costs associated with Company's sales and marketing departments, which include sales commissions, advertising, travel, trade shows and other promotional activities.

Interest expense

Interest expense consists of interest incurred on bank debt. Interest expenses amounted to \$119,656 and \$107,257 for the first six months of fiscals 2023 and 2022 respectively. The majority of the Company's debt accrues interest at variable rates based on the Company's bank prime lending rate of interest.

Loss on foreign exchange

The Company reported a gain on foreign exchange of \$(117,987) and (\$58,694) in the first six months of fiscals 2023 and 2022, respectively. The gain/loss on foreign exchange represents the gain/loss, realized or unrealized, of transactions and year end foreign balances that are completed in currencies other than the Company's reporting currency.

Net (loss) earnings, Comprehensive earnings and Net earnings Attributable to Common Shareholders

Net (loss) and comprehensive (loss) for first six months of fiscal 2023 and fiscal 2022 was \$(173,868) and \$(9,221), respectively. Net income attributed to common shareholders is calculated by reducing net income by the \$1,466,000 cumulative dividends that accrue annually on the Class A preferred shares. The cumulative dividends accrue at 8% per annum on the face value of the \$18,325,000 for the Class A preferred shares and as September 30, 2022 the accrued and unpaid dividends on the Class A preferred shares were \$20,457,000 (March 31, 2022 - \$18,258,000).

Quarterly Results

The following table sets out selected unaudited consolidated financial information for the last eight quarters in fiscals 2023, 2022 and 2021:

Quarters ended (unaudited, in \$000s except per share data)

_	Sept 30 2022 Q2 2023	Jun 30 2022 Q1 2023	Mar 31 2022 Q4 2022	Dec 31 2021 Q3 2022	Sept 30 2021 Q2 2022	June 30 2021 Q1 2022	Mar 31 2021 0 2021	Dec 31 2020 Q3 2021
	\$	\$	\$	\$	\$	\$	\$	\$
Revenue	4,861	5,447	5,168	3,111	4,271	3,643	4,656	2,954
Net earnings (loss) and total comprehensive earnings (loss)	220	339	(366)	(560)	462	262	809	0
Net (loss) earnings attributed to common shareholders	(146)	(28)	(733)	(926)	95	(104)	444	(367)
Basic and diluted (loss) earnings per share	(0.01)	(0.00)	(0.06)	(0.07)	0.01	(0.01)	0.03	(0.03)
	-0.0012	-0.0002	-0.0060	-0.0075	0.0008	-0.0008	0.0036	-0.0030

Liquidity and Capital Resources

	September 30, 2022	March 31, 2022	Change
	(unaudited)	(audited)	
	\$	\$	\$
Cash	365	1,911	(1,546)
Working Capital	4,127	2,042	2,085
	September 30, 2022	September 30, 2021	Change
	(unaudited)	(unaudited)	
	\$	\$	\$
Net cash provided by (used in):			
Operating activities	(427)	929	(1,356)
Investing activities	(448)	(220)	(228)

Cash

As at September 30, 2022, the Company had a cash balance of \$364,973 a decrease of \$(1,546,228) from cash balance of \$1,911,201 in March 31, 2022.

Working Capital

Working capital represents current assets less current liabilities. As at September 30, 2022, the Company had working capital of \$4,147,860 compared to a working capital of \$2,042,018 at March 31, 2022.

Operating activities

Cash (used) by operating activities during the first two quarters of fiscal 2023 was (\$426,963) representing a decrease of \$(1,356,228) from cash provided of \$929,265 for the respective period during fiscal 2022. Cash used during the period related to both Inventory and Unbilled Receivables

Investing activities

Cash (used in) investing activities during the first two quarters of fiscal 2023 was \$(448,003) representing an increase of \$(228,161) in investing activities from cash (used in) investing activities of \$(219,842) in the respective period during fiscal 2022. Cash used in investing activities during the first half of fiscal 2023 relates primarily to the purchases of manufacturing equipment and website development.

Financing activities

Cash (used in) financing activities during the first two quarters of fiscal 2023 was \$(671,262) representing an increase of \$(115,952) from cash (used in) of \$(555,310) during the respective period in fiscal 2022. Cash used in financing activities during the first half of fiscal 2023 relates primarily to the repayment of long-term debt and leases.

Outlook

The Company has in place a credit facility of up to \$3,000,000 CAD through its bank based on acceptable trade receivables and inventory. The total amount available to the Company as at September 30, 2022 was \$2,624,195 CAD of which \$NIL was in use and a letter of credit in the amount of US\$100,000 (\$137,070 CAD) leaving \$2,487,125 CAD available. The Company through its bank has in place a credit facility of up to \$3,500,000 CAD for the issuance of standby letters of credit and/or letters of guarantee insured by Export Development Corporation ("EDC") Performance Security Guarantee of which \$694,97- CAD was in use as at September 30, 2022. The Company has in place a credit facility of up to \$2,000,000 CAD to assist with financing of new and used equipment. As at September 30, 2022 \$724,928 CAD was available (Note 7 Lease obligations). The Company also has in place a term loan of \$1.5 million CAD to assist with the payment obligations to the vendors of the Elmira Stove Works business of which \$1,000,000 was available for use as at September 30, 2022.

Due to related parties

	September 30, 2022	March 31, 2022
	(unaudited)	(audited)
	\$	\$
Due to senior officers	3,840,592	3,865,785
Dividends payable	60,000	60,000
Due to Targa Group Inc, covertible debentures	247,672	247,672
Due to Tidal Quality Management Inc.	398,116	398,116
Due to Targa Group Inc, line of credit interest	242,598	242,598
Due to Targa Group Inc, demand loan interest	201,393	201,393
	4,990,371	5,015,564
Less: current portion	(50,000)	(50,000)
	4,940,371	4,965,564

Targa Group Inc. and Tidal Quality Management Inc. are companies under common control.

As at September 30, 2022, a balance of \$3,840,592 (\$2,604,958 principal and \$1,235,634 interest); March 31, 2022 - \$3,865,785 (\$2,630,151 principal and \$1,235,634 interest) remained owing to senior officers of the Company. The parties agreed to discontinue interest payments accruing on balances as of April 1, 2016. During the first six months of fiscal 2023 payments in the amount of \$25,192 were repaid to senior officers. As of September 30, 2022, \$50,000 was classified as current. The balance of the amount is classified as long-term, as the related party has agreed with third-party lenders to postpone repayments.

On July 14, 2011, the board of directors of the Company declared a cash dividend of \$10.91405 per Class A preferred share (\$200,000 in the aggregate) payable on July 22, 2011, to the holders of record at the close of business on July 18, 2011. The Class A preferred shares are held by related parties and are entitled to annual cumulative dividends of 8% on the \$1,000 redemption amount of the Class A preferred share. An amount of \$60,000 (\$60,000 – March 31, 2022) of the dividend remains outstanding as at September 30, 2022. The balance of the amount is classified as long-term, as the related party has agreed with third-party lenders to postpone repayments.

As at September 30, 2022, interest in the amount of \$247,672 (\$247,672 – March 31, 2022)) on a loan from Targa remains outstanding. The balance of the amount is classified as long-term, as the related party has agreed with third-party lenders to postpone repayments.

As at September 30, 2022, a balance of \$398,116 (\$215,227 rent arrears and \$182,889 interest); March 31, 2022 - \$398,116 (\$215,227 rent arrears and \$182,889 interest) remained owing to a related party controlled by Targa, Tidal Quality Management Corp. The party agreed to discontinue interest accruing on unpaid balances as at April 1, 2016. Until then the interest rate was at bank prime plus 2%. The balance of the amount is classified as long-term, as the related party has agreed with third-party lenders to postpone repayments.

The Company has a revolving line of credit of up to \$1,000,000 with Targa. Under the loan agreements, all amounts advanced to the Company are payable on demand and bear interest at bank prime plus 2%. The Targa Credit Line is secured by a security interest granted over the assets of the Company. As at September 30, 2022, \$NIL (\$NIL - March 31, 2022) remained outstanding on the line of credit with accumulated interest of \$242,598 (\$242,598 - March 31, 2021) outstanding for a balance of \$242,598 (\$242,598 - March 31, 2021). The balance of the amount is classified as long-term, as the related party has agreed with third-party lenders to postpone repayments.

Interest in the amount of \$66,581 (\$66,581 – March 31, 2022) remained outstanding on a demand loan with Targa. The balance of the amount is classified as long-term, as the related party has agreed with third-party lenders to postpone repayments. Accumulated interest in the amount of \$134,812 (\$134,812 – March 31, 2022), on a loan from Targa remains outstanding as of September 30, 2022. The balance of the amount is classified as long-term, as the related party has agreed with third-party lenders to postpone repayments.

Facilities

The Company leases a 135,500 sq. /ft. building at 10 Didak Drive in Arnprior, Ontario and a sales office and showroom in Elmira, ON for the Elmira Stove Works Inc.

The Company along with its wholly-owned US subsidiary owns a 16,300 sq. ft. manufacturing facility in Pocono Summit, PA.

Summary of Outstanding Share Data

As at November 21, 2022 the following equity instruments of the Company were issued and outstanding:

<u>Common Shares:</u> 12,925,253

Class A Preferred Shares: * 18,325

* The Class A Preferred shares provide an 8% cumulative dividend based on a value of \$1,000 per share, are redeemable at the option of the Company at any time at \$1,000 per share plus accrued dividends and they are non-voting.

Convertible Debentures:** \$nil principal value

** The Company has issued various tranches of convertible debentures to related parties for total outstanding value at March 31, 2022 of \$247,672 in accrued interest only. Interest is convertible in cash only.

Options:*** 880,000

Additional information relating to the Company may be found on SEDAR at www.sedar.com or the Company's website at www.sedar.com.