

POET TECHNOLOGIES INC.

Consolidated Financial Statements For the Year Ended December 31, 2021, 2020 and 2019



REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors of POET Technologies Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated statements of financial position of POET Technologies Inc. (the "Company") as of December 31, 2021, 2020 and 2019, the related consolidated statements of operations and deficit, comprehensive loss, changes in shareholders' equity and cash flows for each of the three years in the period ended December 31, 2021, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2021, 2020 and 2019, and the results of its operations and its cash flows for each of the years in the period ended December 31, 2021, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the Company's internal control over financial reporting as of December 31, 2021, based on the criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in 2013 and our report dated April 26, 2022, expressed an adverse opinion on the effectiveness of the Company's internal control over financial reporting because of the existence of a material weakness.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provides a reasonable basis for our opinion.



Critical Audit Matters

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of the critical audit matter does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Description of the Matter

As described in Note 5 to the financial statements, in October 2020, the Company signed a Joint Venture Agreement ("JVA"), establishing a joint venture, Super Photonics Xiamen Co., Ltd ("SPX"). The Company contributed intellectual property ("IP Assets") that were independently valued at \$22,500,000.

The Company recognized a gain on the contribution of its IP Assets to SPX in accordance with Internal Accounting Standards (IAS) 28, Investment in Associates and Joint Ventures. The Company only recognized a gain on the contribution of the IP Assets in equivalence to the other joint venture's interest in SPX. The unrecognized gain on the Company's investment will be periodically realized as the Company's ownership in SPX is reduced.

SPX was determined to be a joint venture as both POET and the other joint venture exercise joint control over SPX. All relevant activity of SPX requires unanimous consent. The Company recognizes its share of SPX's profits or losses using the equity method.

During the year ending December 31, 2021, the Company recognized a gain of \$2,587,500. As of December 31, 2021, the Company's ownership interest in SPX was 88.5%.

Auditing the Company's recording of the joint venture was complex and involved subjective auditor judgment because this area involved significant estimations by management as part of the valuation of the IP Assets. This transaction required a higher degree of auditor subjectivity in applying audit procedures to address the matter when evaluating the results of the valuation.

How We Addressed the Matter in Our Audit

We obtained and read the JVA, gained an understanding of the purpose and nature of the joint venture and the rights and control provided under the agreement. We further evaluated management's approach and documentation surrounding the guidance they followed in the recording of this joint venture.

Further, we independently analyzed the appraised fair value of the IP Assets (\$22.5M) with the assistance of an internal Marcum specialist, further assessing the Company-engaged specialists' appropriateness and reasonableness of methods and assumptions used.

We evaluated the Company's application of relevant accounting guidance and the consistency of management's methods and assumptions used in determining whether SPX is an equity method investment and whether the Company has joint control over the joint venture and the fair value determination for the equity method investment.

Marcum LLP

We have served as the Company's auditor since 2009, such date takes into account the acquisition of a portion of UHY LLP by Marcum LLP in April 2010.

Hartford, CT April 26, 2022



REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM ON INTERNAL CONTROL OVER FINANCIAL REPORTING

To the Shareholders and Board of Directors of POET Technologies Inc.

Adverse Opinion on Internal Control over Financial Reporting

We have audited POET Technologies Inc.' (the "Company") internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control-Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, because of the effect of the material weakness described in the following paragraph on the achievement of the objectives of the control criteria, the Company has not maintained effective internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control-Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

A material weakness is a control deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the Company's annual or interim financial statements will not be prevented or detected on a timely basis. The following material weakness has been identified and included in "Management's Annual Report on Internal Control Over Financial Reporting": The Company did not design and maintain effective internal controls over the user access controls over certain software utilized for financial reporting. The Company did not adequately restrict user access to ensure appropriate segregation of duties among certain personnel who also had responsibility for controls that interacted with the software utilized for financial reporting, which was within the internal control over financing reporting environment. Specifically, the provisioning and user recertification controls over the respective software are not designed to ensure users maintain proper segregation of duties and therefore could have inappropriate access rights.

This material weakness was considered in determining the nature, timing and extent of audit tests applied in our audit of the fiscal December 31, 2021 consolidated financial statements, and this report does not affect our report dated April 26, 2022 on those financial statements.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the consolidated statements of financial position as of December 31, 2021, 2020 and 2019 and the related consolidated statements of operations and deficit, comprehensive loss, changes in shareholders' equity, and cash flows and the related notes for each of the three years in the period ended December 31, 2021 of the Company and our report dated April 26, 2022 expressed an unqualified opinion on those consolidated financial statements.



Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying "Management Annual Report on Internal Control Over Financial Reporting". Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed 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. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of the inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that degree of compliance with the policies or procedures may deteriorate.

Marcum LLP

Hartford, CT April 26, 2022

POET TECHNOLOGIES INC.

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION (Expressed in US Dollars)

cember 31,		2021		2020		2019
Assets						
Current Cash and cash equivalents (Note 2) Short-term investments (Note 2)	\$	14,941,775 6.366.828	\$	6,872,894 -	\$	1,428,129
Receivable from the sale of discontinued operations (Notes 3 ar Prepaids and other current assets (Note 4)	nd 21)			- 618,717		18,000,000 831,265
		21,789,126		7,491,611		20,259,394
Investment in joint venture (Note 5) Property and equipment (Note 6)				- 3 185 754		- 3,143,060
Patents and licenses (Note 7)		528,476		438,677		452,384
Right of use asset (Note 8)		326,890		520,686		222,517
	\$	27,153,977	\$	11,636,728	\$	24,077,355
Liabilitie	Assets) \$ 14,941,775 \$ 6,872,89 inued operations (Notes 3 and 21) - - Note 4) 480,523 618,71 21,789,126 7,491,61 - 1,445,251 - - 3,064,234 3,185,75 528,476 438,67 326,890 520,68 - - \$ 27,153,977 \$ 11,636,72 - - Liabilities - - - \$ 27,153,977 \$ 11,636,72 - - Liabilities - - - \$ 1,791,222 \$ 1,730,36 - - \$ (Note 25) \$ 1,791,222 \$ 1,730,36 - \$ (Note 25) - 70,31 - \$ (Note 25) - 70,31 - \$ (Note 25) - 70,31 - \$ (Note 12) - 5,57,00 - \$ (Note 12) 5,328,455 5,557,00 - \$ (Note 12) 5,328,455 <td></td> <td></td> <td></td>					
Current						
Accounts payable and accrued liabilities (Note 9)	\$	1,791,222	\$	1,730,361	\$	1,725,708
Covid-19 government support loans (Note 25)				147,841		-
Lease liability (Note 8)		101,074		172,949		90,504
Convertible debentures (Note 10)		-		3,341,246		3,089,033
		1,923,956		5,392,397		4,905,245
Non-current covid-19 government support (Note 25)		-		70,310		-
Non-current lease liability (Note 8)		258,274		359,048		133,254
		2,182,230		5,821,755		5,038,499
Shareholders	' Equi	ty				
Share capital (Note 11(b))		147,729,846		114,586,260		112,144,172
Equity component of convertible debentures (Note 10)		-		565,121		627,51
Warrants and compensation options (Note 12)				5,557,002		8,525,358
Contributed surplus (Note 13)						38,799,337
Accumulated other comprehensive loss Deficit				(1,983,212) (157,317,877)	((1,908,715) (139,148,807)
		24,971,747		5,814,973		19,038,856
	\$	27.153.977	\$	11,636,728	\$	24,077,355

Commitments and contingencies (Note 15)

On behalf of the Board of Directors

alia Director

Director

POET TECHNOLOGIES INC.

CONSOLIDATED STATEMENTS OF OPERATIONS AND DEFICIT (Expressed in US Dollars)

For the Years Ended December 31,	2021	2020	2019
Revenue (Note 23)	\$ 209,100 \$	5 -	\$-
Operating expenses			
Selling, marketing and administration (Note 20) Research and development (Note 20)	9,055,528 8,165,128	8,137,998 6,634,317	6,697,387 2,083,815
Operating expenses	17,220,656	14,772,315	8,781,202
Operating loss before the following Impairment of long lived assets (Note 22)	(17,011,556)	(14,772,315)	(8,781,202) (1,764,459)
Interest expense (Notes 8 and 10)	(364,619)	(937,903)	(819,911)
Amortization of debt issuance costs (Note 10) Other income, including interest	- 75,084	- 41,148	(372,340) 10,540
Forgiveness of Covid-19 government support loans (Note 25)	186,747	-	-
Gain on contribution of intellectual property to joint venture (Note 5) Share of loss in joint venture (Note 5)	2,587,500 (1,142,249)	-	-
Credit loss on receivable from sale of discontinued operation (Note 3 and 21)		(2,500,000)	-
Net loss from continuing operations, before taxes Income tax recovery (Note 24)	(15,669,093) -	(18,169,070) -	(11,727,372) 292,740
Net loss from continuing operations	(15,669,093)	(18,169,070)	(11,434,632)
Income (loss) from discontinued operations, net of taxes (Notes 21 and 24)	-	-	5,481,757
Net loss	(15,669,093)	(18,169,070)	(5,952,875)
Deficit, beginning of year	(157,317,877)	(139,148,807)	(133,195,932)
Net loss	(15,669,093)	(18,169,070)	(5,952,875)
Deficit, end of year	\$ (172,986,970) \$	6 (157,317,877)	\$(139,148,807)
Basic and diluted loss per share, continuing operations (Note 14)	\$ (0.45)	\$ (0.62)	
Basic and diluted income (loss) per share, discontinued operations (Note 14) Basic and diluted net loss per share (Note 14)	\$- \$(0.45)		\$ 0.19 \$ (0.21)

CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS (Expressed in US Dollars)			
For the Years Ended December 31,	2021	2020	2019
Net loss	\$(15,669,093)	\$(18,169,070)	\$ (5,952,875)
Other comprehensive (loss) income - net of income taxes Items that may in the future be reclassfied to profit (loss): Exchange differences on translating foreign operations, continuing			
operations Exchange differences on translating foreign operations, discontinued	(70,705)	(74,497)	3,109
operations	-	-	171,690
Comprehensive loss	\$(15,739,798)	\$(18,243,567)	\$ (5,778,076)

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

POET TECHNOLOGIES INC.

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY (Expressed in US Dollars)

Share Capital Beginning balance Funds from the averaise of stock options \$ 114,586,260 \$ 112,144,172 \$ 112,028,194 Funds from the averaise of stock options 729,803 60,028 709,803 60,028 Funds from the averaise of stock options 729,804,585 729,804 65,950 Fair value of warrants issued on conversion of convertible debentures 3,571,342 369,545 - Fair value of warrants issued on conversion of convertible debentures 3,571,342 369,545 - Common share sissued on conversion of convertible debentures 13,614 13,011 - Funds from common shares issued on private placement 11,815,955 - - Fair value of warrants issued on private placement (3,766,007) - - Fair value of warrants issued on aprivate placement (2,765,007) - - Fair value of warrants issued on convertible debentures (665,121) (62,900) 627,511 Equity Component of convertible debentures (665,121) (62,900) 627,511 Fair value of warrants issued on conjunction with of debt financing - 565,7002 8,525,358 8,303,738	For the Years Ended December 31,	2021	2020	2019
Beginning balance \$ 114,565,620 \$ \$ 174,408 \$ 102,241,4172 \$ 112,028,104 Funds from the exercise of stock options exercised 2,699,042 768,356 255,950 Fair value of stock options exercised 5,351,586 293,642 - Conversion of converbible debentures 1,229,309 127,994 - Conversion of converbible debentures 1,314 13,011 - Conversion of converbible debentures 1,314 13,011 - Fair value of warrants issued on conversion of converbible debentures 1,181,595 - - Common shares issued on private placement 11,181,595 - - - Fair value of warrants issued on private placement 13,164 114,586,200 112,144,172 114,172 Equity Component of convertible debentures (236,197) - - - - Beginning balance 555,121 627,511 - - - - Equity Component of convertible debentures (555,121) 627,511 - - - December 31, - 566,121 <	Share Capital			
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Beginning balance 565,121 627,511 - Fair value of equity component of convertible debentures (565,121) (62,390) 627,511 December 31, - 565,121 627,511 627,511 Warrants and Compensation Options Beginning balance 5,557,002 8,525,358 8,303,738 Fair value of warrants issued in conjunction with of debt financing - (221,620) 221,620 Fair value of warrants issued on conjunction with of debt financing - (221,620) 221,620 Fair value of warrants issued on private placement 3,766,007 - - Fair value of broker warrants issued on private placement 3,766,007 - - Fair value of broker warrants issued as share issue costs 288,197 - - December 31, 5,328,455 5,557,002 8,525,358 Contributed Surplus Beginning balance 44,407,679 38,799,337 36,042,754 2,812,533 Stock-based compensation 4,534,370 3,612,945 2,812,533 55,557,002 8,525,358 Contributed Surplus 46,954,333	December 31,	147,729,846	114,586,260	112,144,172
Fair value of equity component of convertible debentures (565,121) (62,390) 627,511 December 31, - 565,121 627,511 Warrants and Compensation Options 8,557,002 8,525,358 8,303,738 Beginning balance - (221,620) 221,620 Fair value of warrants ind compensation warrants exercised (5,351,586) (127,964) - Fair value of warrants issued on preventise of convertible debentures 1,229,305 146,858 - Fair value of warrants issued on private placement 3,766,007 - - - Fair value of broker warrants issued as share issue costs 288,197 - - - December 31, 5,328,455 5,557,002 8,525,358 6,542,333 36,042,754 Stock-based compensation 4,534,370 3,612,945 2,812,533 551,933 - - December 31, 5,268,042 (768,350) - - - December 31, 46,954,333 44,407,679 38,799,337 36,042,754 - - <t< td=""><td></td><td></td><td></td><td></td></t<>				
December 31, - 565,121 627,511 Warrants and Compensation Options Beginning balance 5,557,002 8,525,358 8,303,738 Fair value of warrants issued in conjunction with of debt financing - (221,620) 221,620 Fair value of warrants issued on compensation options (160,470) (2,765,630) - Fair value of warrants issued on prevate placement 3,766,6007 - - Fair value of broker warrants issued as share issue costs 288,197 - - December 31, 5,328,455 5,557,002 8,525,358 Contributed Surplus Beginning balance 44,407,679 38,799,337 36,042,754 Stock-based compensation options (26,89,042) (768,356) - Pair value of stock options exercised (2,699,042) (768,356) - Fair value of stock options exercised (1,87,7) - - December 31, 46,954,333 44,407,679 38,799,337 36,042,754 Stock-based compensation options 160,470 2,785,630 - Fair value effect of conversion	0 0		- ,-	-
Warrants and Compensation Options Beginning balance 5,557,002 8,525,358 8,303,738 Fair value of warrants issued in conjunction with of debt financing - (221,620) 221,620 Fair value of warrants and compensation options (160,470) (2,765,630) - - Fair value of warrants issued on the exercise of convertible debentures 1,229,305 146,658 - - Fair value of warrants issued on private placement 3,766,007 - - - Fair value of broker warrants issued as share issue costs 288,197 - - - December 31, 5,322,455 5,557,002 8,525,358 Contributed Surplus Beginning balance 44,407,679 38,799,337 36,042,754 Stock-based compensation 2,619,042 (768,356) (55,950) Fair value of stock options exercised (2,699,042) (768,356) (55,950) Fair value of stock options exercised (2,699,042) (768,356) (55,950) Fair value of stock options exercised (2,699,042) (768,356) (55,950) Fair v	Fair value of equity component of convertible debentures	(565,121)	(62,390)	627,511
Beginning balance 5,557,002 8,525,358 8,303,738 Fair value of warrants issued in conjunction with of debt financing - (221,620) 221,620 Fair value of warrants and compensation options (160,470) (2,755,630) - Fair value of warrants issued on private placement 3,766,007 - - Fair value of broker warrants issued as share issue costs 288,197 - - December 31, 5,328,455 5,557,002 8,525,358 Contributed Surplus 44,407,679 38,799,337 36,042,754 Stock-based compensation 4,534,370 3,612,945 2,812,530 Fair value of expired warrants and compensation options (160,470) 2,754 36,042,754 Stock-based compensation 4,534,370 3,612,945 2,812,530 - Pair value of expired warrants and compensation options 160,470 2,756,530 - Fair value of expired warrants and compensation options 160,470 2,765,630 - Fair value of expired warrants and compensation options 160,470 2,756,630 - Fair value of	December 31,	-	565,121	627,511
Beginning balance 5,557,002 8,525,358 8,303,738 Fair value of warrants issued in conjunction with of debt financing - (221,620) 221,620 Fair value of warrants and compensation options (160,470) (2,755,630) - Fair value of warrants issued on private placement 3,766,007 - - Fair value of broker warrants issued as share issue costs 288,197 - - December 31, 5,328,455 5,557,002 8,525,358 Contributed Surplus 44,407,679 38,799,337 36,042,754 Stock-based compensation 4,534,370 3,612,945 2,812,530 Fair value of expired warrants and compensation options (160,470) 2,754 36,042,754 Stock-based compensation 4,534,370 3,612,945 2,812,530 - Pair value of expired warrants and compensation options 160,470 2,756,530 - Fair value of expired warrants and compensation options 160,470 2,765,630 - Fair value of expired warrants and compensation options 160,470 2,756,630 - Fair value of	Warrants and Compensation Options			
Fair value of warrants issued in conjunction with of debt financing - (221,620) 221,620 Fair value of warrants and compensation options (160,470) (2,765,630) - Fair value of warrants issued on the exercise of convertible debentures 1,229,305 146,858 - Fair value of warrants issued on private placement 3,766,007 - - - Fair value of broker warrants issued as share issue costs 288,197 - - - December 31, 5,328,455 5,557,002 8,525,358 Contributed Surplus Beginning balance 44,407,679 38,799,337 36,042,754 Stock-based compensation options 160,470 2,765,630 - Fair value of stock options exercised (2,699,042) (768,356) (59,50) Fair value of stock options exercised (1,877) - - Pecember 31, 46,954,333 44,407,679 38,799,337 December 31, (1,983,212) (1,908,715) (2,083,514) Other comprehensive income (loss) attributable to common shareholders - translation adjustment (70,705) (74,497) 174,799 December 31, (2,053,917)		5,557,002	8,525,358	8,303,738
Fair value of warrants and compensation warrants exercised (5,351,586) (127,964) - Fair value of expired warrants and compensation options (160,470) (2,765,630) - Fair value of warrants issued on private placement 3,766,007 - - Fair value of broker warrants issued as share issue costs 288,197 - - December 31, 5,328,455 5,557,002 8,525,358 Contributed Surplus Beginning balance 44,407,679 38,799,337 36,042,754 Stock-based compensation 4,534,370 3,612,945 2,812,533 Fair value of stock options exercised (2,699,042) (768,356) (18,77) - Fair value effect of convertible debentures 550,856 (1,877) - - December 31, 46,954,333 44,407,679 38,799,337 36,042,754 Stock-based compensation options 160,470 2,765,630 - - Fair value effect of convertible debentures 550,856 (1,877) - - December 31, 46,954,333 44,407,679 38,799,337 46,954,333 44,407,679 38,799,337 <		-	(221,620)	
Fair value of expired warrants and compensation options (160,470) (2,765,630) - Fair value of warrants issued on the exercise of convertible debentures 1,229,305 146,858 - Fair value of warrants issued on private placement 3,766,007 - - Fair value of warrants issued on private placement 288,197 - - December 31, 5,328,455 5,557,002 8,525,358 Contributed Surplus Beginning balance 44,407,679 38,799,337 36,042,754 Stock-based compensation 4,534,370 3,612,945 2,812,533 Fair value of stock options exercised (2,699,042) (768,356) - Fair value of expired warrants and compensation options 160,470 2,765,630 - Fair value of expired warrants and compensation options 160,470 2,765,630 - Fair value of expired warrants and compensation options 160,470 2,765,630 - Fair value of expired warrants and compensation options 160,470 2,765,630 - Fair value of expired warrants and compensation options 160,470 2,765,630 - Fair value of expired warrants and compensation options		(5.351.586)	(127,964)	-
Fair value of warrants issued on the exercise of convertible debentures 1,229,305 146,858 - Fair value of warrants issued on private placement 3,766,007 - - Fair value of broker warrants issued as share issue costs 288,197 - - December 31, 5,328,455 5,557,002 8,525,358 Contributed Surplus 44,407,679 38,799,337 36,042,754 Beginning balance 44,407,679 38,799,337 36,042,754 Stock-based compensation 4,534,370 3,612,945 2,812,533 Fair value of stock options exercised (2,699,042) (768,356) (2,812,533) Fair value of expired warrants and compensation options 160,470 2,765,630 - Fair value effect of conversion of convertible debentures 550,856 (1,877) - December 31, 46,954,333 44,407,679 38,799,337 Accumulated Other Comprehensive Loss genining balance (1,983,212) (1,908,715) (2,083,514) Other comprehensive income (loss) attributable to common shareholders - translation adjustment (70,705) (74,497) 174,799 December 31, (2,053,917) (1,983,2				-
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Fair value of broker warrants issued as share issue costs 288,197 - - December 31, 5,328,455 5,557,002 8,525,358 Contributed Surplus Beginning balance 44,407,679 38,799,337 36,042,754 Stock-based compensation 4,534,370 3,612,945 2,812,533 Fair value of stock options exercised (2,699,042) (768,356) (55,950) Fair value of stock options of convertible debentures 550,856 (1,877) - December 31, 46,954,333 44,407,679 38,799,337 Accumulated Other Comprehensive Loss Beginning balance (1,983,212) (1,908,715) (2,083,514) Other comprehensive income (loss) attributable to common shareholders - translation adjustment (70,705) (74,497) 174,799 December 31, (2,053,917) (1,983,212) (1,908,715) (2,083,514) Other comprehensive income (loss) attributable to common shareholders - translation adjustment (70,705) (74,497) 174,799 December 31, (2,053,917) (1,983,212) (1,908,715) (2,083,514) Other comprehensive income (loss) attributable to common shareholders - translation adjustment (70,705)			-	-
Contributed Surplus Beginning balance 44,407,679 38,799,337 36,042,754 Stock-based compensation 4,534,370 3,612,945 2,812,533 Fair value of stock options exercised (2,699,042) (768,356) (55,950) Fair value of expired warrants and compensation options 160,470 2,765,630 - Fair value effect of conversion of convertible debentures 550,856 (1,877) - December 31, 46,954,333 44,407,679 38,799,337 Accumulated Other Comprehensive Loss Beginning balance (1,983,212) (1,908,715) (2,083,514) Other comprehensive income (loss) attributable to common shareholders - translation adjustment (70,705) (74,497) 174,799 December 31, (2,053,917) (1,983,212) (1,908,715) (2,083,514) Other comprehensive income (loss) attributable to common shareholders - translation adjustment (70,705) (74,497) 174,799 December 31, (2,053,917) (1,983,212) (1,908,715) (2,983,514) Deficit Beginning balance (157,317,877) (133,195,932) (15,952,875)			-	-
Beginning balance 44,407,679 38,799,337 36,042,754 Stock-based compensation 4,534,370 3,612,945 2,812,533 Fair value of stock options exercised (2,699,042) (768,356) (55,950) Fair value of expired warrants and compensation options 160,470 2,765,630 - Fair value offect of conversion of convertible debentures 550,856 (1,877) - December 31, 46,954,333 44,407,679 38,799,337 36,042,754 Accumulated Other Comprehensive Loss Beginning balance (1,883,212) (1,908,715) (2,083,514) Other comprehensive income (loss) attributable to common shareholders - translation adjustment (70,705) (74,497) 174,799 December 31, (2,053,917) (1,908,715) (2,083,514) Other comprehensive income (loss) attributable to common shareholders - translation adjustment (170,705) (74,497) 174,799 December 31, (1,083,212) (1,908,715) (1,908,715) (1,908,715) Deficit Beginning balance (157,317,877) (139,148,807) (133,195,932) (15,952,875) (15,	December 31,	5,328,455	5,557,002	8,525,358
Beginning balance 44,407,679 38,799,337 36,042,754 Stock-based compensation 4,534,370 3,612,945 2,812,533 Fair value of stock options exercised (2,699,042) (768,356) (55,950) Fair value of expired warrants and compensation options 160,470 2,765,630 - Fair value offect of conversion of convertible debentures 550,856 (1,877) - December 31, 46,954,333 44,407,679 38,799,337 36,042,754 Accumulated Other Comprehensive Loss Beginning balance (1,883,212) (1,908,715) (2,083,514) Other comprehensive income (loss) attributable to common shareholders - translation adjustment (70,705) (74,497) 174,799 December 31, (2,053,917) (1,908,715) (2,083,514) Other comprehensive income (loss) attributable to common shareholders - translation adjustment (170,705) (74,497) 174,799 December 31, (1,083,212) (1,908,715) (1,908,715) (1,908,715) Deficit Beginning balance (157,317,877) (139,148,807) (133,195,932) (15,952,875) (15,	Contributed Surplus			
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Fair value of stock options exercised (2,699,042) (768,356) (55,950) Fair value of expired warrants and compensation options 160,470 2,765,630 - Fair value effect of conversion of convertible debentures 550,856 (1,877) - December 31, 46,954,333 44,407,679 38,799,337 Accumulated Other Comprehensive Loss 8 (1,983,212) (1,908,715) (2,083,514) Other comprehensive income (loss) attributable to common shareholders - translation adjustment (70,705) (74,497) 174,799 December 31, (2,053,917) (1,983,212) (1,908,715) (2,083,514) Other comprehensive income (loss) attributable to common shareholders - translation adjustment (70,705) (74,497) 174,799 December 31, (2,053,917) (1,983,212) (1,908,715) (1,908,715) Deficit Beginning balance (157,317,877) (139,148,807) (133,195,932) Net loss (15669,093) (18,169,070) (5,952,875) December 31, (172,986,970) (157,317,877) (139,148,807)				
Fair value of expired warrants and compensation options 160,470 2,765,630 - Fair value effect of conversion of convertible debentures 550,856 (1,877) - December 31, 46,954,333 44,407,679 38,799,337 Accumulated Other Comprehensive Loss geginning balance (1,983,212) (1,908,715) (2,083,514) Other comprehensive income (loss) attributable to common shareholders - translation adjustment (70,705) (74,497) 174,799 December 31, (2,053,917) (1,983,212) (1,908,715) (2,083,514) Deficit geginning balance (157,317,877) (139,148,807) (133,195,932) Net loss (1569,093) (157,317,877) (139,148,807) (139,148,807) December 31, (172,986,970) (157,317,877) (139,148,807)				
Fair value effect of conversion of convertible debentures 550,856 (1,877) - December 31, 46,954,333 44,407,679 38,799,337 Accumulated Other Comprehensive Loss geginning balance (1,983,212) (1,908,715) (2,083,514) Other comprehensive income (loss) attributable to common shareholders - translation adjustment (70,705) (74,497) 174,799 December 31, (2,053,917) (1,983,212) (1,908,715) (2,083,514) Deficit geginning balance (157,317,877) (139,148,807) (133,195,932) Net loss (15669,093) (157,317,877) (139,148,807) (5,952,875) December 31, (172,986,970) (157,317,877) (139,148,807)				(55,950)
December 31, 46,954,333 44,407,679 38,799,337 Accumulated Other Comprehensive Loss (1,983,212) (1,908,715) (2,083,514) Other comprehensive income (loss) attributable to common shareholders - translation adjustment (70,705) (74,497) 174,799 December 31, (2,053,917) (1,983,212) (1,908,715) (2,083,514) December 31, (2,053,917) (1,983,212) (1,908,715) Deficit Beginning balance (157,317,877) (139,148,807) (133,195,932) Net loss (157,317,877) (139,148,807) (5,952,875) December 31, (172,986,970) (157,317,877) (139,148,807)				-
Accumulated Other Comprehensive Loss (1,983,212) (1,908,715) (2,083,514) Other comprehensive income (loss) attributable to common shareholders - translation adjustment (70,705) (74,497) 174,799 December 31, (2,053,917) (1,983,212) (1,908,715) (2,083,514) Deficit Beginning balance (1,71,7877) (1,908,715) (1,908,715) Deficit Beginning balance (157,317,877) (139,148,807) (133,195,932) Net loss (172,986,970) (157,317,877) (139,148,807) (139,148,807)		550,856	(1,877)	-
Beginning balance (1,983,212) (1,908,715) (2,083,514) Other comprehensive income (loss) attributable to common shareholders - translation adjustment (70,705) (74,497) 174,799 December 31, (2,053,917) (1,983,212) (1,908,715) Deficit Beginning balance Net loss (157,317,877) (139,148,807) (133,195,932) December 31, (172,986,970) (157,317,877) (139,148,807)	December 31,	46,954,333	44,407,679	38,799,337
Other comprehensive income (loss) attributable to common shareholders - translation adjustment (70,705) (74,497) 174,799 December 31, (2,053,917) (1,983,212) (1,908,715) Deficit Beginning balance Net loss (157,317,877) (139,148,807) (133,195,932) December 31, (172,986,970) (157,317,877) (139,148,807)				
shareholders - translation adjustment (70,705) (74,497) 174,799 December 31, (2,053,917) (1,983,212) (1,908,715) Deficit Beginning balance Net loss (157,317,877) (139,148,807) (133,195,932) December 31, (172,986,970) (157,317,877) (139,148,807)		(1,983,212)	(1,908,715)	(2,083,514)
shareholders - translation adjustment (70,705) (74,497) 174,799 December 31, (2,053,917) (1,983,212) (1,908,715) Deficit Beginning balance Net loss (157,317,877) (139,148,807) (133,195,932) December 31, (172,986,970) (157,317,877) (139,148,807)	Other comprehensive income (loss) attributable to common			
Deficit Beginning balance Net loss (157,317,877) (15,669,093) (139,148,807) (18,169,070) (133,195,932) (5,952,875) December 31, (172,986,970) (157,317,877) (139,148,807)	shareholders - translation adjustment	(70,705)	(74,497)	174,799
Beginning balance Net loss (139,148,807) (15,669,093) (139,148,807) (18,169,070) (133,195,932) (5,952,875) December 31, (172,986,970) (157,317,877) (139,148,807)	December 31,	(2,053,917)	(1,983,212)	(1,908,715)
Net loss (15,669,093) (18,169,070) (5,952,875) December 31, (172,986,970) (157,317,877) (139,148,807)				
Net loss (15,669,093) (18,169,070) (5,952,875) December 31, (172,986,970) (157,317,877) (139,148,807)	Beginning balance	(157,317,877)		(133,195,932)
	Net loss			
Total Shareholders' Equity \$ 24.971.747 \$ 5.814.973 \$ 19.038.856	December 31,	(172,986,970)	(157,317,877)	(139,148,807)
	Total Shareholders' Equity	\$ 24,971,747	\$ 5,814,973 \$	19,038,856

CONSOLIDATED STATEMENTS OF CASH FLOWS (Expressed in US Dollars) For the Years Ended December 31,

CASH AND CASH EQUIVALENTS (USED IN) PROVIDED BY:

OPERATING ACTIVITIES			
Net loss Discontinued operations, net of tax	\$ (15,669,093) -	6 (18,169,070) \$ -	(5,952,875) (5,481,757)
Net loss, continuing operations	(15,669,093)	(18,169,070)	(11,434,632)
Adjustments for: Depreciation of property and equipment (Note 6)	840,366	631,263	166,342
Amortization of patents and licenses (Note 7)	69,560	65.782	61.671
Amortization of right of use asset (Note 8)	190,596	116,057	15,683
Amortization of debt issuance cost (Note 10)	-	-	372,340
Impairment of long lived assets (Note 22)	-	-	1,764,459
Accretion of debt discount on convertible debentures and non-cash	040.040	504.005	000 000
interest (Notes 8 and 10) Stock-based compensation (Note 13)	213,843	524,095	280,829 2,888,141
Income tax recovery (Notes 24)	4,534,370	3,612,945	(292,740)
Non-cash settled operating costs (Notes 6 and 11)	13,814	910,738	(202,740)
Credit loss on receivable from the sale of discontinued operations (Note 3)	-	2,500,000	-
Gain on lease modification (Note 8)	-	(786)	-
Non-cash foreign exchange	-	161,000	-
Gain on contribution of intellectual property to joint venture (Note 5)	(2,587,500)	-	-
Share of loss in joint venture (Note 5)	1,142,249	-	-
Forgiveness of covid-19 government support loans (Note 25)	(186,747)	-	-
Net change in non-cash working capital accounts:	(11,438,542)	(9,647,976)	(6,177,907)
Prepaid and other current assets	134,926	232,522	(685,667)
Accounts payable and accrued liabilities	70,323	(22,510)	420,457
Cash flows from operating activities, continuing operations	(11,233,293)	(9,437,964)	(6,443,117)
Cash flows from operating activities, discontinued operations	•	-	(2,951,104)
	(11,233,293)	(9,437,964)	(9,394,221)
INVESTING ACTIVITIES			
Purchase of short-term investments (Note 2)	(6,366,828)	-	-
Proceeds from the sale of discontinued operations (Note 21)	-	15,500,000	-
Purchase of property and equipment (Note 6)	(771,523)	(1,521,788)	(445,678)
Purchase of patents and licenses (Note 7)	(159,359)	(52,075)	(77,037)
Cash flows from investing activities, continuing operations Cash flow from investing activities, discontinued operations	(7,297,710) -	13,926,137 -	(522,715) 5,908,623
	(7,297,710)	13,926,137	5,385,908
FINANCING ACTIVITIES			
Issue of common shares for cash, net of issue costs (Note 11)	26,791,311	1,088,450	60,028
Payment of lease liability (Note 8)	(237,634)	(144,142)	(19,162)
Proceeds from covid-19 government support loans (Note 25)	-	218,151	-
Proceeds from convertible debentures, net of issue costs paid in cash (Note 10)	-	-	3,352,849
Proceeds from loan payable and promissory note (Note 10)	-	-	4,000,000
Repayment of loan payable and promissory note (Note 10)	-	-	(4,000,000)
Cash flows from financing activities, continuing operations	26,553,677	1,162,459	3,393,715
Cash flow from financing activities, discontinued operations	-	-	(258,460)
	26,553,677	1,162,459	3,135,255
Effect of exchange rate on cash, continuing operations	46,207	(205,867)	(252,671)
Effect of exchange rate on cash, discontinued operations	-	-	(14,010)
Effect of exchange rate on cash	46,207	(205,867)	(266,681)
		5 444 705	(0.004.705)
Net change in cash and cash equivalents, continuing operations	8,068,881	5,444,765	(3,824,788)
Net change in cash and cash equivalents, discontinued operations	-	-	2,685,049
Cash and cash equivalents, beginning of year	6,872,894	1,428,129	2,567,868
Cash and cash equivalents, end of year	\$ 14,941,775	6,872,894 \$	1,428,129
			. ,

2021

2020

2019

1. DESCRIPTION OF BUSINESS

POET Technologies Inc. is incorporated in the Province of Ontario. POET Technologies Inc. and its subsidiaries (the "Company") design and develop the POET Optical Interposer and Photonic Integrated Circuits for the data center and tele-communications markets. The Company's head office is located at 120 Eglinton Avenue East, Suite 1107, Toronto, Ontario, Canada M4P 1E2. These audited consolidated financial statements of the Company were approved by the Board of Directors of the Company on April 26, 2022.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

These consolidated financial statements of the Company and its subsidiaries were prepared in accordance with International Financial Reporting Standards ("IFRS"), as issued by the International Accounting Standards Board ("IASB").

The preparation of financial statements in accordance with IFRS requires the use of certain critical accounting estimates. It also requires management to exercise judgment in applying the Company's accounting policies. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the financial statements are disclosed below:

Basis of presentation

These consolidated financial statements include the accounts of POET Technologies Inc. and its subsidiaries; ODIS Inc. ("ODIS"), Opel Solar Inc. ("OPEL"), BB Photonics Inc. ("BB Photonics"), POET Technologies Pte Ltd. ("PTS") and POET Optoelectronics Shenzhen Co., Ltd ("POET Shenzhen"). They also include the accounts of DenseLight Semiconductor Pte Ltd. ("DenseLight") up-to November 8, 2019. All intercompany balances and transactions have been eliminated on consolidation.

Business combinations

Acquisitions of businesses are accounted for using the acquisition method. The acquisition cost is measured at the acquisition date at the fair value of the consideration transferred, including all contingent consideration.

Subsequent changes in contingent consideration are accounted for through the consolidated statements of operations and deficit and consolidated statements of comprehensive loss in accordance with the applicable standards.

Goodwill arising on acquisition is initially measured at cost, being the difference between the fair value of the consideration transferred including the recognized amount of any non-controlling interest in the acquiree and the net recognized amount (generally fair value) of the identifiable assets and liabilities assumed at the acquisition date. If the net of the amounts of the identifiable assets acquired and liabilities assumed exceeds the sum of the consideration transferred, the amount of any non-controlling interests in the acquiree and the fair value of the acquirer's previously held interest in the acquiree (if any), the excess is recognized immediately in the consolidated statements of operations and deficit as a bargain purchase gain.

Acquisition-related costs, other than those that are associated with the issue of debt or equity securities that the Company incurs in connection with a business combination, are expensed as incurred.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Foreign currency translation

These consolidated financial statements are presented in U.S. dollars ("USD"), which is the Company's presentation currency.

Items included in the financial statements of each of the Company's subsidiaries are measured using the currency of the primary economic environment in which the entity operates (the "functional currency"). Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transaction. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation of monetary assets and liabilities not denominated in the functional currency of an entity are recognized in the statement of operations and deficit.

Assets and liabilities of entities with functional currencies other than U.S. dollars are translated into the presentation currency at the year end rates of exchange, and the results of their operations are translated at average rates of exchange for the year. The resulting translation adjustments are included in accumulated other comprehensive loss in shareholders' equity. Additionally, foreign exchange gains and losses related to certain intercompany loans that are permanent in nature are included in accumulated other comprehensive loss. Elements of equity are translated at historical rates.

Financial instruments

IFRS 9 introduced new classification and measurement models for financial assets. The investment classifications held-to-maturity and available-for-sale are no longer used and financial assets at fair value through other comprehensive income ("FVTOCI") were introduced. Financial assets held with an objective to hold assets in order to collect contractual cash flows which arise on specified dates that are solely principal and interest are measured at amortised cost using the effective interest method. Debt investments held with an objective to hold both assets in order to collect contractual cash flows which arise on specified dates that are solely principal and interest are solely principal and interest as well as selling the asset on the basis of fair value are measured at FVTOCI. All other financial assets are classified and measured at fair value through profit or loss ("FVTPL"). Financial liabilities are classified as either FVTPL or other financial liabilities, and the portion of the change in fair value that relates to the Company's credit risk is presented in other comprehensive income (loss). Instruments classified as FVTPL are measured at fair value with unrealized gains and losses recognized in net income (loss). Other financial liabilities are subsequently measured at amortised cost using the effective interest method.

Transaction costs that are directly attributable to the acquisition or issuance of financial assets and financial liabilities, other than financial assets and financial liabilities classified as FVTPL, are added to or deducted from the fair value on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities classified as FVTPL are recognized immediately in consolidated net income (loss).

Derecognition

Financial assets

The Company derecognizes a financial asset when the contractual rights to the cash flows from the financial asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all of the risks and rewards of ownership of the financial asset are transferred or in which the Company neither transfers nor retains substantially all of the risks and rewards of ownership and it does not retain control of the financial asset. Any interest in transferred financial assets that is created or retained by the Company is recognized as a separate asset or liability.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Financial liabilities

A financial liability is derecognized from the balance sheet when it is extinguished, that is, when the obligation specified in the contract is either discharged, cancelled or expires. Where there has been an exchange between an existing borrower and lender of debt instruments with substantially different terms, or there has been a substantial modification of the terms of an existing financial liability, this transaction is accounted for as an extinguishment of the original financial liability and the recognized in profit or loss. The Company's financial instruments include cash and cash equivalents, short-term investments, accounts receivable, accounts payable and accrued liabilities.

The following table outlines the classification of financial instruments under IFRS 9:

Financial Assets Cash and cash equivalents Short-term investments	Amortized cost Amortized cost
Financial Liabilities Accounts payable and accrued liabilities Convertible debentures Covid-19 government support loans	Amortized cost Amortized cost Amortized cost

Convertible debentures are accounted for as a compound financial instrument with a debt component and a separate equity component. The debt component of these compound financial instruments is measured at fair value on initial recognition by discounting the stream of future interest and principal payments at the rate of interest prevailing at the date of issue for instruments of similar term and risk. The debt component is subsequently deducted from the total carrying value of the compound instrument to derive the equity component. The debt component is subsequently measured at amortized cost using the effective interest rate method. Interest expense based on the coupon rate of the debenture and the accretion of the liability component to the amount that will be payable on redemption are recognized through profit or loss as a finance cost.

Cash and cash equivalents

Cash and cash equivalents consist of cash in current accounts of \$4,216,911 (2020 - \$722,894, 2019 - \$1,278,129) and funds invested in US and Canadian Term Deposits of \$10,724,864 (2020 - \$6,150,000, 2019 - \$150,000) earning interest at rates ranging from 0.20% - 0.25% and maturing in less than 90 days.

Cash and cash equivalents include restricted funds of nil (2020 - \$184,569, 2019 - \$93,800) which serves as a bank guarantee for the purchase of certain equipment. A bank guarantee was discharged in 2020 and a new bank guarantee was put in place. The new bank guarantee was discharged in 2021. The bank guarantee was reduced on a monthly basis by \$14,197 (2020 - \$14,197, 2019 - \$10,424) which is the amount paid monthly in settlement of the outstanding balance on the equipment.

Short-term investments

The short-term investments of \$6,366,828 consist of guaranteed investment certificates (GICs) held with one Canadian chartered bank and earn interest at rates ranging from 0.75 to 1.44%. The GICs have maturity dates between June 2022 and July 2022. Investments are carried at amortized cost.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Property and equipment

Property and equipment are recorded at cost. Depreciation is calculated based on the estimated useful life of the asset using the following method and useful lives:

Machinery and equipment	Straight Line, 5 years
Leasehold improvements	Straight Line, 5 years or life of the lease, whichever is less
Office equipment	Straight Line, 3 - 5 years

Patents and licenses

Patents and licenses are recorded at cost and amortized on a straight line basis over 12 years. Ongoing maintenance costs are expensed as incurred.

Impairment of long-lived assets

The Company's tangible and intangible assets are reviewed for indications of impairment whenever events or changes in circumstances indicate that the carrying amounts of the assets may not be recoverable. An assessment is made at each reporting date whether there is any indication that an asset may be impaired.

An impairment loss is recognized when the carrying amount of an asset exceeds its recoverable amount. Impairment losses are recognized in profit and loss for the year. The recoverable amount is the greater of the asset's fair value less costs 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 current market assessments of the time value of money and the risks specific to the asset. For an asset that does not generate largely independent cash inflows, the recoverable amount is determined for the cash-generating unit ("CGU") to which the asset belongs.

An impairment loss is reversed if there is an indication that there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortization, if no impairment loss had been recognized. The Company reported no impairment loss for the year ended December 31, 2021 (2020 - nil, 2019 - \$714,000) (Note 22).

Goodwill

Goodwill represents the excess of the cost of an acquired business over the fair value of the identifiable assets acquired net of liabilities assumed. Goodwill is measured at cost less accumulated impairment losses and is not amortized. Goodwill is tested for impairment on an annual basis or whenever facts or circumstances indicate that the carrying amount may exceed its recoverable amount.

The Company performs its annual test for goodwill impairment annually in the fourth quarter. The Company utilized a five-year cash flow forecast using the annual budget approved by the Board of Directors as a basis for such forecasts. Cash flow forecasts beyond that of the budget were prepared using a stable growth rate for future periods. These forecasts were based on historical data and future trends expected by the Company. The Company's valuation model also takes into account working capital and capital investments required to maintain the condition of the assets. Forecasted cash flows were discounted using an after-tax rate of 30%.

Based on the impairment tests, the value in-use of the CGU to which goodwill is applicable is less than the carrying amount. As a result goodwill of \$1,050,459 was impaired in 2019. No provision for impairment of goodwill was made in 2021 or 2020 (Note 22).

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Income taxes

The Company follows the liability method of accounting for income taxes. Under this method, deferred income taxes are provided on differences between the financial reporting and income tax bases of assets and liabilities and on income tax losses available to be carried forward to future years for tax purposes. Deferred income taxes are measured using the substantively enacted tax rates and laws that are expected to be in effect when the differences are expected to reverse. Deferred tax assets are only recognized if the amount is expected to be realized in the future.

Revenue recognition

Revenue is measured based on the consideration specified in a contract with a customer and excludes amounts collected on behalf of third parties. The Company recognizes revenue when it transfers control over a product or service to a customer.

Sale of goods

Revenue from the sale of goods is recognized, net of discounts and customer rebates, at the point in time the transfer of control of the related products has taken place as specified in the sales contract and collectability is reasonably assured.

Service revenue

The Company provides contract services, primarily in the form of non-recurring revenue ("NRE") where control is passed to the customer over time. The contracts generally provide agreed upon milestones for customer payment which include but are not limited to the delivery of sample products, design reports and test reports. The customer makes payment when it has approved the delivery of the milestone. The Company must determine if the contract is made up of a series of independent performance obligations or a single performance obligation. Where NRE contracts contain multiple performance obligations for which a standalone transaction price can be assessed, revenue is recognized as each performance obligation is satisfied. Where NRE contracts contain a single performance obligation to be settled over time, revenue is recognized progressively based on the output method.

Other income

Interest income

Interest income on cash is recognized as earned using the effective interest method.

Wage subsidies

Wages subsidies received from the Singaporean government are netted against R&D related wages and benefits on the consolidated statements of operations and deficit.

Government Grants

Loans received exclusively from governmental agencies to support the Company throughout the COVID-19 pandemic qualify to be forgiven if certain conditions are met. Forgiveness of COVID-19 related loans will be recognized as other income on the consolidated statements of operations and deficit.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Intangible assets

Research and development costs

Research costs are expensed in the year incurred. Development costs are also expensed in the year incurred unless the Company believes a development project meets IFRS criteria as set out in IAS 38, *Intangible Assets*, for deferral and amortization. IAS 38 requires all research costs be charged to expense while development costs are capitalised only after technical and commercial feasibility of the asset for sale or use have been established. This means that the entity must intend and be able to complete the intangible asset and either use it or sell it and be able to demonstrate how the asset will generate future economic benefits. Development costs are tested for impairment whenever events or changes indicate that its carrying amount may not be recoverable.

In-Process Research and Development

Under IFRS, in-process research and development ("IPR&D") acquired in a business combination that meets the definition of an intangible asset is capitalized with amortization commencing when the asset is ready for use (i.e., when development is complete). The Company acquired \$714,000 of IPR&D when it acquired BB Photonics Inc. in 2016. During 2020, management observed indicators that suggested that IPR&D may be impaired. IPR&D acquired with BB Photonics was no longer useable with the novel POET Interposer platform. BB Photonics IPR&D would not generate sufficient cash flow to support its value in use. Management completed an impairment assessment of IPR&D and determined that the amount of \$714,000 was impaired. An impairment loss of \$714,000 was recorded in 2019. No impairment was recorded in 2021 or 2020 (Note 22).

Stock-based compensation

Stock options and warrants awarded to non employees are measured using the fair value of the goods or services received unless that fair value cannot be estimated reliably, in which case measurement is based on the fair value of the stock options. Stock options and warrants awarded to employees are accounted for using the fair value method. The fair value of such stock options and warrants granted is recognized as an expense on a proportionate basis consistent with the vesting features of each tranche of the grant. The fair value is calculated using the Black-Scholes option pricing model with assumptions applicable at the date of grant.

Loss per share

Basic loss per share, net of taxes is calculated by dividing net loss by the weighted average number of common shares outstanding during the year. Diluted loss per share is calculated by dividing net loss by the weighted average number of common shares outstanding during the period after giving effect to potentially dilutive financial instruments. The dilutive effect of stock options and warrants is determined using the treasury stock method.

Joint Venture

A joint arrangement is an arrangement among two or more parties where the parties are bound by a contractual arrangement and the contractual arrangement gives the parties joint control of the arrangement. A joint venture is a form of joint arrangement where an entity is independently formed and the parties jointly have rights to the net assets of the arrangement and therefore account for their interests under the equity method.

Share Consolidation

On February 24, 2022, the Company filed Articles of Amendment to consolidate its common shares on a ten-for-one basis. For further clarity, for every ten (10) pre-consolidated common shares, shareholders received one (1) post-consolidated common share. On February 28, 2022 the Company's common shares began trading on the TSX Venture Exchange on a post consolidation basis. The Company's name and trading symbol remained unchanged. All references to share and per share amounts in these consolidated financial statements and accompanying notes to the consolidated financial statements have been retroactively restated to reflect the ten-for-one share consolidation.

3. RECEIVABLE FROM THE SALE OF DISCONTINUED OPERATIONS

On November 8, 2019, the Company sold 100% of the issued and outstanding shares of DenseLight for \$26,000,000. The Company received \$8,000,000 upon the consummation of the sale with the remaining \$18,000,000 expected over three tranche payments in 2020. Payments received in the first quarter were as follows: \$4,750,000 received on February 14, 2020 and \$8,250,000 received on March 30, 2020.

The Company received payments of \$1,500,000 and \$1,000,000 on June 29, 2020 and July 3, 2020 respectively. After taking into consideration the length of time it had taken the Buyer to make the foregoing payments and the Company's expectations regarding the likelihood of receiving an additional payment, the Company determined that it was in its best interest to accept partial payments as final payment on the Company's receivable. As a result, the Company recognized a credit loss of \$2,500,000 during the year ended December 31, 2020. Credit loss was nil in 2021 and 2019.

4. PREPAIDS AND OTHER CURRENT ASSETS

The following table reflects the details of prepaids and other current assets at December 31:

	2021	2020	2019
Sales tax recoverable and other current assets Deposits on equipment Prepaid expenses	\$ 141,568 \$ 288,287 50,668	122,353 \$ _ 496,364	81,265 - 750,000
	\$ 480,523 \$	618,717 \$	831,265

Research and development credit, security deposits on leased properties and certain prepaid expenses were disposed of upon the sale of DenseLight on November 8, 2019.

5. JOINT VENTURE

On October 20, 2020, the Company signed a Joint Venture Agreement ("JVA") establishing a joint venture, Super Photonics Xiamen Co., Ltd ("SPX") in Xiamen China, with Xiamen Sanan Integrated Circuit Co. Ltd. ("Sanan IC") whose purpose is to design, develop, manufacture and sell 100G, 200G and 400G optical engines based on POET's proprietary Optical Interposer platform technology. SPX was registered on March 12, 2021. SPX will be subsequently capitalized through a combination of committed cash, capital equipment and intellectual property from Sanan IC and intellectual property and know-how from the Company.

The Company's contribution of intellectual property to SPX was independently valued at \$22,500,000. During the period from March 12, 2021 to December 31, 2021, the Company recognized a gain of \$2,587,500 related to its contribution of intellectual property to SPX in accordance with IAS 28. The Company only recognized a gain on the contribution of the intellectual property equivalent to the Sanan IC's interest in SPX, the unrecognized gain of \$19,912,500 will be applied against the investment and periodically realized as the Company's ownership interest in SPX is reduced. As at December 31, 2021, Sanan IC's and the Company's ownership interests were 11.5% and 88.5% respectively.

SPX was determined to be a joint venture as both Sanan IC and POET exercise joint control over SPX. All relevant activity of SPX require unanimous consent.

5. JOINT VENTURE (Contined)

The Company's investment in joint venture during the year can be summarized as follows:

	,	December 31, 2021
Investment Unrecognized gain on contribution of intellectual property Share of loss in joint venture		\$ 22,500,000 (19,912,500) (1,142,249)
Investment balance		\$ 1,445,251

Summarized financial information of the joint venture is as follows:

Current assets	\$ 2,287,252
Intangible assets	\$ 22,500,000
Liabilities	\$ (44,683)
Owners Equity	\$ (24,742,569)

Net loss	\$ 1,212,417

The Company recognizes its share of SPX's profits or losses using the equity method. On a weighted average basis, the Company recognized 94.2% or \$1,142,249 of the net operating loss of SPX for the period from March 12, 2021 to December 31, 2021. The Company's current share of the operating loss is a result of the high value of the Company's initial contribution. The Company's share of the loss will reduce as Sanan IC periodically contributes cash and other assets to SPX.

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#### 6. PROPERTY AND EQUIPMENT

|                                             | upment not<br>dy for use |           |       | Machinery and<br>equipment | Office<br>equipment | Total         |  |
|---------------------------------------------|--------------------------|-----------|-------|----------------------------|---------------------|---------------|--|
| Cost                                        |                          |           |       |                            |                     |               |  |
| Balance, January 1, 2019                    | \$<br>3,142,153          | \$ 667,34 | 42 \$ | \$ 11,017,985 \$           | 621,441             | \$ 15,448,921 |  |
| Additions                                   | 1,986,210                | -         |       | 39,260                     | 19,480              | 2,044,950     |  |
| Impairment and disposals <sup>(1)</sup>     | (4,388,762)              | (667,34   | 42)   | (8,198,519)                | (555,688)           | (13,810,311)  |  |
| Effect of changes in foreign exchange rates | 24,741                   | -         |       | 14,529                     | -                   | 39,270        |  |
| Balance, December 31, 2019                  | 764,342                  | -         |       | 2,873,255                  | 85,233              | 3,722,830     |  |
| Additions                                   | 888,726                  | 68,9      | 61    | 525,685                    | 38,416              | 1,521,788     |  |
| Reclassification                            | (519,366)                | -         |       | 516,111                    | 3,255               | -             |  |
| Disposals <sup>(2)</sup>                    | (897,727)                | -         |       | -                          | -                   | (897,727)     |  |
| Effect of changes in foreign exchange rates | (8,828)                  |           | 67    | 79,606                     | 1,281               | 75,026        |  |
| Balance,December 31, 2020                   | 227,147                  | 71,92     | 28    | 3,994,657                  | 128,185             | 4,421,917     |  |
| Additions, net of returns <sup>(3)</sup>    | (128,575)                | -         |       | 842,877                    | 57,221              | 771,523       |  |
| Reclassification                            | (96,334)                 | 47,3      | 93    | 48,941                     | -                   | -             |  |
| Effect of changes in foreign exchange rates | (2,238)                  |           | 06)   | (56,455)                   | (2,137)             | (63,036)      |  |
| Balance, December 31, 2021                  | \$<br>-                  | \$ 117,1  | 15 \$ | \$ 4,830,020 \$            | 183,269             | \$ 5,130,404  |  |

#### 6. PROPERTY AND EQUIPMENT (Continued)

| Accumulated Depreciation<br>Balance, January 1, 2019<br>Depreciation for the year<br>Impairment and disposals <sup>(1)</sup> | -                | 350,497<br>-<br>(350,497) | 5,411,757<br>144,337<br>(5,044,288) | 387,154<br>22,005<br>(341,195) | 6,149,408<br>166,342<br>(5,735,980) |
|------------------------------------------------------------------------------------------------------------------------------|------------------|---------------------------|-------------------------------------|--------------------------------|-------------------------------------|
| Balance, December 31, 2019<br>Depreciation for the year<br>Effect of changes in foreign exchange rates                       | -                | -<br>10,332<br>445        | 511,806<br>609,803<br>24,405        | 67,964<br>11,128<br>280        | 579,770<br>631,263<br>25,130        |
| Balance, December 31, 2020<br>Depreciation for the year<br>Effect of changes in foreign exchange rates                       | -                | 10,777<br>18,891<br>(142) | 1,146,014<br>794,834<br>(10,122)    | 79,372<br>26,641<br>(95)       | 1,236,163<br>840,366<br>(10,359)    |
| Balance, December 31, 2021                                                                                                   | -                | 29,526                    | 1,930,726                           | 105,918                        | 2,066,170                           |
| <b>Carrying Amounts</b><br>At December 31, 2019                                                                              | \$<br>764,342 \$ | - 9                       | \$ 2,361,449 \$                     | 17,269 \$                      | 3,143,060                           |
| At December 31, 2020                                                                                                         | \$<br>227,147 \$ | 61,151 \$                 | \$ 2,848,643 \$                     | 48,813 \$                      | 3,185,754                           |
| At December 31, 2021                                                                                                         | \$<br>- \$       | 87,589 \$                 | \$ 2,899,294 \$                     | 77,351 \$                      | 3,064,234                           |

(1) On November 8, 2019, the Company disposed of property and equipment used in the operations DenseLight.

(2) During 2020, the Company settled certain R&D expenses by transferring \$897,727 worth of equipment to the supplier. The equipment was initially installed in the fabrication facility of the supplier who provided discounted R&D services to the Company. The equipment will be used by the supplier for volume production primarily for the benefit of the Company.

(3) During the year, the Company returned \$196,490 in equipment to a vendor. The equipment was not needed as the Company had alternatives. The equipment was returned without penalty to the Company.

### 7. PATENTS AND LICENSES

| <b>Cost</b><br>Balance, January 1, 2019<br>Additions<br>Disposals <sup>(1)</sup> | \$ 737,686<br>77,037<br>(29,696) |
|----------------------------------------------------------------------------------|----------------------------------|
| Balance, December 31, 2019                                                       | 785,027                          |
| Additions                                                                        | 52,075                           |
| Balance, December 31, 2020                                                       | 837,102                          |
| Additions                                                                        | 159,359                          |
| Balance, December 31, 2021                                                       | 996,461                          |
| Accumulated Amortization<br>Balance, January 1, 2019<br>Amortization             | 270,972<br>61,671                |
| Balance, December 31, 2019                                                       | 332,643                          |
| Amortization                                                                     | 65,782                           |
| Balance, December 31, 2020                                                       | 398,425                          |
| Amortization                                                                     | 69,560                           |
| Balance, December 31, 2021                                                       | 467,985                          |

Carrying Amounts

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in US Dollars)

## 7. PATENTS AND LICENSES (Continued)

| At December 31, 2019 | \$<br>452,384 |
|----------------------|---------------|
| At December 31, 2020 | \$<br>438,677 |
| At December 31, 2021 | \$<br>528,476 |

(1) On November 8, 2019, the Company disposed of certain patents unrelated to the Company's technology on the sale of DenseLight.

#### 8. RIGHT OF USE ASSET AND LEASE LIABILITY

On January 1, 2019, the Company adopted IFRS, 16 Leases. Upon adoption of IFRS 16, the Company recognized a lease liability and right of use asset relating to new leases entered into on February 15, 2019 related to DenseLight, and November 1, 2019 related to PTS. The lease liability was measured at the present value of the remaining lease payments, discounted using the Company's incremental borrowing rate of 12%. During 2020, the Company modified its lease resulting in reducing the space it leased for the operations at PTS. The Company recognized a gain of \$786 on the lease modification which is included in selling, general and marketing on the consolidated statements of operations and deficit.

| Right of use asset                                                                                                                                                                                              | Building                                                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| Cost                                                                                                                                                                                                            |                                                          |
| Balance, January 1, 2019                                                                                                                                                                                        | \$ -                                                     |
| Additions                                                                                                                                                                                                       | 1,127,534                                                |
| Disposal <sup>(1)</sup>                                                                                                                                                                                         | (892,300)                                                |
| Effect of changes in foreign exchange rates                                                                                                                                                                     | 2,966                                                    |
| Balance, December 31, 2019                                                                                                                                                                                      | 238,200                                                  |
| Additions                                                                                                                                                                                                       | 465,068                                                  |
| _ease modification                                                                                                                                                                                              | (47,939)                                                 |
| Effect of changes in foreign exchange rates                                                                                                                                                                     | (2,097)                                                  |
| Balance, December 31, 2020                                                                                                                                                                                      | 653,232                                                  |
| Effect of changes in foreign exchange rates                                                                                                                                                                     | (4,122)                                                  |
| Balance, December 31, 2021                                                                                                                                                                                      | ¢ 640.110                                                |
|                                                                                                                                                                                                                 | \$ 649,110                                               |
| Accumulated Amortization<br>Balance, January 1, 2019<br>Amortization                                                                                                                                            | -<br>15,683                                              |
| Accumulated Amortization<br>Balance, January 1, 2019                                                                                                                                                            |                                                          |
| Accumulated Amortization<br>Balance, January 1, 2019<br>Amortization<br>Balance, December 31, 2019                                                                                                              | -<br>15,683                                              |
| Accumulated Amortization<br>Balance, January 1, 2019<br>Amortization<br>Balance, December 31, 2019<br>Amortization                                                                                              | 15,683                                                   |
| Accumulated Amortization<br>Balance, January 1, 2019<br>Amortization<br>Balance, December 31, 2019<br>Amortization<br>Effect of changes in foreign exchange rates                                               | 15,683<br>15,683<br>116,057<br>806                       |
| Accumulated Amortization<br>Balance, January 1, 2019<br>Amortization<br>Balance, December 31, 2019<br>Amortization<br>Effect of changes in foreign exchange rates<br>Balance, December 31, 2020                 | 15,683<br>15,683<br>116,057<br>806<br>132,546            |
| Accumulated Amortization<br>Balance, January 1, 2019<br>Amortization<br>Balance, December 31, 2019<br>Amortization<br>Effect of changes in foreign exchange rates<br>Balance, December 31, 2020<br>Amortization | 15,683<br>15,683<br>116,057<br>806<br>132,546<br>190,596 |
| Accumulated Amortization<br>Balance, January 1, 2019<br>Amortization<br>Balance, December 31, 2019<br>Amortization                                                                                              | 15,683<br>15,683<br>116,057<br>806<br>132,546            |

#### Carrying Amounts

| At December 31, 2019 | \$<br>222,517 |
|----------------------|---------------|
| At December 31, 2020 | \$<br>520,686 |
| At December 31, 2021 | \$<br>326,890 |

#### 8. RIGHT OF USE ASSET AND LEASE LIABILITY (Continued)

#### Lease liability

| Balance, January 1, 2019                           | \$ -       |
|----------------------------------------------------|------------|
| Additions                                          | 1,127,534  |
| Interest expense                                   | 4,705      |
| Interest included in discontinued operations       | 74,494     |
| Lease payments                                     | (19,162)   |
| Lease payments included in discontinued operations | (258,460)  |
| Disposal (1)                                       | (695,733)  |
| Effect of changes in foreign exchange rates        | (9,620)    |
| Balance, December 31, 2019                         | 223,758    |
| Interest expense                                   | 44,655     |
| Lease modification                                 | (48,725)   |
| Additions                                          | 452,385    |
| Lease payments                                     | (144,142)  |
| Effect of changes in foreign exchange rates        | 4,066      |
| Balance, December 31, 2020                         | 531,997    |
| Interest expense                                   | 67,675     |
| Lease payments                                     | (237,634)  |
| Effect of changes in foreign exchange rates        | (2,690)    |
| Balance, December 31, 2021                         | \$ 359,348 |

(1) The Company disposed of \$892,000 of right of use asset and \$695,733 of lease liability on November 8, 2019 with the sale of DenseLight on November 8, 2019 (Note 21).

#### 9. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

Accounts payable and accrued liabilities at December 31 was as follows:

|                                                                      | 2021                                   | 2020                             | 2019                           |
|----------------------------------------------------------------------|----------------------------------------|----------------------------------|--------------------------------|
| Trade payables<br>Payroll related liabilities<br>Accrued liabilities | \$<br>987,498 \$<br>521,692<br>282,032 | 1,603,284 \$<br>60,455<br>66,622 | 1,507,644<br>44,677<br>173,387 |
|                                                                      | \$<br>1,791,222 \$                     | 1,730,361 \$                     | 1,725,708                      |

. . . .

#### 10. CONVERTIBLE DEBENTURES, LOAN PAYABLE AND PROMISSORY NOTE

On April 1, 2019 the Company announced that it arranged for certain financing required to bridge the Company up to the sale of its DenseLight subsidiary.

#### **Convertible Debentures**

In 2019, the Board of Directors approved the issuance of up to \$10.5 million of unsecured convertible debentures (the "Convertible Debentures") of the Company. The Convertible Debentures were sold in multiple tranches, on a brokered private placement basis through the Company's financial advisors, IBK Capital. In 2019, the Company closed five tranches of the private placement of the Convertible Debentures that raised gross proceeds of \$3,729,921 (CAD\$4,988,292). The Convertible Debentures, bear interest at 12% per annum, compounded annually with 1% payable at the beginning of each month and mature two years from the date of issue. The Company paid \$377,072 (CAD\$499,462) in brokerage fees and other costs related to the closing of these five tranches.

Balance December 31, 2020

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in US Dollars)

#### 10. CONVERTIBLE DEBENTURES, LOAN PAYABLE AND PROMISSORY NOTE (Continued)

The Convertible Debentures were convertible at the option of the holders thereof into units at any time after October 31, 2019 at a conversion price of CAD\$4.00 per unit for a total 1,245,750 units of the Company. Each unit will consist of one common share and one common share purchase warrant. Each common share purchase warrant will entitle the holder to purchase one common share of the Company at a price of CAD\$5.00 per share for a period of four years from the date upon which the convertible debenture is issued. Upon completing the sale of DenseLight, holders of Convertible Debentures will have the right to cause the Company to repurchase the Convertible Debentures at face value, subject to certain restrictions. The Convertible Debentures are governed by a trust indenture between the Company and TSX Trust Company as trustee.

Insiders of the Company subscribed for 14.3% or \$535,000 (CAD\$710,000) of the Convertible Debentures, including the Company's board of directors and senior management team. Insiders of IBK Capital subscribed for 4% or \$146,000 (CAD\$200,000) of the Convertible Debentures.

IAS 32 Financial Instruments: Presentation define these debt securities as compound financial instruments made up of both a liability component and an equity component. The debt component of the Convertible Debentures were fair valued using effective discount rates ranging from 28.74% to 29.71% which the Company determined would be the interest rate of the debts without a conversion feature. The difference between the fair value of the debt component and the loan is allocated to the equity component and is included in shareholders' equity.

Because the Convertible Debentures are denominated in Canadian dollars and the conversion price is also denominated in Canadian dollars, the number of equity instruments that would be issued upon exercise of the convertible debentures are fixed. As a result, the equity component of the convertible debentures will not be periodically remeasured.

During 2021, holders of certain convertible debentures converted \$3,571,342 (2020 - \$369,545) worth of convertible debentures into 1,119,750 (2020 - 123,500) units of the Company. On September 19, 2021, \$7,886 of convertible debentures matured and was repaid to the holder of the convertible debenture. As of December 31, 2021 all convertible debentures were either exercised or matured and repaid.

**Convertible Debentures** Loan Equity Component Accretion Debt Component Issued April 3, 2020 (net of issue costs) 1,293,519 (242,004) 338,988 1,390,503 \$ \$ \$ \$ Issued May 3, 2020 (net of issue costs) 806,893 (151, 842)218,159 873,210 Issued June 3, 2020 (net of issue costs) 496,995 (93, 278)117.481 521,198 Issued August 2, 2020 (net of issue costs) 290,365 (54, 978)62,683 298,070 Issued September 19, 2020 (net of issue costs) 122,965 (23,019) 22,905 122.851 Effect of foreign exchange rate changes 135,414

3,010,737

\$

(565,121)

\$

760,216

\$

3,341,246

The following table reflects the details of convertible debentures at December 31, 2020:

The following table reflects the details of convertible debentures at December 31, 2019:

\$

| Convertible Debentures                                                                                                                                                                                                                                                       | Loan E                                                           | quity C | Component                                                   | A  | ccretion De                                    | ebt C | Component                                                       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|---------|-------------------------------------------------------------|----|------------------------------------------------|-------|-----------------------------------------------------------------|
| Issued April 3, 2020 (net of issue costs )<br>Issued May 3, 2020 (net of issue costs)<br>Issued June 3, 2020 (net of issue costs)<br>Issued August 2, 2020 (net of issue costs)<br>Issued September 19, 2020 (net of issue costs)<br>Effect of foreign exchange rate changes | \$<br>1,293,519<br>979,256<br>582,356<br>374,753<br>122,965<br>- | \$      | (242,004)<br>(183,317)<br>(109,017)<br>(70,154)<br>(23,019) | \$ | 128,240<br>84,708<br>42,855<br>19,690<br>5,336 | \$    | 1,179,755<br>880,647<br>516,194<br>324,289<br>105,282<br>82,866 |
| Balance December 31, 2019                                                                                                                                                                                                                                                    | \$<br>3,352,849                                                  | \$      | (627,511)                                                   | \$ | 280,829                                        | \$    | 3,089,033                                                       |

#### 10. CONVERTIBLE DEBENTURES, LOAN PAYABLE AND PROMISSORY NOTE (Continued)

#### Loan Payable and Promissory Note

The second component of the financing in 2019 consisted of a credit facility (the "Bridge Loan") provided by Espresso Capital Ltd which granted the Company access to a maximum \$5,000,000. The Company signed the loan documents on April 18, 2019 and was advanced \$3,100,000 shortly thereafter.

Funds drawn on the Credit Facility bore interest at a rate of 17.25% per annum (the "Interest Rate"), calculated daily from the date of each advance until the earlier of the due date of each such advance, if any, and December 31, 2019 (the "Maturity Date"). The Interest Rate was comprised of 15% cash interest and 2.25% deferred interest. Per the agreement, the interest rate was retroactively increased to 19.25% because the Company did not consummate the sale of Denselight by October 15, 2019.

In 2019, the Company paid \$147,077 in costs related to the Bridge Loan. Additionally, the Company issued to Espresso Capital Ltd, warrants for the purchase of 328,950 common shares at a price of CAD\$3.50 per share. The Warrants expire on April 18, 2020. The fair value of the warrants was estimated on the date of issue using the Black-Scholes option pricing model with the following assumptions: volatility of 78.91%, interest rate of 1.62% and an expected life of 1 year. The estimated fair value assigned to the warrants was \$221,620. The total cost of \$368,697 along with the foreign exchange impact of \$3,543 was deferred and charged against the Bridge Loan and subsequently amortized over the life of the Bridge Loan. The Bridge loan was repaid on November 8, 2019.

Additionally, on August 30, 2019, the Company signed a term promissory note (the "Promissory Note") for up-to \$1,000,000 with Century Prosper Investment Corporation (the "Lender"). The Promissory Note bore interest at 15% per annum. The Promissory Note and accrued interest were repayable on the six-month anniversary of each advance. At the option of the Lender, the advances and accrued interest may be repaid in full five days after the sale of the Company's DenseLight subsidiary. The Company was advanced \$900,000 in 2019 on this Promissory Note. The \$900,000 advance and related interest of \$17,160 were repaid on November 8, 2019.

#### 11. SHARE CAPITAL

(a) AUTHORIZED

Unlimited number of common shares One special voting share

#### (b) COMMON SHARES ISSUED

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Number of<br>Shares                                                          | Amount                                                                                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| Balance, January 1, 2019<br>Funds from the exercise of stock options<br>Fair value of stock options exercised                                                                                                                                                                                                                                                                                                                                                       | 28,808,230<br>28,125<br>-                                                    | 112,028,194<br>60,028<br>55,950                                                                      |
| Balance, December 31, 2019<br>Funds from the exercise of stock options<br>Fair value of stock options exercised<br>Funds from the exercise of warrants<br>Fair value of exercised warrants (Notes 10 and 11)<br>Issued on the conversion of convertible debentures (Note 10)<br>Fair value of warrants issued on conversion of convertible debentures<br>Exercise of warrants issued in conjunction with debt financing<br>Shares issued to settle accounts payable | 28,836,355<br>330,284<br>-<br>74,400<br>-<br>123,500<br>-<br>94,245<br>3,027 | 112,144,172<br>794,808<br>768,356<br>293,642<br>127,964<br>369,545<br>(146,858)<br>221,620<br>13,011 |
| Balance, December 31, 2020                                                                                                                                                                                                                                                                                                                                                                                                                                          | 29,461,811                                                                   | \$114,586,260                                                                                        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                              | Page 18                                                                                              |

#### 11. SHARE CAPITAL (Continued)

| Fair value of warrants issued upon conversion of convertible debentures<br>Funds from the exercise of warrants<br>Fair value of warrants exercised | 1,119,750<br>-<br>3,144,750<br>1,764,720<br>-<br>-<br>-<br>1,678 | 3,571,342<br>(1,229,305)<br>12,994,358<br>5,351,586<br>11,815,595<br>(3,766,007)<br>(1,143,034)<br>(288,197)<br>13,814 |
|----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                    | 6,494,228                                                        | \$147,729,846                                                                                                          |

During 2020, holders of certain convertible debentures converted \$369,545 worth of convertible debentures into 123,500 units of the Company. Each unit consists of one common share and one common share purchase warrant. Each common share purchase warrant entitles the holder to purchase one common share of the Company at a price of \$3.80 (CAD\$5.00) per share for a period of four years from the date upon which the convertible debenture was issued.

The fair value of the share purchase warrants was estimated using the Black-Scholes option pricing model with the following weighted average assumptions: dividend yield of 0%, risk-free interest rate of 1.32%, volatility of 76.55%, and estimated life of 2 years. The estimated fair value assigned to the warrants was \$146,858.

During 2020, the Company engaged with a firm to assist with its shareholder communications strategy. The terms of the agreement require the Company to issue common shares at certain pre-determined dates in statisfaction of past services rendered. During 2020, the Company settled \$13,011 in accounts payable related to past services rendered under this agreement by issuing 3,027 common shares at a price of \$4.30 (CAD\$5.60) per share to the firm.

On February 11, 2021, the Company completed a brokered private placement offering of 1,764,720 units at a price of \$6.70 (CAD\$8.50) per unit for gross proceeds of \$11,815,595 (CAD\$15,000,120). Each unit consists of one common share and one common share purchase warrant. Each whole warrant entitles the holder to purchase one common share of the Company at a price of \$9.00 (CAD\$11.50) per share until February 11, 2023. At any time after June 12, 2021, the Company reserves the right to accelerate the expiry of the warrants if the Company's average stock price exceeds \$18.10 (CAD\$23.00) for a period of 10 consecutive trading days. The broker was paid a cash commission of \$708,667 (CAD\$900,007) equating to 6% of the gross proceeds and received 105,883 broker warrants. Each broker warrant is exercisable into one common share of the Company at a price of \$6.70 (CAD\$8.50) per broker warrant until February 11, 2023. The Company incurred additional share issuance costs of \$434,367 directly related to the private placement and warrant exercises.

The fair value of the share purchase warrants and broker warrants was estimated using the Black-Scholes option pricing model with the following weighted average assumptions: dividend yield of 0%, risk-free interest rate of 0.19%, volatility of 75.26%, and estimated life of 2 years. The estimated fair value assigned to the warrants and broker warrants was \$3,766,007 and \$288,197, respectively.

In 2020, the Company engaged with a firm to assist with its shareholder communications strategy. The terms of the agreement require the Company to issue common shares at certain pre-determined dates in statisfaction of past services rendered. During 2021, the Company settled \$13,814 (2020 - \$13,011) in accounts payable related to past services rendered under this agreement by issuing 1,678 (2020 - 3,027) common shares at a price of \$8.20 (CAD\$10.10) (2020 - \$4.30 (CAD\$5.60) per share to the firm.

#### 12. WARRANTS AND COMPENSATION OPTIONS

The following table reflects the continuity of warrants and compensation options:

|                                                                                                                                                                                                                                                                                                                               | -  | listorical<br>age Exercise<br>Price Co       | Number of<br>Warrants/<br>mpensation option                               | Historical<br>s Fair value                                                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----------------------------------------------|---------------------------------------------------------------------------|----------------------------------------------------------------------------|
| Balance, January 1, 2019<br>Fair value of warrants issued as cost of debt financing                                                                                                                                                                                                                                           | \$ | 4.40<br>2.70                                 | 4,625,029<br>328,950                                                      | \$ 8,303,738<br>221,620                                                    |
| Balance, December 31, 2019                                                                                                                                                                                                                                                                                                    |    | 4.30                                         | 4,953,979                                                                 | 8,525,358                                                                  |
| Fair value of warrants issued on conversion of<br>convertible debentures (Notes 10 and 11)<br>Fair value of expired compensation options issued to brokers<br>Fair value related to the exercise of warrants issued as cost                                                                                                   |    | 3.80<br>4.30                                 | 123,500<br>(150,544)                                                      | 146,858<br>(479,204)                                                       |
| of debt financing <sup>(1)</sup><br>Fair value of expired warrants issued on public offering<br>Historical fair value assigned to warrants exercised                                                                                                                                                                          |    | 2.70<br>5.80<br>3.90                         | (328,950)<br>(1,254,535)<br>(74,400)                                      | (221,620)<br>(2,286,426)<br>(127,964)                                      |
| Balance, December 31, 2020<br>Fair value of warrant issued on private placement<br>Fair value of broker warrants issued on private placement<br>Fair value of warrants issued on conversion of<br>convertible debentures (Notes 10)<br>Historical fair value assigned to warrants exercised<br>Fair value of expired warrants |    | 3.90<br>9.00<br>6.70<br>3.80<br>3.90<br>3.90 | 3,269,050<br>1,764,720<br>105,883<br>1,119,750<br>(3,144,750)<br>(93,300) | 5,557,002<br>3,766,007<br>288,197<br>1,229,305<br>(5,351,586)<br>(160,470) |
| Balance, December 31, 2021                                                                                                                                                                                                                                                                                                    | \$ | 7.10                                         | 3,021,353                                                                 | \$ 5,328,455                                                               |

(1) These warrants had a cashless exercise feature. The warrant holder utilized the cashless exercise feature to exercise the warrants, which resulted in the Company issuing 94,245 common shares to the warrant holders.

#### 13. STOCK OPTIONS AND CONTRIBUTED SURPLUS

#### Stock Options

On October 7, 2021, shareholders of the Company approved amendments to the Company's fixed 20% stock option plan (as amended, previously referred to as the "2020 plan", now referred to as the "2021 Plan"). Under the 2021 Plan, the board of directors may grant options to acquire common shares of the Company to qualified directors, officers, employees and consultants. The 2021 Plan provides that the number of common shares issuable pursuant to options granted under the 2021 Plan and pursuant to other previously granted options is limited to 70,905,183 (the "Number Reserved"). Any subsequent increase in the Number Reserved must be approved by shareholders of the Company and cannot, at the time of the increase, exceed 20% of the number of issued and outstanding shares. The stock options vest in accordance with the policies determined by the Board of Directors from time to time consistent with the provisions of the 2021 Plan which grants discretion to the Board of Directors.

#### 13. STOCK OPTIONS AND CONTRIBUTED SURPLUS (Continued)

Stock option transactions and the number of stock options outstanding were as follows:

|                                  |              | Historical<br>ghted Average<br>Exercise<br>Price |
|----------------------------------|--------------|--------------------------------------------------|
| Balance, January 1, 2019         | 4,446,373 \$ | 5.80                                             |
| Expired/cancelled <sup>(1)</sup> | (870,781)    | 9.00                                             |
| Exercised                        | (28,125)     | 2.20                                             |
| Granted                          | 1,778,567    | 2.70                                             |
| Balance, December 31, 2019       | 5,326,034    | 4.30                                             |
| Expired/cancelled                | (828,794)    | 10.20                                            |
| Exercised                        | (330,284)    | 2.40                                             |
| Granted                          | 947,493      | 3.60                                             |
| Balance, December 31, 2020       | 5,114,449    | 3.30                                             |
| Expired/cancelled                | (166,438)    | 3.40                                             |
| Exercised                        | (1,001,519)  | 3.00                                             |
| Granted                          | 1,013,125    | 8.50                                             |
| Balance, December 31, 2021       | 4,959,617 \$ | 4.40                                             |

(1) 227,719 cancelled options related to staff employed at DenseLight

During the year ended December 31, 2021, the Company recorded stock-based compensation of \$4,534,370 (2020 - \$3,612,945, 2019 - \$2,888,141) relating to stock options that vested during the year. The stock-based compensation applicable to employees of DenseLight in the amount of nil (2020 - nil, 2019 - \$(75,608)) has been allocated to discontinued operations (see note 21).

The stock options granted were valued using the Black-Scholes option pricing model using the following assumptions:

|                                          | 2021            | 2020            | 2019            |
|------------------------------------------|-----------------|-----------------|-----------------|
| Weighted average exercise price          | \$8.50          | \$3.60          | \$2.70          |
| Weighted average risk-free interest rate | 0.80% - 1.48%   | 0.52% - 1.52%   | 1.57%           |
| Weighted average dividend yield          | 0%              | 0%              | 0%              |
| Weighted average volatility              | 90.68%          | 94.77%          | 95.48%          |
| Weighted average estimated life          | 10 years        | 10 years        | 10 years        |
| Weighted average share price             | \$8.50          | \$3.60          | \$2.70          |
| Share price on the various grant dates:  | \$6.20 - \$9.50 | \$2.20 - \$3.90 | \$2.40 - \$2.80 |
| Weighted average fair value              | \$7.50          | \$3.00          | \$2.40          |

The underlying expected volatility was determined by reference to the Company's historical share price movements, its dividend policy and dividend yield and past experience relating to the expected life of granted stock options.

#### 13. STOCK OPTIONS AND CONTRIBUTED SURPLUS (Continued)

The weighted average remaining contractual life and weighted average exercise price of options outstanding and of options exercisable as at December 31, 2021 are as follows:

|                                                       | Options Out           | standing                                               |                                                                 | Options Exercis                 | Options Exercisable |                                                       |  |  |  |  |
|-------------------------------------------------------|-----------------------|--------------------------------------------------------|-----------------------------------------------------------------|---------------------------------|---------------------|-------------------------------------------------------|--|--|--|--|
| Exercise<br>Range                                     | Number<br>Outstanding | Historical<br>Weighted<br>Average<br>Exercise<br>Price | Weighted<br>Average<br>Remaining<br>Contractual<br>Life (years) | Number<br>Exercisable           | W<br>A<br>E         | listorical<br>/eighted<br>.verage<br>xercise<br>Price |  |  |  |  |
| \$1.10 - \$2.50<br>\$2.60 - \$3.70<br>\$3.80 - \$9.20 | ,                     | 2.20           2.60           5.10                     | 6.20<br>7.38<br>7.79                                            | 661,188<br>546,304<br>1,731,064 | \$<br>\$<br>\$      | 2.20<br>2.60<br>3.90                                  |  |  |  |  |
|                                                       | 4,959,619             | \$ 4.20                                                | 7.45                                                            | 2,938,556                       | \$                  | 3.30                                                  |  |  |  |  |

#### 14. LOSS PER SHARE

|                                                                                                                |          | 2021                    | 2020              | 2019                        |
|----------------------------------------------------------------------------------------------------------------|----------|-------------------------|-------------------|-----------------------------|
| Numerator<br>Net loss from continuing operations<br>Net income (loss) from discontinued operations             | \$<br>\$ | (15,669,093) \$<br>- \$ | (18,169,070)<br>- | \$(11,434,632)<br>5,481,757 |
| Net loss                                                                                                       | \$       | (15,669,093) \$         | (18,169,070)      | \$ (5,952,875)              |
| Denominator<br>Weighted average number of<br>common shares outstanding                                         |          | 34,545,752              | 29,169,653        | 28,821,638                  |
| Weighted average number of common<br>shares outstanding - diluted                                              |          | 34,545,752              | 29,169,653        | 28,821,638                  |
| Basic and diluted loss per share, continuing<br>operations<br>Basic and diluted income per share, discontinued | \$       | (0.45) \$               | (0.62)            | \$ (0.40)                   |
| operations<br>Basic and diluted loss per share                                                                 | \$<br>\$ | -  \$<br>(0.45) \$      | - (0.62)          | \$ 0.19<br>\$ (0.21)        |

The effect of common share purchase options, warrants, compensation warrants and shares to be issued on the net loss in 2021, 2020 and 2019 is not reflected as they are anti-dilutive.

#### 15. COMMITMENTS AND CONTINGENCIES

The Company has operating leases on four facilities; head office located in Toronto, Canada, design and testing operations located in Allentown, Pennsylvania (formerly in San Jose, California) and operating facilities located in Singapore and China. The Company's design and testing operations terminated a lease on January 31, 2020. A new lease was initiated on April 1, 2020 and expires on March 31, 2025. The lease on the Company's operating facilities in Singapore was initiated on November 1, 2019 and expires April 30, 2022. The lease on the Company's operating facilities in China was initiated in November 19, 2020 and expires on November 18, 2023. As at December 31, 2021, the Company's head office was on a month to month lease term.

#### 15. COMMITMENTS AND CONTINGENCIES (Continued)

Remaining annual lease payments to the lease expiration dates are as follows:

| 2022<br>2023 and beyond | \$<br>182,787<br>258,274 |
|-------------------------|--------------------------|
|                         | \$<br>441,061            |

#### 16. RELATED PARTY TRANSACTIONS

Compensation to key management personnel were as follows:

|                                                 | 2021                         | 2020                         | 2019                         |
|-------------------------------------------------|------------------------------|------------------------------|------------------------------|
| Salaries<br>Share-based payments <sup>(1)</sup> | \$<br>1,782,297<br>2,077,333 | \$<br>1,501,058<br>2,144,930 | \$<br>1,251,277<br>2,135,579 |
| Total                                           | \$<br>3,859,630              | \$<br>3,645,988              | \$<br>3,386,856              |

(1) Share-based payments are the fair value of options granted to key management personnel and expensed during the various years as calculated using the Black-Scholes model.

All transactions with related parties have occurred in the normal course of operations and are measured at the exchange amounts, which are the amounts of consideration established and agreed to by the related parties.

#### 17. SEGMENT INFORMATION

The Company and its subsidiaries operate in a single segment; the design, manufacture and sale of semi-conductor products and services for commercial applications. The Company's operating and reporting segment reflects the management reporting structure of the organization and the manner in which the chief operating decision maker regularly assesses information for decision making purposes, including the allocation of resources. A summary of the Company's operations is below:

#### **OPEL, ODIS, POET Shenzhen and PTS**

OPEL, ODIS, POET Shenzhen and PTS are the developers of the POET platform semiconductor process IP for monolithic fabrication of integrated circuit devices containing both electronic and optical elements on a single die.

#### **BB** Photonics

BB Photonics developed photonic integrated components for the datacom and telecom markets utilizing embedded dielectric technology that enables the low-cost integration of active and passive devices into photonic integrated circuits. BB Photonics' operation is currently dormant.

On a consolidated basis, the Company operates geographically in Singapore, China (collectively "Asia"), the United States and Canada. Geographical information is as follows:

| As of December 31,          | Asia            | US              | Canada           | Consolidated     |
|-----------------------------|-----------------|-----------------|------------------|------------------|
| Current assets              | \$<br>537,647   | \$<br>291,772   | \$<br>20,959,707 | \$<br>21,789,126 |
| Investment in joint venture | 1,445,251       | -               | -                | 1,445,251        |
| Property and equipment      | 2,787,273       | 276,961         | -                | 3,064,234        |
| Patents and licenses        | -               | 528,476         | -                | 528,476          |
| Right of use asset          | 150,134         | 176,756         | -                | 326,890          |
| Total Assets                | \$<br>4,920,305 | \$<br>1,273,965 | \$<br>20,959,707 | \$<br>27,153,977 |

## 17. SEGMENT INFORMATION (Continued)

| Year Ended December 31,                                                                 |    | Asia                  |    | US                 |    | Canada         |    | Consolidated           |
|-----------------------------------------------------------------------------------------|----|-----------------------|----|--------------------|----|----------------|----|------------------------|
| Revenue                                                                                 | \$ | 209,100               | \$ | -                  | \$ | -              | \$ | 209,100                |
| Selling, marketing and<br>administration                                                | \$ | (1,563,829)           | \$ | (5,460,917)        | \$ | (2,030,784)    | \$ | (9,055,530)            |
| Research and development<br>Gain on contribution of intellectual                        | Ŷ  | (4,849,553)           | Ŷ  | (2,679,452)        | Ŷ  | (636,123)      | Ŷ  | (8,165,128)            |
| property to joint venture<br>Interest expense                                           |    | 2,587,500<br>(35,043) |    | -<br>(32,632)      |    | -<br>(296,944) |    | 2,587,500<br>(364,619) |
| Forgiveness of Covid-19<br>government support loans<br>Other income, including interest |    | -                     |    | 186,747<br>-       |    | -<br>75,084    |    | 186,747<br>75,084      |
| Share of loss in joint venture                                                          |    | (1,142,249)           |    | -                  |    | -              |    | (1,142,249)            |
| Net loss                                                                                | \$ | (4,794,074)           | \$ | (7,986,254)        | \$ | (2,888,767)    | \$ | (15,669,095)           |
|                                                                                         |    |                       |    |                    | 2  | 2020           |    |                        |
| As of December 31,                                                                      |    | Asia                  |    | US                 |    | Canada         |    | Consolidated           |
| Current assets                                                                          | \$ | 304,450               | \$ | 69,874             | \$ | 7,117,287      | \$ | 7,491,611              |
| Property and equipment<br>Patents and licenses                                          |    | 2,982,496             |    | 203,258<br>438,677 |    | -              |    | 3,185,754<br>438,677   |
| Right of use asset                                                                      |    | 289,542               |    | 231,144            |    | -              |    | 520,686                |
| Total Assets                                                                            | \$ | 3,576,488             | \$ | 942,953            | \$ | 7,117,287      | \$ | 11,636,728             |
| The Year Ended December 31,                                                             |    | Asia                  |    | US                 |    | Canada         |    | Consolidated           |
| Selling, marketing and administration                                                   | \$ | (1,182,054)           | \$ | (5,495,161)        | \$ | (1,460,783)    | \$ | (8,137,998)            |
| Research and development                                                                | Ψ  | (3,269,873)           | Ψ  | (1,447,729)        | Ψ  | (1,916,715)    | Ψ  | (6,634,317)            |
| Interest expense                                                                        |    | (20,181)              |    | (24,474)           |    | (893,248)      |    | (937,903)              |
| Credit loss on receivable from the sale of discontinued operation                       |    | _                     |    | -                  |    | (2,500,000)    |    | (2,500,000)            |
| Other income, including interest                                                        |    | -                     |    | -                  |    | 41,148         |    | 41,148                 |
| Net loss                                                                                | \$ | (4,472,108)           | \$ | (6,967,364)        | \$ | (6,729,598)    | \$ | (18,169,070)           |
|                                                                                         |    |                       |    |                    |    | 2019           |    |                        |
|                                                                                         |    |                       |    |                    |    |                |    |                        |

| As of December 31,                                                                     | Asia                                      | US                                     | Canada |                           | Consolidated |                                               |  |
|----------------------------------------------------------------------------------------|-------------------------------------------|----------------------------------------|--------|---------------------------|--------------|-----------------------------------------------|--|
| Current assets<br>Property and equipment<br>Patents and licenses<br>Right of use asset | \$<br>86,849<br>3,055,906<br>-<br>222,517 | \$<br>22,523<br>87,154<br>452,384<br>- | \$     | 20,150,022<br>-<br>-<br>- | \$           | 20,259,394<br>3,143,060<br>452,384<br>222,517 |  |
| Total Assets                                                                           | \$<br>3,365,272                           | \$<br>562,061                          | \$     | 20,150,022                | \$           | 24,077,355                                    |  |

#### 17. SEGMENT INFORMATION (Continued)

| The Year Ended December 31,                                                                                                                                                                                                   | Asia                                                  | US                                                            | Canada                                                                                   | Consolidated                                                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| Selling, marketing and administration \$<br>Research and development<br>Impairment of long lived assets<br>Interest expense<br>Amortization of debt issuance costs<br>Other income, including interest<br>Income tax recovery | (217,416)<br>(218,900)<br>-<br>(4,705)<br>-<br>-<br>- | \$<br>(5,126,260)<br>(107,161)<br>-<br>-<br>-<br>-<br>292,740 | \$<br>(1,353,711)<br>(1,757,754)<br>(1,764,459)<br>(815,206)<br>(372,340)<br>10,540<br>- | \$<br>(6,697,387)<br>(2,083,815)<br>(1,764,459)<br>(819,911)<br>(372,340)<br>10,540<br>292,740 |
| Net loss from continuing operations<br>Income from discontinued<br>operations, net of taxes                                                                                                                                   | (441,021)<br>5,481,757                                | (4,940,681)<br>-                                              | (6,052,930)<br>-                                                                         | (11,434,632)<br>5,481,757                                                                      |
| Net income (loss) \$                                                                                                                                                                                                          | 5,040,736                                             | \$<br>(4,940,681)                                             | \$<br>(6,052,930)                                                                        | \$<br>(5,952,875)                                                                              |

#### 18. FINANCIAL INSTRUMENTS AND RISK MANAGEMENT

The Company's financial instruments consist of cash and cash equivalents, receivable from the sale of discontinued operation, short-term investments, convertible debentures, covid-19 government support loans and accounts payable and accrued liabilities. Unless otherwise noted, it is management's opinion that the Company is not exposed to significant interest risk arising from these financial instruments. The Company estimates that carrying value of these instruments approximates fair value due to their short term nature.

The Company has classified financial assets and (liabilities) as follows at December 31:

|                                                     |    | 2021                   | 2020           | 2019        |
|-----------------------------------------------------|----|------------------------|----------------|-------------|
| Financial assets, measured at amortized cost:       |    |                        |                |             |
| Cash and cash equivalents                           | \$ | 14,941,775 \$          | 6,872,894 \$   | 1,428,129   |
| Short-term investments                              | \$ | 6,366,828 \$           | • • •          | -           |
| Accounts receivable, measured at amortized cost:    |    |                        |                |             |
| Receivable from the sale of discontinued operations | \$ | - \$                   | - \$           | 18,000,000  |
| Other liabilities, measured at amortized cost:      |    |                        |                |             |
| Accounts payable and accrued liabilities            | \$ | (1,791,222) \$<br>- \$ | (1,730,361) \$ | (1,725,708) |
| Convertible debentures                              | \$ | - \$                   | (3,341,246) \$ | (3,089,033) |
| Covid-19 government support loans                   | \$ | (31,660) \$            | (218,151) \$   | -           |
| Covid-19 government support loans                   | φ  | (51,000) \$            | (210,101) φ    | -           |

#### **Exchange Rate Risk**

The functional currency of each of the entities included in the accompanying consolidated financial statements is the local currency where the entity is domiciled. Functional currencies include the Chinese Yuan, US, Singapore and Canadian dollar. Most transactions within the entities are conducted in functional currencies. As such, none of the entities included in the consolidated financial statements engage in hedging activities. The Company is exposed to a foreign currency risk when its subsidiaries hold current assets or current liabilities in currencies other than its functional currency. A 10% change in foreign currencies held would increase or decrease other comprehensive loss by \$1,000,422.

#### Liquidity Risk

The Company currently does not maintain credit facilities. The Company's existing cash and cash resources are considered sufficient to fund operating and investing activities beyond one year from the issuance of these consolidated financial statements. The Company may, however, need to seek additional financing in the future.

#### 19. CAPITAL MANAGEMENT

In the management of capital, the Company includes shareholders' equity (excluding accumulated other comprehensive loss and deficit) and cash. The components of capital on December 31, 2021 were:

Cash and cash equivalents Shareholders' equity

\$ 14,941,775 \$200,012,634

The Company's objective in managing capital is to ensure that financial flexibility is present to increase shareholder value through growth and responding to changes in economic and/or market conditions; to maintain a strong capital base so as to maintain investor, creditor and market confidence and to sustain future development of the business and to safeguard the Company's ability to obtain financing should the need arise.

In maintaining its capital, the Company has a strict investment policy which includes investing its surplus capital only in highly liquid, highly rated financial instruments.

The Company reviews its capital management approach on an ongoing basis.

#### 20. EXPENSES

Research and development costs can be analysed as follows:

|                                        | 2    | 2021                   | 2020                      | 2019                     |
|----------------------------------------|------|------------------------|---------------------------|--------------------------|
| Wages and benefits<br>Subcontract fees |      | 3,270,528<br>1,516,343 | \$ 1,586,900<br>3,802,919 | \$<br>874,673<br>834,598 |
| Stock-based compensation<br>Supplies   |      | 1,769,951<br>1,608,306 | 567,859<br>676,639        | 237,311<br>137,233       |
|                                        | \$ 8 | 8,165,128              | \$ 6,634,317              | \$<br>2,083,815          |

. . . .

Selling, marketing and administration costs can be analysed as follows:

| Stock-based compensation<br>Wages and benefits | \$ 2,764,419<br>2,643,451<br>4,455,246 | 2,233,449    | \$ 2,650,830<br>1,619,719 |
|------------------------------------------------|----------------------------------------|--------------|---------------------------|
| Professional fees                              | 1,155,316                              | 800,551      | 1,120,805                 |
| General expenses                               | 1,304,690                              | 1,188,712    | 813,951                   |
| Depreciation and amortization                  | 1,100,522                              | 813,103      | 243,674                   |
| Management and consulting fees                 | -                                      | -            | 154,357                   |
| Rent and facility costs                        | 87,130                                 | 57,097       | 94,051                    |
|                                                | \$ 9,055,528                           | \$ 8,137,998 | \$ 6,697,387              |

#### 21. DISCONTINUED OPERATIONS

On November 8, 2019, the Company sold 100% of the issued and outstanding shares of DenseLight for \$26,000,000. The Buyer assumed control of DenseLight on November 8, 2019 and is responsible for all operations of DenseLight. Upon closing, the Company recognized a gain on the sale of \$8,707,280. The sale proceeds were to be paid over multiple tranches. The first tranche payment was recived on November 8, 2019 in the amount of \$8,000,000. The second tranche payment was payment was made in two installments, with first paid on February 14, 2020 in the amount of \$4,750,000 and the second on March 30, 2020 in the amount of \$8,250,000.

#### 21. DISCONTINUED OPERATION (Continued)

The Company received payments of \$1,500,000 and \$1,000,000 on June 29, 2020 and July 3, 2020 respectively. After taking into consideration the length of time it had taken the Buyer to make the foregoing payments and the Company's expectations regarding the likelihood of receiving an additional payment, the Company determined that it was in its best interest to accept partial payments as final payment on the Company's receivable. As a result, the Company recognized a credit loss of \$2,500,000 during the year ended December 31, 2020 (nil - 2021 and 2019).

The Company received an additional \$2,000,000, in excess of the sale proceeds which was immediately paid to Oak Capital on behalf of the Buyer for due diligence, legal and other expenses.

Revenue and expenses, and gains and losses relating to the discontinued operations were removed from the results of continuing operations and are shown as a single line item on the face of the consolidated statements of operations and deficit. The operating results of the discontinued operations can be analysed as follows:

#### **Results of discontinued operations**

|                                                       |    | For the Period From<br>January 1, 2019 to<br>November 8,<br>2019 |         |              |
|-------------------------------------------------------|----|------------------------------------------------------------------|---------|--------------|
| Revenue                                               | \$ | -                                                                | \$<br>- | \$ 4,426,355 |
| Cost of revenue                                       |    | -                                                                | -       | 1,201,373    |
| Gross margin                                          |    | -                                                                | -       | 3,224,982    |
| Operating expenses                                    |    |                                                                  |         |              |
| Research and development                              |    | -                                                                | -       | 5,677,222    |
| Selling, marketing and administration                 |    | -                                                                | -       | 1,950,526    |
| Interest expense                                      |    | -                                                                | -       | 74,494       |
| Impairment loss                                       |    | -                                                                | -       | -            |
| Other income                                          |    | -                                                                | -       | (1,251,737)  |
| Operating expenses                                    |    | -                                                                | -       | 6,450,505    |
| Loss from discontinued operations                     |    | -                                                                | -       | (3,225,523)  |
| Gain on sale of discontinued operations, net of taxes |    | -                                                                | -       | 8,707,280    |
| Income tax recovery                                   |    | -                                                                | -       | -            |
| Net income, net of taxes                              | \$ | -                                                                | \$<br>- | \$ 5,481,757 |

#### **Disaggregated Revenues**

The Company disaggregates revenue by timing of revenue recognition, that is, at a point in time and revenue over time. Disaggregated revenue is as follows:

|                                                          |    |      | Year Ende<br>ember 31, | ed   | For the Period From<br>January 1, 2019 to<br>November 8, |           |  |
|----------------------------------------------------------|----|------|------------------------|------|----------------------------------------------------------|-----------|--|
|                                                          | 2  | 2021 |                        | 2020 |                                                          | 2019      |  |
| Non-contract revenue (at a point in time) <sup>(1)</sup> | \$ | -    | \$                     | -    | \$                                                       | 2,092,426 |  |
| Contract revenue (revenue over time) <sup>(2)</sup>      |    | -    |                        | -    |                                                          | 2,221,429 |  |
| Contract revenue (at a point in time) <sup>(2)</sup>     |    | -    |                        | -    |                                                          | 112,500   |  |
|                                                          | \$ | -    | \$                     | -    | \$                                                       | 4,426,355 |  |

(1) Revenue from the sale of products.

(2) Revenue from long-term projects or non-recurring engineering (NRE).

## 21. DISCONTINUED OPERATION (Continued)

|                                                                | Contra       | Contract    |  |  |  |
|----------------------------------------------------------------|--------------|-------------|--|--|--|
|                                                                | Receivables  | Liabilities |  |  |  |
| Balance, January 1, 2019                                       | 60,000       | -           |  |  |  |
| Revenues recognized                                            | 2,333,929    | (2,333,929) |  |  |  |
| Changes due to payment, fulfillment of performance obligations |              |             |  |  |  |
| or other                                                       | (1,293,929)  | 2,333,929   |  |  |  |
| Balance, November 8, 2019                                      | \$ 1,100,000 | \$-         |  |  |  |

Research and development costs included in discontinued operations can be analysed as follows:

|                              |         | e Year Ended<br>cember 31,<br>20 |   | Januar<br>N | Period From<br>y 1, 2019 to<br>ovember 8,<br>2019 |
|------------------------------|---------|----------------------------------|---|-------------|---------------------------------------------------|
| Wages and benefits           | \$<br>- | \$                               | - | \$          | 3,565,076                                         |
| Supplies<br>Subcontract fees | -       |                                  | - |             | 1,412,572<br>728,457                              |
| Stock-based compensation     | -       |                                  | - |             | (28,883)                                          |
|                              | \$<br>- | \$                               | - | \$          | 5,677,222                                         |

Selling, marketing and administration costs included in discontinued operations can be analysed as follows:

| Wages and benefits<br>Rent and facility costs<br>General expenses<br>Stock-based compensation<br>Professional fees | \$<br>-<br>-<br>- | \$<br>-<br>-<br>-<br>- | \$<br>887,860<br>604,442<br>458,465<br>(46,725)<br>46,484 |
|--------------------------------------------------------------------------------------------------------------------|-------------------|------------------------|-----------------------------------------------------------|
|                                                                                                                    | \$<br>-           | \$<br>-                | \$<br>1,950,526                                           |

### Cash flows from (used in) discontinued operations

|                                                                                                                                                                                                                                                     | 2021                                    | 2020                                    | 2019                                                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-----------------------------------------|--------------------------------------------------------|
| CASH (USED IN) PROVIDED BY:                                                                                                                                                                                                                         |                                         |                                         |                                                        |
| OPERATING ACTIVITIES                                                                                                                                                                                                                                |                                         |                                         |                                                        |
| Net income (loss)<br>Adjustments for:<br>Depreciation of property and equipment<br>Gain on sale of discontinued operations<br>Amortization of intangibles<br>Interest expense<br>Impairment loss<br>Stock-based compensation<br>Income tax recovery | \$ -<br>-<br>-<br>-<br>-<br>-<br>-<br>- | \$ -<br>-<br>-<br>-<br>-<br>-<br>-<br>- | \$ 5,481,757<br>(8,707,280)<br>-<br>74,494<br>(75,608) |
| Deferred rent<br>Expected credit loss                                                                                                                                                                                                               | -                                       | -                                       | (1,825)<br>-                                           |
|                                                                                                                                                                                                                                                     | -                                       | -                                       | (3,228,462)                                            |

## 21. DISCONTINUED OPERATION (Continued)

| Net change in non-cash working capital accounts:               |         |         |                 |
|----------------------------------------------------------------|---------|---------|-----------------|
| Accounts receivable                                            | -       | -       | 584,902         |
| Prepaid and other current assets                               | -       | -       | 497,259         |
| Inventory                                                      | -       | -       | (334,425)       |
| Accounts payable and accrued liabilities                       | -       | -       | (470,378)       |
| Cash flows provided by (used in) operating activities          | -       | -       | (2,951,104)     |
| INVESTING ACTIVITIES                                           |         |         |                 |
| Proceeds from the sale of discontinued operations, net of cash |         |         |                 |
| given up <sup>(1)</sup>                                        | -       | -       | 7,519,126       |
| Purchase of property and equipment (Note 6)                    | -       | -       | (1,599,272)     |
| Purchase of patents and licenses (Note 7)                      | -       | -       | (11,231)        |
| Cash flows from investing activities                           | -       | -       | 5,908,623       |
| FINANCING ACTIVITIES                                           |         |         |                 |
| Payment of lease liability (Note 8)                            | -       | -       | (258,460)       |
| Cash flows from financing activities                           | -       | -       | (258,460)       |
| EFFECT OF EXCHANGE RATE CHANGES ON CASH                        | -       | -       | (14,010)        |
| NET CHANGE IN CASH                                             | \$<br>- | \$<br>- | \$<br>2,685,049 |

## Effect of Disposal on the Financial Position of the Group on November 8, 2019

| Accounts receivable<br>Prepaid and other current assets<br>Inventory<br>Property and equipment<br>Right of use asset<br>Patents<br>Goodwill and customer list<br>Trade payables<br>Lease Liability<br>Deferred tax liability | \$ 396,037<br>2,303,014<br>774,404<br>8,424,638<br>880,577<br>29,696<br>6,718,953<br>(1,312,053)<br>(695,733)<br>(707,687) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Net assets disposed                                                                                                                                                                                                          | \$ 16,811,846                                                                                                              |
| <ul> <li><sup>(1)</sup> Consideration received in cash</li> <li><sup>(1)</sup> Cash given up</li> <li>Consideration receivable</li> <li>Net inflows</li> </ul>                                                               | \$ 8,000,000<br>(480,874)<br>18,000,000<br>\$ 25,519,126                                                                   |

#### 22. GOODWILL, INTANGIBLE ASSET AND DEFERRED TAX LIABILITY

On May 11 and June 22, 2016 the Company acquired DenseLight and BB photonics for \$10,500,000 and \$1,550,000 respectively. The all stock purchases were accomplished with the issuance of 13,611,150 common shares and 1,996,090 common shares of the Company at a price of \$0.7714 and \$0.777 per share, respectively. The purchase price in both acquisitions exceeded the net assets acquired which resulted in the difference being accounted for as goodwill on the consolidated statements of financial position.

The continuity of goodwill is as follows:

|                                                                             | DenseLight BB Photonics Total                                                                    |
|-----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| Balance January 1, 2019<br>Impairment<br>Disposed on the sale of DenseLight | \$ 6,630,544 \$ 1,050,459 \$ 7,681,003<br>- (1,050,459) (1,050,459)<br>(6,630,544) - (6,630,544) |
| Balance, December 31, 2019, 2020 and 2021                                   | \$ - \$ - \$ -                                                                                   |

Deferred tax liability was created on the date of purchase for both DenseLight and BB Photonics. The following is a continuity of deferred tax liability.

|                                                                                            | DenseLight               | <b>BB</b> Photonics | Total                               |
|--------------------------------------------------------------------------------------------|--------------------------|---------------------|-------------------------------------|
| Balance, January 1, 2019<br>Tax effect of Impairment<br>Disposed on the sale of DenseLight | 707,687<br>-<br>(707,687 | (292,740)           | 1,000,427<br>(292,740)<br>(707,687) |
| Balance, December 31, 2019, 2020 and 2021                                                  | \$-                      | \$ -                | \$-                                 |

Included in the sale of DenseLight on November 8, 2019 was \$6,630,544 of goodwill and \$707,687 of deferred liability.

## INTANGIBLE ASSETS

|                                                                       | Customer<br>Technology Relationships Total                                         |
|-----------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Balance, January 1, 2019<br>Impairment<br>Disposals <sup>(1)</sup>    | \$ 714,000 \$ 186,131 \$ 900,131<br>(714,000) - (714,000)<br>- (186,131) (186,131) |
| Balance, December 31, 2019, 2020 and 2021                             |                                                                                    |
| Balance, January 1, 2019<br>Amortization for the year                 | - 97,722 97,722                                                                    |
| Disposals <sup>(1)</sup><br>Balance, December 31, 2019, 2020 and 2021 | - (97,722) (97,722)                                                                |
|                                                                       |                                                                                    |

(1) The Company disposed of its customer relationships intangible assets and related amortization on November 8, 2019 with the sale of DenseLight (Note 21).

## 23. REVENUE

#### **Disaggregated Revenues**

The Company disaggregates revenue by timing of revenue recognition, that is, at a point in time and revenue over time. During the year ended December 31, 2021, the Company recognized \$209,100 from non-recurring engineering services. The revenue was over time. All performance obligations were fulfilled and there were no contract assets or liabilities at December 31, 2021. The Company did not recognize revenue during the years ended December 31, 2020 and 2019.

### 24. INCOME TAXES

The following table reconciles the expected income tax recovery at the Canadian statutory income tax rate of 26.5% for 2021 (2020 - 26.5%, 2019 - 26.5%) to the amounts recognized in operations.

| For the Year Ended December 31,                                                                                                                                                                                                                                                                      | 2021                                                                                                 | 2020                                                                          | 2019                                                                                                                              |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Net loss, continuing operations<br>Net income, discontinued operations                                                                                                                                                                                                                               | \$<br>(15,669,093)<br>-                                                                              | \$<br>(18,169,070)<br>-                                                       | \$ (11,727,372)<br>5,481,757                                                                                                      |
| Net loss before taxes                                                                                                                                                                                                                                                                                | \$<br>(15,669,093)                                                                                   | \$<br>(18,169,070)                                                            | \$ (6,245,615)                                                                                                                    |
| Expected current income tax recovery<br>Deferred tax recovery                                                                                                                                                                                                                                        | 4,152,310<br>-                                                                                       | 4,814,804<br>-                                                                | 1,655,088<br>292,740                                                                                                              |
|                                                                                                                                                                                                                                                                                                      | 4,152,310                                                                                            | 4,814,804                                                                     | 1,947,828                                                                                                                         |
| For the Year Ended December 31,                                                                                                                                                                                                                                                                      | 2021                                                                                                 | 2020                                                                          | 2019                                                                                                                              |
| Adjustments to income tax recovery:                                                                                                                                                                                                                                                                  |                                                                                                      |                                                                               |                                                                                                                                   |
| Amounts not deductible for tax purposes<br>Other non-deductible items<br>Other deductible items<br>Non-taxable gain<br>Non-taxable loan forgiveness<br>Foreign tax differential<br>Non-recognizable permanent capital loss<br>Unusable foreign tax recoveries<br>Unrecognized tax recovered (losses) | \$<br>(1,201,600)<br>(111,000)<br>157,000<br>383,000<br>49,000<br>(508,000)<br>-<br>-<br>(2,920,710) | \$<br>(957,400)<br>(137,000)<br>115,000<br>-<br>(221,000)<br>-<br>(3,614,404) | <pre>\$ (1,212,900)<br/>(173,000)<br/>216,000<br/>2,307,000<br/>-<br/>591,000<br/>(1,175,000)<br/>(7,040,081)<br/>4,831,893</pre> |
| Income tax recovery recognized                                                                                                                                                                                                                                                                       | \$<br>-                                                                                              | \$<br>-                                                                       | \$ 292,740                                                                                                                        |

The following table reflects future income tax assets at December 31:

|                                                                                                                                                                           | 2021                                                                               | 2020                                                                             | 2019                                                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| Resource assets<br>Gross unamortized share issue costs<br>Canadian non-capital losses<br>Canadian capital losses<br>US non-capital losses<br>Singapore non-capital losses | \$<br>1,024,271<br>1,114,604<br>21,404,000<br>5,565,125<br>86,073,000<br>9,180,000 | \$<br>1,024,271<br>325,600<br>22,969,000<br>4,432,532<br>78,829,000<br>3,753,000 | \$ 1,024,271<br>385,000<br>16,545,000<br>4,432,500<br>75,060,000<br>378,000 |
| Unrecognized deferred tax assets                                                                                                                                          | 124,361,000<br>(124,361,000)                                                       | 111,333,403<br>(111,333,403)                                                     | 97,824,771<br>(97,824,771)                                                  |
| Deferred income tax assets recognized                                                                                                                                     | \$<br>-                                                                            | \$<br>-                                                                          | \$ -<br>Page 31                                                             |

#### 25. COVID-19 GOVERNMENT SUPPORT LOANS

In March 2020, the United States Congress passed the Paycheck Protection Program ("PPP"), authorizing loans to small businesses for use in paying employees that they continue to employ throughout the COVID-19 pandemic and for rent, utilities and interest on mortgages. Loans obtained through the PPP are eligible to be forgiven as long as the proceeds are used for qualifying purposes and certain other conditions are met. On May 3, 2020, the Company received a loan in the amount of \$186,747 through the PPP. During the year, the Company received notice from the Small Business Administration of Washington, DC that the PPP loan was forgiven in full. The forgiven loan was reclassified to the consolidated statements of operations and deficit and recognized as income for the year ended December 31, 2021.

On April 9, 2020, the Canadian government launched the Canada Emergency Business Account ("CEBA") which is intended to support businesses during COVID-19 by providing interest free financing of up to \$31,660 (CA\$40,000) until December 31, 2023. If 75% of the loan is repaid by December 31, 2023, the loan recipient will be eligible for a loan forgiveness of the remaining 25% of the amount loaned. On April 15, 2020, the Company received a loan in the amount of \$31,660 through the CEBA. If the loan has not been repaid by December 31, 2023, the outstanding amount will be automatically extended for an additional two years at 5% interest per annum payable monthly and maturing on December 31, 2025. The Company expects to repay 75% of the amount borrowed prior to December 31, 2023.

#### 26. SUBSEQUENT EVENTS

On March 14, 2022 the Company's common shares began trading on the NASDAQ under the trading symbol "POET".